

Ultimate Double Hung G2

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Unit Features**Ultimate Double Hung G2 Collection:**

Ultimate Single Hung G2: USHG2

Ultimate Double Hung G2: UDHG2

Ultimate Double Hung Picture G2: UDHP G2

Ultimate Double Hung Transom G2: UDHTR G2

Ultimate Double Hung Bows and Bays G2: UDHBB G2

Ultimate Double Hung -G2 IZ3: UDH G2 IZ3

Ultimate Double Hung Picture G2 IZ3: UDHP G2 IZ3

Ultimate Double Hung Transom G2 IZ3: UDHTR G2 IZ3

Frame:

- Frame thickness:
 - 11/16" (17) thick at head and jambs
 - 1 13/32" (36) thick at sill
- Frame Width: 4 9/16" (116)

Sash:

- Operating / Stationary Sash (Single Hung, Double Hung, Transom):
 - Sash thickness: 1 3/4" (44), corner slot and tenoned
 - Top rail height: 2 13/32" (61)
 - Stiles width: 1 21/32" (42)
 - Bottom rail height (operating): 3 1/4" (83)
 - Bottom rail height (transom): 2 3/4" (70)
- Stationary Picture Sash:
 - Sash thickness: 1 3/4" (44), corner slot and tenoned
 - Top rail height: 2 13/32" (61)
 - Stile width: 2 13/32" (61)
 - Bottom rail height: 3 1/4" (83)
- Optional CW (Commercial Window) certified product
- Sash Options
 - Standard: Equal
 - Optional: Unequal, Both Sash Stationary
- Standard exterior cope profile: Putty
- Standard interior wood cope sticking: Ogee
- Optional interior wood cope sticking: Square

Unit Features

Glass and Glazing:

- Glazing seal: Silicone glazed
- Standard glass is Insulating Low E2 Argon or air
- Gas fill: Air or Argon
- Dual-pane insulating glass thickness: 7/8"
- Triple-pane insulating glass thickness: 7/8"
- Insulating glass coatings:
 - Low E1
 - Low E2
 - Low E3
 - Low ERS
 - Low ELR
- Available glass types:
 - Laminated
 - Tempered
 - Obscure
 - Clear
- Tints
 - Bronze
 - Gray
 - Green
 - Reflective Bronze
- Decorative glass options:
 - Frost
 - 1/2 English Reed
 - Rain
 - Sandblasted
 - Glue Chip
- Glazing will be altitude adjusted for higher elevations with capillary tubes. Argon gas not included
- IZ3 has annealed exterior pane is default with the option to temper
- CUDHP-NG 2.0 IZ3 product requires tempered glass on units above a glass square footage of 33.1.
- Egress may be affected when selecting specialty glass, please contact your Marvin representative
- For additional specialty glazing options, please contact your Marvin representatives.

Unit Features

Weather Strip:

- Operating units:
 - Jambs: Foam-filled bulb
 - Color: beige, black, and white
 - Head Jamb: Continuous dual leaf
 - Color: black
 - Check rail: Hollow bulb
 - Color: beige, black, and white
 - Bottom rail: Hollow bulb
 - Color: black
- Picture units:
 - Jambs: Foam
 - Header and bottom rail: Hollow bulb

Hardware:

- Locking system that provides locking, unlocking, balancing, and tilting of the sash members. Lock automatically locks when both sash are closed.
- Lock Actuator Assembly:
 - Material
 - Zinc die cast
 - Optional finishes: White, Bronze, Satin Taupe, Matte Black, Brass, Antique Brass, Polished Chrome, Satin Chrome, Oil Rubbed Bronze, Satin Nickel, or Unlacquered Brass
 - Design features or components
 - To unlock the unit, turn the handle 135°
 - To lock the unit, both sash must be moved to the closed position
 - To tilt the bottom sash for wash-mode, the bottom sash must be open; push the button on top of lock handle and rotate the handle 180°
 - To tilt the top sash for wash-mode, the bottom sash must be tilted and/or removed from frame; lower the top sash to a good working height, retract the tilt latches on the top rail and tilt sash out of the frame
 - Options
 - Non-tilt hardware is standard on units with performance brackets
 - Custodial hardware colors: satin taupe, white, bronze, matte black
- Lift Lock (Option for Single Hung Only)
 - Available with one or two locks
 - Lift lock handle assembly is integrated into the bottom rail of the sash and controls locking, unlocking and facilitates operation of the bottom sash.
 - Two locks are not available on sash less than CN26 width
 - Material
 - Zinc die-cast
 - Finishes
 - Lift and Escutcheon components - Bronze, Satin Taupe, White, Matte Black, Oil Rubbed Bronze, Antique Brass, Brass, Polished Chrome, Satin Chrome, Satin Nickel
 - Sill Strike: White, Black, Beige
- Latches
 - Bottom sash latch, top sash tilt latch
 - Latches accommodate locking/un-locking, travel of sash in frame, and tilting into wash-mode
 - Injection-molded plastic
 - Color: beige
- Cord guide assembly
 - Injection-molded plastic and die-cast zinc
 - One cord guide inserted into bottom check rail
 - Cord guide is driven by lock handle, accounts for cord travel to retract latches
 - Plunger drives auto-lock feature to lock position when both sash are closed
- Strike Assembly
 - Zinc die-cast strike plate and injection-molded Acetal housing and button
 - Strike assembly accommodates locking/unlocking

