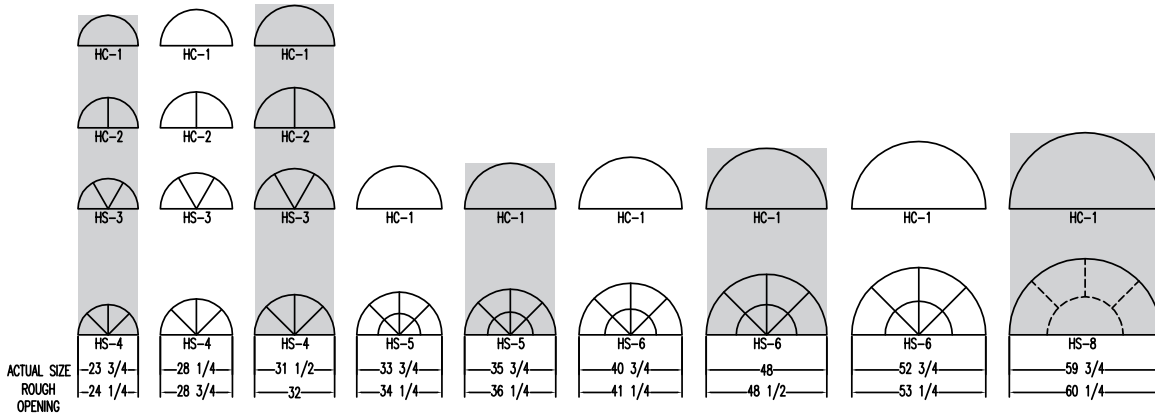
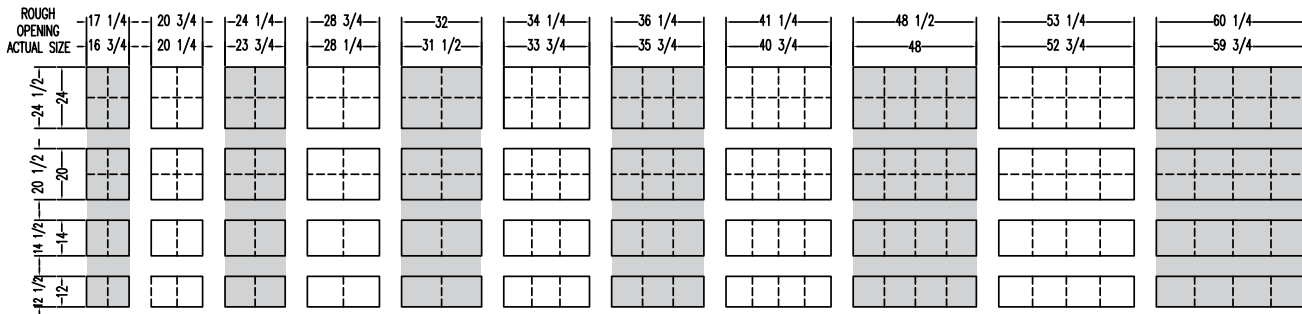


