



A WHOLE NEW POINT OF VIEW.

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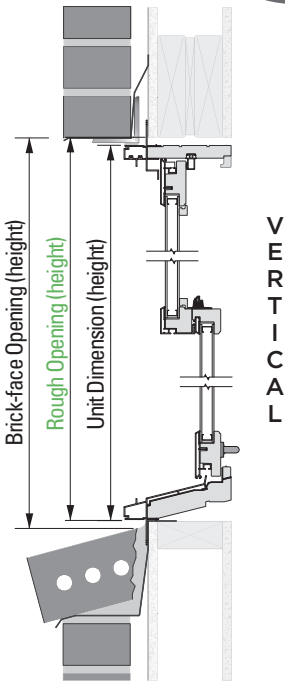
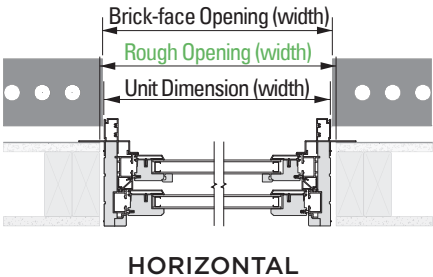
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It's more than a window. It's a whole new point of view. At Ply Gem Windows, we have a different view for the way the window business should be run. We believe you should have access to all of the top quality styles and brands across the country. That's why we've taken our entire portfolio of brands, brands that you know and trust, and given them one name – Ply Gem Windows. With this one name comes a lot of big advantages, starting with a national manufacturing and distribution network. Pair that with our commitment to customer service, sustainable practices and wide variety of window styles that fit all of your design needs, and you'll get the right window for every project and every budget.

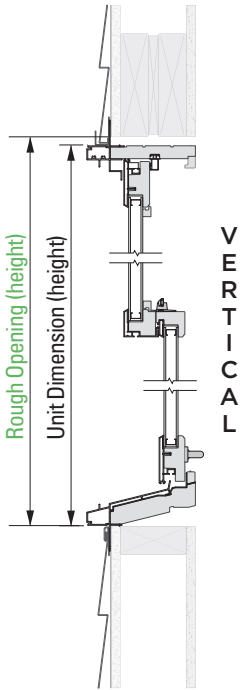
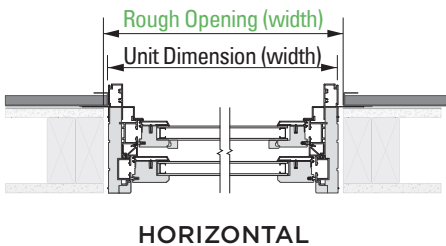
And, because we're part of the Ply Gem family, you know you'll always have access to leading brands. Windows, doors, siding and accessories, stone veneer, fence and rail, rainware, shutters and designer accents, we have something for every project. We work with residential builders, remodelers, architects, distributors and dealers to help build sales. When you combine 75 years of experience, industry-leading customer service, and trusted local relationships you've got a company you can count on. **Ply Gem. Building products. Building success.**



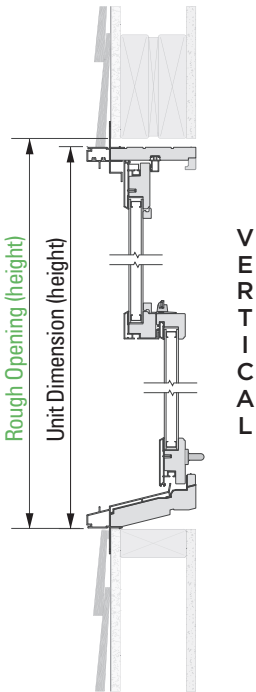
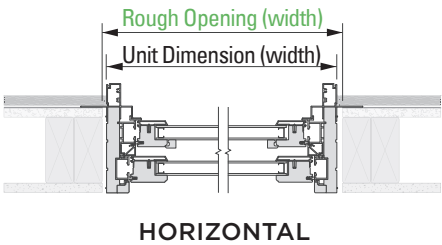
Brick Siding



Vinyl Siding



Wood Siding



Double Hung – Single Operating Units

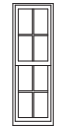
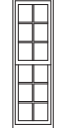
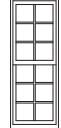
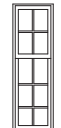
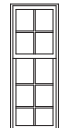
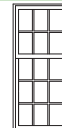
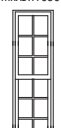
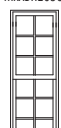
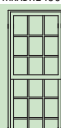
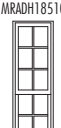
DOUBLE HUNG UNITS

		Widths							
		1' – 9 3/8"	2' – 1 3/8"	2' – 5 3/8"	2' – 7 3/8"	2' – 9 3/8"	3' – 1 3/8"	3' – 5 3/8"	3' – 9 3/8"
		1' – 10 3/8"	2' – 2 3/8"	2' – 6 3/8"	2' – 8 3/8"	2' – 10 3/8"	3' – 2 3/8"	3' – 6 3/8"	3' – 10 3/8"
		1 – 8	2 – 0	2 – 4	2 – 6	2 – 8	3 – 0	3 – 4	3 – 8
Heights	Unit Dimension								
	Rough Opening								
Call Size	3' – 0 9/16"	 MRADH18210	 MRADH20210	 MRADH24210	 MRADH26210	 MRADH28210	 MRADH30210	 MRADH34210	 MRADH38210
	3' – 4 9/16"	 MRADH1832	 MRADH2032	 MRADH2432	 MRADH2632	 MRADH2832	 MRADH3032	 MRADH3432	 MRADH3832
	3' – 8 9/16"	 MRADH1836	 MRADH2036	 MRADH2436	 MRADH2636	 MRADH2836	 MRADH3036	 MRADH3436	 MRADH3836
	4' – 0 9/16"	 MRADH18310	 MRADH20310	 MRADH24310	 MRADH26310	 MRADH28310	 MRADH30310	 MRADH34310	 MRADH38310
	4' – 4 9/16"	 MRADH1842	 MRADH2042	 MRADH2442	 MRADH2642	 MRADH2842	 MRADH3042	 MRADH3442	 MRADH3842
	4' – 8 9/16"	 MRADH1846	 MRADH2046	 MRADH2446	 MRADH2646	 MRADH2846	 MRADH3046	 MRADH3446	 MRADH3846
	5' – 0 9/16"	 MRADH18410	 MRADH20410	 MRADH24410	 MRADH26410	 MRADH28410	 MRADH30410	 MRADH34410	 MRADH38410
	4' – 10 9/16"								

NOTE:

Shaded units satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.

Double Hung – Single Operating Units

		Widths									
		1' – 9 3⁄8"	2' – 1 3⁄8"	2' – 5 3⁄8"	2' – 7 3⁄8"	2' – 9 3⁄8"	3' – 1 3⁄8"	3' – 5 3⁄8"	3' – 9 3⁄8"		
		1' – 10 3⁄8"	2' – 2 3⁄8"	2' – 6 3⁄8"	2' – 8 3⁄8"	2' – 10 3⁄8"	3' – 2 3⁄8"	3' – 6 3⁄8"	3' – 10 3⁄8"		
		1 – 8	2 – 0	2 – 4	2 – 6	2 – 8	3 – 0	3 – 4	3 – 8		
Heights	Unit Dimension										
	Rough Opening										
	Call Size										
	5' – 4 9⁄16"	5' – 5 1⁄8"	5 – 2								
	5' – 8 9⁄16"	5' – 9 1⁄8"	5 – 6E								
	5' – 8 9⁄16"	5' – 9 1⁄8"	5 – 6C								
	6' – 0 9⁄16"	6' – 1 1⁄8"	5 – 10								
	6' – 4 9⁄16"	6' – 5 1⁄8"	6 – 2								
	6' – 8 9⁄16"	6' – 9 1⁄8"	6 – 6								
7' – 2 9⁄16"	7' – 3 1⁄8"	7 – 0									

NOTE:

Shaded units satisfy ICC egress requirements.
Check with your local code official to confirm
egress requirements in your area.

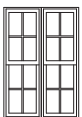
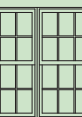
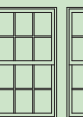
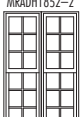
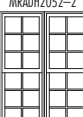
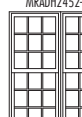
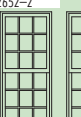
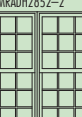
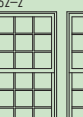
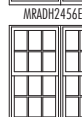
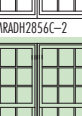
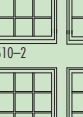
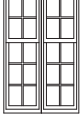
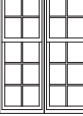
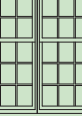
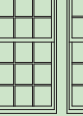
Double Hung – Twin Operating Units

		Widths							
		3' – 7 3/4"	4' – 3 3/4"	4' – 11 3/4"	5' – 3 3/4"	5' – 7 3/4"	6' – 3 3/4"	6' – 11 3/4"	7' – 7 3/4"
		3' – 8 3/4"	4' – 4 3/4"	5' – 0 3/4"	5' – 4 3/4"	5' – 8 3/4"	6' – 4 3/4"	7' – 0 3/4"	7' – 8 3/4"
		1-8 Twin	2-0 Twin	2-4 Twin	2-6 Twin	2-8 Twin	3-0 Twin	3-4 Twin	3-8 Twin
Heights	Unit Dimension								
	Rough Opening								
	Call Size								
	3' – 0 3/8"	 MRADH18210-2	 MRADH20210-2	 MRADH24210-2	 MRADH26210-2	 MRADH28210-2	 MRADH30210-2	 MRADH34210-2	 MRADH38210-2
	3' – 4 3/8"	 MRADH1832-2	 MRADH2032-2	 MRADH2432-2	 MRADH2632-2	 MRADH2832-2	 MRADH3032-2	 MRADH3432-2	 MRADH3832-2
	3' – 8 9/16"	 MRADH1836-2	 MRADH2036-2	 MRADH2436-2	 MRADH2636-2	 MRADH2836-2	 MRADH3036-2	 MRADH3436-2	 MRADH3836-2
	4' – 0 1/8"	 MRADH18310-2	 MRADH20310-2	 MRADH24310-2	 MRADH26310-2	 MRADH28310-2	 MRADH30310-2	 MRADH34310-2	 MRADH38310-2
	4' – 4 3/8"	 MRADH1842-2	 MRADH2042-2	 MRADH2442-2	 MRADH2642-2	 MRADH2842-2	 MRADH3042-2	 MRADH3442-2	 MRADH3842-2
	4' – 8 3/8"	 MRADH1846-2	 MRADH2046-2	 MRADH2446-2	 MRADH2646-2	 MRADH2846-2	 MRADH3046-2	 MRADH3446-2	 MRADH3846-2
	5' – 0 3/8"	 MRADH18410-2	 MRADH20410-2	 MRADH24410-2	 MRADH26410-2	 MRADH28410-2	 MRADH30410-2	 MRADH34410-2	 MRADH38410-2

NOTE:

Shaded units satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.

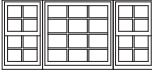
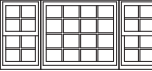
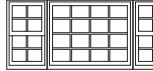
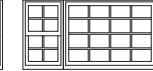
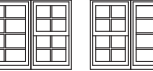
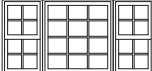
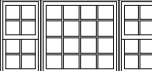
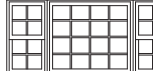
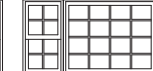
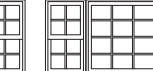
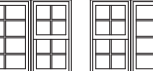
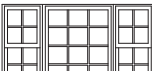
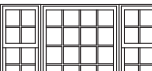
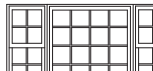
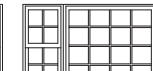
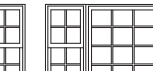
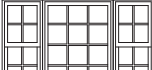
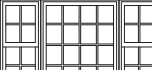
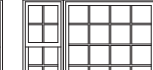
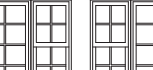
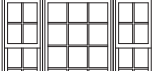
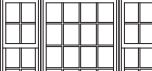
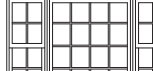
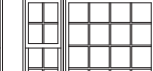
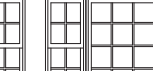
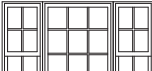
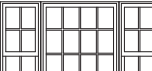
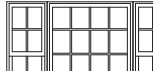
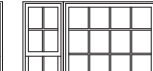
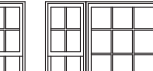
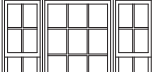
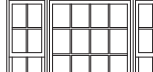
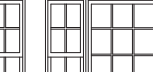
Double Hung – Twin Operating Units

		Widths								
		3' – 7 ¾"	4' – 3 ¾"	4' – 11 ¾"	5' – 3 ¾"	5' – 7 ¾"	6' – 3 ¾"	6' – 11 ¾"	7' – 7 ¾"	
		3' – 8 ¾"	4' – 4 ¾"	5' – 0 ¾"	5' – 4 ¾"	5' – 8 ¾"	6' – 4 ¾"	7' – 0 ¾"	7' – 8 ¾"	
		1–8 Twin	2–0 Twin	2–4 Twin	2–6 Twin	2–8 Twin	3–0 Twin	3–4 Twin	3–8 Twin	
Unit Dimension	Rough Opening	Call Size								
Heights	5' – 4 ⅞"	5' – 2								
	5' – 8 ⅞"	5' – 6E								
	5' – 8 ⅞"	5' – 6C								
	6' – 0 ⅞"	5' – 10								
	6' – 4 ⅞"	6' – 2								
	6' – 8 ⅞"	6' – 6								
	7' – 2 ⅞"	7' – 0								
	7' – 3 ⅞"									

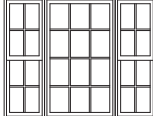
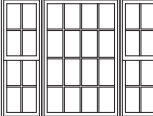
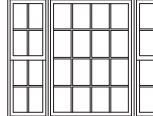
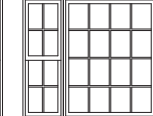
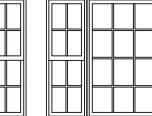
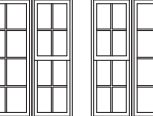
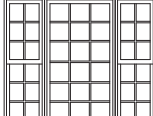
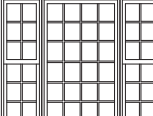
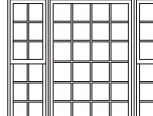
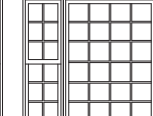
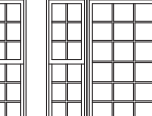
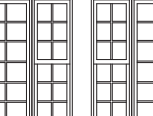
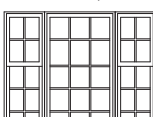
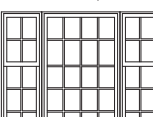
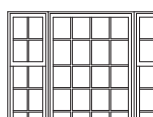
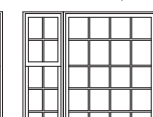
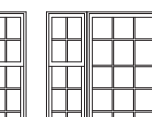
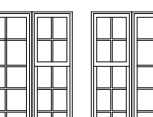
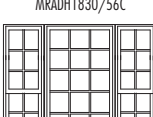
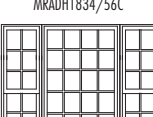
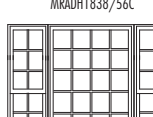
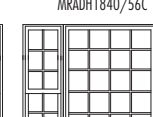
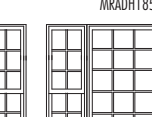
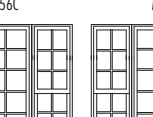
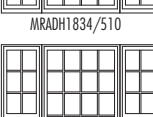
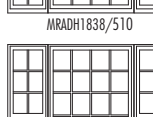
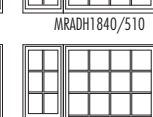
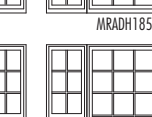
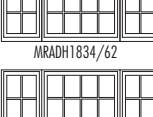
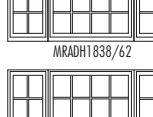
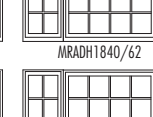
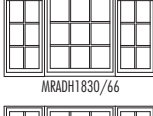
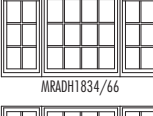
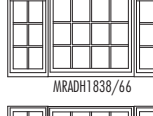
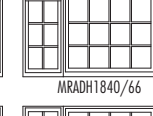
NOTE:

Shaded units satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.

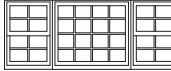
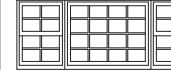
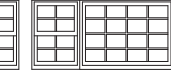
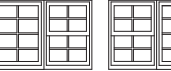
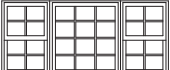
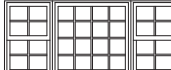
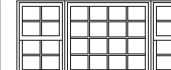
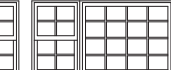
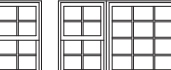
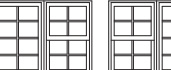
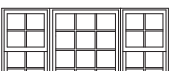
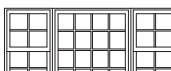
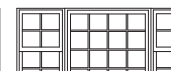
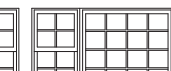
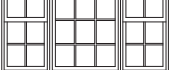
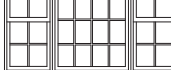
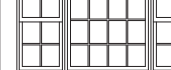
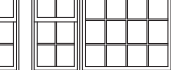
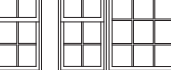
Double Hung – Combination 1-8 Operating Units

		Widths					
Heights	Unit Dimension Rough Opening Call Size	6' – 10 1/8"	7' – 2 1/8"	7' – 6 1/8"	7' – 10 1/8"	8' – 10 1/8"	9' – 10 1/8"
		6' – 11 1/8"	7' – 3 1/8"	7' – 7 1/8"	7' – 11 1/8"	8' – 11 1/8"	9' – 11 1/8"
		18/30	18/34	18/38	18/40	18/50	18/60
3 – 0 7/8"	3 – 1 1/8"	 MRADH1830/210	 MRADH1834/210	 MRADH1838/210	 MRADH1840/210	 MRADH1850/210	 MRADH1860/210
3 – 4 1/8"	3 – 5 1/8"	 MRADH1830/32	 MRADH1834/32	 MRADH1838/32	 MRADH1840/32	 MRADH1850/32	 MRADH1860/32
3 – 8 1/8"	3 – 9 1/8"	 MRADH1830/36	 MRADH1834/36	 MRADH1838/36	 MRADH1840/36	 MRADH1850/36	 MRADH1860/36
4 – 0 1/8"	4 – 1 1/8"	 MRADH1830/310	 MRADH1834/310	 MRADH1838/310	 MRADH1840/310	 MRADH1850/310	 MRADH1860/310
4 – 4 1/8"	4 – 5 1/8"	 MRADH1830/42	 MRADH1834/42	 MRADH1838/42	 MRADH1840/42	 MRADH1850/42	 MRADH1860/42
4 – 8 1/8"	4 – 9 1/8"	 MRADH1830/46	 MRADH1834/46	 MRADH1838/46	 MRADH1840/46	 MRADH1850/46	 MRADH1860/46
5 – 0 1/8"	5 – 1 1/8"	 MRADH1830/410	 MRADH1834/410	 MRADH1838/410	 MRADH1840/410	 MRADH1850/410	 MRADH1860/410

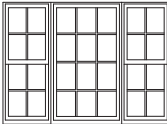
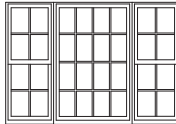
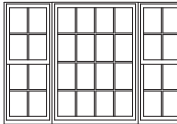
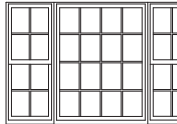
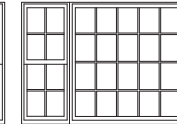
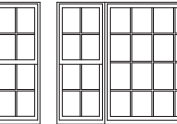
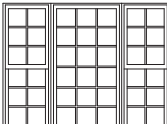
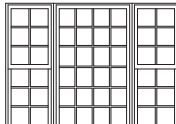
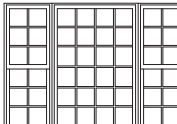
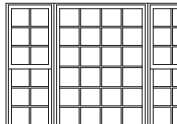
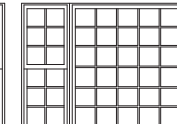
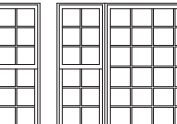
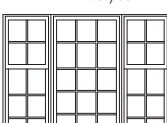
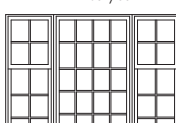
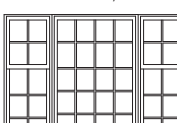
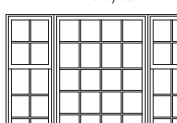
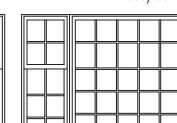
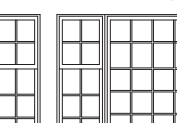
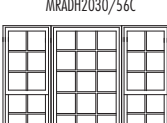
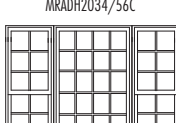
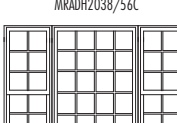
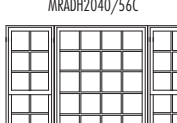
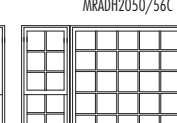
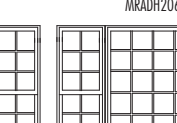
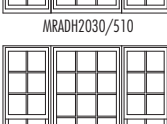
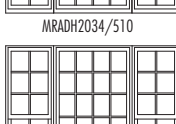
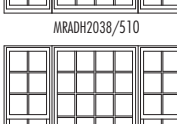
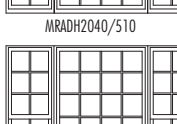
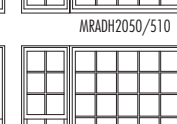
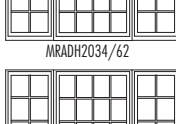
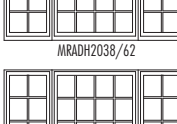
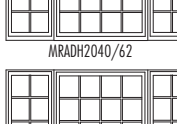
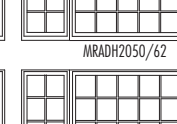
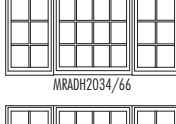
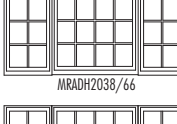
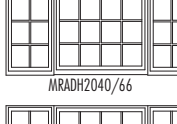
Double Hung – Combination 1-8 Operating Units

		Widths							
		6' – 10 1/8"	7' – 2 1/8"	7' – 6 1/8"	7' – 10 1/8"	8' – 10 1/8"	9' – 10 1/8"		
		6' – 11 1/8"	7' – 3 1/8"	7' – 7 1/8"	7' – 11 1/8"	8' – 11 1/8"	9' – 11 1/8"		
		18/30	18/34	18/38	18/40	18/50	18/60		
Heights	Unit Dimension								
	Rough Opening								
	Call Size								
	5' – 4 9/16"	5' – 5 1/8"	5' – 2	 MRADH1830/52	 MRADH1834/52	 MRADH1838/52	 MRADH1840/52	 MRADH1850/52	 MRADH1860/52
	5' – 8 9/16"	5' – 9 1/8"	5' – 6E	 MRADH1830/56E	 MRADH1834/56E	 MRADH1838/56E	 MRADH1840/56E	 MRADH1850/56E	 MRADH1860/56E
	5' – 8 9/16"	5' – 9 1/8"	5' – 6C	 MRADH1830/56C	 MRADH1834/56C	 MRADH1838/56C	 MRADH1840/56C	 MRADH1850/56C	 MRADH1860/56C
	6' – 0 9/16"	6' – 1 1/8"	5' – 10	 MRADH1830/510	 MRADH1834/510	 MRADH1838/510	 MRADH1840/510	 MRADH1850/510	 MRADH1860/510
	6' – 4 9/16"	6' – 5 1/8"	6' – 2	 MRADH1830/62	 MRADH1834/62	 MRADH1838/62	 MRADH1840/62	 MRADH1850/62	 MRADH1860/62
	6' – 8 9/16"	6' – 9 1/8"	6' – 6	 MRADH1830/66	 MRADH1834/66	 MRADH1838/66	 MRADH1840/66	 MRADH1850/66	 MRADH1860/66
	7' – 2 9/16"	7' – 3 1/8"	7' – 0	 MRADH1830/70	 MRADH1834/70	 MRADH1838/70	 MRADH1840/70	 MRADH1850/70	 MRADH1860/70

Double Hung – Combination 2-0 Operating Units

		Widths					
		7' – 6 1/8"	7' – 10 1/8"	8' – 2 1/8"	8' – 6 1/8"	9' – 6 1/8"	10' – 6 1/8"
		7' – 7 1/8"	7' – 11 1/8"	8' – 3 1/8"	8' – 7 1/8"	9' – 7 1/8"	10' – 7 1/8"
		20/30	20/34	20/38	20/40	20/50	20/60
Heights	Unit Dimension Rough Opening Call Size						
	3 – 0 7/8"						
	3 – 4 7/8"						
	3 – 8 7/8"						
	4 – 0 7/8"						
	4 – 4 7/8"						
	4 – 8 7/8"						
	5 – 0 7/8"						
		MRADH2030/210	MRADH2034/210	MRADH2038/210	MRADH2040/210	MRADH2050/210	MRADH2060/210
		MRADH2030/32	MRADH2034/32	MRADH2038/32	MRADH2040/32	MRADH2050/32	MRADH2060/32
		MRADH2030/36	MRADH2034/36	MRADH2038/36	MRADH2040/36	MRADH2050/36	MRADH2060/36
		MRADH2030/310	MRADH2034/310	MRADH2038/310	MRADH2040/310	MRADH2050/310	MRADH2060/310
		MRADH2030/42	MRADH2034/42	MRADH2038/42	MRADH2040/42	MRADH2050/42	MRADH2060/42
		MRADH2030/46	MRADH2034/46	MRADH2038/46	MRADH2040/46	MRADH2050/46	MRADH2060/46
		MRADH2030/410	MRADH2034/410	MRADH2038/410	MRADH2040/410	MRADH2050/410	MRADH2060/410

Double Hung – Combination 2-0 Operating Units

		Widths							
		7' – 6 1/8"	7' – 10 1/8"	8' – 2 1/8"	8' – 6 1/8"	9' – 6 1/8"	10' – 6 1/8"		
		7' – 7 1/8"	7' – 11 1/8"	8' – 3 1/8"	8' – 7 1/8"	9' – 7 1/8"	10' – 7 1/8"		
		20/30	20/34	20/38	20/40	20/50	20/60		
Heights	Unit Dimension Rough Opening Caul Size								
	5' – 4 9/16"	5' – 5 1/8"	5' – 2						
	5' – 8 9/16"	5' – 9 1/8"	5' – 6E						
	5' – 8 9/16"	5' – 9 1/8"	5' – 6C						
	6' – 0 9/16"	6' – 1 1/8"	5' – 10						
	6' – 4 9/16"	6' – 5 1/8"	6' – 2						
	6' – 8 9/16"	6' – 9 1/8"	6' – 6						
	7' – 2 9/16"	7' – 3 1/8"	7' – 0						
				MRADH2030/52	MRADH2034/52	MRADH2038/52	MRADH2040/52	MRADH2050/52	MRADH2060/52
				MRADH2030/56E	MRADH2034/56E	MRADH2038/56E	MRADH2040/56E	MRADH2050/56E	MRADH2060/56E
				MRADH2030/56C	MRADH2034/56C	MRADH2038/56C	MRADH2040/56C	MRADH2050/56C	MRADH2060/56C
				MRADH2030/510	MRADH2034/510	MRADH2038/510	MRADH2040/510	MRADH2050/510	MRADH2060/510
				MRADH2030/62	MRADH2034/62	MRADH2038/62	MRADH2040/62	MRADH2050/62	MRADH2060/62
				MRADH2030/66	MRADH2034/66	MRADH2038/66	MRADH2040/66	MRADH2050/66	MRADH2060/66
				MRADH2030/70	MRADH2034/70	MRADH2038/70	MRADH2040/70	MRADH2050/70	MRADH2060/70

Double Hung – Fixed Units

		Widths											
		1'-1 3/8"	1'-9 3/8"	2'-1 3/8"	2'-5 3/8"	2'-7 3/8"	2'-9 3/8"	3'-1 3/8"	3'-5 3/8"	3'-9 3/8"	4'-1 3/8"	5'-1 3/8"	6'-1 3/8"
		1'-2 3/8"	1'-10 3/8"	2'-2 3/8"	2'-6 3/8"	2'-8 3/8"	2'-10 3/8"	3'-2 3/8"	3'-6 3/8"	3'-10 3/8"	4'-2 3/8"	5'-2 3/8"	6'-2 3/8"
		1-0	1-8	2-0	2-4	2-6	2-8	3-0	3-4	3-8	4-0	5-0	6-0
Heights	Unit Dimension												
	Rough Opening												
	Call Size												
	3'-0 9/16"	3'-0 9/16"	3'-0 9/16"	3'-0 9/16"	3'-0 9/16"	3'-0 9/16"	3'-0 9/16"	3'-0 9/16"	3'-0 9/16"	3'-0 9/16"	3'-0 9/16"	3'-0 9/16"	3'-0 9/16"
	3'-4 9/16"	3'-4 9/16"	3'-4 9/16"	3'-4 9/16"	3'-4 9/16"	3'-4 9/16"	3'-4 9/16"	3'-4 9/16"	3'-4 9/16"	3'-4 9/16"	3'-4 9/16"	3'-4 9/16"	3'-4 9/16"
	3'-8 9/16"	3'-8 9/16"	3'-8 9/16"	3'-8 9/16"	3'-8 9/16"	3'-8 9/16"	3'-8 9/16"	3'-8 9/16"	3'-8 9/16"	3'-8 9/16"	3'-8 9/16"	3'-8 9/16"	3'-8 9/16"
	4'-0 9/16"	4'-0 9/16"	4'-0 9/16"	4'-0 9/16"	4'-0 9/16"	4'-0 9/16"	4'-0 9/16"	4'-0 9/16"	4'-0 9/16"	4'-0 9/16"	4'-0 9/16"	4'-0 9/16"	4'-0 9/16"
	4'-4 9/16"	4'-4 9/16"	4'-4 9/16"	4'-4 9/16"	4'-4 9/16"	4'-4 9/16"	4'-4 9/16"	4'-4 9/16"	4'-4 9/16"	4'-4 9/16"	4'-4 9/16"	4'-4 9/16"	4'-4 9/16"
	4'-8 9/16"	4'-8 9/16"	4'-8 9/16"	4'-8 9/16"	4'-8 9/16"	4'-8 9/16"	4'-8 9/16"	4'-8 9/16"	4'-8 9/16"	4'-8 9/16"	4'-8 9/16"	4'-8 9/16"	4'-8 9/16"
	5'-0 9/16"	5'-0 9/16"	5'-0 9/16"	5'-0 9/16"	5'-0 9/16"	5'-0 9/16"	5'-0 9/16"	5'-0 9/16"	5'-0 9/16"	5'-0 9/16"	5'-0 9/16"	5'-0 9/16"	5'-0 9/16"
	4-10	4-10	4-10	4-10	4-10	4-10	4-10	4-10	4-10	4-10	4-10	4-10	4-10
	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6
	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2
	3-10	3-10	3-10	3-10	3-10	3-10	3-10	3-10	3-10	3-10	3-10	3-10	3-10
		MRADH10210P	MRADH18210P	MRADH20210P	MRADH24210P	MRADH26210P	MRADH28210P	MRADH30210P	MRADH34210P	MRADH38210P	MRADH40210P	MRADH50210P	MRADH60210P
		MRADH1032P	MRADH1832P	MRADH2032P	MRADH2432P	MRADH2632P	MRADH2832P	MRADH3032P	MRADH3432P	MRADH3832P	MRADH4032P	MRADH5032P	MRADH6032P
		MRADH1036P	MRADH1836P	MRADH2036P	MRADH2436P	MRADH2636P	MRADH2836P	MRADH3036P	MRADH3436P	MRADH3836P	MRADH4036P	MRADH5036P	MRADH6036P
		MRADH10310P	MRADH18310P	MRADH20310P	MRADH24310P	MRADH26310P	MRADH28310P	MRADH30310P	MRADH34310P	MRADH38310P	MRADH40310P	MRADH50310P	MRADH60310P
		MRADH1042P	MRADH1842P	MRADH2042P	MRADH2442P	MRADH2642P	MRADH2842P	MRADH3042P	MRADH3442P	MRADH3842P	MRADH4042P	MRADH5042P	MRADH6042P
		MRADH1046P	MRADH1846P	MRADH2046P	MRADH2446P	MRADH2646P	MRADH2846P	MRADH3046P	MRADH3446P	MRADH3846P	MRADH4046P	MRADH5046P	MRADH6046P
		MRADH10410P	MRADH18410P	MRADH20410P	MRADH24410P	MRADH26410P	MRADH28410P	MRADH30410P	MRADH34410P	MRADH38410P	MRADH40410P	MRADH50410P	MRADH60410P

		Widths											
		1'-1 3/8"	1'-9 3/8"	2'-1 3/8"	2'-5 3/8"	2'-7 3/8"	2'-9 3/8"	3'-1 3/8"	3'-5 3/8"	3'-9 3/8"	4'-1 3/8"	5'-1 3/8"	6'-1 3/8"
		1'-2 3/8"	1'-10 3/8"	2'-2 3/8"	2'-6 3/8"	2'-8 3/8"	2'-10 3/8"	3'-2 3/8"	3'-6 3/8"	3'-10 3/8"	4'-2 3/8"	5'-2 3/8"	6'-2 3/8"
Unit Dimension		1-0	1-8	2-0	2-4	2-6	2-8	3-0	3-4	3-8	4-0	5-0	6-0
Heights	Call Size												
	Rough Opening												
5'-4 9/16"	5'-5 1/8"	5'-2											
													
		MRADH1052P	MRADH1852P	MRADH2052P	MRADH2452P	MRADH2652P	MRADH2852P	MRADH3052P	MRADH3452P	MRADH3852P	MRADH4052P	MRADH5052P	MRADH6052P
5'-8 9/16"	5'-9 1/8"	5'-6E											
													
		MRADH1056EP	MRADH1856EP	MRADH2056EP	MRADH2456EP	MRADH2656EP	MRADH2856EP	MRADH3056EP	MRADH3456EP	MRADH3856EP	MRADH4056EP	MRADH5056EP	MRADH6056EP
5'-8 9/16"	5'-9 1/8"	5'-6C											
													
		MRADH1056CP	MRADH1856CP	MRADH2056CP	MRADH2456CP	MRADH2656CP	MRADH2856CP	MRADH3056CP	MRADH3456CP	MRADH3856CP	MRADH4056CP	MRADH5056CP	MRADH6056CP
6'-0 9/16"	6'-1 1/8"	5'-10											
													
		MRADH18510P	MRADH20510P	MRADH24510P	MRADH26510P	MRADH28510P	MRADH30510P	MRADH34510P	MRADH38510P	MRADH40510P	MRADH50510P	MRADH60510P	
6'-4 9/16"	6'-5 1/8"	6'-2											
													
		MRADH1862P	MRADH2062P	MRADH2462P	MRADH2662P	MRADH2862P	MRADH3062P	MRADH3462P	MRADH3862P	MRADH4062P	MRADH5062P	MRADH6062P	
6'-8 9/16"	6'-9 1/8"	6'-6											
													
		MRADH1866P	MRADH2066P	MRADH2466P	MRADH2666P	MRADH2866P	MRADH3066P	MRADH3466P	MRADH3866P	MRADH4066P	MRADH5066P	MRADH6066P	
7'-2 9/16"	7'-3 1/8"	7'-0											
													
		MRADH1870P	MRADH2070P	MRADH2470P	MRADH2670P	MRADH2870P	MRADH3070P	MRADH3470P	MRADH3870P	MRADH4070P	MRADH5070P	MRADH6070P	

Double Hung – Circle Head Units

Single Widths

Heights	Unit Dimension Rough Opening Cdl Size	Single Widths							
		1' - 9 ³ / ₈ "	2' - 1 ³ / ₈ "	2' - 5 ³ / ₈ "	2' - 7 ³ / ₈ "	2' - 9 ³ / ₈ "	3' - 1 ³ / ₈ "	3' - 5 ³ / ₈ "	3' - 9 ³ / ₈ "
		1' - 10 ³ / ₈ "	2' - 2 ³ / ₈ "	2' - 6 ³ / ₈ "	2' - 8 ³ / ₈ "	2' - 10 ³ / ₈ "	3' - 2 ³ / ₈ "	3' - 6 ³ / ₈ "	3' - 10 ³ / ₈ "
		1-8	2-0	2-4	2-6	2-8	3-0	3-4	3-8
									
	MRADH18CH 0' - 10 ¹¹ / ₁₆ " 0' - 11 ³ / ₁₆ "	MRADH20CH 1' - 0 ¹¹ / ₁₆ " 1' - 1 ³ / ₁₆ "	MRADH24CH 1' - 2 ¹¹ / ₁₆ " 1' - 3 ³ / ₁₆ "	MRADH26CH 1' - 3 ¹¹ / ₁₆ " 1' - 4 ³ / ₁₆ "	MRADH28CH 1' - 4 ¹¹ / ₁₆ " 1' - 5 ³ / ₁₆ "	MRADH30CH 1' - 6 ¹¹ / ₁₆ " 1' - 7 ³ / ₁₆ "	MRADH34CH 1' - 8 ¹¹ / ₁₆ " 1' - 9 ³ / ₁₆ "	MRADH38CH 1' - 10 ¹¹ / ₁₆ " 1' - 11 ³ / ₁₆ "	
Grille Options (See chart on opposite page)									
	C01, CG2, C0L	C01, CG2, C0L	C03, CG3, C0L	C03, CG3, C0L	C03, CG3, C0L	C03, CG3, C0L	C03, CG3, C0L	C01, C02, C03, C04, C05, C06, C07, CG2, CG3, CG4, C0L	

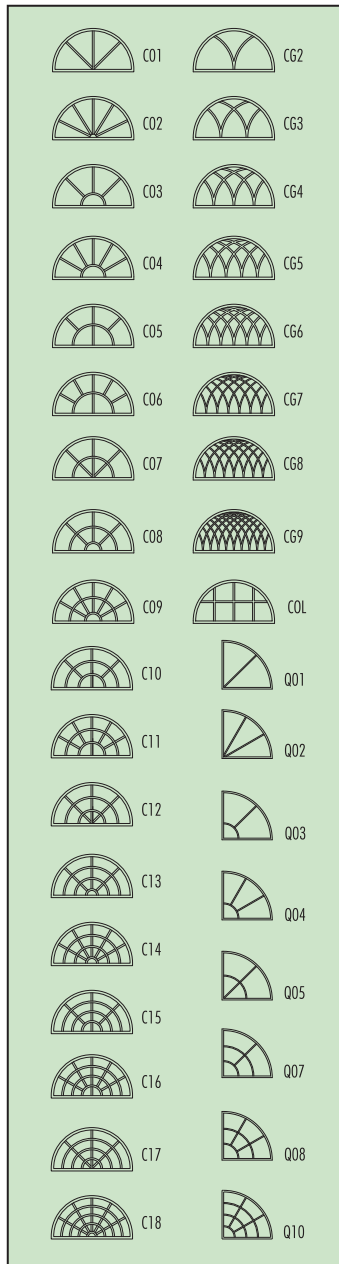
Twin Widths

Unit Dimension Rough Opening Call Size	Twin Widths							
	3' - 7 3/4"	4' - 3 3/4"	4' - 11 3/4"	5' - 3 3/4"	5' - 7 3/4"	6' - 3 3/4"	6' - 11 3/4"	7' - 7 3/4"
	3' - 8 3/4"	4' - 4 3/4"	5' - 0 3/4"	5' - 4 3/4"	5' - 8 3/4"	6' - 4 3/4"	7' - 0 3/4"	7' - 8 3/4"
	1-8 Twin	2-0 Twin	2-4 Twin	2-6 Twin	2-8 Twin	3-0 Twin	3-4 Twin	3-8 Twin
Heights	 MRADH18-2CH 1' - 9 7/8" 1' - 10 3/8"	 MRADH20-2CH 2' - 1 7/8" 2' - 2 3/8"	 MRADH24-2CH 2' - 5 7/8" 2' - 6 3/8"	 MRADH26-2CH 2' - 7 7/8" 2' - 8 3/8"	 MRADH28-2CH 2' - 9 7/8" 2' - 10 3/8"	 MRADH30-2CH 3' - 1 7/8" 3' - 2 3/8"	 MRADH34-2CH 3' - 5 7/8" 3' - 6 3/8"	 MRADH38-2CH 3' - 9 7/8" 3' - 10 3/8"
	 Grille Options (See chart on opposite page)							
C01, C02, C03, C04, C05, C06, C07, CG2, CG4, C0L		C01, C02, C03, C04, C04, C05, C06, C07, CG2, CG4, C0L	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, CG2, CG3, CG4, CG5, CG6, C0L	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, CG2, CG3, CG4, CG5, CG6, C0L	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, CG2, CG3, CG4, CG5, CG6, C0L	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, CG2, CG3, CG4, CG5, CG6, C0L	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, CG2, CG3, CG4, CG5, CG6, C0L	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, CG2, CG3, CG4, CG5, CG6, C0L

Picture Widths

Heights	Unit Dimension Rough Opening Call Size	Picture Widths					
		3' - 1 ³ / ₈ "	3' - 5 ³ / ₈ "	3' - 9 ³ / ₈ "	4' - 1 ³ / ₈ "	5' - 1 ³ / ₈ "	6' - 1 ³ / ₈ "
		3' - 2 ³ / ₈ "	3' - 6 ³ / ₈ "	3' - 10 ³ / ₈ "	4' - 2 ³ / ₈ "	5' - 2 ³ / ₈ "	6' - 2 ³ / ₈ "
		3-0 Picture	3-4 Picture	3-8 Picture	4-0 Picture	5-0 Picture	6-0 Picture
							
		MRADH30PCH 1' - 6 ¹¹ / ₁₆ " 1' - 7 ³ / ₁₆ "	MRADH34PCH 1' - 8 ¹¹ / ₁₆ " 1' - 9 ³ / ₁₆ "	MRADH38PCH 1' - 10 ¹¹ / ₁₆ " 1' - 11 ³ / ₁₆ "	MRADH40PCH 2' - 0 ¹¹ / ₁₆ " 2' - 1 ³ / ₁₆ "	MRADH50PCH 2' - 6 ¹¹ / ₁₆ " 2' - 7 ³ / ₁₆ "	MRADH60PCH 3' - 0 ¹¹ / ₁₆ " 3' - 1 ³ / ₁₆ "
							
		C03, CG3, C0L	C01, C02, C03, C04, C05, C06, C07, CG2, CG3, CG4, C0L	C01, C02, C03, C04, C05, C06, C07, CG2, CG3, CG4, C0L	C01, C02, C03, C04, C05, C06, C07, CG2, CG3, C0L	C03, C04, C08, C09, CG3, CG5, C0L	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, CG2, CG3, CG4, CG6, C0L

Optional Grille Patterns



Use order code to specify pattern

Quarter Circle Widths

Heights	Unit Dimension						
	Rough Opening						
	Call Size						
	2'-1 3/8"	2'-5 3/8"	2'-7 3/8"	2'-9 3/8"	3'-1 3/8"	3'-5 3/8"	3'-9 3/8"
	2'-2 3/8"	2'-6 3/8"	2'-8 3/8"	2'-10 3/8"	3'-2 3/8"	3'-6 3/8"	3'-10 3/8"
	2-0	2-4	2-6	2-8	3-0	3-4	3-8
	MRADH20QC 2'-1 3/8" 2'-1 7/8"	MRADH24QC 2'-5 3/8" 2'-5 7/8"	MRADH26QC 2'-7 3/8" 2'-8 7/8"	MRADH28QC 2'-9 3/8" 2'-9 7/8"	MRADH30QC 3'-1 3/8" 3'-1 7/8"	MRADH34QC 3'-5 3/8" 3'-5 7/8"	MRADH38QC 3'-9 3/8" 3'-9 7/8"
	Q01, Q02, Q03, Q04, Q05, Q06, Q07, Q08, Q09, Q10	Q01, Q02, Q03, Q04, Q05, Q06, Q07, Q08, Q09, Q10	Q01, Q02, Q03, Q04, Q05, Q06, Q07, Q08, Q09, Q10	Q01, Q02, Q03, Q04, Q05, Q06, Q07, Q08, Q09, Q10	Q01, Q02, Q03, Q04, Q05, Q06, Q07, Q08, Q09, Q10	Q01, Q02, Q03, Q04, Q05, Q06, Q07, Q08, Q09, Q10	Q01, Q02, Q03, Q04, Q05, Q06, Q07, Q08, Q09, Q10

Single Widths

Heights	Unit Dimension		
	Rough Opening		
	Call Size		
	3'-1 3/8"	3'-5 3/8"	3'-9 3/8"
	3'-2 3/8"	3'-6 3/8"	3'-10 3/8"
	3-0	3-4	3-8
	MRADH30-EL 0'-9 3/8" 0'-9 7/8"	MRADH34-EL 0'-10 3/8" 0'-10 7/8"	MRADH38-EL 0'-11 3/8" 0'-11 7/8"
	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18	C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18	C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18

Picture Widths

Heights	Unit Dimension		
	Rough Opening		
	Call Size		
	4'-1 3/8"	5'-1 3/8"	6'-1 3/8"
	4'-2 3/8"	5'-2 3/8"	6'-2 3/8"
	4-0 Picture	5-0 Picture	6-0 Picture
	MRADH40-PEL 1'-0 3/8" 1'-0 7/8"	MRADH50-PEL 1'-3 3/8" 1'-3 7/8"	MRADH60-PEL 1'-6 3/8" 1'-6 7/8"
	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18	C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18

Twin Widths

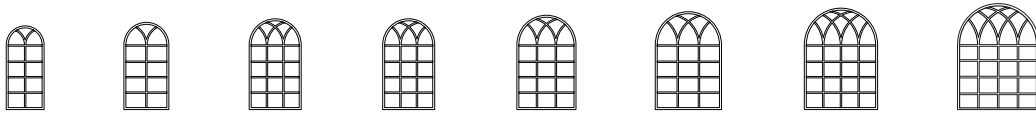
Heights	Unit Dimension						
	Rough Opening						
	Call Size						
	4'-3 3/8"	4'-11 3/8"	5'-1 1/2"	5'-7 3/8"	6'-3 3/8"	6'-11 3/8"	6'-7 3/8"
	4'-4 3/8"	5'-0 3/8"	5'-2 1/2"	5'-8 3/8"	6'-4 3/8"	7'-0 3/8"	7'-8 3/8"
	2-0 Twin	2-4 Twin	2-6 Twin	2-8 Twin	3-0 Twin	3-4 Twin	3-8 Twin
	MRADH20-2EL 1'-0 15/16" 1'-1 1/8"	MRADH24-2EL 1'-2 15/16" 1'-3 1/8"	MRADH26-2EL 1'-3 15/16" 1'-4 1/8"	MRADH28-2EL 1'-4 15/16" 1'-5 1/8"	MRADH30-2EL 1'-6 15/16" 1'-7 1/8"	MRADH34-2EL 1'-8 15/16" 1'-9 1/8"	MRADH38-2EL 1'-10 15/16" 1'-11 1/8"
	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18	C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18

Double Hung – True Radius Single Units

Standard Colonial Grille Pattern Widths

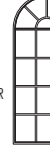
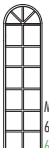
Unit Dimension		1' – 9 ³ / ₈ "	2' – 1 ³ / ₈ "	2' – 5 ³ / ₈ "	2' – 7 ³ / ₈ "	2' – 9 ³ / ₈ "	3' – 1 ³ / ₈ "	3' – 5 ³ / ₈ "	3' – 9 ³ / ₈ "
Rough Opening		1' – 10 ³ / ₈ "	2' – 2 ³ / ₈ "	2' – 6 ³ / ₈ "	2' – 8 ³ / ₈ "	2' – 10 ³ / ₈ "	3' – 2 ³ / ₈ "	3' – 6 ³ / ₈ "	3' – 10 ³ / ₈ "
Call Size		1-8	2-0	2-4	2-6	2-8	3-0	3-4	3-8
Heights	2-10	 MRADH1821OTR 3' – 11 ¹ / ₄ " 3' – 11 ³ / ₄ "	 MRADH2021OTR 4' – 1 ¹ / ₄ " 4' – 1 ³ / ₄ "	 MRADH2421OTR 4' – 3 ¹ / ₄ " 4' – 3 ³ / ₄ "	 MRADH2621OTR 4' – 4 ¹ / ₄ " 4' – 4 ³ / ₄ "	 MRADH2821OTR 4' – 5 ¹ / ₄ " 4' – 5 ³ / ₄ "	 MRADH3021OTR 4' – 7 ¹ / ₄ " 4' – 7 ³ / ₄ "	 MRADH3421OTR 4' – 9 ¹ / ₄ " 4' – 9 ³ / ₄ "	 MRADH3821OTR 4' – 11 ¹ / ₄ " 4' – 11 ³ / ₄ "
	3-2	 MRADH1832TR 4' – 3 ¹ / ₄ " 4' – 3 ³ / ₄ "	 MRADH2032TR 4' – 5 ¹ / ₄ " 4' – 5 ³ / ₄ "	 MRADH2432TR 4' – 7 ¹ / ₄ " 4' – 7 ³ / ₄ "	 MRADH2632TR 4' – 8 ¹ / ₄ " 4' – 8 ³ / ₄ "	 MRADH2832TR 4' – 9 ¹ / ₄ " 4' – 9 ³ / ₄ "	 MRADH3032TR 4' – 11 ¹ / ₄ " 4' – 11 ³ / ₄ "	 MRADH3432TR 5' – 1 ¹ / ₄ " 5' – 1 ³ / ₄ "	 MRADH3832TR 5' – 3 ¹ / ₄ " 5' – 3 ³ / ₄ "
	3-6	 MRADH1836TR 4' – 7 ¹ / ₄ " 4' – 7 ³ / ₄ "	 MRADH2036TR 4' – 9 ¹ / ₄ " 4' – 9 ³ / ₄ "	 MRADH2436TR 4' – 11 ¹ / ₄ " 4' – 11 ³ / ₄ "	 MRADH2636TR 5' – 0 ¹ / ₄ " 5' – 0 ³ / ₄ "	 MRADH2836TR 5' – 1 ¹ / ₄ " 5' – 1 ³ / ₄ "	 MRADH3036TR 5' – 3 ¹ / ₄ " 5' – 3 ³ / ₄ "	 MRADH3436TR 5' – 5 ¹ / ₄ " 5' – 5 ³ / ₄ "	 MRADH3836TR 5' – 7 ¹ / ₄ " 5' – 7 ³ / ₄ "
	3-10	 MRADH1831OTR 4' – 11 ¹ / ₄ " 4' – 11 ³ / ₄ "	 MRADH2031OTR 5' – 1 ¹ / ₄ " 5' – 1 ³ / ₄ "	 MRADH2431OTR 5' – 3 ¹ / ₄ " 5' – 3 ³ / ₄ "	 MRADH2631OTR 5' – 4 ¹ / ₄ " 5' – 4 ³ / ₄ "	 MRADH2831OTR 5' – 5 ¹ / ₄ " 5' – 5 ³ / ₄ "	 MRADH3031OTR 5' – 7 ¹ / ₄ " 5' – 7 ³ / ₄ "	 MRADH3431OTR 5' – 9 ¹ / ₄ " 5' – 9 ³ / ₄ "	 MRADH3831OTR 5' – 11 ¹ / ₄ " 5' – 11 ³ / ₄ "
	4-2	 MRADH1842TR 5' – 3 ¹ / ₄ " 5' – 3 ³ / ₄ "	 MRADH2042TR 5' – 5 ¹ / ₄ " 5' – 5 ³ / ₄ "	 MRADH2442TR 5' – 7 ¹ / ₄ " 5' – 7 ³ / ₄ "	 MRADH2642TR 5' – 8 ¹ / ₄ " 5' – 8 ³ / ₄ "	 MRADH2842TR 5' – 9 ¹ / ₄ " 5' – 9 ³ / ₄ "	 MRADH3042TR 5' – 11 ¹ / ₄ " 5' – 11 ³ / ₄ "	 MRADH3442TR 6' – 1 ¹ / ₄ " 6' – 1 ³ / ₄ "	 MRADH3842TR 6' – 3 ¹ / ₄ " 6' – 3 ³ / ₄ "
	4-6	 MRADH1846TR 5' – 7 ¹ / ₄ " 5' – 7 ³ / ₄ "	 MRADH2046TR 5' – 9 ¹ / ₄ " 5' – 9 ³ / ₄ "	 MRADH2446TR 5' – 11 ¹ / ₄ " 5' – 11 ³ / ₄ "	 MRADH2646TR 6' – 0 ¹ / ₄ " 6' – 0 ³ / ₄ "	 MRADH2846TR 6' – 1 ¹ / ₄ " 6' – 1 ³ / ₄ "	 MRADH3046TR 6' – 3 ¹ / ₄ " 6' – 3 ³ / ₄ "	 MRADH3446TR 6' – 5 ¹ / ₄ " 6' – 5 ³ / ₄ "	 MRADH3846TR 6' – 7 ¹ / ₄ " 6' – 7 ³ / ₄ "
	4-10	 MRADH1841OTR 5' – 11 ¹ / ₄ " 5' – 11 ³ / ₄ "	 MRADH2041OTR 6' – 1 ¹ / ₄ " 6' – 1 ³ / ₄ "	 MRADH2441OTR 6' – 3 ¹ / ₄ " 6' – 3 ³ / ₄ "	 MRADH2641OTR 6' – 4 ¹ / ₄ " 6' – 4 ³ / ₄ "	 MRADH2841OTR 6' – 5 ¹ / ₄ " 6' – 5 ³ / ₄ "	 MRADH3041OTR 6' – 7 ¹ / ₄ " 6' – 7 ³ / ₄ "	 MRADH3441OTR 6' – 9 ¹ / ₄ " 6' – 9 ³ / ₄ "	 MRADH3841OTR 6' – 11 ¹ / ₄ " 6' – 11 ³ / ₄ "

Optional Gothic Grille Pattern

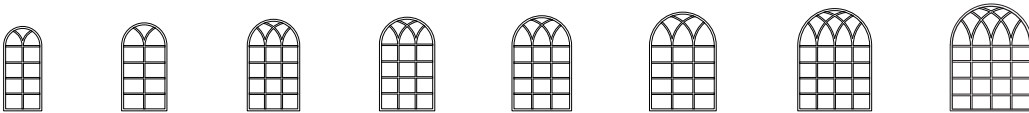


Double Hung – True Radius Single Units

Standard Colonial Grille Pattern Widths

Unit Dimension		1' – 9 ³ / ₈ "	2' – 1 ³ / ₈ "	2' – 5 ³ / ₈ "	2' – 7 ³ / ₈ "	2' – 9 ³ / ₈ "	3' – 1 ³ / ₈ "	3' – 5 ³ / ₈ "	3' – 9 ³ / ₈ "
Rough Opening		1' – 10 ³ / ₈ "	2' – 2 ³ / ₈ "	2' – 6 ³ / ₈ "	2' – 8 ³ / ₈ "	2' – 10 ³ / ₈ "	3' – 2 ³ / ₈ "	3' – 6 ³ / ₈ "	3' – 10 ³ / ₈ "
Grid Size		1-8	2-0	2-4	2-6	2-8	3-0	3-4	3-8
Heights	5-2	 MRADH1852TR 6' – 3 ¹ / ₄ " 6' – 3 ³ / ₄ "	 MRADH2052TR 6' – 5 ¹ / ₄ " 6' – 5 ³ / ₄ "	 MRADH2452TR 6' – 7 ¹ / ₄ " 6' – 7 ³ / ₄ "	 MRADH2652TR 6' – 8 ¹ / ₄ " 6' – 8 ³ / ₄ "	 MRADH2852TR 6' – 9 ¹ / ₄ " 6' – 9 ³ / ₄ "	 MRADH3052TR 6' – 11 ¹ / ₄ " 6' – 11 ³ / ₄ "	 MRADH3452TR 7' – 1 ¹ / ₄ " 7' – 1 ³ / ₄ "	 MRADH3852TR 7' – 3 ¹ / ₄ " 7' – 3 ³ / ₄ "
	5-6	 MRADH1856TR 6' – 7 ¹ / ₄ " 6' – 7 ³ / ₄ "	 MRADH2056TR 6' – 9 ¹ / ₄ " 6' – 9 ³ / ₄ "	 MRADH2456TR 6' – 11 ¹ / ₄ " 6' – 11 ³ / ₄ "	 MRADH2656TR 7' – 0 ¹ / ₄ " 7' – 0 ³ / ₄ "	 MRADH2856TR 7' – 1 ¹ / ₄ " 7' – 1 ³ / ₄ "	 MRADH3056TR 7' – 3 ¹ / ₄ " 7' – 3 ³ / ₄ "	 MRADH3456TR 7' – 5 ¹ / ₄ " 7' – 5 ³ / ₄ "	 MRADH3856TR 7' – 7 ¹ / ₄ " 7' – 7 ³ / ₄ "
	5-10	 MRADH18510TR 6' – 11 ¹ / ₄ " 6' – 11 ³ / ₄ "	 MRADH20510TR 7' – 1 ¹ / ₄ " 7' – 1 ³ / ₄ "	 MRADH24510TR 7' – 3 ¹ / ₄ " 7' – 3 ³ / ₄ "	 MRADH26510TR 7' – 4 ¹ / ₄ " 7' – 4 ³ / ₄ "	 MRADH28510TR 7' – 5 ¹ / ₄ " 7' – 5 ³ / ₄ "	 MRADH30510TR 7' – 7 ¹ / ₄ " 7' – 7 ³ / ₄ "	 MRADH34510TR 7' – 9 ¹ / ₄ " 7' – 9 ³ / ₄ "	 MRADH38510TR 7' – 11 ¹ / ₄ " 7' – 11 ³ / ₄ "
	6-2	 MRADH1862TR 7' – 3 ¹ / ₄ " 7' – 3 ³ / ₄ "	 MRADH2062TR 7' – 5 ¹ / ₄ " 7' – 5 ³ / ₄ "	 MRADH2462TR 7' – 7 ¹ / ₄ " 7' – 7 ³ / ₄ "	 MRADH2662TR 7' – 8 ¹ / ₄ " 7' – 8 ³ / ₄ "	 MRADH2862TR 7' – 9 ¹ / ₄ " 7' – 9 ³ / ₄ "	 MRADH3062TR 7' – 11 ¹ / ₄ " 7' – 11 ³ / ₄ "	 MRADH3462TR 8' – 1 ¹ / ₄ " 8' – 1 ³ / ₄ "	 MRADH3862TR 8' – 3 ¹ / ₄ " 8' – 3 ³ / ₄ "
	6-6	 MRADH1866TR 7' – 7 ¹ / ₄ " 7' – 7 ³ / ₄ "	 MRADH2066TR 7' – 9 ¹ / ₄ " 7' – 9 ³ / ₄ "	 MRADH2466TR 7' – 11 ¹ / ₄ " 7' – 11 ³ / ₄ "	 MRADH2666TR 8' – 0 ¹ / ₄ " 8' – 0 ³ / ₄ "	 MRADH2866TR 8' – 1 ¹ / ₄ " 8' – 1 ³ / ₄ "	 MRADH3066TR 8' – 3 ¹ / ₄ " 8' – 3 ³ / ₄ "	 MRADH3466TR 8' – 5 ¹ / ₄ " 8' – 5 ³ / ₄ "	 MRADH3866TR 8' – 7 ¹ / ₄ " 8' – 7 ³ / ₄ "
	7-0	 MRADH1870TR 8' – 1 ¹ / ₄ " 8' – 1 ³ / ₄ "	 MRADH2070TR 8' – 3 ¹ / ₄ " 8' – 3 ³ / ₄ "	 MRADH2470TR 8' – 5 ¹ / ₄ " 8' – 5 ³ / ₄ "	 MRADH2670TR 8' – 6 ¹ / ₄ " 8' – 6 ³ / ₄ "	 MRADH2870TR 8' – 7 ¹ / ₄ " 8' – 7 ³ / ₄ "	 MRADH3070TR 8' – 9 ¹ / ₄ " 8' – 9 ³ / ₄ "	 MRADH3470TR 8' – 11 ¹ / ₄ " 8' – 11 ³ / ₄ "	 MRADH3870TR 9' – 1 ¹ / ₄ " 9' – 1 ³ / ₄ "