Unit Features

- Balance system
 - Block & tackle balance
 - Hybrid spiral balance

Balance type is dependent on sash weight. Unit size, glass type, and options can all impact sash weight. General balance selection is as follows (some exceptions exist based on unit size):

Sash	Sash Weight	Balance Tube Type
Top	up to 35 lbs	Block and Tackle
	>35 lbs	Hybrid Spiral
Bottom	up to 30.6 lbs	Block and Tackle
	>30.6 lbs	Hybrid Spiral

- Sash Limiter
 - Bottom sash limiter:
 - Available on all operator configurations, and IZ3
 - Selectable bottom sash locations, 4", 6" or 8" Net Clear Opening (NCO)
 - Non-tilt hardware is default, and a sash removal tool is required in order to by-pass the Sash limiter for sash removal (tilt wash mode)
 - Standard application is factory applied. Available for retrofit applications.
 - Color: Will align with the Interior Weather Strip Package selection
 - Top Sash Limiter
 - Available on all operator configurations, with the exception Single Hung configurations. This includes IZ3
 - Selectable bottom sash locations, 4", 6" or 8" Net Clear Opening (NCO)
 - Standard application is factory applied. Available for field applications
 - Color: Will align with the Exterior Weather Strip Package selection
- Optional factory applied Window Opening Control Device is available on operating units.
 - Two devices will be applied to each window and will default color match the lock handle color.
 - WOCD is a device consisting of a zinc lever housed in a zinc shell on the top sash stile of the secondary sash and an acetal stop on the bottom check rail of the primary sash.
 - Color: Satin Taupe, White, Bronze, Matte Black, Brass, Antique Brass, Polished Chrome, Satin Chrome, Oil Rubbed Bronze, and Satin Nickel.
 - This device works in accordance to ASTM F2090-17 Standard Specification for Window Fall Prevention Devices with Emergency Escape (Egress) Release Mechanisms.
- Exterior Sash Lugs - Standard Option
 - Standard Profile: Ogee
 - Available on Top Sash
 - Color: Available in all exterior clad color options
 - Color shall be the same as top sash clad color
 - Standard application is factory applied. Available for field applications
- Optional Finger Pull
 - Single or double (not available on units less than CN26: Frame OM 31 1/4" (794))
 - Not available with Lift Lock
- Performance Rating Option
 - Option to eliminate performance brackets on specific size units to allow for standard tilt hardware. Reduces performance from an LC-PG50 to LC-PG35.
 - Option for a CW (Commercial Window) performance rating.

Mulling:

- For mull performance, refer to the General Mulling chapter of the ADM.

Unit Features

Insect Screens:

- Screen Frame
 - Window Frame height less than or equal to 54 1/2" Aluminum Screen; Option: Extruded Aluminum Screen Frame.
 - Window Frame height greater than 54 1/2" Extruded Screen Frame.
- Screen mesh:
 - Standard: Marvin Bright View™,
 - Options: Charcoal Aluminum Wire, Black Aluminum Wire, Bright Aluminum Wire, or Bright Bronze Aluminum Wire
- Aluminum surround to match exterior frame clad color
- Units with a glass height of 20" (508) or greater will have a center cross bar

Combination Storm Sash and Screen:

- Frame: Extruded aluminum frame .045"(1.1) thick. Color: Stone White, Bahama Brown, and Pebble Gray
- Insect screen:
 - Standard Screen mesh: Charcoal Aluminum Wire,
 - Optional screen material: Marvin Bright View™
- Weather strip: Pile weather strip between operating panels and at stiles of main frame
- Hardware: Spring-loaded latches to secure storm panel
- Max size: 45 1/4" x 79 1/2" frame size

Lock Status Sensor (Optional):

- Refer to **Lock Status Sensor Installation Instructions** for requirements.
- The Lock Status Sensor detects an open or closed status on Ultimate Double Hung 2.0 units and Ultimate Single Hung 2.0 units. A "locked" status is inferred from the presence of the Auto-Lock feature which activates the locking mechanism when the operating panels are closed. It allows easy integration with home automation systems through a wired or wireless connection.
 - For wired option, check with local codes on potential contractor requirements for low voltage networking connections.
 - Wireless option available. Requires purchase of secondary transmitter for operation. Marvin will prep for this option.
- Wireless Lock Status Sensor is located within the width and height of the frame.
- Sensor Location
 - Will always be located on the right-hand side of the check rail (from the exterior) for the bottom sash. For the top sash, the sensor will be located in the header parting stop of the frame on the right side (from the exterior).
- For Wired or Wireless, Black or White Magnet Covers only visible on secondary surface. Cover color dependent upon interior finish.
 - White: Prime and White Painted Interior Finish
 - Black: Bare and all other finish options