9660/9770 Vinyl Awning and Casements

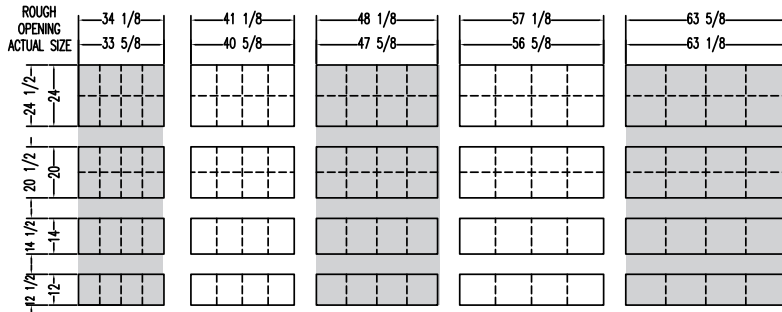
CASEMENT: TRANSOM AND CIRCLE TOP SIZES



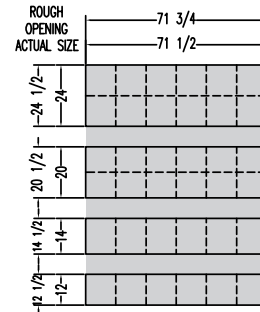
SINGLE TRANSOMS



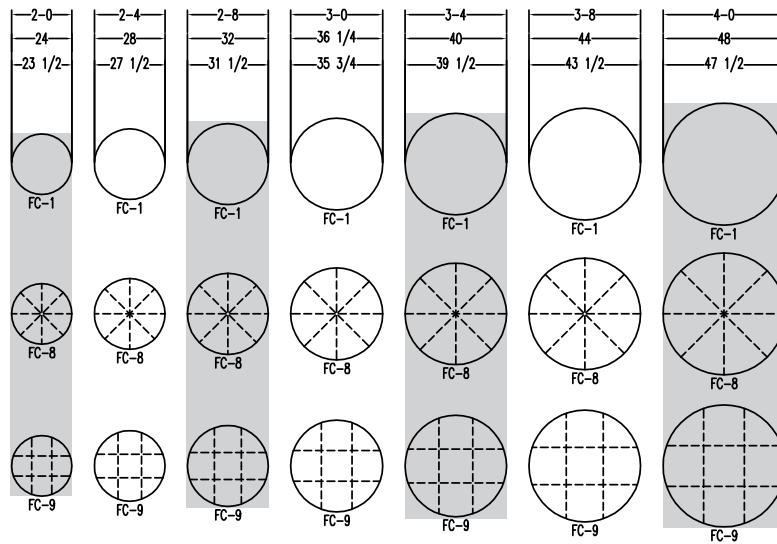
TWIN TRANSOMS



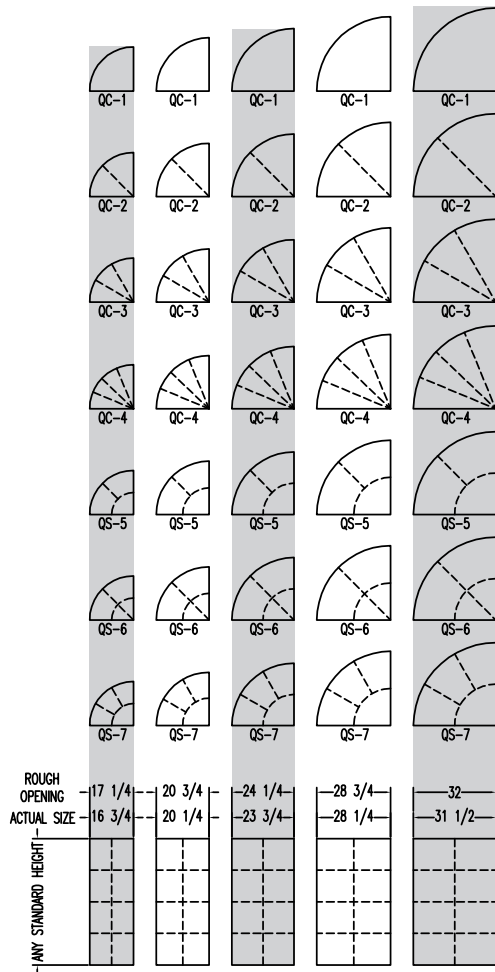
TRIPLE TRANSOM



FULL CIRCLE WINDOW SIZES

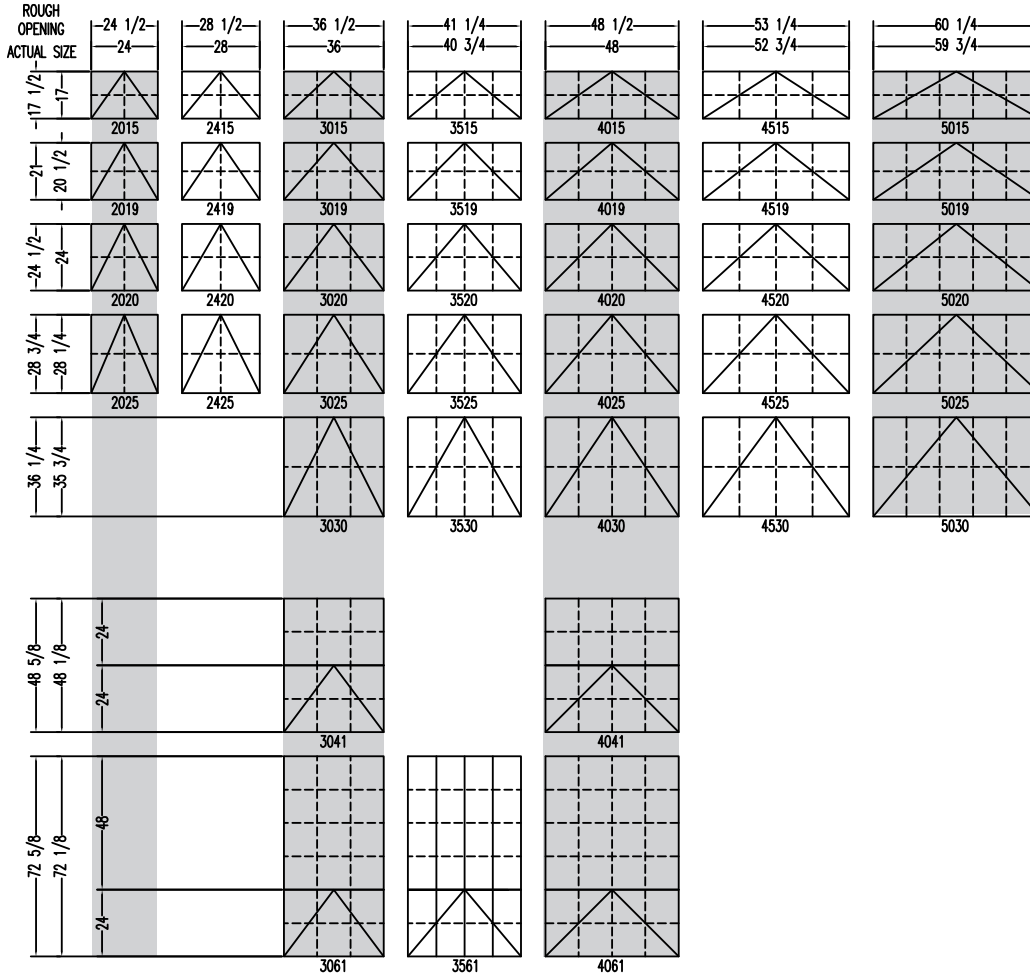


CASEMENT QUARTER CIRCLE WINDOW SIZES

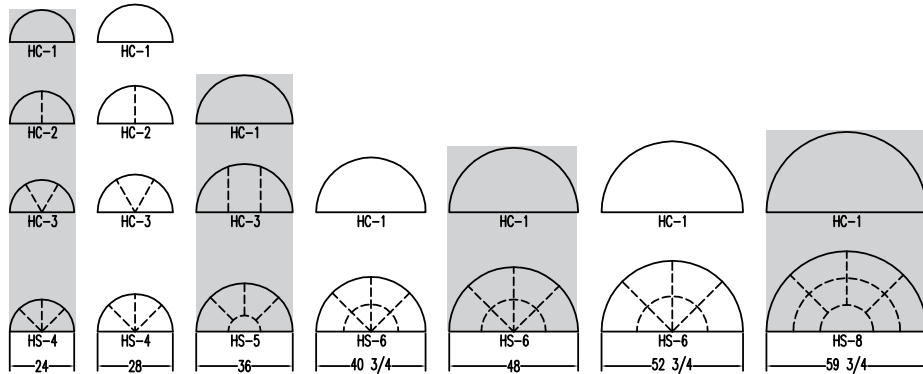


9660/9770 Vinyl Awning and Casements

AWNING OPENING SPECIFICATIONS



AWNING CIRCLE TOP WINDOW SIZES



PICTURE WINDOW OPENING SPECIFICATIONS

ROUGH OPENING	41 1/4	48 1/2	53 1/4	60 1/4
ACTUAL SIZE	40 3/4	48	52 3/4	59 3/4
24 1/2	3520	4020	4520	5020
36 1/2	3530	4030	4530	5030
41 1/4	3635	4035	4535	5035
48 1/2	3540	4040	4540	5040
53 1/4	3545	4045	4545	5045
60 1/4	3550	4050	4550	5050
66 1/4	3555	4055	4555	5055
72 1/4	3560	4060	4560	5060

