

Integrity Wood-Ultrex Casement / Awning

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Wood-Ultrex Casement / Awning

Unit Features

Integrity Wood-Ultrex Casement: ICA

Integrity Wood-Ultrex Awning: IAWN

Integrity Wood-Ultrex Casement Picture: ICAP

Integrity Wood-Ultrex Casement Transom: ICATR

Frame and Sash:

- The frame and sash exteriors are made of Ultrex® meets all the requirements of AAMA 624-10.
- Exterior colors: Stone White, Pebble Gray, an advanced fiber reinforced material that is resistant to thermal conductance. Ultrex patented coating system, Bronze, Evergreen, Cashmere, or Ebony.
- The interior is non finger-jointed pine, kiln dried to a moisture content of 6-12% at time of fabrication. Water-repellent, preservative treated in accordance with WDMA I.S.4.
- Interior wood is available as Pine bare wood or factory-applied white interior finish.

Frame:

- Composite frame thickness is 1 5/16", (33). Frame width is 4 9/16", (116). 4/4 non finger-jointed pine interior stop is applied to all units. Interior wood is available as Pine bare wood or factory applied white interior finish. Ultrex frame is .080", (2) thick.

Sash:

- Composite sash thickness is 1 9/16" (40) with standard glass. Tripane sash are 1 31/32" (50) thick. Sash is .070" (2) thick.

Jamb Extension:

- 6 9/16" (167) and 6 13/16" (173) jamb extension available factory applied or in lineal lengths for field application.

Casement Hardware:

- Dual arm roto hardware factory installed on casement units
 - Roto gear hardware is an E-coated, high strength, low alloy steel
 - Call number 17 and 21 widths up to RO 25" (635) require dyad operators.
- The hinge track is stainless steel
 - hinge arm is E-coated high strength, low alloy steel
 - hinge shoe is injection molded with a stainless steel insert.
- Egress hinge is required on units with an R.O. from 27.125" to 29.984" including CN 29 to meet egress code. This hinge does not allow for cleaning of the exterior of sash from the inside.
- Folding handle with removable snap fit covers are available in Almond Frost or White color finish.
 - Optional Brass, Satin Nickel. and Oil Rubbed Bronze hardware available.
- Sequential locks are used on all heights, with removable escutcheon and handle.
 - Optional coastal hardware is available.
- Optional factory applied Window Opening Control Device is available (min size: 17 27/32" (453) x 31 1/8" (791) - max size: 36" (914) x 71 1/8" (1807))
 - Available in Almond Frost or White color finishes.

Awning Hardware:

- Scissors arm roto hardware factory installed on all awning units.
 - Roto hardware is an E-coated high strength, low alloy steel.
- The hinge track is stainless steel
 - hinge arm is E-coated high strength, low alloy steel
 - hinge shoe is injection molded with a stainless steel insert.
- Folding handle with removable snap fit covers are available in Almond Frost or White color finish
 - Optional Brass, Satin Nickel. and Oil Rubbed Bronze hardware available
- A single point lock on each jamb/stile, with a removable escutcheon and handle
 - Optional coastal hardware is available
- Optional factory installed or field applied stainless steel sash limiter is available

Installation:

- Factory applied folding nailing fin and drip cap system
 - Optional installation brackets for masonry available
 - Optional through jamb installation method on non-impact units only
- Factory mullions available up to 4W or 113" (2870) not to exceed 71 5/8" (1819) height or 2W2H with 94 3/4" (2407) height not to exceed 73" (1854) in width
- Factory supplied field mulling kits are available for standard assemblies, or 30°, 45° Bay, and Bow assemblies
- Picture units may require both nailing fin and installation brackets
- Impact glazed units require installation clip with nailing fin on all sizes for installation.

Wood-Ultrex Casement / Awning

Unit Features Continued

Glazing:

- Dual-pane units are manufactured with an 11/16" (17) IG with Low E2, E3, or E1 coatings including argon gas fill.
- Tripane units are manufactured with a 1 1/8" (29) IG with a combination coating consisting of Low E2 on surface 2 and Low E1 on surface 5 including argon gas fill.
- Tempered glass and/or obscure glass, and California Fire glass (annealed exterior and tempered interior glazing configuration) are available as an option.
- All glass is of a select quality complying with ASTM C 1036.
- Insulating glass is manufactured and tested to pass level ASTM E 2190 and is IGCC certified.
- The glazing seal is a silicone bedding on both interior and exterior surfaces utilized in a sandwich style sash.
- STC/OITC values are available for 3.1 mm thickness glass.
 - Optional 3.1/4.7 STC/OITC Upgrade glass is available. STC and OITC ratings are tested in accordance with ASTM E 90-09.
 - See the Product Performance chapter for values.

CE Glazing:

- Dual-pane units are manufactured with an 11/16" (17) IG with Low E2, E3, or E1 coatings including argon gas fill.
- Tripane units are manufactured with a 1 1/8" (29) IG with a combination coating consisting of Low E2 on surface 2 and Low E1 on surface 5 including argon gas fill.
- Tempered glass is available as an option.
- CE marked IG units comply with EN 1279 and EN 12150 (fully tempered).
 - The glazing seal is a silicone bedding on both interior and exterior surfaces utilized in a sandwich style sash.
- CE glazing is available on operator and stationary casement units up to CN3771.
 - Awning units, operable and stationary are available up to CN4947.
 - Casement pictures and transoms are not available with CE mark. Bows and Bays are not available with CE mark.

Impact Glazing:

- Optional Impact Zone 3 available on selected sizes.
 - Zone 3 for winds up to 140 miles per hour.
- Glass is laminated insulated Low E2 or E3 Argon, consisting of annealed or tempered glass exterior and laminated glass interior.
- The laminated glass is comprised of two pieces of glass with either a SGP or PVB laminate layer between.
 - Interior and exterior glazing compound is silicone, in a sandwich style glazing system.
 - Not available with CE product.

Weather Strip:

- All units are dual weather stripped.
- Frame and sash are weather stripped on all four sides with an extruded PVC bulb.
- Foam filled bulb is only on the frame, the sash has a hollow bulb.

Screen:

- Roll formed aluminum frame with corner key construction
- Available in an Almond Frost or White.
 - Optional wood veneer screen available.
- Charcoal color fiberglass (non-corrosive) screen cloth.
- Spring loaded pins for installation.

Removable Interior Grilles:

- Bar: Pine wood, 3/4" (19)
- Pattern: Standard rectangular pattern
- Available in Pine bare wood or factory applied white finish

Interior / Exterior Simulated Divided Lites (SDL):

- Interior bar: 7/8" (22) wide bars
 - Pine bare wood or factory applied white finish, to match interior
- Exterior bar: 7/8" (22) wide bars Ultrex, finish to match exterior
 - Patterns available: rectangle, 9 lite Prairie cut or Cottage style cut
 - Simulated check rail option: 2 11/32" (60)
 - Pattern available: simulated rail in standard center or customer specified location with 7/8" (22) pattern above, below or both in pattern of rectangular equal lite or prairie lite cut

Wood-Ultrex Casement / Awning

Unit Features Continued

Grilles-Between-The-Glass (GBG):

- 11/16" (17) contoured aluminum bar placed between two panes of glass
- Pattern: Standard rectangular pattern, or optional 9 lite Prairie cut
 - Exterior color determined by frame color
- Interior Colors: White or Bronze
- GBGs are not available on Impact units

Exterior Casing:

- Non-integral to the unit
- Fastened to the exterior wall with barb and kerf
- 2" (51) brick mould available as a full surround or with sill nosing
- 3 1/2" (89) flat casing available as full surround or with sill nosing
 - Also available with 1" (25) ranch style sill and header overhang

Wood-Ultrex Casement / Awning

Egress and Vent Openings: Casement

CN	Opening Width		Opening Height		Egress Opening		Floor to Clear Opening		Opening Vent Width		Opening Vent Height		Vent Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²	ft-in	mm	ft - in	mm	ft - in	mm	ft ²	m ²
1731	0-7 1/4	(184)	2-2 23/32	(678)	1.34	(0.12)	4-5 7/32	(1352)	0-11 7/8	(302)	2-2 3/4	(678)	2.20	(0.20)
1735	0-7 1/4	(184)	2-6 23/32	(780)	1.54	(0.14)	4-1 7/32	(1250)	0-11 7/8	(302)	2-6 3/4	(780)	2.53	(0.24)
1739	0-7 1/4	(184)	2-10 23/32	(882)	1.75	(0.16)	3-9 7/32	(1149)	0-11 7/8	(302)	2-10 3/4	(882)	2.86	(0.27)
1743	0-7 1/4	(184)	3-2 27/32	(986)	1.95	(0.18)	3-5 3/32	(1044)	0-11 7/8	(302)	3-2 3/4	(983)	3.19	(0.30)
1747	0-7 1/4	(184)	3-6 23/32	(1085)	2.15	(0.20)	3-1 7/32	(946)	0-11 7/8	(302)	3-6 3/4	(1085)	3.52	(0.33)
1755	0-7 1/4	(184)	4-2 23/32	(1288)	2.55	(0.24)	2-5 7/32	(742)	0-11 7/8	(302)	4-2 3/4	(1288)	4.18	(0.39)
1759	0-7 1/4	(184)	4-6 23/32	(1390)	2.75	(0.26)	2-1 7/32	(641)	0-11 7/8	(302)	4-6 3/4	(1390)	4.51	(0.42)
1763	0-7 1/4	(184)	4-10 23/32	(1491)	2.95	(0.27)	1-9 7/32	(539)	0-11 7/8	(302)	4-10 3/4	(1491)	4.84	(0.45)
1771	T 0-7 1/4	(184)	5-6 23/32	(1694)	3.35	(0.31)	1-1 7/32	(336)	0-11 7/8	(302)	5-6 3/4	(1694)	5.50	(0.51)
2131	0-11 1/4	(286)	2-2 23/32	(678)	2.08	(0.19)	4-5 7/32	(1352)	1-3 7/8	(403)	2-2 3/4	(678)	2.94	(0.27)
2135	0-11 1/4	(286)	2-6 23/32	(780)	2.4	(0.22)	4-1 7/32	(1250)	1-3 7/8	(403)	2-6 3/4	(780)	3.38	(0.31)
2139	0-11 1/4	(286)	2-10 23/32	(882)	2.71	(0.25)	3-9 7/32	(1149)	1-3 7/8	(403)	2-10 3/4	(882)	3.83	(0.36)
2143	0-11 1/4	(286)	3-2 27/32	(986)	3.03	(0.28)	3-5 7/32	(1047)	1-3 7/8	(403)	3-2 3/4	(983)	4.27	(0.40)
2147	0-11 1/4	(286)	3-6 23/32	(1085)	3.33	(0.31)	3-1 7/32	(946)	1-3 7/8	(403)	3-6 3/4	(1085)	4.71	(0.44)
2155	0-11 1/4	(286)	4-2 23/32	(1288)	3.96	(0.37)	2-5 7/32	(742)	1-3 7/8	(403)	4-2 3/4	(1288)	5.59	(0.52)
2159	0-11 1/4	(286)	4-6 23/32	(1390)	4.27	(0.40)	2-1 7/32	(641)	1-3 7/8	(403)	4-6 3/4	(1390)	6.03	(0.56)
2163	0-11 1/4	(286)	4-10 23/32	(1491)	4.58	(0.43)	1-9 7/32	(539)	1-3 7/8	(403)	4-10 3/4	(1491)	6.47	(0.60)
2171	T 0-11 1/4	(286)	5-6 23/32	(1694)	5.21	(0.48)	1-1 7/32	(336)	1-3 7/8	(403)	5-6 3/4	(1694)	7.35	(0.68)
2531	1-3 1/4	(387)	2-2 23/32	(678)	2.83	(0.26)	4-5 7/32	(1352)	1-7 7/8	(505)	2-2 3/4	(678)	3.69	(0.34)
2535	1-3 1/4	(387)	2-6 23/32	(780)	3.25	(0.30)	4-1 7/32	(1250)	1-7 7/8	(505)	2-6 3/4	(780)	4.24	(0.39)
2539	1-3 1/4	(387)	2-10 23/32	(882)	3.67	(0.34)	3-9 7/32	(1149)	1-7 7/8	(505)	2-10 3/4	(882)	4.79	(0.44)
2543	1-3 1/4	(387)	3-2 27/32	(986)	4.11	(0.38)	3-5 7/32	(1047)	1-7 7/8	(505)	3-2 3/4	(983)	5.34	(0.50)
2547	1-3 1/4	(387)	3-6 23/32	(1085)	4.52	(0.42)	3-1 7/32	(946)	1-7 7/8	(505)	3-6 3/4	(1085)	5.89	(0.55)
2555	1-3 1/4	(387)	4-2 23/32	(1288)	5.37	(0.50)	2-5 7/32	(742)	1-7 7/8	(505)	4-2 3/4	(1288)	7.00	(0.65)
2559	1-3 1/4	(387)	4-6 23/32	(1390)	5.79	(0.54)	2-1 7/32	(641)	1-7 7/8	(505)	4-6 3/4	(1390)	7.55	(0.70)
2563	1-3 1/4	(387)	4-10 23/32	(1491)	6.21	(0.58)	1-9 7/32	(539)	1-7 7/8	(505)	4-10 3/4	(1491)	8.10	(0.75)
2571	T 1-3 1/4	(387)	5-6 23/32	(1694)	7.06	(0.66)	1-1 7/32	(336)	1-7 7/8	(505)	5-6 3/4	(1694)	9.21	(0.86)
2931	1-9 7/8	(556)	2-2 23/32	(678)	4.06	(0.38)	4-5 7/32	(1352)	1-11 7/8	(606)	2-2 3/4	(678)	4.43	(0.41)
2935	1-9 7/8	(556)	2-6 23/32	(780)	4.66	(0.43)	4-1 7/32	(1250)	1-11 7/8	(606)	2-6 3/4	(780)	5.09	(0.47)
2939	1-9 7/8	(556)	2-10 23/32	(882)	5.27	(0.49)	3-9 7/32	(1149)	1-11 7/8	(606)	2-10 3/4	(882)	5.75	(0.53)
2943	E 1-9 7/8	(556)	3-2 27/32	(986)	5.9	(0.55)	3-5 7/32	(1047)	1-11 7/8	(606)	3-2 3/4	(983)	6.42	(0.60)
2947	E 1-9 7/8	(556)	3-6 23/32	(1085)	6.48	(0.60)	3-1 7/32	(946)	1-11 7/8	(606)	3-6 3/4	(1085)	7.08	(0.66)
2955	E 1-9 7/8	(556)	4-2 23/32	(1288)	7.7	(0.72)	2-5 7/32	(742)	1-11 7/8	(606)	4-2 3/4	(1288)	8.41	(0.78)
2959	E 1-9 7/8	(556)	4-6 23/32	(1390)	8.31	(0.77)	2-1 7/32	(641)	1-11 7/8	(606)	4-6 3/4	(1390)	9.07	(0.84)
2963	E 1-9 7/8	(556)	4-10 23/32	(1491)	8.91	(0.83)	1-9 7/32	(539)	1-11 7/8	(606)	4-10 3/4	(1491)	9.73	(0.90)
2971	E T 1-9 7/8	(556)	5-6 23/32	(1694)	10.13	(0.94)	1-1 7/32	(336)	1-11 7/8	(606)	5-6 3/4	(1694)	11.06	(1.03)