Unit Features

Cottage Unit:

The following formula will properly size a standard cottage style double hung:

Formula

1. Select the standard size double hung that will fit the rough opening
2. Subtract 7 1/2" (191) from the frame size height to get total glass height
3. Multiply the total glass height by the desired top sash ratio, this is the top sash glass height
4. Subtract the top sash height from the total glass height, this is the bottom sash glass height

Example

1. CUDH-NG 2.0 with a 0.400 top sash ratio (2/5 - 3/5) cottage style. If the rough opening is 2'-4 1/4" x 4' (RO for a CUDH-NG 2.0 2020) the frame size will be 25 1/4" x 47 1/2"
2. $47\frac{1}{2}" - 7\frac{1}{2}" = 40"$
3. $40" \text{ multiplied by } 0.400 (2/5) = 16"$
4. $40" - 16" = 24"$
5. The top sash will be a 2016 and the bottom sash will be a 2024. The call number for the example is: CUDH-NG 2.0 2016/24.

Egress/Vent and Daylight Openings: Operable

CN	Opening Width		Opening Height		Egress Opening		Daylight Opening Width		Daylight Opening Height		Daylight Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²	ft-in	mm	ft-in	mm	sq. ft.	m ²
1612	1-5 21/32	(449)	0-10 11/16	(271)	1.31	(0.12)	1-2 47/64	(374)	0-10 3/4	(273)	1.10	(0.10)
1614	1-5 21/32	(449)	1-0 11/16	(322)	1.56	(0.14)	1-2 47/64	(374)	1-0 3/4	(324)	1.30	(0.12)
1616	1-5 21/32	(449)	1-2 11/16	(373)	1.80	(0.17)	1-2 47/64	(374)	1-2 3/4	(375)	1.51	(0.14)
1618	1-5 21/32	(449)	1-4 11/16	(424)	2.05	(0.19)	1-2 47/64	(374)	1-4 3/4	(425)	1.71	(0.16)
1620	1-5 21/32	(449)	1-6 11/16	(475)	2.29	(0.21)	1-2 47/64	(374)	1-6 3/4	(476)	1.92	(0.18)
1622	1-5 21/32	(449)	1-8 11/16	(525)	2.54	(0.24)	1-2 47/64	(374)	1-8 3/4	(527)	2.12	(0.20)
1624	1-5 21/32	(449)	1-10 11/16	(576)	2.78	(0.26)	1-2 47/64	(374)	1-10 3/4	(578)	2.33	(0.22)
1626	1-5 21/32	(449)	2-0 11/16	(627)	3.03	(0.28)	1-2 47/64	(374)	2-0 3/4	(629)	2.53	(0.24)
1628	1-5 21/32	(449)	2-2 11/16	(678)	3.27	(0.30)	1-2 47/64	(374)	2-2 3/4	(679)	2.74	(0.25)
1630	1-5 21/32	(449)	2-4 11/16	(729)	3.52	(0.33)	1-2 47/64	(374)	2-4 3/4	(730)	2.94	(0.27)
1632	1-5 21/32	(449)	2-6 11/16	(779)	3.76	(0.35)	1-2 47/64	(374)	2-6 3/4	(781)	3.15	(0.29)
1634	1-5 21/32	(449)	2-8 11/16	(830)	4.01	(0.37)	1-2 47/64	(374)	2-8 3/4	(832)	3.35	(0.31)