Optional Gothic Grille Pattern



Widths							
0' – 11 ³ / ₈ "	1' – 1 ³ / ₈ "	1' – 3 ³ / ₈ "	1' – 5 ³ / ₈ "	1' – 7 ³ / ₈ "			
1' – 0 ³ / ₈ "	1' – 2 ³ / ₈ "	1' – 4 ³ / ₈ "	1' – 6 ³ / ₈ "	1' – 8 ³ / ₈ "			
0-10	1-0	1-2	1-4	1-6			
					5-2	5' – 4 ⁹ / ₁₆ "	
						5' – 5 ¹ / ₁₆ "	
					5-6	5' – 8 ⁹ / ₁₆ "	
						5' – 9 ¹ / ₁₆ "	
					5-10	6' – 0 ⁹ / ₁₆ "	
						6' – 1 ¹ / ₁₆ "	
					6-2	6' – 4 ⁹ / ₁₆ "	
						6' – 5 ¹ / ₁₆ "	
					6-6	6' – 8 ⁹ / ₁₆ "	
						6' – 9 ¹ / ₁₆ "	
					7-0	7' – 2 ⁹ / ₁₆ "	
						7' – 3 ¹ / ₁₆ "	

Double Hung – True Radius Twin Units

Standard Colonial Grille Pattern Widths

		3' – 7 3/4"		4' – 3 3/4"		4' – 11 3/4"		5' – 3 3/4"		5' – 7 3/4"		6' – 3 3/4"	
		3' – 8 3/4"		4' – 4 3/4"		5' – 0 3/4"		5' – 4 3/4"		5' – 8 3/4"		6' – 4 3/4"	
		1-8 Twin		2-0 Twin		2-4 Twin		2-6 Twin		2-8 Twin		3-0 Twin	
Heights	Unit Dimension	Grid Size											
	Rough Opening	Col Size											
	2 – 10	 MRADH18210-2TR 4' – 10 1/16" 4' – 10 5/16"	 MRADH20210-2TR 5' – 2 7/16" 5' – 2 5/16"	 MRADH24210-2TR 5' – 6 7/16" 5' – 6 5/16"	 MRADH26210-2TR 5' – 8 7/16" 5' – 8 5/16"	 MRADH28210-2TR 5' – 10 7/16" 5' – 10 5/16"	 MRADH30210-2TR 6' – 2 7/16" 6' – 2 5/16"						
	3 – 2	 MRADH1832-2TR 5' – 2 7/16" 5' – 2 5/16"	 MRADH2032-2TR 5' – 6 7/16" 5' – 6 5/16"	 MRADH2432-2TR 5' – 10 7/16" 5' – 10 5/16"	 MRADH2632-2TR 6' – 0 7/16" 6' – 0 5/16"	 MRADH2832-2TR 6' – 2 7/16" 6' – 2 5/16"	 MRADH3032-2TR 6' – 6 7/16" 6' – 6 5/16"						
	3 – 6	 MRADH1836-2TR 5' – 6 7/16" 5' – 6 5/16"	 MRADH2032-2TR 5' – 10 7/16" 5' – 10 5/16"	 MRADH2432-2TR 6' – 2 7/16" 6' – 2 5/16"	 MRADH2632-2TR 6' – 4 7/16" 6' – 4 5/16"	 MRADH2832-2TR 6' – 6 7/16" 6' – 6 5/16"	 MRADH3032-2TR 6' – 10 7/16" 6' – 10 5/16"						
	3 – 10	 MRADH18310-2TR 5' – 10 7/16" 5' – 10 5/16"	 MRADH20310-2TR 6' – 2 7/16" 6' – 2 5/16"	 MRADH24310-2TR 6' – 6 7/16" 6' – 6 5/16"	 MRADH26310-2TR 6' – 8 7/16" 6' – 8 5/16"	 MRADH28310-2TR 6' – 10 7/16" 6' – 10 5/16"							
	4 – 2	 MRADH1842-2TR 6' – 2 7/16" 6' – 2 5/16"	 MRADH2042-2TR 6' – 6 7/16" 6' – 6 5/16"	 MRADH2442-2TR 6' – 10 7/16" 6' – 10 5/16"	 MRADH2642-2TR 7' – 0 7/16" 7' – 0 5/16"	 MRADH2842-2TR 7' – 2 7/16" 7' – 2 5/16"							
4 – 6	 MRADH1846-2TR 6' – 6 7/16" 6' – 6 5/16"	 MRADH2046-2TR 6' – 10 7/16" 6' – 10 5/16"	 MRADH2446-2TR 7' – 2 7/16" 7' – 2 5/16"	 MRADH2646-2TR 7' – 4 7/16" 7' – 4 5/16"	 MRADH2846-2TR 7' – 6 7/16" 7' – 6 5/16"								
4 – 10	 MRADH18410-2TR 6' – 10 7/16" 6' – 10 5/16"	 MRADH20410-2TR 7' – 2 7/16" 7' – 2 5/16"	 MRADH24410-2TR 7' – 6 7/16" 7' – 6 5/16"	 MRADH26410-2TR 7' – 8 7/16" 7' – 8 5/16"	 MRADH28410-2TR 7' – 10 7/16" 7' – 10 5/16"								
													
													

Optional Gothic Grille Pattern

Standard Colonial Grille Pattern Widths

Heights	Unit Dimension			
	Rough Opening			
	Grid Size			
	3' – 7 3/4"	4' – 3 3/4"	4' – 11 3/4"	5' – 3 3/4"
5' – 2"	MRADH1852-2TR 7' – 2 1/4" 7' – 2 3/4"	MRADH2052-2TR 7' – 6 1/4" 7' – 6 3/4"	MRADH2452-2TR 7' – 10 1/4" 7' – 10 3/4"	MRDH2652-2TR 8' – 2 1/4" 8' – 2 3/4"
	MRADH1856-2TR 7' – 6 1/4" 7' – 6 3/4"	MRADH2056-2TR 7' – 10 1/4" 7' – 10 3/4"	MRADH2456-2TR 8' – 2 1/4" 8' – 2 3/4"	MRDH2656-2TR 8' – 5 1/4" 8' – 5 3/4"
	MRADH18510-2TR 7' – 10 1/4" 7' – 10 3/4"	MRADH20510-2TR 8' – 2 1/4" 7' – 2 3/4"	MRADH24510-2TR 8' – 6 1/4" 8' – 6 3/4"	MRDH26510-2TR 8' – 10 1/4" 8' – 10 3/4"
	MRADH1862-2TR 8' – 2 1/4" 8' – 2 3/4"	MRADH2062-2TR 8' – 6 1/4" 8' – 6 3/4"	MRADH2462-2TR 8' – 10 1/4" 8' – 10 3/4"	MRDH2662-2TR 9' – 2 1/4" 9' – 2 3/4"
	MRADH1866-2TR 8' – 6 1/4" 8' – 6 3/4"	MRADH2066-2TR 8' – 10 1/4" 8' – 10 3/4"		
	MRADH1870-2TR 9' – 0 1/4" 9' – 0 3/4"	MRADH2070-2TR 9' – 4 1/4" 9' – 4 3/4"		



Optional Gothic Grille Pattern

Double Hung – Arch Picture Units

Standard Colonial Grille Pattern Widths

		1' - 9 3/8"	2' - 1 3/8"	2' - 5 3/8"	2' - 7 3/8"	2' - 9 3/8"	3' - 1 3/8"	3' - 5 3/8"	3' - 9 3/8"
		1' - 10 3/8"	2' - 2 3/8"	2' - 6 3/8"	2' - 8 3/8"	2' - 10 3/8"	3' - 2 3/8"	3' - 6 3/8"	3' - 10 3/8"
		1-8	2-0	2-4	2-6	2-8	3-0	3-4	3-8
Unit Dimension Rough Opening	3-10	 MRADH1831OAH 4' - 4 1/8" 4' - 4 3/8"	 MRADH2031OAH 4' - 4 1/8" 4' - 5 1/8"	 MRADH2431OAH 4' - 5 1/8" 4' - 5 5/8"	 MRADH2631OAH 4' - 5 1/8" 4' - 6 3/8"	 MRADH2831OAH 4' - 6 1/8" 4' - 6 3/8"	 MRADH3031OAH 4' - 6 1/8" 4' - 7 1/8"	 MRADH3431OAH 4' - 7 1/8" 4' - 7 1/8"	 MRADH3831OAH 4' - 8 1/8" 4' - 8 3/8"
	4-2	 MRADH1842AH 4' - 8 1/8" 4' - 8 3/8"	 MRADH2042AH 4' - 8 1/8" 4' - 9 1/8"	 MRADH2442AH 4' - 9 1/8" 4' - 9 5/8"	 MRADH2642AH 4' - 9 1/8" 4' - 10 3/8"	 MRADH2842AH 4' - 10 1/8" 4' - 10 3/8"	 MRADH3042AH 4' - 10 1/8" 4' - 11 1/8"	 MRADH3442AH 4' - 11 1/8" 4' - 11 1/8"	 MRADH3842AH 5' - 0 1/8" 5' - 0 3/8"
	4-6	 MRADH1846AH 5' - 0 1/8" 5' - 0 3/8"	 MRADH2046AH 5' - 0 1/8" 5' - 1 1/8"	 MRADH2446AH 5' - 1 1/8" 5' - 1 5/8"	 MRADH2646AH 5' - 1 1/8" 5' - 2 1/8"	 MRADH2846AH 5' - 2 1/8" 5' - 2 3/8"	 MRADH3046AH 5' - 2 1/8" 5' - 3 1/8"	 MRADH3446AH 5' - 3 1/8" 5' - 3 3/8"	 MRADH3846AH 5' - 4 1/8" 5' - 4 3/8"
	4-10	 MRADH1841OAH 5' - 4 1/8" 5' - 4 3/8"	 MRADH2041OAH 5' - 4 1/8" 5' - 5 1/8"	 MRADH2441OAH 5' - 5 1/8" 5' - 5 5/8"	 MRADH2641OAH 5' - 5 1/8" 5' - 6 3/8"	 MRADH2841OAH 5' - 6 1/8" 5' - 6 3/8"	 MRADH3041OAH 5' - 6 1/8" 5' - 7 1/8"	 MRADH3441OAH 5' - 7 1/8" 5' - 7 1/8"	 MRADH3841OAH 5' - 8 1/8" 5' - 8 3/8"
	5-2	 MRADH1852AH 5' - 8 1/8" 5' - 8 3/8"	 MRADH2052AH 5' - 8 1/8" 5' - 9 1/8"	 MRADH2452AH 5' - 9 1/8" 5' - 9 5/8"	 MRADH2652AH 5' - 9 1/8" 5' - 10 3/8"	 MRADH2852AH 5' - 10 1/8" 5' - 10 3/8"	 MRADH3052AH 5' - 10 1/8" 5' - 11 1/8"	 MRADH3452AH 5' - 11 1/8" 5' - 11 1/8"	 MRADH3852AH 6' - 0 1/8" 6' - 0 3/8"
	5-6	 MRADH1856AH 6' - 0 1/8" 6' - 0 3/8"	 MRADH2056AH 6' - 0 1/8" 6' - 1 1/8"	 MRADH2456AH 6' - 1 1/8" 6' - 1 5/8"	 MRADH2656AH 6' - 1 1/8" 6' - 2 1/8"	 MRADH2856AH 6' - 2 1/8" 6' - 2 3/8"	 MRADH3056AH 6' - 2 1/8" 6' - 3 1/8"	 MRADH3456AH 6' - 3 1/8" 6' - 3 3/8"	 MRADH3856AH 6' - 4 1/8" 6' - 4 3/8"
	5-10	 MRADH1851OAH 6' - 4 1/8" 6' - 4 3/8"	 MRADH2051OAH 6' - 4 1/8" 6' - 5 1/8"	 MRADH2451OAH 6' - 5 1/8" 6' - 5 5/8"	 MRADH2651OAH 6' - 5 1/8" 6' - 6 3/8"	 MRADH2851OAH 6' - 6 1/8" 6' - 6 3/8"	 MRADH3051OAH 6' - 6 1/8" 6' - 7 1/8"	 MRADH3451OAH 6' - 7 1/8" 6' - 7 1/8"	 MRADH3851OAH 6' - 8 1/8" 6' - 8 3/8"
	6-2	 MRADH1862AH 6' - 8 1/8" 6' - 8 3/8"	 MRADH2062AH 6' - 8 1/8" 6' - 9 1/8"	 MRADH2462AH 6' - 9 1/8" 6' - 9 5/8"	 MRADH2662AH 6' - 9 1/8" 6' - 10 3/8"	 MRADH2862AH 6' - 10 1/8" 6' - 10 3/8"	 MRADH3062AH 6' - 10 1/8" 6' - 11 1/8"	 MRADH3462AH 6' - 11 1/8" 6' - 11 1/8"	 MRADH3862AH 7' - 0 1/8" 7' - 0 3/8"
	6-6	 MRADH1866AH 7' - 0 1/8" 7' - 0 3/8"	 MRADH2066AH 7' - 0 1/8" 7' - 1 1/8"	 MRADH2466AH 7' - 1 1/8" 7' - 1 5/8"	 MRADH2666AH 7' - 1 1/8" 7' - 2 1/8"	 MRADH2866AH 7' - 2 1/8" 7' - 2 3/8"	 MRADH3066AH 7' - 2 1/8" 7' - 3 1/8"	 MRADH3466AH 7' - 3 1/8" 7' - 3 3/8"	 MRADH3866AH 7' - 4 1/8" 7' - 4 3/8"
	7-0	 MRADH1870AH 7' - 6 1/8" 7' - 6 3/8"	 MRADH2070AH 7' - 6 1/8" 7' - 7 1/8"	 MRADH2470AH 7' - 7 1/8" 7' - 7 5/8"	 MRADH2670AH 7' - 7 1/8" 7' - 8 3/8"	 MRADH2870AH 7' - 8 1/8" 7' - 8 3/8"	 MRADH3070AH 7' - 8 1/8" 7' - 9 1/8"	 MRADH3470AH 7' - 9 1/8" 7' - 9 1/8"	 MRADH3870AH 7' - 10 1/8" 7' - 10 3/8"

Unit height dimension is listed first under individual windows

Rough Opening height dimension is listed second under individual windows

Heights



Optional Renaissance Grille Pattern

Standard Colonial Grille Pattern

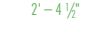
		Widths										
		1' – 9 3/8"	2' – 1 3/8"	2' – 5 3/8"	2' – 7 3/8"	2' – 9 3/8"	3' – 1 3/8"	3' – 5 3/8"	3' – 9 3/8"	4' – 1 3/8"	5' – 1 3/8"	6' – 1 3/8"
		1' – 10 3/8"	2' – 2 3/8"	2' – 6 3/8"	2' – 8 3/8"	2' – 10 3/8"	3' – 2 3/8"	3' – 6 3/8"	3' – 10 3/8"	4' – 2 3/8"	5' – 2 3/8"	6' – 2 3/8"
		1-8	2-0	2-4	2-6	2-8	3-0	3-4	3-8	4-0	5-0	6-0
Heights	Unit Dimension											
	Rough Opening											
	Call Size											
	0-6	 MRADH1806AHTN 0' – 10 15/16" 0' – 11 1/8"	 MRADH2006AHTN 0' – 11 5/8" 1' – 0 1/8"	 MRADH2406AHTN 1' – 0 1/4" 1' – 0 3/4"	 MRADH2606AHTN 1' – 0 5/8" 1' – 1 1/8"	 MRADH2806AHTN 1' – 1 1/8" 1' – 1 1/2"	 MRADH3006AHTN 1' – 1 5/8" 1' – 2 1/8"	 MRADH3406AHTN 1' – 2 1/4" 1' – 2 3/4"	 MRADH3806AHTN 1' – 2 15/16" 1' – 3 1/8"	 MRADH4006AHTN 1' – 3 3/8" 1' – 4 1/8"	 MRADH5006AHTN 1' – 5 5/8" 1' – 6 1/8"	 MRADH6006AHTN 1' – 7 5/8" 1' – 8 1/8"
	0-10	 MRADH18010AHTN 1' – 2 15/16" 1' – 3 1/8"	 MRADH20010AHTN 1' – 3 5/8" 1' – 4 1/8"	 MRADH24010AHTN 1' – 4 1/4" 1' – 4 3/4"	 MRADH26010AHTN 1' – 4 5/8" 1' – 5 1/8"	 MRADH28010AHTN 1' – 4 15/16" 1' – 5 1/2"	 MRADH30010AHTN 1' – 5 5/8" 1' – 6 1/8"	 MRADH34010AHTN 1' – 6 1/4" 1' – 6 3/4"	 MRADH38010AHTN 1' – 6 15/16" 1' – 7 1/8"	 MRADH40010AHTN 1' – 7 3/8" 1' – 8 1/8"	 MRADH50010AHTN 1' – 9 5/8" 1' – 10 1/8"	 MRADH60010AHTN 1' – 11 5/8" 2' – 0 1/8"
	1-0	 MRADH1810AHTN 1' – 4 15/16" 1' – 5 1/8"	 MRADH2010AHTN 1' – 5 5/8" 1' – 6 1/8"	 MRADH2410AHTN 1' – 6 1/4" 1' – 6 3/4"	 MRADH2610AHTN 1' – 6 5/8" 1' – 7 1/8"	 MRADH2810AHTN 1' – 6 15/16" 1' – 7 1/2"	 MRADH3010AHTN 1' – 7 5/8" 1' – 8 1/8"	 MRADH3410AHTN 1' – 8 1/4" 1' – 8 3/4"	 MRADH3810AHTN 1' – 8 15/16" 1' – 9 1/8"	 MRADH4010AHTN 1' – 9 3/8" 1' – 10 1/8"	 MRADH5010AHTN 1' – 11 5/8" 2' – 0 1/8"	 MRADH6010AHTN 2' – 1 5/8" 2' – 2 1/8"
	1-2	 MRADH1812AHTN 1' – 4 15/16" 1' – 7 7/8"	 MRADH2012AHTN 1' – 7 5/8" 1' – 8 1/4"	 MRADH2412AHTN 1' – 8 1/4" 1' – 8 3/4"	 MRADH2612AHTN 1' – 8 5/8" 1' – 9 1/8"	 MRADH2812AHTN 1' – 8 15/16" 1' – 9 1/2"	 MRADH3012AHTN 1' – 9 5/8" 1' – 10 1/8"	 MRADH3412AHTN 1' – 10 1/4" 1' – 10 3/4"	 MRADH3812AHTN 1' – 10 15/16" 1' – 11 1/8"	 MRADH4012AHTN 1' – 11 3/8" 2' – 0 1/8"	 MRADH5012AHTN 2' – 1 5/8" 2' – 2 1/8"	 MRADH6012AHTN 2' – 3 5/8" 2' – 4 1/8"
1-6	 MRADH1816AHTN 1' – 10 15/16" 1' – 11 1/8"	 MRADH2016AHTN 1' – 11 5/8" 2' – 0 1/8"	 MRADH2416AHTN 2' – 0 1/4" 2' – 0 3/4"	 MRADH2616AHTN 2' – 0 5/8" 2' – 10 1/8"	 MRADH2816AHTN 2' – 0 15/16" 2' – 1 1/8"	 MRADH3016AHTN 2' – 1 5/8" 2' – 2 1/8"	 MRADH3416AHTN 2' – 2 1/4" 2' – 2 3/4"	 MRADH3816AHTN 2' – 2 15/16" 2' – 3 1/8"	 MRADH4016AHTN 2' – 3 3/8" 2' – 4 1/8"	 MRADH5016AHTN 2' – 5 5/8" 2' – 6 1/8"	 MRADH6016AHTN 2' – 7 5/8" 2' – 8 1/8"	
2-0	 MRADH1820AHTN 2' – 4 15/16" 2' – 5 7/8"	 MRADH2020AHTN 2' – 5 5/8" 2' – 6 1/8"	 MRADH2420AHTN 2' – 6 1/4" 2' – 6 3/4"	 MRADH2620AHTN 2' – 6 5/8" 2' – 7 1/8"	 MRADH2820AHTN 2' – 6 15/16" 2' – 7 1/2"	 MRADH3020AHTN 2' – 7 5/8" 2' – 8 1/8"	 MRADH3420AHTN 2' – 8 1/4" 2' – 8 3/4"	 MRADH3820AHTN 2' – 8 15/16" 2' – 9 1/8"	 MRADH4020AHTN 2' – 9 3/8" 2' – 10 1/8"	 MRADH5020AHTN 2' – 11 7/8" 3' – 0 1/8"	 MRADH6020AHTN 3' – 1 5/8" 3' – 2 1/8"	
		 MRADH1824AHTN 2' – 10 15/16" 2' – 11 1/8"	 MRADH2024AHTN 2' – 11 5/8" 2' – 12 1/8"	 MRADH2424AHTN 2' – 12 1/4" 2' – 12 3/4"	 MRADH2624AHTN 2' – 12 5/8" 2' – 13 1/8"	 MRADH2824AHTN 2' – 12 15/16" 2' – 13 1/2"	 MRADH3024AHTN 2' – 13 5/8" 2' – 14 1/8"	 MRADH3424AHTN 2' – 14 1/4" 2' – 14 3/4"	 MRADH3824AHTN 2' – 14 15/16" 2' – 15 1/8"	 MRADH4024AHTN 2' – 15 3/8" 2' – 16 1/8"	 MRADH5024AHTN 2' – 17 5/8" 3' – 0 1/8"	 MRADH6024AHTN 2' – 19 5/8" 3' – 2 1/8"



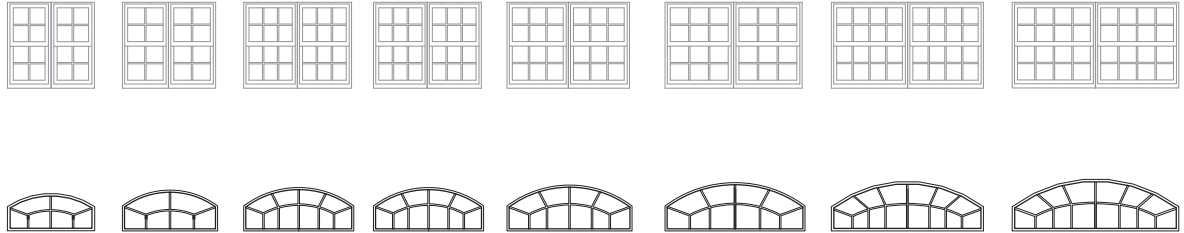
Optional Renaissance Grille Pattern

Double Hung – Arch Transom Twin Units

Standard Colonial Grille Pattern Widths

		Standard Colonial Grille Pattern Widths							
		3' – 7 3/4"	4' – 3 3/4"	4' – 11 3/4"	5' – 3 3/4"	5' – 7 3/4"	6' – 3 3/4"	6' – 11 3/4"	7' – 7 3/4"
		3' – 8 3/4"	4' – 4 3/4"	5' – 0 3/4"	5' – 4 3/4"	5' – 8 3/4"	6' – 4 3/4"	7' – 0 3/4"	7' – 8 3/4"
		1-8 Twin	2-0 Twin	2-4 Twin	2-6 Twin	2-8 Twin	3-0 Twin	3-4 Twin	3-8 Twin
Heights	Unit Dimension								
	Rough Opening								
	Call Size								
	0-6	 MRADH1806-2AHTN 1' – 2 11/16" 1' – 3 3/8"	 MRADH2006-2AHTN 1' – 4" 1' – 4 1/2"	 MRADH2406-2AHTN 1' – 5 5/16" 1' – 5 9/16"	 MRADH2606-2AHTN 1' – 6" 1' – 6 1/2"	 MRADH2806-2AHTN 1' – 6 11/16" 1' – 7 3/16"	 MRADH3006-2AHTN 1' – 8" 1' – 8 1/2"	 MRADH3406-2AHTN 1' – 9 5/16" 1' – 9 9/16"	 MRADH3806-2AHTN 1' – 10 11/16" 1' – 11 3/16"
	0-10	 MRADH18010-2AHTN 1' – 6 11/16" 1' – 7 3/8"	 MRADH20010-2AHTN 1' – 8" 1' – 8 1/2"	 MRADH24010-2AHTN 1' – 9 5/16" 1' – 9 9/16"	 MRADH26010-2AHTN 1' – 10" 1' – 10 1/2"	 MRADH28010-2AHTN 1' – 10 11/16" 1' – 11 3/16"	 MRADH30010-2AHTN 2' – 0" 2' – 0 1/2"	 MRADH34010-2AHTN 2' – 1 5/16" 2' – 1 9/16"	 MRADH38010-2AHTN 2' – 2 11/16" 2' – 3 3/16"
	1-0	 MRADH1810-2AHTN 1' – 8 11/16" 1' – 9 3/8"	 MRADH2010-2AHTN 1' – 10" 1' – 10 1/2"	 MRADH2410-2AHTN 1' – 11 5/16" 1' – 11 9/16"	 MRADH2610-2AHTN 2' – 0" 2' – 0 1/2"	 MRADH2810-2AHTN 2' – 1 11/16" 2' – 1 3/16"	 MRADH3010-2AHTN 2' – 2" 2' – 2 1/2"	 MRADH3410-2AHTN 2' – 3 5/16" 2' – 3 9/16"	 MRADH3810-2AHTN 2' – 5 11/16" 2' – 5 3/16"
	1-2	 MRADH1812-2AHTN 1' – 10 11/16" 1' – 11 3/8"	 MRADH2012-2AHTN 2' – 0" 2' – 0 1/2"	 MRADH2412-2AHTN 2' – 1 5/16" 2' – 1 9/16"	 MRADH2612-2AHTN 2' – 2" 2' – 2 1/2"	 MRADH2812-2AHTN 2' – 2 11/16" 2' – 3 3/16"	 MRADH3012-2AHTN 2' – 4" 2' – 4 1/2"	 MRADH3412-2AHTN 2' – 5 5/16" 2' – 5 9/16"	 MRADH3812-2AHTN 2' – 6 11/16" 2' – 7 3/16"
	1-6	 MRADH1816-2AHTN 2' – 2 11/16" 2' – 3 3/8"	 MRADH2016-2AHTN 2' – 4" 2' – 4 1/2"	 MRADH2416-2AHTN 2' – 5 5/16" 2' – 5 9/16"	 MRADH2616-2AHTN 2' – 6" 2' – 6 1/2"	 MRADH2816-2AHTN 2' – 6 11/16" 2' – 7 3/16"	 MRADH3016-2AHTN 2' – 8" 2' – 8 1/2"	 MRADH3416-2AHTN 2' – 9 5/16" 2' – 9 9/16"	 MRADH3816-2AHTN 2' – 10 11/16" 2' – 11 3/16"
	2-0	 MRADH1820-2AHTN 2' – 8 11/16" 2' – 9 3/8"	 MRADH2020-2AHTN 2' – 10" 2' – 10 1/2"	 MRADH2420-2AHTN 2' – 11 5/16" 2' – 11 9/16"	 MRADH2620-2AHTN 3' – 0" 3' – 0 1/2"	 MRADH2820-2AHTN 3' – 0 11/16" 3' – 1 3/16"	 MRADH3020-2AHTN 3' – 2" 3' – 2 1/2"	 MRADH3420-2AHTN 3' – 3 5/16" 3' – 3 9/16"	 MRADH3820-2AHTN 3' – 4 11/16" 3' – 5 3/16"

Optional Renaissance Grille Pattern



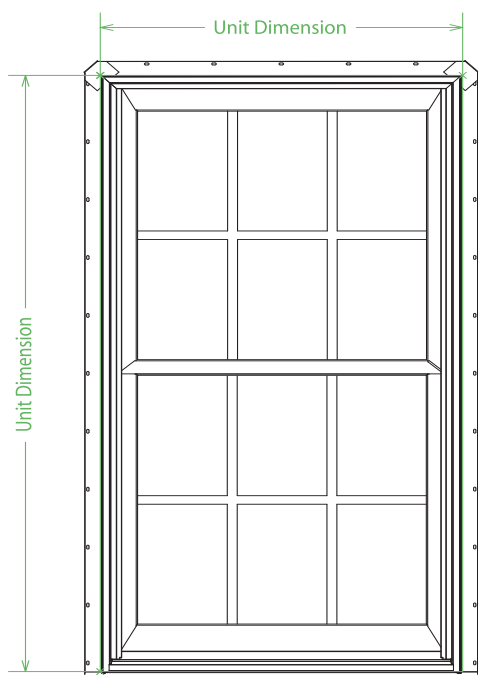
Single Widths

Heights	Unit Dimension										
	Rough Opening										
	Call Size										
	1'-9 3/8"	2'-1 3/8"	2'-5 3/8"	2'-7 3/8"	2'-9 3/8"	3'-1 3/8"	3'-5 3/8"	3'-9 3/8"	4'-1 3/8"	5'-1 3/8"	6'-1 3/8"
0-11 3/8"	1'-10 3/8"	2'-2 3/8"	2'-6 3/8"	2'-8 3/8"	2'-10 3/8"	3'-2 3/8"	3'-6 3/8"	3'-10 3/8"	4'-2 3/8"	5'-2 3/8"	6'-2 3/8"
0-10"	1-8	2-0	2-4	2-6	2-8	3-0	3-4	3-8	4-0 Picture	5-0 Picture	6-0 Picture
1-0"	MRADH18010TN	MRADH20010TN	MRADH24010TN	MRADH26010TN	MRADH28010TN	MRADH30010TN	MRADH34010TN	MRADH38010TN	MRADH40010-PTN	MRADH50010-PTN	MRADH60010-PTN
1-1 3/8"	MRADH1810TN	MRADH2010TN	MRADH2410TN	MRADH2610TN	MRADH2810TN	MRADH3010TN	MRADH3410TN	MRADH3810TN	MRADH4010-PTN	MRADH5010-PTN	MRADH6010-PTN
1-3 3/8"	MRADH1812TN	MRADH2012TN	MRADH2412TN	MRADH2612TN	MRADH2812TN	MRADH3012TN	MRADH3412TN	MRADH3812TN	MRADH4012-PTN	MRADH5012-PTN	MRADH6012-PTN
1-5 3/8"	MRADH1816TN	MRADH2016TN	MRADH2416TN	MRADH2616TN	MRADH2816TN	MRADH3016TN	MRADH3416TN	MRADH3816TN	MRADH4016-PTN	MRADH5016-PTN	MRADH6016-PTN
1-7 3/8"	MRADH1820TN	MRADH2020TN	MRADH2420TN	MRADH2620TN	MRADH2820TN	MRADH3020TN	MRADH3420TN	MRADH3820TN	MRADH4020-PTN	MRADH5020-PTN	MRADH6020-PTN
1-9 3/8"	MRADH1824TN	MRADH2024TN	MRADH2424TN	MRADH2624TN	MRADH2824TN	MRADH3024TN	MRADH3424TN	MRADH3824TN	MRADH4024-PTN	MRADH5024-PTN	MRADH6024-PTN
2-0"											
2-2 3/8"											
2-4"											

Twin Widths

Heights	Unit Dimension							
	Rough Opening							
	Call Size							
	3'-7 3/4"	4'-3 3/4"	4'-11 3/4"	5'-3 3/4"	5'-7 3/4"	6'-3 3/4"	6'-11 3/4"	7'-7 3/4"
0-11 3/8"	3'-8 3/4"	4'-4 3/4"	5'-0 3/4"	5'-4 3/4"	5'-8 3/4"	6'-4 3/4"	7'-0 3/4"	7'-8 3/4"
0-10"	1-8 Twin	2-0 Twin	2-4 Twin	2-6 Twin	2-8 Twin	3-0 Twin	3-4 Twin	3-8 Twin
1-0"	MRADH18010-2TN	MRADH20010-2TN	MRADH24010-2TN	MRADH26010-2TN	MRADH28010-2TN	MRADH30010-2TN		
1-1 3/8"	MRADH1810-2TN	MRADH2010-2TN	MRADH2410-2TN	MRADH2610-2TN	MRADH2810-2TN	MRADH3010-2TN	MRADH3410-2TN	MRADH3810-2TN
1-3 3/8"	MRADH1812-2TN	MRADH2012-2TN	MRADH2412-2TN	MRADH2612-2TN	MRADH2812-2TN	MRADH3012-2TN	MRADH3412-2TN	MRADH3812-2TN
1-5 3/8"	MRADH1816-2TN	MRADH2016-2TN	MRADH2416-2TN	MRADH2616-2TN	MRADH2816-2TN	MRADH3016-2TN	MRADH3416-2TN	MRADH3816-2TN
1-7 3/8"	MRADH1820-2TN	MRADH2020-2TN	MRADH2420-2TN	MRADH2620-2TN	MRADH2820-2TN	MRADH3020-2TN	MRADH3420-2TN	MRADH3820-2TN
1-9 3/8"	MRADH1824-2TN	MRADH2024-2TN	MRADH2424-2TN	MRADH2624-2TN	MRADH2824-2TN	MRADH3024-2TN	MRADH3424-2TN	MRADH3824-2TN
2-0"								
2-2 3/8"								
2-4"								

Double Hung – Actual Unit Dimensions



To calculate unit dimension on multiple units, add 1" per mull together with actual unit dimension.

Operating Units, WIDTH

CALL SIZE (WIDTH)	1-8	2-0	2-4	2-6	2-8	3-0	3-4	3-8
SINGLE	21 ^{-3/8}	25 ^{-3/8}	29 ^{-3/8}	31 ^{-3/8}	33 ^{-3/8}	37 ^{-3/8}	41 ^{-3/8}	45 ^{-3/8}
TWIN	43 ^{-3/4}	51 ^{-3/4}	59 ^{-3/4}	63 ^{-3/4}	67 ^{-3/4}	75 ^{-3/4}	83 ^{-3/4}	91 ^{-3/4}
TRIPLE	66 ^{-1/8}	78 ^{-1/8}	90 ^{-1/8}	96 ^{-1/8}	102 ^{-1/8}	114 ^{-1/8}	N/A	N/A
FOUR WIDE	88 ^{-1/2}	104 ^{-1/2}	120 ^{-1/2}	N/A	N/A	N/A	N/A	N/A

Fixed Units, WIDTH

CALL SIZE (WIDTH)	3-0	3-4	4-0	5-0	6-0
SINGLE	37 ^{-3/8}	41 ^{-3/8}	49 ^{-3/8}	61 ^{-3/8}	73 ^{-3/8}
TWIN	75 ^{-3/4}	83 ^{-3/4}	99 ^{-3/4}	N/A	N/A
TRIPLE	114 ^{-1/8}	N/A	N/A	N/A	N/A

Transom Units, WIDTH

CALL SIZE (WIDTH)	1-0	1-2	1-4	1-8	2-0	2-4	2-6	2-8
SINGLE	13 ^{-3/8}	15 ^{-3/8}	17 ^{-3/8}	21 ^{-3/8}	25 ^{-3/8}	29 ^{-3/8}	31 ^{-3/8}	33 ^{-3/8}
TWIN	27 ^{-3/4}	31 ^{-3/4}	35 ^{-3/4}	43 ^{-3/4}	51 ^{-3/4}	59 ^{-3/4}	63 ^{-3/4}	67 ^{-3/4}
TRIPLE	43 ^{-1/8}	49 ^{-1/8}	55 ^{-1/8}	67 ^{-1/8}	79 ^{-1/8}	91 ^{-1/8}	96 ^{-1/8}	103 ^{-1/8}

Operating & Fixed Units, HEIGHT

CALL SIZE (HEIGHT)	HEIGHT IN INCHES
2-10	36 ^{-9/16}
3-2	41 ^{-9/16}
3-10	49 ^{-9/16}
4-2	53 ^{-9/16}
4-6	57 ^{-9/16}
4-10	60 ^{-9/16}
5-2	65 ^{-9/16}
5-6C	69 ^{-9/16}
5-6E	69 ^{-9/16}
5-10	72 ^{-9/16}
6-2	77 ^{-9/16}
6-6	80 ^{-9/16}

Transom Units, HEIGHT

CALL SIZE (HEIGHT)	HEIGHT IN INCHES
0-10	11 ^{-3/8}
1-0	13 ^{-3/8}
1-2	15 ^{-3/8}
1-6	17 ^{-3/8}
2-0	25 ^{-5/8}
2-4	29 ^{-5/8}

NOTE: Units listed in **green** satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.

Double Hung – Net Clear & Daylight Opening Dimensions

Operating Units

Call Size	Clear Opening Width	Clear Opening Height	Clear Opening S.F.	Daylight Opening S.F.
MRADH18210	17.672	14.500	1.78	2.8
32	17.672	16.500	2.02	3.2
36	17.672	18.500	2.27	3.6
310	17.672	20.500	2.52	4.1
42	17.672	22.500	2.76	4.5
46	17.672	24.500	3.01	4.9
410	17.672	26.500	3.25	5.3
52	17.672	28.500	3.50	5.7
56E	17.672	30.500	3.74	6.1
56C	17.672	24.500	3.01	6.1
510	17.672	32.500	3.99	6.5
62	17.672	34.500	4.23	7.0
66	17.672	36.500	4.48	7.4
70	17.672	39.500	4.85	8.0
MRADH20210	21.672	14.500	2.18	3.6
32	21.672	16.500	2.48	4.1
36	21.672	18.500	2.78	4.6
310	21.672	20.500	3.09	5.1
42	21.672	22.500	3.39	5.7
46	21.672	24.500	3.69	6.2
410	21.672	26.500	3.99	6.7
52	21.672	28.500	4.29	7.2
56E	21.672	30.500	4.59	7.8
56C	21.672	24.500	3.69	7.8
510	21.672	32.500	4.89	8.3
62	21.672	34.500	5.19	8.8
66	21.672	36.500	5.49	9.3
70	21.672	39.500	5.94	10.1
MRADH24210	25.672	14.500	2.59	4.3
32	25.672	16.500	2.94	5.0
36	25.672	18.500	3.30	5.6
310	25.672	20.500	3.65	6.2
42	25.672	22.500	4.01	6.9
46	25.672	24.500	4.37	7.5
410	25.672	26.500	4.72	8.1
52	25.672	28.500	5.08	8.8
56E	25.672	30.500	5.44	9.4
56C	25.672	24.500	4.37	9.4
510	25.672	32.500	5.79	10.0
62	25.672	34.500	6.15	10.7
66	25.672	36.500	6.51	11.3
70	25.672	39.500	7.04	12.3
MRADH26210	27.672	14.500	2.79	4.7
32	27.672	16.500	3.17	5.4
36	27.672	18.500	3.56	6.1
310	27.672	20.500	3.94	7.8
42	27.672	22.500	4.32	7.5
46	27.672	24.500	4.71	8.2
410	27.672	26.500	5.09	8.8
52	27.672	28.500	5.48	9.5
56E	27.672	30.500	5.86	10.2
56C	27.672	24.500	4.71	10.2
510	27.672	32.500	6.25	10.9
62	27.672	34.500	6.63	11.6
66	27.672	36.500	7.01	12.3
70	27.672	39.500	7.59	13.3

Call Size	Clear Opening Width	Clear Opening Height	Clear Opening S.F.	Daylight Opening S.F.
MRADH28210	29.672	14.500	2.99	5.1
32	29.672	16.500	3.40	5.8
36	29.672	18.500	3.81	6.6
310	29.672	20.500	4.22	7.3
42	29.672	22.500	4.64	8.1
46	29.672	24.500	5.05	8.8
410	29.672	26.500	5.46	9.6
52	29.672	28.500	5.87	10.3
56E	29.672	30.500	6.28	11.1
56C	29.672	24.500	5.05	11.1
510	29.672	32.500	6.70	11.8
62	29.672	34.500	7.11	12.5
66	29.672	36.500	7.52	13.3
70	29.672	39.500	8.14	14.4
MRADH30210	33.672	14.500	3.39	5.8
32	33.672	16.500	3.86	6.7
36	33.672	18.500	4.33	7.5
310	33.672	20.500	4.79	8.4
42	33.672	22.500	5.26	9.3
46	33.672	24.500	5.73	10.1
410	33.672	26.500	6.20	11.0
52	33.672	28.500	6.66	11.8
56E	33.672	30.500	7.13	12.7
56C	33.672	24.500	5.73	12.7
510	33.672	32.500	7.60	13.6
62	33.672	34.500	8.07	14.4
66	33.672	36.500	8.53	15.3
70	33.672	39.500	9.24	16.6
MRADH34210	37.672	14.500	3.79	6.6
32	37.672	16.500	4.32	7.5
36	37.672	18.500	4.84	8.5
310	37.672	20.500	5.36	9.5
42	37.672	22.500	5.89	10.5
46	37.672	24.500	6.41	11.4
410	37.672	26.500	6.93	12.4
52	37.672	28.500	7.46	13.4
56E	37.672	30.500	7.98	14.3
56C	37.672	24.500	6.41	14.3
510	37.672	32.500	8.50	15.3
62	37.672	34.500	9.03	16.3
66	37.672	36.500	9.55	17.2
70	37.672	39.500	10.33	18.7
MRADH38210	41.672	14.500	4.20	7.3
32	41.672	16.500	4.77	8.4
36	41.672	18.500	5.35	9.5
310	41.672	20.500	5.93	10.6
42	41.672	22.500	6.51	11.6
46	41.672	24.500	7.09	12.7
410	41.672	26.500	7.67	13.8
52	41.672	28.500	8.25	14.9
56E	41.672	30.500	8.83	16.0
56C	41.672	24.500	7.09	16.0
510	41.672	32.500	9.41	17.1
62	41.672	34.500	9.98	18.1
66	41.672	36.500	10.56	19.2
70	41.672	39.500	11.43	20.8

Double Hung – Daylight Opening Dimensions

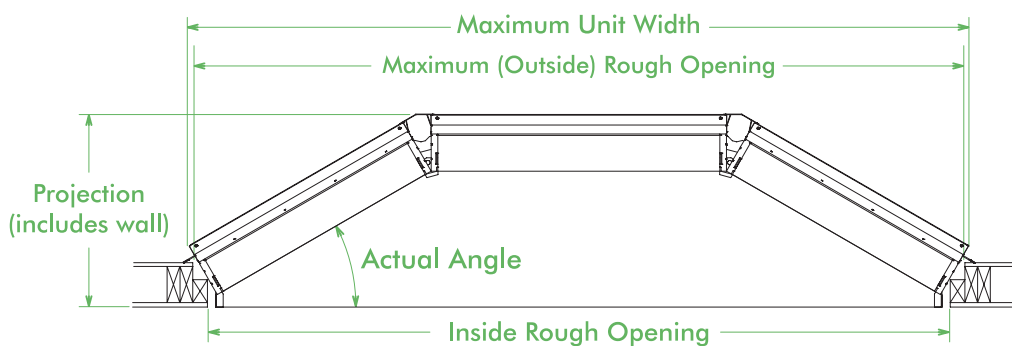
Fixed Units

Call Size	Daylight Opening S.F.
MRADH10210P	1.4
32	1.6
36	1.8
310	2.0
42	2.2
46	2.4
410	2.5
52	2.7
56	2.9
510	3.1
62	3.3
66	3.5
70	3.8
MRADH18210P	3.0
32	3.4
36	3.8
310	4.2
42	4.6
46	5.1
410	5.5
52	5.9
56	6.3
510	6.7
62	7.1
66	7.6
70	8.2
MRADH20210P	3.8
32	4.3
36	4.8
310	5.4
42	5.9
46	6.4
410	6.9
52	7.5
56	8.0
510	8.5
62	9.0
66	9.6
70	10.4
MRADH24210P	4.6
32	5.2
36	5.9
310	6.5
42	7.1
46	7.8
410	8.4
52	9.0
56	9.7
510	10.3
62	11.0
66	11.6
70	12.6

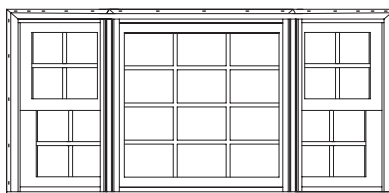
Call Size	Daylight Opening S.F.
MRADH26210P	5.0
32	5.7
36	6.4
310	7.1
42	7.8
46	8.5
410	9.1
52	9.8
56	10.5
510	11.2
62	11.9
66	12.6
70	13.6
MRADH28210P	5.4
32	6.1
36	6.9
310	7.6
42	8.4
46	9.1
410	9.9
52	10.6
56	11.4
510	12.1
62	12.9
66	13.6
70	14.7
MRADH30210P	6.2
32	7.1
36	7.9
310	8.8
42	9.6
46	10.5
410	11.3
52	12.2
56	13.1
510	13.9
62	14.8
66	15.6
70	16.9
MRADH34210P	7.0
32	8.0
36	8.9
310	9.9
42	10.9
46	11.8
410	12.8
52	13.8
56	14.8
510	15.7
62	16.7
66	17.7
70	19.1

Call Size	Daylight Opening S.F.
MRADH38210P	7.8
32	8.9
36	10.0
310	11.0
42	12.1
46	13.2
410	14.3
52	15.4
56	16.4
510	17.5
62	18.6
66	19.7
70	21.3
MRADH40210P	8.6
32	9.8
36	11.0
310	12.2
42	13.4
46	14.6
410	15.7
52	16.9
56	18.1
510	19.3
62	20.5
66	21.7
70	23.5
MRADH50210P	11.0
32	12.5
36	14.0
310	15.6
42	17.1
46	18.6
410	20.2
52	21.7
56	23.2
510	24.7
62	26.3
66	27.8
70	30.1
MRADH60210P	13.4
32	15.3
36	17.1
310	19.0
42	20.8
46	22.7
410	24.6
52	26.4
56	28.3
510	30.1
62	32.0
66	33.8
70	36.6

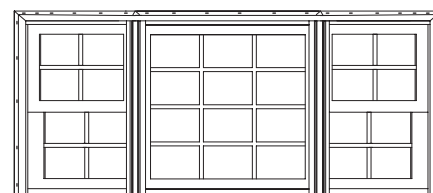
Double Hung – Bay Window Details



30° Angle Bay with 1-8 Flankers



30° Angle Bay with 2-0 Flankers



HEIGHTS

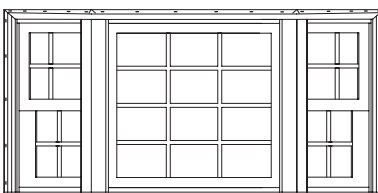
Call Size	Bay Unit	Inside Dimension	Rough Opening
2/10	37- ⁵ / ₁₆	35- ⁷ / ₁₆	37- ¹³ / ₁₆
3/2	41- ⁵ / ₁₆	39- ⁷ / ₁₆	41- ¹³ / ₁₆
3/10	49- ⁵ / ₁₆	47- ⁷ / ₁₆	49- ¹³ / ₁₆
4/2	53- ⁵ / ₁₆	51- ⁷ / ₁₆	53- ¹³ / ₁₆
4/6	57- ⁵ / ₁₆	55- ⁷ / ₁₆	57- ¹³ / ₁₆
5/2	65- ⁵ / ₁₆	63- ⁷ / ₁₆	65- ¹³ / ₁₆
5/6	69- ⁵ / ₁₆	67- ⁷ / ₁₆	69- ¹³ / ₁₆
6/2	77- ⁵ / ₁₆	75- ⁷ / ₁₆	77- ¹³ / ₁₆

Note: Projections include 4-⁹/₁₆" wall.

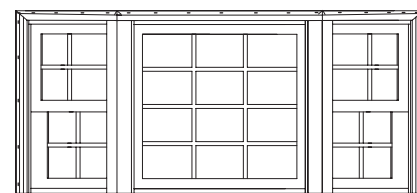
WIDTHS

Call Size	Max. Unit	Max. Ext. Rough Opening	Inside Rough Opening	Projection	Actual Angle
MRADH1830xx-30	80- ¹³ / ₁₆	80- ³ / ₁₆	75- ⁹ / ₁₆	17- ⁷ / ₈	30°
MRADH1834xx-30	84- ¹³ / ₁₆	84- ³ / ₁₆	79- ⁹ / ₁₆	17- ⁷ / ₈	30°
MRADH1838xx-30	88- ¹³ / ₁₆	88- ³ / ₁₆	83- ⁹ / ₁₆	17- ⁷ / ₈	30°
MRADH1840xx-30	92- ¹³ / ₁₆	92- ³ / ₁₆	87- ⁹ / ₁₆	17- ⁷ / ₈	30°
MRADH1850xx-30	104- ¹³ / ₁₆	104- ³ / ₁₆	99- ⁹ / ₁₆	17- ⁷ / ₈	30°
MRADH1860xx-30	116- ¹³ / ₁₆	116- ³ / ₁₆	111- ⁹ / ₁₆	17- ⁷ / ₈	30°
MRADH2030xx-30	87- ³ / ₄	87- ¹ / ₈	82- ¹ / ₂	19- ⁷ / ₈	30°
MRADH2034xx-30	91- ³ / ₄	91- ¹ / ₈	86- ¹ / ₂	19- ⁷ / ₈	30°
MRADH2038xx-30	95- ³ / ₄	95- ¹ / ₈	90- ¹ / ₂	19- ⁷ / ₈	30°
MRADH2040xx-30	99- ³ / ₄	99- ¹ / ₈	94- ¹ / ₂	19- ⁷ / ₈	30°
MRADH2050xx-30	111- ³ / ₄	111- ¹ / ₈	106- ¹ / ₂	19- ⁷ / ₈	30°
MRADH2060xx-30	123- ³ / ₄	123- ¹ / ₈	118- ¹ / ₂	19- ⁷ / ₈	30°

45° Angle Bay with 1-8 Flankers

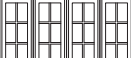
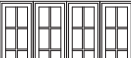
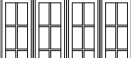


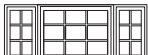
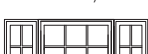
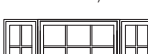
45° Angle Bay with 2-0 Flankers

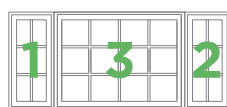


WIDTHS

Call Size	Max. Unit	Max. Ext. Rough Opening	Inside Rough Opening	Projection	Actual Angle
MRADH1830xx-45	77- ³ / ₄	75- ⁷ / ₈	69- ⁷ / ₈	23- ⁵ / ₁₆	45°
MRADH1834xx-45	81- ³ / ₄	79- ⁷ / ₈	73- ⁷ / ₈	23- ⁵ / ₁₆	45°
MRADH1838xx-45	85- ³ / ₄	83- ⁷ / ₈	77- ⁷ / ₈	23- ⁵ / ₁₆	45°
MRADH1840xx-45	89- ³ / ₄	87- ⁷ / ₈	81- ⁷ / ₈	23- ⁵ / ₁₆	45°
MRADH1850xx-45	101- ³ / ₄	99- ⁷ / ₈	93- ⁷ / ₈	23- ⁵ / ₁₆	45°
MRADH1860xx-45	113- ³ / ₄	111- ⁷ / ₈	105- ⁷ / ₈	23- ⁵ / ₁₆	45°
MRADH2030xx-45	83- ³ / ₈	81- ¹ / ₂	75- ¹ / ₂	26- ¹ / ₈	45°
MRADH2034xx-45	87- ³ / ₈	85- ¹ / ₂	79- ¹ / ₂	26- ¹ / ₈	45°
MRADH2038xx-45	91- ³ / ₈	89- ¹ / ₂	83- ¹ / ₂	26- ¹ / ₈	45°
MRADH2040xx-45	95- ³ / ₈	93- ¹ / ₂	87- ¹ / ₂	26- ¹ / ₈	45°
MRADH2050xx-45	107- ³ / ₈	105- ¹ / ₂	99- ¹ / ₂	26- ¹ / ₈	45°
MRADH2060xx-45	119- ³ / ₈	117- ¹ / ₂	111- ¹ / ₂	26- ¹ / ₈	45°

		Widths			
		1' – 4 3/4"	2' – 10 1/2"	4' – 4 1/4"	5' – 10"
		1' – 5 3/4"	2' – 11 1/2"	4' – 5 1/4"	5' – 11"
		1-5	1-5 Twin	1-5 Triple	1-5 Quad
Heights	Unit Dimension				
	Rough Opening				
	Call Size				
	2' – 0 1/4"	 MRACA1520	 MRACA1520-2	 MRACA1520-3	 MRACA1520-4
	2' – 4 1/4"	 MRACA1524	 MRACA1524-2	 MRACA1524-3	 MRACA1524-4
	3' – 0"	 MRACA1530	 MRACA1530-2	 MRACA1530-3	 MRACA1530-4
	3' – 5 1/2"	 MRACA1535	 MRACA1535-2	 MRACA1535-3	 MRACA1535-4
	4' – 1 1/2"	 MRACA1540	 MRACA1540-2	 MRACA1540-3	 MRACA1540-4
	4' – 5"	 MRACA1545	 MRACA1545-2	 MRACA1545-3	 MRACA1545-4
	5' – 0"	 MRACA1550	 MRACA1550-2	 MRACA1550-3	 MRACA1550-4
	5' – 5"	 MRACA1555	 MRACA1555-2	 MRACA1555-3	 MRACA1555-4
	6' – 0"	 MRACA1560	 MRACA1560-2	 MRACA1560-3	 MRACA1560-4

		Widths				
		5' – 11 1/2"	6' – 5"	7' – 1"	7' – 11 1/2"	8' – 11 1/2"
		6' – 0 1/2"	6' – 6"	7' – 2"	8' – 0 1/2"	9' – 0 1/2"
		1–5 Flankers with 3–0 Center	1–5 Flankers with 3–5 Center	1–5 Flankers with 4–0 Center	1–5 Flankers with 5–0 Center	1–5 Flankers with 6–0 Center
Heights	Unit Dimension					
	Rough Opening					
	Call Size					
	2' – 0 1/4"					
	2' – 4 1/4"					
	3' – 0"					
	3' – 5 1/2"					
	4' – 1 1/4"					
	4' – 5"					
	5' – 0"					
	5' – 5 1/4"					
	6' – 0"					



STYLE 2VB
(Shown Above)



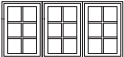
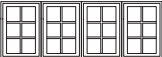
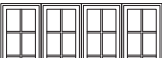
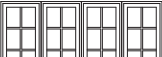
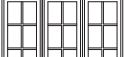
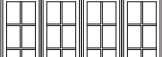
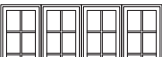
STYLE 2VL



STYLE 2VR

Note: Viewed from exterior, Windows 1 and 2 are operating. Window 3 is Fixed

Casement – Operating Units

		Widths			
		1' – 8 1/4"	3' – 5 1/2"	5' – 2 3/4"	7' – 0"
		1' – 9 1/4"	3' – 6 1/2"	5' – 3 3/4"	7' – 1"
		1-8	1-8 Twin	1-8 Triple	1-8 Quad
Heights	Unit Dimension	Rough Opening			
	Call Size				
	2' – 0 1/4"	2' – 0 1/4"	2' – 0 1/4"	2' – 0 1/4"	2' – 0 1/4"
	2' – 4 1/4"	2' – 4 1/4"	2' – 4 1/4"	2' – 4 1/4"	2' – 4 1/4"
	3' – 0"	3' – 0 1/4"	3' – 0 1/4"	3' – 0 1/4"	3' – 0 1/4"
	3' – 5 1/2"	3' – 6"	3' – 5"	3' – 5"	3' – 5"
	4' – 1 1/2"	4' – 2"	4' – 1 1/2"	4' – 1 1/2"	4' – 1 1/2"
	4' – 5"	4' – 5 1/2"	4' – 5"	4' – 5"	4' – 5"
	5' – 0"	5' – 0 1/2"	5' – 0"	5' – 0"	5' – 0"
	5' – 5"	5' – 5 1/2"	5' – 5"	5' – 5"	5' – 5"
	6' – 0"	6' – 0 1/2"	6' – 0"	6' – 0"	6' – 0"
					
		MRACA1820	MRACA1820-2	MRACA1820-3	MRACA1820-4
					
		MRACA1824	MRACA1824-2	MRACA1824-3	MRACA1824-4
					
		MRACA1830	MRACA1830-2	MRACA1830-3	MRACA1830-4
					
		MRACA1835	MRACA1835-2	MRACA1835-3	MRACA1835-4
					
		MRACA1840	MRACA1840-2	MRACA1840-3	MRACA1840-4
					
		MRACA1845	MRACA1845-2	MRACA1845-3	MRACA1845-4
					
		MRACA1850	MRACA1850-2	MRACA1850-3	MRACA1850-4
					
		MRACA1855	MRACA1855-2	MRACA1855-3	MRACA1855-4
					
		MRACA1860	MRACA1860-2	MRACA1860-3	MRACA1860-4

		Widths				
		6' – 6 1/2"	7' – 0"	7' – 8"	8' – 6 1/2"	9' – 6 1/2"
		6' – 7 1/2"	7' – 1"	7' – 9"	8' – 7 1/2"	9' – 7 1/2"
		1–8 Flankers with 3–0 Center	1–8 Flankers with 3–5 Center	1–8 Flankers with 4–0 Center	1–8 Flankers with 5–0 Center	1–8 Flankers with 6–0 Center
Heights	Unit Dimension					
	2' – 0 1/4"	2' – 0 1/4"	2' – 0 1/4"	2' – 0 1/4"	2' – 0 1/4"	2' – 0 1/4"
	2' – 4 1/4"	2' – 4 1/4"	2' – 4 1/4"	2' – 4 1/4"	2' – 4 1/4"	2' – 4 1/4"
	3' – 0"	3' – 0"	3' – 0"	3' – 0"	3' – 0"	3' – 0"
	3' – 5 1/2"	3' – 5 1/2"	3' – 5 1/2"	3' – 5 1/2"	3' – 5 1/2"	3' – 5 1/2"
	4' – 1 1/4"	4' – 1 1/4"	4' – 1 1/4"	4' – 1 1/4"	4' – 1 1/4"	4' – 1 1/4"
	4' – 5"	4' – 5"	4' – 5"	4' – 5"	4' – 5"	4' – 5"
	5' – 0"	5' – 0"	5' – 0"	5' – 0"	5' – 0"	5' – 0"
	5' – 5"	5' – 5"	5' – 5"	5' – 5"	5' – 5"	5' – 5"
	6' – 0"	6' – 0"	6' – 0"	6' – 0"	6' – 0"	6' – 0"
		MRACA1820/30	MRACA1820/35	MRACA1820/40	MRACA1820/50	MRACA1820/60
		MRACA1824/30	MRACA1824/35	MRACA1824/40	MRACA1824/50	MRACA1824/60
		MRACA1830/30	MRACA1830/35	MRACA1830/40	MRACA1830/50	MRACA1830/60
		MRACA1835/30	MRACA1835/35	MRACA1835/40	MRACA1835/50	MRACA1835/60
		MRACA1840/30	MRACA1840/35	MRACA1840/40	MRACA1840/50	MRACA1840/60
		MRACA1845/30	MRACA1845/35	MRACA1845/40	MRACA1845/50	MRACA1845/60
		MRACA1850/30	MRACA1850/35	MRACA1850/40	MRACA1850/50	MRACA1850/60
		MRACA1855/30	MRACA1855/35	MRACA1855/40	MRACA1855/50	MRACA1855/60
		MRACA1860/30	MRACA1860/35	MRACA1860/40	MRACA1860/50	MRACA1860/60



STYLE 2VB
(Shown Above)



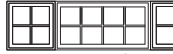
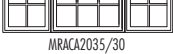
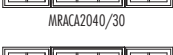
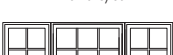
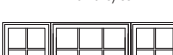
STYLE 2VL

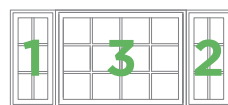


STYLE 2VR

Note: Viewed from exterior, Windows 1 and 2 are operating. Window 3 is Fixed

		Widths			
		2'-0 1/4"	4'-1 1/2"	6'-2 3/4"	8'-4"
		2'-1 1/4"	4'-2 1/2"	6'-3 3/4"	8'-5"
		2-0	2-0 Twin	2-0 Triple	2-0 Quad
Heights	Unit Dimension	Call Size			
	Rough Opening				
	2'-0 1/4"	 MRACA2020	 MRACA2020-2	 MRACA2020-3	 MRACA2020-4
	2'-4 1/4"	 MRACA2024	 MRACA2024-2	 MRACA2024-3	 MRACA2024-4
	3'-0"	 MRACA2030	 MRACA2030-2	 MRACA2030-3	 MRACA2030-4
	3'-5 1/4"	 MRACA2035	 MRACA2035-2	 MRACA2035-3	 MRACA2035-4
	4'-1 1/4"	 MRACA2040	 MRACA2040-2	 MRACA2040-3	 MRACA2040-4
	4'-5"	 MRACA2045	 MRACA2045-2	 MRACA2045-3	 MRACA2045-4
	5'-0"	 MRACA2050	 MRACA2050-2	 MRACA2050-3	 MRACA2050-4
	5'-5"	 MRACA2055	 MRACA2055-2	 MRACA2055-3	 MRACA2055-4
	6'-0"	 MRACA2060	 MRACA2060-2	 MRACA2060-3	 MRACA2060-4

		Widths			
Heights	Unit Dimension Call Size	7' – 2 1/8"	7' – 8"	8' – 4"	9' – 2 1/8"
		7' – 3 1/2"	7' – 9"	8' – 5"	9' – 3 1/2"
		2-0 Flankers with 3-0 Center	2-0 Flankers with 3-5 Center	2-0 Flankers with 4-0 Center	2-0 Flankers with 5-0 Center
2' – 0 1/4"	2' – 0 1/4"	 MRACA2020/30	 MRACA2020/35	 MRACA2020/40	 MRACA2020/50
2' – 4 1/4"	2' – 4 1/4"	 MRACA2024/30	 MRACA2024/35	 MRACA2024/40	 MRACA2024/50
3' – 0"	3' – 0"	 MRACA2030/30	 MRACA2030/35	 MRACA2030/40	 MRACA2030/50
3' – 5 1/2"	3' – 5 1/2"	 MRACA2035/30	 MRACA2035/35	 MRACA2035/40	 MRACA2035/50
4' – 1 1/2"	4' – 1 1/2"	 MRACA2040/30	 MRACA2040/35	 MRACA2040/40	 MRACA2040/50
4' – 5"	4' – 5"	 MRACA2045/30	 MRACA2045/35	 MRACA2045/40	 MRACA2045/50
5' – 0"	5' – 0"	 MRACA2050/30	 MRACA2050/35	 MRACA2050/40	 MRACA2050/50
5' – 5"	5' – 5"	 MRACA2055/30	 MRACA2055/35	 MRACA2055/40	 MRACA2055/50
6' – 0"	6' – 0"	 MRACA2060/30	 MRACA2060/35	 MRACA2060/40	 MRACA2060/50



STYLE 2VB
(Shown Above)



STYLE 2VL



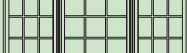
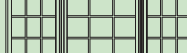
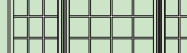
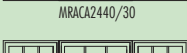
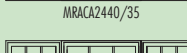
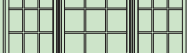
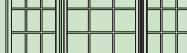
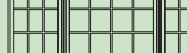
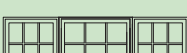
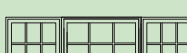
STYLE 2VR

Note: Viewed from exterior, Windows 1 and 2 are operating. Window 3 is Fixed

Casement – Operating Units

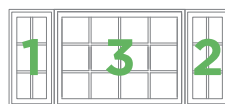
		Widths			
		2' – 4 1/4"	4' – 9 1/2"	7' – 2 3/4"	9' – 8"
		2' – 5 1/4"	4' – 10 1/2"	7' – 3 3/4"	9' – 9"
		2-4	2-4 Twin	2-4 Triple	2-4 Quad
Heights	Unit Dimension				
	Rough Opening				
	Coil Size				
	2' – 0 1/4"	2' – 0 3/4"	2-0		
	2' – 4 1/4"	2' – 4 3/4"	2-4		
	3' – 0"	3' – 0 1/2"	3-0		
	3' – 4 1/2"	3' – 5"	3-5		
	4' – 1 1/2"	4' – 2"	4-0		
	4' – 5"	4' – 5 1/2"	4-5		
	5' – 0"	5' – 0 1/2"	5-0		
	5' – 5"	5' – 5 1/2"	5-5		
	6' – 0"	6' – 0 1/2"	6-0		
		MRACA2420	MRACA2420-2	MRACA2420-3	MRACA2420-4
		MRACA2424	MRACA2424-2	MRACA2424-3	MRACA2424-4
		MRACA2430	MRACA2430-2	MRACA2430-3	MRACA2430-4
		MRACA2435	MRACA2435-2	MRACA2435-3	MRACA2435-4
		MRACA2440	MRACA2440-2	MRACA2440-3	MRACA2440-4
		MRACA2445	MRACA2445-2	MRACA2445-3	MRACA2445-4
		MRACA2450	MRACA2450-2	MRACA2450-3	MRACA2450-4
		MRACA2455	MRACA2455-2	MRACA2455-3	MRACA2455-4
		MRACA2460	MRACA2460-2	MRACA2460-3	MRACA2460-4

NOTE:
Shaded units satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.