SERIES 9660- AWNING OPENING SPECIFICATIONS

Code Size	Window ID			Visible Light Sq. Ft.	Screen "Box" Finish Size			Glass Size		
	Width		Height		Width		Height	Width		Height
2015	24	x	17	1.19	18 13/16	x	11 13/16	18 5/16	x	11 5/16
2019	24	x	20 1/2	1.61	18 13/16	x	15 5/16	18 5/16	x	14 13/16
2020	24	x	24	2.14	18 13/16	x	18 13/16	18 5/16	x	18 5/16
2025	24	x	28 1/4	2.53	18 13/16	x	23 1/16	18 5/16	x	22 9/16
2415	28	x	17	1.47	22 13/16	x	11 13/16	22 5/16	x	11 5/16
2419	28	x	20 1/2	1.98	22 13/16	x	15 5/16	22 5/16	x	14 13/16
2420	28	x	24	2.50	22 13/16	x	18 13/16	22 5/16	x	18 5/16
2425	28	x	28 1/4	3.12	22 13/16	x	23 1/16	22 5/16	x	22 9/16
3015	36	x	17	2.03	30 13/16	x	11 13/16	30 5/16	x	11 5/16
3019	36	x	20 1/2	2.74	30 13/16	x	15 5/16	30 5/16	x	14 13/16
3020	36	x	24	3.44	30 13/16	x	18 13/16	30 5/16	x	18 5/16
3025	36	x	28 1/4	4.30	30 13/16	x	23 1/16	30 5/16	x	22 9/16
3030	36	x	35 3/4	5.82	30 13/16	x	30 9/16	30 5/16	x	30 1/16
3515	40 3/4	x	17	2.36	35 9/16	x	11 13/16	35 1/16	x	11 5/16
3519	40 3/4	x	20 1/2	3.18	35 9/16	x	15 5/16	35 1/16	x	14 13/16
3520	40 3/4	x	24	4.01	35 9/16	x	18 13/16	35 1/16	x	18 5/16
3525	40 3/4	x	28 1/4	5.00	35 9/16	x	23 1/16	35 1/16	x	22 9/16
3530	40 3/4	x	35 3/4	6.77	35 9/16	x	30 9/16	35 1/16	x	30 1/16
4015	48	x	17	2.87	42 13/16	x	11 13/16	42 5/16	x	11 5/16
4019	48	x	20 1/2	3.87	42 13/16	x	15 5/16	42 5/16	x	14 13/16
4020	48	x	24	4.87	42 13/16	x	18 13/16	42 5/16	x	18 5/16
4025	48	x	28 1/4	6.08	42 13/16	x	23 1/16	42 5/16	x	22 9/16
4030	48	x	35 3/4	8.22	42 13/16	x	30 9/16	42 5/16	x	30 1/16
4515	52 3/4	x	17	3.20	47 9/16	x	11 13/16	47 1/16	x	11 5/16
4519	52 3/4	x	20 1/2	4.31	47 9/16	x	15 5/16	47 1/16	x	14 13/16
4520	52 3/4	x	24	5.43	47 9/16	x	18 13/16	47 1/16	x	18 5/16
4525	52 3/4	x	28 1/4	6.78	47 9/16	x	23 1/16	47 1/16	x	22 9/16
4530	52 3/4	x	35 3/4	9.17	47 9/16	x	30 9/16	47 1/16	x	30 1/16
5015	59 3/4	x	17	3.69	54 9/16	x	11 13/16	54 1/16	x	11 5/16
5019	59 3/4	x	20 1/2	4.97	54 9/16	x	15 5/16	54 1/16	x	14 13/16
5020	59 3/4	x	24	6.26	54 9/16	x	18 13/16	54 1/16	x	18 5/16
5025	59 3/4	x	28 1/4	7.82	54 9/16	x	23 1/16	54 1/16	x	22 9/16
5030	59 3/4	x	35 3/4	10.57	54 9/16	x	30 9/16	54 1/16	x	30 1/16

09-26-11



QUALITY CONTROL & TESTING
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AAMA Certification insures labeled products comply with industry specifications.



NFRC rated products provide you with an industry standard energy efficiency testing and ratings comparison. Meet your demands to energy performance at a glance.

