

Ultimate Wood Casement and Awning Push Out

Unit Features.....	1
Egress and Vent Openings: Casement Push Out - Full Frame.....	3
Daylight Measurements: Casement Push Out - Full Frame.....	7
Vent Openings: Awning Push Out - Full Frame	9
Daylight Measurements: Awning Push Out - Full Frame	11
Daylight Measurements: Picture - Full Frame	14
Minimum and Maximum Guidelines: Full Frame	16
Certified Sizes and Ratings	17
Measurement Conversions: Casement and Awning Push Out	18
Egress Formulas: Casement Push Out.....	19
Vent Opening: Awning Push Out.....	20
Field Measurement for Replacement Units	21
Standard Unit Measurements: Casement Push Out - Full Frame.....	22
Standard Unit Measurements: Awning Push Out - Full Frame	23
Standard Unit Measurements: 3/4" Casement Push Out Picture - Full Frame	24
Standard Unit Measurements: 1" Casement Push Out Picture - Full Frame	25
Section Details: Operating/Picture - Casement/Awning Push Out - 3/4" (19) IG	26
Section Details: Operating/Picture - Casement/Awning Push Out - 1" (25) IG	27
Section Details: Push Out Picture - 3/4" (19) and 1" (25) IG.....	30
Section Details: 6 9/16" (167) Jambs, Wood Screen - Casement / Awning Push Out.....	31
Section Details: Wide Bottom Rail Option - Casement and Awning Push Out.....	32
Section Details: Full Frame Casement Push Out Mullion Options	33
Section Details: Full Frame Awning Push Out Mullion Options.....	34

Unit Features

Ultimate Wood Casement Push Out: UWCAPO

Ultimate Wood Awning Push Out: UWAWNPO

UWCAPO Hardware:

- Multi-point sequential system with a single lock handle actuation
 - Oil Rubbed Bronze plated finish handle standard
 - Stainless Steel option available
- Sequential multi-lock uses 2, 4, or 5 locking points depending on unit size
- Detachable Friction Limiter Device is used to hold sash in place and allow sash to lock open at multiple locations
 - Stainless Steel option available
- Hinges allow the user to slide the sash across the frame opening which causes the sash exterior to rotate towards the user for the easy wash mode
 - Stainless steel option available
- Units under 20" (508) width OM do not have the easy wash hinges
- Maximum sash weight is 145 lbs.(66 kg)

Factory Set Friction Sash Stop

CN Width	Frame to Sash Opening (With Factory Set Friction Sash Stop Setting +/- 1/2")	
	in	mm
CN 30	21"	(533)
CN 32	22 1/2"	(572)
CN 36	17"	(432)
CN 40	19 1/2"	(495)

NOTE: For Ultimate Wood Casement Narrow Frame Push Out units, add 1 1/2" to Frame to Sash Opening

The friction stop is not a window opening control device and is not ASTM F2090 compliant. It is not intended to and will not reduce the risk of child falls

Optional Factory installed Window Opening Control Device (WOCD)

- The standard operation of the WOCD limits the operation of the sash to an opening of less than 4" (102)
- The sash arm detaches from the lock housing by a two-step function actuation to allow the normal operation of the unit
- The WOCD re-engages when the unit is fully closed
- Hardware meets the ASTM F2090-17
- WOCD is Coastal compliant
- Minimum operable unit size:
 - 20" (508) width
 - Spring Line Height lock side: 26 1/8" (664)
 - Not available on RT7 or RT8
 - For polygon shapes, the locking jamb must be 90 degrees to the sill
- Maximum operable unit size:
 - 44" (1118) width
 - If the width is greater than 36" (914) and less than 44" (1118), then 92" (2337) maximum height
 - If the width is less than or equal to 36" (914), then 96 1/8" (2442)
 - Not available on RT7 or RT8
 - For polygon shapes, the locking jamb must be 90 degrees to the sill
- Components:
 - The WOCD hardware is handed.
 - The Lock Housing and sash arm are comprised of multiple stainless steel, injection-molded components, and a single stainless steel spring
 - The Lock Housing fits within a pocket on the jamb.
 - The Sash Arm will fit within a pocket between the jamb/sill cover and the locking hardware.

Unit Features**UWAWNPO Hardware:**

- Lock is multi-point sequential lock system actuated by using lock handle
- There are two hinges that connect the stiles of the sash to the jambs of the frame
 - Material is steel coated with zinc finish
- Track is steel coated with zinc finish
- The hinges are four bar hinges and include a friction adjustment set screw
- Optional Stainless Steel hardware is available
- Hinges are designed to handle up to 129lb. (59 kg) sash

Egress and Vent Openings: Casement Push Out - Full Frame

CN	Clear Opening Width		Clear Opening Height		Egress Opening			Opening Vent Width		Opening Vent Height		Vent Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²	E	ft - in	mm	ft - in	mm	ft ²	m ²
1616	0-7 21/64	(186)	0-11 3/64	(281)	0.56	(0.05)		1-0 7/8	(327)	0-11 3/64	(281)	0.99	(0.09)
1618	0-7 21/64	(186)	1-1 3/64	(331)	0.66	(0.06)		1-0 7/8	(327)	1-1 3/64	(331)	1.17	(0.11)
1620	0-7 21/64	(186)	1-3 3/64	(382)	0.77	(0.07)		1-0 7/8	(327)	1-3 3/64	(382)	1.35	(0.13)
1624	0-7 21/64	(186)	1-7 3/64	(484)	0.97	(0.09)		1-0 7/8	(327)	1-7 3/64	(484)	1.70	(0.16)
1628	0-7 21/64	(186)	1-11 3/64	(585)	1.17	(0.11)		1-0 7/8	(327)	1-11 3/64	(585)	2.06	(0.19)
1632	0-7 21/64	(186)	2-3 3/64	(687)	1.38	(0.13)		1-0 7/8	(327)	2-3 3/64	(687)	2.42	(0.22)
1636	0-7 21/64	(186)	2-7 3/64	(789)	1.58	(0.15)		1-0 7/8	(327)	2-7 3/64	(789)	2.78	(0.26)
1640	0-7 21/64	(186)	2-11 3/64	(890)	1.78	(0.17)		1-0 7/8	(327)	2-11 3/64	(890)	3.13	(0.29)
1644	0-7 21/64	(186)	3-3 3/64	(992)	1.99	(0.18)		1-0 7/8	(327)	3-3 3/64	(992)	3.49	(0.32)
1648	0-7 21/64	(186)	3-7 3/64	(1093)	2.19	(0.20)		1-0 7/8	(327)	3-7 3/64	(1093)	3.85	(0.36)
1654	0-7 21/64	(186)	4-1 3/64	(1246)	2.50	(0.23)		1-0 7/8	(327)	4-1 3/64	(1246)	4.39	(0.41)
1656	0-7 21/64	(186)	4-3 3/64	(1297)	2.60	(0.24)		1-0 7/8	(327)	4-3 3/64	(1297)	4.56	(0.42)
1660	0-7 21/64	(186)	4-7 3/64	(1398)	2.80	(0.26)		1-0 7/8	(327)	4-7 3/64	(1398)	4.92	(0.46)
1664	0-7 21/64	(186)	4-11 3/64	(1500)	3.00	(0.28)		1-0 7/8	(327)	4-11 3/64	(1500)	5.28	(0.49)
1672 T	0-7 21/64	(186)	5-7 3/64	(1703)	3.41	(0.32)		1-0 7/8	(327)	5-7 3/64	(1703)	5.99	(0.56)
1678 T	0-7 21/64	(186)	6-1 3/64	(1855)	3.72	(0.35)		1-0 7/8	(327)	6-1 3/64	(1855)	6.53	(0.61)
1684 T	0-7 21/64	(186)	6-7 3/64	(2008)	4.02	(0.37)		1-0 7/8	(327)	6-7 3/64	(2008)	7.07	(0.66)
1692 T	0-7 21/64	(186)	7-3 3/64	(2211)	4.43	(0.41)		1-0 7/8	(327)	7-3 3/64	(2211)	7.78	(0.72)
1696 T	0-7 21/64	(186)	7-7 3/64	(2313)	4.63	(0.43)		1-0 7/8	(327)	7-7 3/64	(2313)	8.14	(0.76)
1816	0-9 21/64	(237)	0-11 3/64	(281)	0.72	(0.07)		1-2 7/8	(378)	0-11 3/64	(281)	1.14	(0.11)
1818	0-9 21/64	(237)	1-1 3/64	(331)	0.85	(0.08)		1-2 7/8	(378)	1-1 3/64	(331)	1.35	(0.13)
1820	0-9 21/64	(237)	1-3 3/64	(382)	0.97	(0.09)		1-2 7/8	(378)	1-3 3/64	(382)	1.55	(0.14)
1824	0-9 21/64	(237)	1-7 3/64	(484)	1.23	(0.11)		1-2 7/8	(378)	1-7 3/64	(484)	1.97	(0.18)
1828	0-9 21/64	(237)	1-11 3/64	(585)	1.49	(0.14)		1-2 7/8	(378)	1-11 3/64	(585)	2.38	(0.22)
1832	0-9 21/64	(237)	2-3 3/64	(687)	1.75	(0.16)		1-2 7/8	(378)	2-3 3/64	(687)	2.79	(0.26)
1836	0-9 21/64	(237)	2-7 3/64	(789)	2.01	(0.19)		1-2 7/8	(378)	2-7 3/64	(789)	3.21	(0.30)
1840	0-9 21/64	(237)	2-11 3/64	(890)	2.27	(0.21)		1-2 7/8	(378)	2-11 3/64	(890)	3.62	(0.34)
1844	0-9 21/64	(237)	3-3 3/64	(992)	2.53	(0.23)		1-2 7/8	(378)	3-3 3/64	(992)	4.03	(0.37)
1848	0-9 21/64	(237)	3-7 3/64	(1093)	2.79	(0.26)		1-2 7/8	(378)	3-7 3/64	(1093)	4.45	(0.41)
1854	0-9 21/64	(237)	4-1 3/64	(1246)	3.18	(0.30)		1-2 7/8	(378)	4-1 3/64	(1246)	5.07	(0.47)
1856	0-9 21/64	(237)	4-3 3/64	(1297)	3.31	(0.31)		1-2 7/8	(378)	4-3 3/64	(1297)	5.27	(0.49)
1860	0-9 21/64	(237)	4-7 3/64	(1398)	3.57	(0.33)		1-2 7/8	(378)	4-7 3/64	(1398)	5.69	(0.53)
1864	0-9 21/64	(237)	4-11 3/64	(1500)	3.82	(0.36)		1-2 7/8	(378)	4-11 3/64	(1500)	6.10	(0.57)
1872 T	0-9 21/64	(237)	5-7 3/64	(1703)	4.34	(0.40)		1-2 7/8	(378)	5-7 3/64	(1703)	6.93	(0.64)
1878 T	0-9 21/64	(237)	6-1 3/64	(1855)	4.73	(0.44)		1-2 7/8	(378)	6-1 3/64	(1855)	7.55	(0.70)
1884 T	0-9 21/64	(237)	6-7 3/64	(2008)	5.12	(0.48)		1-2 7/8	(378)	6-7 3/64	(2008)	8.17	(0.76)
1892 T	0-9 21/64	(237)	7-3 3/64	(2211)	5.64	(0.52)		1-2 7/8	(378)	7-3 3/64	(2211)	8.99	(0.84)
1896 T	0-9 21/64	(237)	7-7 3/64	(2313)	5.90	(0.55)		1-2 7/8	(378)	7-7 3/64	(2313)	9.40	(0.87)
2016	1-1 13/16	(351)	0-11 3/64	(281)	1.06	(0.10)		1-4 7/8	(429)	0-11 3/64	(281)	1.29	(0.12)
2018	1-1 13/16	(351)	1-1 3/64	(331)	1.25	(0.12)		1-4 7/8	(429)	1-1 3/64	(331)	1.53	(0.14)
2020	1-1 13/16	(351)	1-3 3/64	(382)	1.44	(0.13)		1-4 7/8	(429)	1-3 3/64	(382)	1.76	(0.16)
2024	1-1 13/16	(351)	1-7 3/64	(484)	1.83	(0.17)		1-4 7/8	(429)	1-7 3/64	(484)	2.23	(0.21)
2028	1-1 13/16	(351)	1-11 3/64	(585)	2.21	(0.21)		1-4 7/8	(429)	1-11 3/64	(585)	2.70	(0.25)
2032	1-1 13/16	(351)	2-3 3/64	(687)	2.60	(0.24)		1-4 7/8	(429)	2-3 3/64	(687)	3.17	(0.29)
2036	1-1 13/16	(351)	2-7 3/64	(789)	2.98	(0.28)		1-4 7/8	(429)	2-7 3/64	(789)	3.64	(0.34)
2040	1-1 13/16	(351)	2-11 3/64	(890)	3.36	(0.31)		1-4 7/8	(429)	2-11 3/64	(890)	4.11	(0.38)
2044	1-1 13/16	(351)	3-3 3/64	(992)	3.75	(0.35)		1-4 7/8	(429)	3-3 3/64	(992)	4.58	(0.43)
2048	1-1 13/16	(351)	3-7 3/64	(1093)	4.13	(0.38)		1-4 7/8	(429)	3-7 3/64	(1093)	5.04	(0.47)

NOTE: Refer to Product Performance Chapter for International Building Code information. Clear Opening drawings are located in individual chapters with conversion tables.

Egress and Vent Openings: Casement Push Out - Full Frame

CN	Clear Opening Width		Clear Opening Height		Egress Opening			Opening Vent Width		Opening Vent Height		Vent Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²	E	ft - in	mm	ft - in	mm	ft ²	m ²
2054	1-1 13/16	(351)	4-1 3/64	(1246)	4.71	(0.44)		1-4 7/8	(429)	4-1 3/64	(1246)	5.75	(0.53)
2056	1-1 13/16	(351)	4-3 3/64	(1297)	4.90	(0.46)		1-4 7/8	(429)	4-3 3/64	(1297)	5.98	(0.56)
2060	1-1 13/16	(351)	4-7 3/64	(1398)	5.28	(0.49)		1-4 7/8	(429)	4-7 3/64	(1398)	6.45	(0.60)
2064	1-1 13/16	(351)	4-11 3/64	(1500)	5.67	(0.53)		1-4 7/8	(429)	4-11 3/64	(1500)	6.92	(0.64)
2072 T	1-1 13/16	(351)	5-7 3/64	(1703)	6.43	(0.60)		1-4 7/8	(429)	5-7 3/64	(1703)	7.86	(0.73)
2078 T	1-1 13/16	(351)	6-1 3/64	(1855)	7.01	(0.65)		1-4 7/8	(429)	6-1 3/64	(1855)	8.56	(0.80)
2084 T	1-1 13/16	(351)	6-7 3/64	(2008)	7.58	(0.70)		1-4 7/8	(429)	6-7 3/64	(2008)	9.26	(0.86)
2092 T	1-1 13/16	(351)	7-3 3/64	(2211)	8.35	(0.78)		1-4 7/8	(429)	7-3 3/64	(2211)	10.20	(0.95)
2096 T	1-1 13/16	(351)	7-7 3/64	(2313)	8.74	(0.81)		1-4 7/8	(429)	7-7 3/64	(2313)	10.67	(0.99)
2416	1-5 13/16	(453)	0-11 3/64	(281)	1.37	(0.13)		1-8 7/8	(530)	0-11 3/64	(281)	1.60	(0.15)
2418	1-5 13/16	(453)	1-1 3/64	(331)	1.61	(0.15)		1-8 7/8	(530)	1-1 3/64	(331)	1.89	(0.18)
2420	1-5 13/16	(453)	1-3 3/64	(382)	1.86	(0.17)		1-8 7/8	(530)	1-3 3/64	(382)	2.18	(0.20)
2424	1-5 13/16	(453)	1-7 3/64	(484)	2.36	(0.22)		1-8 7/8	(530)	1-7 3/64	(484)	2.76	(0.26)
2428	1-5 13/16	(453)	1-11 3/64	(585)	2.85	(0.26)		1-8 7/8	(530)	1-11 3/64	(585)	3.34	(0.31)
2432	1-5 13/16	(453)	2-3 3/64	(687)	3.35	(0.31)		1-8 7/8	(530)	2-3 3/64	(687)	3.92	(0.36)
2436	1-5 13/16	(453)	2-7 3/64	(789)	3.84	(0.36)		1-8 7/8	(530)	2-7 3/64	(789)	4.50	(0.42)
2440	1-5 13/16	(453)	2-11 3/64	(890)	4.34	(0.40)		1-8 7/8	(530)	2-11 3/64	(890)	5.08	(0.47)
2444	1-5 13/16	(453)	3-3 3/64	(992)	4.83	(0.45)		1-8 7/8	(530)	3-3 3/64	(992)	5.66	(0.53)
2448	1-5 13/16	(453)	3-7 3/64	(1093)	5.33	(0.49)		1-8 7/8	(530)	3-7 3/64	(1093)	6.24	(0.58)
2454	1-5 13/16	(453)	4-1 3/64	(1246)	6.07	(0.56)		1-8 7/8	(530)	4-1 3/64	(1246)	7.11	(0.66)
2456	1-5 13/16	(453)	4-3 3/64	(1297)	6.32	(0.59)		1-8 7/8	(530)	4-3 3/64	(1297)	7.40	(0.69)
2460	1-5 13/16	(453)	4-7 3/64	(1398)	6.81	(0.63)		1-8 7/8	(530)	4-7 3/64	(1398)	7.98	(0.74)
2464	1-5 13/16	(453)	4-11 3/64	(1500)	7.31	(0.68)		1-8 7/8	(530)	4-11 3/64	(1500)	8.56	(0.80)
2472 T	1-5 13/16	(453)	5-7 3/64	(1703)	8.30	(0.77)		1-8 7/8	(530)	5-7 3/64	(1703)	9.72	(0.90)
2478 T	1-5 13/16	(453)	6-1 3/64	(1855)	9.04	(0.84)		1-8 7/8	(530)	6-1 3/64	(1855)	10.59	(0.98)
2484 T	1-5 13/16	(453)	6-7 3/64	(2008)	9.78	(0.91)		1-8 7/8	(530)	6-7 3/64	(2008)	11.46	(1.06)
2492 T	1-5 13/16	(453)	7-3 3/64	(2211)	10.77	(1.00)		1-8 7/8	(530)	7-3 3/64	(2211)	12.62	(1.17)
2496 T	1-5 13/16	(453)	7-7 3/64	(2313)	11.27	(1.05)		1-8 7/8	(530)	7-7 3/64	(2313)	13.20	(1.23)
2616	1-7 13/16	(503)	0-11 3/64	(281)	1.52	(0.14)		1-10 7/8	(581)	0-11 3/64	(281)	1.76	(0.16)
2618	1-7 13/16	(503)	1-1 3/64	(331)	1.80	(0.17)		1-10 7/8	(581)	1-1 3/64	(331)	2.07	(0.19)
2620	1-7 13/16	(503)	1-3 3/64	(382)	2.07	(0.19)		1-10 7/8	(581)	1-3 3/64	(382)	2.39	(0.22)
2624	1-7 13/16	(503)	1-7 3/64	(484)	2.62	(0.24)		1-10 7/8	(581)	1-7 3/64	(484)	3.03	(0.28)
2628	1-7 13/16	(503)	1-11 3/64	(585)	3.17	(0.29)		1-10 7/8	(581)	1-11 3/64	(585)	3.66	(0.34)
2632	1-7 13/16	(503)	2-3 3/64	(687)	3.72	(0.35)		1-10 7/8	(581)	2-3 3/64	(687)	4.30	(0.40)
2636	1-7 13/16	(503)	2-7 3/64	(789)	4.27	(0.40)		1-10 7/8	(581)	2-7 3/64	(789)	4.93	(0.46)
2640	1-7 13/16	(503)	2-11 3/64	(890)	4.82	(0.45)		1-10 7/8	(581)	2-11 3/64	(890)	5.57	(0.52)
2644	1-7 13/16	(503)	3-3 3/64	(992)	5.37	(0.50)		1-10 7/8	(581)	3-3 3/64	(992)	6.20	(0.58)
2648	1-7 13/16	(503)	3-7 3/64	(1093)	5.92	(0.55)		1-10 7/8	(581)	3-7 3/64	(1093)	6.84	(0.64)
2654	1-7 13/16	(503)	4-1 3/64	(1246)	6.75	(0.63)		1-10 7/8	(581)	4-1 3/64	(1246)	7.79	(0.72)
2656	1-7 13/16	(503)	4-3 3/64	(1297)	7.03	(0.65)		1-10 7/8	(581)	4-3 3/64	(1297)	8.11	(0.75)
2660	1-7 13/16	(503)	4-7 3/64	(1398)	7.58	(0.70)		1-10 7/8	(581)	4-7 3/64	(1398)	8.74	(0.81)
2664	1-7 13/16	(503)	4-11 3/64	(1500)	8.13	(0.75)		1-10 7/8	(581)	4-11 3/64	(1500)	9.38	(0.87)
2672 T	1-7 13/16	(503)	5-7 3/64	(1703)	9.23	(0.86)		1-10 7/8	(581)	5-7 3/64	(1703)	10.65	(0.99)
2678 T	1-7 13/16	(503)	6-1 3/64	(1855)	10.05	(0.93)		1-10 7/8	(581)	6-1 3/64	(1855)	11.60	(1.08)
2684 T	1-7 13/16	(503)	6-7 3/64	(2008)	10.88	(1.01)		1-10 7/8	(581)	6-7 3/64	(2008)	12.56	(1.17)
2692 T	1-7 13/16	(503)	7-3 3/64	(2211)	11.98	(1.11)		1-10 7/8	(581)	7-3 3/64	(2211)	13.83	(1.28)
2696 T	1-7 13/16	(503)	7-7 3/64	(2313)	12.53	(1.16)		1-10 7/8	(581)	7-7 3/64	(2313)	14.46	(1.34)
2816	1-9 13/16	(554)	0-11 3/64	(281)	1.67	(0.16)		2-0 7/8	(632)	0-11 3/64	(281)	1.91	(0.18)
2818	1-9 13/16	(554)	1-1 3/64	(331)	1.98	(0.18)		2-0 7/8	(632)	1-1 3/64	(331)	2.25	(0.21)

NOTE: Refer to Product Performance Chapter for International Building Code information. Clear Opening drawings are located in individual chapters with conversion tables.