1636	1-5 21/32	(449)	2-10 11/16	(881)	4.25	(0.40)	1-2 47/64	(374)	2-10 3/4	(883)	3.56	(0.33)
1640	1-5 21/32	(449)	3-2 11/16	(983)	4.74	(0.44)	1-2 47/64	(374)	3-2 3/4	(984)	3.97	(0.37)
1642	1-5 21/32	(449)	3-4 11/16	(1033)	4.99	(0.46)	1-2 47/64	(374)	3-4 3/4	(1035)	4.17	(0.39)
1650	1-5 21/32	(449)	4-0 25/64	(1229)	5.93	(0.55)	1-2 47/64	(374)	4-0 3/4	(1238)	4.99	(0.46)
1656	1-5 21/32	(449)	4-6 25/64	(1381)	6.67	(0.62)	1-2 47/64	(374)	4-6 3/4	(1391)	5.60	(0.52)
1660	1-5 21/32	(449)	4-10 25/64	(1483)	7.16	(0.67)	1-2 47/64	(374)	4-10 3/4	(1492)	6.01	(0.56)
2012	1-9 21/32	(550)	0-10 11/16	(271)	1.61	(0.15)	1-6 47/64	(476)	0-10 3/4	(273)	1.40	(0.13)
2014	1-9 21/32	(550)	1-0 11/16	(322)	1.91	(0.18)	1-6 47/64	(476)	1-0 3/4	(324)	1.66	(0.15)
2016	1-9 21/32	(550)	1-2 11/16	(373)	2.21	(0.21)	1-6 47/64	(476)	1-2 3/4	(375)	1.92	(0.18)
2018	1-9 21/32	(550)	1-4 11/16	(424)	2.51	(0.23)	1-6 47/64	(476)	1-4 3/4	(425)	2.18	(0.20)
2020	1-9 21/32	(550)	1-6 11/16	(475)	2.81	(0.26)	1-6 47/64	(476)	1-6 3/4	(476)	2.44	(0.23)
2022	1-9 21/32	(550)	1-8 11/16	(525)	3.11	(0.29)	1-6 47/64	(476)	1-8 3/4	(527)	2.70	(0.25)
2024	1-9 21/32	(550)	1-10 11/16	(576)	3.41	(0.32)	1-6 47/64	(476)	1-10 3/4	(578)	2.96	(0.27)
2026	1-9 21/32	(550)	2-0 11/16	(627)	3.71	(0.34)	1-6 47/64	(476)	2-0 3/4	(629)	3.22	(0.30)
2028	1-9 21/32	(550)	2-2 11/16	(678)	4.01	(0.37)	1-6 47/64	(476)	2-2 3/4	(679)	3.48	(0.32)
2030	1-9 21/32	(550)	2-4 11/16	(729)	4.32	(0.40)	1-6 47/64	(476)	2-4 3/4	(730)	3.74	(0.35)
2032	1-9 21/32	(550)	2-6 11/16	(779)	4.62	(0.43)	1-6 47/64	(476)	2-6 3/4	(781)	4.00	(0.37)
2034	1-9 21/32	(550)	2-8 11/16	(830)	4.92	(0.46)	1-6 47/64	(476)	2-8 3/4	(832)	4.26	(0.40)
2036	1-9 21/32	(550)	2-10 11/16	(881)	5.22	(0.48)	1-6 47/64	(476)	2-10 3/4	(883)	4.52	(0.42)
2040 E	1-9 21/32	(550)	3-2 11/16	(983)	5.82	(0.54)	1-6 47/64	(476)	3-2 3/4	(984)	5.04	(0.47)
2042 E	1-9 21/32	(550)	3-4 11/16	(1033)	6.12	(0.57)	1-6 47/64	(476)	3-4 3/4	(1035)	5.30	(0.49)
2050 E	1-9 21/32	(550)	4-0 25/64	(1229)	7.28	(0.68)	1-6 47/64	(476)	4-0 3/4	(1238)	6.34	(0.59)
2056 E	1-9 21/32	(550)	4-6 25/64	(1381)	8.18	(0.76)	1-6 47/64	(476)	4-6 3/4	(1391)	7.12	(0.66)
2060 E	1-9 21/32	(550)	4-10 25/64	(1483)	8.78	(0.82)	1-6 47/64	(476)	4-10 3/4	(1492)	7.64	(0.71)