SERIES 9770- CASEMENT OPENING SPECIFICATIONS

Code Size	Window ID		Standard Hinge (Dual Arm Operator) Clear Opening			Egress Hinge Clear Opening			Visible Light Sq. Ft.	Screen "Box" Finish Size		Glass Size	
	Width	Height	Width	Height	Sq. Ft.	Width	Height	Sq. Ft.		Width	Height	Width	Height
1520	16 3/4	x 24	5 1/16	x 18 7/8	0.66	9 3/8	x 18 7/8	1.23	1.19	11 9/16	x 18 13/16	11 1/16	x 18 5/16
1524	16 3/4	x 28	5 1/16	x 22 7/8	0.80	9 3/8	x 22 7/8	1.49	1.46	11 9/16	x 22 13/16	11 1/16	x 22 5/16
1530	16 3/4	x 36	5 1/16	x 30 7/8	1.09	9 3/8	x 30 7/8	2.01	2.01	11 9/16	x 30 13/16	11 1/16	x 30 5/16
1535	16 3/4	x 40 3/4	5 1/16	x 35 5/8	1.25	9 3/8	x 35 5/8	2.32	2.34	11 9/16	x 35 9/16	11 1/16	x 35 1/16
1540	16 3/4	x 48	5 1/16	x 42 7/8	1.51	9 3/8	x 42 7/8	2.79	2.84	11 9/16	x 42 13/16	11 1/16	x 42 5/16
1545	16 3/4	x 52 3/4	5 1/16	x 47 5/8	1.67	9 3/8	x 47 5/8	3.10	3.17	11 9/16	x 47 9/16	11 1/16	x 47 1/16
1550	16 3/4	x 59 3/4	5 1/16	x 54 5/8	1.92	9 3/8	x 54 5/8	3.56	3.65	11 9/16	x 54 9/16	11 1/16	x 54 1/16
1555	16 3/4	x 64 3/4	5 1/16	x 59 5/8	2.10	9 3/8	x 59 5/8	3.88	4.00	11 9/16	x 59 9/16	11 1/16	x 59 1/16
1560	16 3/4	x 71 3/4	5 1/16	x 66 5/8	2.34	9 3/8	x 66 5/8	4.34	4.48	11 9/16	x 66 9/16	11 1/16	x 66 1/16
1920	20 1/4	x 24	8 9/16	x 18 7/8	1.12	12 7/8	x 18 7/8	1.69	1.60	15 1/16	x 18 13/16	14 9/16	x 18 5/16
1924	20 1/4	x 28	8 9/16	x 22 7/8	1.36	12 7/8	x 22 7/8	2.05	1.98	15 1/16	x 22 13/16	14 9/16	x 22 5/16
1930	20 1/4	x 36	8 9/16	x 30 7/8	1.84	12 7/8	x 30 7/8	2.76	2.72	15 1/16	x 30 13/16	14 9/16	x 30 5/16
1935	20 1/4	x 40 3/4	8 9/16	x 35 5/8	2.12	12 7/8	x 35 5/8	3.19	3.17	15 1/16	x 35 9/16	14 9/16	x 35 1/16
1940	20 1/4	x 48	8 9/16	x 42 7/8	2.55	12 7/8	x 42 7/8	3.83	3.84	15 1/16	x 42 13/16	14 9/16	x 42 5/16
1945	20 1/4	x 52 3/4	8 9/16	x 47 5/8	2.83	12 7/8	x 47 5/8	4.26	4.29	15 1/16	x 47 9/16	14 9/16	x 47 1/16
1950	20 1/4	x 59 3/4	8 9/16	x 54 5/8	3.25	12 7/8	x 54 5/8	4.88	4.94	15 1/16	x 54 9/16	14 9/16	x 54 1/16
1955	20 1/4	x 64 3/4	8 9/16	x 59 5/8	3.55	12 7/8	x 59 5/8	5.33	5.41	15 1/16	x 59 9/16	14 9/16	x 59 1/16
1960	20 1/4	x 71 3/4	8 9/16	x 66 5/8	3.96	12 7/8	x 66 5/8	5.96	6.06	15 1/16	x 66 9/16	14 9/16	x 66 1/16
2020	23 3/4	x 24	12 1/16	x 18 7/8	1.58	16 3/8	x 18 7/8	2.15	2.02	18 9/16	x 18 13/16	18 1/16	x 18 5/16