		Widths			
		7'-10 1/2"	8'-4"	9'-0"	9'-10 1/2"
		7'-11 1/2"	8'-5"	9'-1"	9'-11 1/2"
		2-4 Flankers with 3-0 Center	2-4 Flankers with 3-5 Center	2-4 Flankers with 4-0 Center	2-4 Flankers with 5-0 Center
Unit Dimension	Rough Opening	Call Size			
		2-0	2-4	3-0	3-5
2'-0 1/4"	2'-0 3/4"	 MRACA2420/30	 MRACA2420/35	 MRACA2420/40	 MRACA2420/50
2'-4 1/4"	2'-4 3/4"	 MRACA2424/30	 MRACA2424/35	 MRACA2424/40	 MRACA2424/50
3'-0"	3'-0 1/2"	 MRACA2430/30	 MRACA2430/35	 MRACA2430/40	 MRACA2430/50
3'-5 1/2"	3'-6"	 MRACA2435/30	 MRACA2435/35	 MRACA2435/40	 MRACA2435/50
4'-1 1/2"	4'-2"	 MRACA2440/30	 MRACA2440/35	 MRACA2440/40	 MRACA2440/50
4'-5"	4'-5 1/2"	 MRACA2445/30	 MRACA2445/35	 MRACA2445/40	 MRACA2445/50
5'-0"	5'-0 1/2"	 MRACA2450/30	 MRACA2450/35	 MRACA2450/40	 MRACA2450/50
5'-5"	5'-5 1/2"	 MRACA2455/30	 MRACA2455/35	 MRACA2455/40	 MRACA2455/50
6'-0"	6'-0 1/2"	 MRACA2460/30	 MRACA2460/35	 MRACA2460/40	 MRACA2460/50

NOTE:

Shaded units satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.



STYLE 2VB
(Shown Above)



STYLE 2VL

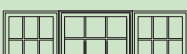
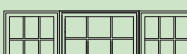
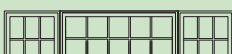
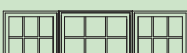
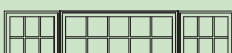
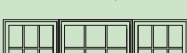
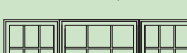
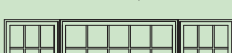
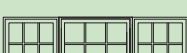
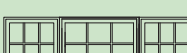
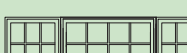
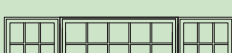
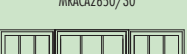
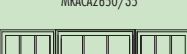
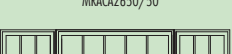
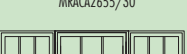
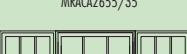
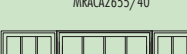
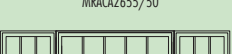


STYLE 2VR

Note: Viewed from exterior, Windows 1 and 2 are operating. Window 3 is Fixed

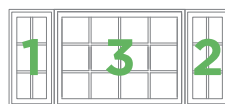
		Widths			
		2' – 6 1/4"	5' – 1 1/2"	7' – 8 3/4"	10' – 4"
		2' – 7 1/4"	5' – 2 1/2"	7' – 9 3/4"	10' – 5"
		2-6	2-6 Twin	2-6 Triple	2-6 Quad
Heights	Unit Dimension				
	Rough Opening				
	Coil Size				
	2' – 0 1/4"	2' – 0 3/4"	2-0		
	2' – 4 1/4"	2' – 4 3/4"	2-4		
	3' – 0"	3' – 0 1/2"	3-0		
	3' – 4 1/2"	3' – 5"	3-5		
	4' – 1 1/2"	4' – 2"	4-0		
	4' – 5"	4' – 5 1/2"	4-5		
	5' – 0"	5' – 0 1/2"	5-0		
	5' – 5"	5' – 5 1/2"	5-5		
	6' – 0"	6' – 0 1/2"	6-0		
		MRACA2620	MRACA2620-2	MRACA2620-3	MRACA2620-4
		MRACA2624	MRACA2624-2	MRACA2624-3	MRACA2624-4
		MRACA2630	MRACA2630-2	MRACA2630-3	MRACA2630-4
		MRACA2635	MRACA2635-2	MRACA2635-3	MRACA2635-4
		MRACA2640	MRACA2640-2	MRACA2640-3	MRACA2640-4
		MRACA2645	MRACA2645-2	MRACA2645-3	MRACA2645-4
		MRACA2650	MRACA2650-2	MRACA2650-3	MRACA2650-4
		MRACA2655	MRACA2655-2	MRACA2655-3	MRACA2655-4
		MRACA2660	MRACA2660-2	MRACA2660-3	MRACA2660-4

NOTE:
Shaded units satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.

		Widths			
		8'-2 1/2"	8'-8"	9'-4"	10'-2 1/2"
		8'-3 1/2"	8'-9"	9'-5"	10'-3 1/2"
		2-6 Flankers with 3-0 Center	2-6 Flankers with 3-5 Center	2-6 Flankers with 4-0 Center	2-6 Flankers with 5-0 Center
Heights	Unit Dimension	Call Size			
	Rough Opening				
2'-0 1/4"	2'-0 1/4"	 MRACA2620/30	 MRACA2620/35	 MRACA2620/40	 MRACA2620/50
2'-4 1/4"	2'-4 1/4"	 MRACA2624/30	 MRACA2624/35	 MRACA2624/40	 MRACA2624/50
3'-0"	3'-0 1/2"	 MRACA2630/30	 MRACA2630/35	 MRACA2630/40	 MRACA2630/50
3'-5 1/2"	3'-6"	 MRACA2635/30	 MRACA2635/35	 MRACA2635/40	 MRACA2635/50
4'-1 1/2"	4'-2"	 MRACA2640/30	 MRACA2640/35	 MRACA2640/40	 MRACA2640/50
4'-5"	4'-5 1/2"	 MRACA2645/30	 MRACA2645/35	 MRACA2645/40	 MRACA2645/50
5'-0"	5'-0 1/2"	 MRACA2650/30	 MRACA2650/35	 MRACA2650/40	 MRACA2650/50
5'-5"	5'-5 1/2"	 MRACA2655/30	 MRACA2655/35	 MRACA2655/40	 MRACA2655/50
6'-0"	6'-0 1/2"	 MRACA2660/30	 MRACA2660/35	 MRACA2660/40	 MRACA2660/50

NOTE:

Shaded units satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.



STYLE 2VB
(Shown Above)

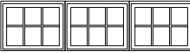
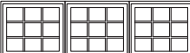
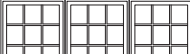
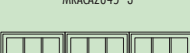
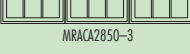
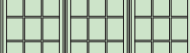


STYLE 2VL



STYLE 2VR

Note: Viewed from exterior, Windows 1 and 2 are operating. Window 3 is Fixed

		Widths				
		2' – 8 ¼"	5' – 5 ½"	8' – 2 ¾"		
		2' – 9 ¼"	5' – 6 ½"	8' – 3 ¾"		
		2-8	2-8 Twin	2-8 Triple		
Heights	Unit Dimension					
	Rough Opening					
	Call Size					
	2' – 0 ¼"	2' – 0 ¾"	2-0	 MRACA2820	 MRACA2820-2	 MRACA2820-3
	2' – 4 ¼"	2' – 4 ¾"	2-4	 MRACA2824	 MRACA2824-2	 MRACA2824-3
	3' – 0"	3' – 0 ½"	3-0	 MRACA2830	 MRACA2830-2	 MRACA2830-3
	3' – 5 ½"	3' – 6"	3-5	 MRACA2835	 MRACA2835-2	 MRACA2835-3
	4' – 1 ½"	4' – 2"	4-0	 MRACA2840	 MRACA2840-2	 MRACA2840-3
	4' – 5"	4' – 5 ½"	4-5	 MRACA2845	 MRACA2845-2	 MRACA2845-3
	5' – 0"	5' – 0 ½"	5-0	 MRACA2850	 MRACA2850-2	 MRACA2850-3
	5' – 5"	5' – 5 ½"	5-5	 MRACA2855	 MRACA2855-2	 MRACA2855-3
	6' – 0"	6' – 0 ½"	6-0	 MRACA2860	 MRACA2860-2	 MRACA2860-3

NOTE:
Shaded units satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.

Widths

Unit Dimension	Call Size		
	Rough Opening		
	3'-0"	6'-1"	9'-2"
2'-0 1/4"	3'-0"	3-0 Twin	3-0 Triple
2'-4 1/4"	3'-1"	6'-2"	9'-3"
3'-0"	3'-0 1/2"		
3'-5 1/2"	3'-6"		
4'-1 1/2"	4'-2"		
4'-5"	4'-5 1/2"		
5'-0"	5'-0 1/2"		
5'-5"	5'-5 1/2"		
6'-0"	6'-0 1/2"		

NOTE:

Shaded units satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.

Casement – Fixed Units

Widths

Unit Dimension Rough Opening Call Size	Widths											
	1' - 1 3/8"	1' - 4 3/4"	1' - 8 1/4"	2' - 0 1/4"	2' - 4 1/4"	2' - 6 1/4"	2' - 8 1/4"	3' - 0"	3' - 5 1/2"	4' - 1 1/2"	5' - 0"	6' - 0"
	1' - 2 3/8"	1' - 5 3/4"	1' - 9 1/4"	2' - 1 1/4"	2' - 5 1/4"	2' - 7 1/4"	2' - 9 1/4"	3' - 1"	3' - 6 1/2"	4' - 2 1/2"	5' - 1"	6' - 1"
	1-0	1-5	1-8	2-0	2-4	2-6	2-8	3-0	3-5	4-0	5-0	6-0
Heights	 MRACA1010P	 MRACA1510P	 MRACA1810P	 MRACA2010P	 MRACA2410P	 MRACA2610P	 MRACA2810P	 MRACA3010P	 MRACA3510P	 MRACA4010P	 MRACA5010P	 MRACA6010P
	 MRACA1015P	 MRACA1515P	 MRACA1815P	 MRACA2015P	 MRACA2415P	 MRACA2615P	 MRACA2815P	 MRACA3015P	 MRACA3515P	 MRACA4015P	 MRACA5015P	 MRACA6015P
	 MRACA1018P	 MRACA1518P	 MRACA1818P	 MRACA2018P	 MRACA2418P	 MRACA2618P	 MRACA2818P	 MRACA3018P	 MRACA3518P	 MRACA4018P	 MRACA5018P	 MRACA6018P
	 MRACA1020P	 MRACA1520P	 MRACA1820P	 MRACA2020P	 MRACA2420P	 MRACA2620P	 MRACA2820P	 MRACA3020P	 MRACA3520P	 MRACA4020P	 MRACA5020P	 MRACA6020P
	 MRACA1024P	 MRACA1524P	 MRACA1824P	 MRACA2024P	 MRACA2424P	 MRACA2624P	 MRACA2824P	 MRACA3024P	 MRACA3524P	 MRACA4024P	 MRACA5024P	 MRACA6024P
	 MRACA1030P	 MRACA1530P	 MRACA1830P	 MRACA2030P	 MRACA2430P	 MRACA2630P	 MRACA2830P	 MRACA3030P	 MRACA3530P	 MRACA4030P	 MRACA5030P	 MRACA6030P
	 MRACA1035P	 MRACA1535P	 MRACA1835P	 MRACA2035P	 MRACA2435P	 MRACA2635P	 MRACA2835P	 MRACA3035P	 MRACA3535P	 MRACA4035P	 MRACA5035P	 MRACA6035P
	 MRACA1040P	 MRACA1540P	 MRACA1840P	 MRACA2040P	 MRACA2440P	 MRACA2640P	 MRACA2840P	 MRACA3040P	 MRACA3540P	 MRACA4040P	 MRACA5040P	 MRACA6040P
	 MRACA1045P	 MRACA1545P	 MRACA1845P	 MRACA2045P	 MRACA2445P	 MRACA2645P	 MRACA2845P	 MRACA3045P	 MRACA3545P	 MRACA4045P	 MRACA5045P	 MRACA6045P
	 MRACA1050P	 MRACA1550P	 MRACA1850P	 MRACA2050P	 MRACA2450P	 MRACA2650P	 MRACA2850P	 MRACA3050P	 MRACA3550P	 MRACA4050P	 MRACA5050P	 MRACA6050P
	 MRACA1055P	 MRACA1555P	 MRACA1855P	 MRACA2055P	 MRACA2455P	 MRACA2655P	 MRACA2855P	 MRACA3055P	 MRACA3555P	 MRACA4055P	 MRACA5055P	 MRACA6055P
	 MRACA1060P	 MRACA1560P	 MRACA1860P	 MRACA2060P	 MRACA2460P	 MRACA2660P	 MRACA2860P	 MRACA3060P	 MRACA3560P	 MRACA4060P	 MRACA5060P	 MRACA6060P

Casement – True Radius Units & Matching Side Lights

Standard Colonial Grille Pattern

Widths

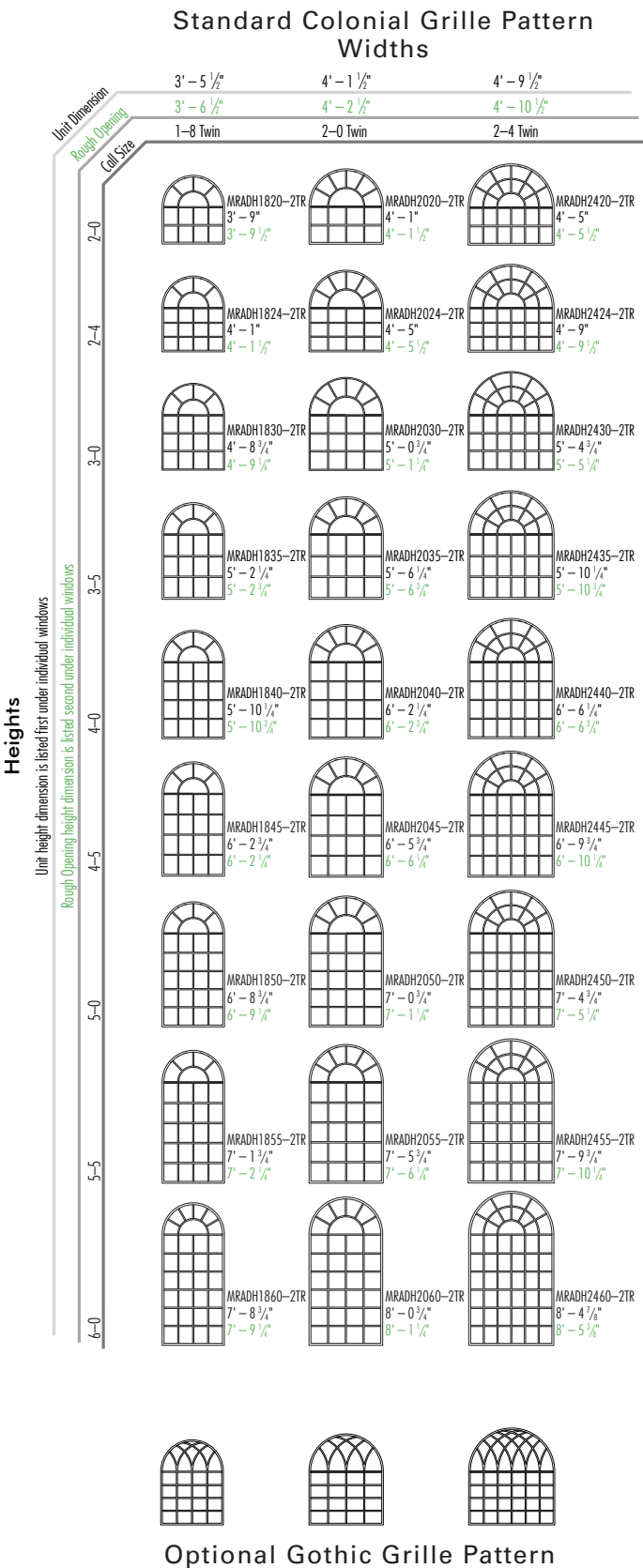
Widths

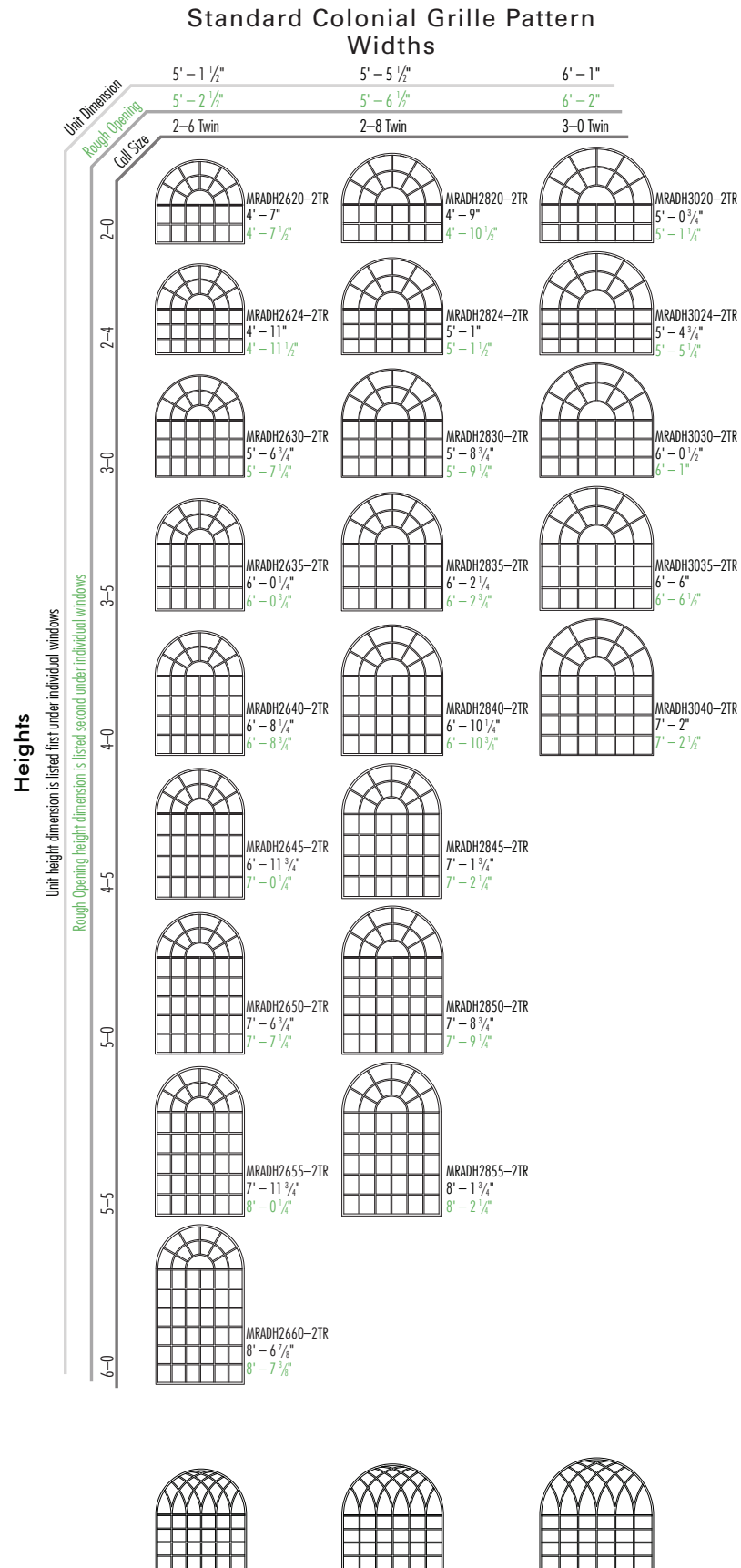
Unit Dimension Rough Opening Call Size	Standard Colonial Grille Pattern Widths								Widths				
	1'-8 1/8"	2'-0 1/8"	2'-4 1/8"	2'-6 1/8"	2'-8 1/8"	3'-0"	3'-5 1/8"	4'-1 1/2"	0'-11 1/8"	1'-1 1/8"	1'-3 3/8"	1'-5 3/8"	1'-7 3/8"
	1'-9 1/8"	2'-1 1/8"	2'-5 1/8"	2'-7 1/8"	2'-9 1/8"	3'-1"	3'-6 1/8"	4'-2 1/2"	1'-0 3/8"	1'-2 1/8"	1'-4 3/8"	1'-6 3/8"	1'-8 3/8"
2-0	MRACA1820TR 2'-10 1/8" 2'-10 1/8"	MRACA2020TR 3'-0 3/8" 3'-1 1/8"	MRACA2420TR 3'-2 3/8" 3'-2 1/8"	MRACA2620TR 3'-3 3/8" 3'-3 1/8"	MRACA2820TR 3'-4 1/8" 3'-4 1/8"	MRACA3020TR 3'-6 1/8" 3'-6 1/8"	MRACA3520TR 3'-9" 3'-10"	MRACA4020TR 4'-1" 4'-2"	MRACA01020SL	MRACA1020SL	MRACA1220SL	MRACA1420SL	MRACA1620SL
2-4	MRACA1824TR 3'-2 3/8" 3'-2 1/8"	MRACA2024TR 3'-4 3/8" 3'-4 1/8"	MRACA2424TR 3'-6 3/8" 3'-6 1/8"	MRACA2624TR 3'-7 3/8" 3'-7 1/8"	MRACA2824TR 3'-8 1/8" 3'-8 1/8"	MRACA3024TR 3'-10 1/8" 3'-10 3/8"	MRACA3524TR 4'-1" 4'-2"	MRACA4024TR 4'-5" 4'-6"	MRACA01024SL	MRACA1024SL	MRACA1224SL	MRACA1424SL	MRACA1624SL
3-0	MRACA1830TR 3'-10 1/8" 3'-10 1/8"	MRACA2030TR 4'-0 1/8" 4'-0 1/8"	MRACA2430TR 4'-2 1/8" 4'-2 1/8"	MRACA2630TR 4'-3 3/8" 4'-3 1/8"	MRACA2830TR 4'-4 1/8" 4'-4 1/8"	MRACA3030TR 4'-11 1/8" 4'-11 1/8"	MRACA3530TR 4'-8 3/8" 4'-9 3/8"	MRACA4030TR 4'-10 3/8" 4'-11 3/8"	MRACA01030SL	MRACA1030SL	MRACA1230SL	MRACA1430SL	MRACA1630SL
3-5	MRACA1835TR 4'-3 3/8" 4'-4 1/8"	MRACA2035TR 4'-5 3/8" 4'-6 1/8"	MRACA2435TR 4'-7 3/8" 4'-8 1/8"	MRACA2635TR 4'-8 3/8" 4'-9 1/8"	MRACA2835TR 4'-9 3/8" 4'-10 1/8"	MRACA3035TR 4'-11 1/2" 5'-0"	MRACA3535TR 5'-2 1/8" 5'-3 1/8"	MRACA4035TR 5'-4 1/8" 5'-5 1/8"	MRACA01035SL	MRACA1035SL	MRACA1235SL	MRACA1435SL	MRACA1635SL
4-0	MRACA1840TR 5'-0 3/8" 5'-0 1/8"	MRACA2040TR 5'-2 1/8" 5'-2 1/8"	MRACA2440TR 5'-4 1/8" 5'-4 1/8"	MRACA2640TR 5'-5 3/8" 5'-5 1/8"	MRACA2840TR 5'-5 3/8" 5'-6 1/8"	MRACA3040TR 5'-7 1/2" 5'-8"	MRACA3540TR 5'-10 1/8" 5'-11 1/8"	MRACA4040TR 6'-2 1/2" 6'-3 1/8"	MRACA01040SL	MRACA1040SL	MRACA1240SL	MRACA1440SL	MRACA1640SL
4-5	MRACA1845TR 5'-3 1/8" 5'-3 3/8"	MRACA2045TR 5'-5 1/8" 5'-5 3/8"	MRACA2445TR 5'-7 1/8" 5'-7 3/8"	MRACA2645TR 5'-8 3/8" 5'-9 1/8"	MRACA2845TR 5'-9 3/8" 5'-9 1/8"	MRACA3045TR 5'-11 1/2" 5'-11 1/2"	MRACA3545TR 6'-1 3/8" 6'-2 1/8"	MRACA4045TR 6'-5 3/8" 6'-6 1/8"	MRACA01045SL	MRACA1045SL	MRACA1245SL	MRACA1445SL	MRACA1645SL
5-0	MRACA1850TR 5'-10 1/8" 5'-10 1/8"	MRACA2050TR 6'-0 1/8" 6'-0 3/8"	MRACA2450TR 6'-2 1/8" 6'-2 1/8"	MRACA2650TR 6'-3 3/8" 6'-3 3/8"	MRACA2850TR 6'-4 1/8" 6'-4 1/8"	MRACA3050TR 6'-6" 6'-6 1/8"	MRACA3550TR 6'-1 3/8" 6'-2 1/8"	MRACA4050TR 7'-2 3/8" 7'-3 1/8"	MRACA01050SL	MRACA1050SL	MRACA1250SL	MRACA1450SL	MRACA1650SL
5-5	MRACA1855TR 6'-3 1/8" 6'-3 3/8"	MRACA2055TR 6'-5 1/8" 6'-5 3/8"	MRACA2455TR 6'-7 1/8" 6'-7 3/8"	MRACA2655TR 6'-8 3/8" 6'-8 1/8"	MRACA2855TR 6'-9 3/8" 6'-9 1/8"	MRACA3055TR 6'-11" 6'-11 1/2"	MRACA3555TR 7'-1 1/8" 7'-2 1/8"	MRACA4055TR 7'-5 3/8" 7'-6 1/8"	MRACA01055SL	MRACA1055SL	MRACA1255SL	MRACA1455SL	MRACA1655SL
6-0	MRACA1860TR 6'-10 1/8" 6'-10 3/8"	MRACA2060TR 7'-0 1/8" 7'-0 3/8"	MRACA2460TR 7'-2 1/8" 7'-2 1/8"	MRACA2660TR 7'-3 3/8" 7'-3 3/8"	MRACA2860TR 7'-4 1/8" 7'-4 1/8"	MRACA3060TR 7'-6" 7'-6 1/8"	MRACA3560TR 7'-8 3/8" 7'-9 3/8"	MRACA4060TR 8'-0 3/8" 8'-1 3/8"	MRACA01060SL	MRACA1060SL	MRACA1260SL	MRACA1460SL	MRACA1660SL

Optional Gothic Grille Pattern

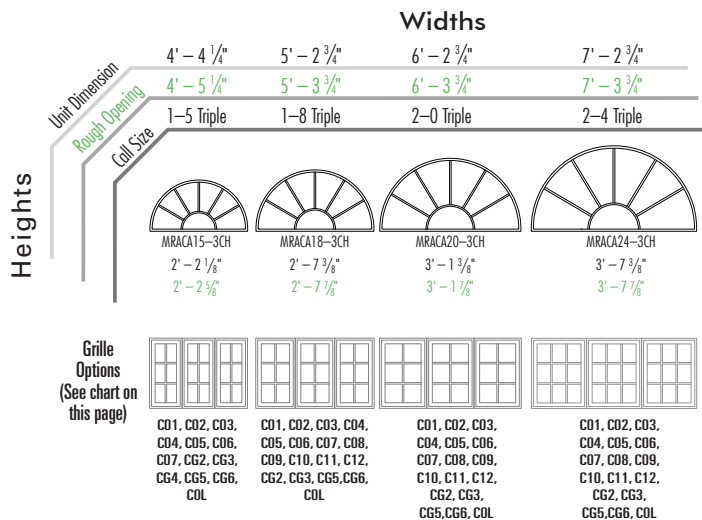
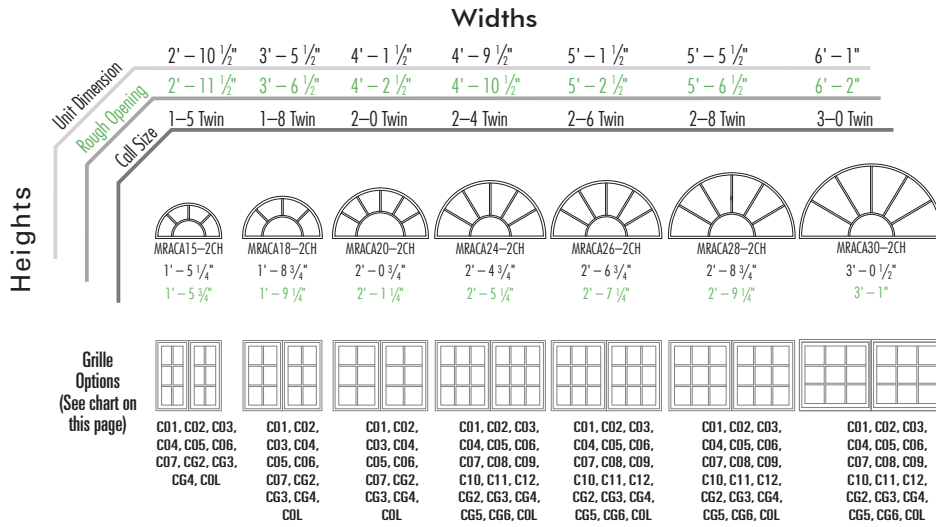
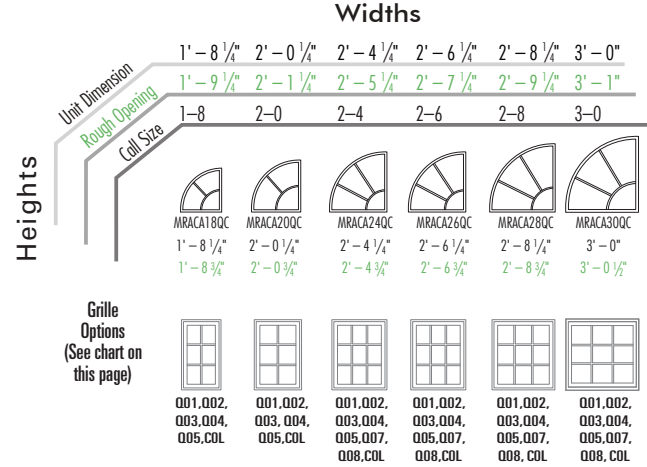
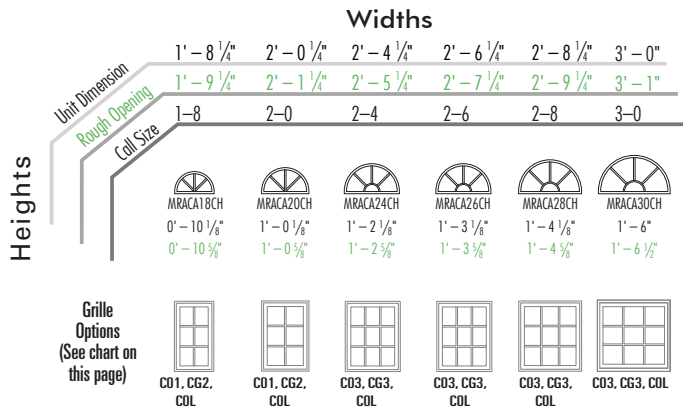


Casement – True Radius Twin Units

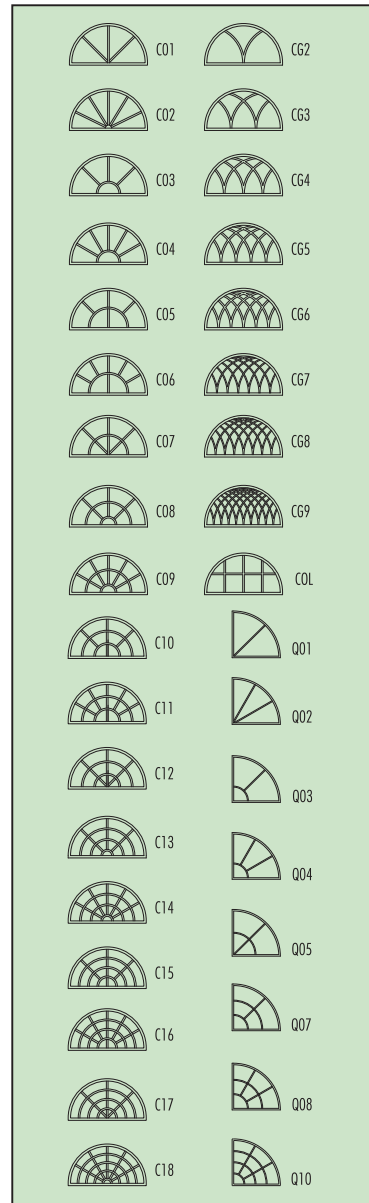




Casement – Circle Head & Quarter Circle Units

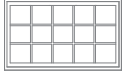
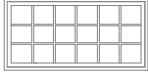


Optional Grille Patterns



Use order code to specify pattern

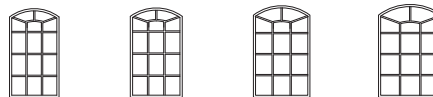
Casement – Circle Head & Elliptical Units

Heights	Unit Dimension Rough Opening Caul Size	Widths				
		3'-0"	3'-5 1/2"	4'-1 1/2"	5'-0"	6'-0"
		3'-1"	3'-6 1/2"	4'-2 1/2"	5'-1"	6'-1"
		3-0 Picture	3-5 Picture	4-0 Picture	5-0 Picture	6-0 Picture
		 MRACA30PCH 1'-6" 1'-6 1/2"	 MRACA35PCH 1'-8 3/4" 1'-9 1/4"	 MRACA40PCH 2'-0 3/4" 2'-1 1/4"	 MRACA50PCH 2'-6" 2'-6 1/2"	 MRACA60PCH 3'-0" 3'-0 1/2"
	Grille Options (See chart on opposite page)	 C03, CG3, C0L	 C03, CG3, C0L	 C01, C02, C03, C04, C05, C06, C07, CG2, CG3, CG4, C0L	 C03, C04, C08, C09, CG3, CG5, C0L	 C01, C02, C03, C04, C05, C06, C07, C08, C09, C010, C011, C012, CG2, CG3, CG4, CG5, CG6, C0L

Heights	Unit Dimension Rough Opening Caul Size	Widths			
		3'-5 1/2"	4'-1 1/2"	5'-0"	6'-0"
		3'-6 1/2"	4'-2 1/2"	5'-1"	6'-1"
		3-5 Picture	4-0 Picture	5-0 Picture	6-0 Picture
		 MRACA35PEL 0'-10 3/8" 0'-11 1/8"	 MRACA40PEL 1'-0 3/8" 1'-0 1/2"	 MRACA50PEL 1'-3" 1'-3 1/2"	 MRACA60PEL 1'-6" 1'-6 1/2"
	Grille Options (See chart on opposite page)	 C03, CG3, C0L	 C01, CG2, CG3, CG4, C0L	 C03, C04, CG3, CG5, C0L	 C01, C02, C03, C04, C05, C06, C07, CG2, CG3, CG4, CG5, CG6, C0L

Heights	Unit Dimension Rough Opening Caul Size	Widths					
		3'-5 1/2"	4'-1 1/2"	4'-9 1/2"	3'-5 1/2"	5'-5 1/2"	6'-1"
		3'-6 1/2"	4'-2 1/2"	4'-10 1/2"	3'-6 1/2"	5'-6 1/2"	6'-2"
		1-8 Twin	2-0 Twin	2-4 Twin	2-6 Twin	2-8 Twin	3-0 Twin
		 MRACA18-2EL 0'-10 3/8" 0'-10 7/8"	 MRACA20-2EL 1'-0 3/8" 1'-0 1/2"	 MRACA24-2EL 1'-2 3/8" 1'-3 1/8"	 MRACA26-2EL 1'-3 3/8" 1'-3 7/8"	 MRACA28-2EL 1'-4 3/8" 1'-5 1/8"	 MRACA30-2EL 1'-6 1/4" 1'-6 3/4"
	Grille Options (See chart on opposite page)	 C01, C02, C03, C04, C05, C06, C07, CG2, CG3, CG4, C0L	 C01, C02, C03, C04, C05, C06, C07, CG2, CG3, CG4, C0L	 C01, C02, C03, C04, C05, C06, C07, CG2, CG3, CG4, C0L	 C01, C02, C03, C04, C05, C06, C07, CG2, CG3, CG4, C0L	 C01, C02, C03, C04, C05, C06, C07, CG2, CG3, CG4, CG5, CG6, C0L	 C01, C02, C03, C04, C05, C06, C07, CG2, CG3, CG4, CG5, CG6, C0L

		Standard Colonial Grille Pattern						
		Widths						
Unit Dimension	Rough Opening	1' – 4 3/4"	1' – 8 1/4"	2' – 0 1/4"	2' – 4 1/4"	2' – 6 1/4"	2' – 8 1/4"	3' – 0"
		1' – 5 3/4"	1' – 9 1/4"	2' – 1 1/4"	2' – 5 1/4"	2' – 7 1/4"	2' – 9 1/4"	3' – 1"
		1-5	1-8	2-0	2-4	2-6	2-8	3-0
Heights	2-0	 MRACA1520AH 2' - 3 1/4" 2' - 3 3/4"	 MRACA1820AH 2' - 3 3/4" 2' - 4 1/4"	 MRACA2020AH 2' - 4 1/4" 2' - 4 3/4"	 MRACA2420AH 2' - 4 3/4" 2' - 5 1/4"	 MRACA2620AH 2' - 5 1/4" 2' - 5 3/4"	 MRACA2820AH 2' - 5 3/4" 2' - 6 1/4"	 MRACA3020AH 2' - 6 1/4" 2' - 6 3/4"
	2-4	 MRACA1524AH 2' - 7 1/4" 2' - 7 3/4"	 MRACA1824AH 2' - 7 3/4" 2' - 8 1/4"	 MRACA2024AH 2' - 8 1/4" 2' - 8 3/4"	 MRACA2424AH 2' - 8 3/4" 2' - 9 1/4"	 MRACA2624AH 2' - 9 1/4" 2' - 9 3/4"	 MRACA2824AH 2' - 9 3/4" 2' - 10 1/4"	 MRACA3024AH 2' - 10 1/4" 2' - 10 3/4"
	3-0	 MRACA1530AH 3' - 2 1/4" 3' - 3 1/4"	 MRACA1830AH 3' - 3 1/4" 3' - 3 3/4"	 MRACA2030AH 3' - 4 1/4" 3' - 4 3/4"	 MRACA2430AH 3' - 4 3/4" 3' - 5 1/4"	 MRACA2630AH 3' - 5 1/4" 3' - 5 3/4"	 MRACA2830AH 3' - 5 3/4" 3' - 5 3/4"	 MRACA3030AH 3' - 6" 3' - 6 1/2"
	3-5	 MRACA1535AH 3' - 8 3/4" 3' - 8 3/4"	 MRACA1835AH 3' - 8 3/4" 3' - 9 1/4"	 MRACA2035AH 3' - 9 1/4" 3' - 10 1/4"	 MRACA2435AH 3' - 10 1/4" 3' - 11 1/4"	 MRACA2635AH 3' - 10 3/4" 3' - 11 1/4"	 MRACA2835AH 3' - 10 3/4" 3' - 11 3/4"	 MRACA3035AH 3' - 11 1/2" 4' - 0"
	4-0	 MRACA1540AH 4' - 4 3/4" 4' - 4 3/4"	 MRACA1840AH 4' - 4 3/4" 4' - 5 1/4"	 MRACA2040AH 4' - 5 1/4" 4' - 6 1/4"	 MRACA2440AH 4' - 6 1/4" 4' - 6 3/4"	 MRACA2640AH 4' - 7 1/4" 4' - 7 1/4"	 MRACA2840AH 4' - 7 3/4" 4' - 7 3/4"	 MRACA3040AH 4' - 7 1/2" 4' - 8"
	4-5	 MRACA1545AH 4' - 7 3/4" 4' - 8 3/4"	 MRACA1845AH 4' - 8 3/4" 4' - 8 3/4"	 MRACA2045AH 4' - 9 1/4" 4' - 9 3/4"	 MRACA2445AH 4' - 9 3/4" 4' - 10 1/4"	 MRACA2645AH 4' - 10 1/4" 4' - 10 3/4"	 MRACA2845AH 4' - 10 3/4" 4' - 10 3/4"	 MRACA3045AH 4' - 11" 4' - 11 1/2"
	5-0	 MRACA1550AH 5' - 2 1/4" 5' - 3 3/4"	 MRACA1850AH 5' - 3 3/4" 5' - 3 3/4"	 MRACA2050AH 5' - 4 1/4" 5' - 4 3/4"	 MRACA2450AH 5' - 4 3/4" 5' - 5 1/4"	 MRACA2650AH 5' - 5 1/4" 5' - 5 3/4"	 MRACA2850AH 5' - 5 3/4" 5' - 5 3/4"	 MRACA3050AH 5' - 6" 5' - 6 1/2"
	5-5	 MRACA1555AH 5' - 7 3/4" 5' - 8 3/4"	 MRACA1855AH 5' - 8 3/4" 5' - 8 3/4"	 MRACA2055AH 5' - 9 1/4" 5' - 9 3/4"	 MRACA2455AH 5' - 9 3/4" 5' - 10 1/4"	 MRACA2655AH 5' - 10 1/4" 5' - 10 3/4"	 MRACA2855AH 5' - 10 3/4" 5' - 10 3/4"	 MRACA3055AH 5' - 11" 5' - 11 1/2"
	6-0	 MRACA1560AH 6' - 2 1/4" 6' - 3 3/4"	 MRACA1860AH 6' - 3 3/4" 6' - 3 3/4"	 MRACA2060AH 6' - 4 1/4" 6' - 4 3/4"	 MRACA2460AH 6' - 4 3/4" 6' - 5 1/4"	 MRACA2660AH 6' - 5 1/4" 6' - 5 3/4"	 MRACA2860AH 6' - 5 3/4" 6' - 5 3/4"	 MRACA3060AH 6' - 6" 6' - 6 1/2"



Optional Renaissance Grille Pattern

Standard Colonial Grille Pattern Widths

Unit Dimension Rough Opening Grid Size	2' – 10 1/2"	3' – 5 1/2"	4' – 1 1/2"	4' – 9 1/2"
	2' – 11 1/2"	3' – 6 1/2"	4' – 2 1/2"	4' – 10 1/2"
	1-5 Twin	1-8 Twin	2-0 Twin	2-4 Twin
2-0	 MRACA1520-2AH 2'-6" 2'-6 1/2"	 MRACA1820-2AH 2'-7 3/4" 2'-7 1/4"	 MRACA2020-2AH 2'-8 1/2" 2'-9"	 MRACA2420-2AH 2'-9 3/4" 2'-10 1/4"
2-4	 MRACA1524-2AH 2'-10" 2'-10 1/2"	 MRACA1824-2AH 2'-11 3/4" 2'-11 1/4"	 MRACA2024-2AH 3'-0 1/2" 3'-1"	 MRACA2424-2AH 3'-1 3/4" 3'-2 1/4"
3-0	 MRACA1530-2AH 3'-5 1/4" 3'-6 1/4"	 MRACA1830-2AH 3'-6 3/4" 3'-7 1/4"	 MRACA2030-2AH 3'-8 1/2" 3'-8 3/4"	 MRACA2430-2AH 3'-9 3/4" 3'-10 1/4"
3-5	 MRACA1535-2AH 3'-11 1/4" 3'-11 3/4"	 MRACA1835-2AH 4'-0 1/4" 4'-0 3/4"	 MRACA2035-2AH 4'-1 3/4" 4'-2 1/4"	 MRACA2435-2AH 4'-3 3/4" 4'-3 1/4"
4-0	 MRACA1540-2AH 4'-7 1/4" 4'-7 3/4"	 MRACA1840-2AH 4'-8 7/8" 4'-8 3/4"	 MRACA2040-2AH 4'-9 3/4" 4'-10 1/4"	 MRACA2440-2AH 4'-11 1/8" 4'-11 3/4"
4-5	 MRACA1545-2AH 4'-10 3/4" 4'-11 1/4"	 MRACA1845-2AH 4'-11 3/8" 5'-0 1/8"	 MRACA2045-2AH 5'-1 1/4" 5'-1 3/4"	 MRACA2445-2AH 5'-2 3/8" 5'-3 1/8"
5-0	 MRACA1550-2AH 5'-5 1/4" 5'-6 1/4"	 MRACA1850-2AH 5'-6 3/8" 5'-7 1/8"	 MRACA2050-2AH 5'-8 1/4" 5'-8 3/4"	 MRACA2450-2AH 5'-9 3/8" 5'-10 1/8"
5-5	 MRACA1555-2AH 5'-10 3/4" 5'-11 1/4"	 MRACA1855-2AH 5'-11 3/8" 6'-0 1/8"	 MRACA2055-2AH 6'-1 1/4" 6'-1 3/4"	 MRACA2455-2AH 6'-2 3/8" 6'-3 1/8"
6-0	 MRACA1560-2AH 6'-5 1/4" 6'-6 1/4"	 MRACA1860-2AH 6'-6 3/8" 6'-7 1/8"	 MRACA2060-2AH 6'-8 1/4" 6'-8 3/4"	 MRACA2460-2AH 6'-9 3/8" 6'-10 1/8"

Heights

Unit height dimension is listed first under individual windows

Rough opening height dimension is listed second under individual windows



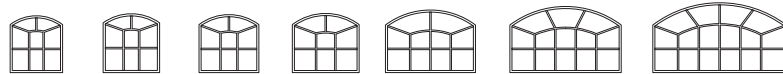
Optional Renaissance Grille Pattern

Casement – Arch Transom Units

Standard Colonial Grille Pattern Widths

		1' - 4 3/4"	1' - 8 1/4"	2' - 0 1/4"	2' - 4 1/4"	2' - 6 1/4"	2' - 8 1/4"	3' - 0"	3' - 5 1/2"	4' - 1 1/2"	5' - 0"	6' - 0"
		1' - 5 3/4"	1' - 9 1/4"	2' - 1 1/4"	2' - 5 1/4"	2' - 7 1/4"	2' - 9 1/4"	3' - 1"	3' - 6 1/2"	4' - 2 1/2"	5' - 1"	6' - 1"
		1-5	1-8	2-0	2-4	2-6	2-8	3-0	3-5	4-0	5-0	6-0
Heights	Unit Dimension Rough Opening Call Size											
	0-6	 MRACA1506AHTN 0' - 10 3/16" 0' - 10 11/16"	 MRACA1806AHTN 0' - 10 3/4" 0' - 11 1/4"	 MRACA2006AHTN 0' - 11 1/16" 0' - 11 15/16"	 MRACA2406AHTN 1' - 0 1/16" 1' - 0 5/16"	 MRACA2606AHTN 1' - 0 1/4" 1' - 0 15/16"	 MRACA2806AHTN 1' - 0 3/4" 1' - 1 1/4"	 MRACA3006AHTN 1' - 1 3/8" 1' - 1 7/8"	 MRACA3506AHTN 1' - 2 3/16" 1' - 2 5/16"	 MRACA4006AHTN 1' - 3 3/8" 1' - 4 1/8"	 MRACA5006AHTN 1' - 5 3/8" 1' - 5 7/8"	 MRACA6006AHTN 1' - 7 3/8" 1' - 7 7/8"
	0-10	 MRACA15010AHTN 1' - 2 3/16" 1' - 2 11/16"	 MRACA18010AHTN 1' - 2 3/4" 1' - 3 1/4"	 MRACA20010AHTN 1' - 3 1/16" 1' - 3 15/16"	 MRACA24010AHTN 1' - 4 1/16" 1' - 4 5/16"	 MRACA26010AHTN 1' - 4 1/4" 1' - 4 15/16"	 MRACA28010AHTN 1' - 4 3/4" 1' - 5 1/4"	 MRACA30010AHTN 1' - 5 3/8" 1' - 5 7/8"	 MRACA35010AHTN 1' - 6 3/16" 1' - 6 5/16"	 MRACA40010AHTN 1' - 7 3/8" 1' - 8 1/8"	 MRACA50010AHTN 1' - 9 3/8" 1' - 9 7/8"	 MRACA60010AHTN 1' - 11 3/8" 1' - 11 7/8"
	1-0	 MRACA1510AHTN 1' - 4 3/16" 1' - 4 11/16"	 MRACA1810AHTN 1' - 4 3/4" 1' - 5 1/4"	 MRACA2010AHTN 1' - 5 1/16" 1' - 5 15/16"	 MRACA2410AHTN 1' - 6 1/16" 1' - 6 5/16"	 MRACA2610AHTN 1' - 6 1/4" 1' - 6 15/16"	 MRACA2810AHTN 1' - 6 3/4" 1' - 7 1/4"	 MRACA3010AHTN 1' - 7 3/8" 1' - 7 7/8"	 MRACA3510AHTN 1' - 8 3/16" 1' - 8 5/16"	 MRACA4010AHTN 1' - 9 3/8" 1' - 10 1/8"	 MRACA5010AHTN 1' - 11 3/8" 1' - 11 7/8"	 MRACA6010AHTN 2' - 1 3/8" 2' - 1 7/8"
	1-2	 MRACA1512AHTN 1' - 6 3/16" 1' - 6 11/16"	 MRACA1812AHTN 1' - 6 3/4" 1' - 7 1/4"	 MRACA2012AHTN 1' - 7 1/16" 1' - 7 15/16"	 MRACA2412AHTN 1' - 8 1/16" 1' - 8 5/16"	 MRACA2612AHTN 1' - 8 1/4" 1' - 8 15/16"	 MRACA2812AHTN 1' - 8 3/4" 1' - 9 1/4"	 MRACA3012AHTN 1' - 9 3/8" 1' - 9 7/8"	 MRACA3512AHTN 1' - 10 3/16" 1' - 10 5/16"	 MRACA4012AHTN 1' - 11 3/8" 2' - 0 1/8"	 MRACA5012AHTN 2' - 1 3/8" 2' - 1 7/8"	 MRACA6012AHTN 2' - 3 3/8" 2' - 3 7/8"
	1-6	 MRACA1516AHTN 1' - 10 3/16" 1' - 10 11/16"	 MRACA1816AHTN 1' - 10 3/4" 1' - 11 1/4"	 MRACA2016AHTN 1' - 11 1/16" 1' - 11 15/16"	 MRACA2416AHTN 2' - 0 1/16" 2' - 0 5/16"	 MRACA2616AHTN 2' - 0 1/4" 2' - 0 15/16"	 MRACA2816AHTN 2' - 0 3/4" 2' - 1 1/4"	 MRACA3016AHTN 2' - 1 3/8" 2' - 1 7/8"	 MRACA3516AHTN 2' - 2 3/16" 2' - 2 5/16"	 MRACA4016AHTN 2' - 3 3/8" 2' - 4 1/8"	 MRACA5016AHTN 2' - 5 3/8" 2' - 5 7/8"	 MRACA6016AHTN 2' - 7 3/8" 2' - 7 7/8"
	2-0	 MRACA1520AHTN 2' - 3 1/16" 2' - 3 5/16"	 MRACA1820AHTN 2' - 3 3/8" 2' - 4 1/8"	 MRACA2020AHTN 2' - 4 1/16" 2' - 4 5/16"	 MRACA2420AHTN 2' - 5 1/16" 2' - 5 5/16"	 MRACA2620AHTN 2' - 5 1/4" 2' - 5 15/16"	 MRACA2820AHTN 2' - 5 3/8" 2' - 6 1/8"	 MRACA3020AHTN 2' - 6 1/4" 2' - 6 3/4"	 MRACA3520AHTN 2' - 8 3/16" 2' - 8 5/16"	 MRACA4020AHTN 2' - 8 1/2" 2' - 9"	 MRACA5020AHTN 2' - 10 1/4" 2' - 10 3/4"	 MRACA6020AHTN 3' - 0 1/4" 3' - 0 3/4"
												