Wood-Ultrex Casement / Awning

Egress and Vent Openings: Casement

CN	Opening Width		Opening Height		Egress Opening		Floor to Clear Opening		Opening Vent Width		Opening Vent Height		Vent Opening		
	ft - in	mm	ft - in	mm	ft ²	m ²	ft-in	mm	ft - in	mm	ft - in	mm	ft ²	m ²	
3331	1-11 1/4	(591)	2-2 23/32	(678)	4.31	(0.40)	4-5 7/32	(1352)	2-3 7/8	(708)	2-2 3/4	(678)	5.17	(0.48)	
3335	1-11 1/4	(591)	2-6 23/32	(780)	4.96	(0.46)	4-1 7/32	(1250)	2-3 7/8	(708)	2-6 3/4	(780)	5.94	(0.55)	
3339	1-11 1/4	(591)	2-10 23/32	(882)	5.60	(0.52)	3-9 7/32	(1149)	2-3 7/8	(708)	2-10 3/4	(882)	6.72	(0.62)	
3343	E	1-11 1/4	(591)	3-2 27/32	(986)	6.27	(0.58)	3-5 7/32	(1047)	2-3 7/8	(708)	3-2 3/4	(983)	7.49	(0.70)
3347	E	1-11 1/4	(591)	3-6 23/32	(1085)	6.89	(0.64)	3-1 7/32	(946)	2-3 7/8	(708)	3-6 3/4	(1085)	8.27	(0.77)
3355	E	1-11 1/4	(591)	4-2 23/32	(1288)	8.18	(0.76)	2-5 7/32	(742)	2-3 7/8	(708)	4-2 3/4	(1288)	9.81	(0.91)
3359	E	1-11 1/4	(591)	4-6 23/32	(1390)	8.83	(0.82)	2-1 7/32	(641)	2-3 7/8	(708)	4-6 3/4	(1390)	10.59	(0.98)
3363	E	1-11 1/4	(591)	4-10 23/32	(1491)	9.48	(0.88)	1-9 7/32	(539)	2-3 7/8	(708)	4-10 3/4	(1491)	11.36	(1.06)
3371	E T	1-11 1/4	(591)	5-6 23/32	(1694)	10.77	(1.00)	1-1 7/32	(336)	2-3 7/8	(708)	5-6 3/4	(1694)	12.91	(1.20)
3731		2-3 1/4	(692)	2-2 23/32	(678)	5.05	(0.47)	4-5 7/32	(1352)	2-7 7/8	(810)	2-2 3/4	(678)	5.91	(0.55)
3735	E	2-3 1/4	(692)	2-6 23/32	(780)	5.81	(0.54)	4-1 7/32	(1250)	2-7 7/8	(810)	2-6 3/4	(780)	6.80	(0.63)
3739	E	2-3 1/4	(692)	2-10 23/32	(882)	6.57	(0.61)	3-9 7/32	(1149)	2-7 7/8	(810)	2-10 3/4	(882)	7.68	(0.71)
3743	E	2-3 1/4	(692)	3-2 27/32	(986)	7.35	(0.68)	3-5 7/32	(1047)	2-7 7/8	(810)	3-2 3/4	(983)	8.57	(0.80)
3747	E	2-3 1/4	(692)	3-6 23/32	(1085)	8.08	(0.75)	3-1 7/32	(946)	2-7 7/8	(810)	3-6 3/4	(1085)	9.45	(0.88)
3755	E	2-3 1/4	(692)	4-2 23/32	(1288)	9.59	(0.89)	2-5 7/32	(742)	2-7 7/8	(810)	4-2 3/4	(1288)	11.22	(1.04)
3759	E	2-3 1/4	(692)	4-6 23/32	(1390)	10.35	(0.96)	2-1 7/32	(641)	2-7 7/8	(810)	4-6 3/4	(1390)	12.11	(1.12)
3763	E	2-3 1/4	(692)	4-10 23/32	(1491)	11.11	(1.03)	1-9 7/32	(539)	2-7 7/8	(810)	4-10 3/4	(1491)	12.99	(1.21)
3771	E T	2-3 1/4	(692)	5-6 23/32	(1694)	12.62	(1.17)	1-1 7/32	(336)	2-7 7/8	(810)	5-6 3/4	(1694)	14.76	(1.37)

NOTE: 3735 will meet national egress if the sill height is within 44" (1118) of the floor. Code restrictions may vary depending on local building codes.

Wood-Ultrex Casement / Awning

Daylight Measurements: Casement

CN	Daylight Opening Width		Daylight Opening Height		Daylight Sq Feet	
	ft-in	mm	ft-in	mm	ft ²	mm ²
1731	0-10 25/32	(274)	2-1 29/32	(658)	1.94	(0.18)
1735	0-10 25/32	(274)	2-5 29/32	(760)	2.24	(0.21)
1739	0-10 25/32	(274)	2-9 29/32	(861)	2.54	(0.24)
1743	0-10 25/32	(274)	3-2 1/32	(966)	2.85	(0.26)
1747	0-10 25/32	(274)	3-5 29/32	(1065)	3.14	(0.29)
1755	0-10 25/32	(274)	4-1 29/32	(1268)	3.74	(0.35)
1759	0-10 25/32	(274)	4-5 29/32	(1369)	4.04	(0.38)
1763	0-10 25/32	(274)	4-9 29/32	(1471)	4.34	(0.40)
1771 T	0-10 25/32	(274)	5-5 29/32	(1674)	4.94	(0.46)
2131	1-2 25/32	(376)	2-1 29/32	(658)	2.66	(0.25)
2135	1-2 25/32	(376)	2-5 29/32	(760)	3.07	(0.29)
2139	1-2 25/32	(376)	2-9 29/32	(861)	3.48	(0.32)
2143	1-2 25/32	(376)	3-2 1/32	(966)	3.91	(0.36)
2147	1-2 25/32	(376)	3-5 29/32	(1065)	4.30	(0.40)
2155	1-2 25/32	(376)	4-1 29/32	(1268)	5.13	(0.48)
2159	1-2 25/32	(376)	4-5 29/32	(1369)	5.54	(0.51)
2163	1-2 25/32	(376)	4-9 29/32	(1471)	5.95	(0.55)
2171 T	1-2 25/32	(376)	5-5 29/32	(1674)	6.77	(0.63)
2531	1-6 25/32	(477)	2-1 29/32	(658)	3.38	(0.31)
2535	1-6 25/32	(477)	2-5 29/32	(760)	3.90	(0.36)
2539	1-6 25/32	(477)	2-9 29/32	(861)	4.43	(0.41)
2543	1-6 25/32	(477)	3-2 1/32	(966)	4.96	(0.46)
2547	1-6 25/32	(477)	3-5 29/32	(1065)	5.47	(0.51)
2555	1-6 25/32	(477)	4-1 29/32	(1268)	6.51	(0.61)
2559	1-6 25/32	(477)	4-5 29/32	(1369)	7.03	(0.65)
2563	1-6 25/32	(477)	4-9 29/32	(1471)	7.56	(0.70)
2571 T	1-6 25/32	(477)	5-5 29/32	(1674)	8.6	(0.80)
2931	1-10 25/32	(579)	2-1 29/32	(658)	4.10	(0.38)
2935	1-10 25/32	(579)	2-5 29/32	(760)	4.73	(0.44)
2939	1-10 25/32	(579)	2-9 29/32	(861)	5.37	(0.50)
2943	1-10 25/32	(579)	3-2 1/32	(966)	6.02	(0.56)
2947	1-10 25/32	(579)	3-5 29/32	(1065)	6.63	(0.62)
2955	1-10 25/32	(579)	4-1 29/32	(1268)	7.90	(0.73)
2959	1-10 25/32	(579)	4-5 29/32	(1369)	8.53	(0.79)
2963	1-10 25/32	(579)	4-9 29/32	(1471)	9.17	(0.85)
2971 T	1-10 25/32	(579)	5-5 29/32	(1674)	10.43	(0.97)

CN	Daylight Opening Width		Daylight Opening Height		Daylight Sq Feet	
	ft-in	mm	ft-in	mm	ft ²	mm ²
3331	2-2 25/32	(680)	2-1 29/32	(658)	4.82	(0.45)
3335	2-2 25/32	(680)	2-5 29/32	(760)	5.57	(0.52)
3339	2-2 25/32	(680)	2-9 29/32	(861)	6.31	(0.59)
3343	2-2 25/32	(680)	3-2 1/32	(966)	7.08	(0.66)
3347	2-2 25/32	(680)	3-5 29/32	(1065)	7.80	(0.72)
3355	2-2 25/32	(680)	4-1 29/32	(1268)	9.29	(0.86)
3359	2-2 25/32	(680)	4-5 29/32	(1369)	10.03	(0.93)
3363	2-2 25/32	(680)	4-9 29/32	(1471)	10.77	(1.00)
3371 T	2-2 25/32	(680)	5-5 29/32	(1674)	12.26	(1.14)
3731	2-6 25/32	(782)	2-1 29/32	(658)	5.54	(0.51)
3735	2-6 25/32	(782)	2-5 29/32	(760)	6.40	(0.59)
3739	2-6 25/32	(782)	2-9 29/32	(861)	7.25	(0.67)
3743	2-6 25/32	(782)	3-2 1/32	(966)	8.13	(0.76)
3747	2-6 25/32	(782)	3-5 29/32	(1065)	8.96	(0.83)
3755	2-6 25/32	(782)	4-1 29/32	(1268)	10.67	(0.99)
3759	2-6 25/32	(782)	4-5 29/32	(1369)	11.53	(1.07)
3763	2-6 25/32	(782)	4-9 29/32	(1471)	12.38	(1.15)
3771 T	2-6 25/32	(782)	5-5 29/32	(1674)	14.09	(1.31)

Wood-Ultrex Casement / Awning

Vent and Daylight Measurements: Awning

CN	Opening Vent Width		Opening Vent Height		Vent Opening		Daylight Opening Width		Daylight Opening Height		Daylight Sq Feet	
	ft - in	mm	ft - in	mm	ft ²	mm ²	ft-in	mm	ft-in	mm	ft ²	mm ²
2519	1-7 7/8	(505)	1-2 7/8	(377)	2.05	(0.19)	1-6 25/32	(477)	1-1 29/32	(353)	1.82	(0.17)
2523	1-7 7/8	(505)	1-6 7/8	(478)	2.60	(0.24)	1-6 25/32	(477)	1-5 29/32	(455)	2.34	(0.22)
2527	1-7 7/8	(505)	1-10 7/8	(580)	3.15	(0.29)	1-6 25/32	(477)	1-9 29/32	(557)	2.86	(0.27)
2535	1-7 7/8	(505)	2-6 7/8	(783)	4.25	(0.40)	1-6 25/32	(477)	2-5 29/32	(760)	3.90	(0.36)
2539	1-7 7/8	(505)	2-10 7/8	(885)	4.81	(0.45)	1-6 25/32	(477)	2-9 29/32	(861)	4.43	(0.41)
2547	1-7 7/8	(505)	3-6 7/8	(1088)	5.91	(0.55)	1-6 25/32	(477)	3-5 29/32	(1065)	5.47	(0.51)
2919	1-11 7/8	(606)	1-2 7/8	(377)	2.46	(0.23)	1-10 25/32	(579)	1-1 29/32	(353)	2.20	(0.20)
2923	1-11 7/8	(606)	1-6 7/8	(478)	3.12	(0.29)	1-10 25/32	(579)	1-5 29/32	(455)	2.84	(0.26)
2927	1-11 7/8	(606)	1-10 7/8	(580)	3.79	(0.35)	1-10 25/32	(579)	1-9 29/32	(557)	3.47	(0.32)
2935	1-11 7/8	(606)	2-6 7/8	(783)	5.11	(0.47)	1-10 25/32	(579)	2-5 29/32	(760)	4.73	(0.44)
2939	1-11 7/8	(606)	2-10 7/8	(885)	5.77	(0.54)	1-10 25/32	(579)	2-9 29/32	(861)	5.37	(0.50)
2947	1-11 7/8	(606)	3-6 7/8	(1088)	7.10	(0.66)	1-10 25/32	(579)	3-5 29/32	(1065)	6.63	(0.62)
3319	2-3 7/8	(708)	1-2 7/8	(377)	2.87	(0.27)	2-2 25/32	(680)	1-1 29/32	(353)	2.59	(0.24)
3323	2-3 7/8	(708)	1-6 7/8	(478)	3.64	(0.34)	2-2 25/32	(680)	1-5 29/32	(455)	3.33	(0.31)
3327	2-3 7/8	(708)	1-10 7/8	(580)	4.42	(0.41)	2-2 25/32	(680)	1-9 29/32	(557)	4.08	(0.38)
3335	2-3 7/8	(708)	2-6 7/8	(783)	5.97	(0.55)	2-2 25/32	(680)	2-5 29/32	(760)	5.57	(0.52)
3339	2-3 7/8	(708)	2-10 7/8	(885)	6.74	(0.63)	2-2 25/32	(680)	2-9 29/32	(861)	6.31	(0.59)
3347	2-3 7/8	(708)	3-6 7/8	(1088)	8.29	(0.77)	2-2 25/32	(680)	3-5 29/32	(1065)	7.80	(0.72)
3719	2-7 7/8	(810)	1-2 7/8	(377)	3.28	(0.30)	2-6 25/32	(782)	1-1 29/32	(353)	2.97	(0.28)
3723	2-7 7/8	(810)	1-6 7/8	(478)	4.17	(0.39)	2-6 25/32	(782)	1-5 29/32	(455)	3.83	(0.36)
3727	2-7 7/8	(810)	1-10 7/8	(580)	5.05	(0.47)	2-6 25/32	(782)	1-9 29/32	(557)	4.69	(0.44)
3735	2-7 7/8	(810)	2-6 7/8	(783)	6.82	(0.63)	2-6 25/32	(782)	2-5 29/32	(760)	6.40	(0.59)
3739	2-7 7/8	(810)	2-10 7/8	(885)	7.71	(0.72)	2-6 25/32	(782)	2-9 29/32	(861)	7.25	(0.67)
3747	2-7 7/8	(810)	3-6 7/8	(1088)	9.48	(0.88)	2-6 25/32	(782)	3-5 29/32	(1065)	8.96	(0.83)
4119	2-11 7/8	(911)	1-2 7/8	(377)	3.69	(0.34)	2-10 25/32	(884)	1-1 29/32	(353)	3.36	(0.31)
4123	2-11 7/8	(911)	1-6 7/8	(478)	4.69	(0.44)	2-10 25/32	(884)	1-5 29/32	(455)	4.33	(0.40)
4127	2-11 7/8	(911)	1-10 7/8	(580)	5.69	(0.53)	2-10 25/32	(884)	1-9 29/32	(557)	5.29	(0.49)
4135	2-11 7/8	(911)	2-6 7/8	(783)	7.68	(0.71)	2-10 25/32	(884)	2-5 29/32	(760)	7.23	(0.67)
4139	2-11 7/8	(911)	2-10 7/8	(885)	8.68	(0.81)	2-10 25/32	(884)	2-9 29/32	(861)	8.19	(0.76)
4147	2-11 7/8	(911)	3-6 7/8	(1088)	10.67	(0.99)	2-10 25/32	(884)	3-5 29/32	(1065)	10.13	(0.94)
4919	3-7 7/8	(1114)	1-2 7/8	(377)	4.52	(0.42)	3-6 25/32	(1087)	1-1 29/32	(353)	4.13	(0.38)
4923	3-7 7/8	(1114)	1-6 7/8	(478)	5.74	(0.53)	3-6 25/32	(1087)	1-5 29/32	(455)	5.32	(0.49)
4927	3-7 7/8	(1114)	1-10 7/8	(580)	6.96	(0.65)	3-6 25/32	(1087)	1-9 29/32	(557)	6.51	(0.60)
4935	3-7 7/8	(1114)	2-6 7/8	(783)	9.39	(0.87)	3-6 25/32	(1087)	2-5 29/32	(760)	8.89	(0.83)
4939	3-7 7/8	(1114)	2-10 7/8	(885)	10.61	(0.99)	3-6 25/32	(1087)	2-9 29/32	(861)	10.08	(0.94)
4947	3-7 7/8	(1114)	3-6 7/8	(1088)	13.05	(1.21)	3-6 25/32	(1087)	3-5 29/32	(1065)	12.45	(1.16)