2024	23 3/4	x 28	12 1/16	x 22 7/8	1.92	16 3/8	x 22 7/8	2.60	2.49	18 9/16	x 22 13/16	18 1/16	x 22 5/16
2030	23 3/4	x 36	12 1/16	x 30 7/8	2.59	16 3/8	x 30 7/8	3.51	3.43	18 9/16	x 30 13/16	18 1/16	x 30 5/16
2035	23 3/4	x 40 3/4	12 1/16	x 35 5/8	2.98	16 3/8	x 35 5/8	4.05	3.99	18 9/16	x 35 9/16	18 1/16	x 35 1/16
2040	23 3/4	x 48	12 1/16	x 42 7/8	3.59	16 3/8	x 42 7/8	4.88	4.84	18 9/16	x 42 13/16	18 1/16	x 42 5/16
2045	23 3/4	x 52 3/4	12 1/16	x 47 5/8	3.99	16 3/8	x 47 5/8	5.42	5.40	18 9/16	x 47 9/16	18 1/16	x 47 1/16
2050	23 3/4	x 59 3/4	12 1/16	x 54 5/8	4.58	16 3/8	x 54 5/8	6.21	6.23	18 9/16	x 54 9/16	18 1/16	x 54 1/16
2055	23 3/4	x 64 3/4	12 1/16	x 59 5/8	4.99	16 3/8	x 59 5/8	6.78	6.81	18 9/16	x 59 9/16	18 1/16	x 59 1/16
2060	23 3/4	x 71 3/4	12 1/16	x 66 5/8	5.58	16 3/8	x 66 5/8	7.58	7.64	18 9/16	x 66 9/16	18 1/16	x 66 1/16
2520	28 1/4	x 24	16 9/16	x 18 7/8	2.17	20 7/8	x 18 7/8	2.74	2.56	23 1/16	x 18 13/16	22 9/16	x 18 5/16
2524	28 1/4	x 28	16 9/16	x 22 7/8	2.63	20 7/8	x 22 7/8	3.32	3.15	23 1/16	x 22 13/16	22 9/16	x 22 5/16
2530	28 1/4	x 36	16 9/16	x 30 7/8	3.55	20 7/8	x 30 7/8	4.48	4.35	23 1/16	x 30 13/16	22 9/16	x 30 5/16
2535	28 1/4	x 40 3/4	16 9/16	x 35 5/8	4.10	20 7/8	x 35 5/8	5.16	5.05	23 1/16	x 35 9/16	22 9/16	x 35 1/16
2540	28 1/4	x 48	16 9/16	x 42 7/8	4.93	20 7/8	x 42 7/8	6.22	6.13	23 1/16	x 42 13/16	22 9/16	x 42 5/16
2545	28 1/4	x 52 3/4	16 9/16	x 47 5/8	5.48	20 7/8	x 47 5/8	6.90	6.84	23 1/16	x 47 9/16	22 9/16	x 47 1/16
2550	28 1/4	x 59 3/4	16 9/16	x 54 5/8	6.28	20 7/8	x 54 5/8	7.92	7.88	23 1/16	x 54 9/16	22 9/16	x 54 1/16
2555	28 1/4	x 64 3/4	16 9/16	x 59 5/8	6.86	20 7/8	x 59 5/8	8.64	8.63	23 1/16	x 59 9/16	22 9/16	x 59 1/16
2560	28 1/4	x 71 3/4	16 9/16	x 66 5/8	7.66	20 7/8	x 66 5/8	9.66	9.67	23 1/16	x 66 9/16	22 9/16	x 66 1/16
2830	31 1/2	x 36	19 13/16	x 30 7/8	4.25	24 1/8	x 30 7/8	5.17	5.00	26 5/16	x 30 13/16	25 13/16	x 30 5/16
2835	31 1/2	x 40 3/4	19 13/16	x 35 5/8	4.90	24 1/8	x 35 5/8	5.97	5.82	26 5/16	x 35 9/16	25 13/16	x 35 1/16
2840	31 1/2	x 48	19 13/16	x 42 7/8	5.90	24 1/8	x 42 7/8	7.18	7.06	26 5/16	x 42 13/16	25 13/16	x 42 5/16
2845	31 1/2	x 52 3/4	19 13/16	x 47 5/8	6.55	24 1/8	x 47 5/8	7.98	7.88	26 5/16	x 47 9/16	25 13/16	x 47 1/16