												

Optional Renaissance Grille Pattern



Standard Colonial Grille Pattern Widths

		2'-10 1/2"	3'-5 1/2"	4'-1 1/2"	4'-9 1/2"	5'-1 1/2"	5'-5 1/2"	6'-1"
		2'-11 1/2"	3'-6 1/2"	4'-2 1/2"	4'-10 1/2"	5'-2 1/2"	5'-6 1/2"	6'-2"
		1-5 Twin	1-8 Twin	2-0 Twin	2-4 Twin	2-6 Twin	2-8 Twin	3-0 Twin
Heights	Unit Dimension Rough Opening Call Size	 MRACA1506-2AHTN 1'-1 1/8" 1'-1 5/8"	 MRACA1806-2AHTN 1'-2 5/16" 1'-2 1/8"	 MRACA2006-2AHTN 1'-3 3/8" 1'-4 1/8"	 MRACA2406-2AHTN 1'-4 15/16" 1'-5 1/8"	 MRACA2606-2AHTN 1'-5 5/8" 1'-6 1/8"	 MRACA2806-2AHTN 1'-6 5/16" 1'-6 9/16"	 MRACA3006-2AHTN 1'-7 1/16" 1'-8 1/16"
	0-10	 MRACA15010-2AHTN 1'-5 5/8" 1'-5 3/8"	 MRACA18010-2AHTN 1'-6 5/16" 1'-6 3/8"	 MRACA20010-2AHTN 1'-7 5/8" 1'-8 1/8"	 MRACA24010-2AHTN 1'-8 15/16" 1'-9 1/8"	 MRACA26010-2AHTN 1'-9 5/8" 1'-10 1/8"	 MRACA28010-2AHTN 1'-10 5/16" 1'-10 9/16"	 MRACA30010-2AHTN 1'-11 1/16" 2'-0 1/16"
	1-0	 MRACA1510-2AHTN 1'-7 1/8" 1'-7 3/8"	 MRACA1810-2AHTN 1'-8 5/16" 1'-8 3/8"	 MRACA2010-2AHTN 1'-9 5/8" 1'-10 1/8"	 MRACA2410-2AHTN 1'-10 15/16" 1'-11 1/8"	 MRACA2610-2AHTN 1'-11 5/8" 2'-0 1/8"	 MRACA2810-2AHTN 2'-0 5/16" 2'-0 9/16"	 MRACA3010-2AHTN 2'-1 1/16" 2'-2 1/16"
	1-2	 MRACA1512-2AHTN 1'-9 1/8" 1'-9 3/8"	 MRACA1812-2AHTN 1'-10 5/16" 1'-10 3/8"	 MRACA2012-2AHTN 1'-11 5/8" 2'-0 1/8"	 MRACA2412-2AHTN 2'-0 15/16" 2'-1 1/16"	 MRACA2612-2AHTN 2'-1 5/8" 2'-2 1/8"	 MRACA2812-2AHTN 2'-2 5/16" 2'-2 9/16"	 MRACA3012-2AHTN 2'-3 1/16" 2'-4 1/16"
	1-6	 MRACA1512-2AHTN 2'-1 1/8" 2'-1 3/8"	 MRACA1812-2AHTN 2'-2 5/16" 2'-2 3/8"	 MRACA2012-2AHTN 2'-3 5/8" 2'-4 1/8"	 MRACA2412-2AHTN 2'-4 15/16" 2'-5 1/16"	 MRACA2612-2AHTN 2'-5 5/8" 2'-6 1/8"	 MRACA2812-2AHTN 2'-6 5/16" 2'-6 9/16"	 MRACA3012-2AHTN 2'-7 1/16" 2'-8 1/16"
	2-0	 MRACA1520-2AHTN 2'-6" 2'-6 1/2"	 MRACA1820-2AHTN 2'-7 3/16" 2'-7 1/8"	 MRACA2020-2AHTN 2'-8 1/2" 2'-9"	 MRACA2420-2AHTN 2'-9 9/16" 2'-10 1/16"	 MRACA2620-2AHTN 2'-10 1/2" 2'-11"	 MRACA2820-2AHTN 2'-11 3/16" 2'-11 1/8"	 MRACA3020-2AHTN 3'-0 1/16" 3'-0 5/16"
								
								

Optional Renaissance Grille Pattern

Casement – Direct Set Transom Units

		Single Widths										
Heights	Unit Dimension Rough Opening Call Size	1'-4 3/4"	1'-8 1/4"	2'-0 1/4"	2'-4 1/4"	2'-6 1/4"	2'-8 1/4"	3'-0"	3'-5 1/2"	4'-1 1/2"	5'-0"	6'-0"
		1'-5 3/4"	1'-9 1/4"	2'-1 1/4"	2'-5 1/4"	2'-7 1/4"	2'-9 1/4"	3'-1"	3'-6 1/2"	4'-2 1/2"	5'-1"	6'-1"
		1-5	1-8	2-0	2-4	2-6	2-8	3-0	3-5 Picture	4-0 Picture	5-0 Picture	6-0 Picture
		0-11 3/8"	0-11 3/8"	0-11 3/8"	0-11 3/8"	0-11 3/8"	0-11 3/8"	0-11 3/8"	0-11 3/8"	0-11 3/8"	0-11 3/8"	0-11 3/8"
1'-1 3/8"	1-0	MIRACA18010TN	MIRACA18010TN	MIRACA20010TN	MIRACA24010TN	MIRACA26010TN	MIRACA28010TN	MIRACA30010-TN	MIRACA35010-PTN	MIRACA40010-PTN	MIRACA50010-PTN	MIRACA60010-PTN
1'-3 3/8"	1-2	MIRACA1810TN	MIRACA1810TN	MIRACA2010TN	MIRACA2410TN	MIRACA2610TN	MIRACA2810TN	MIRACA3010-TN	MIRACA3510-PTN	MIRACA4010-PTN	MIRACA5010-PTN	MIRACA6010-PTN
1'-7 3/8"	1-6	MIRACA1812TN	MIRACA1812TN	MIRACA2012TN	MIRACA2412TN	MIRACA2612TN	MIRACA2812TN	MIRACA3012-TN	MIRACA3512-PTN	MIRACA4012-PTN	MIRACA5012-PTN	MIRACA6012-PTN
2'-0 1/4"	2-0	MIRACA1816TN	MIRACA1816TN	MIRACA2016TN	MIRACA2416TN	MIRACA2616TN	MIRACA2816TN	MIRACA3016-TN	MIRACA3516-PTN	MIRACA4016-PTN	MIRACA5016-PTN	MIRACA6016-PTN
2'-4 1/4"	2-4	MIRACA1820TN	MIRACA1820TN	MIRACA2020TN	MIRACA2420TN	MIRACA2620TN	MIRACA2820TN	MIRACA3020-PTN	MIRACA3520-PTN	MIRACA4020-PTN	MIRACA5020-PTN	MIRACA6020-PTN
		MIRACA1824TN	MIRACA1824TN	MIRACA2024TN	MIRACA2424TN	MIRACA2624TN	MIRACA2824TN	MIRACA3024-PTN	MIRACA3524-PTN	MIRACA4024-PTN	MIRACA5024-PTN	MIRACA6024-PTN

		Twin Widths						
Heights	Unit Dimension Rough Opening Call Size	2'-10 1/2"	3'-5 1/2"	4'-1 1/2"	4'-9 1/2"	5'-1 1/2"	5'-5 1/2"	6'-1"
		2'-11 1/2"	3'-6 1/2"	4'-2 1/2"	4'-10 1/2"	5'-2 1/2"	5'-6 1/2"	6'-2"
		1-5 Twin	1-8 Twin	2-0 Twin	2-4 Twin	2-6 Twin	2-8 Twin	3-0 Twin
		0-11 3/8"	0-11 3/8"	0-11 3/8"	0-11 3/8"	0-11 3/8"	0-11 3/8"	0-11 3/8"
1'-1 3/8"	1-0	MIRACA15010-2TN	MIRACA18010-2TN	MIRACA20010-2TN	MIRACA24010-2TN	MIRACA26010-2TN	MIRACA28010-2TN	MIRACA30010-2TN
1'-3 3/8"	1-2	MIRACA1510-2TN	MIRACA1810-2TN	MIRACA2010-2TN	MIRACA2410-2TN	MIRACA2610-2TN	MIRACA2810-2TN	MIRACA3010-2TN
1'-7 3/8"	1-6	MIRACA1512-2TN	MIRACA1812-2TN	MIRACA2012-2TN	MIRACA2412-2TN	MIRACA2612-2TN	MIRACA2812-2TN	MIRACA3012-2TN
2'-0 1/4"	2-0	MIRACA1520-2TN	MIRACA1820-2TN	MIRACA2020-2TN	MIRACA2420-2TN	MIRACA2620-2TN	MIRACA2820-2TN	MIRACA3016-2TN
2'-4 1/4"	2-4	MIRACA1520-2TN	MIRACA1820-2TN	MIRACA2020-2TN	MIRACA2420-2TN	MIRACA2620-2TN	MIRACA2820-2TN	MIRACA3020-2TN
		MIRACA1524-2TN	MIRACA1824-2TN	MIRACA2024-2TN	MIRACA2424-2TN	MIRACA2624-2TN	MIRACA2824-2TN	MIRACA3024-2TN

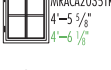
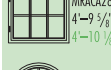
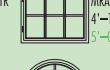
Casement – Sash & Frame Transom Units

		Single Widths											
Heights	Unit Dimension Rough Opening Call Size	1'-1 3/8"	1'-4 3/8"	1'-8 1/4"	2'-0 1/4"	2'-4 1/4"	2'-6 1/4"	2'-8 1/4"	3'-0"	3'-5 1/2"	4'-1 1/2"	5'-0"	6'-0"
		1'-2 3/8"	1'-5 3/8"	1'-9 1/4"	2'-1 1/4"	2'-5 1/4"	2'-7 1/4"	2'-9 1/4"	3'-1"	3'-6 1/2"	4'-2 1/2"	5'-1"	6'-1"
		1-0	1-5	1-8	2-0	2-4	2-6	2-8	3-0	3-5 Picture	4-0 Picture	5-0 Picture	6-0 Picture
		1'-1 3/8"	1'-4 3/8"	1'-8 1/4"	2'-0 1/4"	2'-4 1/4"	2'-6 1/4"	2'-8 1/4"	3'-0"	3'-5 1/2"	4'-1 1/2"	5'-0"	6'-0"
	1'-1 3/8"	MRACA1010SFTN	MRACA1510SFTN	MRACA1810SFTN	MRACA2010SFTN	MRACA2410SFTN	MRACA2610SFTN	MRACA2810SFTN	MRACA3010SFTN	MRACA3510PSFTN	MRACA4010PSFTN	MRACA5010PSFTN	MRACA6010PSFTN
	1'-4 3/8"	MRACA1015SFTN	MRACA1515SFTN	MRACA1815SFTN	MRACA2015SFTN	MRACA2415SFTN	MRACA2615SFTN	MRACA2815SFTN	MRACA3015SFTN	MRACA3515SFTN	MRACA4015PSFTN	MRACA5015PSFTN	MRACA6015PSFTN
	1'-8 1/4"	MRACA1018TN	MRACA1518TN	MRACA1818TN	MRACA2018TN	MRACA2418TN	MRACA2618TN	MRACA2818TN	MRACA3018TN	MRACA3518TN	MRACA4018PSFTN	MRACA5018PSFTN	MRACA6018PSFTN
	2'-0 1/4"	MRACA1020SFTN	MRACA1520SFTN	MRACA1820SFTN	MRACA2020SFTN	MRACA2420SFTN	MRACA2620SFTN	MRACA2820SFTN	MRACA3020SFTN	MRACA3520SFTN	MRACA4020PSFTN	MRACA5020PSFTN	MRACA6020PSFTN
	2'-4 1/4"	MRACA1024SFTN	MRACA1524SFTN	MRACA1824SFTN	MRACA2024SFTN	MRACA2424SFTN	MRACA2624SFTN	MRACA2824SFTN	MRACA3024SFTN	MRACA3524SFTN	MRACA4024PSFTN	MRACA5024PSFTN	MRACA6024PSFTN

		Twin Widths						
Heights	Unit Dimension Rough Opening Call Size	2'-10 1/2"	3'-5 1/2"	4'-1 1/2"	4'-9 1/2"	5'-1 1/2"	5'-5 1/2"	6'-1"
		2'-11 1/2"	3'-6 1/2"	4'-2 1/2"	4'-10 1/2"	5'-2 1/2"	5'-6 1/2"	6'-2"
		1-5 Twin	1-8 Twin	2-0 Twin	2-4 Twin	2-6 Twin	2-8 Twin	3-0 Twin
		2'-10 1/2"	3'-5 1/2"	4'-1 1/2"	4'-9 1/2"	5'-1 1/2"	5'-5 1/2"	6'-1"
	1'-1 3/8"	MRACA1510-2SFTN	MRACA1810-2SFTN	MRACA2010-2SFTN	MRACA2410-2SFTN	MRACA2610-2SFTN	MRACA2810-2SFTN	MRACA3010-2SFTN
	1'-4 3/8"	MRACA1515-2SFTN	MRACA1815-2SFTN	MRACA2015-2SFTN	MRACA2415-2SFTN	MRACA2615-2SFTN	MRACA2815-2SFTN	MRACA3015-2SFTN
	1'-8 1/4"	MRACA1518-2SFTN	MRACA1818-2SFTN	MRACA2018-2SFTN	MRACA2418-2SFTN	MRACA2618-2SFTN	MRACA2818-2SFTN	MRACA3018-2SFTN
	2'-0 1/4"	MRACA1520-2SFTN	MRACA1820-2SFTN	MRACA2020-2SFTN	MRACA2420-2SFTN	MRACA2620-2SFTN	MRACA2820-2SFTN	MRACA3020-2SFTN
	2'-4 1/4"	MRACA15024-2SFTN	MRACA1824-2SFTN	MRACA2024-2SFTN	MRACA2424-2SFTN	MRACA2624-2SFTN	MRACA2824-2SFTN	MRACA3024-2SFTN

Casement – Operating Extended Round Units

Standard Colonial Grille Pattern Widths

Unit Dimension Rough Opening Call Size	Widths					
	2'-0 1/4"	2'-4 1/4"	2'-6 1/4"	2'-8 1/4"	3'-0"	
	2'-1 1/4"	2'-5 1/4"	2'-7 1/4"	2'-9 1/4"	3'-1"	
Heights Unit height dimension is listed first under individual windows Rough Opening height dimension is listed second under individual windows	2-0	 MRACA2020TR 3'-0 3/8" 3'-0 7/8"	 MRACA2420TR 3'-2 3/8" 3'-2 7/8"	 MRACA2620TR 3'-3 3/8" 3'-3 7/8"	 MRACA2820TR 3'-4 3/8" 3'-4 7/8"	 MRACA3020TR 3'-6 1/4" 3'-6 3/4"
	2-4	 MRACA2024TR 3'-4 3/8" 3'-4 7/8"	 MRACA2424TR 3'-6 3/8" 3'-6 7/8"	 MRACA2624TR 3'-7 3/8" 3'-7 7/8"	 MRACA2824TR 3'-8 3/8" 3'-8 7/8"	 MRACA3024TR 3'-10 1/4" 3'-10 3/4"
	3-0	 MRACA2030TR 4'-0 1/8" 4'-0 5/8"	 MRACA2430TR 4'-2 1/8" 4'-2 5/8"	 MRACA2630TR 4'-3 3/4" 4'-3 3/4"	 MRACA2830TR 4'-4 1/8" 4'-4 5/8"	 MRACA3030TR 4'-6" 4'-6 1/2"
	3-5	 MRACA2035TR 4'-5 5/8" 4'-6 1/8"	 MRACA2435TR 4'-7 5/8" 4'-8 1/8"	 MRACA2635TR 4'-10 3/8" 4'-11 1/8"	 MRACA2835TR 4'-9 3/4" 4'-10 1/8"	 MRACA3035TR 4'-11 1/2" 5'-0"
	4-0	 MRACA2040TR 5'-1 5/8" 5'-2 1/8"	 MRACA2440TR 5'-3 5/8" 5'-4 1/8"	 MRACA2640TR 5'-4 3/8" 5'-5 1/8"	 MRACA2840TR 5'-5 5/8" 5'-6 1/8"	 MRACA3040TR 5'-7 1/2" 5'-8"
	4-5	 MRACA2045TR 5'-5 1/8" 5'-5 5/8"	 MRACA2445TR 5'-7 1/8" 5'-7 5/8"	 MRACA2645TR 5'-8 1/8" 5'-8 5/8"	 MRACA2845TR 5'-9 3/4" 5'-9 7/8"	 MRACA3045TR 5'-11" 5'-11 1/2"
	5-0	 MRACA2050TR 6'-0 1/8" 6'-0 5/8"	 MRACA2450TR 6'-2 1/8" 6'-2 5/8"	 MRACA2650TR 6'-3 3/8" 6'-3 3/8"	 MRACA2850TR 6'-4 1/8" 6'-4 5/8"	 MRACA3050TR 6'-6" 6'-6 1/2"
	5-5	 MRACA2055TR 6'-5 1/8" 6'-5 5/8"	 MRACA2455TR 6'-7 1/8" 6'-7 1/8"	 MRACA2655TR 6'-8 1/8" 6'-8 5/8"	 MRACA2855TR 6'-9 1/8" 6'-9 5/8"	 MRACA3055TR 6'-11" 6'-11 1/2"
	6-0	 MRACA2060TR 7'-0 1/8" 7'-0 5/8"	 MRACA2460TR 7'-2 1/8" 7'-2 5/8"	 MRACA2660TR 7'-3 3/8" 7'-3 3/8"	 MRACA2860TR 7'-4 1/8" 7'-4 5/8"	 MRACA3060TR 7'-6" 7'-6 1/2"

NOTE:

Shaded units satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.



Optional Gothic Grille Pattern

Casement – Fixed Units to Match Operating Extended Round Units

		Standard Colonial Grille Pattern				
		Widths				
Unit Dimension	Rough Opening	2'-0 1/4"	2'-4 1/4"	2'-6 1/4"	2'-8 1/4"	3'-0"
		2'-1 1/4"	2'-5 1/4"	2'-7 1/4"	2'-9 1/4"	3'-1"
		2-0	2-4	2-6	2-8	3-0
		Call Size				
Heights	2-0	 MRACA2020TR 3'-0 3/8" 3'-0 1/8"	 MRACA2420TR 3'-2 3/8" 3'-2 1/8"	 MRACA2620TR 3'-3 3/8" 3'-3 1/8"	 MRACA2820TR 3'-4 3/8" 3'-4 1/8"	 MRACA3020TR 3'-6 1/4" 3'-6 1/8"
	2-4	 MRACA2024TR 3'-4 3/8" 3'-4 1/8"	 MRACA2424TR 3'-6 3/8" 3'-6 1/8"	 MRACA2624TR 3'-7 3/8" 3'-7 1/8"	 MRACA2824TR 3'-8 3/8" 3'-8 1/8"	 MRACA3024TR 3'-10 1/4" 3'-10 3/8"
	3-0	 MRACA2030TR 4'-0 1/8" 4'-0 3/8"	 MRACA2430TR 4'-2 1/8" 4'-2 3/8"	 MRACA2630TR 4'-3 1/4" 4'-3 3/4"	 MRACA2830TR 4'-4 1/4" 4'-4 3/8"	 MRACA3030TR 4'-6" 4'-6 1/2"
	3-5	 MRACA2035TR 4'-5 1/8" 4'-6 1/8"	 MRACA2435TR 4'-7 3/8" 4'-8 1/8"	 MRACA2635TR 4'-10 5/8" 4'-11 1/8"	 MRACA2835TR 4'-10 1/8" 4'-10 3/8"	 MRACA3035TR 4'-11 1/2" 5'-0"
	4-0	 MRACA2040TR 5'-1 3/8" 5'-2 1/8"	 MRACA2440TR 5'-3 3/8" 5'-4 1/8"	 MRACA2640TR 5'-4 3/8" 5'-5 1/8"	 MRACA2840TR 5'-5 3/8" 5'-6 1/8"	 MRACA3040TR 5'-7 1/2" 5'-8"
	4-5	 MRACA2045TR 5'-5 1/8" 5'-5 3/8"	 MRACA2445TR 5'-7 1/8" 5'-7 3/8"	 MRACA2645TR 5'-8 1/8" 5'-8 3/8"	 MRACA2845TR 5'-9 3/8" 5'-9 1/8"	 MRACA3045TR 5'-11" 5'-11 1/2"
	5-0	 MRACA2050TR 6'-0 1/8" 6'-0 3/8"	 MRACA2450TR 6'-2 1/8" 6'-2 3/8"	 MRACA2650TR 6'-3 1/8" 6'-3 3/8"	 MRACA2850TR 6'-4 1/8" 6'-4 3/8"	 MRACA3050TR 6'-6" 6'-6 1/2"
	5-5	 MRACA2055TR 6'-5 1/8" 6'-5 3/8"	 MRACA2455TR 6'-7 1/8" 6'-7 3/8"	 MRACA2655TR 6'-8 1/8" 6'-8 3/8"	 MRACA2855TR 6'-9 3/8" 6'-9 1/8"	 MRACA3055TR 6'-11" 6'-11 1/2"
	6-0	 MRACA2060TR 7'-0 1/8" 7'-0 3/8"	 MRACA2460TR 7'-2 1/8" 7'-2 3/8"	 MRACA2660TR 7'-3 1/8" 7'-3 3/8"	 MRACA2860TR 7'-4 1/8" 7'-4 3/8"	 MRACA3060TR 7'-6" 7'-6 1/2"



Optional Gothic Grille Pattern

Casement – Operating Extended Eyebrow Units

Standard Colonial Grille Pattern Widths

Unit Dimension Rough Opening Call Size	Widths				
	2' - 0 1/8"	2' - 4 1/8"	2' - 6 1/8"	2' - 8 1/8"	3' - 0"
	2' - 1 1/8"	2' - 5 1/8"	2' - 7 1/8"	2' - 9 1/8"	3' - 1"
Heights Unit height dimension is listed first under individual windows Rough Opening height dimension is listed second under individual windows	2-0	2-4	2-6	2-8	3-0
	 MRACA2020AH 2' - 4 3/8" 2' - 4 3/8"	 MRACA2420AH 2' - 4 15/16" 2' - 5 1/8"	 MRACA2620AH 2' - 5 1/8" 2' - 5 3/8"	 MRACA2820AH 2' - 5 9/8" 2' - 6 1/8"	 MRACA3020AH 2' - 6 1/8" 2' - 6 3/8"
	 MRACA2024AH 2' - 8 3/8" 2' - 8 3/8"	 MRACA2424AH 2' - 8 15/16" 2' - 9 1/8"	 MRACA2624AH 2' - 9 1/8" 2' - 9 3/8"	 MRACA2824AH 2' - 9 9/8" 2' - 10 1/8"	 MRACA3024AH 2' - 10 1/8" 2' - 10 3/8"
	 MRACA2030AH 3' - 4 1/8" 3' - 4 3/8"	 MRACA2430AH 3' - 4 15/16" 3' - 5 1/8"	 MRACA2630AH 3' - 5 1/8" 3' - 5 3/8"	 MRACA2830AH 3' - 5 9/8" 3' - 5 1/2"	 MRACA3030AH 3' - 6" 3' - 6 1/2"
	 MRACA2035AH 3' - 9 3/8" 3' - 10 1/8"	 MRACA2435AH 3' - 10 15/16" 3' - 11 1/8"	 MRACA2635AH 3' - 10 1/8" 3' - 11 3/8"	 MRACA2835AH 3' - 10 9/8" 3' - 11 1/2"	 MRACA3035AH 3' - 11 1/2" 4' - 0"
	 MRACA2040AH 4' - 5 3/8" 4' - 6 1/8"	 MRACA2440AH 4' - 6 15/16" 4' - 6 11/8"	 MRACA2640AH 4' - 6 1/8" 4' - 7 1/8"	 MRACA2840AH 4' - 6 9/8" 4' - 7 3/8"	 MRACA3040AH 4' - 7 1/2" 4' - 8"
	 MRACA2045AH 4' - 9 3/8" 4' - 9 3/8"	 MRACA2445AH 4' - 9 15/16" 4' - 10 1/8"	 MRACA2645AH 4' - 10 1/8" 4' - 10 3/8"	 MRACA2845AH 4' - 10 9/8" 4' - 10 1/2"	 MRACA3045AH 4' - 11" 4' - 11 1/2"
	 MRACA2050AH 5' - 4 1/8" 5' - 4 3/8"	 MRACA2450AH 5' - 4 15/16" 5' - 5 1/8"	 MRACA2650AH 5' - 5 1/8" 5' - 5 3/8"	 MRACA2850AH 5' - 5 9/8" 5' - 5 1/2"	 MRACA3050AH 5' - 6" 5' - 6 1/2"
	 MRACA2055AH 5' - 9 3/8" 5' - 9 3/8"	 MRACA2455AH 5' - 9 15/16" 5' - 10 1/8"	 MRACA2655AH 5' - 10 1/8" 5' - 10 3/8"	 MRACA2855AH 5' - 10 9/8" 5' - 10 1/2"	 MRACA3055AH 5' - 11" 5' - 11 1/2"
	 MRACA2060AH 6' - 4 1/8" 6' - 4 3/8"	 MRACA2460AH 6' - 4 15/16" 6' - 5 1/8"	 MRACA2660AH 6' - 5 1/8" 6' - 5 3/8"	 MRACA2860AH 6' - 5 9/8" 6' - 5 1/2"	 MRACA3060AH 6' - 6" 6' - 6 1/2"

NOTE:

Shaded units satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.



Optional Renaissance Grille Pattern

Casement – Fixed Units to Match Operating Extended Eyebrow Units

Standard Colonial Grille Pattern

Widths

Unit Dimension Rough Opening Colt Size	Widths								
	2'-0 1/4"	2'-4 1/4"	2'-6 1/4"	2'-8 1/4"	3'-0"	3'-5 1/2"	4'-1 1/2"	5'-0"	6'-0"
	2'-1 1/4"	2'-5 1/4"	2'-7 1/4"	2'-9 1/4"	3'-1"	3'-6 1/2"	4'-2 1/2"	5'-1"	6'-1"
	2-0	2-4	2-6	2-8	3-0	3-5	4-0	5-0	6-0
2-0	 MRACA2020AH 2'-4 1/4" 2'-4 1/4"	 MRACA2420AH 2'-4 1/4" 2'-5 1/4"	 MRACA2620AH 2'-5 1/4" 2'-5 1/4"	 MRACA2820AH 2'-5 1/4" 2'-6 1/4"	 MRACA3020AH 2'-6 1/4" 2'-6 3/4"	 MRACA3520AH 2'-7 3/4" 2'-7 1/4"	 MRACA4020AH 2'-8 1/2" 2'-9"	 MRACA5020AH 2'-10 1/4" 2'-10 1/4"	 MRACA6020AH 3'-0 1/4" 3'-0 3/4"
2-4	 MRACA2024AH 2'-8 3/4" 2'-8 3/4"	 MRACA2424AH 2'-8 3/4" 2'-9 1/4"	 MRACA2624AH 2'-9 1/4" 2'-9 1/4"	 MRACA2824AH 2'-9 1/4" 2'-10 1/4"	 MRACA3024AH 2'-10 1/4" 2'-10 3/4"	 MRACA3524AH 2'-11 3/4" 2'-11 1/4"	 MRACA4024AH 3'-0 1/2" 3'-1"	 MRACA5024AH 3'-2 1/4" 3'-1 3/4"	 MRACA6024AH 3'-4 1/4" 3'-4 3/4"
3-0	 MRACA2030AH 3'-4 1/4" 3'-4 1/4"	 MRACA2430AH 3'-4 1/4" 3'-5 1/4"	 MRACA2630AH 3'-5 1/4" 3'-5 1/4"	 MRACA2830AH 3'-5 1/4" 3'-5 1/4"	 MRACA3030AH 3'-6" 3'-6 1/2"	 MRACA3530AH 3'-6 3/4" 3'-7 1/4"	 MRACA4030AH 3'-8 1/4" 3'-8 3/4"	 MRACA5030AH 3'-10" 3'-10 1/2"	 MRACA6030AH 4'-0" 4'-0 1/2"
3-5	 MRACA2035AH 3'-9 1/4" 3'-10 1/4"	 MRACA2435AH 3'-10 3/4" 3'-11 1/4"	 MRACA2635AH 3'-10 3/4" 3'-11 1/4"	 MRACA2835AH 3'-10 3/4" 3'-11 1/4"	 MRACA3035AH 3'-11 1/2" 4'-0"	 MRACA3535AH 4'-0 1/4" 4'-0 3/4"	 MRACA4035AH 4'-1 3/4" 4'-2 1/4"	 MRACA5035AH 4'-3 1/2" 4'-4"	 MRACA6035AH 4'-5 1/2" 4'-6"
4-0	 MRACA2040AH 4'-5 1/4" 4'-6 1/4"	 MRACA2440AH 4'-6 3/4" 4'-6 3/4"	 MRACA2640AH 4'-6 3/4" 4'-7 1/4"	 MRACA2840AH 4'-6 3/4" 4'-7 3/4"	 MRACA3040AH 4'-7 1/2" 4'-8"	 MRACA3540AH 4'-8 1/4" 4'-8 3/4"	 MRACA4040AH 4'-9 3/4" 4'-10 1/4"	 MRACA5040AH 4'-11 1/2" 5'-0"	 MRACA6040AH 5'-1 1/2" 5'-2"
4-5	 MRACA2045AH 4'-9 1/4" 4'-9 3/4"	 MRACA2445AH 4'-9 1/4" 4'-10 3/4"	 MRACA2645AH 4'-10 1/4" 4'-10 3/4"	 MRACA2845AH 4'-10 3/4" 4'-10 3/4"	 MRACA3045AH 4'-11" 4'-11 1/2"	 MRACA3545AH 4'-11 1/4" 5'-0 7/8"	 MRACA4045AH 5'-1 1/4" 5'-1 3/4"	 MRACA5045AH 5'-3" 5'-3 1/2"	 MRACA6045AH 5'-5" 5'-5 1/2"
5-0	 MRACA2050AH 5'-4 1/4" 5'-4 3/4"	 MRACA2450AH 5'-4 1/4" 5'-5 1/4"	 MRACA2650AH 5'-5 1/4" 5'-5 1/4"	 MRACA2850AH 5'-5 3/4" 5'-5 3/4"	 MRACA3050AH 5'-6" 5'-6 1/2"	 MRACA3550AH 5'-6 3/4" 5'-7 1/4"	 MRACA4050AH 5'-8 1/4" 5'-8 3/4"	 MRACA5050AH 5'-10" 5'-10 1/2"	 MRACA6050AH 6'-0" 6'-0 1/2"
5-5	 MRACA2055AH 5'-9 1/4" 5'-9 3/4"	 MRACA2455AH 5'-9 1/4" 5'-10 3/4"	 MRACA2655AH 5'-10 1/4" 5'-10 3/4"	 MRACA2855AH 5'-10 3/4" 5'-10 3/4"	 MRACA3055AH 5'-11" 5'-11 1/2"	 MRACA3555AH 5'-11 1/4" 6'-0 1/4"	 MRACA4055AH 6'-1 1/4" 6'-1 3/4"	 MRACA5055AH 6'-3" 6'-3 1/2"	 MRACA6055AH 6'-5" 6'-5 1/2"
6-0	 MRACA2060AH 6'-4 1/4" 6'-4 3/4"	 MRACA2460AH 6'-4 1/4" 6'-5 1/4"	 MRACA2660AH 6'-5 1/4" 6'-5 1/4"	 MRACA2860AH 6'-5 3/4" 6'-5 3/4"	 MRACA3060AH 6'-6" 6'-6 1/2"	 MRACA3560AH 6'-6 3/4" 6'-7 1/4"	 MRACA4060AH 6'-8 1/4" 6'-8 3/4"	 MRACA5060AH 6'-10" 6'-10 1/2"	 MRACA6060AH 7'-0" 7'-0 1/2"



Optional Renaissance Grille Pattern

Casement – Operating Extended Quarter Round Units

		Widths	
		2' - 0 1/4"	2' - 4 1/4"
		2' - 1 1/4"	2' - 5 1/4"
		2-0	2-4
Heights	Unit Dimension		
	Rough Opening		
	Call Size		
	2-0	 MRACA2020QC 4' - 0 1/2" 4' - 1"	 MRACA2420QC 4' - 4 1/2" 4' - 5"
	2-4	 MRACA2024QC 4' - 4 1/2" 4' - 5"	 MRACA2424QC 4' - 8 1/2" 4' - 9"
Heights	3-0	 MRACA2030QC 5' - 0 1/4" 5' - 0 3/4"	 MRACA2430QC 5' - 4 1/4" 5' - 4 3/4"
	3-5	 MRACA2035QC 5' - 5 3/4" 5' - 6 1/4"	 MRACA2435QC 5' - 9 3/4" 5' - 10 1/4"
	4-0	 MRACA2040QC 6' - 1 3/4" 6' - 2 1/4"	 MRACA2440QC 6' - 5 3/4" 6' - 6 1/4"

Mulling Options



Casement – Fixed Units to Match Operating Extended Quarter Round Units

		Widths				
Unit Dimension	Rough Opening	2'-0 1/4"	2'-4 1/4"	2'-6 1/4"	2'-8 1/4"	3'-0"
		2'-1 1/4"	2'-5 1/4"	2'-7 1/4"	2'-9 1/4"	3'-1"
		Call Size	Call Size	Call Size	Call Size	Call Size
Heights	2-0	 MRACA2020QC 4'-0 1/2" 4'-1"	 MRACA2420QC 4'-4 1/2" 4'-5"	 MRACA2620QC 4'-6 1/2" 4'-7"	 MRACA2820QC 4'-8 1/2" 4'-8"	 MRACA3020UQH 5'-0 1/4" 5'-0 3/4"
	2-4	 MRACA2024QC 4'-4 1/2" 4'-5"	 MRACA2424QC 4'-8 1/2" 4'-9"	 MRACA2624QC 4'-10 1/2" 4'-11"	 MRACA2824QC 5'-0 1/2" 5'-1"	 MRACA3024QC 5'-4 1/4" 5'-4 3/4"
	3-0	 MRACA2030QC 5'-0 1/4" 5'-0 3/4"	 MRACA2430QC 5'-4 1/4" 5'-4 3/4"	 MRACA2630QC 5'-6 1/4" 5'-6 3/4"	 MRACA2830QC 5'-8 1/4" 5'-8 3/4"	 MRACA3030QC 6'-0" 6'-0 1/2"
	3-5	 MRACA2035QC 5'-5 3/4" 5'-6 1/4"	 MRACA2435QC 5'-9 3/4" 5'-10 1/4"	 MRACA2635QC 5'-11 3/4" 6'-0 1/4"	 MRACA2835QC 6'-1 3/4" 6'-2 1/4"	 MRACA3035QC 6'-5 1/2" 6'-6"
	4-0	 MRACA2040QC 6'-1 3/4" 6'-2 1/4"	 MRACA2440QC 6'-5 3/4" 6'-6 1/4"	 MRACA2640QC 6'-7 3/4" 6'-8 1/4"	 MRACA2840QC 6'-9 3/4" 6'-10 1/4"	 MRACA3040QC 7'-1 1/2" 7'-2"
	4-5	 MRACA2045QC 6'-5 1/4" 6'-5 3/4"	 MRACA2445QC 6'-9 1/4" 6'-9 3/4"	 MRACA2645QC 6'-11 1/4" 6'-11 3/4"	 MRACA2845QC 7'-1 1/4" 7'-1 3/4"	 MRACA3045QC 7'-5" 7'-5 1/2"
	5-0	 MRACA2050QC 7'-0 1/4" 7'-0 3/4"	 MRACA2450QC 7'-4 1/4" 7'-4 3/4"			
	5-5	 MRACA2055QC 7'-5 1/4" 7'-5 3/4"				

Mulling Options



Casement – Operating Extended Quarter Eyebrow Units

		Widths				
Unit Dimension	Rough Opening	2'-0 1/4"	2'-4 1/4"	2'-6 1/4"	2'-8 1/4"	3'-0"
		2'-1 1/4"	2'-5 1/4"	2'-7 1/4"	2'-9 1/4"	3'-1"
		2-0	2-4	2-6	2-8	3-0
Heights	2-0	 MRACA2020UAH 2'-8 1/8" 2'-9"	 MRACA2420UAH 2'-9 3/8" 2'-10 3/8"	 MRACA2620UAH 2'-10 1/8" 2'-11"	 MRACA2820UAH 2'-11 3/8" 2'-11 3/8"	 MRACA3020UAH 3'-0 1/8" 3'-0 1/8"
	2-4	 MRACA2024UAH 3'-0 1/8" 3'-1"	 MRACA2424UAH 3'-1 3/8" 3'-2 3/8"	 MRACA2624UAH 3'-2 1/8" 3'-3"	 MRACA2824UAH 3'-3 3/8" 3'-3 3/8"	 MRACA3024UAH 3'-4 1/8" 3'-4 1/8"
	3-0	 MRACA2030UAH 3'-8 1/8" 3'-8 3/4"	 MRACA2430UAH 3'-9 3/8" 3'-10 3/8"	 MRACA2630UAH 3'-10 1/8" 3'-10 3/4"	 MRACA2830UAH 3'-10 3/8" 3'-11 1/8"	 MRACA3030UAH 4'-0 3/8" 4'-0 3/8"
	3-5	 MRACA2035UAH 4'-1 3/8" 4'-2 1/4"	 MRACA2435UAH 4'-3 1/8" 4'-3 3/8"	 MRACA2635UAH 4'-3 3/4" 4'-4 1/4"	 MRACA2835UAH 4'-4 1/8" 4'-4 3/8"	 MRACA3035UAH 4'-5 1/8" 4'-6 3/8"
	4-0	 MRACA2040UAH 4'-9 3/8" 4'-10 1/4"	 MRACA2440UAH 4'-11 1/8" 4'-11 3/8"	 MRACA2640UAH 4'-11 3/4" 5'-0 1/8"	 MRACA2840UAH 5'-0 1/8" 5'-0 3/8"	 MRACA3040UAH 5'-1 1/8" 5'-2 3/8"
	4-5	 MRACA2045UAH 5'-1 1/4" 5'-1 3/4"	 MRACA2445UAH 5'-2 7/8" 5'-3 1/8"	 MRACA2645UAH 5'-3 1/4" 5'-3 3/4"	 MRACA2845UAH 5'-3 15/16" 5'-4 1/8"	 MRACA3045UAH 5'-5 3/8" 5'-5 9/8"
	5-0	 MRACA2050UAH 5'-8 1/8" 5'-8 3/4"	 MRACA2450UAH 5'-9 3/8" 5'-10 1/8"	 MRACA2650UAH 5'-10 1/4" 5'-10 3/4"	 MRACA2850UAH 5'-10 3/8" 5'-11 1/8"	 MRACA3050UAH 6'-0 3/8" 6'-0 1/4"
	5-5	 MRACA2055UAH 6'-1 1/4" 6'-1 3/4"	 MRACA2455UAH 6'-2 7/8" 6'-3 1/8"	 MRACA2655UAH 6'-3 1/4" 6'-3 3/4"	 MRACA2855UAH 6'-3 3/8" 6'-4 1/8"	 MRACA3055UAH 6'-5 3/8" 6'-5 9/8"
	6-0	 MRACA2060UAH 6'-8 1/8" 6'-8 3/4"	 MRACA2460UAH 6'-9 3/8" 6'-10 1/8"	 MRACA2660UAH 6'-10 1/4" 6'-10 3/4"	 MRACA2860UAH 6'-10 3/8" 6'-11 1/8"	 MRACA3060UAH 7'-0 3/8" 7'-0 1/4"

NOTE:

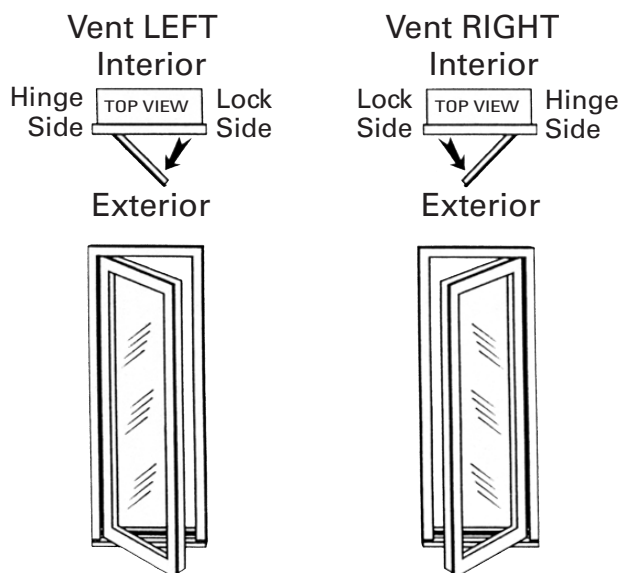
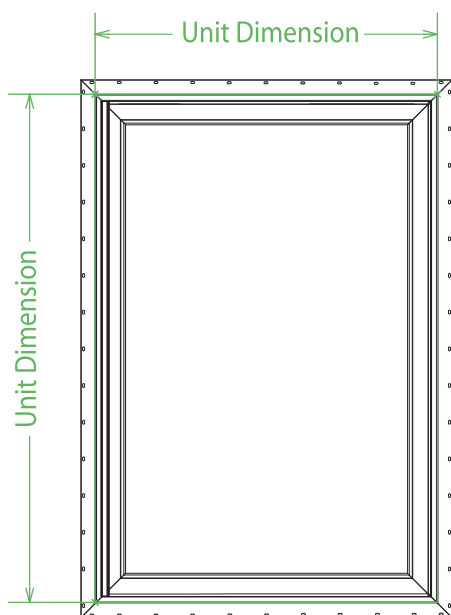
Shaded units satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.

Casement – Fixed Units to Match Operating Extended Quarter Eyebrow Units

Unit Dimension		Widths				
		2' - 0 1/4"	2' - 4 1/4"	2' - 6 1/4"	2' - 8 1/4"	3' - 0"
		2' - 1 1/4"	2' - 5 1/4"	2' - 7 1/4"	2' - 9 1/4"	3' - 1"
Rough Opening		2-0	2-4	2-6	2-8	3-0
Call Size						
Heights	2-0	 MRACA2020UAH 2' - 8 1/2" 2' - 9"	 MRACA2420UAH 2' - 9 1/2" 2' - 10 3/8"	 MRACA2620UAH 2' - 10 1/2" 2' - 11"	 MRACA2820UAH 2' - 11 3/8" 2' - 11 1/2"	 MRACA3020UAH 3' - 0 1/8" 3' - 0 3/8"
	2-4	 MRACA2024UAH 3' - 0 1/2" 3' - 1"	 MRACA2424UAH 3' - 1 1/8" 3' - 2 5/8"	 MRACA2624UAH 3' - 2 1/2" 3' - 3"	 MRACA2824UAH 3' - 3 3/8" 3' - 3 1/2"	 MRACA3024UAH 3' - 4 1/8" 3' - 4 5/8"
	3-0	 MRACA2030UAH 3' - 8 1/2" 3' - 8 3/4"	 MRACA2430UAH 3' - 9 1/8" 3' - 10 1/8"	 MRACA2630UAH 3' - 10 1/4" 3' - 10 3/4"	 MRACA2830UAH 3' - 10 5/8" 3' - 11 1/8"	 MRACA3030UAH 4' - 0 9/16" 4' - 0 1/2"
	3-5	 MRACA2035UAH 4' - 1 3/4" 4' - 2 1/4"	 MRACA2435UAH 4' - 3 1/8" 4' - 3 3/8"	 MRACA2635UAH 4' - 3 3/4" 4' - 4 1/4"	 MRACA2835UAH 4' - 4 7/16" 4' - 4 1/2"	 MRACA3035UAH 4' - 5 1/16" 4' - 6 3/16"
	4-0	 MRACA2040UAH 4' - 9 3/4" 4' - 10 1/4"	 MRACA2440UAH 4' - 11 1/8" 4' - 11 3/8"	 MRACA2640UAH 4' - 11 3/4" 5' - 0 1/4"	 MRACA2840UAH 5' - 0 7/8" 5' - 0 1/2"	 MRACA3040UAH 5' - 1 1/16" 5' - 2 3/16"
	4-5	 MRACA2045UAH 5' - 1 1/4" 5' - 1 3/4"	 MRACA2445UAH 5' - 2 7/16" 5' - 3 1/8"	 MRACA2645UAH 5' - 3 1/4" 5' - 3 3/4"	 MRACA2845UAH 5' - 3 15/16" 5' - 4 1/8"	 MRACA3045UAH 5' - 5 3/16" 5' - 5 9/16"
	5-0	 MRACA2050UAH 5' - 8 1/4" 5' - 8 3/4"	 MRACA2450UAH 5' - 9 9/16" 5' - 10 1/8"	 MRACA2650UAH 5' - 10 1/4" 5' - 10 3/4"	 MRACA2850UAH 5' - 10 5/8" 5' - 11 1/8"	 MRACA3050UAH 6' - 0 3/16" 6' - 0 1/2"
	5-5	 MRACA2055UAH 6' - 1 1/4" 6' - 1 3/4"	 MRACA2455UAH 6' - 2 1/16" 6' - 3 1/8"	 MRACA2655UAH 6' - 3 1/4" 6' - 3 3/4"	 MRACA2855UAH 6' - 3 15/16" 6' - 4 1/8"	 MRACA3055UAH 6' - 5 3/16" 6' - 5 9/16"
	6-0	 MRACA2060UAH 6' - 8 1/4" 6' - 8 3/4"	 MRACA2460UAH 6' - 9 1/8" 6' - 10 1/8"	 MRACA2660UAH 6' - 10 1/4" 6' - 10 3/4"	 MRACA2860UAH 6' - 10 5/8" 6' - 11 1/8"	 MRACA3060UAH 7' - 0 9/16" 7' - 0 1/2"

Unit height dimension is listed first under individual windows
Rough Opening height dimension is listed second under individual windows

Casement – Actual Unit Dimensions



To calculate unit dimension on multiple units, add 1" per mull together with actual unit dimension.

Operating Units, WIDTH

CALL SIZE (WIDTH)	1-5	1-8	2-0	2-4	2-6	2-8	3-0
SINGLE	16- ³ / ₄	20- ¹ / ₄	24- ¹ / ₄	28- ¹ / ₄	30- ¹ / ₄	32- ¹ / ₄	36
TWIN	34- ¹ / ₂	41- ¹ / ₂	49- ¹ / ₂	57- ¹ / ₂	61- ¹ / ₂	65- ¹ / ₂	73
TRIPLE	52- ¹ / ₄	62- ³ / ₄	74- ³ / ₄	86- ³ / ₄	92- ³ / ₄	98- ³ / ₄	110
FOUR WIDE	70	84	100	116	124	N/A	N/A
FIVE WIDE	87- ³ / ₄	105- ¹ / ₄	N/A	N/A	N/A	N/A	N/A

Operating & Fixed Units, HEIGHT

CALL SIZE (HEIGHT)	HEIGHT IN INCHES
2-0	24- ¹ / ₄
2-4	28- ¹ / ₄
3-0	36
3-5	41- ¹ / ₂
4-0	49- ¹ / ₂
4-5	53
5-0	60
5-5	65
6-0	72

Fixed Units, WIDTH

CALL SIZE (WIDTH)	1-0	1-5	1-8	2-0	2-4	2-6
SINGLE	13- ³ / ₈	16- ³ / ₄	20- ¹ / ₄	24- ¹ / ₄	28- ¹ / ₄	30- ¹ / ₄
TWIN	27- ³ / ₄	34- ¹ / ₂	41- ¹ / ₂	49- ¹ / ₂	57- ¹ / ₂	61- ¹ / ₂
TRIPLE	42- ¹ / ₈	52- ¹ / ₄	62- ³ / ₄	74- ³ / ₄	86- ³ / ₄	92- ³ / ₄

Transom Units, HEIGHT

CALL SIZE (HEIGHT)	HEIGHT IN INCHES
0-10	11- ³ / ₈
1-0	13- ³ / ₈
1-2	15- ³ / ₈
1-6	17- ³ / ₈
2-0	24- ¹ / ₄
2-4	28- ¹ / ₄

Fixed Units, WIDTH

CALL SIZE (WIDTH)	2-8	3-0	4-0	5-0	6-0
SINGLE	32- ¹ / ₄	36	49- ¹ / ₂	60	72
TWIN	65- ¹ / ₂	73	100	N/A	N/A
TRIPLE	98- ³ / ₄	110	N/A	N/A	N/A

Operating Units

Call Size	Clear Opening Width	Clear Opening Height	Clear Opening S.F.	Daylight Opening S.F.
MRACA1520	9.000	19.719	1.23	1.4
24	9.000	23.719	1.48	1.7
30	9.000	31.469	1.97	2.3
35	9.000	36.969	2.31	2.8
40	9.000	44.969	2.81	3.4
45	9.000	48.469	3.03	3.6
50	9.000	55.469	3.47	4.2
55	9.000	60.469	3.78	4.6
60	9.000	67.469	4.22	5.1
MRACA1820	12.500	19.719	1.71	1.9
24	12.500	23.719	2.06	2.3
30	12.500	31.469	2.73	3.1
35	12.500	36.969	3.12	3.6
40	12.500	44.969	3.82	4.4
45	12.500	48.469	4.21	4.8
50	12.500	55.469	4.82	5.5
55	12.500	60.469	5.25	6.0
60	12.500	67.469	5.86	6.7
MRACA2020	16.500	19.719	2.26	2.4
24	16.500	23.719	2.72	2.9
30	16.500	31.469	3.61	3.9
35	16.500	36.969	4.12	4.6
40	16.500	44.969	5.04	5.6
45	16.500	48.469	5.55	6.1
50	16.500	55.469	6.36	7.0
55	16.500	60.469	6.93	7.6
60	16.500	67.469	7.73	8.5
MRACA2420	20.500	19.719	2.81	2.9
24	20.500	23.719	3.38	3.5
30	20.500	31.469	4.48	4.7
35	20.500	36.969	5.12	5.6
40	20.500	44.969	6.26	6.9
45	20.500	48.469	6.90	7.4
50	20.500	55.469	7.90	8.5
55	20.500	60.469	8.61	9.3
60	20.500	67.469	9.60	10.4
MRACA2620	22.500	19.719	3.08	3.2
24	22.500	23.719	3.71	3.8
30	22.500	31.469	4.92	5.2
35	22.500	36.969	5.78	6.1
40	22.500	44.969	7.03	7.5
45	22.500	48.469	7.57	8.1
50	22.500	55.469	8.67	9.3
55	22.500	60.469	9.45	10.1
60	22.500	67.469	10.54	11.3
MRACA2820	24.500	19.719	3.35	3.4
24	24.500	23.719	4.04	4.2
30	24.500	31.469	5.35	5.6
35	24.500	35.969	6.12	6.6
40	24.500	43.969	7.48	8.1
45	24.500	48.469	8.25	8.7
50	24.500	55.469	9.44	10.0
55	24.500	60.469	10.29	10.9
60	24.500	67.469	11.48	12.2
MRACA3020	28.250	19.719	3.87	3.9
24	28.250	23.719	4.65	4.7
30	28.250	31.469	6.17	6.4
35	28.250	35.969	6.12	7.5
40	28.250	43.969	7.48	9.2
45	28.250	48.469	8.25	10.0
50	28.250	55.469	9.44	11.4
55	28.250	60.469	10.29	12.5
60	28.250	67.469	11.48	14.0

NOTE:
Units listed in **green** satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.

Casement – Net Clear & Daylight Opening Dimensions

Fixed Units

Call Size	Daylight Opening S.F.	Call Size	Daylight Opening S.F.
MRACA1020P	1.0	MRACA2820P	3.4
24	1.2	24	4.2
30	1.6	30	5.6
35	1.9	35	6.6
40	2.3	40	8.1
45	2.5	45	8.7
50	2.9	50	10.0
55	3.2	55	10.9
60	3.5	60	12.2
MRACA1520P	1.4	MRACA3020P	3.9
24	1.7	24	4.7
30	2.3	30	6.4
35	2.8	35	7.5
40	3.4	40	9.2
45	3.6	45	10.0
50	4.2	50	11.4
55	4.6	55	12.5
60	5.1	60	14.0
MRACA1820P	1.9	MRACA3520P	4.6
24	2.3	24	5.6
30	3.1	30	7.5
35	3.6	35	8.9
40	4.4	40	10.9
45	4.8	45	11.8
50	5.5	50	13.5
55	6.0	55	14.8
60	6.7	60	16.5
MRACA2020P	2.4	MRACA4020P	5.6
24	2.9	24	6.9
30	3.9	30	9.2
35	4.6	35	10.9
40	5.6	40	13.3
45	6.1	45	14.4
50	7.0	50	16.5
55	7.6	55	18.0
60	8.5	60	20.2
MRACA2420P	2.9	MRACA5020P	7.0
24	3.5	24	8.5
30	4.7	30	11.4
35	5.6	35	13.5
40	6.9	40	16.5
45	7.4	45	17.8
50	8.5	50	20.5
55	9.3	55	22.4
60	10.4	60	25.0
MRACA2620P	3.2	MRACA6020P	8.5
24	3.8	24	10.4
30	5.2	30	14.0
35	6.1	35	16.5
40	7.5	40	20.2
45	8.1	45	21.8
50	9.3	50	25.0
55	10.1	55	27.3
60	11.3	60	30.5

Casement – Net Clear & Daylight Opening Dimensions

Operating Extended Round Casement Units

Call Size	Clear Opening Width	Clear Opening Height	Clear Opening S.F.	Daylight Opening S.F.
MRACA2020TR	15.000	21.658	2.26	4.6
24	15.000	25.658	2.67	5.2
30	15.000	33.408	3.48	6.2
35	15.000	38.908	4.05	6.9
40	15.000	46.908	4.89	7.9
45	15.000	50.408	5.25	8.3
50	15.000	57.408	5.98	9.2
55	15.000	62.408	6.50	9.9
60	15.000	69.408	7.23	10.8
MRACA2420TR	19.000	21.658	2.86	6.1
24	19.000	25.658	3.39	6.8
30	19.000	33.408	4.41	8.0
35	19.000	38.908	5.13	8.8
40	19.000	46.908	6.19	10.1
45	19.000	50.408	6.65	10.6
50	19.000	57.408	7.57	11.7
55	19.000	62.408	8.23	12.5
60	19.000	69.408	9.19	13.6
MRACA2620TR	21.000	21.658	3.16	6.9
24	21.000	25.658	3.74	7.6
30	21.000	33.408	4.87	8.9
35	21.000	38.908	5.67	9.8
40	21.000	46.908	6.84	11.2
45	21.000	50.408	7.35	11.8
50	21.000	57.408	8.37	13.0
55	21.000	62.408	9.10	13.8
60	21.000	69.408	10.12	15.0
MRACA2820TR	23.000	21.658	3.46	7.8
24	23.000	25.658	4.10	8.5
30	23.000	33.408	5.34	10.0
35	23.000	38.908	6.21	11.0
40	23.000	46.908	7.49	12.5
45	23.000	50.408	8.05	13.1
50	23.000	57.408	9.17	14.4
55	23.000	62.408	9.97	15.3
60	23.000	69.408	11.09	16.6
MRACA3020TR	26.750	21.658	4.02	9.5
24	26.750	25.658	4.77	10.4
30	26.750	33.408	6.21	12.0
35	26.750	38.408	7.23	13.1
40	26.750	46.908	8.71	14.8
45	26.750	50.408	9.36	15.6
50	26.750	57.408	10.66	17.0
55	26.750	62.408	11.59	18.1
60	26.750	69.408	12.89	19.6

Fixed Units to Match Operating Extended Round Casement Units

Call Size	Daylight Opening S.F.
MRACA2020TR	4.6
24	5.2
30	6.2
35	6.9
40	7.9
45	8.3
50	9.2
55	9.9
60	10.8
MRACA2420TR	6.1
24	6.8
30	8.0
35	8.8
40	10.1
45	10.6
50	11.7
55	12.5
60	13.6
MRACA2620TR	6.9
24	7.6
30	8.9
35	9.8
40	11.2
45	11.8
50	12.9
55	13.8
60	15.0
MRACA2820TR	7.8
24	8.5
30	10.0
35	11.0
40	12.5
45	13.1
50	14.4
55	15.3
60	16.6
MRACA3020TR	9.5
24	10.4
30	12.0
35	13.1
40	14.8
45	15.6
50	17.0
55	18.1
60	19.6

NOTE: Units listed in **green** satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.