Wood-Ultrex Casement / Awning

Daylight Measurement: Transom

CN	Daylight Opening Width		Daylight Opening Height		Daylight Sq Feet	
	ft-in	mm	ft-in	mm	ft ²	mm ²
1716	0-10 25/32	(274)	0-10 17/32	(268)	.79	(0.07)
1719	0-10 25/32	(274)	1-1 29/32	(353)	1.04	(0.10)
2116	1-2 25/32	(376)	0-10 17/32	(268)	1.08	(0.10)
2119	1-2 25/32	(376)	1-1 29/32	(353)	1.43	(0.13)
2516	1-6 25/32	(477)	0-10 17/32	(268)	1.38	(0.13)
2519	1-6 25/32	(477)	1-1 29/32	(353)	1.82	(0.17)
2916 T	1-10 25/32	(579)	0-10 17/32	(268)	1.67	(0.15)
2919 T	1-10 25/32	(579)	1-1 29/32	(353)	2.2	(0.20)
3316 T	2-2 25/32	(680)	0-10 17/32	(268)	1.96	(0.18)
3319 T	2-2 25/32	(680)	1-1 29/32	(353)	2.59	(0.24)
3716 T	2-6 25/32	(782)	0-10 17/32	(268)	2.25	(0.21)
3719 T	2-6 25/32	(782)	1-1 29/32	(353)	2.97	(0.28)
4116 T	2-10 25/32	(884)	0-10 17/32	(268)	2.55	(0.24)
4119 T	2-10 25/32	(884)	1-1 29/32	(353)	3.36	(0.31)
4916 T	3-6 25/32	(1087)	0-10 17/32	(268)	3.13	(0.29)
4919 T	3-6 25/32	(1087)	1-1 29/32	(353)	4.13	(0.38)
5716 T	4-2 25/32	(1290)	0-10 17/32	(268)	3.72	(0.35)
5719 T	4-2 25/32	(1290)	1-1 29/32	(353)	4.91	(0.46)
7316 T	5-6 25/32	(1696)	0-10 17/32	(268)	4.89	(0.45)
7319 T	5-6 25/32	(1696)	1-1 29/32	(353)	6.45	(0.60)

Wood-Ultrex Casement / Awning

Daylight Measurement: Picture

CN	Daylight Opening Width		Daylight Opening Height		Daylight Sq Feet		CN	Daylight Opening Width		Daylight Opening Height		Daylight Sq Feet	
	ft-in	mm	ft-in	mm	ft ²	mm ²		ft-in	mm	ft-in	mm	ft ²	mm ²
1719	0-10 25/32	(274)	1-1 29/32	(353)	1.04	(0.10)	2919	1-10 25/32	(579)	1-1 29/32	(353)	2.20	(0.20)
1723	0-10 25/32	(274)	1-5 29/32	(455)	1.34	(0.12)	2923	1-10 25/32	(579)	1-5 29/32	(455)	2.84	(0.26)
1727	0-10 25/32	(274)	1-9 29/32	(557)	1.64	(0.15)	2927	1-10 25/32	(579)	1-9 29/32	(557)	3.47	(0.32)
1731	0-10 25/32	(274)	2-1 29/32	(658)	1.94	(0.18)	2931	1-10 25/32	(579)	2-1 29/32	(658)	4.10	(0.38)
1735	0-10 25/32	(274)	2-5 29/32	(760)	2.24	(0.21)	2935	1-10 25/32	(579)	2-5 29/32	(760)	4.73	(0.44)
1739	0-10 25/32	(274)	2-9 29/32	(861)	2.54	(0.24)	2939	1-10 25/32	(579)	2-9 29/32	(861)	5.37	(0.50)
1743	0-10 25/32	(274)	3-2 1/32	(966)	2.85	(0.26)	2943	1-10 25/32	(579)	3-2 1/32	(966)	6.02	(0.56)
1747	0-10 25/32	(274)	3-5 29/32	(1065)	3.14	(0.29)	2947	1-10 25/32	(579)	3-5 29/32	(1065)	6.63	(0.62)
1755	0-10 25/32	(274)	4-1 29/32	(1268)	3.74	(0.35)	2955	1-10 25/32	(579)	4-1 29/32	(1268)	7.90	(0.73)
1759	0-10 25/32	(274)	4-5 29/32	(1369)	4.04	(0.38)	2959	1-10 25/32	(579)	4-5 29/32	(1369)	8.53	(0.79)
1763	0-10 25/32	(274)	4-9 29/32	(1471)	4.34	(0.40)	2963	1-10 25/32	(579)	4-9 29/32	(1471)	9.17	(0.85)
1771 T	0-10 25/32	(274)	5-5 29/32	(1674)	4.94	(0.46)	2971 T	1-10 25/32	(579)	5-5 29/32	(1674)	10.43	(0.97)
2119	1-2 25/32	(376)	1-1 29/32	(353)	1.43	(0.13)	3319	2-2 25/32	(680)	1-1 29/32	(353)	2.59	(0.24)
2123	1-2 25/32	(376)	1-5 29/32	(455)	1.84	(0.17)	3323	2-2 25/32	(680)	1-5 29/32	(455)	3.33	(0.31)
2127	1-2 25/32	(376)	1-9 29/32	(557)	2.25	(0.21)	3327	2-2 25/32	(680)	1-9 29/32	(557)	4.08	(0.38)
2131	1-2 25/32	(376)	2-1 29/32	(658)	2.66	(0.25)	3331	2-2 25/32	(680)	2-1 29/32	(658)	4.82	(0.45)
2135	1-2 25/32	(376)	2-5 29/32	(760)	3.07	(0.29)	3335	2-2 25/32	(680)	2-5 29/32	(760)	5.57	(0.52)
2139	1-2 25/32	(376)	2-9 29/32	(861)	3.48	(0.32)	3339	2-2 25/32	(680)	2-9 29/32	(861)	6.31	(0.59)
2143	1-2 25/32	(376)	3-2 1/32	(966)	3.91	(0.36)	3343	2-2 25/32	(680)	3-2 1/32	(966)	7.08	(0.66)
2147	1-2 25/32	(376)	3-5 29/32	(1065)	4.30	(0.40)	3347	2-2 25/32	(680)	3-5 29/32	(1065)	7.80	(0.72)
2155	1-2 25/32	(376)	4-1 29/32	(1268)	5.13	(0.48)	3355	2-2 25/32	(680)	4-1 29/32	(1268)	9.29	(0.86)
2159	1-2 25/32	(376)	4-5 29/32	(1369)	5.54	(0.51)	3359	2-2 25/32	(680)	4-5 29/32	(1369)	10.03	(0.93)
2163	1-2 25/32	(376)	4-9 29/32	(1471)	5.95	(0.55)	3363	2-2 25/32	(680)	4-9 29/32	(1471)	10.77	(1.00)
2171 T	1-2 25/32	(376)	5-5 29/32	(1674)	6.77	(0.63)	3371 T	2-2 25/32	(680)	5-5 29/32	(1674)	12.26	(1.14)
2519	1-6 25/32	(477)	1-1 29/32	(353)	1.82	(0.17)	3719	2-6 25/32	(782)	1-1 29/32	(353)	2.97	(0.28)
2523	1-6 25/32	(477)	1-5 29/32	(455)	2.34	(0.22)	3723	2-6 25/32	(782)	1-5 29/32	(455)	3.83	(0.36)
2527	1-6 25/32	(477)	1-9 29/32	(557)	2.86	(0.27)	3727	2-6 25/32	(782)	1-9 29/32	(557)	4.69	(0.44)
2531	1-6 25/32	(477)	2-1 29/32	(658)	3.38	(0.31)	3731	2-6 25/32	(782)	2-1 29/32	(658)	5.54	(0.51)
2535	1-6 25/32	(477)	2-5 29/32	(760)	3.90	(0.36)	3735	2-6 25/32	(782)	2-5 29/32	(760)	6.40	(0.59)
2539	1-6 25/32	(477)	2-9 29/32	(861)	4.43	(0.41)	3739	2-6 25/32	(782)	2-9 29/32	(861)	7.25	(0.67)
2543	1-6 25/32	(477)	3-2 1/32	(966)	4.96	(0.46)	3743	2-6 25/32	(782)	3-2 1/32	(966)	8.13	(0.76)
2547	1-6 25/32	(477)	3-5 29/32	(1065)	5.47	(0.51)	3747	2-6 25/32	(782)	3-5 29/32	(1065)	8.96	(0.83)
2555	1-6 25/32	(477)	4-1 29/32	(1268)	6.51	(0.61)	3755	2-6 25/32	(782)	4-1 29/32	(1268)	10.67	(0.99)
2559	1-6 25/32	(477)	4-5 29/32	(1369)	7.03	(0.65)	3759	2-6 25/32	(782)	4-5 29/32	(1369)	11.53	(1.07)
2563	1-6 25/32	(477)	4-9 29/32	(1471)	7.56	(0.70)	3763	2-6 25/32	(782)	4-9 29/32	(1471)	12.38	(1.15)
2571 T	1-6 25/32	(477)	5-5 29/32	(1674)	8.60	(0.80)	3771 T	2-6 25/32	(782)	5-5 29/32	(1674)	14.09	(1.31)

Wood-Ultrex Casement / Awning

Daylight Measurement: Picture

Daylight Opening Width		Daylight Opening Height		Daylight Sq Feet	
ft-in	mm	ft-in	mm	ft ²	mm ²
2-10 25/32 (884)		1-1 29/32 (353)		3.36	(0.31)
2-10 25/32 (884)		1-5 29/32 (455)		4.33	(0.40)
2-10 25/32 (884)		1-9 29/32 (557)		5.29	(0.49)
2-10 25/32 (884)		2-1 29/32 (658)		6.26	(0.58)
2-10 25/32 (884)		2-5 29/32 (760)		7.23	(0.67)
2-10 25/32 (884)		2-9 29/32 (861)		8.19	(0.76)
2-10 25/32 (884)		3-2 1/32 (966)		9.19	(0.85)
2-10 25/32 (884)		3-5 29/32 (1065)		10.13	(0.94)
2-10 25/32 (884)		4-1 29/32 (1268)		12.06	(1.12)
2-10 25/32 (884)		4-5 29/32 (1369)		13.03	(1.21)
2-10 25/32 (884)		4-9 29/32 (1471)		13.99	(1.30)
2-10 25/32 (884)		5-5 29/32 (1674)		15.92	(1.48)
3-6 25/32 (1087)		1-1 29/32 (353)		4.13	(0.38)
3-6 25/32 (1087)		1-5 29/32 (455)		5.32	(0.49)
3-6 25/32 (1087)		1-9 29/32 (557)		6.51	(0.60)
3-6 25/32 (1087)		2-1 29/32 (658)		7.70	(0.72)
3-6 25/32 (1087)		2-5 29/32 (760)		8.89	(0.83)
3-6 25/32 (1087)		2-9 29/32 (861)		10.08	(0.94)
3-6 25/32 (1087)		3-2 1/32 (966)		11.3	(1.05)
3-6 25/32 (1087)		3-5 29/32 (1065)		12.45	(1.16)
3-6 25/32 (1087)		4-1 29/32 (1268)		14.83	(1.38)
3-6 25/32 (1087)		4-5 29/32 (1369)		16.02	(1.49)
3-6 25/32 (1087)		4-9 29/32 (1471)		17.21	(1.60)
3-6 25/32 (1087)		5-5 29/32 (1674)		19.59	(1.82)
4-2 25/32 (1290)		1-1 29/32 (353)		4.91	(0.46)
4-2 25/32 (1290)		1-5 29/32 (455)		6.32	(0.59)
4-2 25/32 (1290)		1-9 29/32 (557)		7.73	(0.72)
4-2 25/32 (1290)		2-1 29/32 (658)		9.14	(0.85)
4-2 25/32 (1290)		2-5 29/32 (760)		10.55	(0.98)
4-2 25/32 (1290)		2-9 29/32 (861)		11.96	(1.11)
4-2 25/32 (1290)		3-2 1/32 (966)		13.42	(1.25)
4-2 25/32 (1290)		3-5 29/32 (1065)		14.78	(1.37)
4-2 25/32 (1290)		4-1 29/32 (1268)		17.60	(1.64)
4-2 25/32 (1290)		4-5 29/32 (1369)		19.02	(1.77)
4-2 25/32 (1290)		4-9 29/32 (1471)		20.43	(1.90)
4-2 25/32 (1290)		5-5 29/32 (1674)		23.25	(2.16)

CN	Daylight Opening Width		Daylight Opening Height		Daylight Sq Feet	
	ft-in	mm	ft-in	mm	ft ²	mm ²
7319	5-6 25/32 (1696)		1-1 29/32 (353)		6.45	(0.60)
7323	5-6 25/32 (1696)		1-5 29/32 (455)		8.31	(0.77)
7327	5-6 25/32 (1696)		1-9 29/32 (557)		10.16	(0.94)
7331	5-6 25/32 (1696)		2-1 29/32 (658)		12.02	(1.12)
7335	5-6 25/32 (1696)		2-5 29/32 (760)		13.87	(1.29)
7339	5-6 25/32 (1696)		2-9 29/32 (861)		15.73	(1.46)
7343	5-6 25/32 (1696)		3-2 1/32 (966)		17.64	(1.64)
7347	5-6 25/32 (1696)		3-5 29/32 (1065)		19.44	(1.81)
7355	5-6 25/32 (1696)		4-1 29/32 (1268)		23.15	(2.15)
7359 T	5-6 25/32 (1696)		4-5 29/32 (1369)		25.01	(2.32)

Wood-Ultrex Casement / Awning

Minimum and Maximum Guidelines

Minimum and Maximum Guidelines - Standard Product										
Unit Type	Frame Size									
	CN	Min Width		Min Height		CN	Max Width		Max Height	
		in	mm	in	mm		in	mm	in	mm
ICA (OP)	1731	16	(406)	31 1/8	(791)	3771	36	(914)	71 1/8	(1807)
ICA (STAT)	1731	16	(406)	31 1/8	(791)	3771	36	(914)	71 1/8	(1807)
IAWN (OP)	2519	24	(610)	19 1/8	(486)	4947	48	(1219)	47 1/8	(1197)
IAWN (STAT)	2519	24	(610)	19 1/8	(486)	4947	48	(1219)	47 1/8	(1197)
ICAP	1719	16	(406)	19 1/8	(486)	7359	72	(1829)	59 1/8	(1502)
	1719	16	(406)	19 1/8	(486)	5771	56	(1422)	71 1/8	(1807)
ICATR	1716	16	(406)	15 3/4	(400)	7319	72	(1829)	19 1/8	(486)

Minimum and Maximum Guidelines - Impact Product										
Unit Type	Frame Size									
	CN	Min Width		Min Height		CN	Max Width		Max Height	
		in	mm	in	mm		in	mm	in	mm
ICA (OP)	1731	16	(406)	31 1/8	(791)	3771	36	(914)	71 1/8	(1807)
ICA (STAT)	1731	16	(406)	31 1/8	(791)	3771	36	(914)	71 1/8	(1807)
IAWN (OP)	2519	24	(610)	19 1/8	(486)	4947	48	(1219)	47 1/8	(1197)
IAWN (STAT)	2519	24	(610)	19 1/8	(486)	4947	48	(1219)	47 1/8	(1197)
ICAP	3739	36	(914)	39 1/8	(994)	7355	72	(1829)	55 1/8	(1400)
	3739	36	(914)	39 1/8	(994)	5771	56	(1422)	71 1/8	(1807)
ICATR	1719	16	(406)	19 1/8	(486)	3316	32	(813)	15 3/4	(400)
	2116	20	(508)	15 3/4	(400)	3316	32	(813)	15 3/4	(400)

Minimum and Maximum Guidelines - CE Product										
Unit Type	Frame Size									
	CN	Min Width		Min Height		CN	Max Width		Max Height	
		in	mm	in	mm		in	mm	in	mm
ICA	1731	16	(406)	31 1/8	(791)	3771	36	(914)	71 1/8	(1807)
IAWN	2519	24	(610)	19 1/8	(486)	4947	48	(1219)	47 1/8	(1197)

NOTE: Special sizes are available in 1/64" increments, not to exceed the maximum or minimum available sizes listed above.

Wood-Ultrex Casement / Awning

Certified Sizes and Ratings: Standard Product and Impact

Product	Air Tested to psf	Water Tested to psf	Certification Rating	Max Overall Width	Max Overall Height
Integrity Wood Casement (3771)	1.57	7.5	LC-PG50-C	36	71 1/8
Integrity Wood Awning (4947)	1.57	7.5	LC-PG50-AP	48	47 1/8
Integrity Wood Picture (7359)	1.57	7.5	LC-PG50-FW	72	59 1/8
Integrity Wood Picture (5771)	1.57	8.25	LC-PG50-FW	56	71 1/8

NOTE: For CE ratings, please refer to CE Performance Section.