2850	31 1/2	x 59 3/4	19 13/16	x 54 5/8	7.52	24 1/8	x 54 5/8	9.15	9.08	26 5/16	x 54 9/16	25 13/16	x 54 1/16
2855	31 1/2	x 64 3/4	19 13/16	x 59 5/8	8.20	24 1/8	x 59 5/8	9.99	9.93	26 5/16	x 59 9/16	25 13/16	x 59 1/16
2860	31 1/2	x 71 3/4	19 13/16	x 66 5/8	9.17	24 1/8	x 66 5/8	11.16	11.13	26 5/16	x 66 9/16	25 13/16	x 66 1/16
21030	33 3/4	x 36	22 1/16	x 30 7/8	4.73	26 3/8	x 30 7/8	5.66	5.57	28 9/16	x 31 1/2	28 1/16	x 30 7/8
21035	33 3/4	x 40 3/4	22 1/16	x 35 5/8	5.46	26 3/8	x 35 5/8	6.53	6.45	28 9/16	x 36 1/4	28 1/16	x 35 5/8
21040	33 3/4	x 48	22 1/16	x 42 7/8	6.57	26 3/8	x 42 7/8	7.85	7.81	28 9/16	x 43 1/2	28 1/16	x 42 7/8
21045	33 3/4	x 52 3/4	22 1/16	x 47 5/8	7.30	26 3/8	x 47 5/8	8.72	8.70	28 9/16	x 48 1/4	28 1/16	x 47 5/8
21050	33 3/4	x 59 3/4	22 1/16	x 54 5/8	8.37	26 3/8	x 54 5/8	10.01	10.01	28 9/16	x 55 1/4	28 1/16	x 54 5/8
21055	33 3/4	x 64 3/4	22 1/16	x 59 5/8	9.14	26 3/8	x 59 5/8	10.92	10.94	28 9/16	x 60 1/4	28 1/16	x 59 5/8
21060	33 3/4	x 71 3/4	22 1/16	x 66 5/8	10.21	26 3/8	x 66 5/8	12.20	12.25	28 9/16	x 67 1/4	28 1/16	x 66 5/8
3030	35 3/4	x 36	24 1/16	x 30 7/8	5.16	28 3/8	x 30 7/8	6.08	5.98	30 9/16	x 31 1/2	30 1/16	x 30 7/8
3035	35 3/4	x 40 3/4	24 1/16	x 35 5/8	5.95	28 3/8	x 35 5/8	7.02	6.93	30 9/16	x 36 1/4	30 1/16	x 35 5/8
3040	35 3/4	x 48	24 1/16	x 42 7/8	7.16	28 3/8	x 42 7/8	8.45	8.39	30 9/16	x 43 1/2	30 1/16	x 42 7/8
3045	35 3/4	x 52 3/4	24 1/16	x 47 5/8	7.96	28 3/8	x 47 5/8	9.38	9.34	30 9/16	x 48 1/4	30 1/16	x 47 5/8
3050	35 3/4	x 59 3/4	24 1/16	x 54 5/8	9.13	28 3/8	x 54 5/8	10.76	10.75	30 9/16	x 55 1/4	30 1/16	x 54 5/8
3055	35 3/4	x 64 3/4	24 1/16	x 59 5/8	9.96	28 3/8	x 59 5/8	11.75	11.76	30 9/16	x 60 1/4	30 1/16	x 59 5/8
3060	35 3/4	x 71 3/4	24 1/16	x 66 5/8	11.13	28 3/8	x 66 5/8	13.13	13.16	30 9/16	x 67 1/4	30 1/16	x 66 5/8

08-04-11

* All sizes in bold meet 5.7 square foot egress requirements.

** The Casement window comes with standard hinge. If the optional egress hinge is required, please specify on the order.



Some products may require special glazing options to meet certain Energy Star criteria. Contact your sales representative for more information.

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