NOTE: Refer to Product Performance Chapter for International Building Code. Net Clear Opening drawings are pictured with the conversion tables.

Sizes designated with "E" meet egress requirements based on standard and optional [Glass and Glazing](#). All other glass options, please contact a Marvin representative.

Egress/Vent and Daylight Opening: Operable

CN	Opening Width		Opening Height		Egress Opening		Daylight Opening Width		Daylight Opening Height		Daylight Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²	ft-in	mm	ft-in	mm	sq. ft.	m ²
2412	2-1 21/32	(652)	0-10 11/16	(271)	1.90	(0.18)	1-10 47/64	(577)	0-10 3/4	(273)	1.70	(0.16)
2414	2-1 21/32	(652)	1-0 11/16	(322)	2.26	(0.21)	1-10 47/64	(577)	1-0 3/4	(324)	2.01	(0.19)
2416	2-1 21/32	(652)	1-2 11/16	(373)	2.62	(0.24)	1-10 47/64	(577)	1-2 3/4	(375)	2.33	(0.22)
2418	2-1 21/32	(652)	1-4 11/16	(424)	2.97	(0.28)	1-10 47/64	(577)	1-4 3/4	(425)	2.64	(0.25)
2420	2-1 21/32	(652)	1-6 11/16	(475)	3.33	(0.31)	1-10 47/64	(577)	1-6 3/4	(476)	2.96	(0.28)
2422	2-1 21/32	(652)	1-8 11/16	(525)	3.69	(0.34)	1-10 47/64	(577)	1-8 3/4	(527)	3.28	(0.30)
2424	2-1 21/32	(652)	1-10 11/16	(576)	4.04	(0.38)	1-10 47/64	(577)	1-10 3/4	(578)	3.59	(0.33)
2426	2-1 21/32	(652)	2-0 11/16	(627)	4.40	(0.41)	1-10 47/64	(577)	2-0 3/4	(629)	3.91	(0.36)
2428	2-1 21/32	(652)	2-2 11/16	(678)	4.76	(0.44)	1-10 47/64	(577)	2-2 3/4	(679)	4.22	(0.39)
2430	2-1 21/32	(652)	2-4 11/16	(729)	5.11	(0.47)	1-10 47/64	(577)	2-4 3/4	(730)	4.54	(0.42)
2432	2-1 21/32	(652)	2-6 11/16	(779)	5.47	(0.51)	1-10 47/64	(577)	2-6 3/4	(781)	4.86	(0.45)
2434 E	2-1 21/32	(652)	2-8 11/16	(830)	5.82	(0.54)	1-10 47/64	(577)	2-8 3/4	(832)	5.17	(0.48)
2436 E	2-1 21/32	(652)	2-10 11/16	(881)	6.18	(0.57)	1-10 47/64	(577)	2-10 3/4	(883)	5.49	(0.51)
2440 E	2-1 21/32	(652)	3-2 11/16	(983)	6.89	(0.64)	1-10 47/64	(577)	3-2 3/4	(984)	6.12	(0.57)
2442 E	2-1 21/32	(652)	3-4 25/64	(1026)	7.20	(0.67)	1-10 47/64	(577)	3-4 3/4	(1035)	6.43	(0.60)
2450 E	2-1 21/32	(652)	4-0 25/64	(1229)	8.62	(0.80)	1-10 47/64	(577)	4-0 3/4	(1238)	7.70	(0.72)