Product	Air Tested to psf	Water Tested to psf	Certification Rating	Max Overall Width	Max Overall Height
Integrity Wood Casement (3771) Impact Rated	1.57	8.25	LC-PG55-C	36	71 1/8
Integrity Wood Awning (4947) Impact Rated	1.57	8.25	LC-PG55-AP	48	47 1/8
Integrity Wood Picture (5771) Impact Rated	1.57	8.25	LC-PG55-FW	56	71 1/8
Integrity Wood Picture (5771) Impact Rated	1.57	8.25	LC-PG55-FW	72	55 1/8

NOTE: CE mark is not available on Impact units

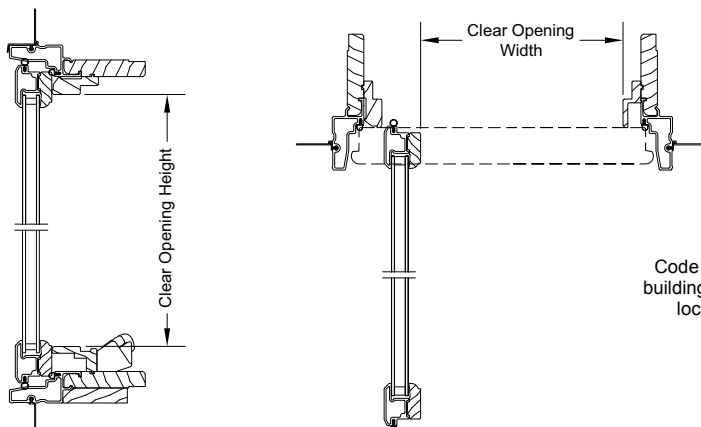
Wood-Ultrex Casement / Awning

Measurement Conversions and Egress Formulas

Unit Measurement					
From	To	Width		Height	
		in	mm	in	mm
Rough Opening					
Masonry Opening	Rough Opening	+ 1/2	(13)	+ 1/4	(06)
OM of Frame	Rough Opening	+ 1	(25)	+ 1/2	(13)
Daylight Opening	Rough Opening	+ 6 7/32	(158)	+ 5 23/32	(145)
Frame					
Daylight Opening	OM of Frame	+ 5 7/32	(132)	+ 5 7/32	(132)
Sash					
OM of Frame	OM of Sash	-1 11/16	(43)	-1 11/16	(43)
Daylight Opening	OM of Sash	+ 3 17/32	(90)	+ 3 17/32	(90)
Glass					
OM of Frame	Glass (Standard Units)	-4 3/16	(106)	-4 3/16	(106)
OM of Frame	Glass (Impact Units)	-4 21/64	(110)	-4 21/64	(110)
Daylight Opening	Glass (Standard Units)	+ 1 1/32	(26)	+ 1 1/32	(26)
Daylight Opening	Glass (Impact Units)	+ 7/8	(22)	+ 7/8	(22)
Screen					
OM of Frame	OM of Aluminum Screen	-3 29/64	(88)	-3 59/64	(100)
Daylight Opening	OM of Aluminum Screen	+ 1 49/64	(45)	+ 1 19/64	(33)
OM of Frame	OM of Wood Veneer Screen	-3 1/2	(89)	-3 31/32	(101)
Daylight Opening	OM of Wood Veneer Screen	+ 1 23/32	(44)	+ 1 1/4	(32)

Egress Calculations for Special Sizes			
Minimum Value for Net Clear Opening		Desired Dimension	Formula
20" (508)	Frame RO of 30" (762) and greater	Std. Hinge Opening Width (inches)	= Frame OMW - 8.758" (222)
20" (508)	Frame RO of 27 1/8" (689) - 29 63/64" (792)	Egress Hinge Opening Width (inches)	= Frame OMW - 6.125" (156)
24" (610)	-	Egress Opening Height (inches)	= Frame OMH - 4.420" (112)
5.7 square feet (53)		Egress Opening Area (sq. ft.)	= (Egress Width x Egress Height) / 144

Egress Measurements for Operating Casements



Code restrictions may vary depending on your local building codes. For additional information contact your local department for IBC or IRC requirements.

Wood-Ultrex Casement / Awning

Mulling Guidelines

Factory Mullered Casement/Awning Assemblies

- Assemblies up to 7 units wide by 1 unit high
 - **MAXIMUM ROUGH OPENING** not to exceed 113" (2870) x 71 5/8" (1819)
- Assemblies up to 4 units wide by 5 units high
 - **MAXIMUM ROUGH OPENING** not to exceed 85" (2159) x 94 3/4" (2407)

NOTE: Field mulling beyond the above limitations is not recommended.

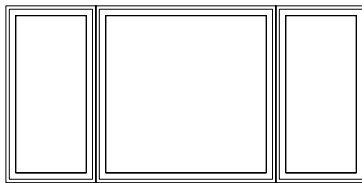
CE mark is not available on factory mullered units

Certified Mull Limits: WDMA Hallmark certified to AAMA 450

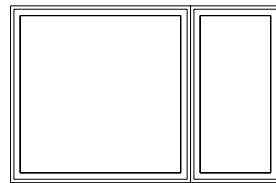
- If assemblies have individual units that have a lower design pressure than the mull, the entire assembly is rated at the lower design pressure.
- Mull certification includes mull clips (nail fin installation) or mull brackets (masonry installation) fastened at all mull points.
- Items not included in certified mull: Standard mull assemblies, field mull assemblies, Integrity round tops.
- Assemblies up to 7 units wide by 1 unit high - Maximum Rough Opening not to exceed 113" (2870) x 71 5/8" (1819)
- Assemblies up to 4 units wide by 5 units high - Maximum Rough Opening not to exceed 85" (2159) x 94 3/4" (2407)

Rough Opening for Assemblies

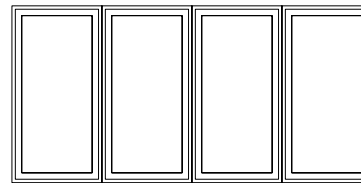
- **WIDTH:**
 - Frame Width = ADD Frame Widths + 1" (25)
 - Tolerance = 1/2" (13) from frame to Rough Opening at left and right jamb.
- **HEIGHT:**
 - Frame Height = ADD Frame Heights + 1/2" (13)
 - Tolerance = 1/2" (13) from frame to Rough Opening at head jamb.



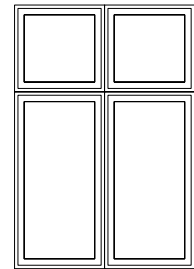
3 Units Wide 1 Unit High



2 Units Wide 1 Unit High



4 Units Wide 1 Unit High



**2 Units Wide
2 Units High**

Wood-Ultrex Casement / Awning

Impact Mulling Guidelines

Factory Mulling

The Wood-Ultrex Casement may be mullled to Wood-Ultrex Casement products, Direct Glaze Polygon, Integrity Round Tops and Integrity Round Top by Marvin.

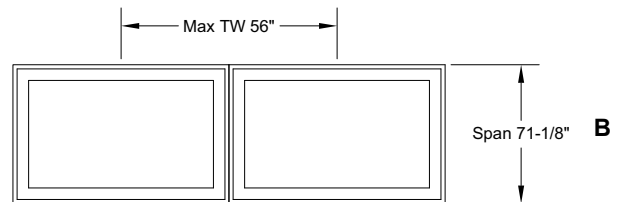
- Standard mull limits (all factory mulls)
 - Maximum Mullled Assembly RO Size
 - 4 units wide x 1 unit high - 113" (2870) x 71 5/8" (1819)
 - 4 units wide x 5 unit high - 85" (2159) x 94 3/4" (2407)
- Field Mulling beyond the above limitations is not recommended

Impact Certified Mull Limits: WDMA Hallmark certified to AAMA 450.

- If assemblies have individual units that have a lower design pressure than the mull; the entire assembly is rated at the lower design pressure.
- Mull certification includes 12" mull brackets fastened at all mull joints.
- Items not included in certified mulls: Standard mull assemblies, Integrity round tops, Integrity round tops by Marvin.

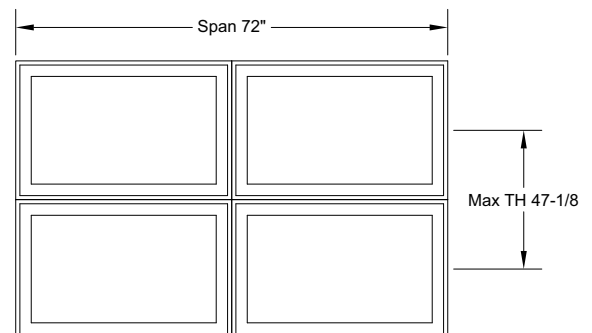
1 Directional Mull Limits				
Product	Max Span	Max TW or TH	Max R.O.	DP
WU Casement Vertical Mulling IZ3	71 1/8" (1807)	56" (1422)	113" (2870) x 71 5/8" (1819)	+55/-65
WU Casement Horizontal Mulling IZ3	72" (1829)	47 18" (1197)	73" (1854) x 94 3/4" (2407)	+55/-65

- Standard Mulls are not certified
- Assembly DP is lowest DP of mull or any product
- Stepped Mulls are not certified
- Tributary Width or Tributary Height = 1/2A + 1/2B



2 Wide 2 High Directional Mull Limits

- 2 Wide 2 High Directional Mull Limits
- Standard Mulls are not certified
- Max assembly RO size – 73" (1854) x 94 3/4" (2407)
- Max TH – 47-1/8" (1197), Span – 72" (1829)
- No non-reinforced mull joints
- Reinforcement is continuous across horizontal member



Wood-Ultrex Casement / Awning

Standard Unit Measurements: Casement

Casement Unit Measurements												
Width												
CN	Masonry Opening		Rough Opening		Frame Size		Sash Size		Screen OM		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft-in	mm	ft - in	mm
17	1-4 1/2	(419)	1-5	(432)	1-4	(406)	1-2 5/16	(364)	1-0 9/16	(319)	0-10 25/32	(274)
21	1-8 1/2	(521)	1-9	(533)	1-8	(508)	1-6 5/16	(465)	1-4 9/16	(421)	1-2 25/32	(376)
25	2-0 1/2	(622)	2-1	(635)	2-0	(610)	1-10 5/16	(567)	1-8 9/16	(522)	1-6 25/32	(477)
29	2-4 1/2	(724)	2-5	(737)	2-4	(711)	2-2 5/16	(668)	2-0 9/16	(624)	1-10 25/32	(579)
33	2-8 1/2	(826)	2-9	(838)	2-8	(813)	2-6 5/16	(770)	2-4 9/16	(726)	2-2 25/32	(680)
37	3-0 1/2	(927)	3-1	(940)	3-0	(914)	2-10 5/16	(872)	2-8 9/16	(827)	2-6 25/32	(782)

Casement Unit Measurements												
Height												
CN	Masonry Opening		Rough Opening		Frame Size		Sash Size		Screen OM		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft-in	mm	ft - in	mm
31	2-7 3/8	(797)	2-7 5/8	(803)	2-7 1/8	(791)	2-5 7/16	(748)	2-3 7/32	(691)	2-1 29/32	(658)
35	2-11 3/8	(899)	2-11 5/8	(905)	2-11 1/8	(892)	2-9 7/16	(849)	2-7 7/32	(793)	2-5 29/32	(760)
39	3-3 3/8	(1000)	3-3 5/8	(1006)	3-3 1/8	(994)	3-1 7/16	(951)	2-11 7/32	(895)	2-9 29/32	(861)
43	3-7 1/2	(1105)	3-7 3/4	(1111)	3-7 1/4	(1099)	3-5 9/16	(1056)	3-3 11/32	(999)	3-2 1/32	(966)
47	3-11 3/8	(1203)	3-11 5/8	(1210)	3-11 1/8	(1197)	3-9 7/16	(1154)	3-7 7/32	(1098)	3-5 29/32	(1065)
55	4-7 3/8	(1407)	4-7 5/8	(1413)	4-7 1/8	(1400)	4-5 7/16	(1357)	4-3 7/32	(1301)	4-1 29/32	(1268)
59	4-11 3/8	(1508)	4-11 5/8	(1514)	4-11 1/8	(1502)	4-9 7/16	(1459)	4-7 7/32	(1403)	4-5 29/32	(1369)
63	5-3 3/8	(1610)	5-3 5/8	(1616)	5-3 1/8	(1603)	5-1 7/16	(1561)	4-11 7/32	(1504)	4-9 29/32	(1471)
71	5-11 3/8	(1813)	5-11 5/8	(1819)	5-11 1/8	(1807)	5-9 7/16	(1764)	5-7 7/32	(1707)	5-5 29/32	(1674)

NOTE: CE mark is available on operable and stationary units up to CN 3771.

For standard casement elevations, visit: www.marvin.com

Wood-Ultrex Casement / Awning

Standard Unit Measurements: Awning

Awning Unit Measurements												
Width												
CN	Masonry Opening		Rough Opening		Frame Size		Sash Size		Screen OM		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft-in	mm	ft - in	mm
25	2-0 1/2	(622)	2-1	(635)	2-0	(610)	1-10 5/16	(567)	1-8 9/16	(522)	1-6 25/32	(477)
29	2-4 1/2	(724)	2-5	(737)	2-4	(711)	2-2 5/16	(668)	2-0 9/16	(624)	1-10 25/32	(579)
33	2-8 1/2	(826)	2-9	(838)	2-8	(813)	2-6 5/16	(770)	2-4 9/16	(726)	2-2 25/32	(680)
37	3-0 1/2	(927)	3-1	(940)	3-0	(914)	2-10 5/16	(872)	2-8 9/16	(827)	2-6 25/32	(782)
41	3-4 1/2	(1029)	3-5	(1041)	3-4	(1016)	3-2 5/16	(973)	3-0 9/16	(929)	2-10 25/32	(884)
49	4-0 1/2	(1232)	4-1	(1245)	4-0	(1219)	3-10 5/16	(1176)	3-8 9/16	(1132)	3-6 25/32	(1087)

Awning Unit Measurements												
Height												
CN	Masonry Opening		Rough Opening		Frame Size		Sash Size		Screen OM		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft-in	mm	ft - in	mm
19	1-7 3/8	(492)	1-7 5/8	(498)	1-7 1/8	(486)	1-5 7/16	(443)	1-3 7/32	(387)	1-1 29/32	(353)
23	1-11 3/8	(594)	1-11 5/8	(600)	1-11 1/8	(587)	1-9 7/16	(545)	1-7 7/32	(488)	1-5 29/32	(455)
27	2-3 3/8	(695)	2-3 5/8	(702)	2-3 1/8	(689)	2-1 7/16	(646)	1-11 7/32	(590)	1-9 29/32	(557)
35	2-11 3/8	(899)	2-11 5/8	(905)	2-11 1/8	(892)	2-9 7/16	(849)	2-7 7/32	(793)	2-5 29/32	(760)
39	3-3 3/8	(1000)	3-3 5/8	(1006)	3-3 1/8	(994)	3-1 7/16	(951)	2-11 7/32	(895)	2-9 29/32	(861)
47	3-11 3/8	(1203)	3-11 5/8	(1210)	3-11 1/8	(1197)	3-9 7/16	(1154)	3-7 7/32	(1098)	3-5 29/32	(1065)

NOTE: CE mark is available on operable and stationary units up to CN 4947.