Egress and Vent Openings: Casement Push Out - Full Frame

CN	Clear Opening Width		Clear Opening Height		Egress Opening			Opening Vent Width		Opening Vent Height		Vent Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²	E	ft - in	mm	ft - in	mm	ft ²	m ²
2820	1-9 13/16	(554)	1-3 3/64	(382)	2.28	(0.21)		2-0 7/8	(632)	1-3 3/64	(382)	2.60	(0.24)
2824	1-9 13/16	(554)	1-7 3/64	(484)	2.89	(0.27)		2-0 7/8	(632)	1-7 3/64	(484)	3.29	(0.31)
2828	1-9 13/16	(554)	1-11 3/64	(585)	3.49	(0.32)		2-0 7/8	(632)	1-11 3/64	(585)	3.98	(0.37)
2832	1-9 13/16	(554)	2-3 3/64	(687)	4.10	(0.38)		2-0 7/8	(632)	2-3 3/64	(687)	4.67	(0.43)
2836	1-9 13/16	(554)	2-7 3/64	(789)	4.70	(0.44)		2-0 7/8	(632)	2-7 3/64	(789)	5.36	(0.50)
2840	1-9 13/16	(554)	2-11 3/64	(890)	5.31	(0.49)		2-0 7/8	(632)	2-11 3/64	(890)	6.05	(0.56)
2844	1-9 13/16	(554)	3-3 3/64	(992)	5.92	(0.55)	E	2-0 7/8	(632)	3-3 3/64	(992)	6.75	(0.63)
2848	1-9 13/16	(554)	3-7 3/64	(1093)	6.52	(0.61)	E	2-0 7/8	(632)	3-7 3/64	(1093)	7.44	(0.69)
2854	1-9 13/16	(554)	4-1 3/64	(1246)	7.43	(0.69)	E	2-0 7/8	(632)	4-1 3/64	(1246)	8.47	(0.79)
2856	1-9 13/16	(554)	4-3 3/64	(1297)	7.73	(0.72)	E	2-0 7/8	(632)	4-3 3/64	(1297)	8.82	(0.82)
2860	1-9 13/16	(554)	4-7 3/64	(1398)	8.34	(0.77)	E	2-0 7/8	(632)	4-7 3/64	(1398)	9.51	(0.88)
2864	1-9 13/16	(554)	4-11 3/64	(1500)	8.95	(0.83)	E	2-0 7/8	(632)	4-11 3/64	(1500)	10.20	(0.95)
2872 T	1-9 13/16	(554)	5-7 3/64	(1703)	10.16	(0.94)	E	2-0 7/8	(632)	5-7 3/64	(1703)	11.58	(1.08)
2878 T	1-9 13/16	(554)	6-1 3/64	(1855)	11.07	(1.03)	E	2-0 7/8	(632)	6-1 3/64	(1855)	12.62	(1.17)
2884 T	1-9 13/16	(554)	6-7 3/64	(2008)	11.98	(1.11)	E	2-0 7/8	(632)	6-7 3/64	(2008)	13.65	(1.27)
2892 T	1-9 13/16	(554)	7-3 3/64	(2211)	13.19	(1.23)	E	2-0 7/8	(632)	7-3 3/64	(2211)	15.04	(1.40)
2896 T	1-9 13/16	(554)	7-7 3/64	(2313)	13.79	(1.28)	E	2-0 7/8	(632)	7-7 3/64	(2313)	15.73	(1.46)
3016	1-11 13/16	(605)	0-11 3/64	(281)	1.83	(0.17)		2-2 7/8	(683)	0-11 3/64	(281)	2.06	(0.19)
3018	1-11 13/16	(605)	1-1 3/64	(331)	2.16	(0.20)		2-2 7/8	(683)	1-1 3/64	(331)	2.44	(0.23)
3020	1-11 13/16	(605)	1-3 3/64	(382)	2.49	(0.23)		2-2 7/8	(683)	1-3 3/64	(382)	2.81	(0.26)
3024	1-11 13/16	(605)	1-7 3/64	(484)	3.15	(0.29)		2-2 7/8	(683)	1-7 3/64	(484)	3.56	(0.33)
3028	1-11 13/16	(605)	1-11 3/64	(585)	3.81	(0.35)		2-2 7/8	(683)	1-11 3/64	(585)	4.30	(0.40)
3032	1-11 13/16	(605)	2-3 3/64	(687)	4.47	(0.42)		2-2 7/8	(683)	2-3 3/64	(687)	5.05	(0.47)
3036	1-11 13/16	(605)	2-7 3/64	(789)	5.14	(0.48)		2-2 7/8	(683)	2-7 3/64	(789)	5.79	(0.54)
3040	1-11 13/16	(605)	2-11 3/64	(890)	5.80	(0.54)	E	2-2 7/8	(683)	2-11 3/64	(890)	6.54	(0.61)
3044	1-11 13/16	(605)	3-3 3/64	(992)	6.46	(0.60)	E	2-2 7/8	(683)	3-3 3/64	(992)	7.29	(0.68)
3048	1-11 13/16	(605)	3-7 3/64	(1093)	7.12	(0.66)	E	2-2 7/8	(683)	3-7 3/64	(1093)	8.03	(0.75)
3054	1-11 13/16	(605)	4-1 3/64	(1246)	8.11	(0.75)	E	2-2 7/8	(683)	4-1 3/64	(1246)	9.15	(0.85)
3056	1-11 13/16	(605)	4-3 3/64	(1297)	8.44	(0.78)	E	2-2 7/8	(683)	4-3 3/64	(1297)	9.53	(0.89)
3060	1-11 13/16	(605)	4-7 3/64	(1398)	9.10	(0.85)	E	2-2 7/8	(683)	4-7 3/64	(1398)	10.27	(0.95)
3064	1-11 13/16	(605)	4-11 3/64	(1500)	9.77	(0.91)	E	2-2 7/8	(683)	4-11 3/64	(1500)	11.02	(1.02)
3072 T	1-11 13/16	(605)	5-7 3/64	(1703)	11.09	(1.03)	E	2-2 7/8	(683)	5-7 3/64	(1703)	12.51	(1.16)
3078 T	1-11 13/16	(605)	6-1 3/64	(1855)	12.08	(1.12)	E	2-2 7/8	(683)	6-1 3/64	(1855)	13.63	(1.27)
3084 T	1-11 13/16	(605)	6-7 3/64	(2008)	13.07	(1.21)	E	2-2 7/8	(683)	6-7 3/64	(2008)	14.75	(1.37)
3092 T	1-11 13/16	(605)	7-3 3/64	(2211)	14.40	(1.34)	E	2-2 7/8	(683)	7-3 3/64	(2211)	16.25	(1.51)
3096 T	1-11 13/16	(605)	7-7 3/64	(2313)	15.06	(1.40)	E	2-2 7/8	(683)	7-7 3/64	(2313)	16.99	(1.58)
3216	2-1 13/16	(656)	0-11 3/64	(281)	1.98	(0.18)		2-4 7/8	(733)	0-11 3/64	(281)	2.22	(0.21)
3218	2-1 13/16	(656)	1-1 3/64	(331)	2.34	(0.22)		2-4 7/8	(733)	1-1 3/64	(331)	2.62	(0.24)
3220	2-1 13/16	(656)	1-3 3/64	(382)	2.70	(0.25)		2-4 7/8	(733)	1-3 3/64	(382)	3.02	(0.28)
3224	2-1 13/16	(656)	1-7 3/64	(484)	3.42	(0.32)		2-4 7/8	(733)	1-7 3/64	(484)	3.82	(0.35)
3228	2-1 13/16	(656)	1-11 3/64	(585)	4.13	(0.38)		2-4 7/8	(733)	1-11 3/64	(585)	4.62	(0.43)
3232	2-1 13/16	(656)	2-3 3/64	(687)	4.85	(0.45)		2-4 7/8	(733)	2-3 3/64	(687)	5.42	(0.50)
3236	2-1 13/16	(656)	2-7 3/64	(789)	5.57	(0.52)		2-4 7/8	(733)	2-7 3/64	(789)	6.23	(0.58)
3240	2-1 13/16	(656)	2-11 3/64	(890)	6.28	(0.58)	E	2-4 7/8	(733)	2-11 3/64	(890)	7.03	(0.65)
3244	2-1 13/16	(656)	3-3 3/64	(992)	7.00	(0.65)	E	2-4 7/8	(733)	3-3 3/64	(992)	7.83	(0.73)
3248	2-1 13/16	(656)	3-7 3/64	(1093)	7.72	(0.72)	E	2-4 7/8	(733)	3-7 3/64	(1093)	8.63	(0.80)
3254	2-1 13/16	(656)	4-1 3/64	(1246)	8.79	(0.82)	E	2-4 7/8	(733)	4-1 3/64	(1246)	9.84	(0.91)
3256	2-1 13/16	(656)	4-3 3/64	(1297)	9.15	(0.85)	E	2-4 7/8	(733)	4-3 3/64	(1297)	10.24	(0.95)
3260	2-1 13/16	(656)	4-7 3/64	(1398)	9.87	(0.92)	E	2-4 7/8	(733)	4-7 3/64	(1398)	11.04	(1.03)
3264	2-1 13/16	(656)	4-11 3/64	(1500)	10.59	(0.98)	E	2-4 7/8	(733)	4-11 3/64	(1500)	11.84	(1.10)

NOTE: Refer to Product Performance Chapter for International Building Code information. Clear Opening drawings are located in individual chapters with conversion tables.

Egress and Vent Openings: Casement Push Out - Full Frame

CN	Clear Opening Width		Clear Opening Height		Egress Opening			Opening Vent Width		Opening Vent Height		Vent Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²	E	ft - in	mm	ft - in	mm	ft ²	m ²
3272 T	2-1 13/16	(656)	5-7 3/64	(1703)	12.02	(1.12)	E	2-4 7/8	(733)	5-7 3/64	(1703)	13.44	(1.25)
3278 T	2-1 13/16	(656)	6-1 3/64	(1855)	13.10	(1.22)	E	2-4 7/8	(733)	6-1 3/64	(1855)	14.65	(1.36)
3284 T	2-1 13/16	(656)	6-7 3/64	(2008)	14.17	(1.32)	E	2-4 7/8	(733)	6-7 3/64	(2008)	15.85	(1.47)
3292 T	2-1 13/16	(656)	7-3 3/64	(2211)	15.61	(1.45)	E	2-4 7/8	(733)	7-3 3/64	(2211)	17.45	(1.62)
3296 T	2-1 13/16	(656)	7-7 3/64	(2313)	16.32	(1.52)	E	2-4 7/8	(733)	7-7 3/64	(2313)	18.26	(1.70)
3616	2-5 13/16	(757)	0-11 3/64	(281)	2.29	(0.21)		2-8 7/8	(835)	0-11 3/64	(281)	2.52	(0.23)
3618	2-5 13/16	(757)	1-1 3/64	(331)	2.70	(0.25)		2-8 7/8	(835)	1-1 3/64	(331)	2.98	(0.28)
3620	2-5 13/16	(757)	1-3 3/64	(382)	3.12	(0.29)		2-8 7/8	(835)	1-3 3/64	(382)	3.44	(0.32)
3624	2-5 13/16	(757)	1-7 3/64	(484)	3.94	(0.37)		2-8 7/8	(835)	1-7 3/64	(484)	4.35	(0.40)
3628	2-5 13/16	(757)	1-11 3/64	(585)	4.77	(0.44)		2-8 7/8	(835)	1-11 3/64	(585)	5.26	(0.49)
3632	2-5 13/16	(757)	2-3 3/64	(687)	5.60	(0.52)		2-8 7/8	(835)	2-3 3/64	(687)	6.18	(0.57)
3636	2-5 13/16	(757)	2-7 3/64	(789)	6.43	(0.60)	E	2-8 7/8	(835)	2-7 3/64	(789)	7.09	(0.66)
3640	2-5 13/16	(757)	2-11 3/64	(890)	7.26	(0.67)	E	2-8 7/8	(835)	2-11 3/64	(890)	8.00	(0.74)
3644	2-5 13/16	(757)	3-3 3/64	(992)	8.09	(0.75)	E	2-8 7/8	(835)	3-3 3/64	(992)	8.92	(0.83)
3648	2-5 13/16	(757)	3-7 3/64	(1093)	8.91	(0.83)	E	2-8 7/8	(835)	3-7 3/64	(1093)	9.83	(0.91)
3654	2-5 13/16	(757)	4-1 3/64	(1246)	10.16	(0.94)	E	2-8 7/8	(835)	4-1 3/64	(1246)	11.20	(1.04)
3656	2-5 13/16	(757)	4-3 3/64	(1297)	10.57	(0.98)	E	2-8 7/8	(835)	4-3 3/64	(1297)	11.65	(1.08)
3660	2-5 13/16	(757)	4-7 3/64	(1398)	11.40	(1.06)	E	2-8 7/8	(835)	4-7 3/64	(1398)	12.57	(1.17)
3664	2-5 13/16	(757)	4-11 3/64	(1500)	12.23	(1.14)	E	2-8 7/8	(835)	4-11 3/64	(1500)	13.48	(1.25)
3672 T	2-5 13/16	(757)	5-7 3/64	(1703)	13.88	(1.29)	E	2-8 7/8	(835)	5-7 3/64	(1703)	15.31	(1.42)
3678 T	2-5 13/16	(757)	6-1 3/64	(1855)	15.13	(1.41)	E	2-8 7/8	(835)	6-1 3/64	(1855)	16.68	(1.55)
3684 T	2-5 13/16	(757)	6-7 3/64	(2008)	16.37	(1.52)	E	2-8 7/8	(835)	6-7 3/64	(2008)	18.05	(1.68)
3692 T	2-5 13/16	(757)	7-3 3/64	(2211)	18.02	(1.67)	E	2-8 7/8	(835)	7-3 3/64	(2211)	19.87	(1.85)
3696 T	2-5 13/16	(757)	7-7 3/64	(2313)	18.85	(1.75)	E	2-8 7/8	(835)	7-7 3/64	(2313)	20.79	(1.93)
4016	2-9 13/16	(859)	0-11 3/64	(281)	2.60	(0.24)		3-0 7/8	(937)	0-11 3/64	(281)	2.83	(0.26)
4018	2-9 13/16	(859)	1-1 3/64	(331)	3.06	(0.28)		3-0 7/8	(937)	1-1 3/64	(331)	3.34	(0.31)
4020	2-9 13/16	(859)	1-3 3/64	(382)	3.53	(0.33)		3-0 7/8	(937)	1-3 3/64	(382)	3.85	(0.36)
4024	2-9 13/16	(859)	1-7 3/64	(484)	4.47	(0.42)		3-0 7/8	(937)	1-7 3/64	(484)	4.88	(0.45)
4028	2-9 13/16	(859)	1-11 3/64	(585)	5.41	(0.50)		3-0 7/8	(937)	1-11 3/64	(585)	5.90	(0.55)
4032	2-9 13/16	(859)	2-3 3/64	(687)	6.35	(0.59)	E	3-0 7/8	(937)	2-3 3/64	(687)	6.93	(0.64)
4036	2-9 13/16	(859)	2-7 3/64	(789)	7.29	(0.68)	E	3-0 7/8	(937)	2-7 3/64	(789)	7.95	(0.74)
4040	2-9 13/16	(859)	2-11 3/64	(890)	8.23	(0.76)	E	3-0 7/8	(937)	2-11 3/64	(890)	8.98	(0.83)
4044	2-9 13/16	(859)	3-3 3/64	(992)	9.17	(0.85)	E	3-0 7/8	(937)	3-3 3/64	(992)	10.00	(0.93)
4048	2-9 13/16	(859)	3-7 3/64	(1093)	10.11	(0.94)	E	3-0 7/8	(937)	3-7 3/64	(1093)	11.02	(1.02)
4054	2-9 13/16	(859)	4-1 3/64	(1246)	11.52	(1.07)	E	3-0 7/8	(937)	4-1 3/64	(1246)	12.56	(1.17)
4056	2-9 13/16	(859)	4-3 3/64	(1297)	11.99	(1.11)	E	3-0 7/8	(937)	4-3 3/64	(1297)	13.07	(1.21)
4060	2-9 13/16	(859)	4-7 3/64	(1398)	12.93	(1.20)	E	3-0 7/8	(937)	4-7 3/64	(1398)	14.10	(1.31)
4064	2-9 13/16	(859)	4-11 3/64	(1500)	13.87	(1.29)	E	3-0 7/8	(937)	4-11 3/64	(1500)	15.12	(1.40)
4072 T	2-9 13/16	(859)	5-7 3/64	(1703)	15.75	(1.46)	E	3-0 7/8	(937)	5-7 3/64	(1703)	17.17	(1.60)
4078 T	2-9 13/16	(859)	6-1 3/64	(1855)	17.15	(1.59)	E	3-0 7/8	(937)	6-1 3/64	(1855)	18.71	(1.74)
4084 T	2-9 13/16	(859)	6-7 3/64	(2008)	18.56	(1.72)	E	3-0 7/8	(937)	6-7 3/64	(2008)	20.24	(1.88)
4092 T	2-9 13/16	(859)	7-3 3/64	(2211)	20.44	(1.90)	E	3-0 7/8	(937)	7-3 3/64	(2211)	22.29	(2.07)

NOTE: Refer to Product Performance Chapter for International Building Code information. Clear Opening drawings are located in individual chapters with conversion tables.