2456 E	2-1 21/32	(652)	4-6 25/64	(1381)	9.69	(0.90)	1-10 47/64	(577)	4-6 3/4	(1391)	8.64	(0.80)
2460 E	2-1 21/32	(652)	4-10 25/64	(1483)	10.40	(0.97)	1-10 47/64	(577)	4-10 3/4	(1492)	9.28	(0.86)
2612	2-3 21/32	(703)	0-10 11/16	(271)	2.05	(0.19)	2-0 47/64	(628)	0-10 3/4	(273)	1.85	(0.17)
2614	2-3 21/32	(703)	1-0 11/16	(322)	2.44	(0.23)	2-0 47/64	(628)	1-0 3/4	(324)	2.19	(0.20)
2616	2-3 21/32	(703)	1-2 11/16	(373)	2.82	(0.26)	2-0 47/64	(628)	1-2 3/4	(375)	2.53	(0.24)
2618	2-3 21/32	(703)	1-4 11/16	(424)	3.21	(0.30)	2-0 47/64	(628)	1-4 3/4	(425)	2.88	(0.27)
2620	2-3 21/32	(703)	1-6 11/16	(475)	3.59	(0.33)	2-0 47/64	(628)	1-6 3/4	(476)	3.22	(0.30)
2622	2-3 21/32	(703)	1-8 11/16	(525)	3.97	(0.37)	2-0 47/64	(628)	1-8 3/4	(527)	3.56	(0.33)
2624	2-3 21/32	(703)	1-10 11/16	(576)	4.36	(0.40)	2-0 47/64	(628)	1-10 3/4	(578)	3.91	(0.36)
2626	2-3 21/32	(703)	2-0 11/16	(627)	4.74	(0.44)	2-0 47/64	(628)	2-0 3/4	(629)	4.25	(0.39)
2628	2-3 21/32	(703)	2-2 11/16	(678)	5.13	(0.48)	2-0 47/64	(628)	2-2 3/4	(679)	4.60	(0.43)
2630	2-3 21/32	(703)	2-4 11/16	(729)	5.51	(0.51)	2-0 47/64	(628)	2-4 3/4	(730)	4.94	(0.46)
2632 E	2-3 21/32	(703)	2-6 11/16	(779)	5.89	(0.55)	2-0 47/64	(628)	2-6 3/4	(781)	5.28	(0.49)
2634 E	2-3 21/32	(703)	2-8 11/16	(830)	6.28	(0.58)	2-0 47/64	(628)	2-8 3/4	(832)	5.63	(0.52)
2636 E	2-3 21/32	(703)	2-10 11/16	(881)	6.66	(0.62)	2-0 47/64	(628)	2-10 3/4	(883)	5.97	(0.55)
2640 E	2-3 21/32	(703)	3-2 25/64	(975)	7.37	(0.69)	2-0 47/64	(628)	3-2 3/4	(984)	6.66	(0.62)
2642 E	2-3 21/32	(703)	3-4 25/64	(1026)	7.76	(0.72)	2-0 47/64	(628)	3-4 3/4	(1035)	7.00	(0.65)
2650 E	2-3 21/32	(703)	4-0 25/64	(1229)	9.29	(0.86)	2-0 47/64	(628)	4-0 3/4	(1238)	8.37	(0.78)
2656 E	2-3 21/32	(703)	4-6 25/64	(1381)	10.45	(0.97)	2-0 47/64	(628)	4-6 3/4	(1391)	9.40	(0.87)
2660 E	2-3 21/32	(703)	4-10 25/64	(1483)	11.21	(1.04)	2-0 47/64	(628)	4-10 3/4	(1492)	10.09	(0.94)

NOTE: Refer to Product Performance Chapter for International Building Code. Net Clear Opening drawings are pictured with the conversion tables.