Wood-Ultrex Casement / Awning

Standard Unit Measurements: Picture

Casement/Awning Picture Unit Measurements										
Width										
CN	Masonry Opening		Rough Opening		Frame Size		Sash Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
17	1-4 1/2	(419)	1-5	(432)	1-4	(406)	1-2 5/16	(364)	0-10 25/32	(274)
21	1-8 1/2	(521)	1-9	(533)	1-8	(508)	1-6 5/16	(465)	1-2 25/32	(376)
25	2-0 1/2	(622)	2-1	(635)	2-0	(610)	1-10 5/16	(567)	1-6 25/32	(477)
29	2-4 1/2	(724)	2-5	(737)	2-4	(711)	2-2 5/16	(668)	1-10 25/32	(579)
33	2-8 1/2	(826)	2-9	(838)	2-8	(813)	2-6 5/16	(770)	2-2 25/32	(680)
37	3-0 1/2	(927)	3-1	(940)	3-0	(914)	2-10 5/16	(872)	2-6 25/32	(782)
41	3-4 1/2	(1029)	3-5	(1041)	3-4	(1016)	3-2 5/16	(973)	2-10 25/32	(884)
49	4-0 1/2	(1232)	4-1	(1245)	4-0	(1219)	3-10 5/16	(1176)	3-6 25/32	(1087)
57	4-8 1/2	(1435)	4-9	(1448)	4-8	(1422)	4-6 5/16	(1380)	4-2 25/32	(1290)
73	6-0 1/2	(1842)	6-1	(1854)	6-0	(1829)	5-10 5/16	(1786)	5-6 25/32	(1696)

Casement/Awning Picture Unit Measurements										
Height										
CN	Masonry Opening		Rough Opening		Frame Size		Sash Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
19	1-7 3/8	(492)	1-7 5/8	(498)	1-7 1/8	(486)	1-5 7/16	(443)	1-1 29/32	(353)
23	1-11 3/8	(594)	1-11 5/8	(600)	1-11 1/8	(587)	1-9 7/16	(545)	1-5 29/32	(455)
27	2-3 3/8	(695)	2-3 5/8	(702)	2-3 1/8	(689)	2-1 7/16	(646)	1-9 29/32	(557)
31	2-7 3/8	(797)	2-7 5/8	(803)	2-7 1/8	(791)	2-5 7/16	(748)	2-1 29/32	(658)
35	2-11 3/8	(899)	2-11 5/8	(905)	2-11 1/8	(892)	2-9 7/16	(849)	2-5 29/32	(760)
39	3-3 3/8	(1000)	3-3 5/8	(1006)	3-3 1/8	(994)	3-1 7/16	(951)	2-9 29/32	(861)
43	3-7 1/2	(1105)	3-7 3/4	(1111)	3-7 1/4	(1099)	3-5 9/16	(1056)	3-2 1/32	(966)
47	3-11 3/8	(1203)	3-11 5/8	(1210)	3-11 1/8	(1197)	3-9 7/16	(1154)	3-5 29/32	(1065)
55	4-7 3/8	(1407)	4-7 5/8	(1413)	4-7 1/8	(1400)	4-5 7/16	(1357)	4-1 29/32	(1268)
59	4-11 3/8	(1508)	4-11 5/8	(1514)	4-11 1/8	(1502)	4-9 7/16	(1459)	4-5 29/32	(1369)
63	5-3 3/8	(1610)	5-3 5/8	(1616)	5-3 1/8	(1603)	5-1 7/16	(1561)	4-9 29/32	(1471)
71	5-11 3/8	(1813)	5-11 5/8	(1819)	5-11 1/8	(1807)	5-9 7/16	(1764)	5-5 29/32	(1674)

Wood-Ultrex Casement / Awning

Standard Unit Measurements: Transom

Casement/Awning Transom Unit Measurements										
Width										
CN	Masonry Opening		Rough Opening		Frame Size		Sash Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
17	1-4 1/2	(419)	1-5	(432)	1-4	(406)	1-2 5/16	(364)	0-10 25/32	(274)
21	1-8 1/2	(521)	1-9	(533)	1-8	(508)	1-6 5/16	(465)	1-2 25/32	(376)
25	2-0 1/2	(622)	2-1	(635)	2-0	(610)	1-10 5/16	(567)	1-6 25/32	(477)
29	2-4 1/2	(724)	2-5	(737)	2-4	(711)	2-2 5/16	(668)	1-10 25/32	(579)
33	2-8 1/2	(826)	2-9	(838)	2-8	(813)	2-6 5/16	(770)	2-2 25/32	(680)
37	3-0 1/2	(927)	3-1	(940)	3-0	(914)	2-10 5/16	(872)	2-6 25/32	(782)
41	3-4 1/2	(1029)	3-5	(1041)	3-4	(1016)	3-2 5/16	(973)	2-10 25/32	(884)
49	4-0 1/2	(1232)	4-1	(1245)	4-0	(1219)	3-10 5/16	(1176)	3-6 25/32	(1087)
57	4-8 1/2	(1435)	4-9	(1448)	4-8	(1422)	4-6 5/16	(1380)	4-2 25/32	(1290)
73	6-0 1/2	(1842)	6-1	(1854)	6-0	(1829)	5-10 5/16	(1786)	5-6 25/32	(1696)

Casement/Awning Transom Unit Measurements										
Height										
CN	Masonry Opening		Rough Opening		Frame Size		Sash Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
16	1-4	(406)	1-4 1/4	(413)	1-3 3/4	(400)	1-2 1/16	(357)	0-10 17/32	(268)
19	1-7 3/8	(492)	1-7 5/8	(498)	1-7 1/8	(486)	1-5 7/16	(443)	1-1 29/32	(353)

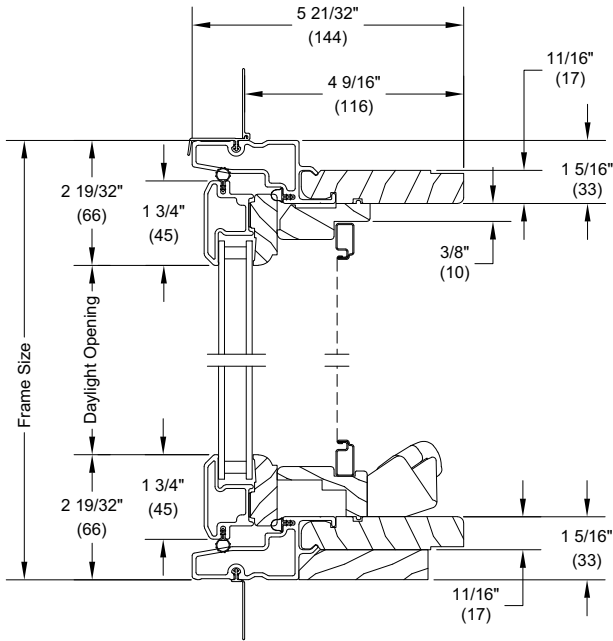
NOTE: CE mark is not available on Casement / Awning transoms.

Wood-Ultrex Casement / Awning

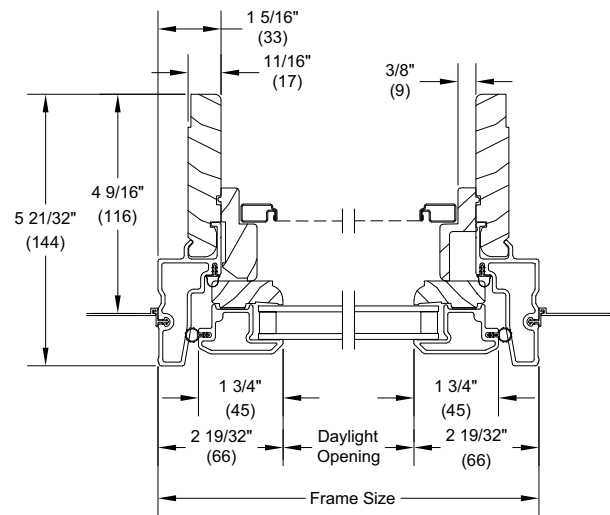
Section Details: Operating - Casement / Awning

Scale: 3" = 1' 0"

Operating - 4 9/16" (116)

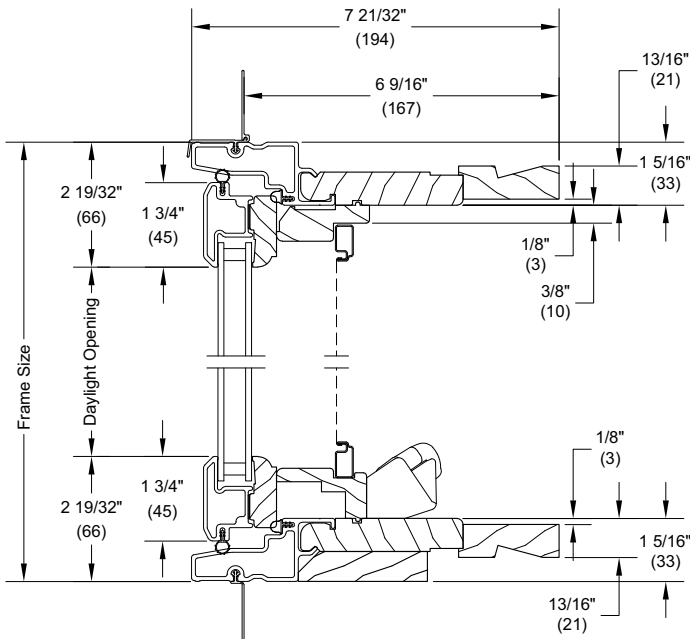


Head Jamb and Sill

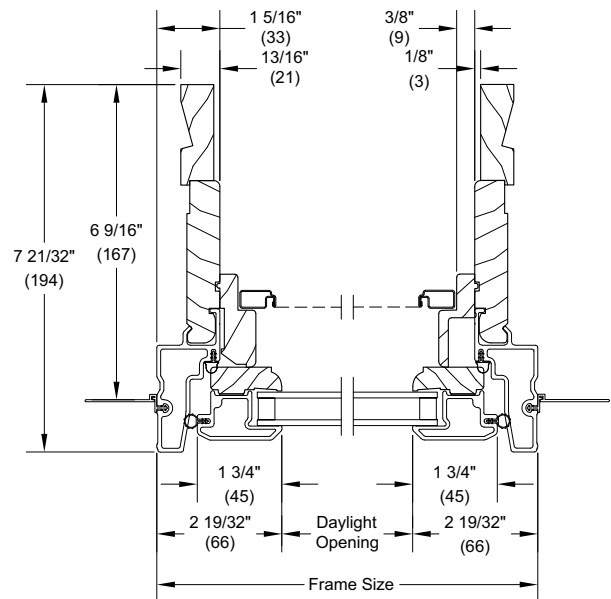


Jambs

Operating - 6 9/16" (167)



Head Jamb and Sill



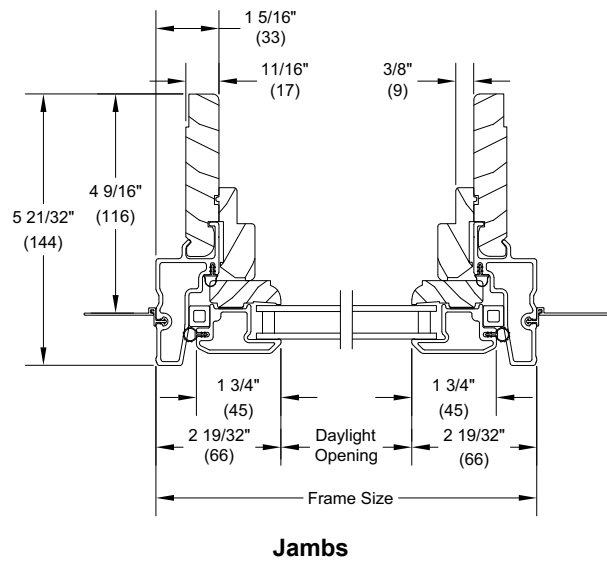
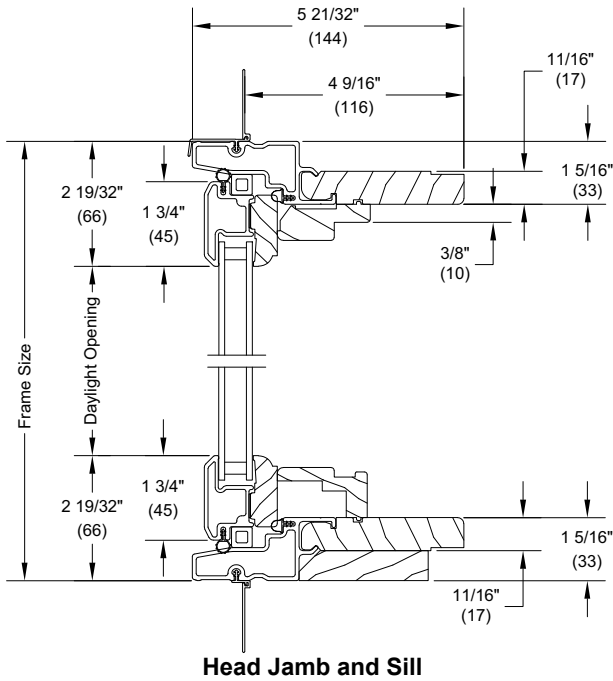
Jambs

Wood-Ultrex Casement / Awning

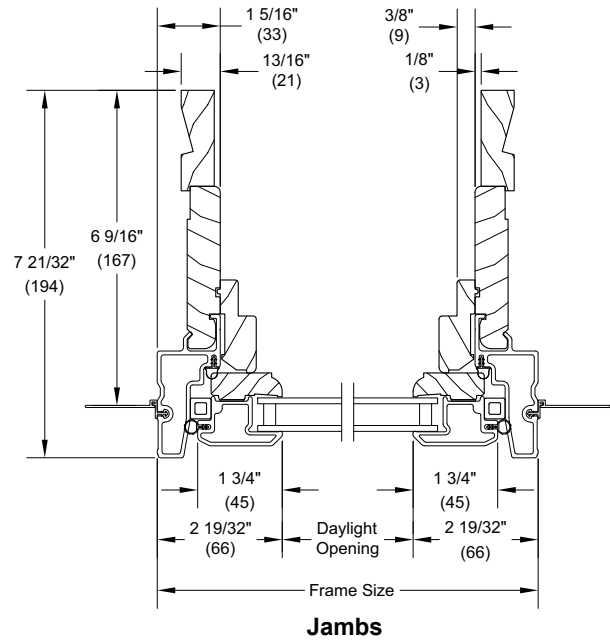
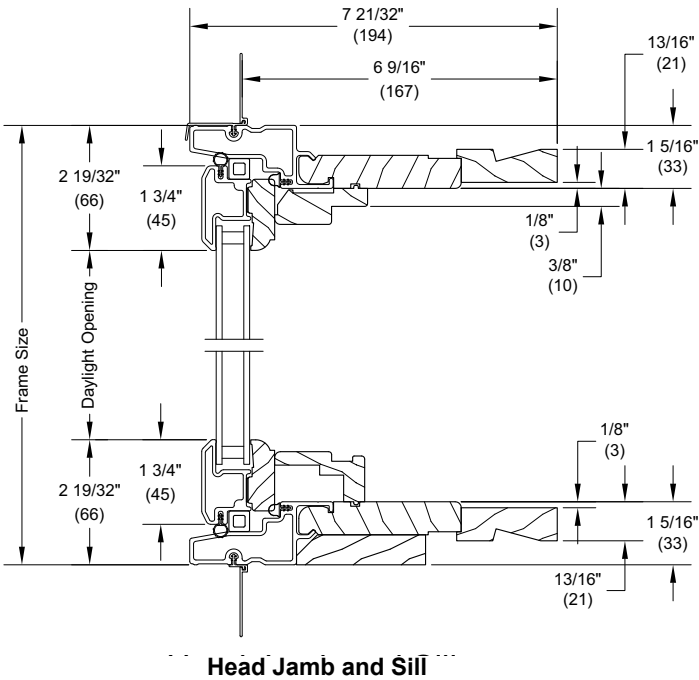
Section Details: Stationary/Picture - Casement / Awning

Scale: 3" = 1' 0"

Stationary/Picture - 4 9/16" (116)



Stationary/Picture - 6 9/16" (167)