Daylight Measurements: Casement Push Out - Full Frame

Ultimate Wood Casement Push Out Daylight Measurements			Width										
			CN	16		18		20		24		26	
			DLO	0-10 3/16	(259)	1-0 3/16	(310)	1-2 3/16	(360)	1-6 3/16	(462)	1-8 3/16	(513)
CN	DLO Height		Square Feet (Square Meters)										
			Standard Bottom Rail										
16	0-9 5/16	(237)	0.66	(0.06)	0.79	(0.07)	0.92	(0.09)	1.18	(0.11)	1.31	(0.12)	
18	0-11 5/16	(287)	0.80	(0.07)	0.96	(0.09)	1.11	(0.10)	1.43	(0.13)	1.59	(0.15)	
20	1-1 5/16	(338)	0.94	(0.09)	1.13	(0.10)	1.31	(0.12)	1.68	(0.16)	1.87	(0.17)	
24	1-5 5/16	(440)	1.22	(0.11)	1.47	(0.14)	1.71	(0.16)	2.19	(0.20)	2.43	(0.23)	
28	1-9 5/16	(541)	1.51	(0.14)	1.80	(0.17)	2.10	(0.20)	2.69	(0.25)	2.99	(0.28)	
32	2-1 5/16	(643)	1.79	(0.17)	2.14	(0.20)	2.49	(0.23)	3.20	(0.30)	3.55	(0.33)	
36	2-5 5/16	(745)	2.07	(0.19)	2.48	(0.23)	2.89	(0.27)	3.70	(0.34)	4.11	(0.38)	
40	2-9 5/16	(846)	2.36	(0.22)	2.82	(0.26)	3.28	(0.30)	4.21	(0.39)	4.67	(0.43)	
44	3-1 5/16	(948)	2.64	(0.25)	3.16	(0.29)	3.68	(0.34)	4.71	(0.44)	5.23	(0.49)	
48	3-5 5/16	(1049)	2.92	(0.27)	3.50	(0.32)	4.07	(0.38)	5.22	(0.48)	5.79	(0.54)	
54	3-11 5/16	(1202)	3.35	(0.31)	4.00	(0.37)	4.66	(0.43)	5.98	(0.56)	6.63	(0.62)	
56	4-1 5/16	(1253)	3.49	(0.32)	4.17	(0.39)	4.86	(0.45)	6.23	(0.58)	6.91	(0.64)	
60	4-5 5/16	(1354)	3.77	(0.35)	4.51	(0.42)	5.25	(0.49)	6.73	(0.63)	7.47	(0.69)	
64	4-9 5/16	(1456)	4.05	(0.38)	4.85	(0.45)	5.65	(0.52)	7.24	(0.67)	8.03	(0.75)	
72	5-5 5/16	(1659)	4.62	(0.43)	5.53	(0.51)	6.43	(0.60)	8.25	(0.77)	9.16	(0.85)	
78	5-11 5/16	(1811)	5.04	(0.47)	6.04	(0.56)	7.03	(0.65)	9.01	(0.84)	10.00	(0.93)	
84	6-5 5/16	(1964)	5.47	(0.51)	6.54	(0.61)	7.62	(0.71)	9.76	(0.91)	10.84	(1.01)	
92	7-1 5/16	(2167)	6.04	(0.56)	7.22	(0.67)	8.41	(0.78)	10.77	(1.00)	11.96	(1.11)	
96	7-5 5/16	(2269)	6.32	(0.59)	7.56	(0.70)	8.80	(0.82)	11.28	(1.05)	12.52	(1.16)	
			Tall Bottom Rail										
16	0-7 13/16	(198)	0.55	(0.05)	0.66	(0.06)	0.77	(0.07)	0.99	(0.09)	1.10	(0.10)	
18	0-9 13/16	(249)	0.69	(0.06)	0.83	(0.08)	0.97	(0.09)	1.24	(0.12)	1.38	(0.13)	
20	0-11 13/16	(300)	0.84	(0.08)	1.00	(0.09)	1.16	(0.11)	1.49	(0.14)	1.66	(0.15)	
24	1-3 13/16	(402)	1.12	(0.10)	1.34	(0.12)	1.56	(0.14)	2.00	(0.19)	2.22	(0.21)	
28	1-7 13/16	(503)	1.40	(0.13)	1.68	(0.16)	1.95	(0.18)	2.50	(0.23)	2.78	(0.26)	
32	1-11 13/16	(605)	1.68	(0.16)	2.02	(0.19)	2.35	(0.22)	3.01	(0.28)	3.34	(0.31)	
36	2-3 13/16	(706)	1.97	(0.18)	2.35	(0.22)	2.74	(0.25)	3.51	(0.33)	3.90	(0.36)	
40	2-7 13/16	(808)	2.25	(0.21)	2.69	(0.25)	3.13	(0.29)	4.02	(0.37)	4.46	(0.41)	
44	2-11 13/16	(910)	2.53	(0.24)	3.03	(0.28)	3.53	(0.33)	4.52	(0.42)	5.02	(0.47)	
48	3-3 13/16	(1011)	2.82	(0.26)	3.37	(0.31)	3.92	(0.36)	5.03	(0.47)	5.58	(0.52)	
54	3-9 13/16	(1164)	3.24	(0.30)	3.88	(0.36)	4.51	(0.42)	5.79	(0.54)	6.42	(0.60)	
56	3-11 13/16	(1214)	3.38	(0.31)	4.05	(0.38)	4.71	(0.44)	6.04	(0.56)	6.70	(0.62)	
60	4-3 13/16	(1316)	3.67	(0.34)	4.38	(0.41)	5.10	(0.47)	6.54	(0.61)	7.26	(0.67)	
64	4-7 13/16	(1418)	3.95	(0.37)	4.72	(0.44)	5.50	(0.51)	7.05	(0.65)	7.82	(0.73)	
72	5-3 13/16	(1621)	4.51	(0.42)	5.40	(0.50)	6.29	(0.58)	8.06	(0.75)	8.95	(0.83)	
78	5-9 13/16	(1773)	4.94	(0.46)	5.91	(0.55)	6.88	(0.64)	8.82	(0.82)	9.79	(0.91)	
84	6-3 13/16	(1926)	5.36	(0.50)	6.42	(0.60)	7.47	(0.69)	9.57	(0.89)	10.63	(0.99)	
92	6-11 13/16	(2129)	5.93	(0.55)	7.09	(0.66)	8.26	(0.77)	10.59	(0.98)	11.75	(1.09)	
96	7-3 13/16	(2230)	6.21	(0.58)	7.43	(0.69)	8.65	(0.80)	11.09	(1.03)	12.31	(1.14)	

Daylight Measurements: Casement Push Out - Full Frame

Ultimate Wood Casement Push Out Daylight Measurements			Width										
			CN	28		30		32		36		40	
			DLO	1-10 3/16	(564)	2-0 3/16	(614)	2-2 3/16	(665)	2-6 3/16	(767)	2-10 3/16	(868)
CN	DLO Height		Square Feet (Square Meters)										
Standard Bottom Rail													
16	0-9 5/16	(237)	1.43	(0.13)	1.56	(0.15)	1.69	(0.16)	1.95	(0.18)	2.21	(0.21)	
18	0-11 5/16	(287)	1.74	(0.16)	1.90	(0.18)	2.06	(0.19)	2.37	(0.22)	2.69	(0.25)	
20	1-1 5/16	(338)	2.05	(0.19)	2.24	(0.21)	2.42	(0.22)	2.79	(0.26)	3.16	(0.29)	
24	1-5 5/16	(440)	2.67	(0.25)	2.91	(0.27)	3.15	(0.29)	3.63	(0.34)	4.11	(0.38)	
28	1-9 5/16	(541)	3.28	(0.31)	3.58	(0.33)	3.88	(0.36)	4.47	(0.42)	5.06	(0.47)	
32	2-1 5/16	(643)	3.90	(0.36)	4.25	(0.39)	4.60	(0.43)	5.31	(0.49)	6.01	(0.56)	
36	2-5 5/16	(745)	4.52	(0.42)	4.92	(0.46)	5.33	(0.50)	6.14	(0.57)	6.96	(0.65)	
40	2-9 5/16	(846)	5.13	(0.48)	5.60	(0.52)	6.06	(0.56)	6.98	(0.65)	7.91	(0.73)	
44	3-1 5/16	(948)	5.75	(0.53)	6.27	(0.58)	6.79	(0.63)	7.82	(0.73)	8.86	(0.82)	
48	3-5 5/16	(1049)	6.37	(0.59)	6.94	(0.64)	7.51	(0.70)	8.66	(0.80)	9.81	(0.91)	
54	3-11 5/16	(1202)	7.29	(0.68)	7.95	(0.74)	8.60	(0.80)	9.92	(0.92)	11.23	(1.04)	
56	4-1 5/16	(1253)	7.60	(0.71)	8.28	(0.77)	8.97	(0.83)	10.34	(0.96)	11.71	(1.09)	
60	4-5 5/16	(1354)	8.21	(0.76)	8.95	(0.83)	9.70	(0.90)	11.18	(1.04)	12.66	(1.18)	
64	4-9 5/16	(1456)	8.83	(0.82)	9.63	(0.89)	10.42	(0.97)	12.01	(1.12)	13.61	(1.26)	
72	5-5 5/16	(1659)	10.06	(0.93)	10.97	(1.02)	11.88	(1.10)	13.69	(1.27)	15.51	(1.44)	
78	5-11 5/16	(1811)	10.99	(1.02)	11.98	(1.11)	12.97	(1.20)	14.95	(1.39)	16.93	(1.57)	
84	6-5 5/16	(1964)	11.91	(1.11)	12.99	(1.21)	14.06	(1.31)	16.21	(1.51)	18.35	(1.71)	
92	7-1 5/16	(2167)	13.14	(1.22)	14.33	(1.33)	15.51	(1.44)	17.88	(1.66)	20.25	(1.88)	
96	7-5 5/16	(2269)	13.76	(1.28)	15.00	(1.39)	16.24	(1.51)	18.72	(1.74)	N/A		
Tall Bottom Rail													
16	0-7 13/16	(198)	1.20	(0.11)	1.31	(0.12)	1.42	(0.13)	1.64	(0.15)	1.85	(0.17)	
18	0-9 13/16	(249)	1.51	(0.14)	1.65	(0.15)	1.78	(0.17)	2.06	(0.19)	2.33	(0.22)	
20	0-11 13/16	(300)	1.82	(0.17)	1.98	(0.18)	2.15	(0.20)	2.48	(0.23)	2.80	(0.26)	
24	1-3 13/16	(402)	2.44	(0.23)	2.66	(0.25)	2.88	(0.27)	3.31	(0.31)	3.75	(0.35)	
28	1-7 13/16	(503)	3.05	(0.28)	3.33	(0.31)	3.60	(0.33)	4.15	(0.39)	4.70	(0.44)	
32	1-11 13/16	(605)	3.67	(0.34)	4.00	(0.37)	4.33	(0.40)	4.99	(0.46)	5.65	(0.53)	
36	2-3 13/16	(706)	4.29	(0.40)	4.67	(0.43)	5.06	(0.47)	5.83	(0.54)	6.60	(0.61)	
40	2-7 13/16	(808)	4.90	(0.46)	5.34	(0.50)	5.79	(0.54)	6.67	(0.62)	7.55	(0.70)	
44	2-11 13/16	(910)	5.52	(0.51)	6.02	(0.56)	6.51	(0.61)	7.51	(0.70)	8.50	(0.79)	
48	3-3 13/16	(1011)	6.13	(0.57)	6.69	(0.62)	7.24	(0.67)	8.35	(0.78)	9.45	(0.88)	
54	3-9 13/16	(1164)	7.06	(0.66)	7.69	(0.71)	8.33	(0.77)	9.60	(0.89)	10.88	(1.01)	
56	3-11 13/16	(1214)	7.37	(0.68)	8.03	(0.75)	8.69	(0.81)	10.02	(0.93)	11.35	(1.05)	
60	4-3 13/16	(1316)	7.98	(0.74)	8.70	(0.81)	9.42	(0.88)	10.86	(1.01)	12.30	(1.14)	
64	4-7 13/16	(1418)	8.60	(0.80)	9.37	(0.87)	10.15	(0.94)	11.70	(1.09)	13.25	(1.23)	
72	5-3 13/16	(1621)	9.83	(0.91)	10.72	(1.00)	11.60	(1.08)	13.38	(1.24)	15.15	(1.41)	
78	5-9 13/16	(1773)	10.76	(1.00)	11.73	(1.09)	12.70	(1.18)	14.63	(1.36)	16.57	(1.54)	
84	6-3 13/16	(1926)	11.68	(1.09)	12.73	(1.18)	13.79	(1.28)	15.89	(1.48)	18.00	(1.67)	
92	6-11 13/16	(2129)	12.91	(1.20)	14.08	(1.31)	15.24	(1.42)	17.57	(1.63)	19.90	(1.85)	
96	7-3 13/16	(2230)	13.53	(1.26)	14.75	(1.37)	15.97	(1.48)	18.41	(1.71)	N/A		

Vent Openings: Awning Push Out - Full Frame

CN	Opening Vent Width		Opening Vent Height		Vent Opening	
	ft - in	mm	ft - in	mm	ft ²	mm ²
1614	0-11 1/64	(280)	0-8 1/64	(203)	0.61	(0.06)
1616	0-11 1/64	(280)	0-10 1/64	(254)	0.77	(0.07)
1618	0-11 1/64	(280)	1-0 1/64	(305)	0.92	(0.09)
1620	0-11 1/64	(280)	1-2 1/64	(356)	1.07	(0.10)
1624	0-11 1/64	(280)	1-6 1/64	(457)	1.38	(0.13)
1628	0-11 1/64	(280)	1-10 1/64	(559)	1.68	(0.16)
1632	0-11 1/64	(280)	2-2 1/64	(661)	1.99	(0.18)
1636	0-11 1/64	(280)	2-6 1/64	(762)	2.30	(0.21)
1640	0-11 1/64	(280)	2-10 1/64	(864)	2.60	(0.24)
1644	0-11 1/64	(280)	3-2 1/64	(965)	2.91	(0.27)
1648	0-11 1/64	(280)	3-6 1/64	(1067)	3.21	(0.30)
1814	1-1 1/64	(331)	0-8 1/64	(203)	0.72	(0.07)
1816	1-1 1/64	(331)	0-10 1/64	(254)	0.90	(0.08)
1818	1-1 1/64	(331)	1-0 1/64	(305)	1.09	(0.10)
1820	1-1 1/64	(331)	1-2 1/64	(356)	1.27	(0.12)
1824	1-1 1/64	(331)	1-6 1/64	(457)	1.63	(0.15)
1828	1-1 1/64	(331)	1-10 1/64	(559)	1.99	(0.18)
1832	1-1 1/64	(331)	2-2 1/64	(661)	2.35	(0.22)
1836	1-1 1/64	(331)	2-6 1/64	(762)	2.71	(0.25)
1840	1-1 1/64	(331)	2-10 1/64	(864)	3.07	(0.29)
1844	1-1 1/64	(331)	3-2 1/64	(965)	3.44	(0.32)
1848	1-1 1/64	(331)	3-6 1/64	(1067)	3.80	(0.35)
2014	1-3 1/64	(381)	0-8 1/64	(203)	0.84	(0.08)
2016	1-3 1/64	(381)	0-10 1/64	(254)	1.04	(0.10)
2018	1-3 1/64	(381)	1-0 1/64	(305)	1.25	(0.12)
2020	1-3 1/64	(381)	1-2 1/64	(356)	1.46	(0.14)
2024	1-3 1/64	(381)	1-6 1/64	(457)	1.88	(0.17)
2028	1-3 1/64	(381)	1-10 1/64	(559)	2.30	(0.21)
2032	1-3 1/64	(381)	2-2 1/64	(661)	2.71	(0.25)
2036	1-3 1/64	(381)	2-6 1/64	(762)	3.13	(0.29)
2040	1-3 1/64	(381)	2-10 1/64	(864)	3.55	(0.33)
2044	1-3 1/64	(381)	3-2 1/64	(965)	3.96	(0.37)
2048	1-3 1/64	(381)	3-6 1/64	(1067)	4.38	(0.41)
2414	1-7 1/64	(483)	0-8 1/64	(203)	1.06	(0.10)
2416	1-7 1/64	(483)	0-10 1/64	(254)	1.32	(0.12)
2418	1-7 1/64	(483)	1-0 1/64	(305)	1.59	(0.15)
2420	1-7 1/64	(483)	1-2 1/64	(356)	1.85	(0.17)
2424	1-7 1/64	(483)	1-6 1/64	(457)	2.38	(0.22)
2428	1-7 1/64	(483)	1-10 1/64	(559)	2.91	(0.27)
2432	1-7 1/64	(483)	2-2 1/64	(661)	3.43	(0.32)
2436	1-7 1/64	(483)	2-6 1/64	(762)	3.96	(0.37)
2440	1-7 1/64	(483)	2-10 1/64	(864)	4.49	(0.42)
2444	1-7 1/64	(483)	3-2 1/64	(965)	5.02	(0.47)
2448	1-7 1/64	(483)	3-6 1/64	(1067)	5.55	(0.52)
2614	1-9 1/64	(534)	0-8 1/64	(203)	1.17	(0.11)
2616	1-9 1/64	(534)	0-10 1/64	(254)	1.46	(0.14)
2618	1-9 1/64	(534)	1-0 1/64	(305)	1.75	(0.16)
2620	1-9 1/64	(534)	1-2 1/64	(356)	2.04	(0.19)
2624	1-9 1/64	(534)	1-6 1/64	(457)	2.63	(0.24)
2628	1-9 1/64	(534)	1-10 1/64	(559)	3.21	(0.30)
2632	1-9 1/64	(534)	2-2 1/64	(661)	3.80	(0.35)
2636	1-9 1/64	(534)	2-6 1/64	(762)	4.38	(0.41)
2640	1-9 1/64	(534)	2-10 1/64	(864)	4.96	(0.46)
2644	1-9 1/64	(534)	3-2 1/64	(965)	5.55	(0.52)
2648	1-9 1/64	(534)	3-6 1/64	(1067)	6.13	(0.57)

CN	Opening Vent Width		Opening Vent Height		Vent Opening	
	ft - in	mm	ft - in	mm	ft ²	mm ²
2814	1-11 1/64	(585)	0-8 1/64	(203)	1.28	(0.12)
2816	1-11 1/64	(585)	0-10 1/64	(254)	1.60	(0.15)
2818	1-11 1/64	(585)	1-0 1/64	(305)	1.92	(0.18)
2820	1-11 1/64	(585)	1-2 1/64	(356)	2.24	(0.21)
2824	1-11 1/64	(585)	1-6 1/64	(457)	2.88	(0.27)
2828	1-11 1/64	(585)	1-10 1/64	(559)	3.52	(0.33)
2832	1-11 1/64	(585)	2-2 1/64	(661)	4.16	(0.39)
2836	1-11 1/64	(585)	2-6 1/64	(762)	4.80	(0.45)
2840	1-11 1/64	(585)	2-10 1/64	(864)	5.44	(0.51)
2844	1-11 1/64	(585)	3-2 1/64	(965)	6.08	(0.56)
2848	1-11 1/64	(585)	3-6 1/64	(1067)	6.71	(0.62)
3014	2-1 1/64	(635)	0-8 1/64	(203)	1.39	(0.13)
3016	2-1 1/64	(635)	0-10 1/64	(254)	1.74	(0.16)
3018	2-1 1/64	(635)	1-0 1/64	(305)	2.09	(0.19)
3020	2-1 1/64	(635)	1-2 1/64	(356)	2.43	(0.23)
3024	2-1 1/64	(635)	1-6 1/64	(457)	3.13	(0.29)
3028	2-1 1/64	(635)	1-10 1/64	(559)	3.82	(0.36)
3032	2-1 1/64	(635)	2-2 1/64	(661)	4.52	(0.42)
3036	2-1 1/64	(635)	2-6 1/64	(762)	5.21	(0.48)
3040	2-1 1/64	(635)	2-10 1/64	(864)	5.91	(0.55)
3044	2-1 1/64	(635)	3-2 1/64	(965)	6.60	(0.61)
3048	2-1 1/64	(635)	3-6 1/64	(1067)	7.30	(0.68)
3214	2-3 1/64	(686)	0-8 1/64	(203)	1.50	(0.14)
3216	2-3 1/64	(686)	0-10 1/64	(254)	1.88	(0.17)
3218	2-3 1/64	(686)	1-0 1/64	(305)	2.25	(0.21)
3220	2-3 1/64	(686)	1-2 1/64	(356)	2.63	(0.24)
3224	2-3 1/64	(686)	1-6 1/64	(457)	3.38	(0.31)
3228	2-3 1/64	(686)	1-10 1/64	(559)	4.13	(0.38)
3232	2-3 1/64	(686)	2-2 1/64	(661)	4.88	(0.45)
3236	2-3 1/64	(686)	2-6 1/64	(762)	5.63	(0.52)
3240	2-3 1/64	(686)	2-10 1/64	(864)	6.38	(0.59)
3244	2-3 1/64	(686)	3-2 1/64	(965)	7.13	(0.66)
3248	2-3 1/64	(686)	3-6 1/64	(1067)	7.88	(0.73)
3614	2-7 1/64	(788)	0-8 1/64	(203)	1.73	(0.16)
3616	2-7 1/64	(788)	0-10 1/64	(254)	2.16	(0.20)
3618	2-7 1/64	(788)	1-0 1/64	(305)	2.59	(0.24)
3620	2-7 1/64	(788)	1-2 1/64	(356)	3.02	(0.28)
3624	2-7 1/64	(788)	1-6 1/64	(457)	3.88	(0.36)
3628	2-7 1/64	(788)	1-10 1/64	(559)	4.74	(0.44)
3632	2-7 1/64	(788)	2-2 1/64	(661)	5.60	(0.52)
3636	2-7 1/64	(788)	2-6 1/64	(762)	6.46	(0.60)
3640	2-7 1/64	(788)	2-10 1/64	(864)	7.33	(0.68)
3644	2-7 1/64	(788)	3-2 1/64	(965)	8.19	(0.76)
3648	2-7 1/64	(788)	3-6 1/64	(1067)	9.05	(0.84)
4014	2-11 1/64	(889)	0-8 1/64	(203)	1.95	(0.18)
4016	2-11 1/64	(889)	0-10 1/64	(254)	2.43	(0.23)
4018	2-11 1/64	(889)	1-0 1/64	(305)	2.92	(0.27)
4020	2-11 1/64	(889)	1-2 1/64	(356)	3.41	(0.32)
4024	2-11 1/64	(889)	1-6 1/64	(457)	4.38	(0.41)
4028	2-11 1/64	(889)	1-10 1/64	(559)	5.35	(0.50)
4032	2-11 1/64	(889)	2-2 1/64	(661)	6.33	(0.59)
4036	2-11 1/64	(889)	2-6 1/64	(762)	7.30	(0.68)
4040	2-11 1/64	(889)	2-10 1/64	(864)	8.27	(0.77)
4044	2-11 1/64	(889)	3-2 1/64	(965)	9.24	(0.86)
4048	2-11 1/64	(889)	3-6 1/64	(1067)	10.22	(0.95)