Sizes designated with "E" meet egress requirements based on standard and optional [Glass and Glazing](#). All other glass options, please contact a Marvin representative.

Egress/Vent and Daylight Opening: Operable

CN	Opening Width		Opening Height		Egress Opening		Daylight Opening Width		Daylight Opening Height		Daylight Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²	ft-in	mm	ft-in	mm	sq. ft.	m ²
2812	2-5 21/32	(753)	0-10 11/16	(271)	2.20	(0.20)	2-2 47/64	(679)	0-10 3/4	(273)	2.00	(0.19)
2814	2-5 21/32	(753)	1-0 11/16	(322)	2.61	(0.24)	2-2 47/64	(679)	1-0 3/4	(324)	2.37	(0.22)
2816	2-5 21/32	(753)	1-2 11/16	(373)	3.03	(0.28)	2-2 47/64	(679)	1-2 3/4	(375)	2.74	(0.25)
2818	2-5 21/32	(753)	1-4 11/16	(424)	3.44	(0.32)	2-2 47/64	(679)	1-4 3/4	(425)	3.11	(0.29)
2820	2-5 21/32	(753)	1-6 11/16	(475)	3.85	(0.36)	2-2 47/64	(679)	1-6 3/4	(476)	3.48	(0.32)
2822	2-5 21/32	(753)	1-8 11/16	(525)	4.26	(0.40)	2-2 47/64	(679)	1-8 3/4	(527)	3.85	(0.36)
2824	2-5 21/32	(753)	1-10 11/16	(576)	4.67	(0.43)	2-2 47/64	(679)	1-10 3/4	(578)	4.22	(0.39)
2826	2-5 21/32	(753)	2-0 11/16	(627)	5.08	(0.47)	2-2 47/64	(679)	2-0 3/4	(629)	4.60	(0.43)
2828	2-5 21/32	(753)	2-2 11/16	(678)	5.50	(0.51)	2-2 47/64	(679)	2-2 3/4	(679)	4.97	(0.46)
2830 E	2-5 21/32	(753)	2-4 11/16	(729)	5.91	(0.55)	2-2 47/64	(679)	2-4 3/4	(730)	5.34	(0.50)
2832 E	2-5 21/32	(753)	2-6 11/16	(779)	6.32	(0.59)	2-2 47/64	(679)	2-6 3/4	(781)	5.71	(0.53)
2834 E	2-5 21/32	(753)	2-8 11/16	(830)	6.73	(0.63)	2-2 47/64	(679)	2-8 3/4	(832)	6.08	(0.56)
2836 E	2-5 21/32	(753)	2-10 25/64	(873)	7.08	(0.66)	2-2 47/64	(679)	2-10 3/4	(883)	6.45	(0.60)
2840 E	2-5 21/32	(753)	3-2 25/64	(975)	7.91	(0.73)	2-2 47/64	(679)	3-2 3/4	(984)	7.19	(0.67)
2842 E	2-5 21/32	(753)	3-4 25/64	(1026)	8.32	(0.77)	2-2 47/64	(679)	3-4 3/4	(1035)	7.57	(0.70)
2850 E	2-5 21/32	(753)	4-0 25/64	(1229)	9.97	(0.93)	2-2 47/64	(679)	4-0 3/4	(1238)	9.05	(0.84)
2856 E	2-5 21/32	(753)	4-6 25/64	(1381)	11.20	(1.04)	2-2 47/64	(679)	4-6 3/4	(1391)	10.17	(0.94)
2860 E	2-5 21/32	(753)	4-10 25/64	(1483)	12.03	(1.12)	2-2 47/64	(679)	4-10 3/4	(1492)	10.91	(1.01)
3012	2-7 21/32	(804)	0-10 11/16	(271)	2.35	(0.22)	2-4 47/64	(730)	0-10 3/4	(273)	2.15	(0.20)
3014	2-7 21/32	(804)	1-0 11/16	(322)	2.79	(0.26)	2-4 47/64	(730)	1-0 3/4	(324)	2.54	(0.24)
3016	2-7 21/32	(804)	1-2 11/16	(373)	3.23	(0.30)	2-4 47/64	(730)	1-2 3/4	(375)	2.94	(0.27)
3018	2-7 21/32	(804)	1-4 11/16	(424)	3.67	(0.34)	2-4 47/64	(730)	1-4 3/4	(425)	3.34	(0.31)
3020	2-7 21/32	(804)	1-6 11/16	(475)	4.11	(0.38)	2-4 47/64	(730)	1-6 3/4	(476)	3.74	(0.35)
3022	2-7 21/32	(804)	1-8 11/16	(525)	4.55	(0.42)	2-4 47/64	(730)	1-8 3/4	(527)	4.14	(0.38)
3024	2-7 21/32	(804)	1-10 11/16	(576)	4.99	(0.46)	2-4 47/64	(730)	1-10 3/4	(578)	4.54	(0.42)
3026	2-7 21/32	(804)	2-0 11/16	(627)	5.43	(0.50)	2-4 47/64	(730)	2-0 3/4	(629)	4.94	(0.46)
3028 E	2-7 21/32	(804)	2-2 11/16	(678)	5.87	(0.55)	2-4 47/64	(730)	2-2 3/4	(679)	5.34	(0.50)
3030 E	2-7 21/32	(804)	2-4 11/16	(729)	6.31	(0.59)	2-4 47/64	(730)	2-4 3/4	(730)	5.74	(0.53)
3032 E	2-7 21/32	(804)	2-6 11/16	(779)	6.75	(0.63)	2-4 47/64	(730)	2-6 3/4	(781)	6.14	(0.57)
3034 E	2-7 21/32	(804)	2-8 25/64	(823)	7.12	(0.66)	2-4 47/64	(730)	2-8 3/4	(832)	6.54	(0.61)
3036 E	2-7 21/32	(804)	2-10 25/64	(873)	7.56	(0.70)	2-4 47/64	(730)	2-10 3/4	(883)	6.93	(0.64)
3040 E	2-7 21/32	(804)	3-2 25/64	(975)	8.44	(0.78)	2-4 47/64	(730)	3-2 3/4	(984)	7.73	(0.72)
3042 E	2-7 21/32	(804)	3-4 25/64	(1026)	8.88	(0.82)	2-4 47/64	(730)	3-4 3/4	(1035)	8.13	(0.76)
3050 E	2-7 21/32	(804)	4-0 25/64	(1229)	10.64	(0.99)	2-4 47/64	(730)	4-0 3/4	(1238)	9.73	(0.90)
3056 E	2-7 21/32	(804)	4-6 25/64	(1381)	11.96	(1.11)	2-4 47/64	(730)	4-6 3/4	(1391)	10.93	(1.02)
3060 E	2-7 21/32	(804)	4-10 25/64	(1483)	12.84	(1.19)	2-4 47/64	(730)	4-10 3/4	(1492)	11.72	(1.09)