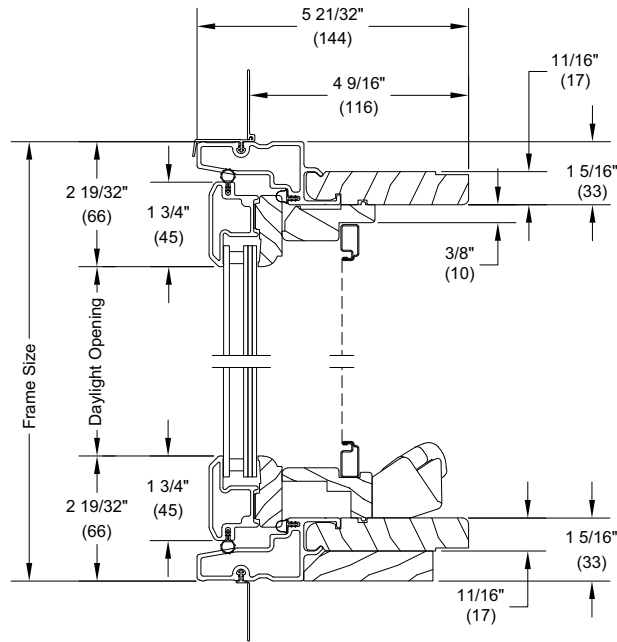


Wood-Ultrex Casement / Awning

Section Details: Casement Impact

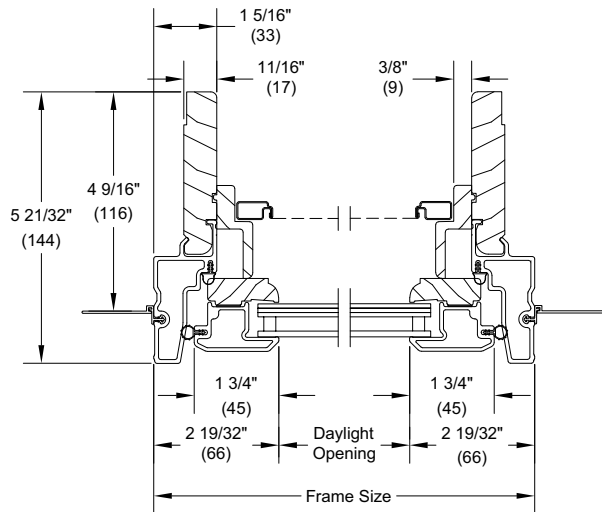
Scale: 3" = 1' 0"

Operating

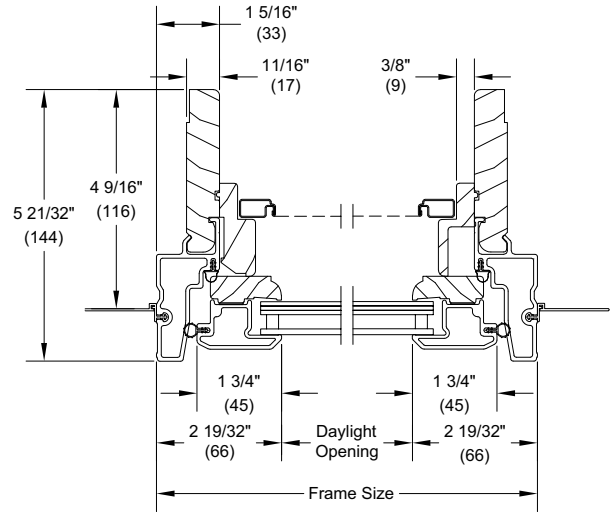


Head Jamb and Sill

Awning



Casement



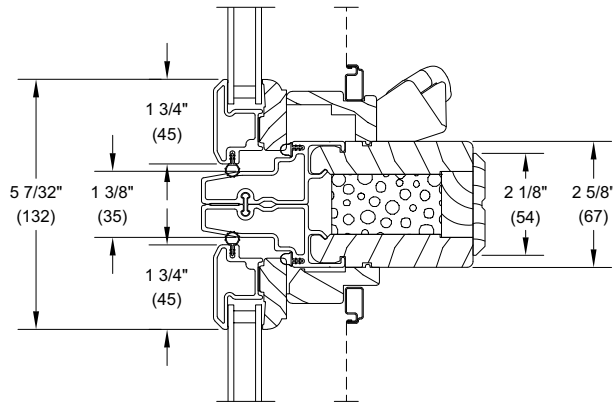
Jambs

NOTE: CE mark is not available on Impact units

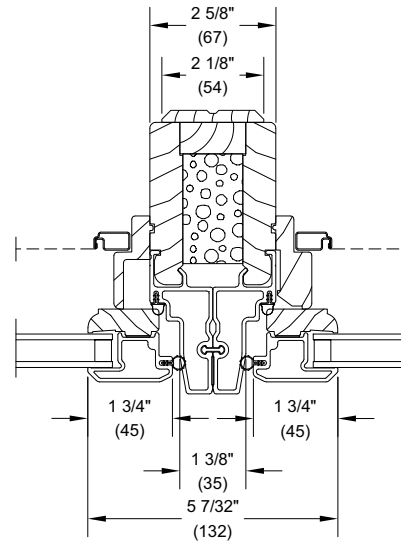
Wood-Ultrex Casement / Awning

Section Details: Casement/Awning Mullion Options

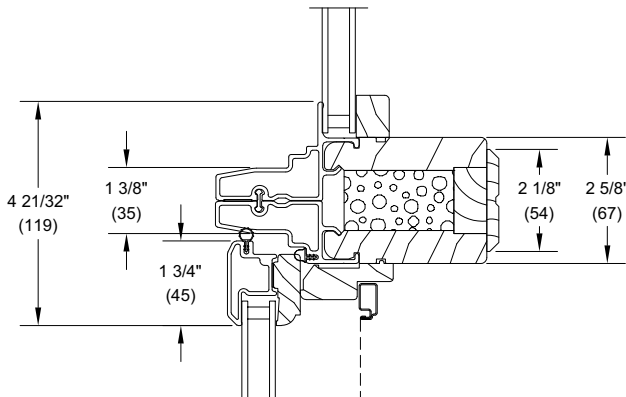
Scale: 3" = 1' 0"



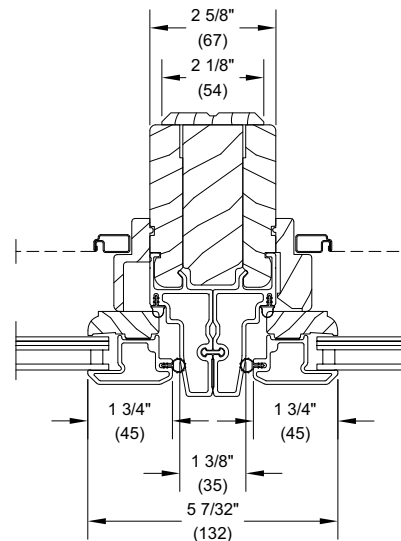
Awning Over Casement Unit



Casement or Awning Units 2 Wide



Direct Glaze Polygon Over Casement



Reinforced Casement or Awning Units 2 Wide

NOTE:

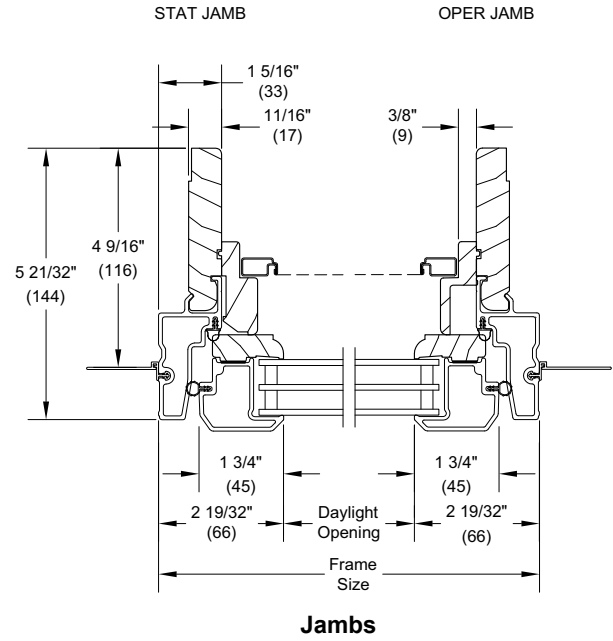
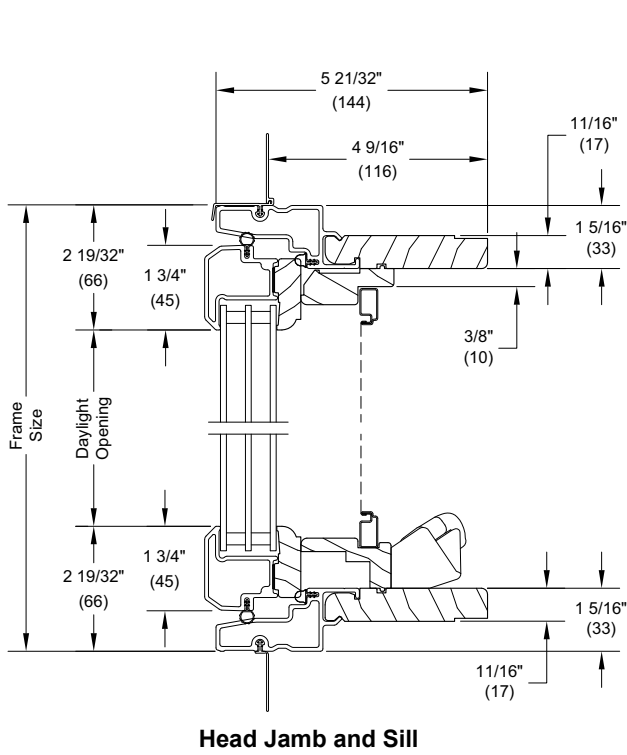


Represents units that are certified for Impact glazing with a wind zone 3.

Wood-Ultrex Casement / Awning

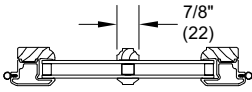
Section Details: Casement / Awning Tri-Pane Glass Option

Scale: 3" = 1' 0"

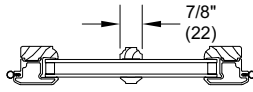


Wood-Ultrex Casement / Awning

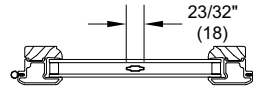
Section Details: Divided Lite Options



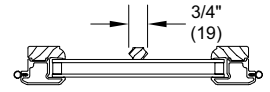
Wood SDL With Spacer Bar



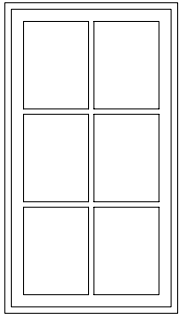
Wood SDL Without Spacer Bar



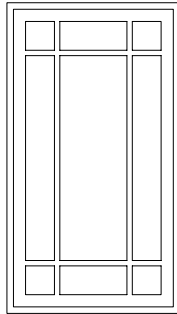
Aluminum Grille Between Glass
GBG or SDL



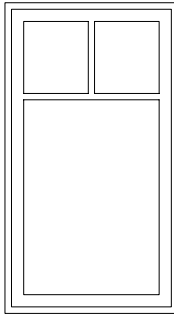
Wood Removable Grille



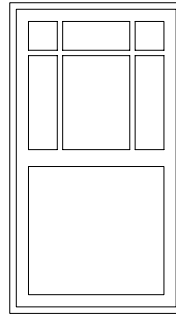
Rectangle SDL



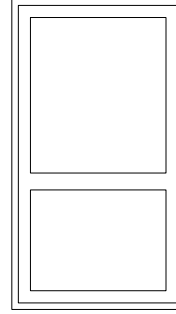
Prairie
GBG or SDL



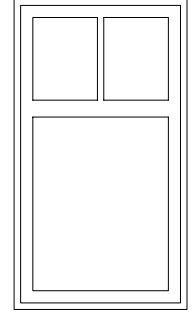
Cottage
SDL Cut



Prairie SDL
w/ Simulate
Check Rail



Custom
Simulated Rail



Cottage SDL
w/Simulated
Check Rail

Conversions Formula:

$$\frac{\text{Total DLO} - \text{Total Bar Width}}{\text{Number of lites}} = \text{Individual DLO}$$

NOTES:

- Direct Glaze Round Top with Wood Grilles, GBG, or SDL will only align with the default lite cut of the unit it is intended to be mullied with.
- Wood Grilles for special sizes will default to the next smaller standard size lite pattern. Wood Grilles are not available in lite patterns other than the Wood Grille patterns listed in the following pages.
- Rectangle GBGs for special size units will default to the next smaller standard size lite pattern. Also available will be Prairie pattern and customer specified equal rectangular lite patterns.
- Rectangular SDL for special size units will default to the next smaller standard size lite pattern. Also available will be Prairie patterns, Cottage patterns, and customer specified equal rectangular lite patterns.
- Prairie GBGs and SDL are not available in lite patterns other than the Prairie patterns listed in the following pages.
- Cottage SDL for special sizes will default to the next smaller standard size lite pattern. Cottage SDL is not available in lite patterns other than the Cottage patterns listed in the following pages.
- Round Top lite patterns will not align with Casement/Awning optional GBG or SDL lite patterns.
- Maximum number of lites wide and high for equal lite SDL is 11 lites.
- Minimum DLO measurement for equal lite GBG and SDL option is 3" (76) and will be validated by OMS.
- Standard DLO measurement for Prairie GBG and SDL option is 4" (102) Special DLO corners are n/a.
- Standard DLO height measurement for Cottage SDL option is 10" (254). Special DLO heights are n/a.
- Simulated Rail: Rectangular, Prairie 6-Lite and 9-Lite SDL patterns are available with Simulated Rail.
- Simulated Rail: custom ratio and specified DLO are available with Simulated Rail and will be validated by OMS.
- An ICADG 7316 with wood grille will align over a 25-3W or 37-2W ICA assembly only.
- An ICATR 7316 or 7319 with wood grille will align over a 73-1W picture only.
- GBGs are not available on Impact IZ3 units.

Wood-Ultrex Casement / Awning

Available Divided Lite Patterns

Default Rectangular Lite Pattern - Wood Grille, GBG, SDL

Standard CN Height	Standard CN Width									
	17	21	25	29	33	37	41	49	57	73
16 ICADG	--	--	--	--	--	--	--	--	--	6W1H
16	2W1H	2W1H	2W1H	3W1H	3W1H	3W1H	4W1H	4W1H	5W1H	7W1H
19	1W2H	2W2H	2W2H	3W2H	3W2H	3W2H	4W2H	4W2H	5W2H	7W2H
23	1W2H	2W2H	2W2H	3W2H	3W2H	3W2H	4W2H	4W2H	5W2H	7W2H
27	1W2H	2W2H	2W2H	3W2H	3W2H	3W2H	4W2H	4W2H	5W2H	7W2H
31	1W2H	2W2H	2W2H	3W2H	3W2H	3W2H	4W2H	4W2H	5W2H	7W2H
35	1W2H	2W2H	2W2H	3W2H	3W2H	3W2H	4W2H	4W2H	5W2H	7W2H
39	1W3H	2W3H	2W3H	3W3H	3W3H	3W3H	4W3H	4W3H	5W3H	7W3H
43	1W3H	2W3H	2W3H	3W3H	3W3H	3W3H	4W3H	4W3H	5W3H	7W3H
47	1W3H	2W3H	2W3H	3W3H	3W3H	3W3H	4W3H	4W3H	5W3H	7W3H
55	1W4H	2W4H	2W4H	3W4H	3W4H	3W4H	4W4H	4W4H	5W4H	7W4H
59	1W4H	2W4H	2W4H	3W4H	3W4H	3W4H	4W4H	4W4H	5W4H	7W4H
63	1W5H	2W5H	2W5H	3W5H	3W5H	3W5H	4W5H	4W5H	5W5H	--
71	1W5H	2W5H	2W5H	3W5H	3W5H	3W5H	4W5H	4W5H	5W5H	--

Optional Prairie Lite Pattern - GBG, SDL

Standard CN Height	Standard CN Width									
	17	21	25	29	33	37	41	49	57	73
16 ICADG	--	--	--	--	--	--	--	--	--	6-Lite Top
16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	N/A	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	N/A
23	N/A	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite
27	N/A	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite
31	N/A	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite
35	N/A	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite
39	N/A	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite
43	N/A	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite
47	N/A	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite
55	N/A	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite
59	N/A	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite
63	N/A	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	--
71	N/A	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	9-Lite	--

NOTE: Prairie lite pattern is not available in the CN16 height transoms.