Vent Openings: Awning Push Out - Full Frame

CN	Opening Vent Width		Opening Vent Height		Vent Opening	
	ft - in	mm	ft - in	mm	ft ²	mm ²
4814	3-7 1/64	(1093)	0-8 1/64	(203)	2.39	(0.22)
4816	3-7 1/64	(1093)	0-10 1/64	(254)	2.99	(0.28)
4818	3-7 1/64	(1093)	1-0 1/64	(305)	3.59	(0.33)
4820	3-7 1/64	(1093)	1-2 1/64	(356)	4.19	(0.39)
4824	3-7 1/64	(1093)	1-6 1/64	(457)	5.38	(0.50)
4828	3-7 1/64	(1093)	1-10 1/64	(559)	6.58	(0.61)
4832	3-7 1/64	(1093)	2-2 1/64	(661)	7.77	(0.72)
4836	3-7 1/64	(1093)	2-6 1/64	(762)	8.96	(0.83)
4840	3-7 1/64	(1093)	2-10 1/64	(864)	10.16	(0.94)
4844	3-7 1/64	(1093)	3-2 1/64	(965)	11.35	(1.05)
4848	3-7 1/64	(1093)	3-6 1/64	(1067)	12.55	(1.17)
5614	4-3 1/64	(1296)	0-8 1/64	(203)	2.84	(0.26)
5616	4-3 1/64	(1296)	0-10 1/64	(254)	3.55	(0.33)
5618	4-3 1/64	(1296)	1-0 1/64	(305)	4.26	(0.40)
5620	4-3 1/64	(1296)	1-2 1/64	(356)	4.96	(0.46)
5624	4-3 1/64	(1296)	1-6 1/64	(457)	6.38	(0.59)
5628	4-3 1/64	(1296)	1-10 1/64	(559)	7.80	(0.72)
5632	4-3 1/64	(1296)	2-2 1/64	(661)	9.22	(0.86)
5636	4-3 1/64	(1296)	2-6 1/64	(762)	10.63	(0.99)
5640	4-3 1/64	(1296)	2-10 1/64	(864)	12.05	(1.12)
5644	4-3 1/64	(1296)	3-2 1/64	(965)	13.47	(1.25)
5648	4-3 1/64	(1296)	3-6 1/64	(1067)	14.88	(1.38)
6014	4-7 1/64	(1397)	0-8 1/64	(203)	3.06	(0.28)
6016	4-7 1/64	(1397)	0-10 1/64	(254)	3.82	(0.36)
6018	4-7 1/64	(1397)	1-0 1/64	(305)	4.59	(0.43)
6020	4-7 1/64	(1397)	1-2 1/64	(356)	5.35	(0.50)
6024	4-7 1/64	(1397)	1-6 1/64	(457)	6.88	(0.64)
6028	4-7 1/64	(1397)	1-10 1/64	(559)	8.41	(0.78)
6032	4-7 1/64	(1397)	2-2 1/64	(661)	9.94	(0.92)
6036	4-7 1/64	(1397)	2-6 1/64	(762)	11.47	(1.07)
6040	4-7 1/64	(1397)	2-10 1/64	(864)	12.99	(1.21)
6044	4-7 1/64	(1397)	3-2 1/64	(965)	14.52	(1.35)
6048	4-7 1/64	(1397)	3-6 1/64	(1067)	16.05	(1.49)
6414	4-11 1/64	(1499)	0-8 1/64	(203)	3.28	(0.31)
6416	4-11 1/64	(1499)	0-10 1/64	(254)	4.10	(0.38)
6418	4-11 1/64	(1499)	1-0 1/64	(305)	4.92	(0.46)
6420	4-11 1/64	(1499)	1-2 1/64	(356)	5.74	(0.53)
6424	4-11 1/64	(1499)	1-6 1/64	(457)	7.38	(0.69)
6428	4-11 1/64	(1499)	1-10 1/64	(559)	9.02	(0.84)
6432	4-11 1/64	(1499)	2-2 1/64	(661)	10.66	(0.99)
6436	4-11 1/64	(1499)	2-6 1/64	(762)	12.30	(1.14)
6440	4-11 1/64	(1499)	2-10 1/64	(864)	13.94	(1.29)
6444	4-11 1/64	(1499)	3-2 1/64	(965)	15.58	(1.45)
6448	4-11 1/64	(1499)	3-6 1/64	(1067)	17.22	(1.60)

CN	Opening Vent Width		Opening Vent Height		Vent Opening	
	ft - in	mm	ft - in	mm	ft ²	mm ²
7214	5-7 1/64	(1702)	0-8 1/64	(203)	3.73	(0.35)
7216	5-7 1/64	(1702)	0-10 1/64	(254)	4.66	(0.43)
7218	5-7 1/64	(1702)	1-0 1/64	(305)	5.59	(0.52)
7220	5-7 1/64	(1702)	1-2 1/64	(356)	6.52	(0.61)
7224	5-7 1/64	(1702)	1-6 1/64	(457)	8.38	(0.78)
7228	5-7 1/64	(1702)	1-10 1/64	(559)	10.24	(0.95)
7232	5-7 1/64	(1702)	2-2 1/64	(661)	12.11	(1.12)
7236	5-7 1/64	(1702)	2-6 1/64	(762)	13.97	(1.30)
7240	5-7 1/64	(1702)	2-10 1/64	(864)	15.83	(1.47)
7244	5-7 1/64	(1702)	3-2 1/64	(965)	17.69	(1.64)
7248	5-7 1/64	(1702)	3-6 1/64	(1067)	19.55	(1.82)

Daylight Measurements: Awning Push Out - Full Frame

Ultimate Wood Awning Push Out Daylight Measurements		Width										
		CN	16		18		20		24		26	
		DLO	0-10 3/16	(259)	1-0 3/16	(310)	1-2 3/16	(360)	1-6 3/16	(462)	1-8 3/16	(513)
CN	DLO Height	Square Feet (Square Meters)										
Standard Bottom Rail												
14	0-7 5/16 (186)	0.52	(0.05)	0.62	(0.06)	0.72	(0.07)	0.92	(0.09)	1.03	(0.10)	
16	0-9 5/16 (237)	0.66	(0.06)	0.79	(0.07)	0.92	(0.09)	1.18	(0.11)	1.31	(0.12)	
18	0-11 5/16 (287)	0.80	(0.07)	0.96	(0.09)	1.11	(0.10)	1.43	(0.13)	1.59	(0.15)	
20	1-1 5/16 (338)	0.94	(0.09)	1.13	(0.10)	1.31	(0.12)	1.68	(0.16)	1.87	(0.17)	
24	1-5 5/16 (440)	1.22	(0.11)	1.47	(0.14)	1.71	(0.16)	2.19	(0.20)	2.43	(0.23)	
28	1-9 5/16 (541)	1.51	(0.14)	1.80	(0.17)	2.10	(0.20)	2.69	(0.25)	2.99	(0.28)	
32	2-1 5/16 (643)	1.79	(0.17)	2.14	(0.20)	2.49	(0.23)	3.20	(0.30)	3.55	(0.33)	
36	2-5 5/16 (745)	2.07	(0.19)	2.48	(0.23)	2.89	(0.27)	3.70	(0.34)	4.11	(0.38)	
40	2-9 5/16 (846)	2.36	(0.22)	2.82	(0.26)	3.28	(0.30)	4.21	(0.39)	4.67	(0.43)	
44	3-1 5/16 (948)	2.64	(0.25)	3.16	(0.29)	3.68	(0.34)	4.71	(0.44)	5.23	(0.49)	
48	3-5 5/16 (1049)	2.92	(0.27)	3.50	(0.32)	4.07	(0.38)	5.22	(0.48)	5.79	(0.54)	
Tall Bottom Rail												
14	0-5 13/16 (148)	0.41	(0.04)	0.49	(0.05)	0.57	(0.05)	0.73	(0.07)	0.81	(0.08)	
16	0-7 13/16 (198)	0.55	(0.05)	0.66	(0.06)	0.77	(0.07)	0.99	(0.09)	1.10	(0.10)	
18	0-9 13/16 (249)	0.69	(0.06)	0.83	(0.08)	0.97	(0.09)	1.24	(0.12)	1.38	(0.13)	
20	0-11 13/16 (300)	0.84	(0.08)	1.00	(0.09)	1.16	(0.11)	1.49	(0.14)	1.66	(0.15)	
24	1-3 13/16 (402)	1.12	(0.10)	1.34	(0.12)	1.56	(0.14)	2.00	(0.19)	2.22	(0.21)	
28	1-7 13/16 (503)	1.40	(0.13)	1.68	(0.16)	1.95	(0.18)	2.50	(0.23)	2.78	(0.26)	
32	1-11 13/16 (605)	1.68	(0.16)	2.02	(0.19)	2.35	(0.22)	3.01	(0.28)	3.34	(0.31)	
36	2-3 13/16 (706)	1.97	(0.18)	2.35	(0.22)	2.74	(0.25)	3.51	(0.33)	3.90	(0.36)	
40	2-7 13/16 (808)	2.25	(0.21)	2.69	(0.25)	3.13	(0.29)	4.02	(0.37)	4.46	(0.41)	
44	2-11 13/16 (910)	2.53	(0.24)	3.03	(0.28)	3.53	(0.33)	4.52	(0.42)	5.02	(0.47)	
48	3-3 13/16 (1011)	2.82	(0.26)	3.37	(0.31)	3.92	(0.36)	5.03	(0.47)	5.58	(0.52)	

Daylight Measurements: Awning Push Out - Full Frame

Ultimate Wood Awning Push Out Daylight Measurements		Width										
		CN	28		30		32		36		40	
		DLO	1-10 3/16	(564)	2-0 3/16	(614)	2-2 3/16	(665)	2-6 3/16	(767)	2-10 3/16	(868)
CN	DLO Height	Square Feet (Square Meters)										
Standard Bottom Rail												
14	0-7 5/16 (186)	1.13	(0.10)	1.23	(0.11)	1.33	(0.12)	1.53	(0.14)	1.74	(0.16)	
16	0-9 5/16 (237)	1.43	(0.13)	1.56	(0.15)	1.69	(0.16)	1.95	(0.18)	2.21	(0.21)	
18	0-11 5/16 (287)	1.74	(0.16)	1.90	(0.18)	2.06	(0.19)	2.37	(0.22)	2.69	(0.25)	
20	1-1 5/16 (338)	2.05	(0.19)	2.24	(0.21)	2.42	(0.22)	2.79	(0.26)	3.16	(0.29)	
24	1-5 5/16 (440)	2.67	(0.25)	2.91	(0.27)	3.15	(0.29)	3.63	(0.34)	4.11	(0.38)	
28	1-9 5/16 (541)	3.28	(0.31)	3.58	(0.33)	3.88	(0.36)	4.47	(0.42)	5.06	(0.47)	
32	2-1 5/16 (643)	3.90	(0.36)	4.25	(0.39)	4.60	(0.43)	5.31	(0.49)	6.01	(0.56)	
36	2-5 5/16 (745)	4.52	(0.42)	4.92	(0.46)	5.33	(0.50)	6.14	(0.57)	6.96	(0.65)	
40	2-9 5/16 (846)	5.13	(0.48)	5.60	(0.52)	6.06	(0.56)	6.98	(0.65)	7.91	(0.73)	
44	3-1 5/16 (948)	5.75	(0.53)	6.27	(0.58)	6.79	(0.63)	7.82	(0.73)	8.86	(0.82)	
48	3-5 5/16 (1049)	6.37	(0.59)	6.94	(0.64)	7.51	(0.70)	8.66	(0.80)	9.81	(0.91)	
Tall Bottom Rail												
14	0-5 13/16 (148)	0.90	(0.08)	0.98	(0.09)	1.06	(0.10)	1.22	(0.11)	1.38	(0.13)	
16	0-7 13/16 (198)	1.20	(0.11)	1.31	(0.12)	1.42	(0.13)	1.64	(0.15)	1.85	(0.17)	
18	0-9 13/16 (249)	1.51	(0.14)	1.65	(0.15)	1.78	(0.17)	2.06	(0.19)	2.33	(0.22)	
20	0-11 13/16 (300)	1.82	(0.17)	1.98	(0.18)	2.15	(0.20)	2.48	(0.23)	2.80	(0.26)	
24	1-3 13/16 (402)	2.44	(0.23)	2.66	(0.25)	2.88	(0.27)	3.31	(0.31)	3.75	(0.35)	
28	1-7 13/16 (503)	3.05	(0.28)	3.33	(0.31)	3.60	(0.33)	4.15	(0.39)	4.70	(0.44)	
32	1-11 13/16 (605)	3.67	(0.34)	4.0	(0.37)	4.33	(0.40)	4.99	(0.46)	5.65	(0.53)	
36	2-3 13/16 (706)	4.29	(0.40)	4.67	(0.43)	5.06	(0.47)	5.83	(0.54)	6.60	(0.61)	
40	2-7 13/16 (808)	4.90	(0.46)	5.34	(0.50)	5.79	(0.54)	6.67	(0.62)	7.55	(0.70)	
44	2-11 13/16 (910)	5.52	(0.51)	6.02	(0.56)	6.51	(0.61)	7.51	(0.70)	8.50	(0.79)	
48	3-3 13/16 (1011)	6.13	(0.57)	6.69	(0.62)	7.24	(0.67)	8.35	(0.78)	9.45	(0.88)	

Daylight Measurements: Awning Push Out - Full Frame

Ultimate Wood Awning Push Out Daylight Measurements		Width										
		CN	48		56		60		64		72	
		DLO	3-6 3/16	(1072)	4-2 3/16	(1275)	4-6 3/16	(1376)	4-10 3/16	(1478)	5-6 3/16	(1681)
CN	DLO Height	Square Feet (Square Meters)										
		Standard Bottom Rail										
14	0-7 5/16 (186)	2.14	(0.20)	2.55	(0.24)	2.75	(0.26)	2.95	(0.27)	3.36	(0.31)	
16	0-9 5/16 (237)	2.73	(0.25)	3.25	(0.30)	3.50	(0.33)	3.76	(0.35)	4.28	(0.40)	
18	0-11 5/16 (287)	3.31	(0.31)	3.94	(0.37)	4.26	(0.40)	4.57	(0.42)	5.20	(0.48)	
20	1-1 5/16 (338)	3.90	(0.36)	4.64	(0.43)	5.01	(0.47)	5.38	(0.50)	6.12	(0.57)	
24	1-5 5/16 (440)	5.07	(0.47)	6.03	(0.56)	6.51	(0.61)	7.0	(0.65)	7.96	(0.74)	
28	1-9 5/16 (541)	6.24	(0.58)	7.43	(0.69)	8.02	(0.75)	8.61	(0.80)	9.80	(0.91)	
32	2-1 5/16 (643)	7.42	(0.69)	8.82	(0.82)	9.52	(0.88)	10.23	(0.95)	11.63	(1.08)	
36	2-5 5/16 (745)	8.59	(0.80)	10.22	(0.95)	11.03	(1.02)	11.84	(1.10)	13.47	(1.25)	
40	2-9 5/16 (846)	9.76	(0.91)	11.61	(1.08)	12.54	(1.16)	13.46	(1.25)	15.31	(1.42)	
44	3-1 5/16 (948)	10.93	(1.02)	13.0	(1.21)	14.04	(1.30)	15.08	(1.40)	17.15	(1.59)	
48	3-5 5/16 (1049)	12.10	(1.12)	14.40	(1.34)	15.55	(1.44)	16.69	(1.55)	18.99	(1.76)	
		Tall Bottom Rail										
14	0-5 13/16 (148)	1.70	(0.16)	2.03	(0.19)	2.19	(0.20)	2.35	(0.22)	2.67	(0.25)	
16	0-7 13/16 (198)	2.29	(0.21)	2.72	(0.25)	2.94	(0.27)	3.16	(0.29)	3.59	(0.33)	
18	0-9 13/16 (249)	2.87	(0.27)	3.42	(0.32)	3.69	(0.34)	3.96	(0.37)	4.51	(0.42)	
20	0-11 13/16 (300)	3.46	(0.32)	4.12	(0.38)	4.44	(0.41)	4.77	(0.44)	5.43	(0.50)	
24	1-3 13/16 (402)	4.63	(0.43)	5.51	(0.51)	5.95	(0.55)	6.39	(0.59)	7.27	(0.68)	
28	1-7 13/16 (503)	5.80	(0.54)	6.90	(0.64)	7.46	(0.69)	8.01	(0.74)	9.11	(0.85)	
32	1-11 13/16 (605)	6.98	(0.65)	8.30	(0.77)	8.96	(0.83)	9.62	(0.89)	10.94	(1.02)	
36	2-3 13/16 (706)	8.15	(0.76)	9.69	(0.90)	10.47	(0.97)	11.24	(1.04)	12.78	(1.19)	
40	2-7 13/16 (808)	9.32	(0.87)	11.09	(1.03)	11.97	(1.11)	12.85	(1.19)	14.62	(1.36)	
44	2-11 13/16 (910)	10.49	(0.97)	12.48	(1.16)	13.48	(1.25)	14.47	(1.34)	16.46	(1.53)	
48	3-3 13/16 (1011)	11.66	(1.08)	13.88	(1.29)	14.98	(1.39)	16.09	(1.49)	18.30	(1.70)	