Operating Extended Eyebrow Casement Units

Call Size	Clear Opening Width	Clear Opening Height	Clear Opening S.F.	Daylight Opening S.F.
MRACA2020AH	15.000	21.658	2.26	2.8
24	15.000	25.658	2.67	3.3
30	15.000	33.408	3.48	4.3
35	15.000	38.908	4.05	5.0
40	15.000	46.908	4.89	6.1
45	15.000	50.408	5.25	6.5
50	15.000	57.408	5.98	7.4
55	15.000	62.408	6.50	8.1
60	15.000	69.408	7.23	9.0
MRACA2420AH	19.000	21.658	2.86	3.5
24	19.000	25.658	3.39	4.1
30	19.000	33.408	4.41	5.3
35	19.000	38.908	5.13	6.2
40	19.000	46.908	6.19	7.4
45	19.000	50.408	6.65	8.0
50	19.000	57.408	7.57	9.1
55	19.000	62.408	8.23	9.9
60	19.000	69.408	9.16	11.0
MRACA2620AH	21.000	21.658	3.16	3.8
24	21.000	25.658	3.74	4.5
30	21.000	33.408	4.87	5.8
35	21.000	38.908	5.67	6.7
40	21.000	46.908	6.84	8.1
45	21.000	50.408	7.35	8.7
50	21.000	57.408	8.37	9.8
55	21.000	62.408	9.10	10.7
60	21.000	69.408	10.12	11.9
MRACA2820AH	23.000	21.658	3.46	4.2
24	23.000	25.658	4.10	4.9
30	23.000	33.408	5.34	6.4
35	23.000	38.908	6.21	7.4
40	23.000	46.908	7.49	8.8
45	23.000	50.408	8.05	9.5
50	23.000	57.408	9.17	10.8
55	23.000	62.408	9.97	11.7
60	23.000	69.408	11.09	13.0
MRACA3020AH	26.750	21.658	4.02	4.8
24	26.750	25.658	4.77	5.7
30	26.750	33.408	6.21	7.3
35	26.750	38.408	7.23	8.5
40	26.750	46.908	8.71	10.2
45	26.750	50.408	9.36	10.9
50	26.750	57.408	10.66	12.4
55	26.750	62.408	11.59	13.4
60	26.750	69.408	12.89	14.9

Fixed Units to Match Operating Extended Eyebrow Casement Units

Call Size	Daylight Opening S.F.	Call Size	Daylight Opening S.F.
MRACA2020AH	2.8	MRACA3520AH	2.8
24	3.3	24	6.9
30	4.3	30	8.8
35	5.0	35	10.2
40	6.1	40	12.2
45	6.5	45	13.0
50	7.4	50	14.8
55	8.1	55	16.0
60	9.0	60	17.8
MRACA2420AH	3.5	MRACA4020AH	7.5
24	4.1	24	8.7
30	5.3	30	11.0
35	6.2	35	12.7
40	7.4	40	15.1
45	8.0	45	16.2
50	9.1	50	18.3
55	9.9	55	19.9
60	11.0	60	22.0
MRACA2620AH	3.8	MRACA5020AH	9.7
24	4.5	24	11.2
30	5.8	30	14.1
35	6.7	35	16.2
40	8.1	40	19.2
45	8.7	45	20.5
50	9.8	50	23.2
55	10.7	55	25.1
60	11.9	60	27.7
MRACA2820AH	4.2	MRACA6020AH	12.4
24	4.9	24	14.3
30	6.4	30	17.9
35	7.4	35	20.4
40	8.8	40	24.1
45	9.5	45	25.7
50	10.8	50	28.9
55	11.7	55	31.2
60	13.0	60	34.4
MRACA3020AH	4.8		
24	5.7		
30	7.3		
35	8.5		
40	10.2		
45	10.9		
50	12.4		
55	13.4		
60	14.9		

NOTE: Units listed in **green** satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.

Casement – Net Clear & Daylight Opening Dimensions

Operating Extended Quarter Round Casement Units

Call Size	Clear Opening Width	Clear Opening Height	Clear Opening S.F.	Daylight Opening S.F.
MRACA2020QC	15.000	21.658	2.26	4.8
24	15.000	25.658	2.67	5.3
30	15.000	33.408	3.48	6.3
35	15.000	38.908	4.05	7.1
40	15.000	46.908	4.89	8.1
MRACA2420QC	19.000	21.658	2.86	6.3
24	19.000	25.658	3.39	6.9
30	19.000	33.408	4.41	8.1
35	19.000	38.908	5.13	9.0
40	19.000	46.908	6.19	10.2

Fixed Units to Match Operating Extended Quarter Round Casement Units

Call Size	Daylight Opening S.F.
MRACA2020QC	4.8
24	5.3
30	6.3
35	7.1
40	8.1
45	8.5
50	9.4
55	10.1
MRACA2420QC	6.3
24	6.9
30	8.1
35	9.0
40	10.2
45	10.8
50	11.9
MRACA2620QC	7.0
24	7.7
30	9.0
35	9.9
40	11.3
45	11.9
MRACA2820QC	7.9
24	8.6
30	10.0
35	11.0
40	12.5
45	13.2
MRACA3020QC	9.5
24	10.3
30	11.9
35	13.1
40	14.8
45	15.5

Operating Extended Quarter Eyebrow Casement Units

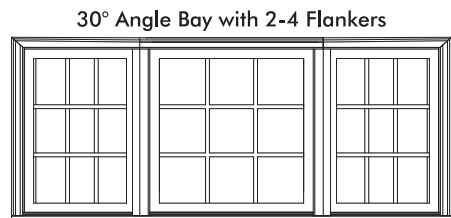
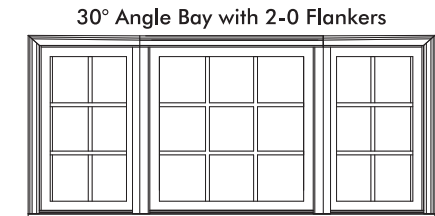
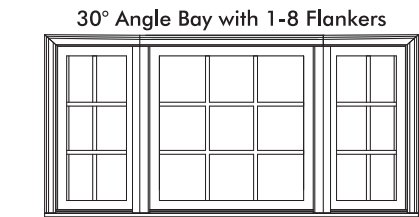
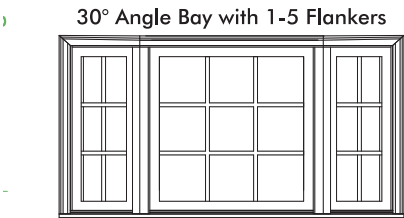
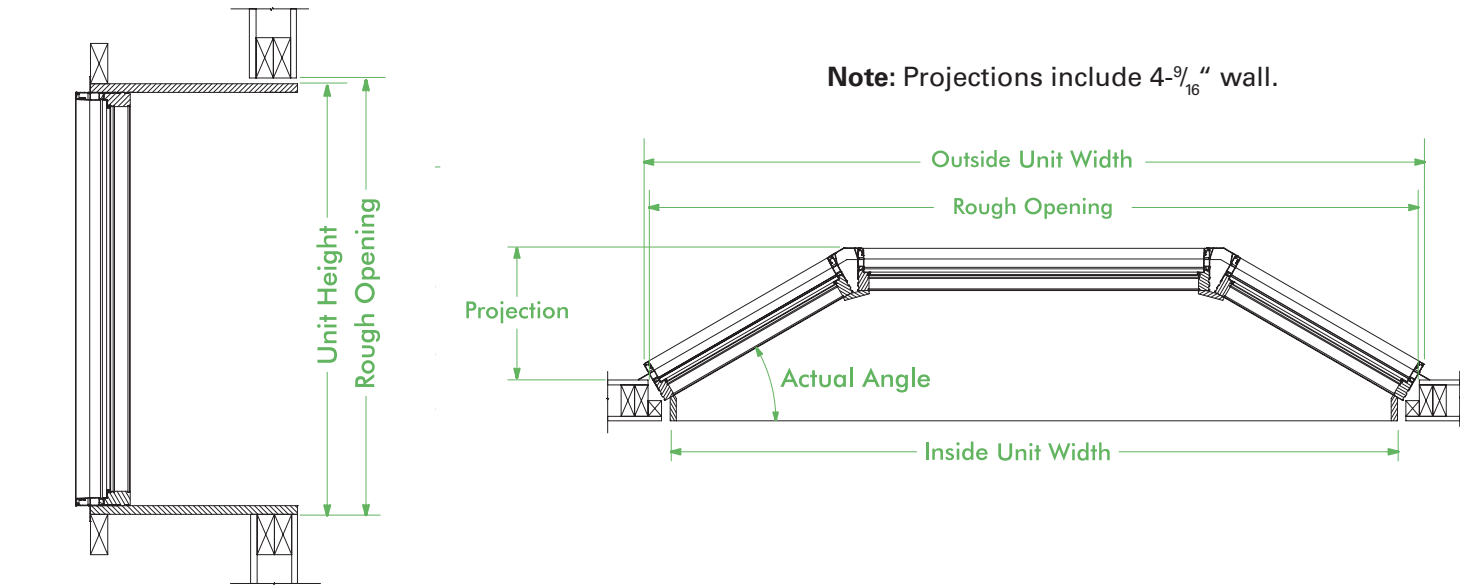
Call Size	Clear Opening Width	Clear Opening Height	Clear Opening S.F.	Daylight Opening S.F.
MRACA2020UAH	15.000	21.658	2.26	3.1
24	15.000	25.658	2.67	3.6
30	15.000	33.408	3.48	4.6
35	15.000	38.908	4.05	5.3
40	15.000	46.908	4.89	6.4
45	15.000	50.408	5.25	6.8
50	15.000	57.408	5.98	7.7
55	15.000	62.408	6.50	8.4
60	15.000	69.408	7.23	9.3
MRACA2420UAH	19.000	21.658	2.86	3.9
24	19.000	25.658	3.39	4.5
30	19.000	33.408	4.41	5.8
35	19.000	38.908	5.13	6.6
40	19.000	46.908	6.19	7.9
45	19.000	50.408	6.65	8.4
50	19.000	57.408	7.57	9.5
55	19.000	62.408	8.23	10.3
60	19.000	69.408	9.16	11.4
MRACA2620UAH	21.000	21.658	3.16	4.3
24	21.000	25.658	3.74	5.0
30	21.000	33.408	4.87	6.3
35	21.000	38.908	5.67	7.2
40	21.000	46.908	6.84	8.6
45	21.000	50.408	7.35	9.2
50	21.000	57.408	8.37	10.4
55	21.000	62.408	9.10	11.2
60	21.000	69.408	10.12	12.4
MRACA2820UAH	23.000	21.658	3.46	4.8
24	23.000	25.658	4.10	5.5
30	23.000	33.408	5.34	6.9
35	23.000	38.908	6.21	8.0
40	23.000	46.908	7.49	9.4
45	23.000	50.408	8.05	10.1
50	23.000	57.408	9.17	11.4
55	23.000	62.408	9.97	12.3
60	23.000	69.408	11.09	13.6
MRACA3020UAH	26.750	21.658	4.02	5.6
24	26.750	25.658	4.77	6.5
30	26.750	33.408	6.21	8.1
35	26.750	38.408	7.23	9.2
40	26.750	46.908	8.71	10.9
45	26.750	50.408	9.36	11.7
50	26.750	57.408	10.66	13.1
55	26.750	62.408	11.59	14.2
60	26.750	69.408	12.89	15.7

Fixed Units to Match Operating Extended Quarter Eyebrow Casement Units

Call Size	Daylight Opening S.F.
MRACA2020UAH	3.1
24	3.6
30	4.6
35	5.3
40	6.4
45	6.8
50	7.7
55	8.4
60	9.3
MRACA2420UAH	3.9
24	4.5
30	5.8
35	6.6
40	7.9
45	8.4
50	9.5
55	10.3
60	11.4
MRACA2620UAH	4.3
24	5.0
30	6.3
35	7.2
40	8.6
45	9.2
50	10.4
55	11.2
60	12.4
MRACA2820UAH	4.8
24	5.5
30	6.9
35	8.0
40	9.4
45	10.1
50	11.4
55	12.3
60	13.6
MRACA3020UAH	5.6
24	6.5
30	8.1
35	9.2
40	10.9
45	11.7
50	13.1
55	14.2
60	15.7

NOTE: Units listed in **green** satisfy ICC egress requirements. Check with your local code official to confirm egress requirements in your area.

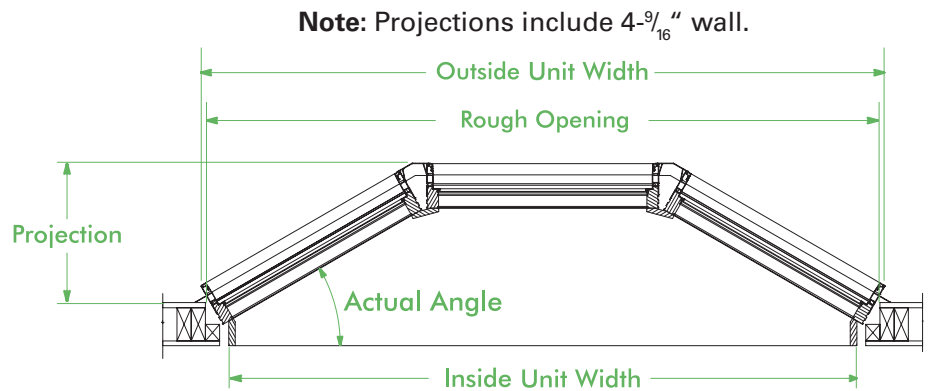
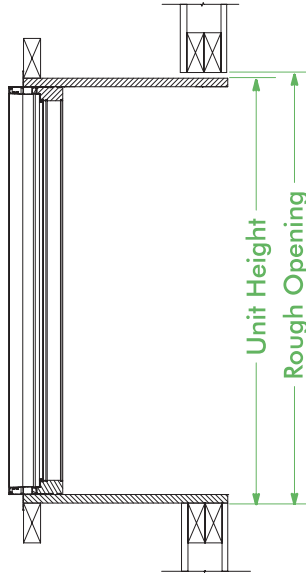
Casement – 30° Bay Window w/ Operating Flankers



WIDTHS					
Call Size	Outside Unit Width	Rough Opening	Inside Unit Width	Projection	Actual Angle
MRACA1530xx-30	70- ¹¹ / ₁₆	69- ³ / ₄	64- ¹³ / ₁₆	11	30°
MRACA1535xx-30	76- ³ / ₁₆	75- ¹ / ₄	70- ⁵ / ₁₆	11	30°
MRACA1540xx-30	84- ³ / ₁₆	83- ¹ / ₄	78- ⁵ / ₁₆	11	30°
MRACA1550xx-30	94- ¹¹ / ₁₆	93- ³ / ₄	88- ¹³ / ₁₆	11	30°
MRACA1560xx-30	106- ¹¹ / ₁₆	105- ³ / ₄	100- ¹³ / ₁₆	11	30°
MRACA1830xx-30	76- ³ / ₄	75- ¹³ / ₁₆	70- ⁷ / ₈	12- ¹¹ / ₁₆	30°
MRACA1835xx-30	82- ¹ / ₄	81- ⁵ / ₁₆	76- ³ / ₈	12- ¹¹ / ₁₆	30°
MRACA1840xx-30	90- ¹ / ₄	89- ⁵ / ₁₆	84- ³ / ₈	12- ¹¹ / ₁₆	30°
MRACA1850xx-30	100- ³ / ₄	99- ¹³ / ₁₆	94- ⁷ / ₈	12- ¹¹ / ₁₆	30°
MRACA1860xx-30	112- ³ / ₄	111- ¹³ / ₁₆	106- ⁷ / ₈	12- ¹¹ / ₁₆	30°
MRACA2030xx-30	83- ¹¹ / ₁₆	82- ³ / ₄	77- ¹³ / ₁₆	14- ¹¹ / ₁₆	30°
MRACA2035xx-30	89- ³ / ₁₆	88- ¹ / ₄	83- ⁵ / ₁₆	14- ¹¹ / ₁₆	30°
MRACA2040xx-30	97- ³ / ₁₆	96- ¹ / ₄	91- ⁵ / ₁₆	14- ¹¹ / ₁₆	30°
MRACA2050xx-30	107- ¹¹ / ₁₆	106- ³ / ₄	101- ¹³ / ₁₆	14- ¹¹ / ₁₆	30°
MRACA2060xx-30	119- ¹¹ / ₁₆	118- ³ / ₄	113- ¹³ / ₁₆	14- ¹¹ / ₁₆	30°
MRACA2430xx-30	90- ⁵ / ₈	89- ¹¹ / ₁₆	84- ³ / ₄	16- ¹¹ / ₁₆	30°
MRACA2435xx-30	96- ¹ / ₈	95- ³ / ₁₆	90- ¹ / ₄	16- ¹¹ / ₁₆	30°
MRACA2440xx-30	104- ¹ / ₈	103- ³ / ₁₆	98- ¹ / ₄	16- ¹¹ / ₁₆	30°

HEIGHTS		
Call Size	Bay Unit	Rough Opening
3/0	37- ¹ / ₂	38
3/5	43	43- ¹ / ₂
4/0	51	51- ¹ / ₂
4/5	54- ¹ / ₂	55
5/0	61- ¹ / ₂	62
5/5	66- ¹ / ₂	67
6/0	73- ¹ / ₂	74

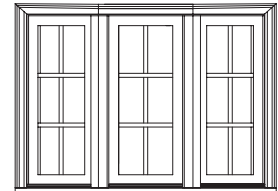
Casement – 30° Bay Window w/Three Operating Units



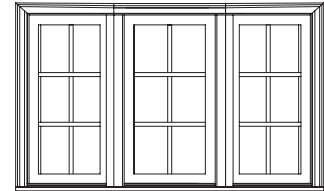
Note: Projections include 4-⁹/₁₆" wall.

WIDTHS					
Call Size	Outside Unit Width	Rough Opening	Inside Unit Width	Projection	Actual Angle
MRACA15xx/3-30	51- ⁷ / ₁₆	50- ¹ / ₂	45- ⁹ / ₁₆	11	30°
MRACA18xx/3-30	61	60- ¹ / ₁₆	55- ¹ / ₈	12- ¹¹ / ₁₆	30°
MRACA20xx/3-30	71- ¹⁵ / ₁₆	71	66- ¹ / ₁₆	14- ¹¹ / ₁₆	30°
MRACA24xx/3-30	82- ⁷ / ₈	81- ¹⁵ / ₁₆	77	16- ¹¹ / ₁₆	30°
MRACA28xx/3-30	93- ¹³ / ₁₆	92- ⁷ / ₈	87- ¹⁵ / ₁₆	18- ¹¹ / ₁₆	30°
MRACA15xx/4-30	69- ³ / ₁₆	68- ¹ / ₄	63- ⁵ / ₁₆	11	30°
MRACA18xx/4-30	82- ¹ / ₄	81- ⁵ / ₁₆	76- ³ / ₈	12- ¹¹ / ₁₆	30°
MRACA20xx/4-30	97- ³ / ₁₆	96- ¹ / ₄	91- ⁵ / ₁₆	14- ¹¹ / ₁₆	30°
MRACA24xx/4-30	112- ¹ / ₈	111- ³ / ₁₆	106- ¹ / ₄	16- ¹¹ / ₁₆	30°
MRACA15xx/5-30	86- ¹⁵ / ₁₆	86	81- ¹ / ₁₆	11	30°
MRACA18xx/5-30	103- ¹ / ₂	102- ⁹ / ₁₆	97- ⁵ / ₈	12- ¹¹ / ₁₆	30°
MRACA20xx/5-30	122- ⁷ / ₁₆	121- ¹ / ₂	116- ⁹ / ₁₆	14- ¹¹ / ₁₆	30°

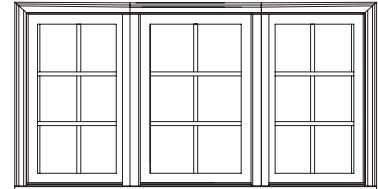
30° Angle Bay
1-5 Flankers with 1-5 Center



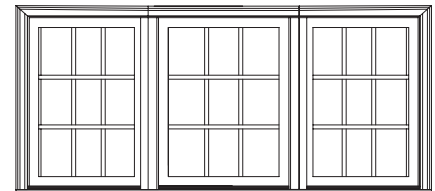
30° Angle Bay
1-8 Flankers with 1-8 Center



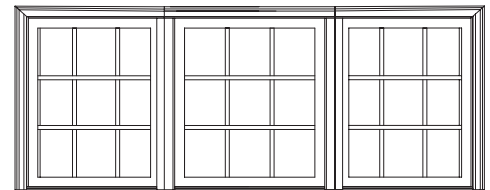
30° Angle Bay
2-0 Flankers with 2-0 Center



30° Angle Bay
2-4 Flankers with 2-4 Center

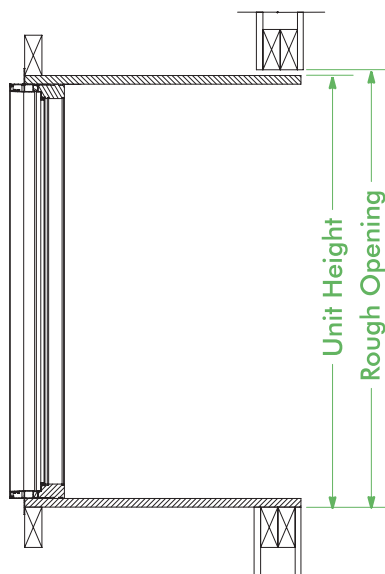


30° Angle Bay
2-8 Flankers with 2-8 Center

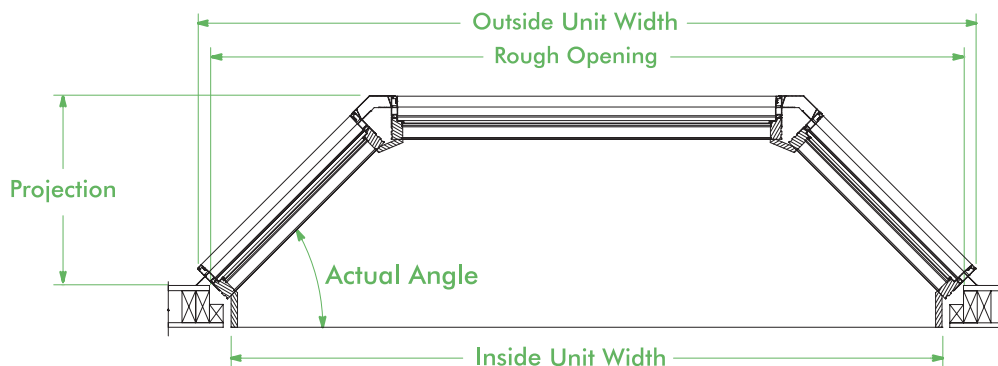


HEIGHTS		
Call Size	Bay Unit	Rough Opening
3/0	37- ¹ / ₂	38
3/5	43	43- ¹ / ₂
4/0	51	51- ¹ / ₂
4/5	54- ¹ / ₂	55
5/0	61- ¹ / ₂	62
5/5	66- ¹ / ₂	67
6/0	73- ¹ / ₂	74

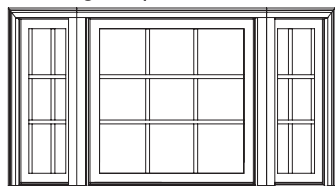
Casement – 45° Bay Window w/ Operating Flankers



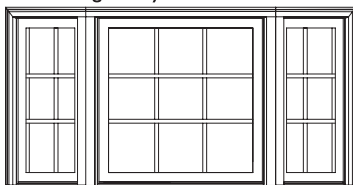
Note: Projections include 4-⁹/₁₆" wall.



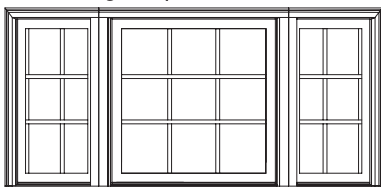
45° Angle Bay with 1-5 Flankers



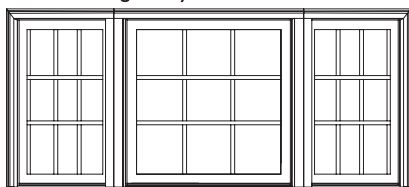
45° Angle Bay with 1-8 Flankers



45° Angle Bay with 2-0 Flankers



45° Angle Bay with 2-4 Flankers



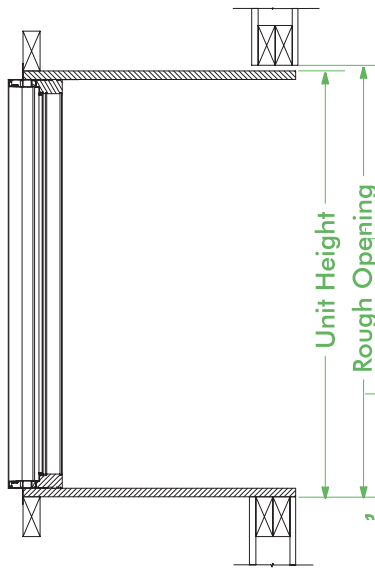
WIDTHS

Call Size	Outside Unit Width	Rough Opening	Inside Unit Width	Projection	Actual Angle
MRACA1530xx-45	67- ¹³ / ₁₆	65- ³ / ₁₆	60- ⁷ / ₁₆	15- ⁷ / ₁₆	45°
MRACA1535xx-45	73- ⁵ / ₁₆	70-- ¹¹ / ₁₆	65- ¹⁵ / ₁₆	15- ⁷ / ₁₆	45°
MRACA1540xx-45	81- ⁵ / ₁₆	78-- ¹¹ / ₁₆	73- ¹⁵ / ₁₆	15- ⁷ / ₁₆	45°
MRACA1550xx-45	91- ¹³ / ₁₆	89- ³ / ₁₆	84- ⁷ / ₁₆	15- ⁷ / ₁₆	45°
MRACA1560xx-45	103- ¹³ / ₁₆	101- ³ / ₁₆	96- ⁷ / ₁₆	15- ⁷ / ₁₆	45°
MRACA1830xx-45	72- ³ / ₄	70- ¹ / ₈	65- ³ / ₈	17- ⁷ / ₈	45°
MRACA1835xx-45	78- ¹ / ₄	75- ⁵ / ₈	70- ⁷ / ₈	17- ⁷ / ₈	45°
MRACA1840xx-45	86- ¹ / ₄	83- ⁵ / ₈	78- ⁷ / ₈	17- ⁷ / ₈	45°
MRACA1850xx-45	96- ³ / ₄	94- ¹ / ₈	89- ³ / ₈	17- ⁷ / ₈	45°
MRACA1860xx-45	108- ³ / ₄	106- ¹ / ₈	101- ³ / ₈	17- ⁷ / ₈	45°
MRACA2030xx-45	78- ³ / ₈	75- ³ / ₄	71	20- ³ / ₄	45°
MRACA2035xx-45	83- ⁷ / ₈	81- ¹ / ₄	76- ¹ / ₂	20- ³ / ₄	45°
MRACA2040xx-45	91- ⁷ / ₈	89- ¹ / ₄	84- ¹ / ₂	20- ³ / ₄	45°
MRACA2050xx-45	102- ³ / ₈	99- ³ / ₄	95	20- ³ / ₄	45°
MRACA2060xx-45	114- ³ / ₈	111- ³ / ₄	107	20- ³ / ₄	45°
MRACA2430xx-45	84- ¹ / ₁₆	81- ⁷ / ₁₆	76- ¹¹ / ₁₆	23- ⁹ / ₁₆	45°
MRACA2435xx-45	89- ⁹ / ₁₆	86- ¹⁵ / ₁₆	82- ³ / ₁₆	23- ⁹ / ₁₆	45°
MRACA2440xx-45	97- ⁹ / ₁₆	94- ¹⁵ / ₁₆	90- ³ / ₁₆	23- ⁹ / ₁₆	45°
MRACA2450xx-45	108- ¹ / ₁₆	105- ⁷ / ₁₆	100- ¹¹ / ₁₆	23- ⁹ / ₁₆	45°
MRACA2460xx-45	120- ¹ / ₁₆	117- ⁷ / ₁₆	112- ¹¹ / ₁₆	23- ⁹ / ₁₆	45°

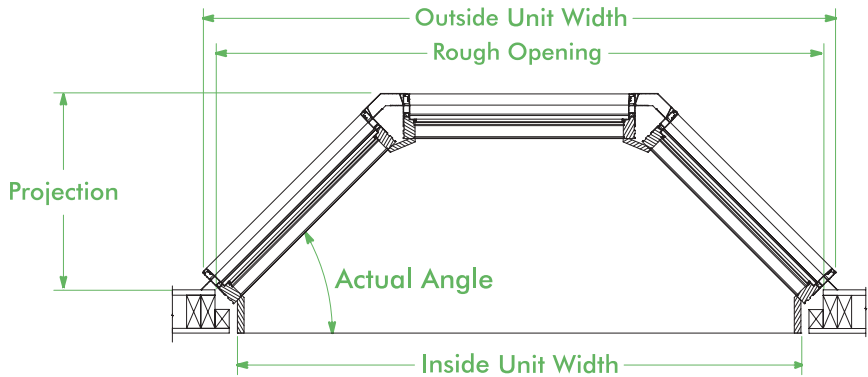
HEIGHTS

Call Size	Bay Unit	Rough Opening
3/0	37- ¹ / ₂	38
3/5	43	43- ¹ / ₂
4/0	51	51- ¹ / ₂
4/5	54- ¹ / ₂	55
5/0	61- ¹ / ₂	62
5/5	66- ¹ / ₂	67
6/0	73- ¹ / ₂	74

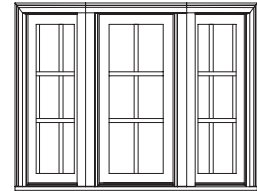
Casement – 45° Bay Window w/Three Operating Units



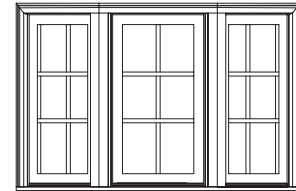
Note: Projections include 4- $\frac{9}{16}$ " wall.



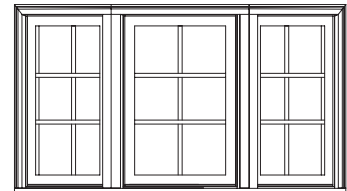
45° Angle Bay
1-5 Flankers with 1-5 Center



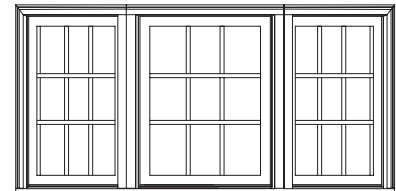
45° Angle Bay
1-8 Flankers with 1-8 Center



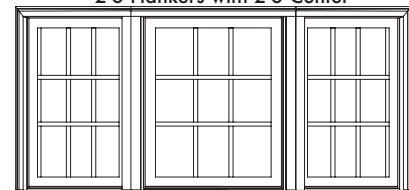
45° Angle Bay
2-0 Flankers with 2-0 Center



45° Angle Bay
2-4 Flankers with 2-4 Center



45° Angle Bay
2-6 Flankers with 2-6 Center



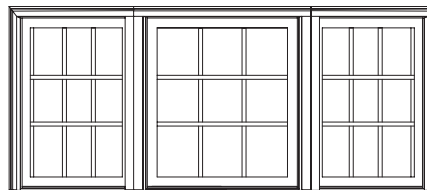
WIDTHS

Call Size	Outside Unit Width	Rough Opening	Inside Unit Width	Projection	Actual Angle
MRACA15xx/3-45	48- $\frac{9}{16}$	45- $\frac{15}{16}$	41- $\frac{3}{16}$	15- $\frac{7}{16}$	45°
MRACA18xx/3-45	57	54- $\frac{3}{8}$	49- $\frac{5}{8}$	17- $\frac{7}{8}$	45°
MRACA20xx/3-45	66- $\frac{5}{8}$	64	59- $\frac{1}{4}$	20- $\frac{3}{4}$	45°
MRACA24xx/3-45	76- $\frac{5}{16}$	73- $\frac{11}{16}$	68- $\frac{15}{16}$	23- $\frac{9}{16}$	45°
MRACA26xx/3-45	81- $\frac{1}{8}$	78- $\frac{1}{2}$	73- $\frac{3}{4}$	24- $\frac{15}{16}$	45°
MRACA28xx/3-45	85- $\frac{15}{16}$	83- $\frac{5}{16}$	78- $\frac{9}{16}$	26- $\frac{3}{8}$	45°
MRACA15xx/4-45	66- $\frac{1}{4}$	63- $\frac{5}{8}$	58- $\frac{7}{8}$	15- $\frac{7}{16}$	45°
MRACA18xx/4-45	78- $\frac{1}{4}$	75- $\frac{5}{8}$	70- $\frac{7}{8}$	17- $\frac{7}{8}$	45°
MRACA20xx/4-45	91- $\frac{7}{8}$	89- $\frac{1}{4}$	84- $\frac{1}{2}$	20- $\frac{3}{4}$	45°
MRACA24xx/4-45	105- $\frac{9}{16}$	102- $\frac{15}{16}$	98- $\frac{3}{16}$	23- $\frac{9}{16}$	45°
MRACA26xx/4-45	112- $\frac{3}{8}$	109- $\frac{3}{4}$	105	24- $\frac{15}{16}$	45°
MRACA28xx/4-45	119- $\frac{3}{16}$	116- $\frac{9}{16}$	111- $\frac{13}{16}$	26- $\frac{3}{8}$	45°
MRACA15xx/5-45	84- $\frac{1}{16}$	81- $\frac{7}{16}$	76- $\frac{11}{16}$	15- $\frac{7}{16}$	45°
MRACA18xx/5-45	99- $\frac{1}{2}$	96- $\frac{7}{8}$	92- $\frac{1}{8}$	17- $\frac{7}{8}$	45°
MRACA20xx/5-45	117- $\frac{1}{8}$	114- $\frac{1}{2}$	109- $\frac{3}{4}$	20- $\frac{3}{4}$	45°

HEIGHTS

Call Size	Bay Unit	Rough Opening
3/0	37- $\frac{1}{2}$	38
3/5	43	43- $\frac{1}{2}$
4/0	51	51- $\frac{1}{2}$
4/5	54- $\frac{1}{2}$	55
5/0	61- $\frac{1}{2}$	62
5/5	66- $\frac{1}{2}$	67
6/0	73- $\frac{1}{2}$	74

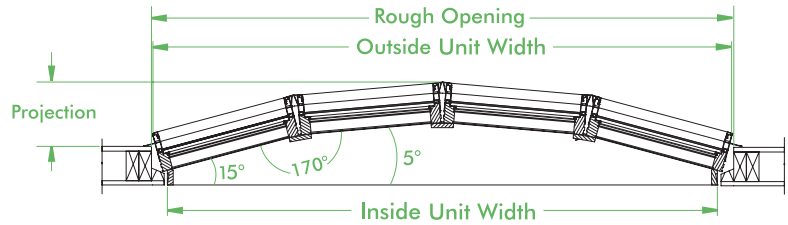
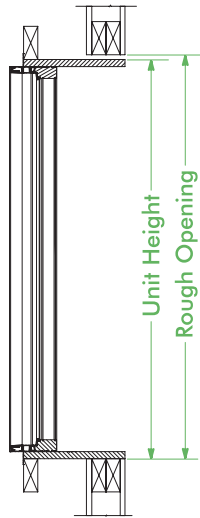
45° Angle Bay
2-8 Flankers with 2-8 Center



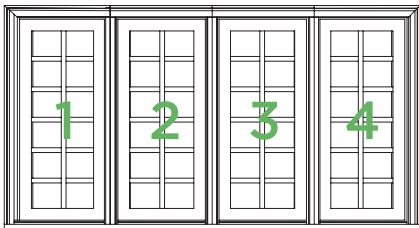
Casement – 4 Wide Bow Window Details

Note: Projections do not include $4\frac{9}{16}$ " wall.

HEIGHTS		
Call Size	Bay Unit	Rough Opening
3/0	37- $\frac{1}{2}$	38
3/5	43	43- $\frac{1}{2}$
4/0	51	51- $\frac{1}{2}$
4/5	54- $\frac{1}{2}$	55
5/0	61- $\frac{1}{2}$	62
5/5	66- $\frac{1}{2}$	67
6/0	73- $\frac{1}{2}$	74



1-5 Bow - 4 Wide



1-8 Bow - 4 Wide



WIDTHS				
Call Size	Outside Unit Dim.	Rough Opening	Projection	Inside Unit Dim.
MRACA15xx/4BOW	68- $\frac{11}{16}$	68- $\frac{7}{8}$	7- $\frac{5}{8}$	65- $\frac{1}{8}$

WIDTHS				
Call Size	Outside Unit Dim.	Rough Opening	Projection	Inside Unit Dim.
MRACA18xx/4BOW	82- $\frac{3}{8}$	82- $\frac{9}{16}$	8- $\frac{13}{16}$	78- $\frac{13}{16}$

2-0 Bow - 4 Wide



2-4 Bow - 4 Wide



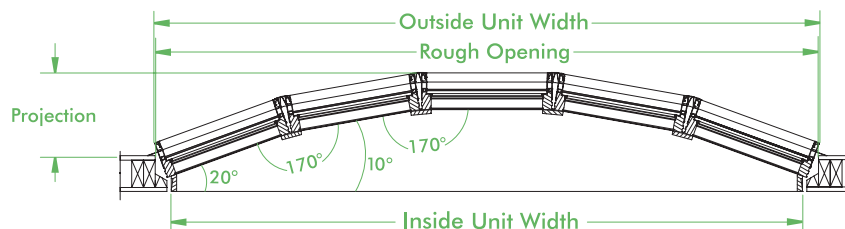
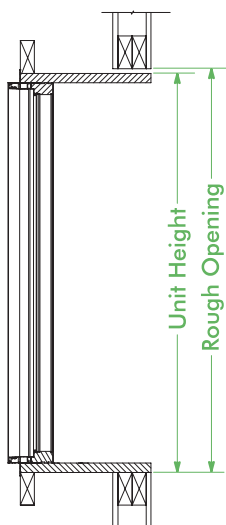
WIDTHS				
Call Size	Outside Unit Dim.	Rough Opening	Projection	Inside Unit Dim.
MRACA20xx/4BOW	99- $\frac{1}{16}$	99- $\frac{1}{4}$	10- $\frac{1}{4}$	95- $\frac{1}{2}$

WIDTHS				
Call Size	Outside Unit Dim.	Rough Opening	Projection	Inside Unit Dim.
MRACA24xx/4BOW	113- $\frac{13}{16}$	114	11- $\frac{9}{16}$	110- $\frac{1}{4}$

Note: Windows 1 and 4 are operating, windows 2 and 3 are fixed. All four windows operating is optional, upcharge applies.

Casement – 5 Wide Bow Window Details

Note: Projections do not include $4\frac{9}{16}$ " wall.



HEIGHTS		
Call Size	Bay Unit	Rough Opening
3/0	37- $\frac{1}{2}$	38
3/5	43	43- $\frac{1}{2}$
4/0	51	51- $\frac{1}{2}$
4/5	54- $\frac{1}{2}$	55
5/0	61- $\frac{1}{2}$	62
5/5	66- $\frac{1}{2}$	67
6/0	73- $\frac{1}{2}$	74

1-5 Bow - 5 Wide



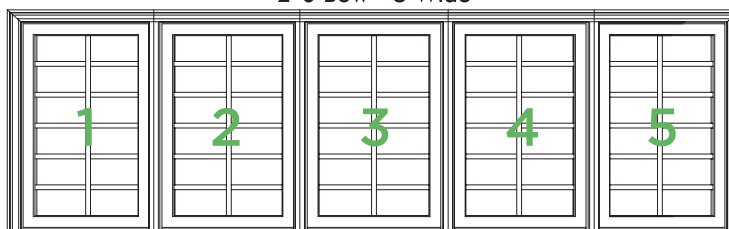
WIDTHS				
Call Size	Outside Unit Dim.	Rough Opening	Projection	Inside Unit Dim.
MRACA15xx/5BOW	85- $\frac{1}{16}$	84- $\frac{15}{16}$	10- $\frac{11}{16}$	80- $\frac{13}{16}$

1-8 Bow - 5 Wide



WIDTHS				
Call Size	Outside Unit Dim.	Rough Opening	Projection	Inside Unit Dim.
MRACA18xx/5BOW	102- $\frac{1}{16}$	101- $\frac{15}{16}$	12- $\frac{7}{16}$	97 $\frac{13}{16}$

2-0 Bow - 5 Wide



WIDTHS				
Call Size	Outside Unit Dim.	Rough Opening	Projection	Inside Unit Dim.
MRACA20xx/5BOW	121- $\frac{7}{16}$	121- $\frac{5}{16}$	14- $\frac{1}{2}$	117- $\frac{3}{16}$

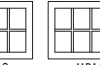
Note: Windows 1 & 5 are operating, windows 2, 3 & 4 are fixed. All five windows operating is optional, upcharge applies.

		Widths							
Heights	Unit Dimension Rough Opening Call Size	1' – 8 1/4"	2' – 0 1/4"	2' – 4 1/4"	2' – 6 1/4"	2' – 8 1/4"	3' – 0"	3' – 5 1/2"	4' – 1 1/2"
		1' – 9 1/4"	2' – 1 1/4"	2' – 5 1/4"	2' – 7 1/4"	2' – 9 1/4"	3' – 1"	3' – 6 1/2"	4' – 2 1/2"
		1-8	2-0	2-4	2-6	2-8	3-0	3-5	4-0
1' – 5 1/4"	1-5	 MRAAW1815	 MRAAW2015	 MRAAW2415	 MRAAW2615	 MRAAW2815	 MRAAW3015	 MRAAW3515	 MRAAW4015
1' – 8 1/4"	1-8	 MRAAW1818	 MRAAW2018	 MRAAW2418	 MRAAW2618	 MRAAW2818	 MRAAW3018	 MRAAW3518	 MRAAW4018
2' – 0 1/4"	2-0	 MRAAW1820	 MRAAW2020	 MRAAW2420	 MRAAW2620	 MRAAW2820	 MRAAW3020	 MRAAW3520	 MRAAW4020
2' – 4 1/4"	2-4	 MRAAW1824	 MRAAW2024	 MRAAW2424	 MRAAW2624	 MRAAW2824	 MRAAW3024	 MRAAW3524	 MRAAW4024
3' – 0"	3-0	 MRAAW1830	 MRAAW2030	 MRAAW2430	 MRAAW2630	 MRAAW2830	 MRAAW3030	 MRAAW3530	 MRAAW4030
3' – 5 1/2"	3-5	 MRAAW1835	 MRAAW2035	 MRAAW2435	 MRAAW2635	 MRAAW2835	 MRAAW3035	 MRAAW3535	 MRAAW4035
4' – 1 1/2"	4-0	 MRAAW1840	 MRAAW2040	 MRAAW2440	 MRAAW2640	 MRAAW2840	 MRAAW3040	 MRAAW3540	 MRAAW4040

Awning – One by Two Operating Units

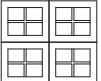
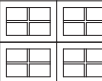
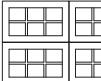
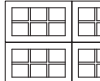
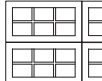
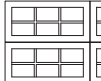
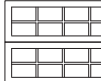
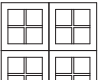
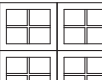
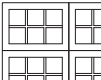
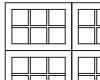
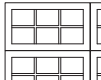
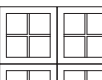
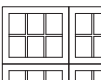
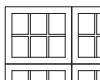
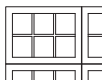
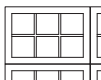
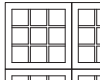
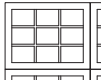
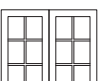
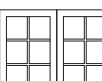
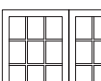
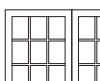
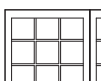
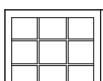
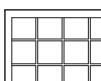
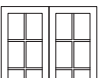
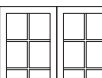
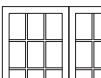
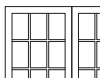
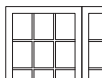
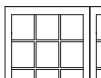
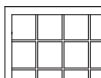
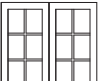
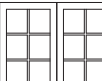
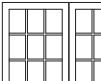
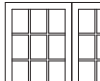
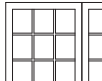
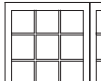
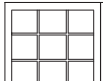
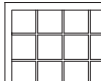
		Widths							
		1' – 8 ¼"	2' – 0 ¼"	2' – 4 ¼"	2' – 6 ¼"	2' – 8 ¼"	3' – 0"	3' – 5 ½"	4' – 1 ½"
		1' – 9 ¼"	2' – 1 ¼"	2' – 5 ¼"	2' – 7 ¼"	2' – 9 ¼"	3' – 1"	3' – 6 ½"	4' – 2 ½"
		1-8	2-0	2-4	2-6	2-8	3-0	3-5	4-0
Heights	Unit Dimension Rough Opening Call Size								
	2' – 10 ½"	2' – 11"	1-5						
	3' – 5 ½"	3' – 6"	1-8						
	4' – 1 ½"	4' – 2"	2-0						
	4' – 9 ½"	4' – 10"	2-4						
	6' – 1"	6' – 1 ½"	3-0						
	7' – 0"	7' – 0 ½"	3-5						
	8' – 4"	8' – 4 ½"	4-0						
									
		MRAAW1815-12	MRAAW2015-12	MRAAW2415-12	MRAAW2615-12	MRAAW2815-12	MRAAW3015-12	MRAAW3515-12	MRAAW4015-12
									
		MRAAW1818-12	MRAAW2018-12	MRAAW2418-12	MRAAW2618-12	MRAAW2818-12	MRAAW3018-12	MRAAW3518-12	MRAAW4018-12
									
		MRAAW1820-12	MRAAW2020-12	MRAAW2420-12	MRAAW2620-12	MRAAW2820-12	MRAAW3020-12	MRAAW3520-12	MRAAW4020-12
									
		MRAAW1824-12	MRAAW2024-12	MRAAW2424-12	MRAAW2624-12	MRAAW2824-12	MRAAW3024-12	MRAAW3524-12	MRAAW4024-12
									
		MRAAW1830-12	MRAAW2030-12	MRAAW2430-12	MRAAW2630-12	MRAAW2830-12	MRAAW3030-12	MRAAW3530-12	MRAAW4030-12
									
		MRAAW1835-12	MRAAW2035-12	MRAAW2435-12	MRAAW2635-12	MRAAW2835-12	MRAAW3035-12	MRAAW3535-12	MRAAW4035-12
									
		MRAAW1840-12	MRAAW2040-12	MRAAW2440-12	MRAAW2640-12	MRAAW2840-12	MRAAW3040-12	MRAAW3540-12	MRAAW4040-12

Awning – Twin Operating Units

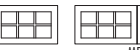
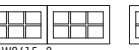
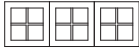
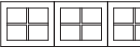
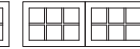
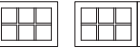
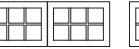
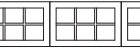
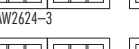
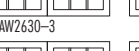
		Widths							
Unit Dimension Rough Opening	Coil Size	3' – 5 1/2"	4' – 1 1/2"	4' – 9 1/2"	5' – 1 1/2"	5' – 5 1/2"	6' – 1"	7' – 0"	8' – 4"
		3' – 6 1/2"	4' – 2 1/2"	4' – 10 1/2"	5' – 2 1/2"	5' – 6 1/2"	6' – 2"	7' – 1"	8' – 5"
		1-8 Twin	2-0 Twin	2-4 Twin	2-6 Twin	2-8 Twin	3-0 Twin	3-5 Twin	4-0 Twin
Heights	1'-5 1/4"								
	1'-8 1/4"								
	2'-0 1/4"								
	2'-4 1/4"								
	3'-0"								
	3'-5 1/4"								
	4'-1 1/4"								
		MRAAW1815-2	MRAAW2015-2	MRAAW2415-2	MRAAW2615-2	MRAAW2815-2	MRAAW3015-2	MRAAW3515-2	MRAAW4015-2
		MRAAW1818-2	MRAAW2018-2	MRAAW2418-2	MRAAW2618-2	MRAAW2818-2	MRAAW3018-2	MRAAW3518-2	MRAAW4018-2
		MRAAW1820-2	MRAAW2020-2	MRAAW2420-2	MRAAW2620-2	MRAAW2820-2	MRAAW3020-2	MRAAW3520-2	MRAAW4020-2
		MRAAW1824-2	MRAAW2024-2	MRAAW2424-2	MRAAW2624-2	MRAAW2824-2	MRAAW3024-2	MRAAW3524-2	MRAAW4024-2
		MRAAW1830P	MRAAW2030P	MRAAW2430P	MRAAW2630P	MRAAW2830P	MRAAW3030P	MRAAW3530P	MRAAW4030P
		MRAAW1835P	MRAAW2035P	MRAAW2435P	MRAAW2635P	MRAAW2835P	MRAAW3035P	MRAAW3535P	MRAAW4035P
		MRAAW1840P	MRAAW2040P	MRAAW2440P	MRAAW2640P	MRAAW2840P	MRAAW3040P	MRAAW3540P	MRAAW4040P

Awning – Two by Two Operating Units

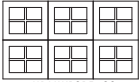
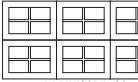
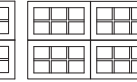
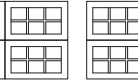
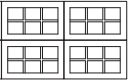
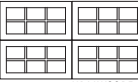
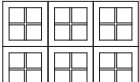
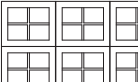
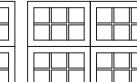
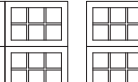
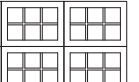
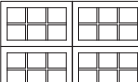
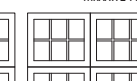
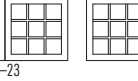
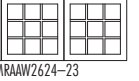
Widths

		3' – 5 ½"	4' – 1 ½"	4' – 9 ½"	5' – 1 ½"	5' – 5 ½"	6' – 1"	7' – 0"	8' – 4"		
		3' – 6 ½"	4' – 2 ½"	4' – 10 ½"	5' – 2 ½"	5' – 6 ½"	6' – 2"	7' – 1"	8' – 5"		
		1-8	2-0	2-4	2-6	2-8	3-0	3-5	4-0		
Unit Dimension	Rough Opening	Call Size									
Heights	2' – 10 ½"	2' – 11"	1-5								
	MRAAW1815-22MRAAW2015-22MRAAW2415-22MRAAW2615-22MRAAW2815-22MRAAW3015-22MRAAW3515-22MRAAW4015-22										
	3' – 5 ½"	3' – 6"	1-8								
	MRAAW1818-22MRAAW2018-22MRAAW2418-22MRAAW2618-22MRAAW2818-22MRAAW3018-22MRAAW3518-22MRAAW4018-22										
	4' – 1 ½"	4' – 2"	2-0								
	MRAAW1820-22MRAAW2020-22MRAAW2420-22MRAAW2620-22MRAAW2820-22MRAAW3020-22MRAAW3520-22MRAAW4020-22										
	4' – 9 ½"	4' – 10"	2-4								
	MRAAW1824-22MRAAW2024-22MRAAW2424-22MRAAW2624-22MRAAW2824-22MRAAW3024-22MRAAW3524-22MRAAW4024-22										
	6' – 1"	6' – 1 ½"	3-0								
	MRAAW1830-22MRAAW2030-22MRAAW2430-22MRAAW2630-22MRAAW2830-22MRAAW3030-22MRAAW3530-22MRAAW4030-22										
	7' – 0"	7' – 0 ½"	3-5								
	MRAAW1835-22MRAAW2035-22MRAAW2435-22MRAAW2635-22MRAAW2835-22MRAAW3035-22MRAAW3535-22MRAAW4035-22										
	8' – 4"	8' – 4 ½"	4-0								
	MRAAW1840-22MRAAW2040-22MRAAW2440-22MRAAW2640-22MRAAW2840-22MRAAW3040-22MRAAW3540-22MRAAW4040-22										

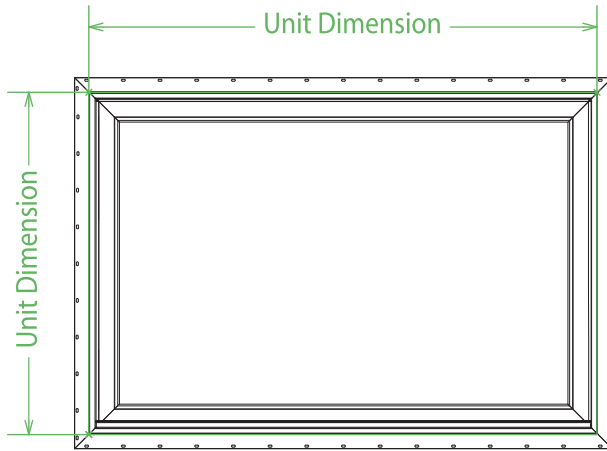
Widths

Unit Dimension Rough Opening Call Size		5' – 2 3/4"	6' – 2 3/4"	7' – 2 3/4"	7' – 8 3/4"	8' – 2 3/4"	9' – 2"
		5' – 3 3/4"	6' – 3 3/4"	7' – 3 3/4"	7' – 9 3/4"	8' – 3 3/4"	9' – 3"
		1-8 Triple	2-0 Triple	2-4 Triple	2-6 Triple	2-8 Triple	3-0 Triple
Heights	1'-5 1/2"	 MRAAW1815-3	 MRAAW2015-3	 MRAAW2415-3	 MRAAW2615-3	 MRAAW2815-3	 MRAAW3015-3
	1'-8 3/4"	 MRAAW1818-3	 MRAAW2018-3	 MRAAW2418-3	 MRAAW2618-3	 MRAAW2818-3	 MRAAW3018-3
	2'-0 1/4"	 MRAAW1820-3	 MRAAW2020-3	 MRAAW2420-3	 MRAAW2620-3	 MRAAW2820-3	 MRAAW3020-3
	2'-4 1/4"	 MRAAW1824-3	 MRAAW2024-3	 MRAAW2424-3	 MRAAW2624-3	 MRAAW2824-3	 MRAAW3024-3
	3'-0"	 MRAAW1830-3	 MRAAW2030-3	 MRAAW2430-3	 MRAAW2630-3	 MRAAW2830-3	 MRAAW3030-3
	3'-0 1/2"	 MRAAW1830-3	 MRAAW2030-3	 MRAAW2430-3	 MRAAW2630-3	 MRAAW2830-3	 MRAAW3030-3
	3'-5 1/2"	 MRAAW1835-3	 MRAAW2035-3	 MRAAW2435-3	 MRAAW2635-3	 MRAAW2835-3	 MRAAW3035-3
	4'-1 1/2"	 MRAAW1840-3	 MRAAW2040-3	 MRAAW2440-3	 MRAAW2640-3	 MRAAW2840-3	 MRAAW3040-3
	4'-2"						
	4'-0"						

Awning – Three by Two Operating Units

		Widths					
Heights	Unit Dimension Rough Opening Call Size	5' – 2 3/4"	6' – 2 3/4"	7' – 2 3/4"	7' – 8 3/4"	8' – 2 3/4"	9' – 2"
		5' – 3 3/4"	6' – 3 3/4"	7' – 3 3/4"	7' – 9 3/4"	8' – 3 3/4"	9' – 3"
		1-8	2-0	2-4	2-6	2-8	3-0
		2' – 10 1/2"	2' – 11"	1-5	3' – 5 1/2"	3' – 6"	1-8
Heights	Unit Dimension Rough Opening Call Size	 MRAAW1815-23	 MRAAW2015-23	 MRAAW2415-23	 MRAAW2615-23	 MRAAW2815-23	 MRAAW3015-23
		 MRAAW1818-23	 MRAAW2018-23	 MRAAW2418-23	 MRAAW2618-23	 MRAAW2818-23	 MRAAW3018-23
		 MRAAW1820-23	 MRAAW2020-23	 MRAAW2420-23	 MRAAW2620-23	 MRAAW2820-23	 MRAAW3020-23
		 MRAAW1824-23	 MRAAW2024-23	 MRAAW2424-23	 MRAAW2624-23	 MRAAW2824-23	 MRAAW3024-23
		 MRAAW1830-23	 MRAAW2030-23	 MRAAW2430-23	 MRAAW2630-23	 MRAAW2830-23	 MRAAW3030-23
		 MRAAW1835-23	 MRAAW2035-23	 MRAAW2435-23	 MRAAW2635-23	 MRAAW2835-23	 MRAAW3035-23
		 MRAAW1840-23	 MRAAW2040-23	 MRAAW2440-23	 MRAAW2640-23	 MRAAW2840-23	 MRAAW3040-23

		Widths											
		1' – 1 1/4"	1' – 8 1/4"	2' – 0 1/4"	2' – 4 1/4"	2' – 6 1/4"	2' – 8 1/4"	3' – 0"	3' – 5 1/2"	4' – 1 1/2"	5' – 0 1/4"	6' – 0 1/4"	
		1' – 2 1/4"	1' – 9 1/4"	2' – 1 1/4"	2' – 5 1/4"	2' – 6 1/4"	2' – 9 1/4"	3' – 1"	3' – 6 1/2"	4' – 2 1/2"	5' – 1 1/4"	6' – 1 1/4"	
		1–0 Picture	1–8 Picture	2–0 Picture	2–4 Picture	2–6 Picture	2–8 Picture	3–0 Picture	3–5 Picture	4–0 Picture	5–0 Picture	6–0 Picture	
Heights	Unit Dimension Rough Opening Call Size												
	1-5	 MRAAW1018P	 MRAAW1815P	 MRAAW2015P	 MRAAW2415P	 MRAAW2615P	 MRAAW2815P	 MRAAW3015P	 MRAAW3515P	 MRAAW4015	 MRAAW5018P	 MRAAW6018P	
	1-8	 MRAAW1018P	 MRAAW1818P	 MRAAW2018P	 MRAAW2418P	 MRAAW2618P	 MRAAW2818P	 MRAAW3018P	 MRAAW3518P	 MRAAW4018P	 MRAAW5018P	 MRAAW6018P	
	2-0	 MRAAW1020P	 MRAAW1820P	 MRAAW2020P	 MRAAW2420P	 MRAAW2620P	 MRAAW2820P	 MRAAW3020P	 MRAAW3520P	 MRAAW4020P	 MRAAW5020P	 MRAAW6020P	
	2-4	 MRAAW1024P	 MRAAW1824P	 MRAAW2024P	 MRAAW2424P	 MRAAW2624P	 MRAAW2824P	 MRAAW3024P	 MRAAW3524P	 MRAAW4024P	 MRAAW5024P	 MRAAW6024P	
	3-0	 MRAAW1030P	 MRAAW1830P	 MRAAW2030P	 MRAAW2430P	 MRAAW2630P	 MRAAW2830P	 MRAAW3030P	 MRAAW3530P	 MRAAW4030P	 MRAAW5030P	 MRAAW6030P	
	3-5	 MRAAW1035P	 MRAAW1835P	 MRAAW2035P	 MRAAW2435P	 MRAAW2635P	 MRAAW2835P	 MRAAW3035P	 MRAAW3535P	 MRAAW4035P	 MRAAW5035P	 MRAAW6035P	
	4-0	 MRAAW1040P	 MRAAW1840P	 MRAAW2040P	 MRAAW2440P	 MRAAW2640P	 MRAAW2840P	 MRAAW3040P	 MRAAW3540P	 MRAAW4040P	 MRAAW5040P	 MRAAW6040P	



To calculate unit dimension on multiple units, add 1" per mull together with actual unit dimension.