Wood-Ultrex Casement / Awning

Available Divided Lite Patterns Continued

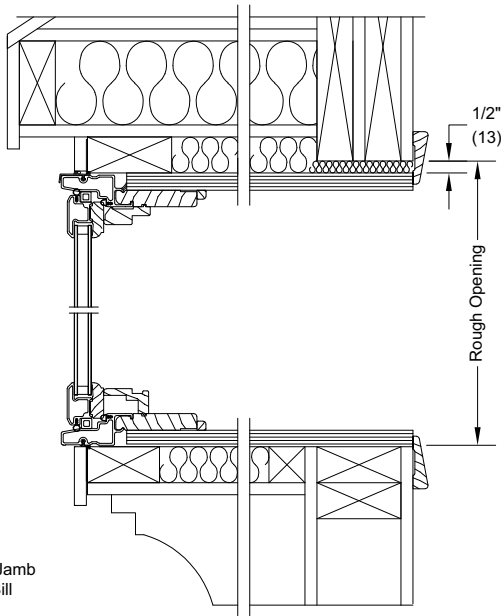
Optional Cottage Lite Pattern - SDL only

Standard CN Height	Standard CN Width									
	17	21	25	29	33	37	41	49	57	73
16 ICADG	--	--	--	--	--	--	--	--	--	N/A
16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	2-Lite	3-Lite	3-Lite	4-Lite	4-Lite	4-Lite	5-Lite	5-Lite	6-Lite	8-Lite
23	2-Lite	3-Lite	3-Lite	4-Lite	4-Lite	4-Lite	5-Lite	5-Lite	6-Lite	8-Lite
27	2-Lite	3-Lite	3-Lite	4-Lite	4-Lite	4-Lite	5-Lite	5-Lite	6-Lite	8-Lite
31	2-Lite	3-Lite	3-Lite	4-Lite	4-Lite	4-Lite	5-Lite	5-Lite	6-Lite	8-Lite
35	2-Lite	3-Lite	3-Lite	4-Lite	4-Lite	4-Lite	5-Lite	5-Lite	6-Lite	8-Lite
39	2-Lite	3-Lite	3-Lite	4-Lite	4-Lite	4-Lite	5-Lite	5-Lite	6-Lite	8-Lite
43	2-Lite	3-Lite	3-Lite	4-Lite	4-Lite	4-Lite	5-Lite	5-Lite	6-Lite	8-Lite
47	2-Lite	3-Lite	3-Lite	4-Lite	4-Lite	4-Lite	5-Lite	5-Lite	6-Lite	8-Lite
55	2-Lite	3-Lite	3-Lite	4-Lite	4-Lite	4-Lite	5-Lite	5-Lite	6-Lite	8-Lite
59	2-Lite	3-Lite	3-Lite	4-Lite	4-Lite	4-Lite	5-Lite	5-Lite	6-Lite	8-Lite
63	2-Lite	3-Lite	3-Lite	4-Lite	4-Lite	4-Lite	5-Lite	5-Lite	6-Lite	--
71	2-Lite	3-Lite	3-Lite	4-Lite	4-Lite	4-Lite	5-Lite	5-Lite	6-Lite	--

Wood-Ultrex Casement / Awning

Bow / Bay Units

Scale: 3/4" = 1' 0"



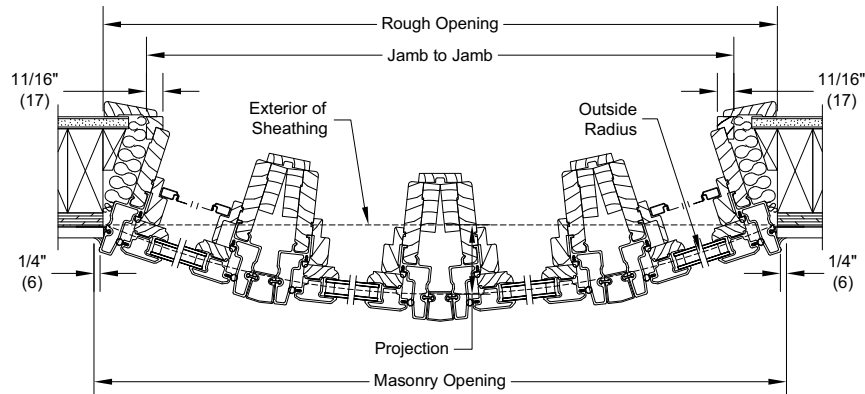
Head Jamb
& Sill

Casement Bay / Bow Height Dimensions				
Unit #	MO Height		RO Height	
	ft-in	mm	ft-in	mm
31	2-7 9/16	(802)	2-7 13/16	(808)
35	2-11 9/16	(903)	2-11 13/16	(910)
39	3-3 9/16	(1005)	3-3 13/16	(1011)
43	3-7 9/16	(1107)	3-7 13/16	(1113)
47	3-11 9/16	(1208)	3-11 13/16	(1214)
55	4-7 9/16	(1411)	4-7 13/16	(1418)
59	4-11 9/16	(1513)	4-11 13/16	(1519)
63	5-3 9/16	(1615)	5-3 13/16	(1621)
71	5-11 9/16	(1818)	5-11 13/16	(1824)

NOTES:

- Impact glazed units are not available in Bow/Bay configuration.
- Structural support members supplied by others.
- CE mark is not available in Casement Bow/Bay configuration.

4 and 5 Wide Casement Bow Widths						
Unit #	MO Width		RO Width		Projection	
	ft-in	mm	ft-in	mm	ft-in	mm
17-4W	5-6 3/8	(1686)	5-6 1/4	(1683)	0-6 7/8	(175)
21-4W	6-9 15/16	(2081)	6-9 13/16	(2078)	0-8 9/16	(217)
25-4W	8-1 1/2	(2477)	8-1 3/8	(2474)	0-10 3/16	(259)
29-4W	9-5 1/16	(2872)	9-4 15/16	(2869)	0-11 7/8	(301)
17-5W	6-9 13/16	(2078)	6-9 1/2	(2070)	0-10 1/4	(260)
21-5W	8-4 15/16	(2564)	8-4 5/8	(2556)	1-0 11/16	(323)
25-5W	10-0 1/16	(3050)	9-11 3/4	(3042)	1-3 3/16	(385)



4 Wide Bow - Jamb

Wood-Ultrex Casement / Awning

30° Bay Units

30 Degree Casement Bay - Width Dimensions								
Unit #	MO Width		RO Width		Jamb to Jamb		Projection	
	ft-in	mm	ft-in	mm	ft-in	mm	ft-in	mm
17 Wide Units								
17-17-17	4-1 15/16	(1268)	4-1 3/8	(1255)	3-7 7/8	(1114)	0-8 5/8	(219)
17-21-17	4-5 15/16	(1370)	4-5 3/8	(1356)	3-11 7/8	(1216)	0-8 5/8	(219)
17-25-17	4-9 15/16	(1471)	4-9 3/8	(1458)	4-3 7/8	(1318)	0-8 5/8	(219)
17-29-17	5-1 15/16	(1573)	5-1 3/8	(1559)	4-7 7/8	(1419)	0-8 5/8	(219)
17-33-17	5-5 15/16	(1674)	5-5 3/8	(1661)	4-11 7/8	(1521)	0-8 5/8	(219)
17-37-17	5-9 15/16	(1776)	5-9 3/8	(1763)	5-3 7/8	(1622)	0-8 5/8	(219)
17-41-17	6-1 15/16	(1878)	6-1 3/8	(1864)	5-7 7/8	(1724)	0-8 5/8	(219)
17-49-17	6-9 15/16	(2081)	6-9 3/8	(2067)	6-3 7/8	(1927)	0-8 5/8	(219)
21 Wide Units								
21-17-21	4-8 7/8	(1444)	4-8 5/16	(1431)	4-2 13/16	(1290)	0-10 5/8	(270)
21-21-21	5-0 7/8	(1546)	5-0 5/16	(1532)	4-6 13/16	(1392)	0-10 5/8	(270)
21-25-21	5-4 7/8	(1647)	5-4 5/16	(1634)	4-10 13/16	(1494)	0-10 5/8	(270)
21-29-21	5-8 7/8	(1749)	5-8 5/16	(1735)	5-2 13/16	(1595)	0-10 5/8	(270)
21-33-21	6-0 7/8	(1850)	6-0 5/16	(1837)	5-6 13/16	(1697)	0-10 5/8	(270)
21-37-21	6-4 7/8	(1952)	6-4 5/16	(1939)	5-10 13/16	(1798)	0-10 5/8	(270)
21-41-21	6-8 7/8	(2054)	6-8 5/16	(2040)	6-2 13/16	(1900)	0-10 5/8	(270)
21-49-21	7-4 7/8	(2257)	7-4 5/16	(2243)	6-10 13/16	(2103)	0-10 5/8	(270)
21-57-21	8-0 7/8	(2460)	8-0 5/16	(2447)	7-6 13/16	(2306)	0-10 5/8	(270)
21-73-21	9-4 7/8	(2866)	9-4 5/16	(2853)	8-10 13/16	(2713)	0-10 5/8	(270)
25 Wide Units								
25-17-25	5-3 3/4	(1620)	5-3 1/4	(1607)	4-9 3/4	(1466)	1-0 5/8	(321)
25-21-25	5-7 3/4	(1721)	5-7 1/4	(1708)	5-1 3/4	(1568)	1-0 5/8	(321)
25-25-25	5-11 3/4	(1823)	5-11 1/4	(1810)	5-5 3/4	(1669)	1-0 5/8	(321)
25-29-25	6-3 3/4	(1925)	6-3 1/4	(1911)	5-9 3/4	(1771)	1-0 5/8	(321)
25-33-25	6-7 3/4	(2026)	6-7 1/4	(2013)	6-1 3/4	(1873)	1-0 5/8	(321)
25-37-25	6-11 3/4	(2128)	6-11 1/4	(2115)	6-5 3/4	(1974)	1-0 5/8	(321)
25-41-25	7-3 3/4	(2229)	7-3 1/4	(2216)	6-9 3/4	(2076)	1-0 5/8	(321)
25-49-25	7-11 3/4	(2433)	7-11 1/4	(2419)	7-5 3/4	(2279)	1-0 5/8	(321)
25-57-25	8-7 3/4	(2636)	8-7 1/4	(2623)	8-1 3/4	(2482)	1-0 5/8	(321)

NOTES:

- Factory assembled. Bay/Bow units include head and seat boards.
- 30 Bay mull kits available for field assembly.
- Structural support member and interior trim supplied by others.

Wood-Ultrex Casement / Awning

30° Bay Units

30 Degree Casement Bay - Width Dimensions								
Unit #	MO Width		RO Width		Jamb to Jamb		Projection	
	ft-in	mm	ft-in	mm	ft-in	mm	ft-in	mm
29 Wide Units								
29-17-29	5-10 11/16	(1796)	5-10 3/16	(1782)	5-4 5/8	(1642)	1-2 5/8	(372)
29-21-29	6-2 11/16	(1897)	6-2 3/16	(1884)	5-8 5/8	(1744)	1-2 5/8	(372)
29-25-29	6-6 11/16	(1999)	6-6 3/16	(1986)	6-0 5/8	(1845)	1-2 5/8	(372)
29-29-29	6-10 11/16	(2101)	6-10 3/16	(2087)	6-4 5/8	(1947)	1-2 5/8	(372)
29-33-29	7-2 11/16	(2202)	7-2 3/16	(2189)	6-8 5/8	(2049)	1-2 5/8	(372)
29-37-29	7-6 11/16	(2304)	7-6 3/16	(2290)	7-0 5/8	(2150)	1-2 5/8	(372)
29-41-29	7-10 11/16	(2405)	7-10 3/16	(2392)	7-4 5/8	(2252)	1-2 5/8	(372)
29-49-29	8-6 11/16	(2609)	8-6 3/16	(2595)	8-0 5/8	(2455)	1-2 5/8	(372)
29-57-29	9-2 11/16	(2812)	9-2 3/16	(2798)	8-8 5/8	(2658)	1-2 5/8	(372)
33 Wide Units								
33-17-33	6-5 5/8	(1972)	6-5 1/8	(1958)	5-11 9/16	(1818)	1-4 5/8	(422)
33-21-33	6-9 5/8	(2073)	6-9 1/8	(2060)	6-3 9/16	(1920)	1-4 5/8	(422)
33-25-33	7-1 5/8	(2175)	7-1 1/8	(2162)	6-7 9/16	(2021)	1-4 5/8	(422)
33-29-33	7-5 5/8	(2277)	7-5 1/8	(2263)	6-11 9/16	(2123)	1-4 5/8	(422)
33-33-33	7-9 5/8	(2378)	7-9 1/8	(2365)	7-3 9/16	(2225)	1-4 5/8	(422)
33-37-33	8-1 5/8	(2480)	8-1 1/8	(2466)	7-7 9/16	(2326)	1-4 5/8	(422)
33-41-33	8-5 5/8	(2581)	8-5 1/8	(2568)	7-11 9/16	(2428)	1-4 5/8	(422)
33-49-33	9-1 5/8	(2785)	9-1 1/8	(2771)	8-7 9/16	(2631)	1-4 5/8	(422)
37 Wide Units								
37-17-37	7-0 9/16	(2148)	7-0 1/16	(2134)	6-6 1/2	(1994)	1-6 5/8	(473)
37-21-37	7-4 9/16	(2249)	7-4 1/16	(2236)	6-10 1/2	(2096)	1-6 5/8	(473)
37-25-37	7-8 9/16	(2351)	7-8 1/16	(2338)	7-2 1/2	(2197)	1-6 5/8	(473)
37-29-37	8-0 9/16	(2453)	8-0 1/16	(2439)	7-6 1/2	(2299)	1-6 5/8	(473)
37-33-37	8-4 9/16	(2554)	8-4 1/16	(2541)	7-10 1/2	(2401)	1-6 5/8	(473)
37-37-37	8-8 9/16	(2656)	8-8 1/16	(2642)	8-2 1/2	(2502)	1-6 5/8	(473)

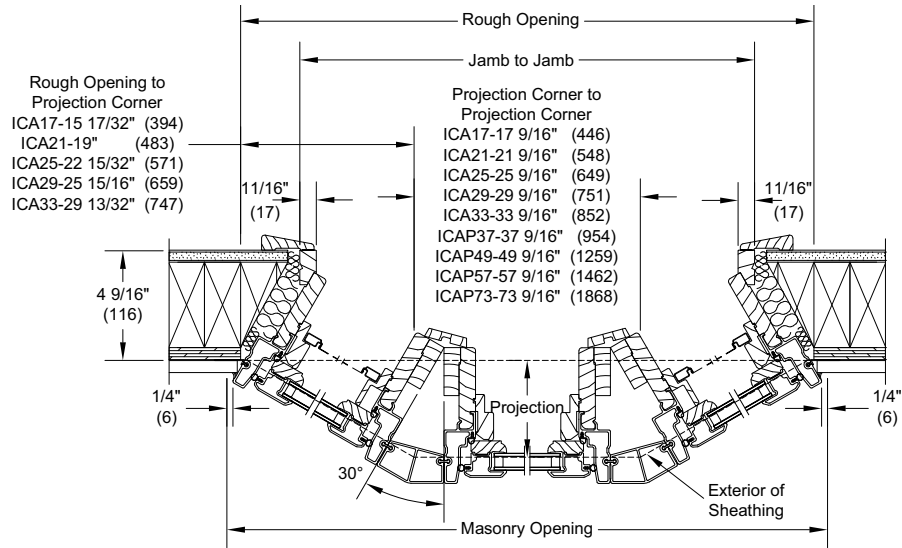
NOTES:

- *Factory assembled. Bay/Bow units include head and seat boards.*
- *30 Bay mull kits available for field assembly.*
- *Structural support member and interior trim supplied by others.*

Wood-Ultrex Casement / Awning

Section Details: 30° Bay Units

Scale: 3" = 1' 0"