Daylight Measurements: Picture - Full Frame

Ultimate Wood Casement Push Out Picture Daylight Measurements			Width										
			CN	40		48		56		60		64	
			DLO	2-10 3/16 (868)	3-6 3/16 (1072)	4-2 3/16 (1275)	4-6 3/16 (1376)	4-10 3/16 (1478)					
CN	DLO Height	Square Feet (Square Meters)											
Standard Bottom Rail													
12	0-5 5/16 (135)	1.26 (0.12)	1.56 (0.14)	1.85 (0.17)	2.00 (0.19)	2.15 (0.20)							
14	0-7 5/16 (186)	1.74 (0.16)	2.14 (0.20)	2.55 (0.24)	2.75 (0.26)	2.95 (0.27)							
16	0-9 5/16 (237)	2.21 (0.21)	2.73 (0.25)	3.25 (0.30)	3.50 (0.33)	3.76 (0.35)							
18	0-11 5/16 (287)	2.69 (0.25)	3.31 (0.31)	3.94 (0.37)	4.26 (0.40)	4.57 (0.42)							
20	1-1 5/16 (338)	3.16 (0.29)	3.90 (0.36)	4.64 (0.43)	5.01 (0.47)	5.38 (0.50)							
24	1-5 5/16 (440)	4.11 (0.38)	5.07 (0.47)	6.03 (0.56)	6.51 (0.61)	7.00 (0.65)							
28	1-9 5/16 (541)	5.06 (0.47)	6.24 (0.58)	7.43 (0.69)	8.02 (0.75)	8.61 (0.80)							
32	2-1 5/16 (643)	6.01 (0.56)	7.42 (0.69)	8.82 (0.82)	9.52 (0.88)	10.23 (0.95)							
36	2-5 5/16 (745)	6.96 (0.65)	8.59 (0.80)	10.22 (0.95)	11.03 (1.02)	11.84 (1.10)							
40	2-9 5/16 (846)	7.91 (0.73)	9.76 (0.91)	11.61 (1.08)	12.54 (1.16)	13.46 (1.25)							
44	3-1 5/16 (948)	8.86 (0.82)	10.93 (1.02)	13.00 (1.21)	14.04 (1.30)	15.08 (1.40)							
48	3-5 5/16 (1049)	9.81 (0.91)	12.10 (1.12)	14.40 (1.34)	15.55 (1.44)	16.69 (1.55)							
54	3-11 5/16 (1202)	11.23 (1.04)	13.86 (1.29)	16.49 (1.53)	17.80 (1.65)	19.12 (1.78)							
56	4-1 5/16 (1253)	11.71 (1.09)	14.45 (1.34)	17.19 (1.60)	18.56 (1.72)	19.93 (1.85)							
60	4-5 5/16 (1354)	12.66 (1.18)	15.62 (1.45)	18.58 (1.73)	20.06 (1.86)	21.54 (2.00)							
64	4-9 5/16 (1456)	13.61 (1.26)	16.79 (1.56)	19.97 (1.86)	21.57 (2.00)	23.16 (2.15)							
72	5-5 5/16 (1659)	15.51 (1.44)	19.13 (1.78)	22.76 (2.11)	24.58 (2.28)	26.39 (2.45)							
78	5-11 5/16 (1811)	16.93 (1.57)	20.89 (1.94)	24.85 (2.31)	26.83 (2.49)	28.82 (2.68)							
84	6-5 5/16 (1964)	18.35 (1.71)	22.65 (2.10)	26.94 (2.50)	29.09 (2.70)	31.24 (2.90)							
92	7-1 5/16 (2167)	20.25 (1.88)	24.99 (2.32)	29.73 (2.76)	32.10 (2.98)	34.47 (3.20)							
96	7-5 5/16 (2269)	21.20 (1.97)	26.17 (2.43)	31.13 (2.89)	33.61 (3.12)	36.09 (3.35)							
Tall Bottom Rail													
12	0-3 13/16 (97)	0.91 (0.08)	1.12 (0.10)	1.33 (0.12)	1.43 (0.13)	1.54 (0.14)							
14	0-5 13/16 (148)	1.38 (0.13)	1.70 (0.16)	2.03 (0.19)	2.19 (0.20)	2.35 (0.22)							
16	0-7 13/16 (198)	1.85 (0.17)	2.29 (0.21)	2.72 (0.25)	2.94 (0.27)	3.16 (0.29)							
18	0-9 13/16 (249)	2.33 (0.22)	2.87 (0.27)	3.42 (0.32)	3.69 (0.34)	3.96 (0.37)							
20	0-11 13/16 (300)	2.8 (0.26)	3.46 (0.32)	4.12 (0.38)	4.44 (0.41)	4.77 (0.44)							
24	1-3 13/16 (402)	3.75 (0.35)	4.63 (0.43)	5.51 (0.51)	5.95 (0.55)	6.39 (0.59)							
28	1-7 13/16 (503)	4.7 (0.44)	5.80 (0.54)	6.90 (0.64)	7.46 (0.69)	8.01 (0.74)							
32	1-11 13/16 (605)	5.65 (0.53)	6.98 (0.65)	8.30 (0.77)	8.96 (0.83)	9.62 (0.89)							
36	2-3 13/16 (706)	6.6 (0.61)	8.15 (0.76)	9.69 (0.90)	10.47 (0.97)	11.24 (1.04)							
40	2-7 13/16 (808)	7.55 (0.70)	9.32 (0.87)	11.09 (1.03)	11.97 (1.11)	12.85 (1.19)							
44	2-11 13/16 (910)	8.5 (0.79)	10.49 (0.97)	12.48 (1.16)	13.48 (1.25)	14.47 (1.34)							
48	3-3 13/16 (1011)	9.45 (0.88)	11.66 (1.08)	13.88 (1.29)	14.98 (1.39)	16.09 (1.49)							
54	3-9 13/16 (1164)	10.88 (1.01)	13.42 (1.25)	15.97 (1.48)	17.24 (1.60)	18.51 (1.72)							
56	3-11 13/16 (1214)	11.35 (1.05)	14.01 (1.30)	16.66 (1.55)	17.99 (1.67)	19.32 (1.79)							
60	4-3 13/16 (1316)	12.3 (1.14)	15.18 (1.41)	18.06 (1.68)	19.50 (1.81)	20.94 (1.95)							
64	4-7 13/16 (1418)	13.25 (1.23)	16.35 (1.52)	19.45 (1.81)	21.00 (1.95)	22.55 (2.10)							
72	5-3 13/16 (1621)	15.15 (1.41)	18.69 (1.74)	22.24 (2.07)	24.01 (2.23)	25.78 (2.40)							
78	5-9 13/16 (1773)	16.57 (1.54)	20.45 (1.90)	24.33 (2.26)	26.27 (2.44)	28.21 (2.62)							
84	6-3 13/16 (1926)	18 (1.67)	22.21 (2.06)	26.42 (2.45)	28.53 (2.65)	30.63 (2.85)							
92	6-11 13/16 (2129)	19.9 (1.85)	24.55 (2.28)	29.21 (2.71)	31.54 (2.93)	33.87 (3.15)							
96	7-3 13/16 (2230)	20.85 (1.94)	25.73 (2.39)	30.60 (2.84)	33.04 (3.07)	35.48 (3.30)							

Daylight Measurements: Picture - Full Frame

Ultimate Wood Casement Push Out Picture Daylight Measurements			Width								
			CN	72		80		88		96	
			DLO	5-6 3/16	(1681)	6-2 3/16	(1884)	6-10 3/16	(2088)	7-6 3/16	(2291)
CN	DLO Height		Square Feet (Square Meters)								
			Standard Bottom Rail								
12	0-5 5/16	(135)	2.44	(0.23)	2.74	(0.25)	3.03	(0.28)	3.33	(0.31)	
14	0-7 5/16	(186)	3.36	(0.31)	3.77	(0.35)	4.17	(0.39)	4.58	(0.43)	
16	0-9 5/16	(237)	4.28	(0.40)	4.80	(0.45)	5.31	(0.49)	5.83	(0.54)	
18	0-11 5/16	(287)	5.20	(0.48)	5.83	(0.54)	6.46	(0.60)	7.08	(0.66)	
20	1-1 5/16	(338)	6.12	(0.57)	6.86	(0.64)	7.60	(0.71)	8.34	(0.77)	
24	1-5 5/16	(440)	7.96	(0.74)	8.92	(0.83)	9.88	(0.92)	10.84	(1.01)	
28	1-9 5/16	(541)	9.80	(0.91)	10.98	(1.02)	12.16	(1.13)	13.35	(1.24)	
32	2-1 5/16	(643)	11.63	(1.08)	13.04	(1.21)	14.45	(1.34)	15.85	(1.47)	
36	2-5 5/16	(745)	13.47	(1.25)	15.10	(1.40)	16.73	(1.55)	18.36	(1.71)	
40	2-9 5/16	(846)	15.31	(1.42)	17.16	(1.59)	19.01	(1.77)	20.86	(1.94)	
44	3-1 5/16	(948)	17.15	(1.59)	19.22	(1.79)	21.30	(1.98)	23.37	(2.17)	
48	3-5 5/16	(1049)	18.99	(1.76)	21.28	(1.98)	23.58	(2.19)	25.87	(2.40)	
54	3-11 5/16	(1202)	21.75	(2.02)	24.37	(2.26)	27.00	(2.51)	29.63	(2.75)	
56	4-1 5/16	(1253)	22.67	(2.11)	25.40	(2.36)	28.14	(2.61)	30.88	(2.87)	
60	4-5 5/16	(1354)	24.50	(2.28)	27.47	(2.55)	30.43	(2.83)	33.39	(3.10)	
64	4-9 5/16	(1456)	26.34	(2.45)	29.53	(2.74)	32.71	(3.04)	35.89	(3.33)	
72	5-5 5/16	(1659)	30.02	(2.79)	33.65	(3.13)	37.28	(3.46)	40.90	(3.80)	
78	5-11 5/16	(1811)	32.78	(3.05)	36.74	(3.41)	40.70	(3.78)	44.66	(4.15)	
84	6-5 5/16	(1964)	35.54	(3.30)	39.83	(3.70)	44.13	(4.10)	48.42	(4.50)	
92	7-1 5/16	(2167)	39.21	(3.64)	43.95	(4.08)	48.69	(4.52)	N/A		
96	7-5 5/16	(2269)	41.05	(3.81)	46.01	(4.27)	50.97	(4.74)	N/A		
			Tall Bottom Rail								
12	0-3 13/16	(97)	1.75	(0.16)	1.96	(0.18)	2.18	(0.20)	2.39	(0.22)	
14	0-5 13/16	(148)	2.67	(0.25)	2.99	(0.28)	3.32	(0.31)	3.64	(0.34)	
16	0-7 13/16	(198)	3.59	(0.33)	4.02	(0.37)	4.46	(0.41)	4.89	(0.45)	
18	0-9 13/16	(249)	4.51	(0.42)	5.06	(0.47)	5.60	(0.52)	6.15	(0.57)	
20	0-11 13/16	(300)	5.43	(0.50)	6.09	(0.57)	6.74	(0.63)	7.40	(0.69)	
24	1-3 13/16	(402)	7.27	(0.68)	8.15	(0.76)	9.02	(0.84)	9.90	(0.92)	
28	1-7 13/16	(503)	9.11	(0.85)	10.21	(0.95)	11.31	(1.05)	12.41	(1.15)	
32	1-11 13/16	(605)	10.94	(1.02)	12.27	(1.14)	13.59	(1.26)	14.91	(1.39)	
36	2-3 13/16	(706)	12.78	(1.19)	14.33	(1.33)	15.87	(1.47)	17.42	(1.62)	
40	2-7 13/16	(808)	14.62	(1.36)	16.39	(1.52)	18.16	(1.69)	19.92	(1.85)	
44	2-11 13/16	(910)	16.46	(1.53)	18.45	(1.71)	20.44	(1.90)	22.43	(2.08)	
48	3-3 13/16	(1011)	18.30	(1.70)	20.51	(1.91)	22.72	(2.11)	24.93	(2.32)	
54	3-9 13/16	(1164)	21.06	(1.96)	23.60	(2.19)	26.15	(2.43)	28.69	(2.67)	
56	3-11 13/16	(1214)	21.98	(2.04)	24.63	(2.29)	27.29	(2.54)	29.94	(2.78)	
60	4-3 13/16	(1316)	23.81	(2.21)	26.69	(2.48)	29.57	(2.75)	32.45	(3.01)	
64	4-7 13/16	(1418)	25.65	(2.38)	28.75	(2.67)	31.85	(2.96)	34.95	(3.25)	
72	5-3 13/16	(1621)	29.33	(2.72)	32.88	(3.05)	36.42	(3.38)	39.97	(3.71)	
78	5-9 13/16	(1773)	32.09	(2.98)	35.97	(3.34)	39.84	(3.70)	43.72	(4.06)	
84	6-3 13/16	(1926)	34.85	(3.24)	39.06	(3.63)	43.27	(4.02)	47.48	(4.41)	
92	6-11 13/16	(2129)	38.52	(3.58)	43.18	(4.01)	47.84	(4.44)	N/A		
96	7-3 13/16	(2230)	40.36	(3.75)	45.24	(4.20)	50.12	(4.66)	N/A		

Minimum and Maximum Guidelines: Full Frame

Full Frame Minimum and Maximum Frame Size										
Unit Type			Min Width		Min Height		Max Width		Max Height	
			in	mm	in	mm	in	mm	in	mm
UWCAPO	Std Btm Rail	Insulating Glass 3/4" (19) or 1" (25)	16	(406)	15 15/16	(405)	36	(914)	96 1/8	(2442)
							40	(1016)	91 1/8	(2315)
UWCAPO	Tall Btm Rail	Insulating Glass 3/4" (19) or 1" (25)	16	(406)	18 5/16	(465)	36	(914)	96 1/8	(2442)
							40	(1016)	91 1/8	(2315)
UAWWNPO	Std and Tall Btm Rail	Insulating Glass 3/4" (19) or 1" (25)	16	(406)	12 13/16	(325)	72	(1829)	47 1/8	(1197)
UAWWNPOP	Std and Tall Btm Rail Certified	Insulating Glass 3/4" (19) or 1" (25)	12	(305)	12 7/16	(316)	88	(2235)	97 1/16	(2465)
							97 1/16	(2465)	88	(2235)
UAWWNPOP	Std and Tall Btm Rail Certified	Insulating Glass 1" (25)	12	(305)	12 7/16	(316)	88	(2235)	97 1/16	(2465)
							97 1/16	(2465)	88	(2235)
UAWWNPOP	Std and Tall Btm Rail Non-certified	Insulating Glass 3/4" (19) or 1" (25)	12	(305)	12 7/16	(316)	64	(1626)	104	(2642)
							104	(2642)	64	(1626)
UAWWNPOP	Std and Tall Btm Rail Non-certified	Insulating Glass 1" (25)	12	(305)	12 7/16	(316)	88	(2235)	120	(3048)
							120	(3048)	88	(2235)

Certified Sizes and Ratings

Product	Air Tested to psf	Water Tested to psf	Structural Overload Tested to psf	Certification Rating	Max Width In	Max Height In	Max Width mm	Max Height mm
Ultimate Wood French Casement Push Out SG & 3/4" (Full Frame)	1.57	7.5	75	LC-PG50	56	60.06	1422	1526
Ultimate Wood French Casement Push Out SG & 3/4" (Full Frame)	1.57	7.5	60	LC-PG40	60	72.06	1524	1830

Measurement Conversions: Casement and Awning Push Out

Unit Measurements		Width		Height	
From	To				
Inside Opening for Replacement		in	mm	in	mm
OM of Frame (Existing sill <8°)	Inside Opening	+ 3/8	(10)	+ 1/4	(06)
OM of Frame (Existing sill ≥8° - <14°)	Inside Opening	+ 3/8	(10)	+ 1/16	(02)
OM of Frame (Existing sill ≥14°)	Inside Opening	+ 3/8	(10)	+ 7/16	(11)
Rough Opening		in	mm	in	mm
OM of Frame	Rough Opening	+ 1	(25)	+ 1/2	(13)
Masonry Opening w/BMC	Rough Opening	-2 5/8	(67)	-1 9/16	(40)
Sash		in	mm	in	mm
OM of Frame	OM of Sash	-1 11/16	(43)	-2 5/8	(67)
Daylight Opening (Std Btm Rail)	OM of Sash	+ 4 7/64	(104)	+ 4 7/64	(104)
Daylight Opening (Tall Btm Rail)	OM of Sash	+ 4 7/64	(104)	+ 5 39/64	(142)
Glass		in	mm	in	mm
Daylight Opening	Glass	+ 1 3/32	(28)	+ 1 3/32	(28)
Swinging Wood Screen (Push Out)		in	mm	in	mm
OM of Frame	OM of Screen	-2 37/64	(66)	-3 33/64	(89)
Daylight Opening (Std Btm Rail)	OM of Screen	+ 3 13/64	(81)	+ 3 13/64	(81)
Daylight Opening (Tall Btm Rail)	OM of Screen	+ 3 13/64	(81)	+ 4 45/64	(120)

Egress Formulas: Casement Push Out

Egress Formulas with Standard Screen

Clear Opening Width:

Frame OM 20" (508) and greater

$$\text{Clear Opening Width} = \text{Frame OM Width} - 6 \frac{3}{16}" (157)$$

Frame OM Width less than 20" (508)

$$\text{Clear Opening Width} = \text{Frame OM Width} - 8 \frac{11}{16}" (220)$$

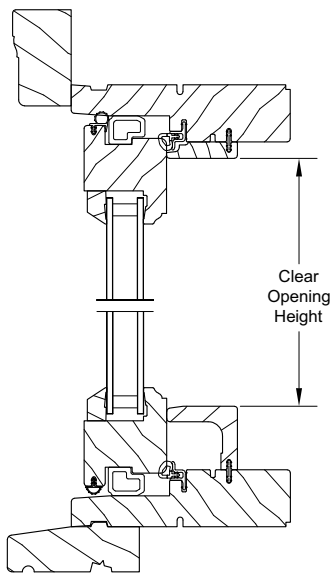
$$\text{Clear Opening Height} = \text{Frame OM Height} - 5 \frac{15}{16}" (151)$$

$$\text{Clear Opening Area (ft}^2\text{)} = (\text{Clear Opening Width} \times \text{Clear Opening Height}) \div 144$$

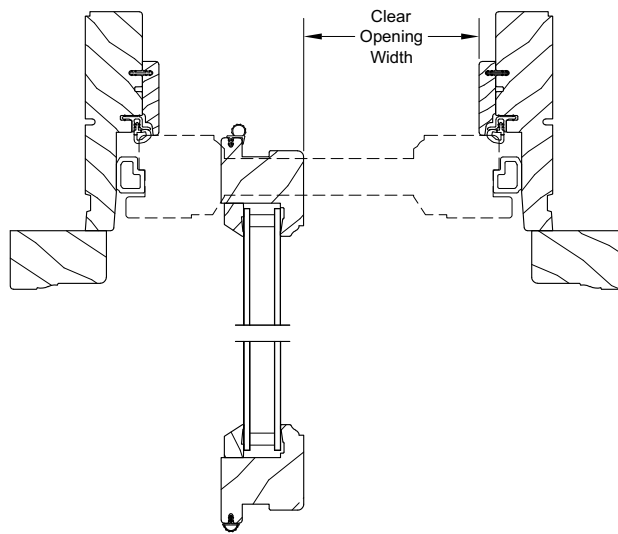
Vent Opening with Standard Screen

$$\text{Vent Opening Width} = \text{Frame OM Width} - 3 \frac{1}{8}" (79)$$

$$\text{Vent Opening Height} = \text{Frame OM Height} - 4 \frac{31}{32}" (126)$$



Head Jamb and Sill



UCAPO - Jamb

Vent Opening: Awning Push Out

Vent Opening with Standard Screen for Awning Push Out Unit:

Vent Opening Width = Frame OM Width - 3 1/8" (79)

Vent Opening Height = Frame OM Height - 4 1/16" (103)

Approximate Opening of Sash Measurement:

To find height:

(distance from top of sill cover to interior face top sash rail - formula is valid for stock hardware that opens 77-78 degrees)

If your frame OM is 11 7/8" (302) - 24 7/8" (632) - Opening of Sash = Frame OM Height - 9 1/4" (235)

If your frame OM is 24 7/8" (632) - 35 7/8" (911) - Opening of Sash = Frame OM Height - 13 3/4" (350)

If your frame OM is 35 7/8" (911) - 47 1/8" (1197) - Opening of Sash = Frame OM Height - 19 13/16" (504)

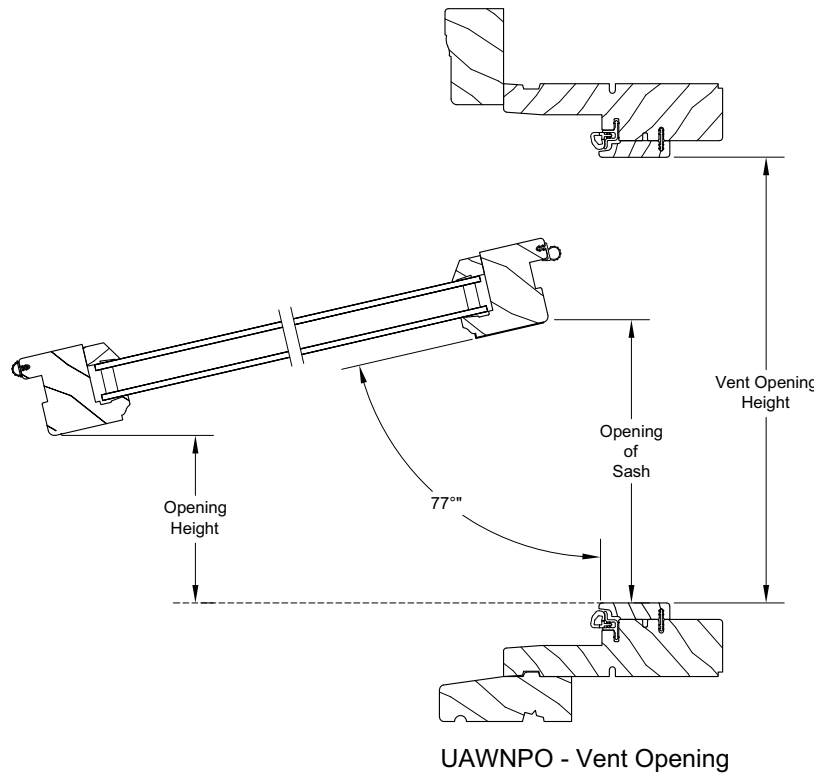
Awning Sash Travel:

If call number is 24 or smaller, sash travel is approximately 4 3/4" (121)

If call number is 24.001 - 32.000, sash travel is approximately 8" (203)

If call number is greater than 32", sash travel is approximately 11 1/2" (292)

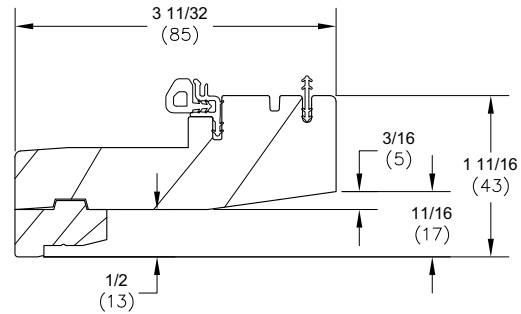
NOTE: Subsill included



Field Measurement for Replacement Units

Operator. Awning, Stationary, Picture Conversion from Field Measurement to Frame OSM		
Width		
Condition	Formula	
If blind stop width is 1/2" (13) or less	Frame OM Width - inside opening width - 0.375 (10)	
Height		
Condition	Type of Sill Bevel	Formula
If old sill angle is less than 8°	Flat-bottom Sill	Frame OM Height = inside opening height - 0.250 (6)
If old sill angle is greater than 8° and less than 14°	8-degreee-bottom sill	Frame OM Height = inside opening height - 0.0563 (1) (frame IM height has a .250 clearance)
If old is angle is 14° of greater	14-degree bottom sill	Frame OM Height = inside height = .431 (1) (frame OM Height has a .250 clearance)

Interior Frame Size to Frame Size (exterior)	
Frame Bevel	Conversions
0°	0
8°	+3/16" (5)
14°	+11/16" (17)



Standard Unit Measurements: Casement Push Out - Full Frame

Standard Push Out Casement Unit Measurements								
Width								
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
16	1-4 1/2	(419)	1-5	(432)	1-4	(406)	0-10 3/16	(259)
18	1-6 1/2	(470)	1-7	(483)	1-6	(457)	1-0 3/16	(310)
20	1-8 1/2	(521)	1-9	(533)	1-8	(508)	1-2 3/16	(360)
24	2-0 1/2	(622)	2-1	(635)	2-0	(610)	1-6 3/16	(462)
26	2-2 1/2	(673)	2-3	(686)	2-2	(660)	1-8 3/16	(513)
28	2-4 1/2	(724)	2-5	(737)	2-4	(711)	1-10 3/16	(564)
30	2-6 1/2	(775)	2-7	(787)	2-6	(762)	2-0 3/16	(614)
32	2-8 1/2	(826)	2-9	(838)	2-8	(813)	2-2 3/16	(665)
36	3-0 1/2	(927)	3-1	(940)	3-0	(914)	2-6 3/16	(767)
40	3-4 1/2	(1029)	3-5	(1041)	3-4	(1016)	2-10 3/16	(868)

Standard Push Out Casement Unit Measurements										
Height										
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening (Std Bottom Rail)		Daylight Opening (Tall Bottom Rail)	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
16	1-4 5/16	(414)	1-4 9/16	(421)	1-4 1/16	(408)	0-9 5/16	(237)	0-7 13/16	(198)
18	1-6 5/16	(465)	1-6 9/16	(472)	1-6 1/16	(459)	0-11 5/16	(287)	0-9 13/16	(249)
20	1-8 5/16	(516)	1-8 9/16	(522)	1-8 1/16	(510)	1-1 5/16	(338)	0-11 13/16	(300)
24	2-0 5/16	(618)	2-0 9/16	(624)	2-0 1/16	(611)	1-5 5/16	(440)	1-3 13/16	(402)
28	2-4 5/16	(719)	2-4 9/16	(726)	2-4 1/16	(713)	1-9 5/16	(541)	1-7 13/16	(503)
32	2-8 5/16	(821)	2-8 9/16	(827)	2-8 1/16	(814)	2-1 5/16	(643)	1-11 13/16	(605)
36	3-0 5/16	(922)	3-0 9/16	(929)	3-0 1/16	(916)	2-5 5/16	(745)	2-3 13/16	(706)
40	3-4 5/16	(1024)	3-4 9/16	(1030)	3-4 1/16	(1018)	2-9 5/16	(846)	2-7 13/16	(808)
44	3-8 5/16	(1126)	3-8 9/16	(1132)	3-8 1/16	(1119)	3-1 5/16	(948)	2-11 13/16	(910)
48	4-0 5/16	(1227)	4-0 9/16	(1234)	4-0 1/16	(1221)	3-5 5/16	(1049)	3-3 13/16	(1011)
54	4-6 5/16	(1380)	4-6 9/16	(1386)	4-6 1/16	(1373)	3-11 5/16	(1202)	3-9 13/16	(1164)
56	4-8 5/16	(1430)	4-8 9/16	(1437)	4-8 1/16	(1424)	4-1 5/16	(1253)	3-11 13/16	(1214)
60	5-0 5/16	(1532)	5-0 9/16	(1538)	5-0 1/16	(1526)	4-5 5/16	(1354)	4-3 13/16	(1316)
64	5-4 5/16	(1634)	5-4 9/16	(1640)	5-4 1/16	(1627)	4-9 5/16	(1456)	4-7 13/16	(1418)
72	6-0 5/16	(1837)	6-0 9/16	(1843)	6-0 1/16	(1830)	5-5 5/16	(1659)	5-3 13/16	(1621)
78	6-6 5/16	(1989)	6-6 9/16	(1996)	6-6 1/16	(1983)	5-11 5/16	(1811)	5-9 13/16	(1773)
84	7-0 5/16	(2142)	7-0 9/16	(2148)	7-0 1/16	(2135)	6-5 5/16	(1964)	6-3 13/16	(1926)
92	7-8 5/16	(2345)	7-8 9/16	(2351)	7-8 1/16	(2338)	7-1 5/16	(2167)	6-11 13/16	(2129)
96	8-0 5/16	(2446)	8-0 9/16	(2453)	8-0 1/16	(2440)	7-5 5/16	(2269)	7-3 13/16	(2230)

Standard Unit Measurements: Awning Push Out - Full Frame

Standard Push Out Awning Unit Measurements								
Width								
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
16	1-7 5/8	(498)	1-5	(432)	1-4	(406)	0-10 3/16	(259)
18	1-9 5/8	(549)	1-7	(483)	1-6	(457)	1-0 3/16	(310)
20	1-11 5/8	(600)	1-9	(533)	1-8	(508)	1-2 3/16	(360)
24	2-3 5/8	(702)	2-1	(635)	2-0	(610)	1-6 3/16	(462)
26	2-5 5/8	(752)	2-3	(686)	2-2	(660)	1-8 3/16	(513)
28	2-7 5/8	(803)	2-5	(737)	2-4	(711)	1-10 3/16	(564)
30	2-9 5/8	(854)	2-7	(787)	2-6	(762)	2-0 3/16	(614)
32	2-11 5/8	(905)	2-9	(838)	2-8	(813)	2-2 3/16	(665)
36	3-3 5/8	(1006)	3-1	(940)	3-0	(914)	2-6 3/16	(767)
40	3-7 5/8	(1108)	3-5	(1041)	3-4	(1016)	2-10 3/16	(868)
48	4-3 5/8	(1311)	4-1	(1245)	4-0	(1219)	3-6 3/16	(1072)
56	4-11 5/8	(1514)	4-9	(1448)	4-8	(1422)	4-2 3/16	(1275)
60	5-3 5/8	(1616)	5-1	(1549)	5-0	(1524)	4-6 3/16	(1376)
64	5-7 5/8	(1718)	5-5	(1651)	5-4	(1626)	4-10 3/16	(1478)
72	6-3 5/8	(1921)	6-1	(1854)	6-0	(1829)	5-6 3/16	(1681)

Standard Push Out Awning Unit Measurements										
Height										
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening (Std Bottom Rail)		Daylight Opening (Tall Bottom Rail)	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
14	1-3 7/8	(403)	1-2 9/16	(370)	1-2 1/16	(357)	0-7 5/16	(186)	0-5 13/16	(148)
16	1-5 7/8	(454)	1-4 9/16	(421)	1-4 1/16	(408)	0-9 5/16	(237)	0-7 13/16	(198)
18	1-7 7/8	(505)	1-6 9/16	(472)	1-6 1/16	(459)	0-11 5/16	(287)	0-9 13/16	(249)
20	1-9 7/8	(556)	1-8 9/16	(522)	1-8 1/16	(510)	1-1 5/16	(338)	0-11 13/16	(300)
24	2-1 7/8	(657)	2-0 9/16	(624)	2-0 1/16	(611)	1-5 5/16	(440)	1-3 13/16	(402)
28	2-5 7/8	(759)	2-4 9/16	(726)	2-4 1/16	(713)	1-9 5/16	(541)	1-7 13/16	(503)
32	2-9 7/8	(860)	2-8 9/16	(827)	2-8 1/16	(814)	2-1 5/16	(643)	1-11 13/16	(605)
36	3-1 7/8	(962)	3-0 9/16	(929)	3-0 1/16	(916)	2-5 5/16	(745)	2-3 13/16	(706)
40	3-5 7/8	(1064)	3-4 9/16	(1030)	3-4 1/16	(1018)	2-9 5/16	(846)	2-7 13/16	(808)
44	3-9 7/8	(1165)	3-8 9/16	(1132)	3-8 1/16	(1119)	3-1 5/16	(948)	2-11 13/16	(910)
48	4-1 7/8	(1267)	4-0 9/16	(1234)	4-0 1/16	(1221)	3-5 5/16	(1049)	3-3 13/16	(1011)

Standard Unit Measurements: 3/4" Casement Push Out Picture - Full Frame

Standard 3/4" Push Out Casement Picture Unit Measurements								
Width								
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
40	3-7 5/8	(1108)	3-5	(1041)	3-4	(1016)	2-10 3/16	(868)
48	4-3 5/8	(1311)	4-1	(1245)	4-0	(1219)	3-6 3/16	(1072)
56	4-11 5/8	(1514)	4-9	(1448)	4-8	(1422)	4-2 3/16	(1275)
60	5-3 5/8	(1616)	5-1	(1549)	5-0	(1524)	4-6 3/16	(1376)
64	5-7 5/8	(1718)	5-5	(1651)	5-4	(1626)	4-10 3/16	(1478)
72	6-3 5/8	(1921)	6-1	(1854)	6-0	(1829)	5-6 3/16	(1681)
80	6-11 5/8	(2124)	6-9	(2057)	6-8	(2032)	6-2 3/16	(1884)
88	7-7 5/8	(2327)	7-5	(2261)	7-4	(2235)	6-10 3/16	(2088)
96	8-3 5/8	(2530)	8-1	(2464)	8-0	(2438)	7-6 3/16	(2291)

Standard 3/4" Push Out Casement Picture Unit Measurements										
Height										
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening (Std Bottom Rail)		Daylight Opening (Tall Bottom Rail)	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
12	1-1 7/8	(352)	1-0 9/16	(319)	1-0 1/16	(306)	0-5 5/16	(135)	0-3 13/16	(97)
14	1-3 7/8	(403)	1-2 9/16	(370)	1-2 1/16	(357)	0-7 5/16	(186)	0-5 13/16	(148)
16	1-5 7/8	(454)	1-4 9/16	(421)	1-4 1/16	(408)	0-9 5/16	(237)	0-7 13/16	(198)
18	1-7 7/8	(505)	1-6 9/16	(472)	1-6 1/16	(459)	0-11 5/16	(287)	0-9 13/16	(249)
20	1-9 7/8	(556)	1-8 9/16	(522)	1-8 1/16	(510)	1-1 5/16	(338)	0-11 13/16	(300)
24	2-1 7/8	(657)	2-0 9/16	(624)	2-0 1/16	(611)	1-5 5/16	(440)	1-3 13/16	(402)
28	2-5 7/8	(759)	2-4 9/16	(726)	2-4 1/16	(713)	1-9 5/16	(541)	1-7 13/16	(503)
32	2-9 7/8	(860)	2-8 9/16	(827)	2-8 1/16	(814)	2-1 5/16	(643)	1-11 13/16	(605)
36	3-1 7/8	(962)	3-0 9/16	(929)	3-0 1/16	(916)	2-5 5/16	(745)	2-3 13/16	(706)
40	3-5 7/8	(1064)	3-4 9/16	(1030)	3-4 1/16	(1018)	2-9 5/16	(846)	2-7 13/16	(808)
44	3-9 7/8	(1165)	3-8 9/16	(1132)	3-8 1/16	(1119)	3-1 5/16	(948)	2-11 13/16	(910)
48	4-1 7/8	(1267)	4-0 9/16	(1234)	4-0 1/16	(1221)	3-5 5/16	(1049)	3-3 13/16	(1011)
54	4-7 7/8	(1419)	4-6 9/16	(1386)	4-6 1/16	(1373)	3-11 5/16	(1202)	3-9 13/16	(1164)
56	4-9 7/8	(1470)	4-8 9/16	(1437)	4-8 1/16	(1424)	4-1 5/16	(1253)	3-11 13/16	(1214)
60	5-1 7/8	(1572)	5-0 9/16	(1538)	5-0 1/16	(1526)	4-5 5/16	(1354)	4-3 13/16	(1316)
64	5-5 7/8	(1673)	5-4 9/16	(1640)	5-4 1/16	(1627)	4-9 5/16	(1456)	4-7 13/16	(1418)

Standard Unit Measurements: 1" Casement Push Out Picture - Full Frame

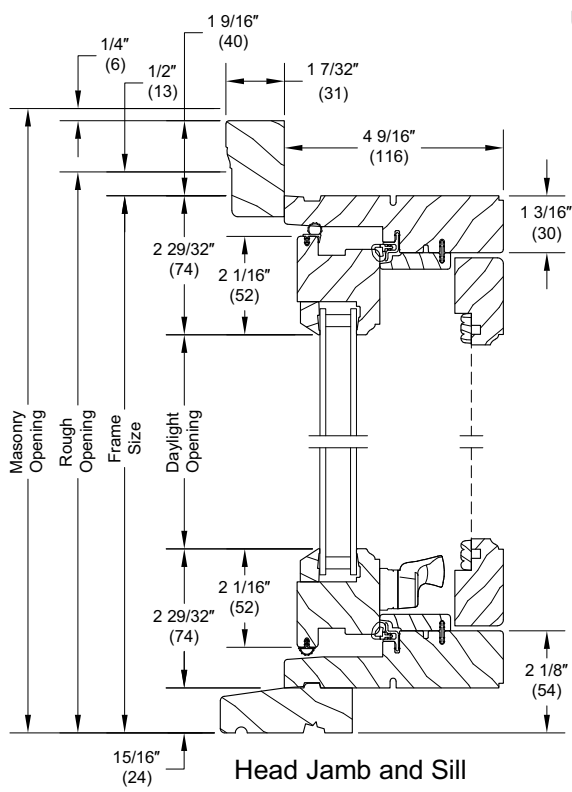
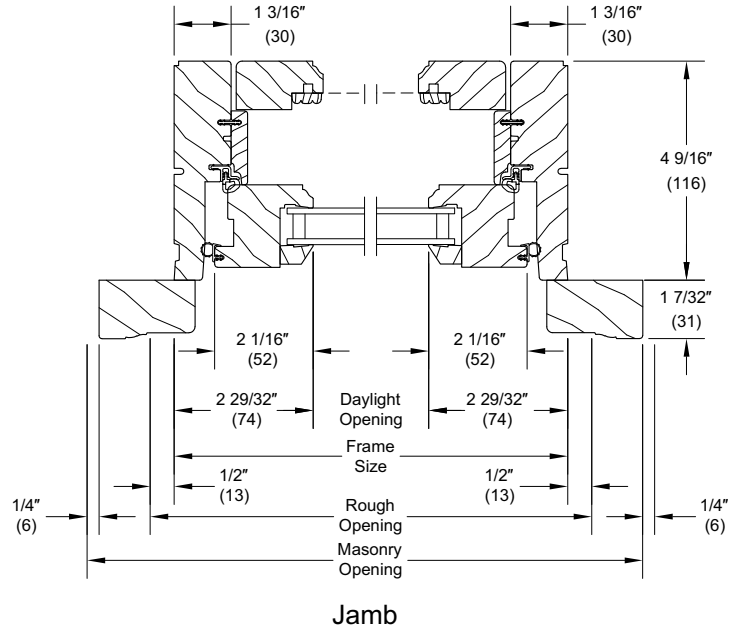
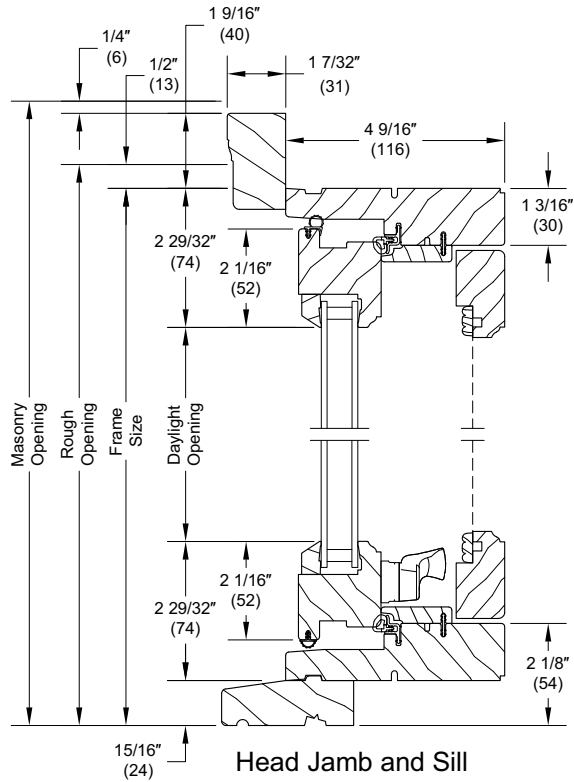
Standard 1" Push Out Casement Picture Unit Measurements								
Width								
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
40	3-7 5/8	(1108)	3-5	(1041)	3-4	(1016)	2-10 3/16	(868)
48	4-3 5/8	(1311)	4-1	(1245)	4-0	(1219)	3-6 3/16	(1072)
56	4-11 5/8	(1514)	4-9	(1448)	4-8	(1422)	4-2 3/16	(1275)
60	5-3 5/8	(1616)	5-1	(1549)	5-0	(1524)	4-6 3/16	(1376)
64	5-7 5/8	(1718)	5-5	(1651)	5-4	(1626)	4-10 3/16	(1478)
72	6-3 5/8	(1921)	6-1	(1854)	6-0	(1829)	5-6 3/16	(1681)
80	6-11 5/8	(2124)	6-9	(2057)	6-8	(2032)	6-2 3/16	(1884)
88	7-7 5/8	(2327)	7-5	(2261)	7-4	(2235)	6-10 3/16	(2088)
96	8-3 5/8	(2530)	8-1	(2464)	8-0	(2438)	7-6 3/16	(2291)