Operating Units, WIDTH

CALL SIZE (WIDTH)	2-0	2-4	2-6	2-8	3-0	3-5	4-0
ONE WIDE	24- ¹ / ₄	28- ¹ / ₄	30- ¹ / ₄	32- ¹ / ₄	36	41- ¹ / ₂	49- ¹ / ₂
TWO WIDE	49- ¹ / ₂	57- ¹ / ₂	61- ¹ / ₂	65- ¹ / ₂	73	84	100
THREE WIDE	74- ³ / ₄	86- ³ / ₄	92- ³ / ₄	98- ³ / ₄	110	N/A	N/A
FOUR WIDE	100	116	N/A	N/A	N/A	N/A	N/A

Operating & Fixed Units, HEIGHT

CALL SIZE (HEIGHT)	ONE HEIGHT	TWO HEIGHT	THREE HEIGHT
1-5	16- ³ / ₄	34- ¹ / ₂	51- ¹ / ₄
1-8	20- ¹ / ₄	41- ¹ / ₂	62- ³ / ₄
2-0	24- ¹ / ₄	49- ¹ / ₂	74- ³ / ₄
2-4	28- ¹ / ₄	57- ¹ / ₂	86- ³ / ₄
3-0	36	73	110
3-5	41- ¹ / ₂	84	N/A
4-0	49- ¹ / ₂	100	N/A
5-0	60	N/A	N/A

Fixed Units, WIDTH

CALL SIZE (WIDTH)	2-0	2-4	2-6	2-8	3-0	3-5	4-0	5-0	6-0
ONE WIDE	24- ¹ / ₄	28- ¹ / ₄	30- ¹ / ₄	32- ¹ / ₄	36	41- ¹ / ₂	49- ¹ / ₂	60	72
TWO WIDE	49- ¹ / ₂	57- ¹ / ₂	61- ¹ / ₂	65- ¹ / ₂	73	84	100	121	145
THREE WIDE	74- ³ / ₄	86- ³ / ₄	92- ³ / ₄	98- ³ / ₄	110	N/A	N/A	N/A	N/A

Picture Over Single Awning Units, HEIGHT

CALL SIZE (WIDTH)	HEIGHT IN INCHES	CALL SIZE (WIDTH)	HEIGHT IN INCHES	CALL SIZE (WIDTH)	HEIGHT IN INCHES
1-8/3-5	62- ³ / ₄	2-0/3-5	66- ³ / ₄	2-4/3-5	70- ³ / ₄
1-8/4-0	70- ³ / ₄	2-0/4-0	74- ³ / ₄	2-4/4-0	78- ³ / ₄
1-8/5-0	81- ¹ / ₄	2-0/5-0	85- ¹ / ₄	2-4/5-0	89- ¹ / ₄

Operating Units

Call Size	Daylight Opening S.F.	Call Size	Daylight Opening S.F.
MRAAW1815	1.1	MRAAW2815	2.0
18	1.5	18	2.7
20	1.9	20	3.4
24	2.3	24	4.2
30	3.1	30	5.6
35	3.6	35	6.6
40	4.4	40	8.1
MRAAW2015	1.4	MRAAW3015	2.3
18	1.9	18	3.1
20	2.4	20	3.9
24	2.9	24	4.7
30	3.9	30	6.4
35	4.6	35	7.5
40	5.6	40	9.2
MRAAW2415	1.7	MRAAW3515	2.8
18	2.3	18	3.6
20	2.9	20	4.6
24	3.5	24	5.6
30	4.7	30	7.5
35	5.6	35	8.9
40	6.9	40	10.9
MRAAW2615	1.9	MRAAW4015	3.4
18	2.5	18	4.4
20	3.2	20	5.6
24	3.9	24	6.9
30	5.2	30	9.2
35	6.1	35	10.9
40	8.1	40	13.3

NOTE: Awning units do NOT satisfy egress requirements.

Fixed Units

Call Size	Daylight Opening S.F.
MRAAW1020P	1.0
24	1.2
30	1.6
35	1.9
40	2.3
45	2.5
50	2.9
55	3.2
60	3.5
MRAAW1520P	1.4
24	1.7
30	2.3
35	2.8
40	3.4
45	3.6
50	4.2
55	4.6
60	5.1
MRAAW1820P	1.9
24	2.3
30	3.1
35	3.6
40	4.4
45	4.8
50	5.5
55	6.0
60	6.7
MRAAW2020P	2.4
24	2.9
30	3.9
35	4.6
40	5.6
45	6.1
50	7.0
55	7.6
60	8.5

Call Size	Daylight Opening S.F.
MRAAW2420P	2.9
24	3.5
30	4.7
35	5.6
40	6.9
45	7.4
50	8.5
55	9.3
60	10.4
MRAAW2620P	3.2
24	3.8
30	5.2
35	6.1
40	7.5
45	8.1
50	9.3
55	10.1
60	11.3
MRAAW2820P	3.4
24	4.2
30	5.6
35	6.6
40	8.1
45	8.7
50	10.0
55	10.9
60	12.2
MRAAW3020P	3.9
24	4.7
30	6.4
35	7.5
40	9.2
45	10.0
50	11.4
55	12.5
60	14.0

Call Size	Daylight Opening S.F.
MRAAW3520P	4.6
24	5.6
30	7.5
35	8.9
40	10.9
45	11.8
50	13.5
55	14.8
60	16.5
MRAAW4020P	5.6
24	6.9
30	9.2
35	10.9
40	13.3
45	14.4
50	16.5
55	18.0
60	20.2
MRAAW5020P	7.0
24	8.5
30	11.4
35	13.5
40	16.5
45	17.8
50	20.5
55	22.4
60	25.0
MRAAW6020P	8.5
24	10.4
30	14.0
35	16.5
40	20.2
45	21.8
50	25.0
55	27.3
60	30.5

French Sliding Doors – Fixed Panels & Transom Units

		Fixed Panel Widths					
Heights	Unit Dimension Rough Opening Call Size	1'-8 1/8"	2'-2 1/8"	2'-8 1/8"	2'-10 1/8"	3'-2 1/8"	4'-2 1/8"
		1'-9 1/8"	2'-3 1/8"	2'-9 1/8"	2'-11 1/8"	3'-3 1/8"	4'-3 1/8"
		1-6	2-0	2-6	2-8	3-0	4-0
		6-11 1/2"					
		MRAFSDR16610P	MRAFSDR20610P	MRAFSDR26610P	MRAFSDR28610P	MRAFSPDR30610P	MRAFSPDR40610P
		MRAFSDR1680P	MRAFSDR2080P	MRAFSDR2680P	MRAFSDR2880P	MRAFSDR3080P	MRAFSDR4080P

		Widths					
Heights	Unit Dimension Rough Opening Call Size	1'-8 1/8"	2'-2 1/8"	2'-8 1/8"	2'-10 1/8"	3'-2 1/8"	4'-2 1/8"
		1'-9 1/8"	2'-3 1/8"	2'-9 1/8"	2'-11 1/8"	3'-3 1/8"	4'-3 1/8"
		1-6	2-0	2-6	2-8	3-0	4-0
		1-1 1/8"	1-3 3/8"	1-7 3/8"	2-1 1/8"	2-5 3/8"	2-9 3/8"
		MRAFSDR1610TN	MRAFSDR2010TN	MRAFSDR2610TN	MRAFSDR2810TN	MRAFSDR3010TN	MRAFSDR4010TN
		MRAFSDR1612TN	MRAFSDR2012TN	MRAFSDR2612TN	MRAFSDR2812TN	MRAFSDR3012TN	MRAFSDR4012TN
		MRAFSDR1616TN	MRAFSPDR2016TN	MRAFSDR2616TN	MRAFSDR2816TN	MRAFSDR3016TN	MRAFSDR4016TN
		MRAFSDR1620TN	MRAFSDR2020TN	MRAFSDR2620TN	MRAFSDR2820TN	MRAFSDR3020TN	MRAFSDR4020TN
		MRAFSDR1624TN	MRAFSDR2024TN	MRAFSDR2624TN	MRAFSDR2824TN	MRAFSDR3024TN	MRAFSDR4024TN

		Standard Colonial Grille Pattern					
		Widths					
Heights	Unit Dimension	1'-8 1/8"	2'-2 1/8"	2'-8 1/8"	2'-10 1/8"	3'-2 1/8"	4'-2 1/8"
	Rough Opening	1'-9 1/8"	2'-3 1/8"	2'-9 1/8"	2'-11 1/8"	3'-3 1/8"	4'-3 1/8"
	Call Size	1-6	2-0	2-6	2-8	3-0	4-0
	Grid Size	0-6	0-6	0-6	0-6	0-6	0-6
	0-6	 MRAFSDR1606AHTN 0'-10 3/4" 0'-11 1/4"	 MRAFSDR2006AHTN 0'-11 3/4" 1'-0 1/4"	 MRAFSDR2606AHTN 1'-0 3/4" 1'-1 1/4"	 MRAFSDR2806AHTN 1'-1 1/16" 1'-1 5/16"	 MRAFSDR3006AHTN 1'-1 3/4" 1'-2 1/4"	 MRAFSDR4006AHTN 1'-3 3/4" 1'-4 1/4"
	0-10	 MRAFSDR1610AHTN 1'-2 3/4" 1'-3 1/4"	 MRAFSDR2010AHTN 1'-3 3/4" 1'-4 1/4"	 MRAFSDR2610AHTN 1'-4 3/4" 1'-5 1/4"	 MRAFSDR2810AHTN 1'-5 1/16" 1'-5 9/16"	 MRAFSDR3010AHTN 1'-5 3/4" 1'-6 1/4"	 MRAFSDR4010AHTN 1'-7 3/4" 1'-8 1/4"
	1-0	 MRAFSDR1610AHTN 1'-4 3/4" 1'-5 1/4"	 MRAFSDR2010AHTN 1'-5 3/4" 1'-6 1/4"	 MRAFSDR2610AHTN 1'-6 3/4" 1'-7 1/4"	 MRAFSDR2810AHTN 1'-9 1/16" 1'-9 9/16"	 MRAFSDR3010AHTN 1'-7 3/4" 1'-8 1/4"	 MRAFSDR4010AHTN 1'-9 3/4" 1'-10 1/4"
	1-2	 MRAFSDR1612AHTN 1'-6 3/4" 1'-7 1/4"	 MRAFSDR2012AHTN 1'-7 3/4" 1'-8 1/4"	 MRAFSDR2612AHTN 1'-8 3/4" 1'-9 1/4"	 MRAFSDR2812AHTN 1'-11 1/16" 1'-11 5/16"	 MRAFSDR3012AHTN 1'-9 3/4" 1'-10 1/4"	 MRAFSDR4012AHTN 1'-11 3/4" 2'-0 1/4"
	1-6	 MRAFSDR1616AHTN 1'-10 3/4" 1'-11 1/4"	 MRAFSDR2016AHTN 2'-0 3/4" 2'-1 1/4"	 MRAFSDR2616AHTN 2'-0 3/4" 2'-1 1/4"	 MRAFSDR2816AHTN 2'-1 1/16" 2'-1 5/16"	 MRAFSDR3016AHTN 2'-1 3/4" 2'-2 1/4"	 MRAFSDR4016AHTN 2'-3 3/4" 2'-4 1/4"
	2-0	 MRAFSDR1620AHTN 2'-4 3/4" 2'-4 1/4"	 MRAFSDR2020AHTN 2'-5 3/4" 2'-6 1/4"	 MRAFSDR2620AHTN 2'-6 3/4" 2'-7 1/4"	 MRAFSDR2820AHTN 2'-7 1/16" 2'-7 9/16"	 MRAFSDR3020AHTN 2'-7 3/4" 2'-8 1/4"	 MRAFSDR4020AHTN 2'-9 3/4" 2'-10 1/4"

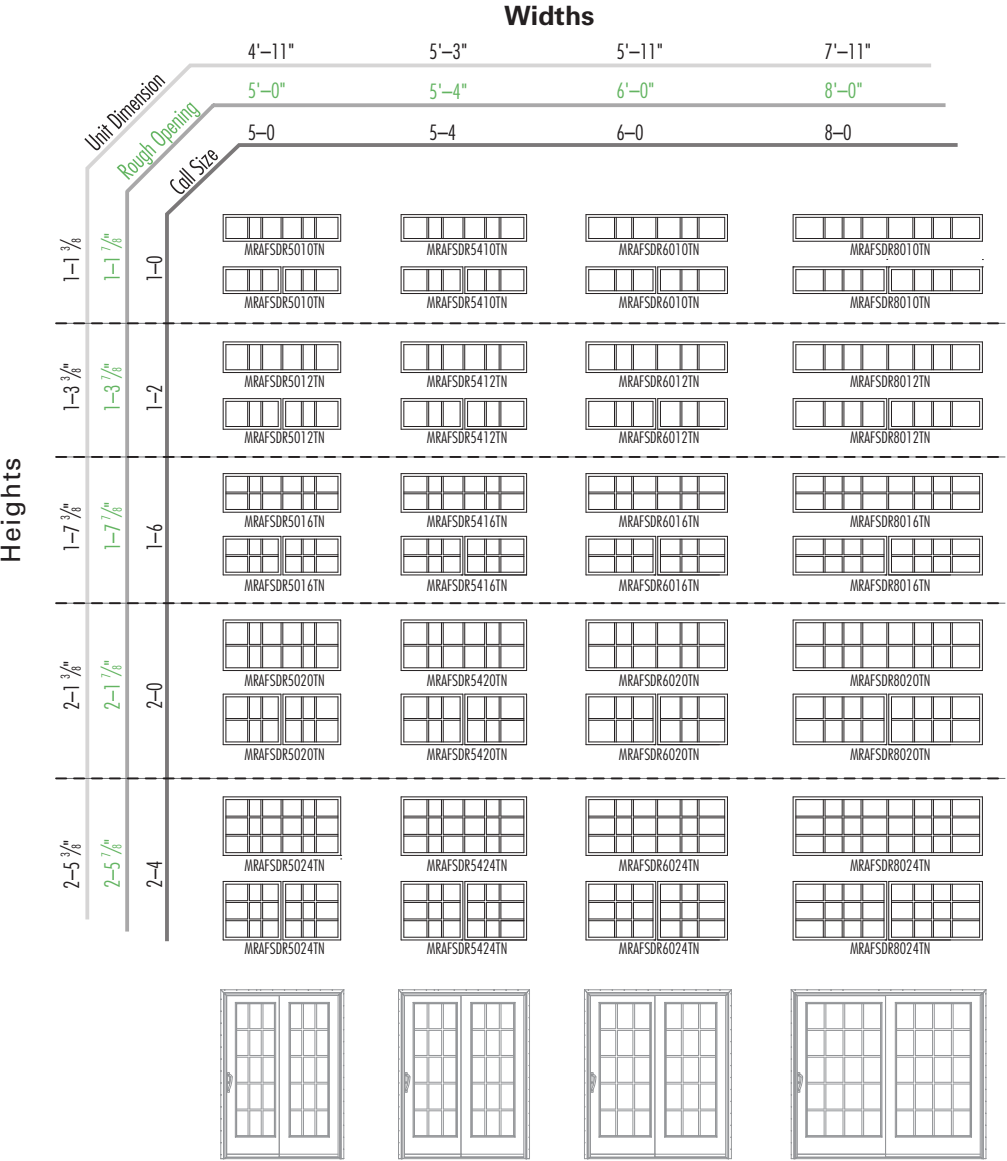
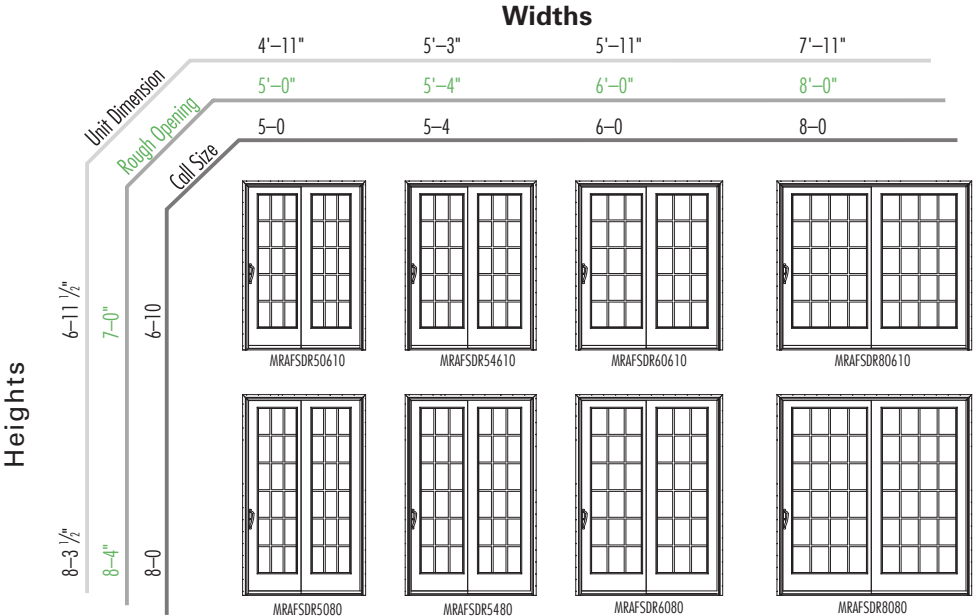
Optional Renaissance Grille Pattern



		Widths	
Unit Dimension	Call Size	3'-2 1/8"	4'-2 3/8"
	Rough Opening	3'-3 1/8"	4'-3 3/8"
	Call Size	3-0	4-0
		 MRAFSDR30CH 1'-7 1/16" 1'-7 9/16"	 MRAFSDR40CH 2'-1 1/16" 2'-1 9/16"

		Widths	
Unit Dimension	Call Size	3'-2 1/8"	4'-2 3/8"
	Rough Opening	3'-3 1/8"	4'-3 3/8"
	Call Size	3-0	4-0
		 MRAFSDR30EL 0'-9 9/16" 0'-10 1/16"	 MRAFSDR40EL 1'-0 9/16" 1'-1 1/16"

French Sliding Doors – 2-Panel Operating & Transom Units



French Sliding Doors – 2-Panel Arch Transom, Elliptical & Circle Head Units

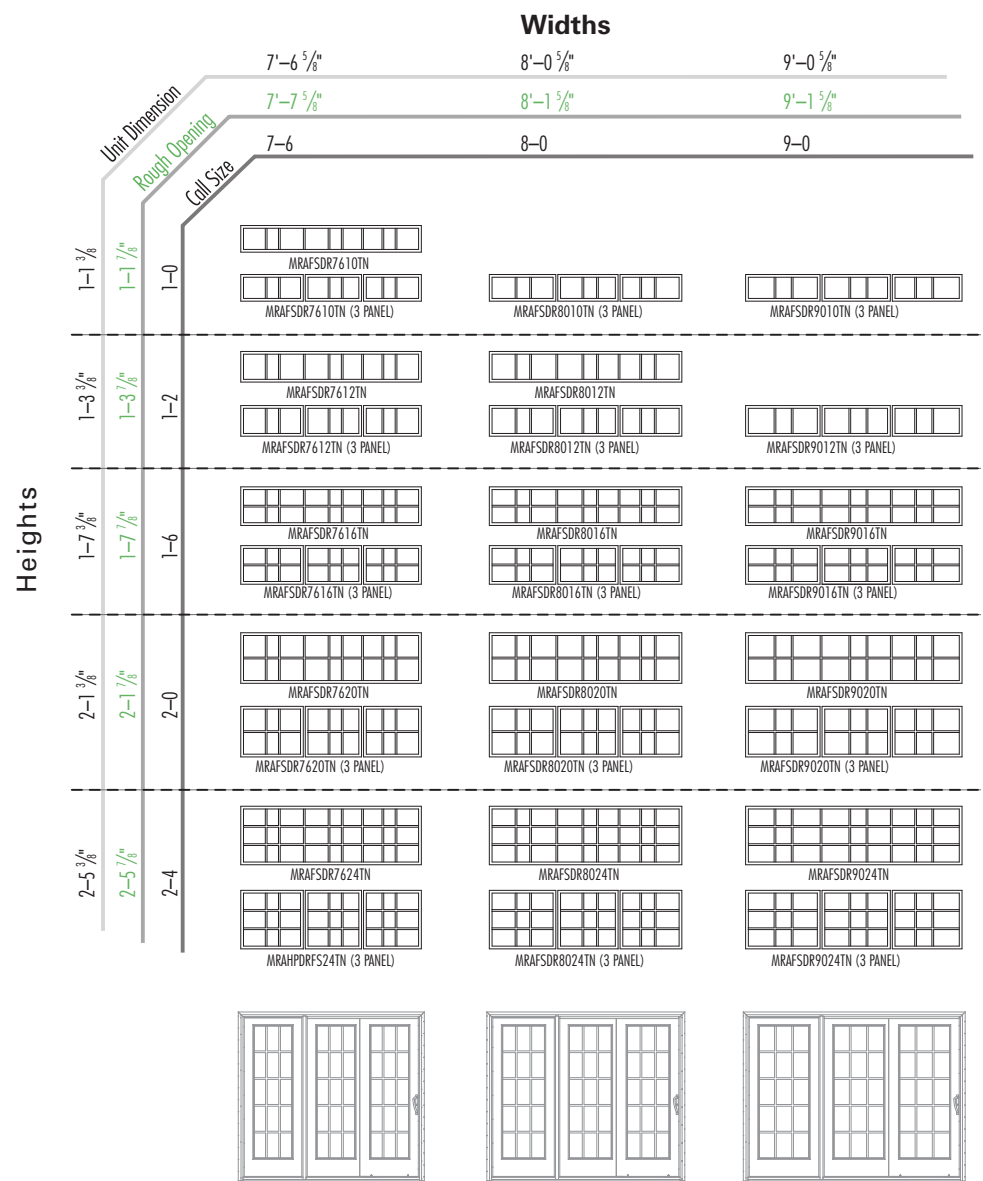
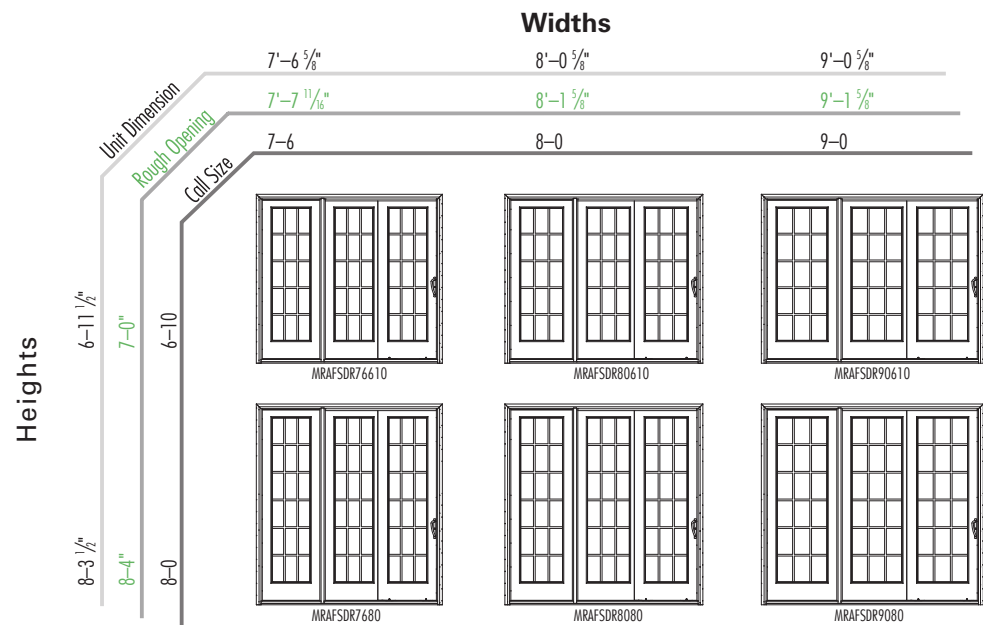
Standard Colonial Grille Pattern

		Widths			
		4'-11"	5'-3"	5'-11"	7'-11"
Unit Dimension	Rough Opening	5'-0"	5'-4"	6'-0"	8'-0"
	Call Size	5-0	5-4	6-0	8-0
	Heights				
	0-6	 MRAFSDR5006AHTN 1'-5 3/16" 1'-5 11/16"	 MRAFSDR5406AHTN 1'-5 7/8" 1'-6 3/8"	 MRAFSDR6006AHTN 1'-7 3/16" 1'-7 11/16"	 MRAFSDR8006AHTN 1'-3 3/16" 1'-4 11/16"
	0-10	 MRAFSDR5010AHTN 1'-9 3/16" 1'-9 11/16"	 MRAFSDR54010AHTN 1'-9 7/8" 1'-10 3/8"	 MRAFSDR6010AHTN 1'-11 3/16" 1'-11 11/16"	 MRAFSDR8010AHTN 1'-7 3/16" 1'-8 11/16"
	1-0	 MRAFSDR5010AHTN 1'-11 3/16" 1'-11 11/16"	 MRAFSDR5410AHTN 1'-11 7/8" 2'-0 3/8"	 MRAFSDR6010AHTN 2'-1 3/16" 2'-1 11/16"	 MRAFSDR8010AHTN 1'-9 3/16" 1'-10 11/16"
	1-2	 MRAFSDR5012AHTN 2'-1 3/16" 2'-1 11/16"	 MRAFSDR5412AHTN 2'-1 7/8" 2'-2 3/8"	 MRAFSDR6012AHTN 2'-3 3/16" 2'-3 11/16"	 MRAFSDR8012AHTN 1'-11 3/16" 2'-0 11/16"
	1-6	 MRAFSDR5016AHTN 2'-5 3/16" 2'-5 11/16"	 MRAFSDR5416AHTN 2'-5 7/8" 2'-6 3/8"	 MRAFSDR6016AHTN 2'-7 3/16" 2'-7 11/16"	 MRAFSDR8016AHTN 2'-3 3/16" 2'-4 11/16"
	2-0	 MRAFSDR5020AHTN 2'-11 3/16" 2'-11 11/16"	 MRAFSDR5420AHTN 2'-11 7/8" 3'-0 3/8"	 MRAFSDR6020AHTN 3'-1 3/16" 3'-1 11/16"	 MRAFSDR8020AHTN 2'-9 3/16" 2'-10 11/16"

Optional Renaissance Grille Pattern

		Widths					Widths		
		4'-11"	5'-3"	5'-11"			4'-11"	5'-3"	5'-11"
Unit Dimension	Rough Opening	5'-0"	5'-4"	6'-0"	Unit Dimension	Rough Opening	5'-0"	5'-4"	6'-0"
	Call Size	5-0	5-4	6-0		Call Size	5-0	5-4	6-0
	Heights					Heights			
		 MRAFSDR50CH 2'-5 1/2" 2'-6"	 MRAFSDR54CH 2'-7 1/2" 2'-8"	 FRSPDR60CH 2'-11 1/2" 3'-0"			 MRAFSDR50EL 1'-2 3/4" 1'-3 1/4"	 MRAFSDR54EL 1'-3 3/4" 1'-4 1/4"	 MRAFSDR60EL 1'-5 3/4" 1'-6 1/4"

French Sliding Doors – 3-Panel Operating & Transom Units



Standard Colonial Grille Pattern

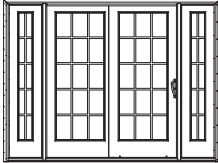
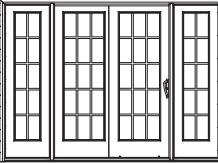
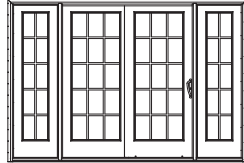
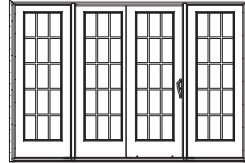
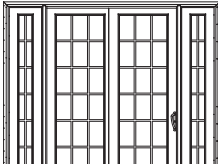
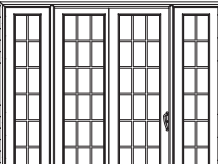
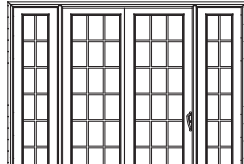
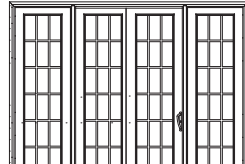
Widths

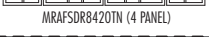
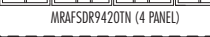
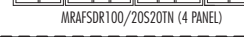
Heights	Unit Dimension			Rough Opening			Call Size		
Unit height dimension is listed first under individual windows Rough Opening height dimension is listed second under individual windows	0-6	0-10	1-0	1-2	1-6	2-0	7'-6 5/8"	8'-0 5/8"	9'-0 5/8"
							7'-6 5/8"	8'-0 5/8"	9'-0 5/8"
							7'-7 5/8"	8'-1 5/8"	9'-1 5/8"
							7'-6	8-0	9-0
							MRAFSDR7606AH 1'-10 1/2" 1'-11"	MRAFSDR8006AH 1'-11 1/2" 2'-0"	MRAFSDR9006AH 2'-1 1/2" 2'-2"
							MRAFSDR76010AH 2'-2 1/2" 2'-3"	MRAFSDR80010AH 2'-3 1/2" 2'-4"	MRAFSDR90010AH 2'-5 1/2" 2'-6"
							MRAFSDR7610AH 2'-4 1/2" 2'-5"	MRAFSDR8010AH 2'-5 1/2" 2'-6"	MRAFSDR9010AH 2'-7 1/2" 2'-8"
							MRAFSDR7612AH 2'-6 1/2" 2'-7"	MRAFSDR8012AH 2'-7 1/2" 2'-8"	MRAFSDR9012AH 2'-9 1/2" 2'-10"
							MRAFSDR7616AH 2'-10 1/2" 2'-11"	MRAFSDR8016AH 2'-11 1/2" 3'-0"	MRAFSDR9016AH 3'-1 1/2" 3'-2"
							MRAFSDR7620AH 3'-4 1/2" 3'-5"	MRAFSDR8020AH 3'-5 1/2" 3'-6"	MRAFSDR9020AH 3'-7 1/2" 3'-8"

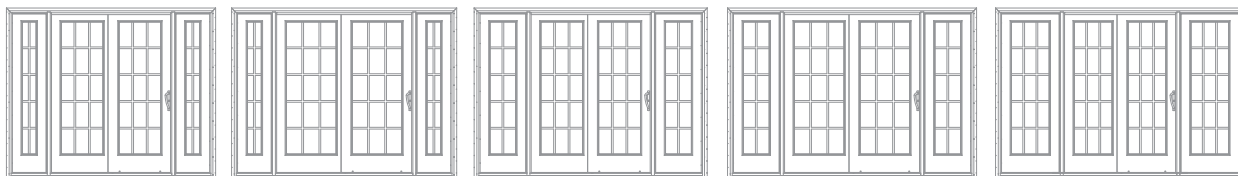
Optional Renaissance Grille Pattern



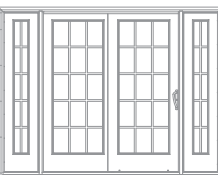
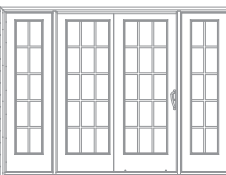
French Sliding Doors – 4-Panel Operating & Transom Units

		Widths				
Heights	Unit Dimension	8'-6 1/4"	9'-2 1/4"	9'-6 1/4"	10'-2 1/4"	10'-2 1/4"
	Rough Opening	8'-7 1/4"	9'-3 1/4"	9'-7 1/4"	10'-3 1/4"	10'-3 1/4"
	Call Size	8-4	9-0	9-4	10-0/20	10-0
		6-11 1/2"	7-0"	6-10		
						
		MRAFSDR84610	MRAFSDR90610	MRAFSDR94610	MRAFSDR100/20S610	MRAFSDR100610
						
		MRAFSDR8480	MRAFSDR9080	MRAFSDR9480	MRAFSDR100/20S80	MRAFSDR10080

		Widths				
Heights	Unit Dimension	8'-6 1/4"	9'-2 1/4"	9'-6 1/4"	10'-2 1/4"	10'-2 1/4"
	Rough Opening	8'-7 1/4"	9'-3 1/4"	9'-7 1/4"	10'-3 1/4"	10'-3 1/4"
	Call Size	8-4	9-0	9-4	10-0/20	10-0
		1-1 3/8"	1-1 7/8"	1-1 3/8"	1-1 7/8"	1-1 3/8"
						
		MRAFSDR8410TN (4 PANEL)	MRAFSDR9010TN (4 PANEL)	MRAFSDR9410TN (4 PANEL)	MRAFSDR100/20S10TN (4 PANEL)	MRAFSDR10010TN (4 PANEL)
						
		MRAFSDR8412TN (4 PANEL)	MRAFSDR9012TN (4 PANEL)	MRAFSDR9412TN (4 PANEL)	MRAFSDR100/20S12TN (4 PANEL)	MRAFSDR10012TN (4 PANEL)
						
		MRAFSDR8416TN	MRAFSDR9016TN	MRAFSDR9416TN	MRAFSDR100/20S16TN (4 PANEL)	MRAFSDR10016TN (4 PANEL)
						
		MRAFSDR8416TN (4 PANEL)	MRAFSDR9016TN (4 PANEL)	MRAFSDR9416TN (4 PANEL)	MRAFSDR100/20S16TN (4 PANEL)	MRAFSDR10016TN (4 PANEL)
						
		MRAFSDR8420TN	MRAFSDR9020TN	MRAFSDR9420TN	MRAFSDR100/20S20TN (4 PANEL)	MRAFSDR10020TN (4 PANEL)
						
		MRAFSDR8420TN (4 PANEL)	MRAFSDR9020TN (4 PANEL)	MRAFSDR9420TN (4 PANEL)	MRAFSDR100/20S20TN (4 PANEL)	MRAFSDR10020TN (4 PANEL)
						
		MRAFSDR8424TN	MRAFSDR9024TN	MRAFSDR9424TN	MRAFSDR100/20S24TN (4 PANEL)	MRAFSDR10024TN (4 PANEL)
						
		MRAFSDR8424TN (4 PANEL)	MRAFSDR9024TN (4 PANEL)	MRAFSDR9424TN (4 PANEL)	MRAFSDR100/20S24TN (4 PANEL)	MRAFSDR10024TN (4 PANEL)



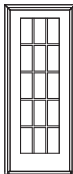
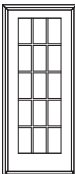
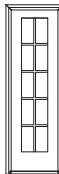
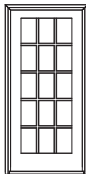
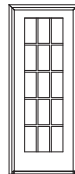
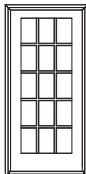
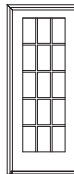
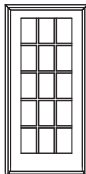
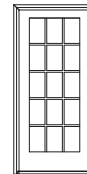
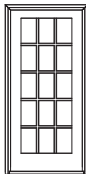
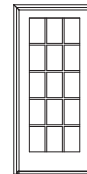
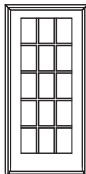
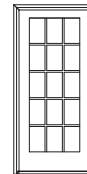
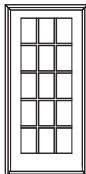
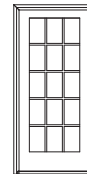
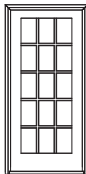
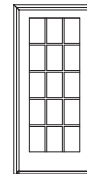
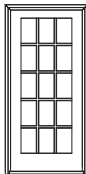
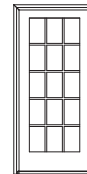
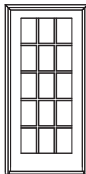
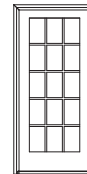
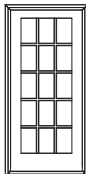
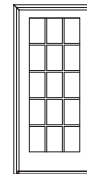
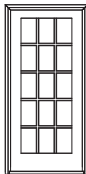
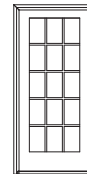
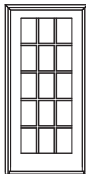
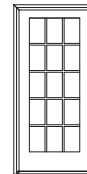
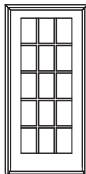
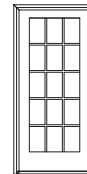
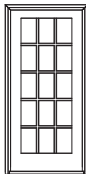
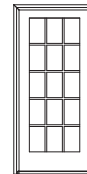
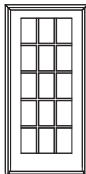
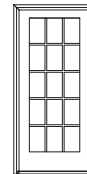
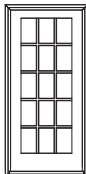
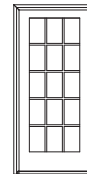
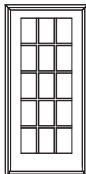
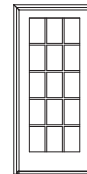
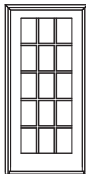
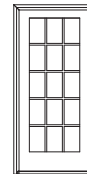
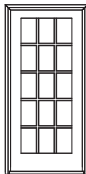
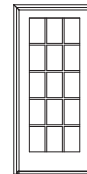
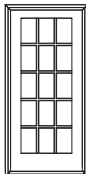
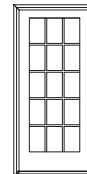
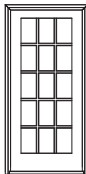
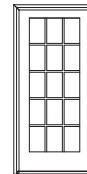
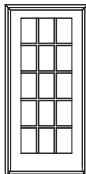
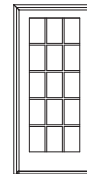
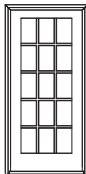
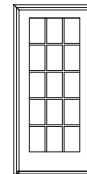
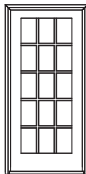
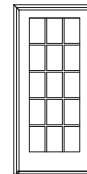
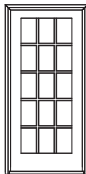
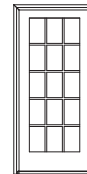
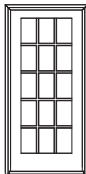
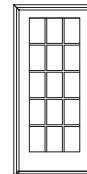
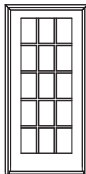
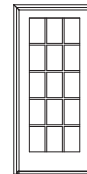
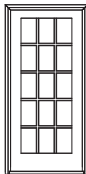
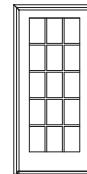
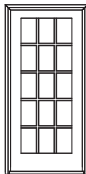
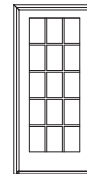
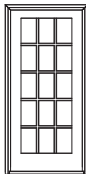
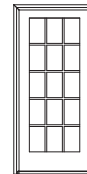
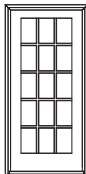
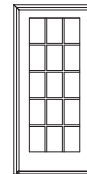
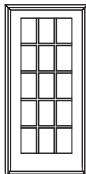
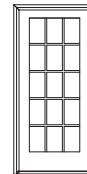
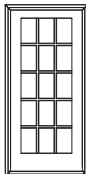
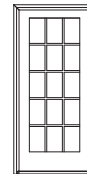
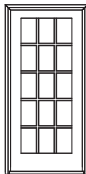
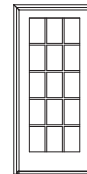
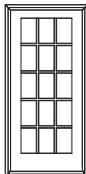
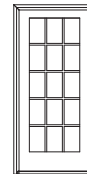
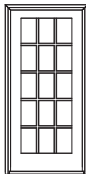
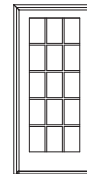
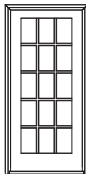
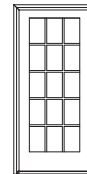
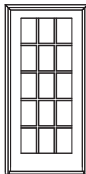
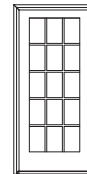
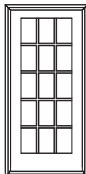
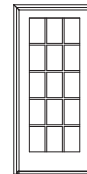
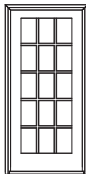
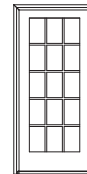
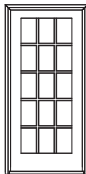
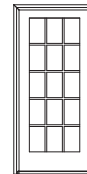
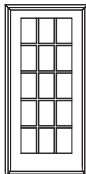
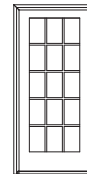
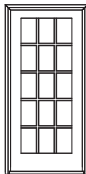
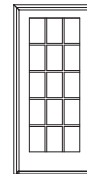
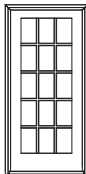
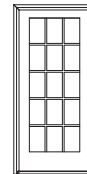
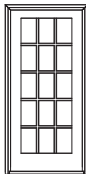
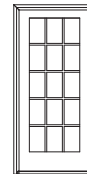
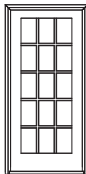
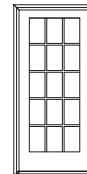
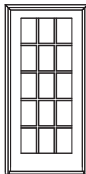
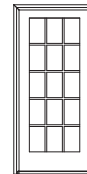
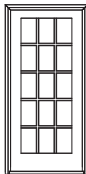
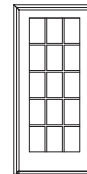
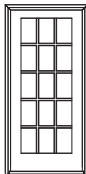
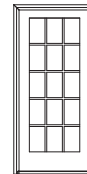
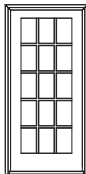
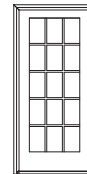
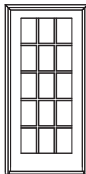
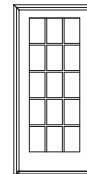
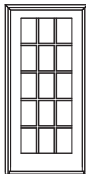
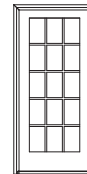
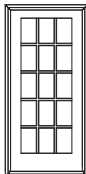
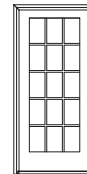
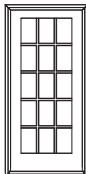
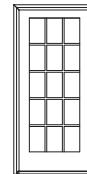
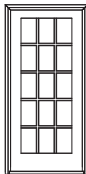
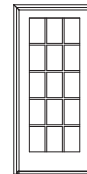
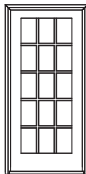
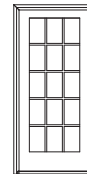
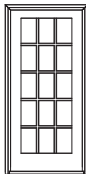
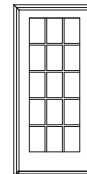
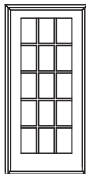
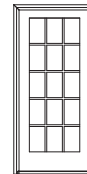
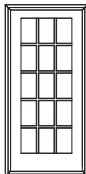
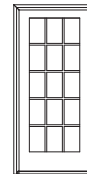
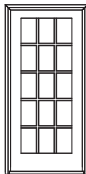
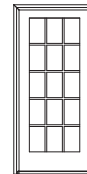
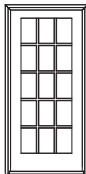
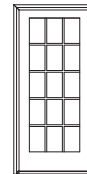
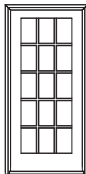
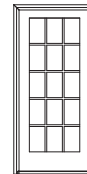
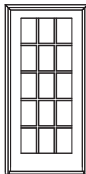
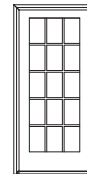
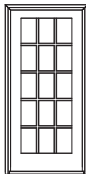
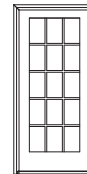
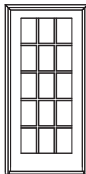
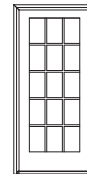
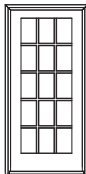
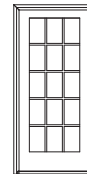
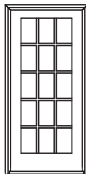
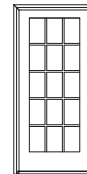
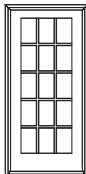
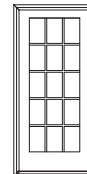
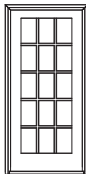
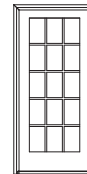
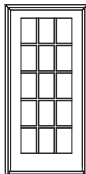
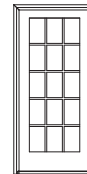
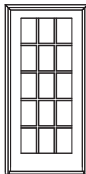
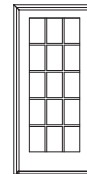
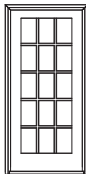
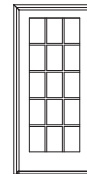
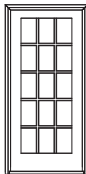
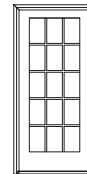
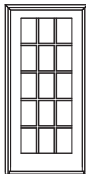
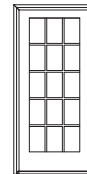
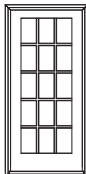
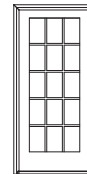
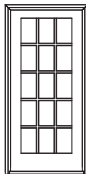
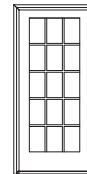
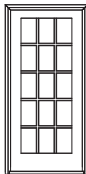
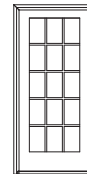
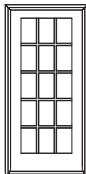
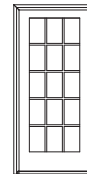
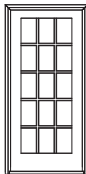
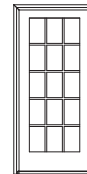
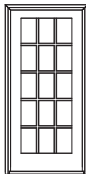
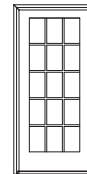
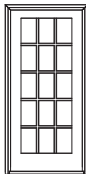
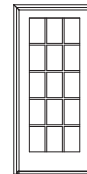
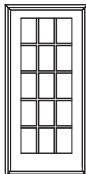
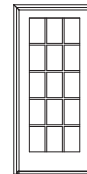
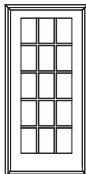
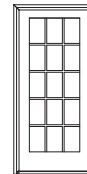
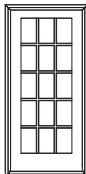
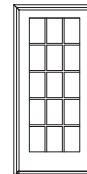
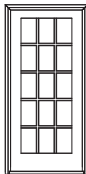
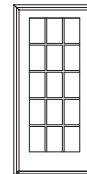
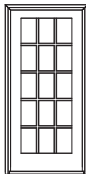
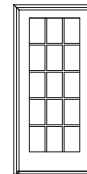
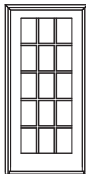
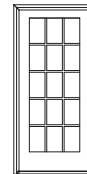
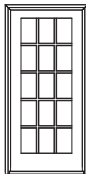
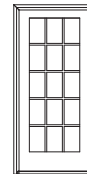
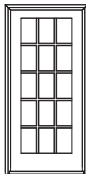
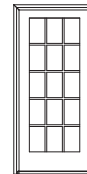
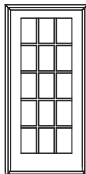
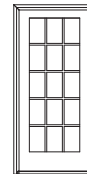
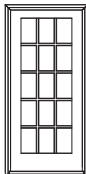
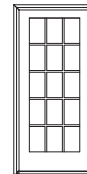
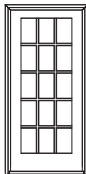
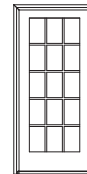
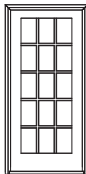
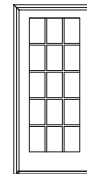
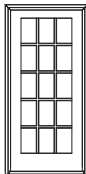
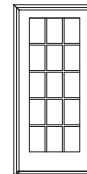
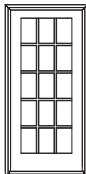
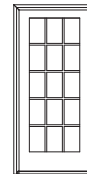
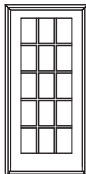
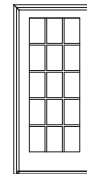
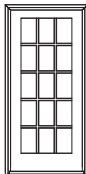
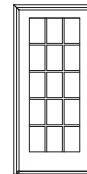
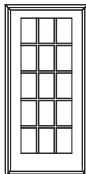
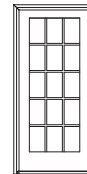
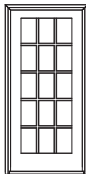
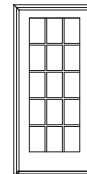
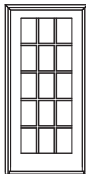
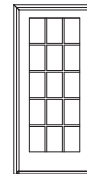
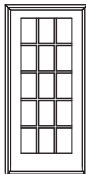
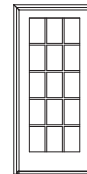
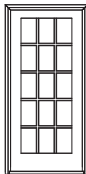
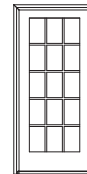
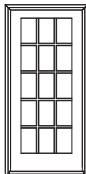
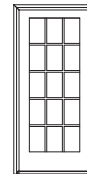
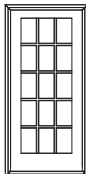
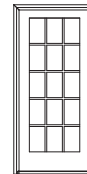
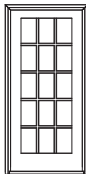
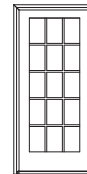
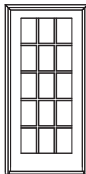
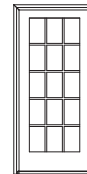
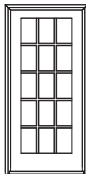
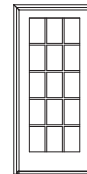
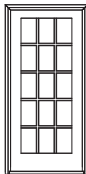
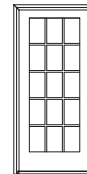
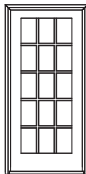
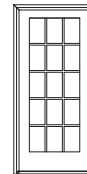
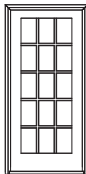
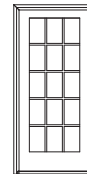
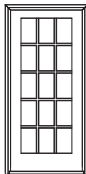
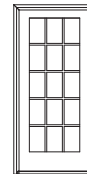
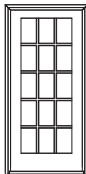
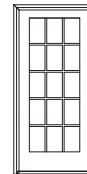
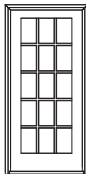
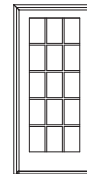
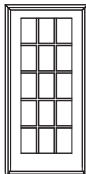
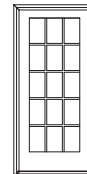
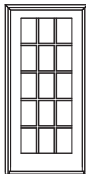
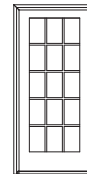
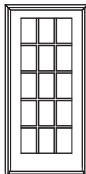
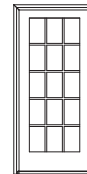
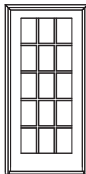
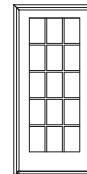
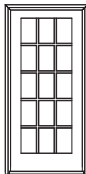
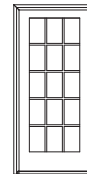
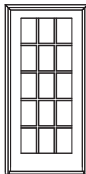
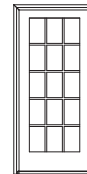
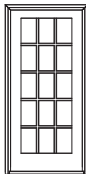
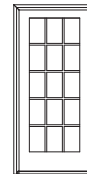
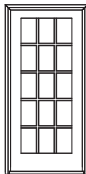
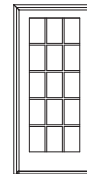
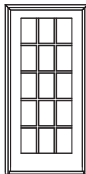
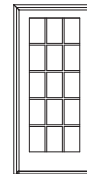
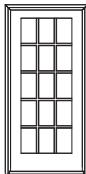
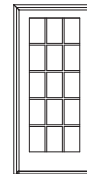
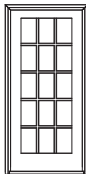
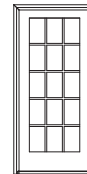
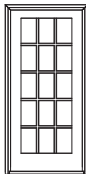
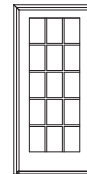
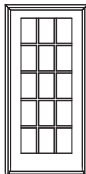
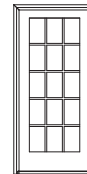
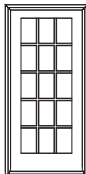
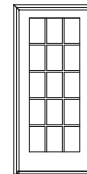
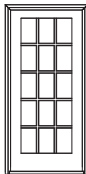
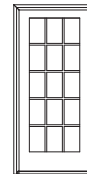
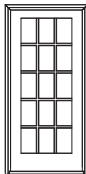
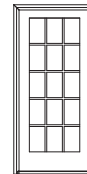
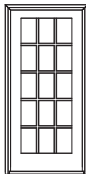
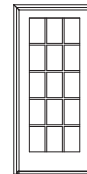
Standard Colonial Grille Pattern

		Widths		
		8'-6 1/4"	9'-2 1/4"	8'-6 1/4"
		8'-7 1/4"	9'-3 1/4"	9'-7 1/4"
		8-4	9-0	9-4
Heights	Unit Dimension			
	Rough Opening			
	Unit Size			
	0-6	 MRAFSDR8406AH 2' - 0 7/16" 2' - 0 15/16"	 MRAFSDR9006AH 2' - 1 3/4" 2' - 2 1/4"	 MRAFSDR9406AH 2' - 2 7/16" 2' - 2 15/16"
	0-10	 MRAFSDR84010AH 2' - 4 7/16" 2' - 4 15/16"	 MRAFSDR90010AH 2' - 5 3/4" 2' - 6 1/4"	 MRAFSDR94010AH 2' - 6 7/16" 2' - 6 15/16"
	1-0	 MRAFSDR8410AH 2' - 6 7/16" 2' - 6 15/16"	 MRAFSDR9010AH 2' - 7 3/4" 2' - 8 1/4"	 MRAFSDR9410AH 2' - 8 7/16" 2' - 8 15/16"
	1-2	 MRAFSDR8412AH 2' - 8 7/16" 2' - 8 15/16"	 MRAFSDR9012AH 2' - 9 3/4" 2' - 10 1/4"	 MRAFSDR9412AH 2' - 10 7/16" 2' - 10 15/16"
	1-6	 MRAFSDR8416AH 3' - 0 7/16" 3' - 0 15/16"	 MRAFSDR9016AH 3' - 1 3/4" 3' - 2 1/4"	 MRAFSDR9416AH 3' - 2 7/16" 3' - 2 15/16"
	2-0	 MRAFSDR8420AH 3' - 6 7/16" 3' - 6 15/16"	 MRAFSDR9020AH 3' - 7 3/4" 3' - 8 1/4"	 MRAFSDR9420AH 3' - 8 7/16" 3' - 8 15/16"
				

Optional Renaissance Grille Pattern

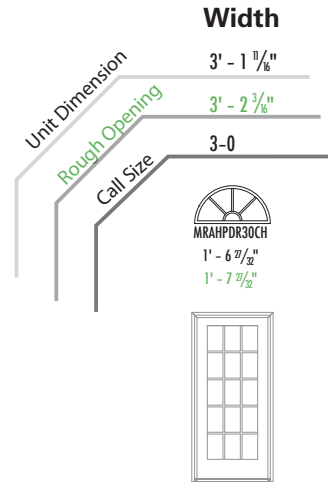


Hinged Doors – Single Panel Operating & Fixed Units

		Operating Unit Widths			Fixed Unit Widths				
		2'-7 11/16"	2'-9 11/16"	3'-1 11/16"	1'-7 5/8"	2'-1 5/8"	2'-7 5/8"	2'-9 5/8"	3'-1 5/8"
		2'-8 11/16"	2'-10 11/16"	3'-2 11/16"	1'-8 5/8"	2'-2 5/8"	2'-8 5/8"	2'-10 5/8"	3'-2 5/8"
		2-6	2-8	3-0	1-6	2-0	2-6	2-8	3-0
Heights	Unit Dimension								
	Rough Opening								
Heights	Call Size								
									
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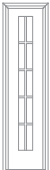
Hinged Doors – Single, Twin & Triple Panel Transom & Circle Head Units

		Widths				
Heights	Unit Dimension Rough Opening Call Size	1'-7 11/16"	2'-1 11/16"	2'-7 11/16"	2'-9 11/16"	3'-1 11/16"
		1'-8 11/16"	2'-2 11/16"	2'-8 11/16"	2'-10 11/16"	3'-2 11/16"
		1-6	2-0	2-6	2-8	3-0
		1-1 3/8	1-3 3/8	1-3 3/8	1-3 3/8	1-1 3/8
2-5 3/8"	2-4	MRAHPDR1610TN	MRAHPDR2010TN	MRAHPDR2610TN	MRAHPDR2810TN	MRAHPDR3010TN
2-1 3/8"	2-0	MRAHPDR1612TN	MRAHPDR2012TN	MRAHPDR2612TN	MRAHPDR2812TN	MRAHPDR3012TN
1-7 3/8"	1-6	MRAHPDR1616TN	MRAHPDR2016TN	MRAHPDR2616TN	MRAHPDR2816TN	MRAHPDR3016TN
1-3 3/8"	1-2	MRAHPDR1620TN	MRAHPDR2020TN	MRAHPDR2620TN	MRAHPDR2820TN	MRAHPDR3020TN
1-1 3/8"	1-0	MRAHPDR1624TN	MRAHPDR2024TN	MRAHPDR2624TN	MRAHPDR2824TN	MRAHPDR3024TN