Jamb Detail

Wood-Ultrex Casement / Awning

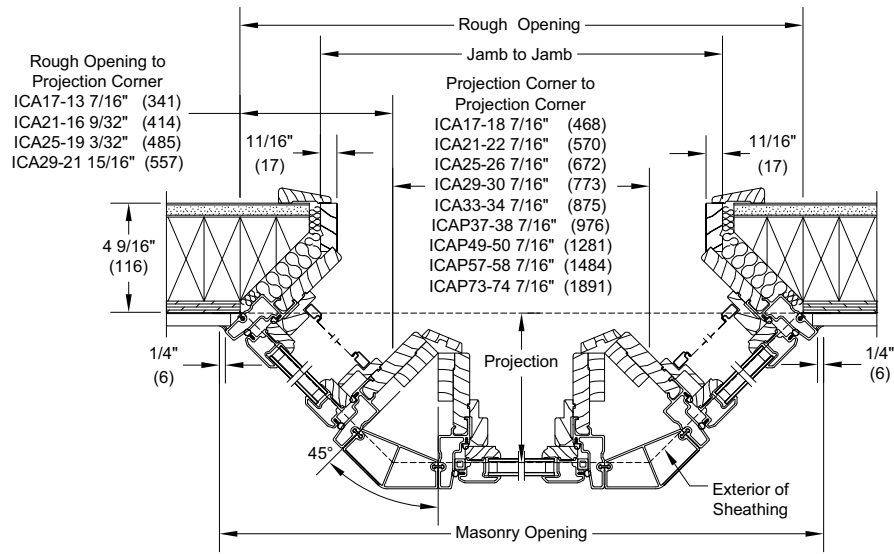
45° Bay Units

45 Degree Casement Bay - Width Dimensions								
Unit #	MO Width		RO Width		Jamb to Jamb		Projection	
	ft-in	mm	ft-in	mm	ft-in	mm	ft-in	mm
17 Wide Units								
17-17-17	3-11 1/8	(1198)	3-10 3/16	(1173)	3-2 3/4	(984)	1-0 11/16	(322)
17-21-17	4-3 1/8	(1299)	4-2 3/16	(1274)	3-6 3/4	(1085)	1-0 11/16	(322)
17-25-17	4-7 1/8	(1401)	4-6 3/16	(1376)	3-10 3/4	(1187)	1-0 11/16	(322)
17-29-17	4-11 1/8	(1503)	4-10 3/16	(1478)	4-2 3/4	(1289)	1-0 11/16	(322)
17-33-17	5-3 1/8	(1604)	5-2 3/16	(1579)	4-6 3/4	(1390)	1-0 11/16	(322)
17-37-17	5-7 1/8	(1706)	5-6 3/16	(1681)	4-10 3/4	(1492)	1-0 11/16	(322)
17-41-17	5-11 1/8	(1807)	5-10 3/16	(1782)	5-2 3/4	(1593)	1-0 11/16	(322)
17-49-17	6-7 1/8	(2011)	6-6 3/16	(1986)	5-10 3/4	(1797)	1-0 11/16	(322)
21 Wide Units								
21-17-21	4-4 13/16	(1341)	4-3 13/16	(1317)	3-8 3/8	(1127)	1-3 1/2	(394)
21-21-21	4-8 13/16	(1443)	4-7 13/16	(1418)	4-0 3/8	(1229)	1-3 1/2	(394)
21-25-21	5-0 13/16	(1545)	4-11 13/16	(1520)	4-4 3/8	(1331)	1-3 1/2	(394)
21-29-21	5-4 13/16	(1646)	5-3 13/16	(1621)	4-8 3/8	(1432)	1-3 1/2	(394)
21-33-21	5-8 13/16	(1748)	5-7 13/16	(1723)	5-0 3/8	(1534)	1-3 1/2	(394)
21-37-21	6-0 13/16	(1849)	5-11 13/16	(1825)	5-4 3/8	(1635)	1-3 1/2	(394)
21-41-21	6-4 13/16	(1951)	6-3 13/16	(1926)	5-8 3/8	(1737)	1-3 1/2	(394)
21-49-21	7-0 13/16	(2154)	6-11 13/16	(2129)	6-4 3/8	(1940)	1-3 1/2	(394)
21-57-21	7-8 13/16	(2357)	7-7 13/16	(2333)	7-0 3/8	(2143)	1-3 1/2	(394)
21-73-21	9-0 13/16	(2764)	8-11 13/16	(2739)	8-4 3/8	(2550)	1-3 1/2	(394)
25 Wide Units								
25-17-25	4-10 1/2	(1485)	4-9 1/2	(1460)	4-2 1/16	(1271)	1-6 5/16	(466)
25-21-25	5-2 1/2	(1587)	5-1 1/2	(1562)	4-6 1/16	(1373)	1-6 5/16	(466)
25-25-25	5-6 1/2	(1688)	5-5 1/2	(1663)	4-10 1/16	(1474)	1-6 5/16	(466)
25-29-25	5-10 1/2	(1790)	5-9 1/2	(1765)	5-2 1/16	(1576)	1-6 5/16	(466)
25-33-25	6-2 1/2	(1892)	6-1 1/2	(1867)	5-6 1/16	(1678)	1-6 5/16	(466)
25-37-25	6-6 1/2	(1993)	6-5 1/2	(1968)	5-10 1/16	(1779)	1-6 5/16	(466)
25-41-25	6-10 1/2	(2095)	6-9 1/2	(2070)	6-2 1/16	(1881)	1-6 5/16	(466)
25-49-25	7-6 1/2	(2298)	7-5 1/2	(2273)	6-10 1/16	(2084)	1-6 5/16	(466)
25-57-25	8-2 1/2	(2501)	8-1 1/2	(2476)	7-6 1/16	(2287)	1-6 5/16	(466)
25-73-25	9-6 1/2	(2908)	9-5 1/2	(2883)	8-10 1/16	(2694)	1-6 5/16	(466)
29 Wide Units								
29-17-29	5-4 1/8	(1629)	5-3 1/8	(1604)	4-7 11/16	(1415)	1-9 1/8	(537)
29-21-29	5-8 1/8	(1730)	5-7 1/8	(1705)	4-11 11/16	(1516)	1-9 1/8	(537)
29-25-29	6-0 1/8	(1832)	5-11 1/8	(1807)	5-3 11/16	(1618)	1-9 1/8	(537)
29-29-29	6-4 1/8	(1934)	6-3 1/8	(1909)	5-7 11/16	(1720)	1-9 1/8	(537)
29-33-29	6-8 1/8	(2035)	6-7 1/8	(2010)	5-11 11/16	(1821)	1-9 1/8	(537)
29-37-29	7-0 1/8	(2137)	6-11 1/8	(2112)	6-3 11/16	(1923)	1-9 1/8	(537)
29-41-29	7-4 1/8	(2238)	7-3 1/8	(2213)	6-7 11/16	(2024)	1-9 1/8	(537)
29-49-29	8-0 1/8	(2442)	7-11 1/8	(2417)	7-3 11/16	(2228)	1-9 1/8	(537)
29-57-29	8-8 1/8	(2645)	8-7 1/8	(2620)	7-11 11/16	(2431)	1-9 1/8	(537)

Wood-Ultrex Casement / Awning

Section Details: 45° Bay Units

Scale: 3" = 1' 0"

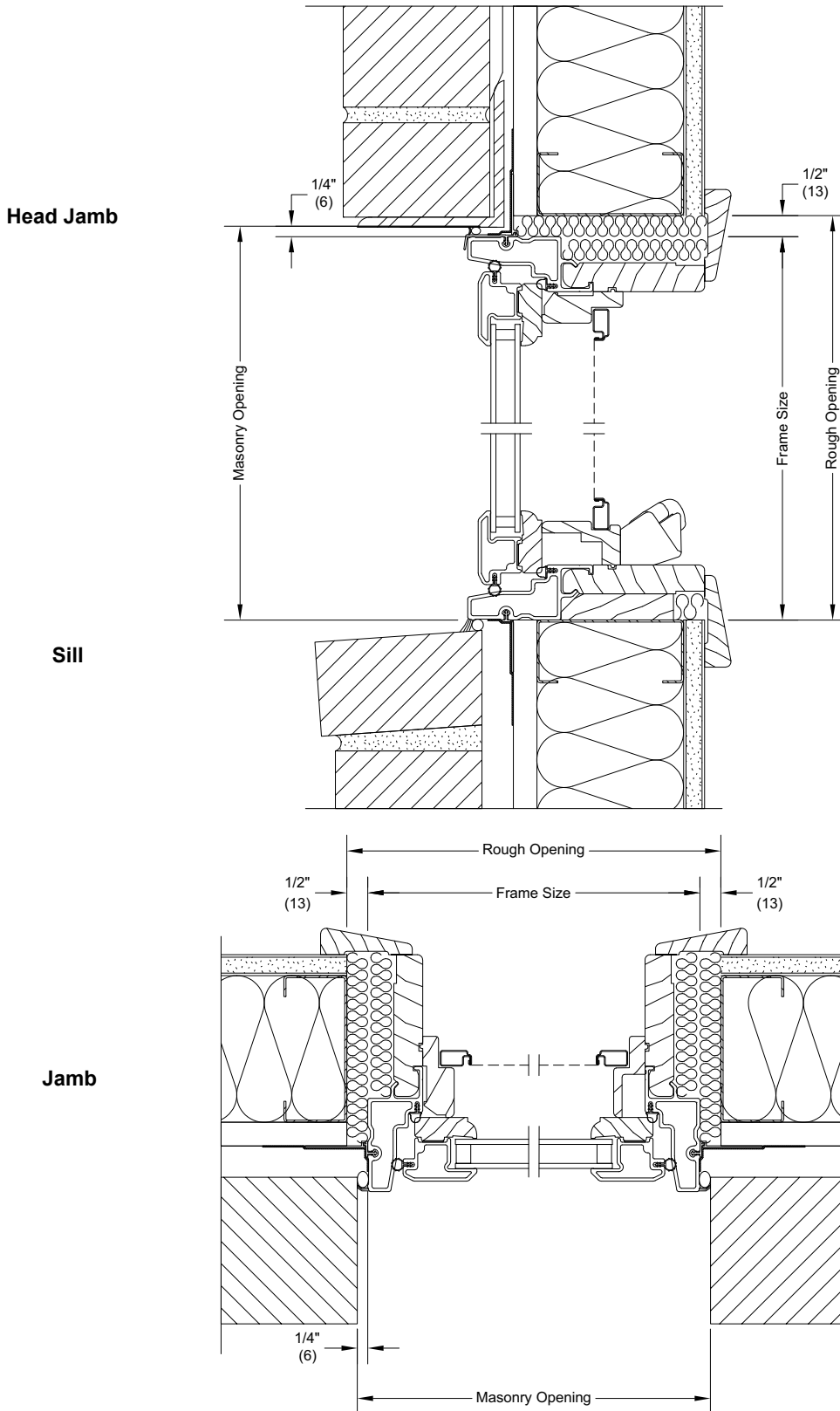


Jamb Detail

Wood-Ultrex Casement / Awning

Section Details: Installation Suggestion - Brick Veneer With Steel Frame Construction

Scale: 1 1/2" - 1' 0"



NOTES:

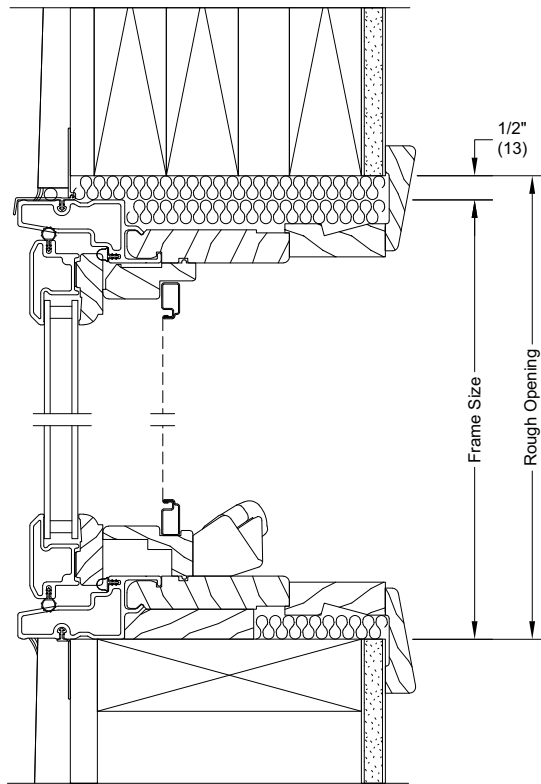
- Picture unit installation similar.
- The above wall sections represent typical wall conditions, these details are not intended as installation instructions. Please refer to the installation instructions provided with the purchased units.

Wood-Ultrex Casement / Awning

Section Details: Installation Suggestion - Wood Siding With 2x6 Frame Construction

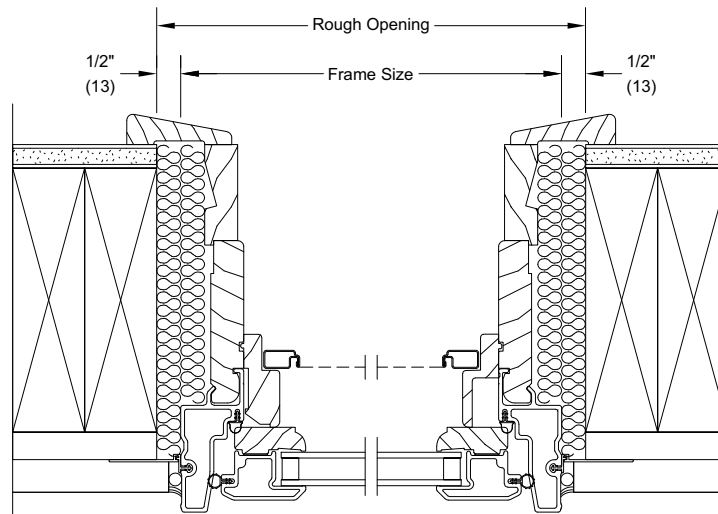
Scale: 1 1/2" - 1' 0"

Head Jamb



Sill

Jamb



NOTES:

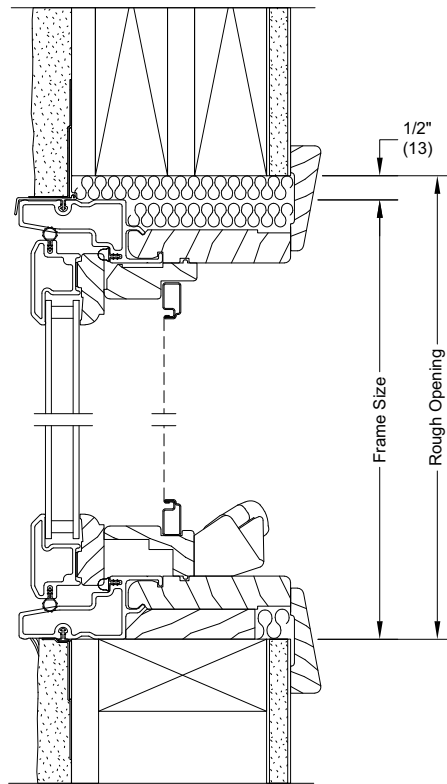
- The above wall sections represent typical wall conditions, these details are not intended as installation instructions. Please refer to the installation instructions provided with the purchased units.
- Picture unit installation similar. Picture units may require both nailing fin and installation brackets.

Wood-Ultrex Casement / Awning

Section Details: Installation Suggestion - Stucco With 2x4 Frame Construction

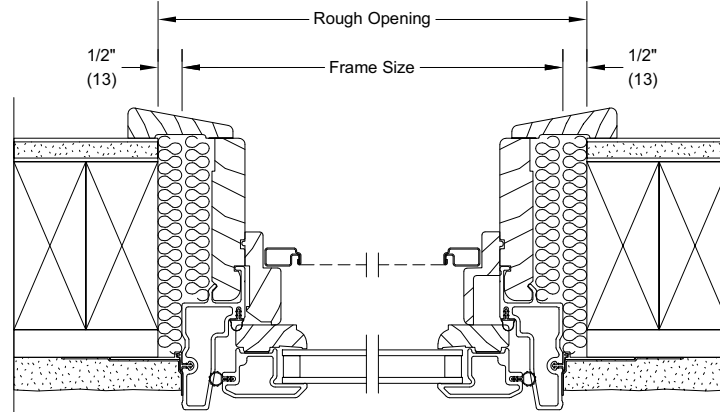
Scale: 1 1/2" - 1' 0"

Head Jamb



Sill

Jamb



NOTES:

- The above wall sections represent typical wall conditions, these details are not intended as installation instructions. Please refer to the installation instructions provided with the purchased units.
- Picture unit installation similar. Picture units may require both nailing fin and installation brackets.