Standard 1" Push Out Casement Picture Unit Measurements										
Height										
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening (Std Bottom Rail)		Daylight Opening (Tall Bottom Rail)	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
12	1-1 7/8	(352)	1-0 9/16	(319)	1-0 1/16	(306)	0-5 5/16	(135)	0-3 13/16	(97)
14	1-3 7/8	(403)	1-2 9/16	(370)	1-2 1/16	(357)	0-7 5/16	(186)	0-5 13/16	(148)
16	1-5 7/8	(454)	1-4 9/16	(421)	1-4 1/16	(408)	0-9 5/16	(237)	0-7 13/16	(198)
18	1-7 7/8	(505)	1-6 9/16	(472)	1-6 1/16	(459)	0-11 5/16	(287)	0-9 13/16	(249)
20	1-9 7/8	(556)	1-8 9/16	(522)	1-8 1/16	(510)	1-1 5/16	(338)	0-11 13/16	(300)
24	2-1 7/8	(657)	2-0 9/16	(624)	2-0 1/16	(611)	1-5 5/16	(440)	1-3 13/16	(402)
28	2-5 7/8	(759)	2-4 9/16	(726)	2-4 1/16	(713)	1-9 5/16	(541)	1-7 13/16	(503)
32	2-9 7/8	(860)	2-8 9/16	(827)	2-8 1/16	(814)	2-1 5/16	(643)	1-11 13/16	(605)
36	3-1 7/8	(962)	3-0 9/16	(929)	3-0 1/16	(916)	2-5 5/16	(745)	2-3 13/16	(706)
40	3-5 7/8	(1064)	3-4 9/16	(1030)	3-4 1/16	(1018)	2-9 5/16	(846)	2-7 13/16	(808)
44	3-9 7/8	(1165)	3-8 9/16	(1132)	3-8 1/16	(1119)	3-1 5/16	(948)	2-11 13/16	(910)
48	4-1 7/8	(1267)	4-0 9/16	(1234)	4-0 1/16	(1221)	3-5 5/16	(1049)	3-3 13/16	(1011)
54	4-7 7/8	(1419)	4-6 9/16	(1386)	4-6 1/16	(1373)	3-11 5/16	(1202)	3-9 13/16	(1164)
56	4-9 7/8	(1470)	4-8 9/16	(1437)	4-8 1/16	(1424)	4-1 5/16	(1253)	3-11 13/16	(1214)
60	5-1 7/8	(1572)	5-0 9/16	(1538)	5-0 1/16	(1526)	4-5 5/16	(1354)	4-3 13/16	(1316)
64	5-5 7/8	(1673)	5-4 9/16	(1640)	5-4 1/16	(1627)	4-9 5/16	(1456)	4-7 13/16	(1418)
72	6-1 7/8	(1876)	6-0 9/16	(1843)	6-0 1/16	(1830)	5-5 5/16	(1659)	5-3 13/16	(1621)
78	6-7 7/8	(2029)	6-6 9/16	(1996)	6-6 1/16	(1983)	5-11 5/16	(1811)	5-9 13/16	(1773)
84	7-1 7/8	(2181)	7-0 9/16	(2148)	7-0 1/16	(2135)	6-5 5/16	(1964)	6-3 13/16	(1926)
92	7-9 7/8	(2384)	7-8 9/16	(2351)	7-8 1/16	(2338)	7-1 5/16	(2167)	6-11 13/16	(2129)
96	8-1 7/8	(2486)	8-0 9/16	(2453)	8-0 1/16	(2440)	7-5 5/16	(2269)	7-3 13/16	(2230)

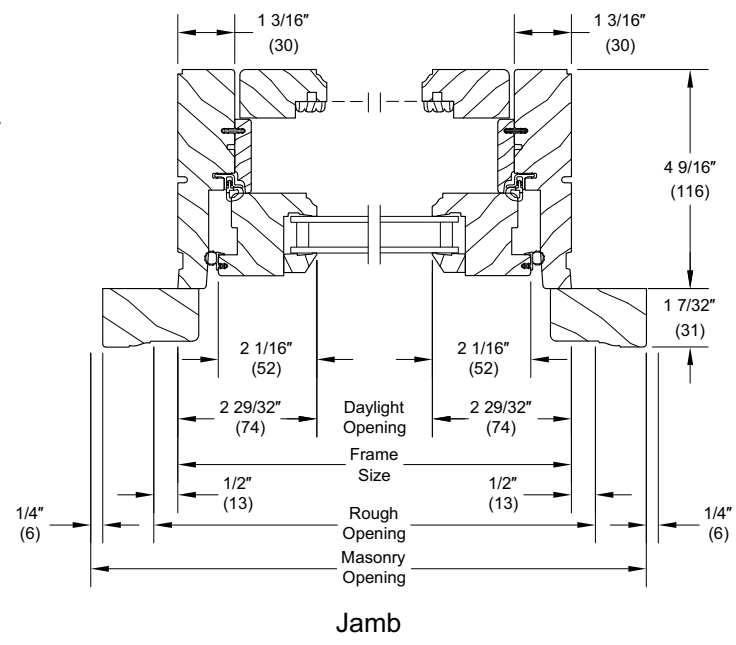
Section Details: Operating/Picture - Casement/Awning Push Out - 3/4" (19) IG

Scale: 3" = 1' 0"

UWCAPO

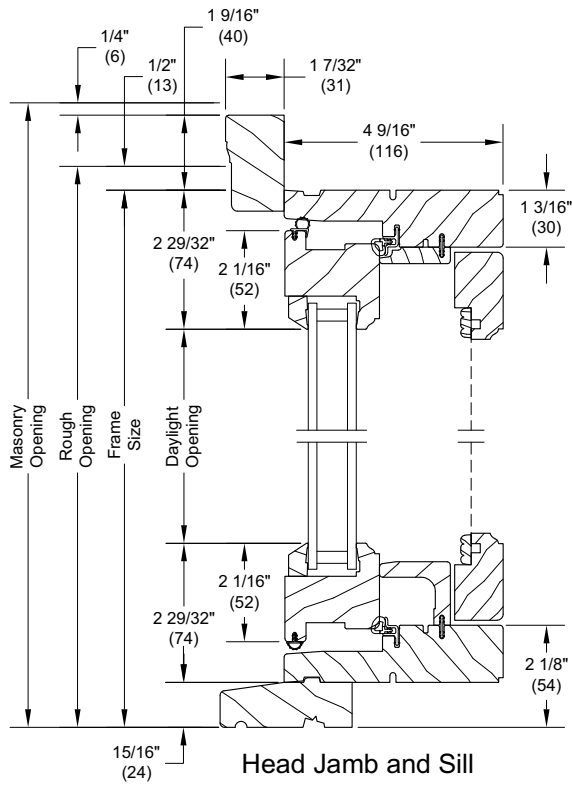


UWCAPO

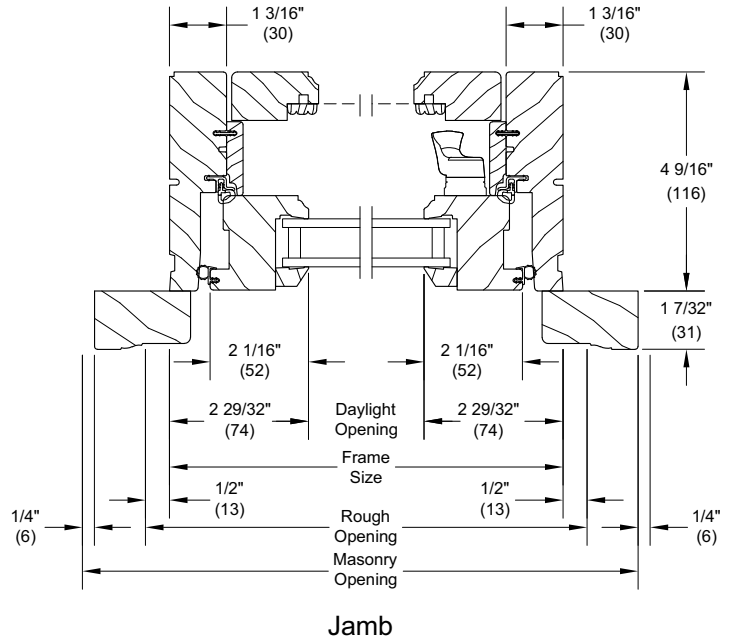


Section Details: Operating/Picture - Casement/Awning Push Out - 1" (25) IG

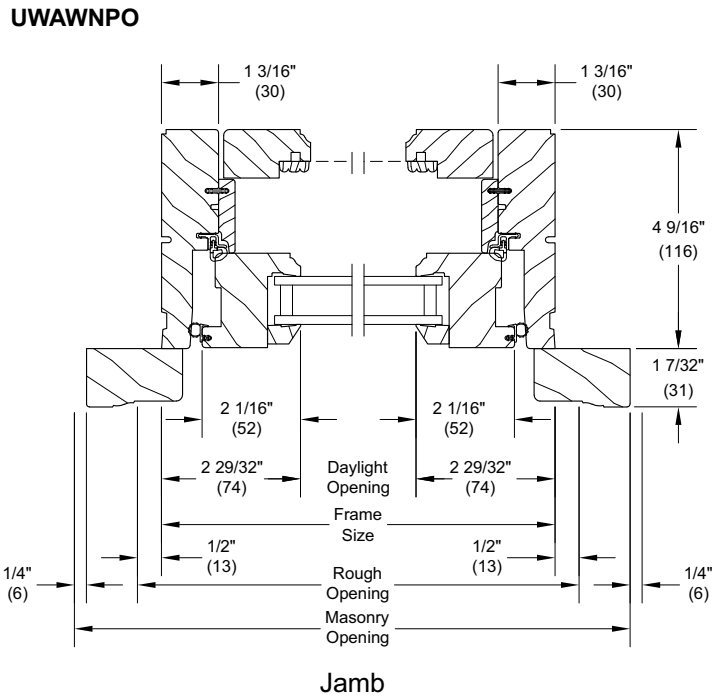
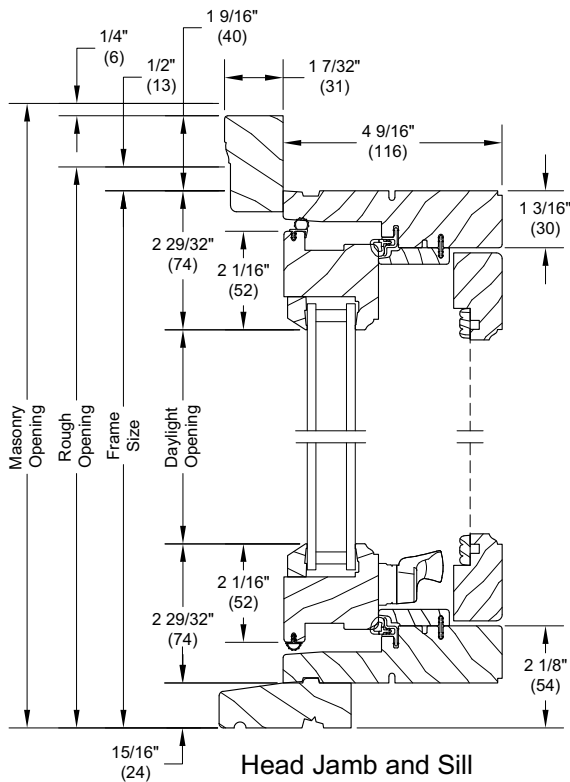
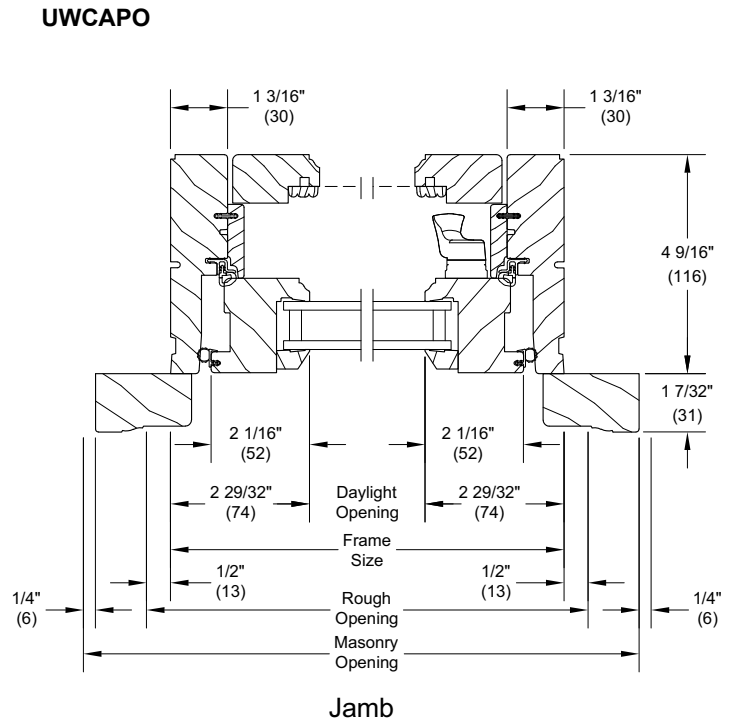
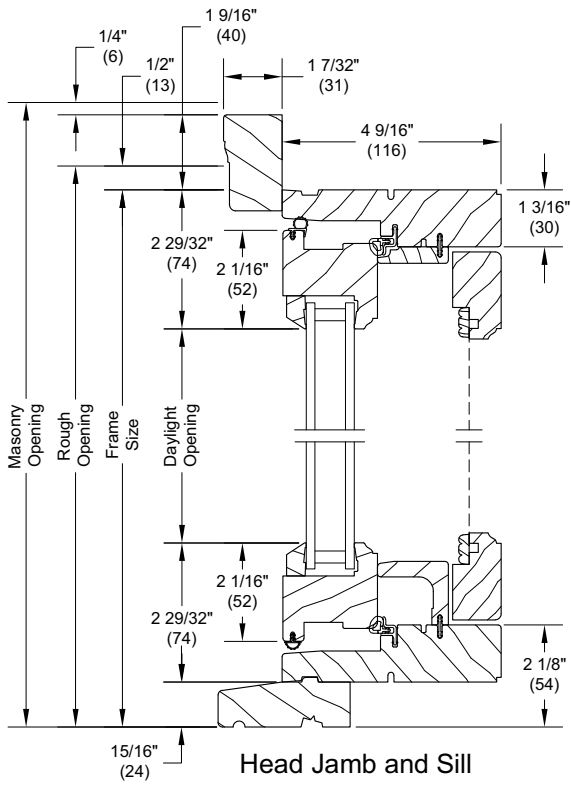
Scale: 3" = 1' 0"

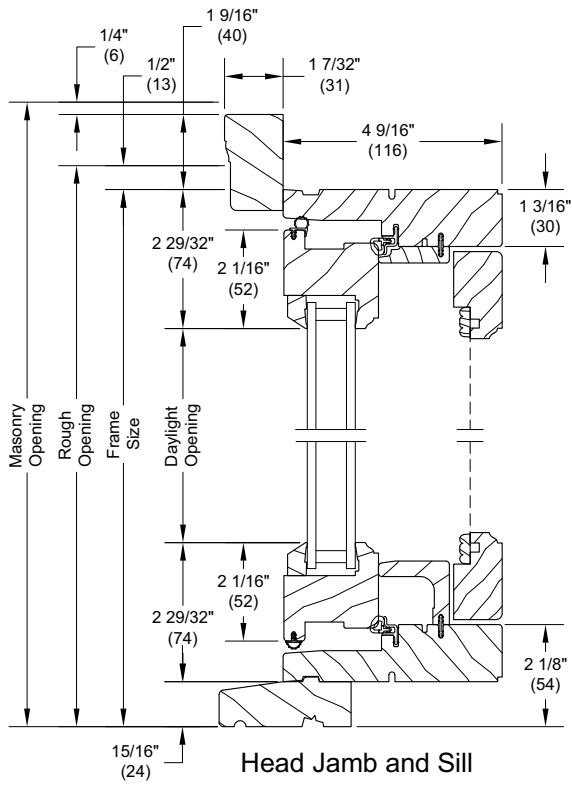


UWCAPO

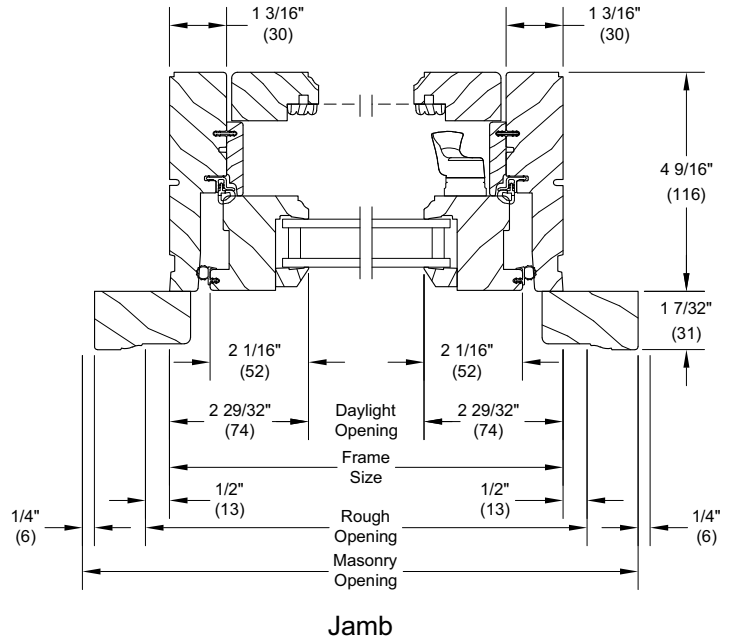


UWAWNPO





UWCAPO

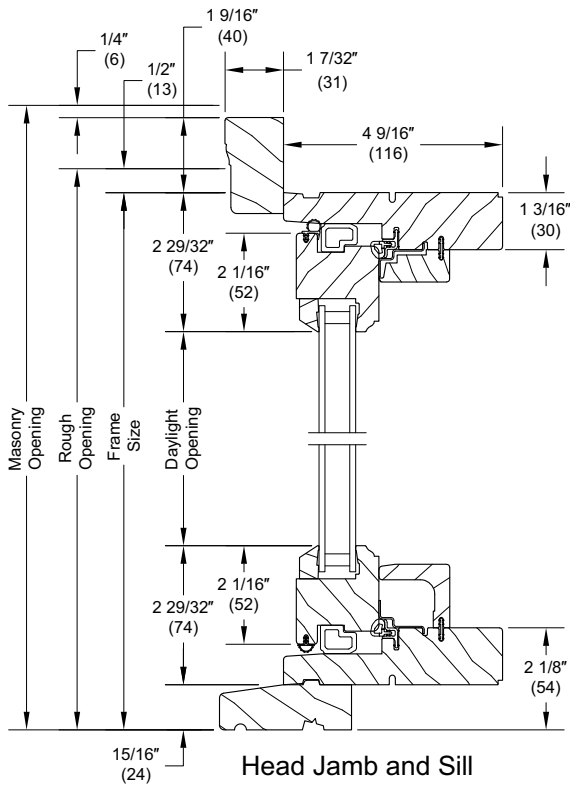


Jamb

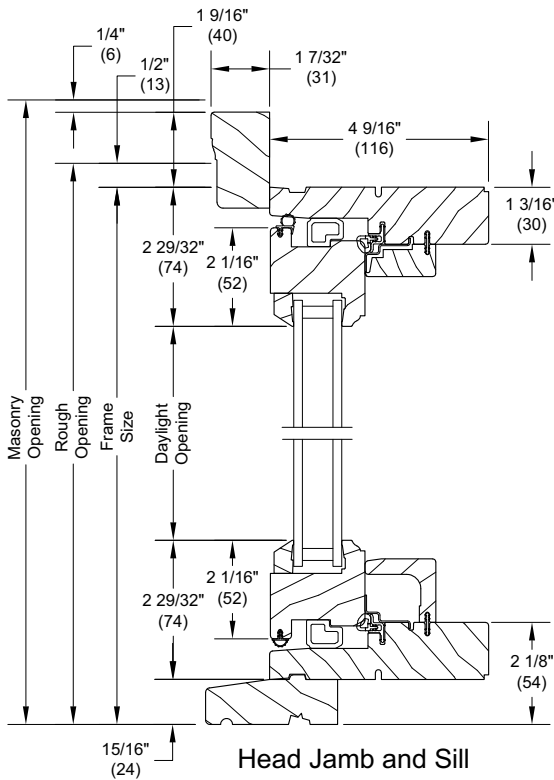
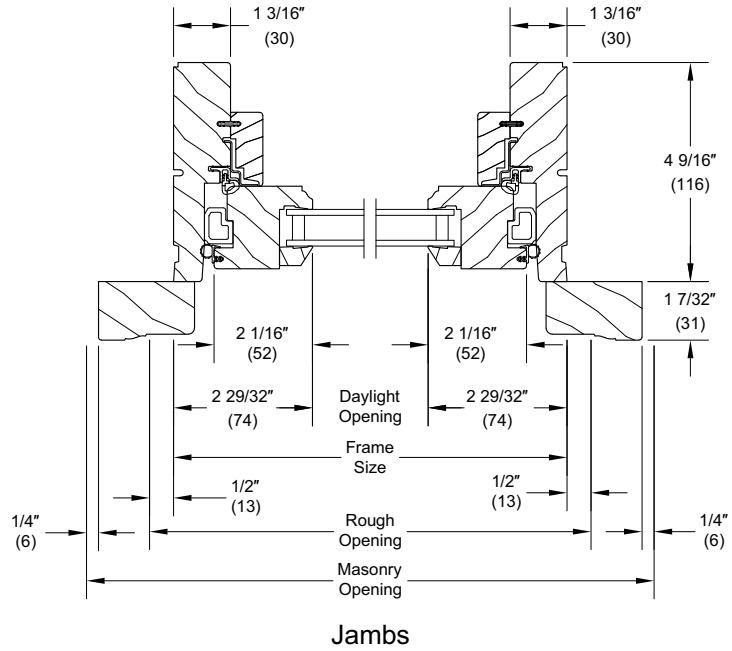
UWAWNPO