		Widths					
Heights	Unit Dimension Rough Opening Call Size	5'-3 5/8"	5'-7 5/8"	6'-3 5/8"	7'-10 5/8"	8'-4 5/8"	9'-4 5/8"
		5'-4 5/8"	5'-8 5/8"	6'-4 5/8"	7'-11 5/8"	8'-5 5/8"	9'-5 5/8"
		5-0	5-4	6-0	7-6	8-0	9-0
		1-1 3/8	1-1 3/8	1-1 3/8	1-1 3/8	1-1 3/8	1-1 3/8
1-3 3/8"	1-2	MRAHPDR5010TN MRAHPDR5410TN (2 PANEL)	MRAHPDR5410TN MRAHPDR5410TN (2 PANEL)	MRAHPDR6010TN MRAHPDR6010TN (2 PANEL)	MRAHPDR7610TNP MRAHPDR7610TNP	MRAHPDR8010TNP MRAHPDR8010TNP	MRAHPDR9010TNP MRAHPDR9010TNP
1-1 3/8"	1-0	MRAHPDR5012TN MRAHPDR5412TN (2 PANEL)	MRAHPDR5412TN MRAHPDR5412TN (2 PANEL)	MRAHPDR6012TN MRAHPDR6012TN (2 PANEL)	MRAHPDR7612TNP MRAHPDR7612TNP	MRAHPDR8012TNP MRAHPDR8012TNP	MRAHPDR9012TNP MRAHPDR9012TNP
1-7 3/8"	1-6	MRAHPDR5016TN MRAHPDR5416TN (2 PANEL)	MRAHPDR5416TN MRAHPDR5416TN (2 PANEL)	MRAHPDR6016TN MRAHPDR6016TN (2 PANEL)	MRAHPDR7616TNP MRAHPDR7616TNP	MRAHPDR8016TNP MRAHPDR8016TNP	MRAHPDR9016TNP MRAHPDR9016TNP
1-3 3/8"	1-2	MRAHPDR5020TN MRAHPDR5420TN (2 PANEL)	MRAHPDR5420TN MRAHPDR5420TN (2 PANEL)	MRAHPDR6020TN MRAHPDR6020TN (2 PANEL)	MRAHPDR7620TNP MRAHPDR7620TNP	MRAHPDR8020TNP MRAHPDR8020TNP	MRAHPDR9020TNP MRAHPDR9020TNP
1-1 3/8"	1-0	MRAHPDR5024TN MRAHPDR5424TN (2 PANEL)	MRAHPDR5424TN MRAHPDR5424TN (2 PANEL)	MRAHPDR6024TN MRAHPDR6024TN (2 PANEL)	MRAHPDR7624TNP MRAHPDR7624TNP	MRAHPDR8024TNP MRAHPDR8024TNP	MRAHPDR9024TNP MRAHPDR9024TNP

Hinged Doors – Single Panel Arch Transom Units

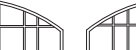
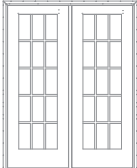
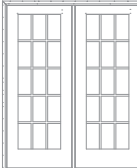
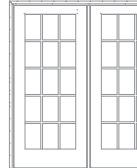
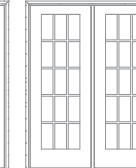
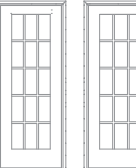
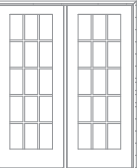
		Standard Colonial Grille Pattern				
		Widths				
		1'-7 5/8"	2'-1 5/8"	2'-7 5/8"	2'-9 5/8"	3'-1 5/8"
		1'-8 5/8"	2'-2 5/8"	2'-8 5/8"	2'-10 5/8"	3'-2 5/8"
		1-6	2-0	2-6	2-8	3-0
Heights	Unit Dimension					
	Rough Opening					
	Call Size					
	0-6	 MRAHPDR1606AHTN 0'-10 5/8" 0'-11 1/8"	 MRAHPDR2006AHTN 0'-11 5/8" 1'-0 1/8"	 MRAHPDR2606AHTN 1'-0 5/8" 1'-1 1/8"	 MRAHPDR2806AHTN 1'-1" 1'-1 1/2"	 MRAHPDR3006AHTN 1'-1 5/8" 1'-2 1/8"
	0-10	 MRAHPDR1610AHTN 1'-2 5/8" 1'-3 1/8"	 MRAHPDR2010AHTN 1'-3 5/8" 1'-4 1/8"	 MRAHPDR2610AHTN 1'-4 5/8" 1'-5 1/8"	 MRAHPDR2810AHTN 1'-5" 1'-5 1/2"	 MRAHPDR3010AHTN 1'-5 5/8" 1'-6 1/8"
	1-0	 MRAHPDR1610AHTN 1'-4 5/8" 1'-5 1/8"	 MRAHPDR2010AHTN 1'-5 5/8" 1'-6 1/8"	 MRAHPDR2610AHTN 1'-6 5/8" 1'-7 1/8"	 MRAHPDR2810AHTN 1'-7" 1'-7 1/2"	 MRAHPDR3010AHTN 1'-7 5/8" 1'-8 1/8"
	1-2	 MRAHPDR1612AHTN 1'-6 5/8" 1'-7 1/8"	 MRAHPDR2012AHTN 1'-7 5/8" 1'-8 1/8"	 MRAHPDR2612AHTN 1'-8 5/8" 1'-9 1/8"	 MRAHPDR2812AHTN 1'-9" 1'-9 1/2"	 MRAHPDR3012AHTN 1'-9 5/8" 1'-10 1/8"
	1-6	 MRAHPDR1616AHTN 1'-10 5/8" 1'-11 1/8"	 MRAHPDR2016AHTN 1'-11 5/8" 2'-0 1/8"	 MRAHPDR2616AHTN 2'-0 5/8" 2'-1 1/8"	 MRAHPDR2816AHTN 2'-1" 2'-1 1/2"	 MRAHPDR3016AHTN 2'-1 5/8" 2'-2 1/8"
	2-0	 MRAHPDR1620AHTN 2'-4 5/8" 2'-5 1/8"	 MRAHPDR2020AHTN 2'-5 5/8" 2'-6 1/8"	 MRAHPDR2620AHTN 2'-6 5/8" 2'-7 1/8"	 MRAHPDR2820AHTN 2'-7" 2'-7 1/2"	 MRAHPDR3020AHTN 2'-7 5/8" 2'-8 1/8"
						

Optional Renaissance Grille Pattern



Hinged Doors – Single Panel Twin & Triple Arch Transom Units

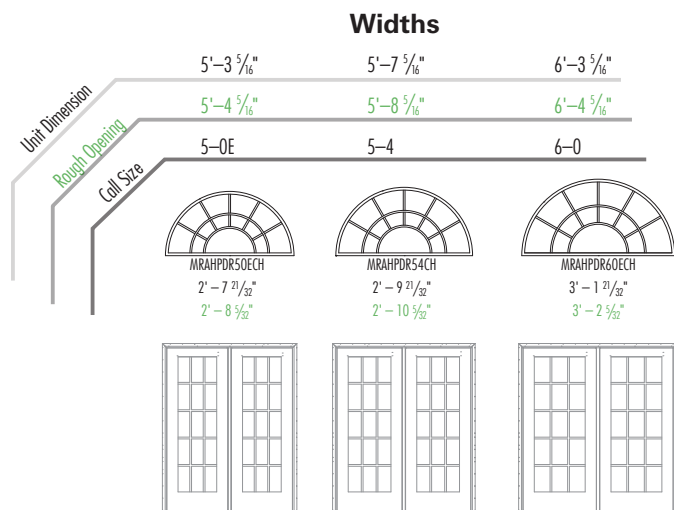
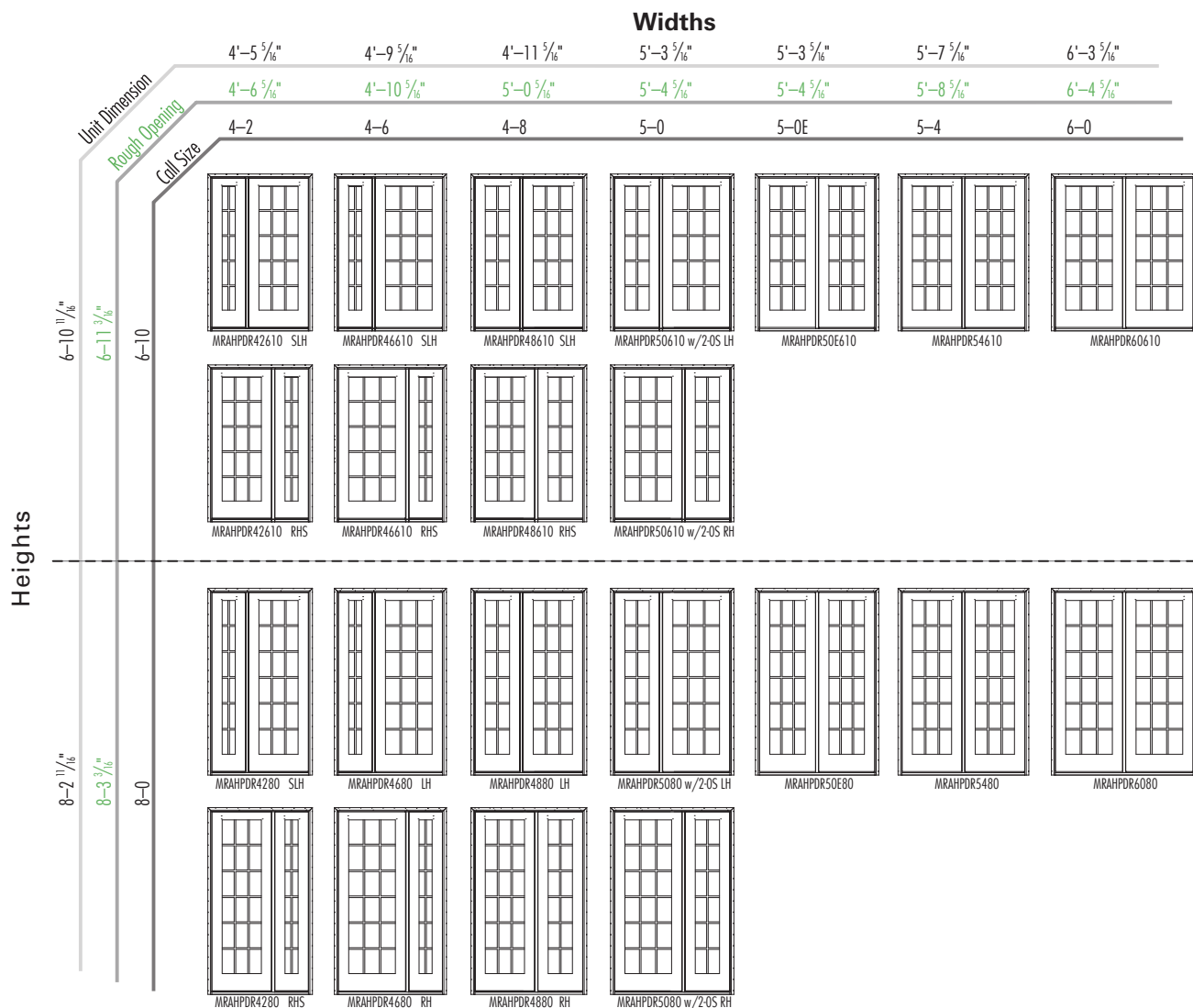
Standard Colonial Grille Pattern Widths

		5'-3 1/4"	5'-7 1/4"	6'-3 1/4"	7'-10 7/8"	8'-4 7/8"	9'-4 7/8"
		5'-4 1/4"	5'-8 1/4"	6'-4 1/4"	7'-11 7/8"	8'-5 7/8"	9'-5 7/8"
		5-0	5-4	6-0	7-6	8-0	9-0
Heights	Unit Dimension						
	Rough Opening						
	Call Size						
	0-6	 MRAHPDR5006AHTN 1'-5 15/16" 1'-6 7/16"	 MRAHPDR5406AHTN 1'-6 9/16" 1'-7 1/16"	 MRAHP6006AH 1'-7 15/16" 1'-8 7/16"	 MRAHPDR7606AHTNP 1'-11 3/16" 1'-11 11/16"	 MRAHPDR8006AH 2'-0 3/16" 2'-0 11/16"	 MRAHPDR9006AH 2'-2 3/16" 2'-2 11/16"
	0-10	 MRAHPDR5010AHTN 1'-5 15/16" 1'-10 7/16"	 MRAHPDR5410AHTN 1'-10 9/16" 1'-11 1/16"	 MRAHP6010AH 1'-11 15/16" 2'-0 7/16"	 MRAHPDR7610AHTNP 2'-3 3/16" 2'-3 11/16"	 MRAHPDR8010AH 2'-4 3/16" 2'-4 11/16"	 MRAHPDR9010AH 2'-6 3/16" 2'-6 11/16"
	1-0	 MRAHPDR5010AHTN 1'-11 15/16" 2'-0 7/16"	 MRAHPDR5410AHTN 2'-0 9/16" 2'-1 1/16"	 MRAHP6010AH 2'-1 15/16" 2'-2 7/16"	 MRAHPDR7610AHTNP 2'-5 3/16" 2'-5 11/16"	 MRAHPDR8010AH 2'-6 3/16" 2'-6 11/16"	 MRAHPDR9010AH 2'-8 3/16" 2'-8 11/16"
	1-2	 MRAHPDR5012AHTN 2'-1 15/16" 2'-2 7/16"	 MRAHPDR5412AHTN 2'-2 9/16" 2'-3 1/16"	 MRAHP6012AH 2'-3 15/16" 2'-4 7/16"	 MRAHPDR7612AHTNP 2'-7 3/16" 2'-7 11/16"	 MRAHPDR8012AH 2'-8 3/16" 2'-8 11/16"	 MRAHPDR9012AH 2'-10 3/16" 2'-10 11/16"
	1-6	 MRAHPDR5016AHTN 2'-5 15/16" 2'-6 7/16"	 MRAHPDR5416AHTN 2'-6 9/16" 2'-7 1/16"	 MRAHP6016AH 2'-7 15/16" 2'-8 7/16"	 MRAHPDR7616AHTNP 2'-11 3/16" 2'-11 11/16"	 MRAHPDR8016AH 3'-0 3/16" 3'-0 11/16"	 MRAHPDR9016AH 3'-2 3/16" 3'-2 11/16"
	2-0	 MRAHPDR5020AHTN 2'-11 15/16" 3'-0 7/16"	 MRAHPDR5420AHTN 3'-0 9/16" 3'-1 1/16"	 MRAHP6020AH 3'-1 15/16" 3'-2 7/16"	 MRAHPDR7620AHTNP 3'-5 3/16" 3'-5 11/16"	 MRAHPDR8020AH 3'-6 3/16" 3'-6 11/16"	 MRAHPDR9020AH 3'-8 3/16" 3'-8 11/16"
							

Optional Renaissance Grille Pattern



Hinged Doors – 2-Panel Operating & Circle Head Units



Hinged Doors – 2-Panel Even Transom & Arch Transom Units

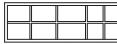
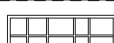
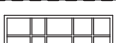
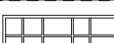
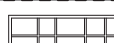
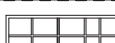
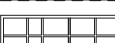
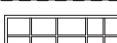
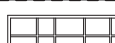
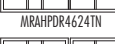
		Widths		
		5'-3 5/16"	5'-7 5/16"	6'-3 5/16"
		5'-4 5/16"	5'-8 5/16"	6'-4 5/16"
		5-0E	5-4	6-0
Heights	Unit Dimension			
	Rough Opening			
	Call Size			
	1-1 3/8"	MRAHPDR5010TN MRAHPDR5410TN (2 PANEL)	MRAHPDR5410TN MRAHPDR5410TN (2 PANEL)	MRAHPDR6010TN MRAHPDR6010TN (2 PANEL)
	1-3 3/8"	MRAHPDR5012TN MRAHPDR5012TN (2 PANEL)	MRAHPDR5412TN MRAHPDR5412TN (2 PANEL)	MRAHPDR6012TN MRAHPDR6012TN (2 PANEL)
Heights	1-7 3/8"	MRAHPDR5016TN MRAHPDR5016TN (2 PANEL)	MRAHPDR5416TN MRAHPDR5416TN (2 PANEL)	MRAHPDR6016TN MRAHPDR6016TN (2 PANEL)
	2-1 3/8"	MRAHPDR5020TN MRAHPDR5020TN (2 PANEL)	MRAHPDR5420TN MRAHPDR5420TN (2 PANEL)	MRAHPDR6020TN MRAHPDR6020TN (2 PANEL)
	2-5 3/8"	MRAHPDR5024TN MRAHPDR5024TN (2 PANEL)	MRAHPDR5424TN MRAHPDR5424TN (2 PANEL)	MRAHPDR6024TN MRAHPDR6024TN (2 PANEL)

		Widths		
		5'-3 5/16"	5'-7 5/16"	6'-3 5/16"
		5'-4 5/16"	5'-8 5/16"	6'-4 5/16"
		5-0E	5-4	6-0
Heights	Unit Dimension			
	Rough Opening			
	Call Size			
	0-6"	MRAHPDR5006AHTN 1'-5 15/16" 1'-6 7/16"	MRAHPDR5406AHTN 1'-6 5/8" 1'-7 7/8"	MRAHPDR6006AH 1'-7 15/16" 1'-8 7/16"
	0-10"	MRAHPDR5010AHTN 1'-9 15/16" 1'-10 7/16"	MRAHPDR5410AHTN 1'-10 5/8" 1'-11 1/8"	MRAHPDR6010AH 1'-11 15/16" 2'-0 7/16"
Heights	1-0"	MRAHPDR5010AHTN 1'-11 15/16" 2'-0 7/16"	MRAHPDR5410AHTN 2'-0 5/8" 2'-1 1/8"	MRAHPDR6010AH 2'-1 15/16" 2'-2 7/16"
	1-2"	MRAHPDR5012AHTN 2'-1 15/16" 2'-2 7/16"	MRAHPDR5412AHTN 2'-2 5/8" 2'-3 1/8"	MRAHPDR6012AH 2'-3 15/16" 2'-4 7/16"
	1-6"	MRAHPDR5016AHTN 2'-5 15/16" 2'-6 7/16"	MRAHPDR5416AHTN 2'-6 5/8" 2'-7 1/8"	MRAHPDR6016AH 2'-7 15/16" 2'-8 7/16"
	2-0"	MRAHPDR5020AHTN 2'-11 15/16" 3'-0 7/16"	MRAHPDR5420AHTN 3'-0 5/8" 3'-1 1/8"	MRAHPDR6020AH 3'-1 15/16" 3'-2 7/16"

Optional Renaissance Grille Pattern

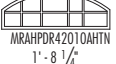
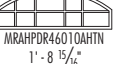
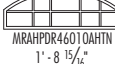
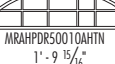
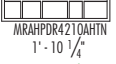
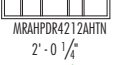
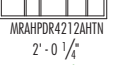
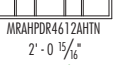
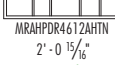
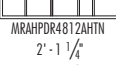
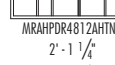
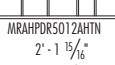
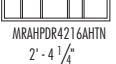
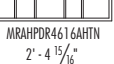
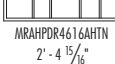
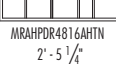
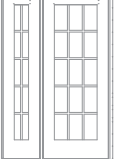
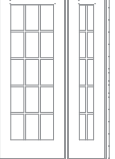
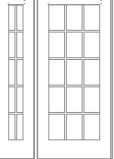
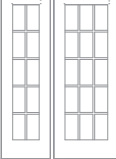
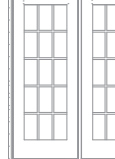
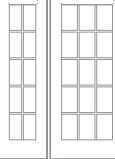


Hinged Doors – 2-Panel Transom Units

		Widths							
		4'-5 5/16"		4'-9 5/16"		4'-11 5/16"		5'-3 5/16"	
		4'-6 5/16"		4'-10 5/16"		5'-0 5/16"		5'-4 5/16"	
		4-2		4-6		4-8		5-0	
Heights	Unit Dimension	Rough Opening							
	1-1 3/8"	1-1 7/8"							
	1-3 3/8"	1-3 7/8"							
	1-7 3/8"	1-7 7/8"							
	2-1 3/8"	2-1 7/8"							
	2-5 3/8"	2-5 7/8"							
	Call Size	1-0							
		1-2							
		1-6							
		2-0							
	2-4								
									
									
									
									
									
									
									
									
									
									
									
									
									
									

Standard Colonial Grille Pattern

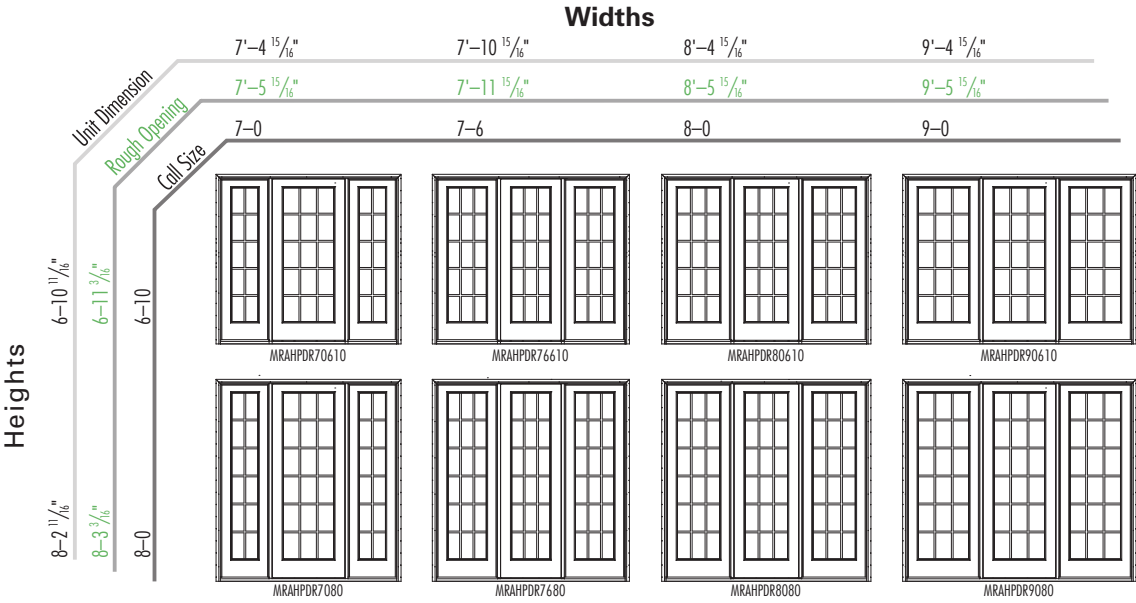
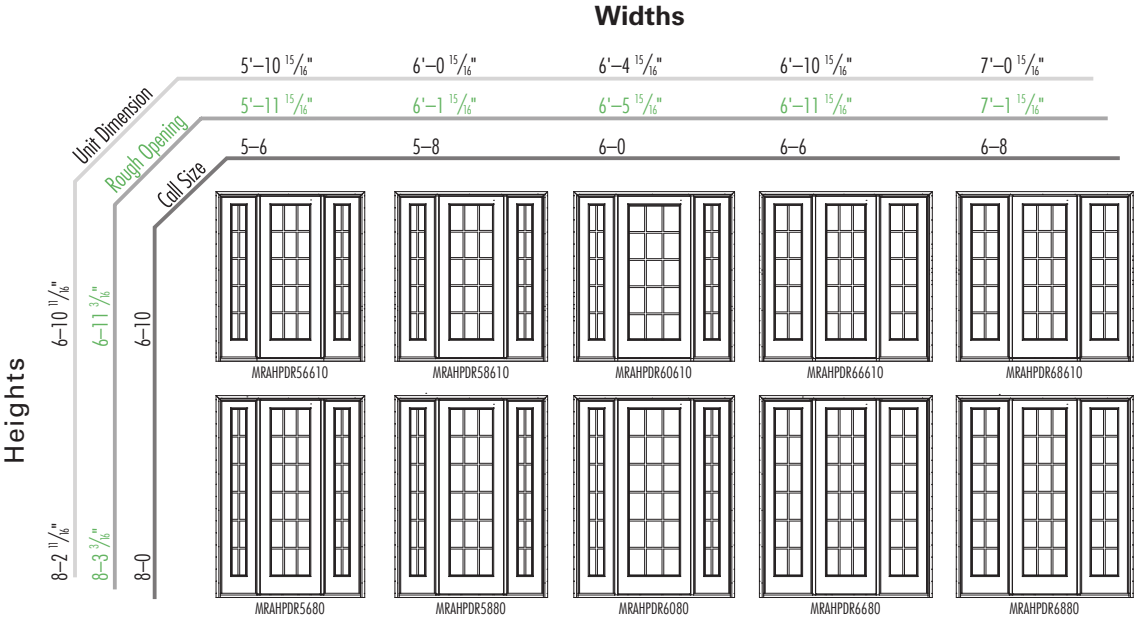
Widths

		4'-5 5/16"	4'-9 5/16"	4'-11 5/16"	5'-3 5/16"
		4'-6 5/16"	4'-10 5/16"	5'-0 5/16"	5'-4 5/16"
		4-2	4-6	4-8	5-0
Heights	Unit Dimension				
	Rough Opening				
	Call Size				
	0-6	 MRAHPDR4206AHTN 1'-4 1/4" 1'-4 3/4"  MRAHPDR4206AHTN 1'-4 1/4" 1'-4 3/4"	 MRAHPDR4606AHTN 1'-4 15/16" 1'-5 1/16"  MRAHPDR4606AHTN 1'-4 15/16" 1'-5 7/16"	 MRAHPDR4806AHTN 1'-5 1/4" 1'-5 3/4"  MRAHPDR4806AHTN 1'-5 1/4" 1'-5 3/4"	 MRAHPDR5006AHTN 1'-5 15/16" 1'-6 1/16"  MRAHPDR5006AHTN 1'-5 15/16" 1'-6 7/16"
	0-10	 MRAHPDR4210AHTN 1'-8 1/4" 1'-8 3/4"  MRAHPDR4210AHTN 1'-8 1/4" 1'-8 3/4"	 MRAHPDR4610AHTN 1'-8 15/16" 1'-9 1/16"  MRAHPDR4610AHTN 1'-8 15/16" 1'-9 7/16"	 MRAHPDR4810AHTN 1'-9 1/4" 1'-9 3/4"  MRAHPDR4810AHTN 1'-9 1/4" 1'-9 3/4"	 MRAHPDR5010AHTN 1'-9 15/16" 1'-10 1/16"  MRAHPDR5010AHTN 1'-9 15/16" 1'-10 7/16"
	1-0	 MRAHPDR4210AHTN 1'-10 1/4" 1'-10 3/4"  MRAHPDR4210AHTN 1'-10 1/4" 1'-10 3/4"	 MRAHPDR4610AHTN 1'-10 15/16" 1'-11 1/16"  MRAHPDR4610AHTN 1'-10 15/16" 1'-11 7/16"	 MRAHPDR4810AHTN 1'-11 1/4" 1'-11 3/4"  MRAHPDR4810AHTN 1'-11 1/4" 1'-11 3/4"	 MRAHPDR5010AHTN 1'-11 15/16" 2'-0 1/16"  MRAHPDR5010AHTN 1'-11 15/16" 2'-0 7/16"
	1-2	 MRAHPDR4212AHTN 2'-0 1/4" 2'-0 3/4"  MRAHPDR4212AHTN 2'-0 1/4" 2'-0 3/4"	 MRAHPDR4612AHTN 2'-0 15/16" 2'-1 1/16"  MRAHPDR4612AHTN 2'-0 15/16" 2'-1 7/16"	 MRAHPDR4812AHTN 2'-1 1/4" 2'-1 3/4"  MRAHPDR4812AHTN 2'-1 1/4" 2'-1 3/4"	 MRAHPDR5012AHTN 2'-1 15/16" 2'-2 1/16"  MRAHPDR5012AHTN 2'-1 15/16" 2'-2 7/16"
	1-6	 MRAHPDR4216AHTN 2'-4 1/4" 2'-4 3/4"  MRAHPDR4216AHTN 2'-4 1/4" 2'-4 3/4"	 MRAHPDR4616AHTN 2'-4 15/16" 2'-5 1/16"  MRAHPDR4616AHTN 2'-4 15/16" 2'-5 7/16"	 MRAHPDR4816AHTN 2'-5 1/4" 2'-5 3/4"  MRAHPDR4816AHTN 2'-5 1/4" 2'-5 3/4"	 MRAHPDR5016AHTN 2'-5 15/16" 2'-6 1/16"  MRAHPDR5016AHTN 2'-5 15/16" 2'-6 7/16"
	2-0	 MRAHPDR4220AHTN 2'-11 1/4" 2'-11 3/4"  MRAHPDR4220AHTN 2'-11 1/4" 2'-11 3/4"	 MRAHPDR4620AHTN 2'-10 15/16" 2'-11 1/16"  MRAHPDR4620AHTN 2'-10 15/16" 2'-11 7/16"	 MRAHPDR4820AHTN 2'-11 1/4" 2'-11 3/4"  MRAHPDR4820AHTN 2'-11 1/4" 2'-11 3/4"	 MRAHPDR5020AHTN 2'-11 15/16" 3'-0 1/16"  MRAHPDR5020AHTN 2'-11 15/16" 3'-0 7/16"
		 MRAHPDR4220AHTN  MRAHPDR4220AHTN	 MRAHPDR4620AHTN  MRAHPDR4620AHTN	 MRAHPDR4820AHTN  MRAHPDR4820AHTN	 MRAHPDR5020AHTN  MRAHPDR5020AHTN

Optional Renaissance Grille Pattern



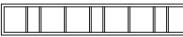
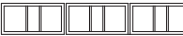
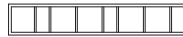
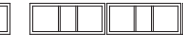
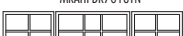
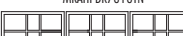
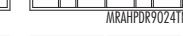
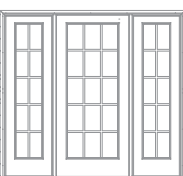
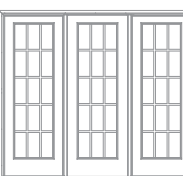
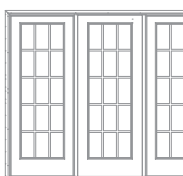
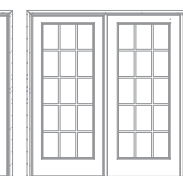
Hinged Doors – 3-Panel Operating & Matching Fixed Units



Hinged Doors – 3-Panel Transom Units

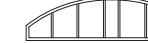
		Widths				
		5'-10 ¹⁵ / ₁₆ "	6'-0 ¹⁵ / ₁₆ "	6'-4 ¹⁵ / ₁₆ "	6'-10 ¹⁵ / ₁₆ "	7'-0 ¹⁵ / ₁₆ "
		5'-11 ¹⁵ / ₁₆ "	6'-1 ¹⁵ / ₁₆ "	6'-5 ¹⁵ / ₁₆ "	6'-11 ¹⁵ / ₁₆ "	7'-1 ¹⁵ / ₁₆ "
		5-6	5-8	6-0	6-6	6-8
		Call Size	Call Size	Call Size	Call Size	Call Size
Heights	Unit Dimension	1-1 ³ / ₈	1-1 ⁷ / ₈	1-0	1-0	1-0
	Rough Opening	1-1 ³ / ₈	1-1 ⁷ / ₈	1-0	1-0	1-0
	Call Size	1-0	1-0	1-0	1-0	1-0
	Call Size	1-0	1-0	1-0	1-0	1-0
	Call Size	1-0	1-0	1-0	1-0	1-0
		MRAHPDR5610TN MRAHPDR5610TN (3 PANEL)	MRAHPDR5810TN MRAHPDR5810TN (3 PANEL)	MRAHPDR6010TN MRAHPDR6010TN (3 PANEL)	MRAHPDR6610TN MRAHPDR6610TN (3 PANEL)	MRAHPDR6810TN MRAHPDR6810TN (3 PANEL)
		MRAHPDR5612TN MRAHPDR5612TN (3 PANEL)	MRAHPDR5812TN MRAHPDR5812TN (3 PANEL)	MRAHPDR6012TN MRAHPDR6012TN (3 PANEL)	MRAHPDR6612TN MRAHPDR6612TN (3 PANEL)	MRAHPDR6812TN MRAHPDR6812TN (3 PANEL)
		MRAHPDR5616TN MRAHPDR5616TN (3 PANEL)	MRAHPDR5816TN MRAHPDR5816TN (3 PANEL)	MRAHPDR6016TN MRAHPDR6016TN (3 PANEL)	MRAHPDR6616TN MRAHPDR6616TN (3 PANEL)	MRAHPDR6816TN MRAHPDR6816TN (3 PANEL)
		MRAHPDR5620TN MRAHPDR5620TN (3 PANEL)	MRAHPDR5820TN MRAHPDR5820TN (3 PANEL)	MRAHPDR6020TN MRAHPDR6020TN (3 PANEL)	MRAHPDR6620TN MRAHPDR6620TN (3 PANEL)	MRAHPDR6820TN MRAHPDR6820TN (3 PANEL)
		MRAHPDR5624TN MRAHPDR5624TN (3 PANEL)	MRAHPDR5824TN MRAHPDR5824TN (3 PANEL)	MRAHPDR6024TN MRAHPDR6024TN (3 PANEL)	MRAHPDR6624TN MRAHPDR6624TN (3 PANEL)	MRAHPDR6824TN MRAHPDR6824TN (3 PANEL)

Hinged Doors – 3-Panel Transom Units

		Widths			
		7'-4 ¹⁵ / ₁₆ "	7'-10 ¹⁵ / ₁₆ "	8'-4 ¹⁵ / ₁₆ "	9'-4 ¹⁵ / ₁₆ "
		7'-5 ¹⁵ / ₁₆ "	7'-11 ¹⁵ / ₁₆ "	8'-5 ¹⁵ / ₁₆ "	9'-5 ¹⁵ / ₁₆ "
		7-0	7-6	8-0	9-0
Heights	Unit Dimension				
	Rough Opening				
	Coil Size				
	1-1 ³ / ₈ "	 MRHPDR7010TN  MRHPDR7010TN (3 PANEL)	 MRHPDR7610TN  MRHPDR7610TN (3 PANEL)	 MRHPDR8010TN (3 PANEL)	 MRHPDR9010TN (3 PANEL)
	1-3 ³ / ₈ "	 MRHPDR7012TN  MRHPDR7012TN (3 PANEL)	 MRHPDR7612TN  MRHPDR7612TN (3 PANEL)	 MRHPDR8012TN (3 PANEL)	 MRHPDR9012TN (3 PANEL)
	1-7 ³ / ₈ "	 MRHPDR7016TN  MRHPDR7016TN (3 PANEL)	 MRHPDR7616TN  MRHPDR7616TN (3 PANEL)	 MRHPDR8016TN (3 PANEL)	 MRHPDR9016TN (3 PANEL)
	2-1 ³ / ₈ "	 MRHPDR7020TN  MRHPDR7020TN (3 PANEL)	 MRHPDR7620TN  MRHPDR7620TN (3 PANEL)	 MRHPDR8020TN (3 PANEL)	 MRHPDR9020TN (3 PANEL)
	2-5 ³ / ₈ "	 MRHPDR7024TN  MRHPDR7024TN (3 PANEL)	 MRHPDR7624TN  MRHPDR7624TN (3 PANEL)	 MRHPDR8024TN (3 PANEL)	 MRHPDR9024TN (3 PANEL)
		 MRHPDR7024TN (3 PANEL)	 MRHPDR7624TN (3 PANEL)	 MRHPDR8024TN (3 PANEL)	 MRHPDR9024TN (3 PANEL)
		 MRHPDR7024TN (3 PANEL)	 MRHPDR7624TN (3 PANEL)	 MRHPDR8024TN (3 PANEL)	 MRHPDR9024TN (3 PANEL)

Standard Colonial Grille Pattern

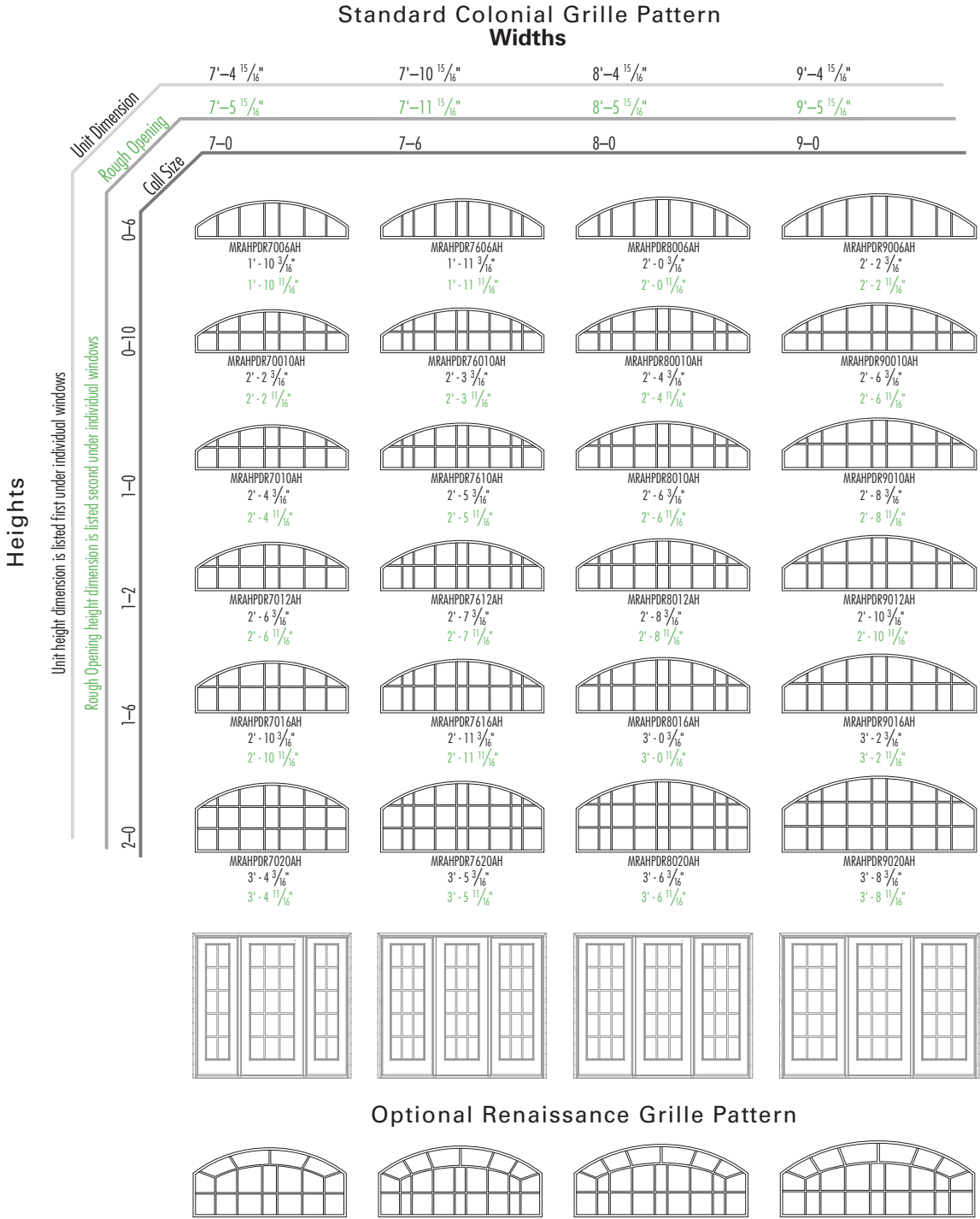
Widths

Unit Dimension Rough Opening Call Size	Widths				
	5'-10 15/16"	6'-0 15/16"	6'-4 15/16"	6'-10 15/16"	7'-0 15/16"
	5'-11 15/16"	6'-1 15/16"	6'-5 15/16"	6'-11 15/16"	7'-1 15/16"
	5-6	5-8	6-0	6-6	6-8
Heights Unit height dimension is listed first under individual windows Rough Opening height dimension is listed second under individual windows	 MRAHPDR5606AH 1'-7 3/16" 1'-7 11/16"	 MRAHPDR5806AH 1'-7 9/16" 1'-8 1/16"	 MRAHPDR6006AH 1'-8 3/16" 1'-8 11/16"	 MRAHPDR6606AH 1'-9 3/16" 1'-9 11/16"	 MRAHPDR6806AH 1'-9 9/16" 1'-10 1/16"
	 MRAHPDR5610AH 1'-11 3/16" 1'-11 11/16"	 MRAHPDR5810AH 1'-11 9/16" 2'-0 1/16"	 MRAHPDR6010AH 2'-0 3/16" 2'-0 11/16"	 MRAHPDR6610AH 2'-1 3/16" 2'-1 11/16"	 MRAHPDR6810AH 2'-1 9/16" 2'-2 1/16"
	 MRAHPDR5610AH 2'-1 3/16" 2'-1 11/16"	 MRAHPDR5810AH 2'-1 9/16" 2'-2 1/16"	 MRAHPDR6010AH 2'-2 3/16" 2'-2 11/16"	 MRAHPDR6610AH 2'-3 3/16" 2'-3 11/16"	 MRAHPDR6810AH 2'-3 9/16" 2'-4 1/16"
	 MRAHPDR5612AH 2'-3 3/16" 2'-3 11/16"	 MRAHPDR5812AH 2'-3 9/16" 2'-4 1/16"	 MRAHPDR6012AH 2'-4 3/16" 2'-4 11/16"	 MRAHPDR6612AH 2'-5 3/16" 2'-5 11/16"	 MRAHPDR6812AH 2'-5 9/16" 2'-6 1/16"
	 MRAHPDR5616AH 2'-7 3/16" 2'-7 11/16"	 MRAHPDR5816AH 2'-7 9/16" 2'-8 1/16"	 MRAHPDR6016AH 2'-8 3/16" 2'-8 11/16"	 MRAHPDR6616AH 2'-9 3/16" 2'-9 11/16"	 MRAHPDR6816AH 2'-9 9/16" 2'-10 1/16"
	 MRAHPDR5620AH 3'-1 3/16" 3'-1 11/16"	 MRAHPDR5820AH 3'-1 9/16" 3'-2 1/16"	 MRAHPDR6020AH 3'-2 3/16" 3'-2 11/16"	 MRAHPDR6620AH 3'-3 3/16" 3'-3 11/16"	 MRAHPDR6820AH 3'-3 9/16" 3'-4 1/16"

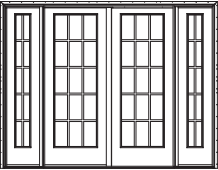
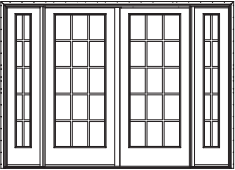
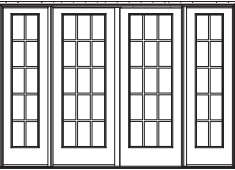
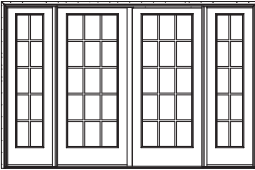
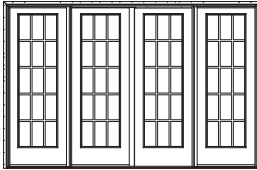
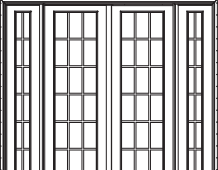
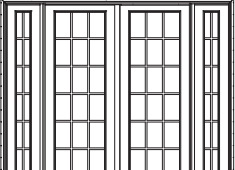
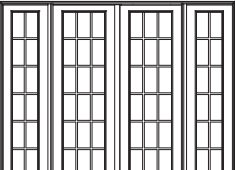
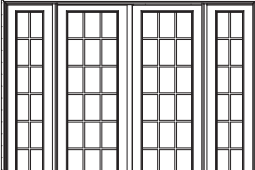
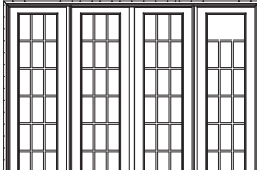
Optional Renaissance Grille Pattern

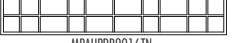
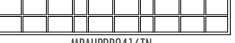
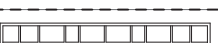
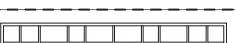
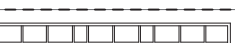
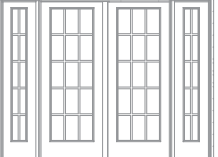
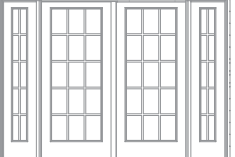
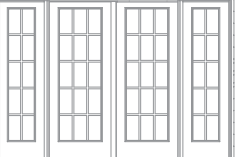
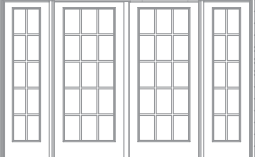


Hinged Doors – 3-Panel Arch Transom Units

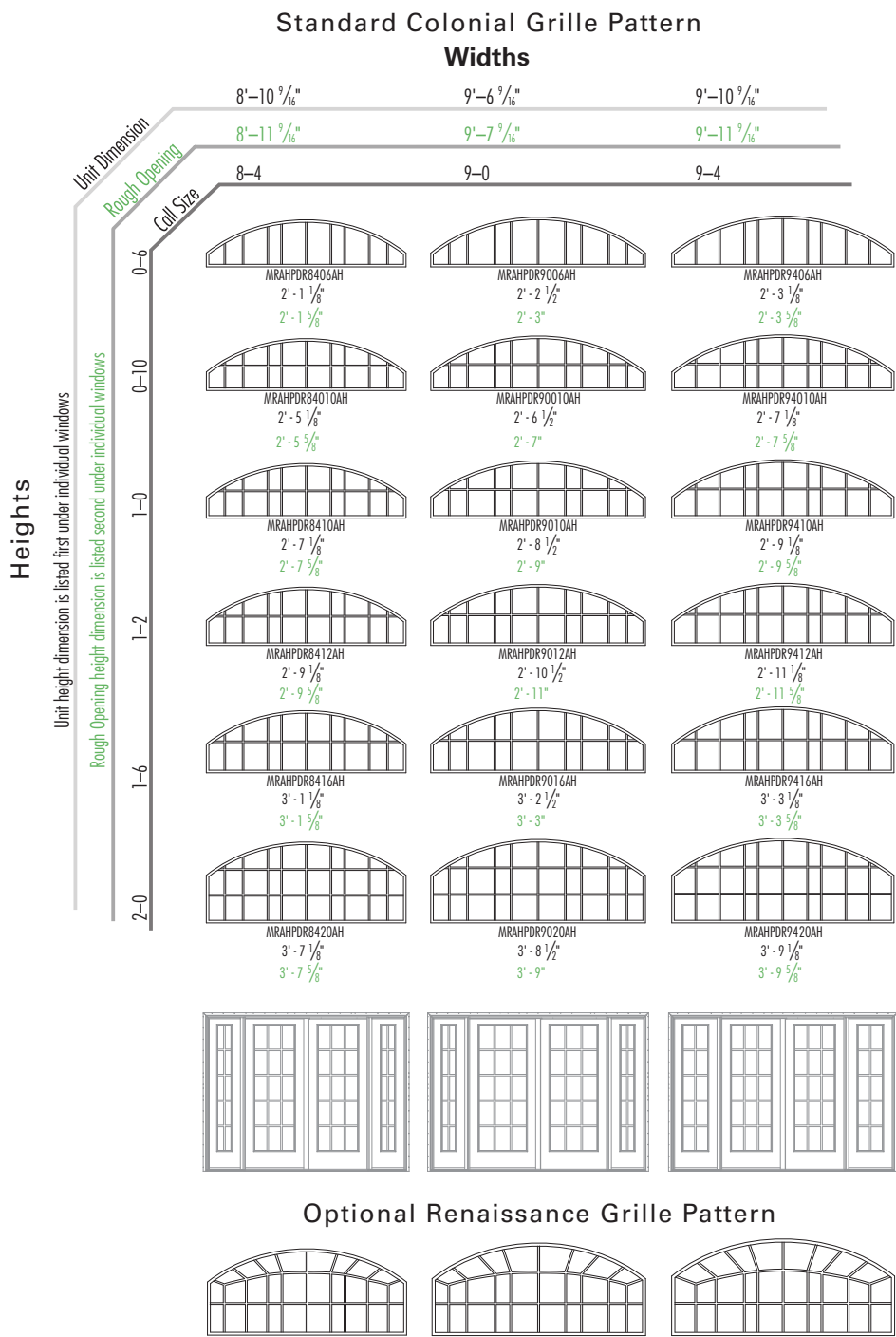


Hinged Doors – 4-Panel Operating & Transom Units

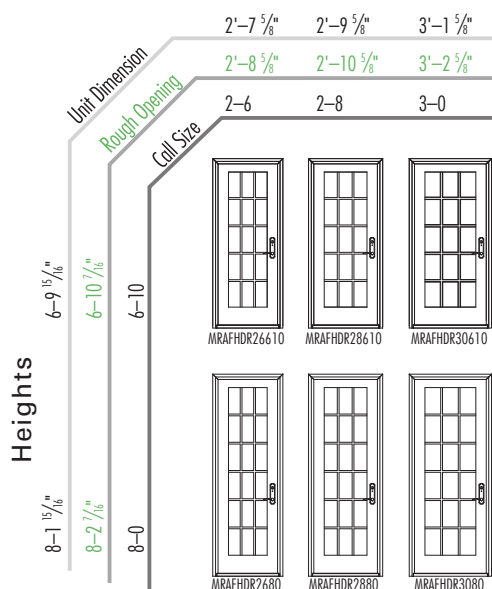
		Widths				
		8'-10 ⁹ / ₁₆ "	9'-6 ⁹ / ₁₆ "	9'-10 ⁹ / ₁₆ "	10'-6 ⁹ / ₁₆ "	10'-6 ⁹ / ₁₆ "
		8'-11 ⁹ / ₁₆ "	9'-7 ⁹ / ₁₆ "	9'-11 ⁹ / ₁₆ "	10'-7 ⁹ / ₁₆ "	10'-7 ⁹ / ₁₆ "
		8-4	9-0	9-4	10-0/20	10-0
Heights	Unit Dimension					
	Rough Opening					
	Call Size					
6-10 ¹¹ / ₁₆ "	6-10 ³ / ₁₆ "					
		MRAPDR84610	MRAPDR90610	MRAPDR94610	MRAPDR100/20S610	MRAPDR100610
8-2 ¹¹ / ₁₆ "	8-3 ³ / ₁₆ "					
		MRAPDR8480	MRAPDR9080	MRAPDR9480	MRAPDR100/20S80	MRAPDR10080

		Widths				
		8'-10 ⁹ / ₁₆ "	9'-6 ⁹ / ₁₆ "	9'-10 ⁹ / ₁₆ "	10'-6 ⁹ / ₁₆ "	10'-6 ⁹ / ₁₆ "
		8'-11 ⁹ / ₁₆ "	9'-7 ⁹ / ₁₆ "	9'-11 ⁹ / ₁₆ "	10'-7 ⁹ / ₁₆ "	10'-7 ⁹ / ₁₆ "
		8-4	9-0	9-4	10-0/20	10-0
Heights	Unit Dimension					
	Rough Opening					
	Call Size					
	1-1 ³ / ₈ "					
		MRAPDR8410TN (4 PANEL)	MRAPDR9010TN (4 PANEL)	MRAPDR9410TN (4 PANEL)	MRAPDR100/20S10TN (4 PANEL)	MRAPDR10010TN (4 PANEL)
	1-3 ³ / ₈ "					
		MRAPDR8412TN (4 PANEL)	MRAPDR9012TN (4 PANEL)	MRAPDR9412TN (4 PANEL)	MRAPDR100/20S12TN (4 PANEL)	MRAPDR10012TN (4 PANEL)
	1-7 ³ / ₈ "					
		MRAPDR8416TN	MRAPDR9016TN	MRAPDR9416TN		
	1-7 ⁷ / ₈ "					
		MRAPDR8416TN (4 PANEL)	MRAPDR9016TN (4 PANEL)	MRAPDR9416TN (4 PANEL)	MRAPDR100/20S16TN (4 PANEL)	MRAPDR10016TN (4 PANEL)
	2-1 ³ / ₈ "					
		MRAPDR8420TN	MRAPDR9020TN	MRAPDR9420TN		
	2-1 ⁷ / ₈ "					
		MRAPDR8420TN (4 PANEL)	MRAPDR9020TN (4 PANEL)	MRAPDR9420TN (4 PANEL)	MRAPDR100/20S20TN (4 PANEL)	MRAPDR10020TN (4 PANEL)
	2-5 ³ / ₈ "					
		MRAPDR8424TN	MRAPDR9024TN	MRAPDR9424TN		
	2-5 ⁷ / ₈ "					
		MRAPDR8424TN (4 PANEL)	MRAPDR9024TN (4 PANEL)	MRAPDR9424TN (4 PANEL)	MRAPDR100/20S24TN (4 PANEL)	MRAPDR10024TN (4 PANEL)
						

Hinged Doors – 4-Panel Arch Transom Units

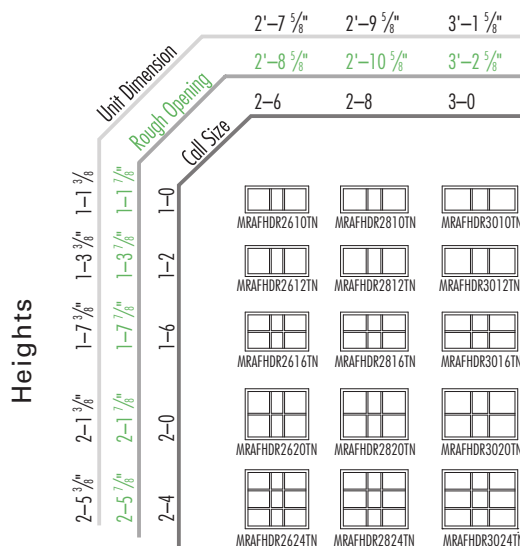
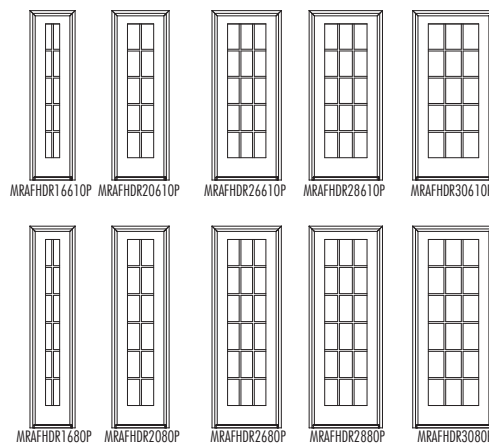


French Outswing Doors – Single Panel Operating, Fixed & Transom Units



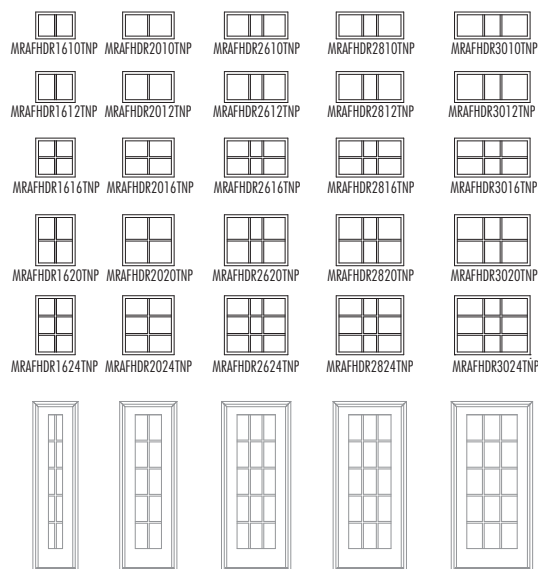
Widths

1'-7 ⁹ / ₁₆ "	2'-1 ⁹ / ₁₆ "	2'-7 ⁹ / ₁₆ "	2'-9 ⁹ / ₁₆ "	3'-1 ⁹ / ₁₆ "
1'-8 ⁹ / ₁₆ "	2'-2 ⁹ / ₁₆ "	2'-8 ⁹ / ₁₆ "	2'-10 ⁹ / ₁₆ "	3'-2 ⁹ / ₁₆ "
1-6	2-0	2-6	2-8	3-0



Widths

1'-7 ⁹ / ₁₆ "	2'-1 ⁹ / ₁₆ "	2'-7 ⁹ / ₁₆ "	2'-9 ⁹ / ₁₆ "	3'-1 ⁹ / ₁₆ "
1'-8 ⁹ / ₁₆ "	2'-2 ⁹ / ₁₆ "	2'-8 ⁹ / ₁₆ "	2'-10 ⁹ / ₁₆ "	3'-2 ⁹ / ₁₆ "
1-6	2-0	2-6	2-8	3-0



French Outswing Doors – Single Panel Arch Transom Units 2- Panel Operating, Elliptical & Circle Head Units

Heights

Unit height dimension is listed first under individual windows

Rough Opening height dimension is listed second under individual windows

Standard Colonial Grille Pattern

Widths

1'-7 ³ / ₁₆ "	2'-1 ⁹ / ₁₆ "	2'-7 ⁹ / ₁₆ "	2'-9 ⁹ / ₁₆ "	3'-1 ⁹ / ₁₆ "
1'-8 ³ / ₁₆ "	2'-2 ⁹ / ₁₆ "	2'-8 ⁹ / ₁₆ "	2'-10 ⁹ / ₁₆ "	3'-2 ⁹ / ₁₆ "
1-6	2-0	2-6	2-8	3-0

0'-6	MRAFHDR1606AHTN 0'-10 ⁵ / ₈ " 0'-11 ¹ / ₈ "	MRAFHDR2006AHTN 0'-11 ⁵ / ₈ " 1'-0 ¹ / ₈ "	MRAFHDR2606AHTN 1'-0 ⁵ / ₈ " 1'-1 ¹ / ₈ "	MRAFHDR2806AHTN 1'-1 ¹ / ₈ " 1'-1 ¹ / ₂ "	MRAFHDR3006AHTN 1'-1 ¹ / ₈ " 1'-2 ¹ / ₈ "
0'-10	MRAFHDR16010AHTN 1'-2 ⁵ / ₈ " 1'-3 ¹ / ₈ "	MRAFHDR20010AHTN 1'-3 ⁵ / ₈ " 1'-4 ¹ / ₈ "	MRAFHDR26010AHTN 1'-4 ⁵ / ₈ " 1'-5 ¹ / ₈ "	MRAFHDR28010AHTN 1'-5 ⁵ / ₈ " 1'-5 ¹ / ₂ "	MRAFHDR30010AHTN 1'-5 ⁵ / ₈ " 1'-6 ¹ / ₈ "
1'-0	MRAFHDR1610AHTN 1'-4 ⁵ / ₈ " 1'-5 ¹ / ₈ "	MRAFHDR2010AHTN 1'-5 ⁵ / ₈ " 1'-6 ¹ / ₈ "	MRAFHDR2610AHTN 1'-6 ⁵ / ₈ " 1'-7 ¹ / ₈ "	MRAFHDR2810AHTN 1'-7 ⁵ / ₈ " 1'-7 ¹ / ₂ "	MRAFHDR3010AHTN 1'-7 ⁵ / ₈ " 1'-8 ¹ / ₈ "
1'-2	MRAFHDR1612AHTN 1'-6 ⁵ / ₈ " 1'-7 ¹ / ₈ "	MRAFHDR2012AHTN 1'-7 ⁵ / ₈ " 1'-8 ¹ / ₈ "	MRAFHDR2612AHTN 1'-8 ⁵ / ₈ " 1'-9 ¹ / ₈ "	MRAFHDR2812AHTN 1'-9 ⁵ / ₈ " 1'-9 ¹ / ₂ "	MRAFHDR3012AHTN 1'-9 ⁵ / ₈ " 1'-10 ¹ / ₈ "
1'-6	MRAFHDR1616AHTN 1'-10 ⁵ / ₈ " 1'-11 ¹ / ₈ "	MRAFHDR2016AHTN 1'-11 ⁵ / ₈ " 2'-0 ¹ / ₈ "	MRAFHDR2616AHTN 2'-0 ⁵ / ₈ " 2'-1 ¹ / ₈ "	MRAFHDR2816AHTN 2'-1 ⁵ / ₈ " 2'-1 ¹ / ₂ "	MRAFHDR3016AHTN 2'-1 ⁵ / ₈ " 2'-2 ¹ / ₈ "
2'-0	MRAFHDR1620AHTN 2'-4 ⁵ / ₈ " 2'-5 ¹ / ₈ "	MRAFHDR2020AHTN 2'-5 ⁵ / ₈ " 2'-6 ¹ / ₈ "	MRAFHDR2620AHTN 2'-6 ⁵ / ₈ " 2'-7 ¹ / ₈ "	MRAFHDR2820AHTN 2'-7 ⁵ / ₈ " 2'-7 ¹ / ₂ "	MRAFHDR3020AHTN 2'-7 ⁵ / ₈ " 2'-8 ¹ / ₈ "

Optional Renaissance Grille Pattern



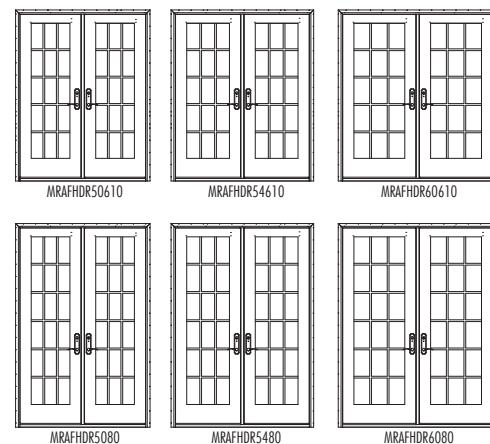
Heights

Unit height dimension is listed first under individual windows

Rough Opening height dimension is listed second under individual windows

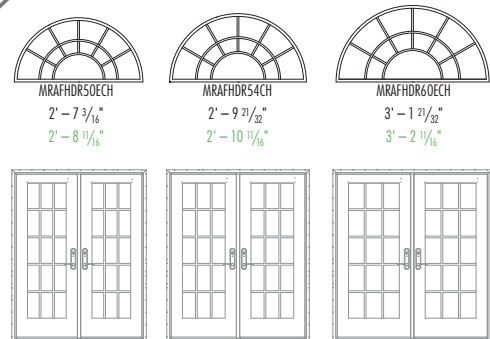
Widths

5'-2 ³ / ₈ "	5'-6 ³ / ₈ "	6'-2 ³ / ₈ "
5'-3 ³ / ₈ "	5'-7 ³ / ₈ "	6'-3 ³ / ₈ "
5-0	5-4	6-0



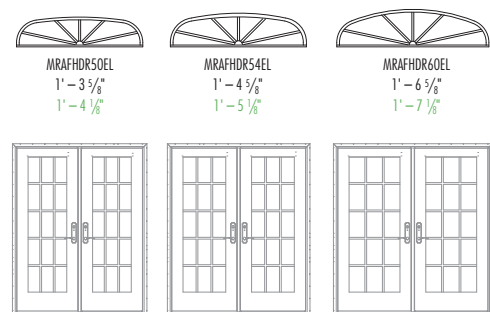
Widths

5'-2 ³ / ₈ "	5'-6 ³ / ₈ "	6'-2 ³ / ₈ "
5'-3 ³ / ₈ "	5'-7 ³ / ₈ "	6'-3 ³ / ₈ "
5-0	5-4	6-0

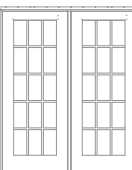
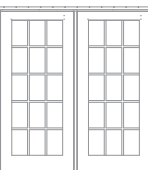


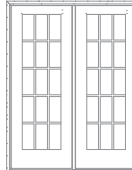
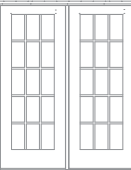
Widths

5'-2 ³ / ₈ "	5'-6 ³ / ₈ "	6'-2 ³ / ₈ "
5'-3 ³ / ₈ "	5'-7 ³ / ₈ "	6'-3 ³ / ₈ "
5-0	5-4	6-0



French Outswing Doors – 2- Panel Transom & Arch Transom Units

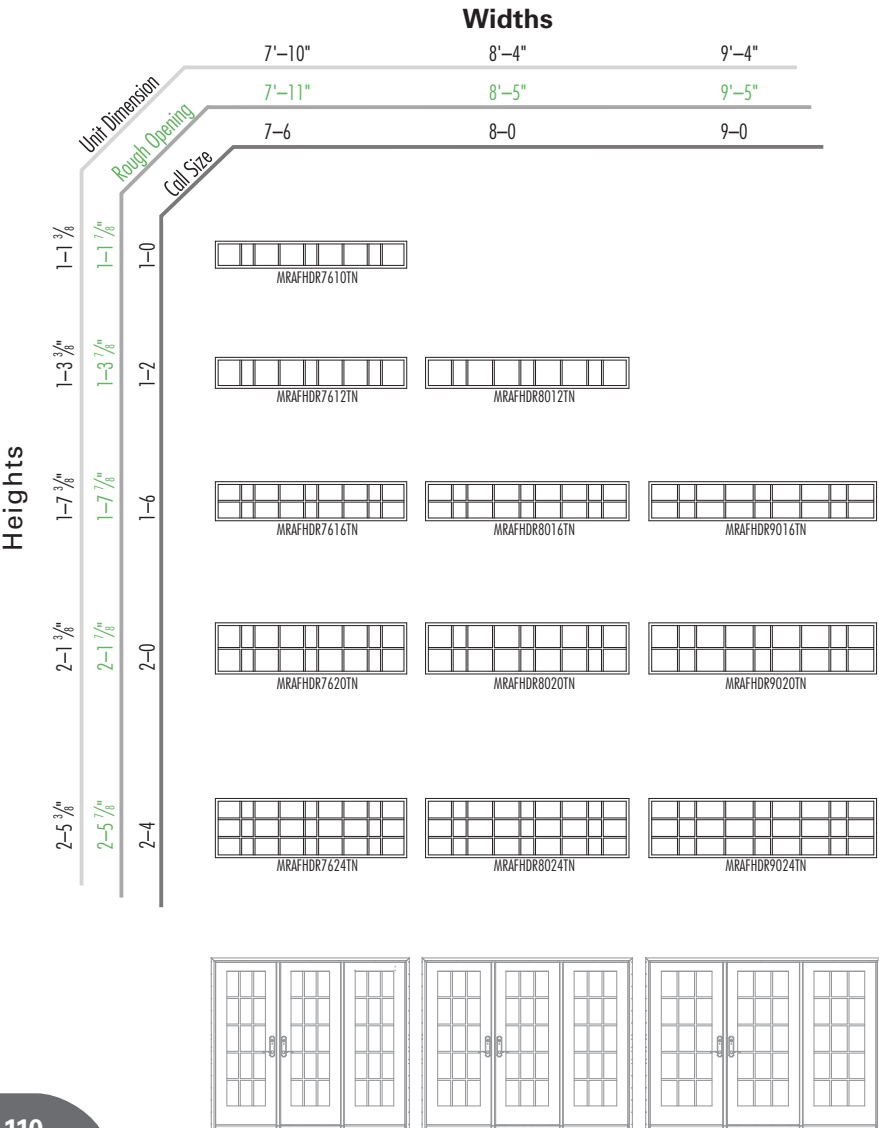
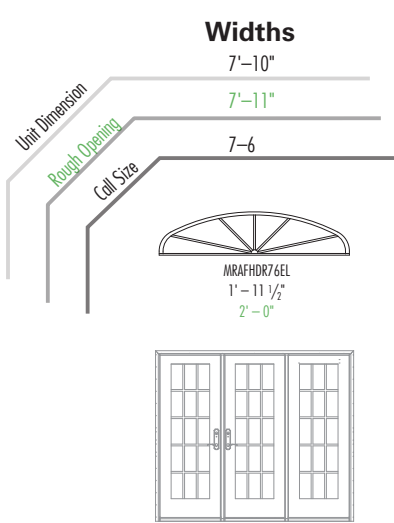
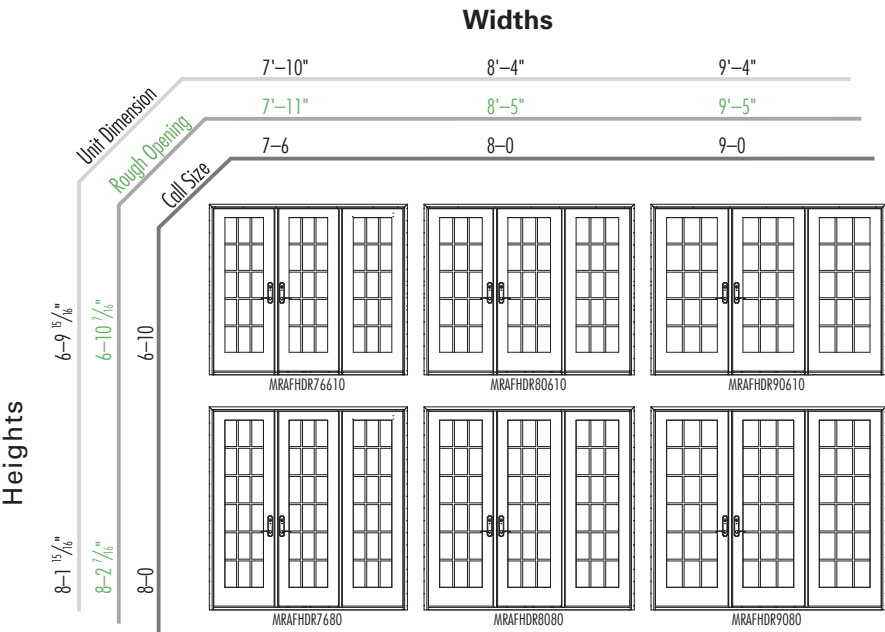
		Widths		
		5'-2 3/8"	5'-6 3/8"	6'-2 3/8"
		5'-3 3/8"	5'-7 3/8"	6'-3 3/8"
		5-0	5-4	6-0
Heights	Unit Dimension			
	Rough Opening			
	Call Size			
	1-1 3/8"	 MRAFHDR5010TN	 MRAFHDR5410TN	 MRAFHDR6010TN
	1-3 3/8"	 MRAFHDR5012TN	 MRAFHDR5412TN	 MRAFHDR6012TN
	1-7 3/8"	 MRAFHDR5016TN	 MRAFHDR5416TN	 MRAFHDR6016TN
	2-1 3/8"	 MRAFHDR5020TN	 MRAFHDR5420TN	 MRAFHDR6020TN
	2-5 3/8"	 MRAFHDR5024TN	 MRAFHDR5424TN	 MRAFHDR6024TN
				

		Standard Colonial Grille Pattern Widths		
		5'-2 3/8"	5'-6 3/8"	6'-2 3/8"
		5'-3 3/8"	5'-7 3/8"	6'-3 3/8"
		5-0	5-4	6-0
Heights	Unit Dimension			
	Rough Opening			
	Call Size			
	0-6"	 MRAFHDR5006AHTN 1'-5 3/4" 1'-6 1/4"	 MRAFHDR5406AHTN 1'-6 7/16" 1'-6 15/16"	 MRAFHDR6006AH 1'-7 3/4" 1'-8 1/4"
	0-10"	 MRAFHDR5010AHTN 1'-9 3/4" 1'-10 1/4"	 MRAFHDR5410AHTN 1'-10 1/16" 1'-10 15/16"	 MRAFHDR6010AH 1'-11 3/4" 2'-0 1/4"
	1-0"	 MRAFHDR5010AHTN 1'-11 3/4" 2'-0 1/4"	 MRAFHDR5410AHTN 2'-0 1/16" 2'-0 15/16"	 MRAFHDR6010AH 2'-1 3/4" 2'-2 1/4"
	1-2"	 MRAFHDR5012AHTN 2'-1 3/4" 2'-2 1/4"	 MRAFHDR5412AHTN 2'-2 1/16" 2'-2 15/16"	 MRAFHDR6012AH 2'-1 3/4" 2'-4 1/4"
	1-6"	 MRAFHDR5016AHTN 2'-5 3/4" 2'-6 1/4"	 MRAFHDR5416AHTN 2'-6 1/16" 2'-6 15/16"	 MRAFHDR6016AH 2'-7 3/4" 2'-8 1/4"
	2-0"	 MRAFHDR5020AHTN 2'-11 3/4" 3'-0 1/4"	 MRAFHDR5420AHTN 3'-0 1/16" 3'-0 15/16"	 MRAFHDR6020AH 3'-1 3/4" 3'-2 1/4"
				

Optional Renaissance Grille Pattern

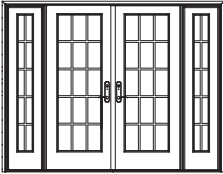
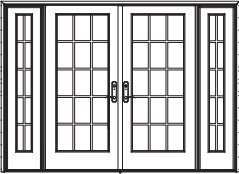
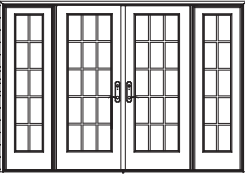
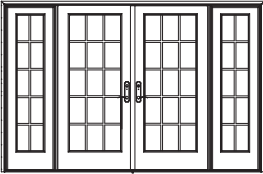
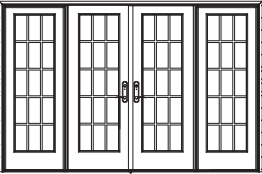
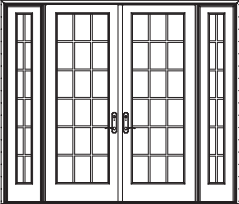
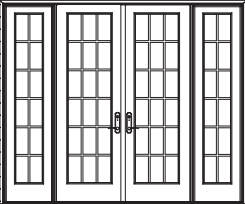
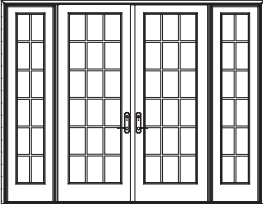
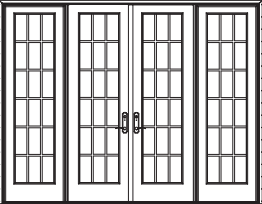


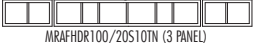
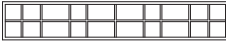
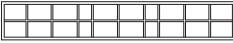
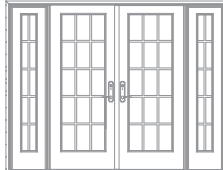
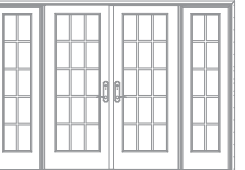
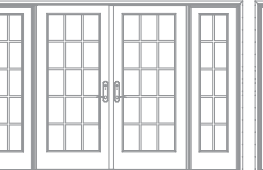
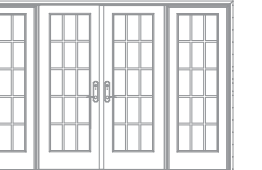
French Outswing Doors – 3- Panel Operating, Elliptical & Transom Units

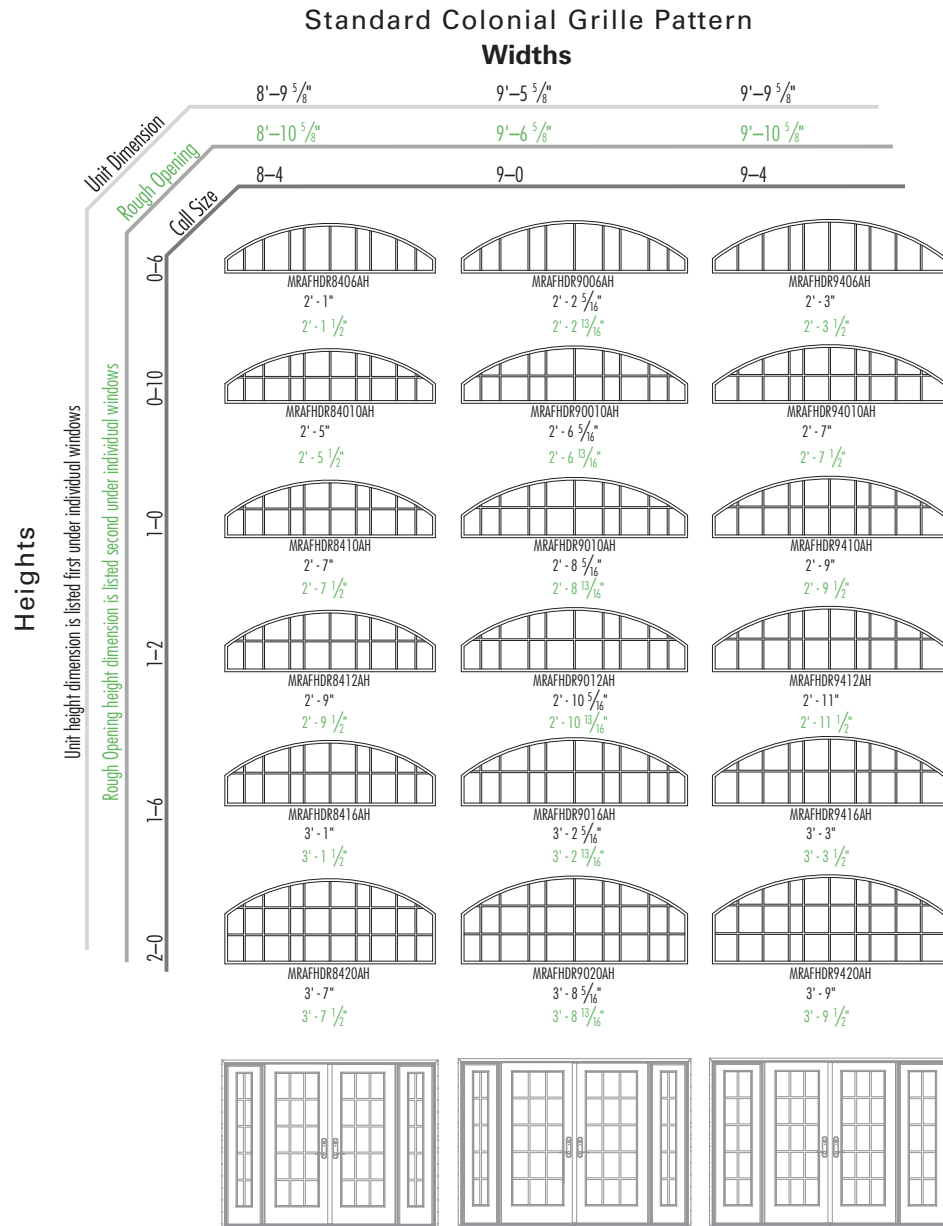




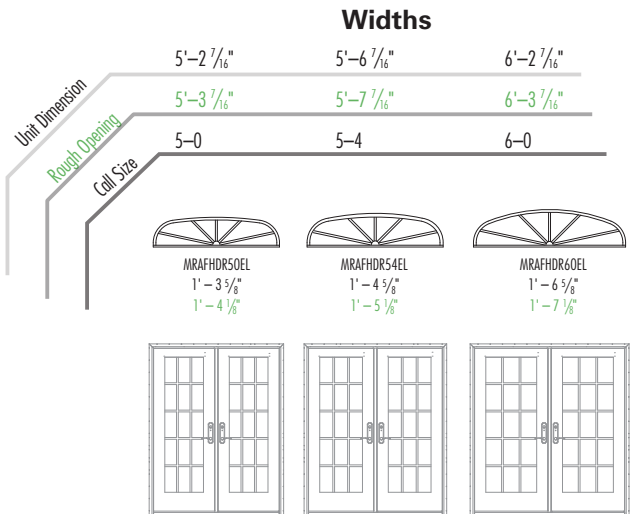
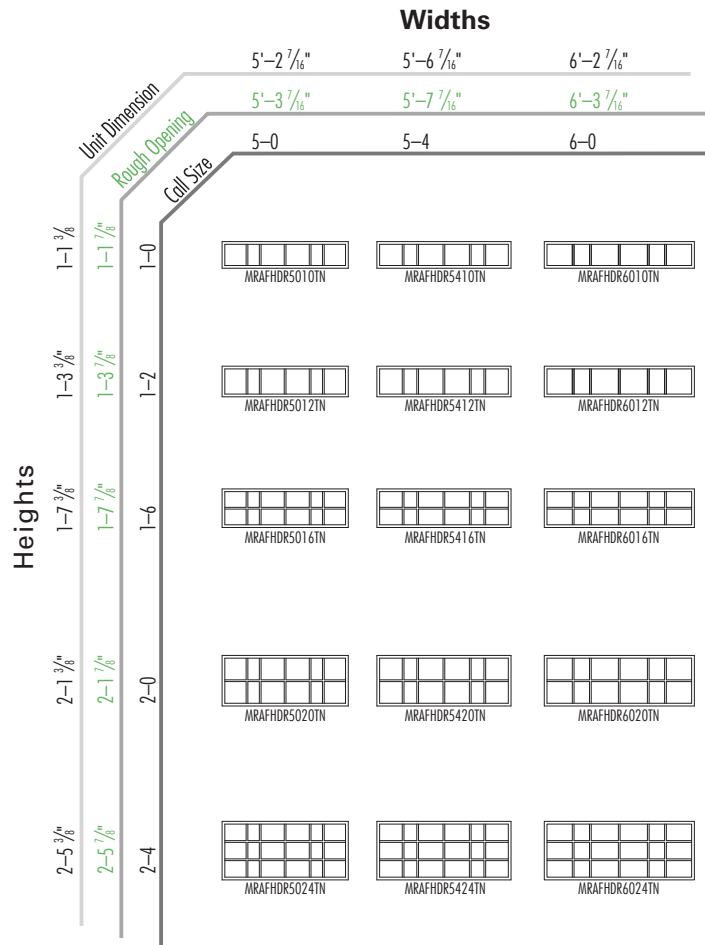
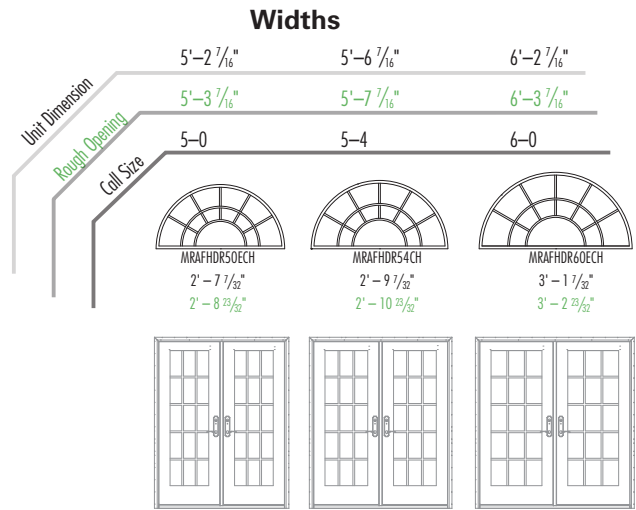
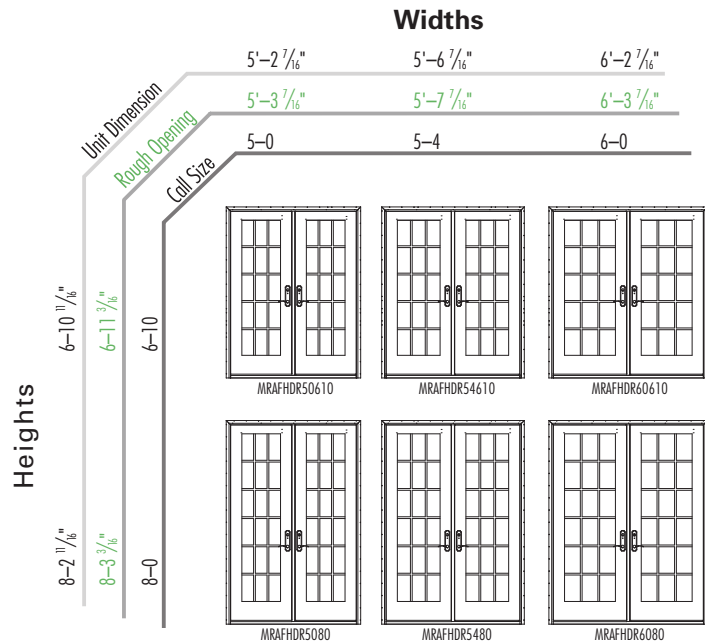
French Outswing Doors – 4- Panel Operating & Transom Units

		Widths				
Heights	Unit Dimension Rough Opening Call Size	8'-9 5/8"	9'-5 5/8"	9'-9 5/8"	10'-5 5/8"	10'-5 5/8"
		8'-10 5/8"	9'-6 5/8"	9'-10 5/8"	10'-6 5/8"	10'-6 5/8"
		8-4	9-0	9-4	10-0/20	10-0
6-9 15/16"	6-10 7/8"					
8-1 15/16"	8-2 7/8"					

		Widths				
Heights	Unit Dimension Rough Opening Call Size	8'-9 5/8"	9'-5 5/8"	9'-9 5/8"	10'-5 5/8"	10'-5 5/8"
		8'-10 5/8"	9'-6 5/8"	9'-10 5/8"	10'-6 5/8"	10'-6 5/8"
		8-4	9-0	9-4	10-0/20	10-0
1-1 3/8"	1-1 1/8"					
1-3 3/8"	1-3 1/8"					
1-7 3/8"	1-7 1/8"					
2-1 3/8"	2-1 1/8"					
2-5 3/8"	2-5 1/8"					
						



French Inswing Doors – 2- Panel Operating, Transoms, Elliptical & Circle Head Units

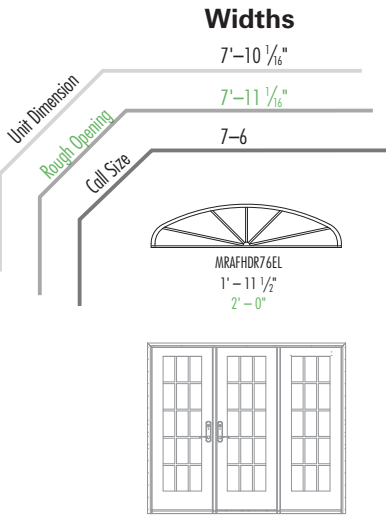
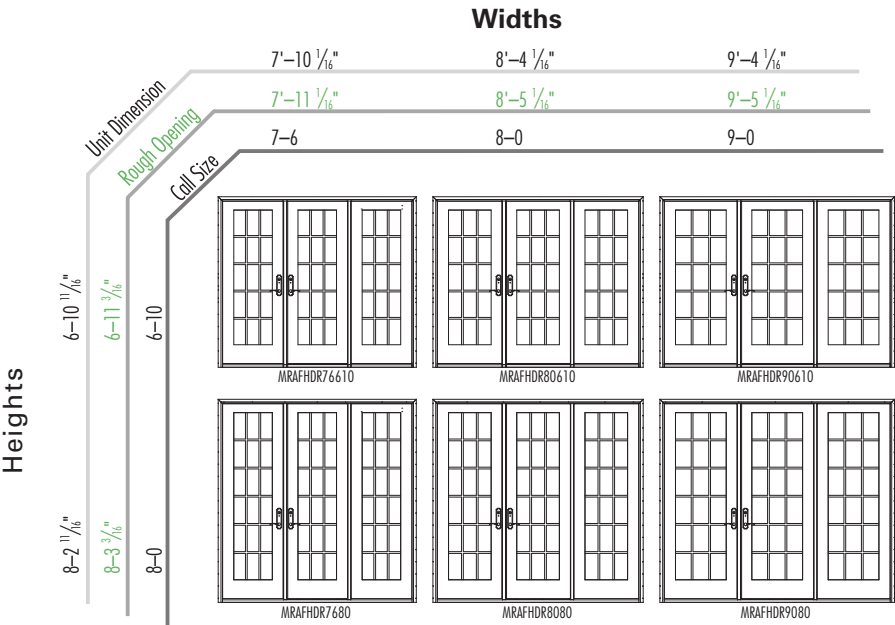


		Standard Colonial Grille Pattern		
		Widths		
Heights	Unit Dimension	5'-2 7/16"	5'-6 7/16"	6'-2 7/16"
	Rough Opening	5'-3 7/16"	5'-7 7/16"	6'-3 7/16"
	Call Size	5-0	5-4	6-0
	Unit height dimension is listed first under individual windows Rough Opening height dimension is listed second under individual windows			
0-6		 MRAFHDR5006AHTN 1'-5 3/4" 1'-6 1/4"	 MRAFHDR5406AHTN 1'-6 7/16" 1'-6 15/16"	 MRAFHDR6006AH 1'-7 3/4" 1'-8 1/4"
0-10		 MRAFHDR5010AHTN 1'-9 3/4" 1'-10 1/4"	 MRAFHDR5410AHTN 1'-10 7/16" 1'-10 15/16"	 MRAFHDR6010AH 1'-11 3/4" 2'-0 1/4"
1-0		 MRAFHDR5010AHTN 1'-11 3/4" 2'-0 1/4"	 MRAFHDR5410AHTN 2'-0 7/16" 2'-0 15/16"	 MRAFHDR6010AH 2'-1 3/4" 2'-2 1/4"
1-2		 MRAFHDR5012AHTN 2'-1 3/4" 2'-2 1/4"	 MRAFHDR5412AHTN 2'-2 7/16" 2'-2 15/16"	 MRAFHDR6012AH 2'-3 3/4" 2'-4 1/4"
1-6		 MRAFHDR5016AHTN 2'-5 3/4" 2'-6 1/4"	 MRAFHDR5416AHTN 2'-6 7/16" 2'-6 15/16"	 MRAFHDR6016AH 2'-7 3/4" 2'-8 1/4"
2-0		 MRAFHDR5020AHTN 2'-11 3/4" 3'-0 1/4"	 MRAFHDR5420AHTN 3'-0 7/16" 3'-0 15/16"	 MRAFHDR6020AH 3'-1 3/4" 3'-2 1/4"

Optional Renaissance Grille Pattern



French Inswing Doors – 3- Panel Operating, Elliptical & Transom Units



French Inswing Doors – 3- Panel Arch Transom Units

Standard Colonial Grille Pattern

Widths

Heights

Unit height dimension is listed first under individual windows

Rough Opening height dimension is listed second under individual windows

Unit Dimension
Rough Opening
Call Size

7'-10 1/16"	8'-4 1/16"	9'-4 1/16"
7'-11 1/16"	8'-5 1/16"	9'-5 1/16"
7-6	8-0	9-0

0-6
0-10
1-0
1-2
1-6
2-0

MRAFHDR7606AH
1' - 11 1/16"
1' - 11 3/16"

MRAFHDR8006AH
2' - 0 1/16"
2' - 0 9/16"

MRAFHDR9006AH
2' - 2 1/16"
2' - 2 9/16"

MRAFHDR76010AH
2' - 3 1/16"
2' - 3 9/16"

MRAFHDR80010AH
2' - 4 1/16"
2' - 4 9/16"

MRAFHDR90010AH
2' - 6 1/16"
2' - 6 9/16"

MRAFHDR7610AH
2' - 5 1/16"
2' - 5 9/16"

MRAFHDR8010AH
2' - 6 1/16"
2' - 6 9/16"

MRAFHDR9010AH
2' - 8 1/16"
2' - 8 9/16"

MRAFHDR7612AH
2' - 7 1/16"
2' - 7 9/16"

MRAFHDR8012AH
2' - 8 1/16"
2' - 8 9/16"

MRAFHDR9012AH
2' - 10 1/16"
2' - 10 9/16"

MRAFHDR7616AH
2' - 11 1/16"
2' - 11 9/16"

MRAFHDR8016AH
3' - 0 1/16"
3' - 0 9/16"

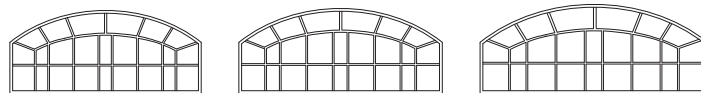
MRAFHDR9016AH
3' - 2 1/16"
3' - 2 9/16"

MRAFHDR7620AH
3' - 5 1/16"
3' - 5 9/16"

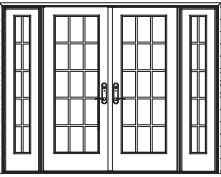
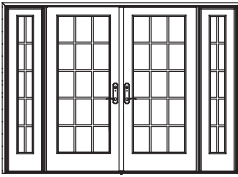
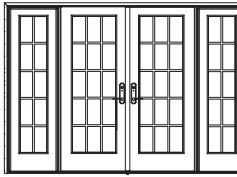
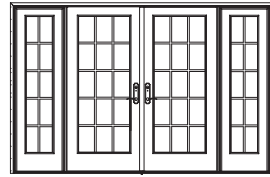
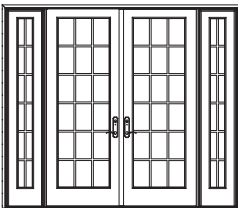
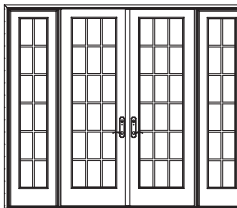
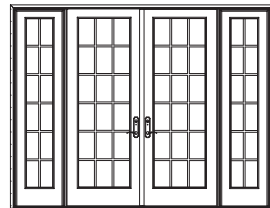
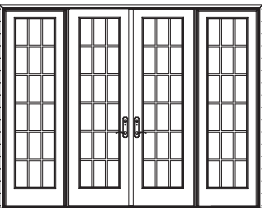
MRAFHDR8020AH
3' - 6 1/16"
3' - 6 9/16"

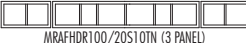
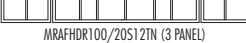
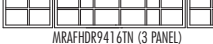
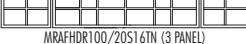
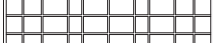
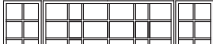
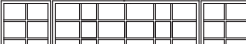
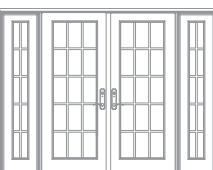
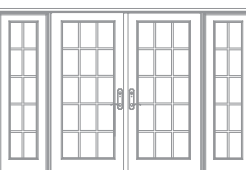
MRAFHDR9020AH
3' - 8 1/16"
3' - 8 9/16"

Optional Renaissance Grille Pattern



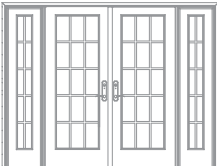
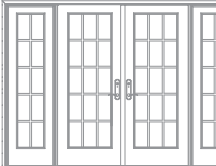
French Inswing Doors – 4-Panel Operating & Transom Units

		Widths				
Heights	Unit Dimension	8'-9 ¹¹ / ₁₆ "	9'-5 ¹¹ / ₁₆ "	9'-9 ¹¹ / ₁₆ "	10'-5 ¹¹ / ₁₆ "	10'-5 ¹¹ / ₁₆ "
	Rough Opening	8'-10 ¹¹ / ₁₆ "	9'-6 ¹¹ / ₁₆ "	9'-10 ¹¹ / ₁₆ "	10'-6 ¹¹ / ₁₆ "	10'-6 ¹¹ / ₁₆ "
	Call Size	8-4	9-0	9-4	10-0/20	10-0
		6-10 ¹¹ / ₁₆ "				
	6-11 ³ / ₁₆ "					
	6-10					
		MRAFHDR84610	MRAFHDR90610	MRAFHDR94610	MRAFHDR100/20S610	MRAFHDR100610
	8-2 ¹¹ / ₁₆ "					
	8-3 ³ / ₁₆ "					
	8-0					
		MRAFHDR8480	MRAFHDR9080	MRAFHDR9480	MRAFHDR100/20S80	MRAFHDR10080

		Widths				
Heights	Unit Dimension	8'-9 ¹¹ / ₁₆ "	9'-5 ¹¹ / ₁₆ "	9'-9 ¹¹ / ₁₆ "	10'-5 ¹¹ / ₁₆ "	10'-5 ¹¹ / ₁₆ "
	Rough Opening	8'-10 ¹¹ / ₁₆ "	9'-6 ¹¹ / ₁₆ "	9'-10 ¹¹ / ₁₆ "	10'-6 ¹¹ / ₁₆ "	10'-6 ¹¹ / ₁₆ "
	Call Size	8-4	9-0	9-4	10-0/20	10-0
		1-1 ³ / ₁₆ "				
	1-1 ¹ / ₁₆ "					
	1-0					
		MRAFHDR8410TN (3 PANEL)	MRAFHDR9010TN (3 PANEL)	MRAFHDR9410TN (3 PANEL)	MRAFHDR100/20S10TN (3 PANEL)	MRAFHDR10010TN (3 PANEL)
	1-3 ³ / ₁₆ "					
	1-3 ¹ / ₁₆ "					
		MRAFHDR8412TN				
	1-2					
		MRAFHDR8412TN (3 PANEL)	MRAFHDR9012TN (3 PANEL)	MRAFHDR9412TN (3 PANEL)	MRAFHDR100/20S12TN (3 PANEL)	MRAFHDR10012TN (3 PANEL)
	1-7 ³ / ₁₆ "					
	1-7 ¹ / ₁₆ "					
		MRAFHDR8416TN	MRAFHDR9016TN	MRAFHDR9416TN		
	1-6					
		MRAFHDR8416TN (3 PANEL)	MRAFHDR9016TN (3 PANEL)	MRAFHDR9416TN (3 PANEL)	MRAFHDR100/20S16TN (3 PANEL)	MRAFHDR10016TN (3 PANEL)
	2-1 ³ / ₁₆ "					
	2-1 ¹ / ₁₆ "					
		MRAFHDR8420TN	MRAFHDR9020TN	MRAFHDR9420TN		
	2-0					
		MRAFHDR8420TN (3 PANEL)	MRAFHDR9020TN (3 PANEL)	MRAFHDR9420TN (3 PANEL)	MRAFHDR100/20S20TN (3 PANEL)	MRAFHDR10020TN (3 PANEL)
	2-5 ³ / ₁₆ "					
	2-5 ¹ / ₁₆ "					
		MRAFHDR8424TN	MRAFHDR9024TN	MRAFHDR9424TN		
	2-4					
		MRAFHDR8424TN (3 PANEL)	MRAFHDR9024TN (3 PANEL)	MRAFHDR9424TN (3 PANEL)	MRAFHDR100/20S24TN (3 PANEL)	MRAFHDR10024TN (3 PANEL)
						

Standard Colonial Grille Pattern

Widths

Unit Dimension		8'-9 ¹¹ / ₁₆ "	9'-5 ¹¹ / ₁₆ "	9'-9 ¹¹ / ₁₆ "
Rough Opening		8'-10 ¹¹ / ₁₆ "	9'-6 ¹¹ / ₁₆ "	9'-10 ¹¹ / ₁₆ "
Call Size		8-4	9-0	9-4
Heights	0-6	 MRAFHDR8406AH 2'-1" 2'-1 ¹ / ₂ "	 MRAFHDR9006AH 2'-2 ⁵ / ₁₆ " 2'-2 ¹³ / ₁₆ "	 MRAFHDR9406AH 2'-3" 2'-3 ¹ / ₂ "
	0-10	 MRAFHDR8410AH 2'-5" 2'-5 ¹ / ₂ "	 MRAFHDR9010AH 2'-6 ⁵ / ₁₆ " 2'-6 ¹³ / ₁₆ "	 MRAFHDR9410AH 2'-7" 2'-7 ¹ / ₂ "
	1-0	 MRAFHDR8410AH 2'-7" 2'-7 ¹ / ₂ "	 MRAFHDR9010AH 2'-8 ⁵ / ₁₆ " 2'-8 ¹³ / ₁₆ "	 MRAFHDR9410AH 2'-9" 2'-9 ¹ / ₂ "
	1-2	 MRAFHDR8412AH 2'-9" 2'-9 ¹ / ₂ "	 MRAFHDR9012AH 2'-10 ⁵ / ₁₆ " 2'-10 ¹³ / ₁₆ "	 MRAFHDR9412AH 2'-11" 2'-11 ¹ / ₂ "
	1-6	 MRAFHDR8416AH 3'-1" 3'-1 ¹ / ₂ "	 MRAFHDR9016AH 3'-2 ⁵ / ₁₆ " 3'-2 ¹³ / ₁₆ "	 MRAFHDR9416AH 3'-3" 3'-3 ¹ / ₂ "
	2-0	 MRAFHDR8420AH 3'-7" 3'-7 ¹ / ₂ "	 MRAFHDR9020AH 3'-8 ⁵ / ₁₆ " 3'-8 ¹³ / ₁₆ "	 MRAFHDR9420AH 3'-9" 3'-9 ¹ / ₂ "
				

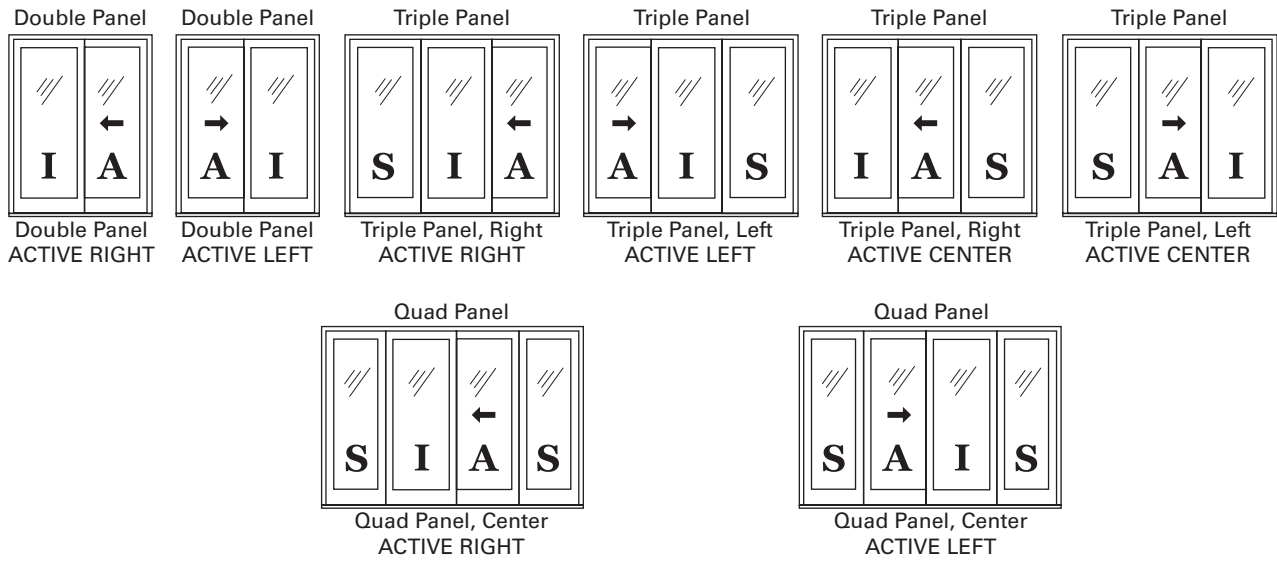
Optional Renaissance Grille Pattern



French Sliding Door – Net Clear & Daylight Opening Dimensions

DOOR OPERATION CONFIGURATION OPTIONS

EXTERIOR VIEW OF DOORS



I=inactive panel

S=Fixed panel

A=active panel.

Door Units

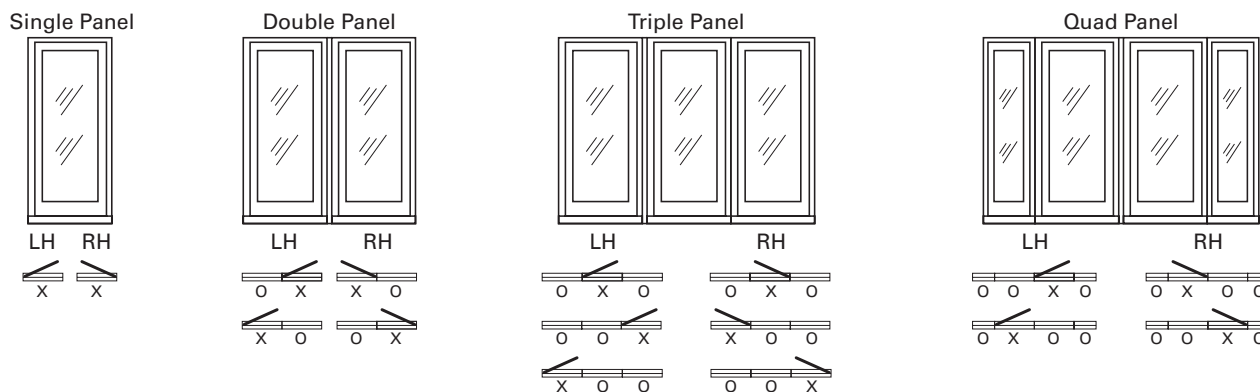
Call Size	Number of Panels	Clear Opening Width	Clear Opening Height	Clear Opening S.F.	Daylight Opening S.F.
MRAFSDR50610	2	22.984	79.359	12.67	17.5
5080	2	22.984	95.359	15.22	21.7
MRAFSDR54610	2	24.984	79.359	13.77	19.4
5480	2	24.984	95.359	16.54	24.0
MRAFSDR60610	2	28.984	79.359	15.97	23.0
6080	2	28.984	95.359	19.19	28.6
MRAFSDR76610	3	22.984	79.359	12.67	26.3
7680	3	22.984	95.359	15.22	32.6
MRAFSDR80610	2	40.984	79.359	22.59	34.1
8080	2	40.984	95.359	27.14	42.3
MRAFSDR80610	3	24.984	79.359	13.77	29.0
8080	3	24.984	95.359	16.54	36.0
MRAFSDR84610	4	24.984	79.359	13.77	25.8
8480	4	24.984	95.359	16.54	32.0
MRAFSDR90610	3	28.984	79.359	15.97	34.6
9080	3	28.984	95.359	19.19	42.9
MRAFSDR90610	4	28.984	79.359	15.97	27.5
9080	4	28.984	95.359	19.19	36.6
MRAFSDR94610	4	24.984	79.359	13.77	31.3
9480	4	24.984	95.359	16.54	38.9
MRAFSDR100610	4	22.984	79.359	12.67	35.0
1080	4	22.984	95.359	15.22	43.5
MRAFSDR100/20610	4	28.984	79.359	15.97	35.0
100/2080	4	28.984	95.359	19.19	43.5

Fixed Panel Units

Call Size	Daylight Opening S.F.
MRAFSDRTN16 610	3.2
80	4.0
MRAFSDRTN20 610	6.0
80	7.4
MRAFSDRTN26610	8.8
80	10.9
MRAFSDRTN28 610	9.7
80	12.0
MRAFSDRTN30 610	11.5
80	14.3
MRAFSDRTN40 610	17.1
80	21.2

DOOR OPERATION CONFIGURATION OPTIONS

EXTERIOR VIEW OF DOORS



O=Fixed panel

X= Operable panel

LH=Left hand swing

RH=Right hand swing

Door Units

Call Size	Number of Panels	Clear Opening Width	Clear Opening Height	Clear Opening S.F.	Daylight Opening S.F.
MRAHPDR 26610	1	29.188	80.063	16.23	8.8
2680	1	29.188	96.063	19.47	10.9
MRAHPDR 28610	1	31.188	80.063	17.34	9.7
2880	1	31.188	96.063	20.81	12.0
MRAHPDR 30610	1	35.188	80.063	19.56	11.5
3080	1	35.188	96.063	23.47	14.3
MRAHPDR 42610	2	31.188	80.063	17.34	12.9
4280	2	31.188	96.063	20.81	16.0
MRAHPDR 46610	2	35.188	80.063	19.56	14.7
4680	2	35.188	96.063	23.47	18.3
MRAHPDR 48610	2	31.188	80.063	17.34	15.7
4880	2	31.188	96.063	20.81	19.4
MRAHPDR 50610	2	35.188	80.063	19.56	17.5
5080	2	35.188	96.063	23.47	21.7
MRAHPDR 50E610	2	29.188	80.063	16.23	17.5
50E80	2	29.188	96.063	19.47	21.7
MRAHPDR 54610	2	31.188	80.063	17.34	19.4
5480	2	31.188	96.063	20.81	24.0
MRAHPDR 56610	3	29.188	80.063	16.23	15.2
5680	3	29.188	96.063	19.47	18.9
MRAHPDR 58610	3	31.188	80.063	17.34	16.1
5880	3	31.188	96.063	20.81	20.0
MRAHPDR 60610	2	35.188	80.063	19.56	23.0
6080	2	35.188	96.063	23.47	28.6

Call Size	Number of Panels	Clear Opening Width	Clear Opening Height	Clear Opening S.F.	Daylight Opening S.F.
MRAHPDR 60610	3	35.188	80.063	19.56	18.0
6080	3	35.188	96.063	23.47	22.3
MRAHPDR 66610	3	29.188	80.063	16.23	20.7
6680	3	29.188	96.063	19.47	25.7
MRAHPDR 68610	3	31.188	80.063	17.34	21.7
6880	3	31.188	96.063	20.81	26.9
MRAHPDR 70610	3	35.188	80.063	19.56	23.5
7080	3	35.188	96.063	23.47	29.2
MRAHPDR 76610	3	29.188	80.063	16.23	26.3
7680	3	29.188	96.063	19.47	32.6
MRAHPDR 80610	3	31.188	80.063	17.34	29.0
8080	3	31.188	96.063	20.81	36.0
MRAHPDR 84610	4	31.188	80.063	17.34	25.8
8480	4	31.188	96.063	20.81	32.0
MRAHPDR 90610	3	35.188	80.063	19.56	34.6
9080	3	35.188	96.063	23.47	42.9
MRAHPDR 90610	4	35.188	80.063	19.56	29.5
9080	4	35.188	96.063	23.47	36.6
MRAHPDR 94610	4	31.188	80.063	17.34	31.3
9480	4	31.188	96.063	20.81	38.9
MRAHPDR 100610	4	29.188	80.063	16.23	35.0
1080	4	29.188	96.063	19.47	43.5
MRAHPDR 100/20610	4	35.188	80.063	19.56	35.0
100/2080	4	35.188	96.063	23.47	43.5

Fixed Panel Units

Call Size	Daylight Opening S.F.
MRAHPDR16 610P	3.2
80	4.0
MRAHPDR20 610P	6.0
80	7.4
MRAHPDR26 610P	8.8
80	10.9

Call Size	Daylight Opening S.F.
MRAHPDR28 610P	9.7
80	12.0
MRAHPDR30 610P	11.5
80	14.3
MRAHPDR50 610P	17.5
80	21.7

Call Size	Daylight Opening S.F.
MRAHPDR54 610P	19.4
80	24.0
MRAHPDR60 610P	23.0
80	28.6
MRAHPDR76 610P	26.3
80	32.6

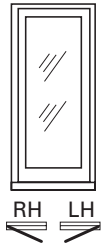
Call Size	Daylight Opening S.F.
MRAHPDR80 610P	29.0
80	36.0
MRAHPDR90 610P	34.6
80	42.9

French Outswing Door – Net Clear & Daylight Opening Dimensions

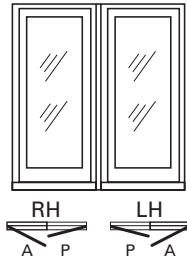
DOOR OPERATION CONFIGURATION OPTIONS

EXTERIOR VIEW OF DOORS

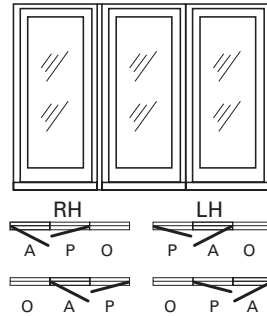
Single Panel



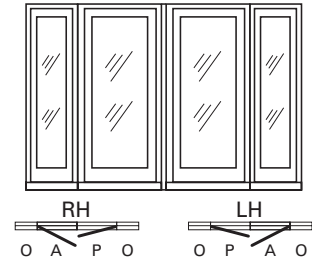
Double Panel



Triple Panel



Quad Panel



A= Active panel

P=Passive panel

O=Fixed panel

LH=Left hand swing

RH=Right hand swing

Door Units

Call Size	Number of Panels	Clear Opening Width	Clear Opening Height	Clear Opening S.F.	Daylight Opening S.F.
MRAFHDR 26610	1	29.188	79.312	16.08	17.5
2680	1	29.188	95.312	19.32	21.7
MRAFHDR 28610	1	31.188	79.312	17.18	19.4
2880	1	31.188	95.312	20.64	24.0
MRAFHDR 30610	1	35.188	79.312	19.38	23.0
3080	1	35.188	95.312	23.29	28.6
MRAFHDR 50610	2	29.188	79.312	16.08	17.5
5080	2	29.188	95.312	19.32	21.7
MRAFHDR 54610	2	31.188	79.312	17.18	19.4
5480	2	31.188	95.312	20.64	24.0
MRAFHDR 60610	2	35.188	79.312	19.38	23.0
6080	2	35.188	95.312	23.29	28.6
MRAFHDR 76610	3	29.188	79.312	16.08	26.3
7680	3	29.188	95.312	19.32	32.6
MRAFHDR80610	3	31.188	79.312	17.18	29.0
8080	3	31.188	95.312	20.64	36.0
MRAFHDR84610	4	31.188	79.312	17.18	26.8
8480	4	31.188	95.312	20.64	32.0
MRAFHDR 90610	3	35.188	79.312	19.38	34.6
9080	3	35.188	95.312	23.29	42.9
MRAFHDR 90610	4	35.188	79.312	19.38	29.5
9080	4	35.188	95.312	23.29	36.6
MRAFHDR94610	4	31.188	79.312	17.18	31.3
9480	4	31.188	95.312	20.64	38.9
MRAFHDR100610	4	29.188	79.312	16.08	35.0
1080	4	29.188	95.312	19.32	43.5
MRAFHDR100/20610	4	35.188	79.312	19.38	35.0
100/2080	4	35.188	95.312	23.29	43.5

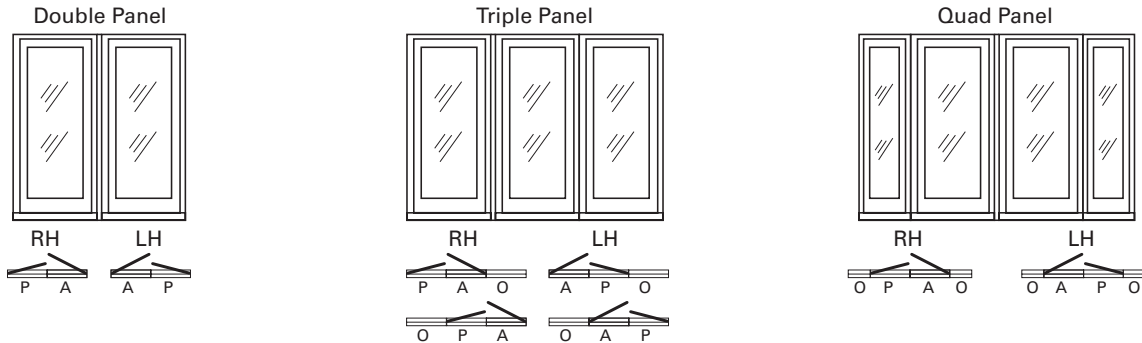
Fixed Panel Units

Call Size	Daylight Opening S.F.
MRFHDPDR16 610P	3.2
80	4.0
MRAFHDR20 610P	6.0
80	7.4
MRAFHDR26 610P	8.8
80	10.9
MRAFHDR28 610P	9.7
80	12.0
MRAFHDR30 610P	11.5
80	14.3
MRAFHDR50 610P	17.5
80	21.7

Call Size	Daylight Opening S.F.
MRAFHDR54 610P	19.4
80	24.0
MRAFHDR60 610P	23.0
80	28.6
MRAFHDR76 610P	26.3
80	32.6
MRAFHDR80 610P	29.0
80	36.0
MRAFHDR90 610P	34.6
80	42.9

DOOR OPERATION CONFIGURATION OPTIONS

EXTERIOR VIEW OF DOORS



A= Active panel **P**=Passive panel **O**=Fixed panel **LH**=Left hand swing **RH**=Right hand swing

Door Units

Call Size	Number of Panels	Clear Opening Width	Clear Opening Height	Clear Opening S.F.	Daylight Opening S.F.
MRAFHDR 50610	2	29.188	80.063	14.23	17.5
5080	2	29.188	96.063	19.47	21.7
MRAFHDR 54610	2	31.188	80.063	17.34	19.4
5480	2	31.188	96.063	20.81	24.0
MRAFHDR 60610	2	35.188	80.063	19.56	23.0
6080	2	35.188	96.063	23.47	28.6
MRAFHDR 76610	3	29.188	80.063	16.23	26.3
7680	3	29.188	96.063	19.47	32.6
MRAFHDR80610	3	31.188	80.063	17.34	29.0
8080	3	31.188	96.063	20.81	36.0
MRAFHDR84610	4	31.188	80.063	17.34	25.8
8480	4	31.188	96.063	20.81	32.0
MRAFHDR 90610	3	35.188	80.063	19.56	34.6
9080	3	35.188	96.063	23.47	42.9
MRAFHDR 90610	4	35.188	80.063	19.56	29.5
9080	4	35.188	96.063	23.47	36.6
MRAFHDR94610	4	31.188	80.063	17.34	31.3
9480	4	31.188	96.063	20.81	38.9
MRAFHDR100610	4	29.188	80.063	19.56	35.0
1080	4	29.188	96.063	23.47	43.5
MRAFHDR100/20610	4	35.188	80.063	16.23	35.0
100/2080	4	35.188	96.063	19.47	43.5

Fixed Panel Units

Call Size	Daylight Opening S.F.	Call Size	Daylight Opening S.F.
MRAFHDR16 610P	3.2	MRAFHDR54 610P	19.4
80	4.0	80	24.0
MRAFHDR20 610P	6.0	MRAFHDR60 610P	23.0
80	7.4	80	28.6
MRAFHDR26 610P	8.8	MRAFHDR76 610P	26.3
80	10.9	80	32.6
MRAFHDR28 610P	9.7	MRAFHDR80 610P	29.0
80	12.0	80	36.0
MRAFHDR30 610P	23.0	MRAFHDR90 610P	34.6
80	28.6	80	42.9
MRAFHDR50 610P	17.5		
80	21.7		