Section Details: Push Out Picture - 3/4" (19) and 1" (25) IG

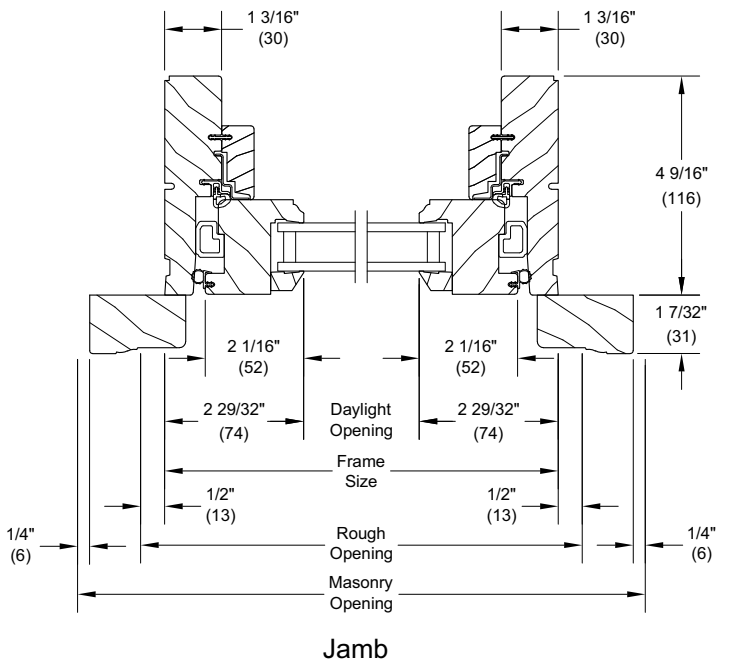
Scale: 3" = 1' 0"



3/4" IG



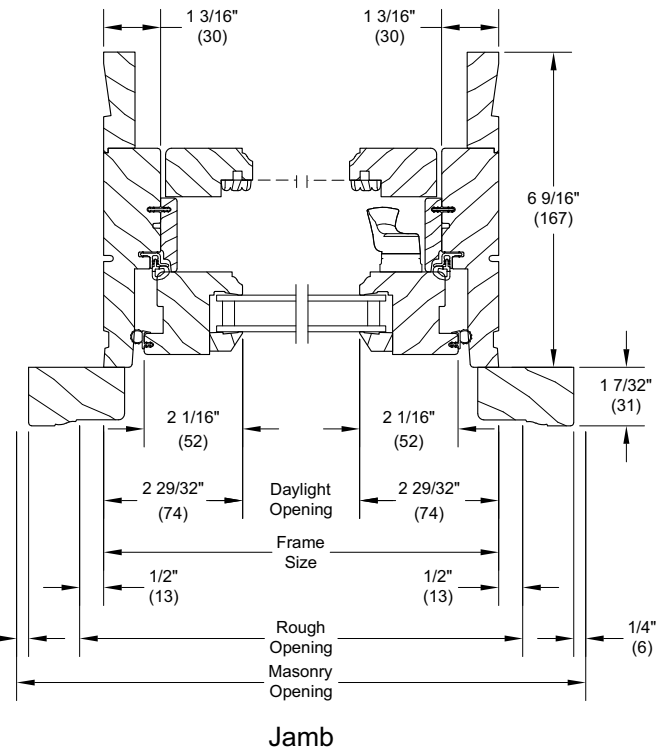
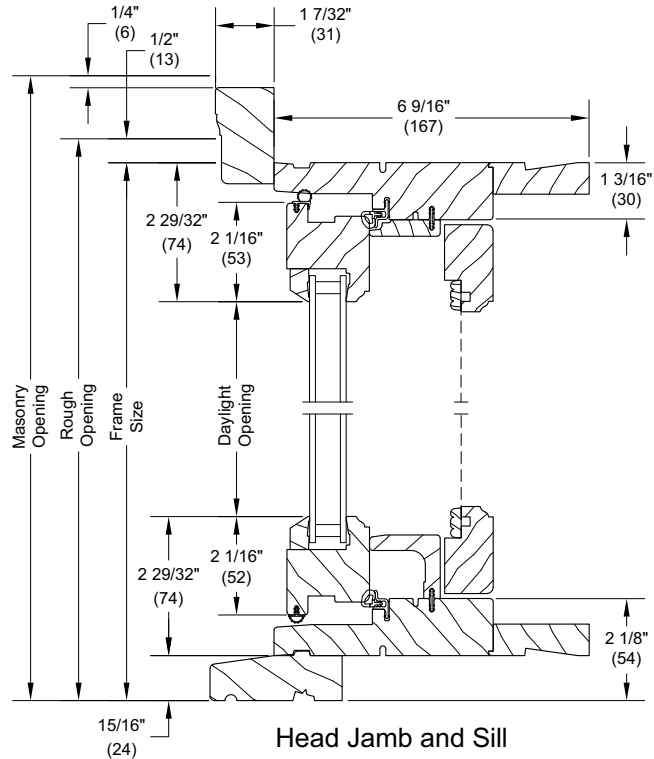
1" IG



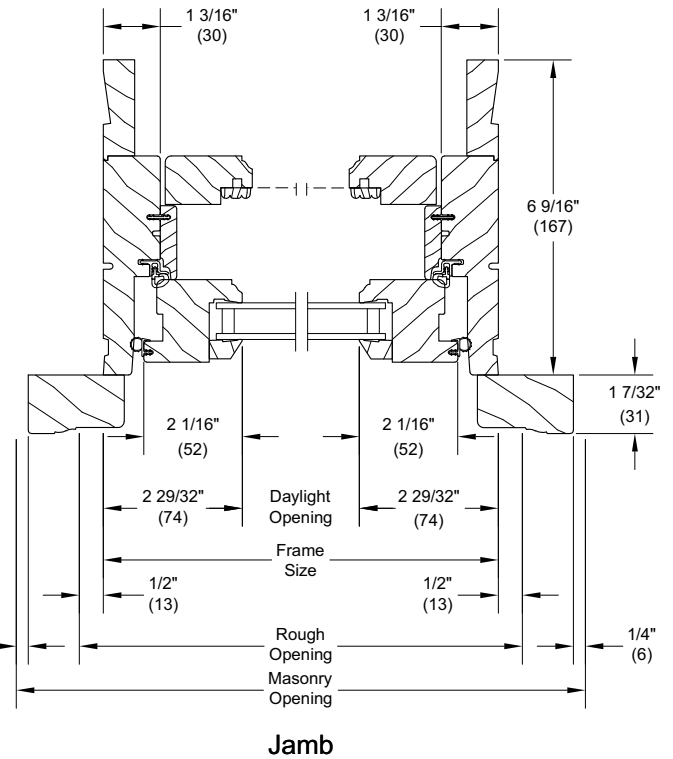
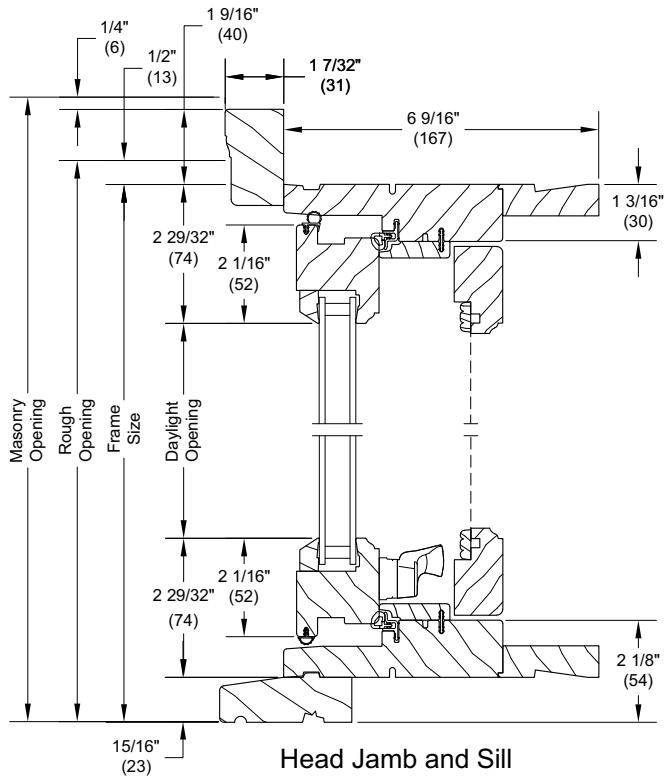
Section Details: 6 9/16" (167) Jambs, Wood Screen - Casement / Awning Push Out

Scale: 3" = 1' 0"

UWCAPO

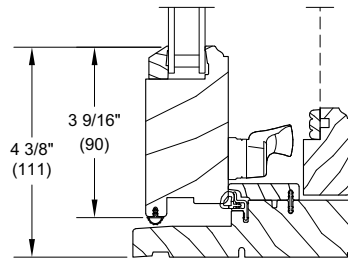
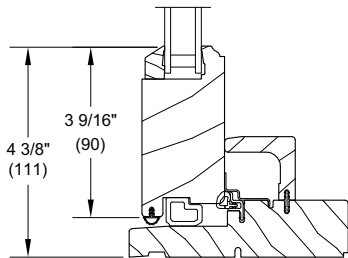
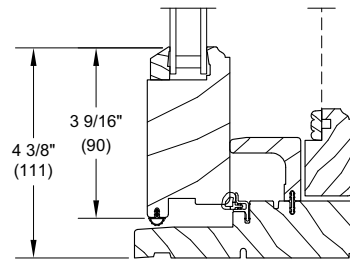
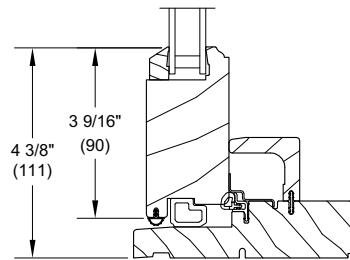


UWAWNPO



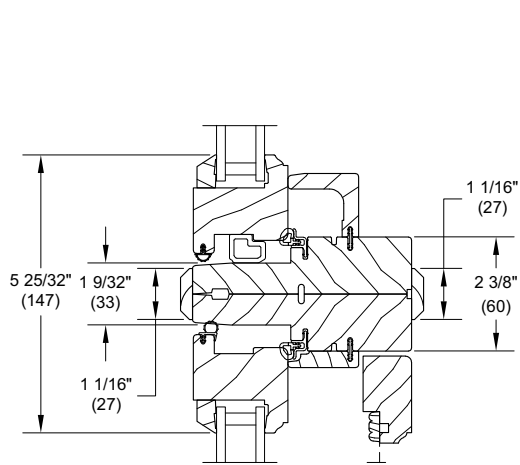
Section Details: Wide Bottom Rail Option - Casement and Awning Push Out

Scale: 3" = 1' 0"

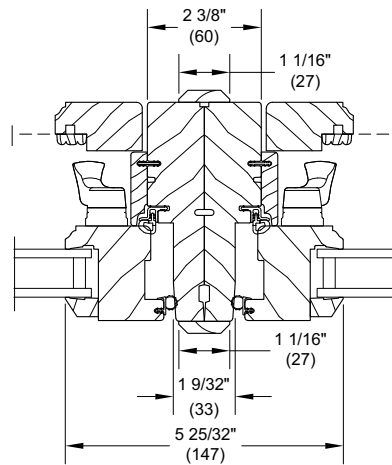


Section Details: Full Frame Casement Push Out Mullion Options

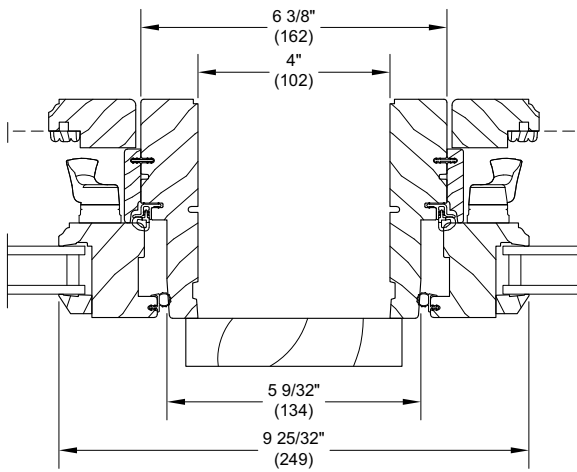
Scale: 3" - 1' 0"



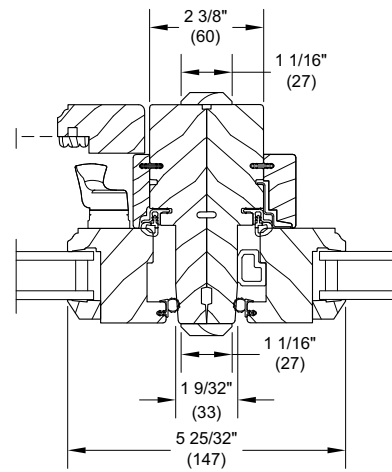
**Horizontal Mullion
Picture/Operator**



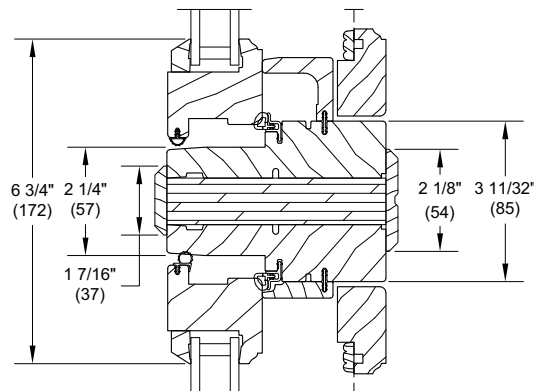
**Vertical Mullion
Operator/Operator/Direct Mull**



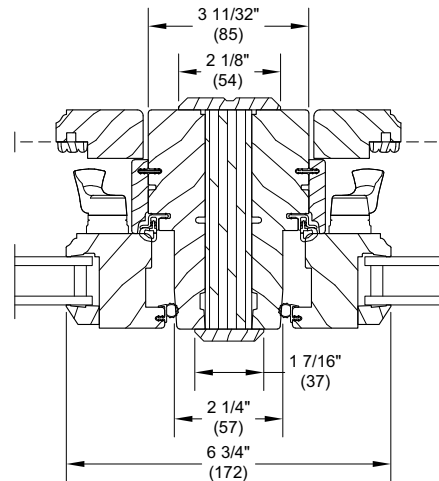
**Vertical Mullion w/ 4" Space Mull
Operator/Operator**



**Vertical Mullion
Operator/Picture/Direct Mull**



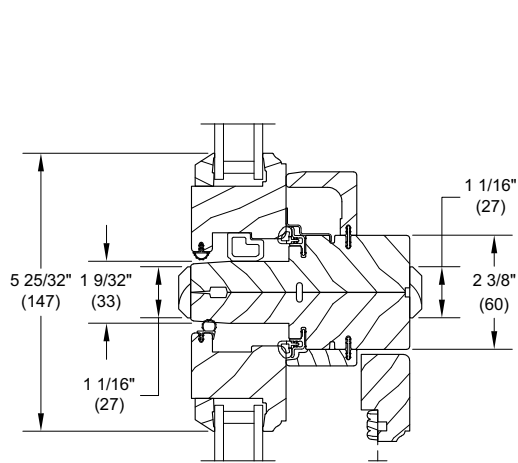
**Horizontal Mullion
LVL Operator/Operator**



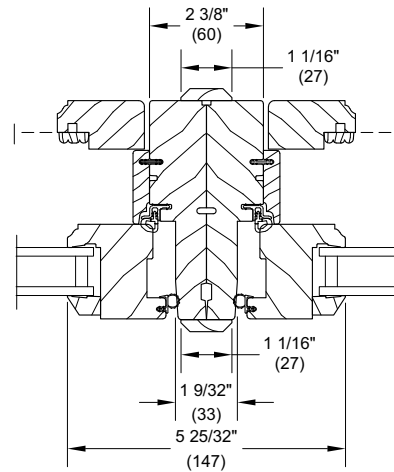
**Vertical Mullion
LVL Operator/Operator**

Section Details: Full Frame Awning Push Out Mullion Options

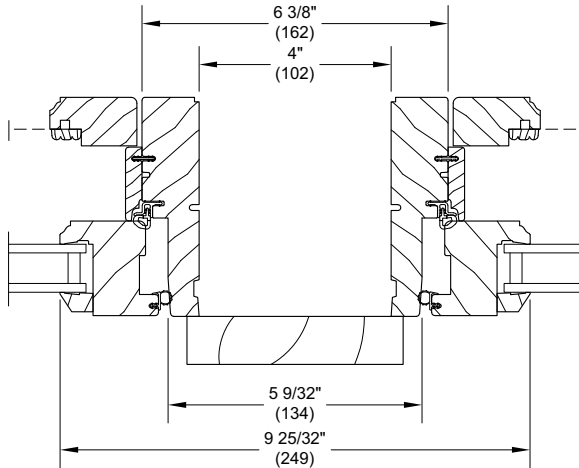
Scale: 3" - 1' 0"



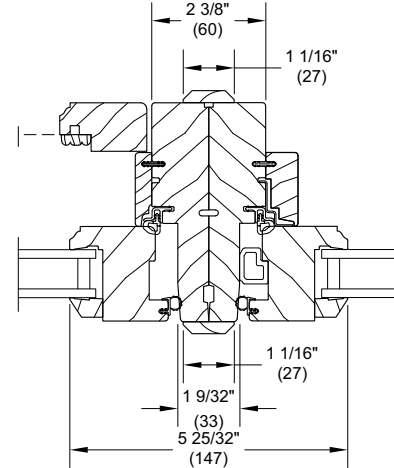
**Horizontal Mullion
Picture/Operator**



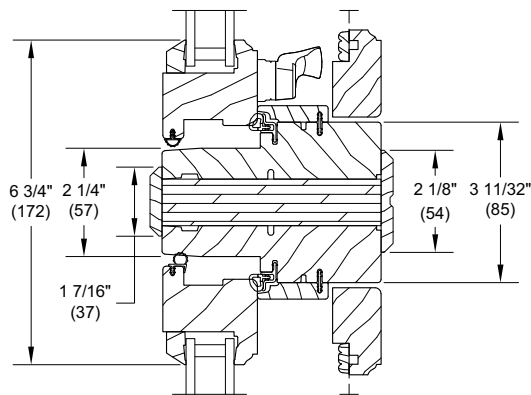
**Vertical Mullion
Operator/Operator/Direct Mull**



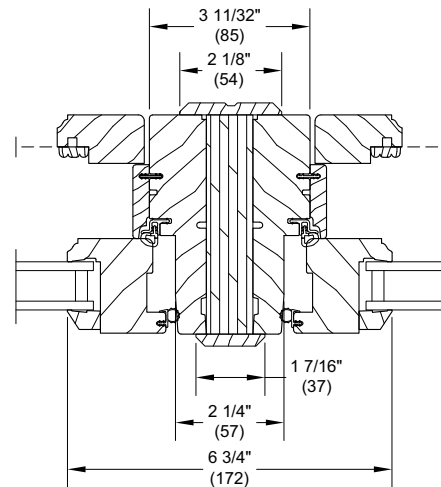
**Vertical Mullion w/ 4" Space Mull
Operator/Operator**



**Vertical Mullion
Operator/Picture/Direct Mull**



**Horizontal Mullion
LVL Operator/Operator**



**Vertical Mullion
LVL Operator/Operator**