NOTE: Refer to Product Performance Chapter for International Building Code. Net Clear Opening drawings are pictured with the conversion tables.

Sizes designated with "E" meet egress requirements based on standard and optional [Glass and Glazing](#). All other glass options, please contact a Marvin representative.

Egress/Vent and Daylight Opening: Operable

CN	Opening Width		Opening Height		Egress Opening		Daylight Opening Width		Daylight Opening Height		Daylight Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²	ft-in	mm	ft-in	mm	sq. ft.	m ²
3212	2-9 21/32	(855)	0-10 11/16	(271)	2.50	(0.23)	2-6 47/64	(781)	0-10 3/4	(273)	2.29	(0.21)
3214	2-9 21/32	(855)	1-0 11/16	(322)	2.97	(0.28)	2-6 47/64	(781)	1-0 3/4	(324)	2.72	(0.25)
3216	2-9 21/32	(855)	1-2 11/16	(373)	3.43	(0.32)	2-6 47/64	(781)	1-2 3/4	(375)	3.15	(0.29)
3218	2-9 21/32	(855)	1-4 11/16	(424)	3.90	(0.36)	2-6 47/64	(781)	1-4 3/4	(425)	3.58	(0.33)
3220	2-9 21/32	(855)	1-6 11/16	(475)	4.37	(0.41)	2-6 47/64	(781)	1-6 3/4	(476)	4.00	(0.37)
3222	2-9 21/32	(855)	1-8 11/16	(525)	4.84	(0.45)	2-6 47/64	(781)	1-8 3/4	(527)	4.43	(0.41)
3224	2-9 21/32	(855)	1-10 11/16	(576)	5.30	(0.49)	2-6 47/64	(781)	1-10 3/4	(578)	4.86	(0.45)
3226 E	2-9 21/32	(855)	2-0 11/16	(627)	5.77	(0.54)	2-6 47/64	(781)	2-0 3/4	(629)	5.28	(0.49)
3228 E	2-9 21/32	(855)	2-2 11/16	(678)	6.24	(0.58)	2-6 47/64	(781)	2-2 3/4	(679)	5.71	(0.53)
3230 E	2-9 21/32	(855)	2-4 11/16	(729)	6.71	(0.62)	2-6 47/64	(781)	2-4 3/4	(730)	6.14	(0.57)
3231 E	2-9 21/32	(855)	2-5 25/64	(746)	6.87	(0.64)	2-6 47/64	(781)	2-5 3/4	(756)	6.35	(0.59)
3234 E	2-9 21/32	(855)	2-8 25/64	(823)	7.57	(0.70)	2-6 47/64	(781)	2-8 3/4	(832)	6.99	(0.65)
3236 E	2-9 21/32	(855)	2-10 25/64	(873)	8.04	(0.75)	2-6 47/64	(781)	2-10 3/4	(883)	7.42	(0.69)
3240 E	2-9 21/32	(855)	3-2 25/64	(975)	8.97	(0.83)	2-6 47/64	(781)	3-2 3/4	(984)	8.27	(0.77)
3242 E	2-9 21/32	(855)	3-4 25/64	(1026)	9.44	(0.88)	2-6 47/64	(781)	3-4 3/4	(1035)	8.70	(0.81)
3250 E	2-9 21/32	(855)	4-0 25/64	(1229)	11.31	(1.05)	2-6 47/64	(781)	4-0 3/4	(1238)	10.41	(0.97)
3256 E	2-9 21/32	(855)	4-6 25/64	(1381)	12.71	(1.18)	2-6 47/64	(781)	4-6 3/4	(1391)	11.69	(1.09)
3260 E	2-9 21/32	(855)	4-10 25/64	(1483)	13.65	(1.27)	2-6 47/64	(781)	4-10 3/4	(1492)	12.54	(1.16)
3612	3-1 21/32	(957)	0-10 11/16	(271)	2.79	(0.26)	2-10 47/64	(882)	0-10 3/4	(273)	2.59	(0.24)
3614	3-1 21/32	(957)	1-0 11/16	(322)	3.32	(0.31)	2-10 47/64	(882)	1-0 3/4	(324)	3.08	(0.29)
3616	3-1 21/32	(957)	1-2 11/16	(373)	3.84	(0.36)	2-10 47/64	(882)	1-2 3/4	(375)	3.56	(0.33)
3618	3-1 21/32	(957)	1-4 11/16	(424)	4.36	(0.41)	2-10 47/64	(882)	1-4 3/4	(425)	4.04	(0.38)
3620	3-1 21/32	(957)	1-6 11/16	(475)	4.89	(0.45)	2-10 47/64	(882)	1-6 3/4	(476)	4.52	(0.42)
3622	3-1 21/32	(957)	1-8 11/16	(525)	5.41	(0.50)	2-10 47/64	(882)	1-8 3/4	(527)	5.01	(0.47)
3624	3-1 21/32	(957)	1-10 11/16	(576)	5.93	(0.55)	2-10 47/64	(882)	1-10 3/4	(578)	5.49	(0.51)
3626 E	3-1 21/32	(957)	2-0 11/16	(627)	6.46	(0.60)	2-10 47/64	(882)	2-0 3/4	(629)	5.97	(0.55)
3628 E	3-1 21/32	(957)	2-2 25/64	(670)	6.90	(0.64)	2-10 47/64	(882)	2-2 3/4	(679)	6.45	(0.60)
3630 E	3-1 21/32	(957)	2-4 25/64	(721)	7.42	(0.69)	2-10 47/64	(882)	2-4 3/4	(730)	6.94	(0.64)
3632 E	3-1 21/32	(957)	2-6 25/64	(772)	7.95	(0.74)	2-10 47/64	(882)	2-6 3/4	(781)	7.42	(0.69)
3634 E	3-1 21/32	(957)	2-8 25/64	(823)	8.47	(0.79)	2-10 47/64	(882)	2-8 3/4	(832)	7.90	(0.73)
3636 E	3-1 21/32	(957)	2-10 25/64	(873)	8.99	(0.84)	2-10 47/64	(882)	2-10 3/4	(883)	8.38	(0.78)
3640 E	3-1 21/32	(957)	3-2 25/64	(975)	10.04	(0.93)	2-10 47/64	(882)	3-2 3/4	(984)	9.35	(0.87)
3642 E	3-1 21/32	(957)	3-4 25/64	(1026)	10.56	(0.98)	2-10 47/64	(882)	3-4 3/4	(1035)	9.83	(0.91)
3650 E	3-1 21/32	(957)	4-0 25/64	(1229)	12.65	(1.18)	2-10 47/64	(882)	4-0 3/4	(1238)	11.76	(1.09)
3656 E	3-1 21/32	(957)	4-6 25/64	(1381)	14.22	(1.32)	2-10 47/64	(882)	4-6 3/4	(1391)	13.21	(1.23)
3660 E	3-1 21/32	(957)	4-10 25/64	(1483)	15.27	(1.42)	2-10 47/64	(882)	4-10 3/4	(1492)	14.17	(1.32)

NOTE: Refer to Product Performance Chapter for International Building Code. Net Clear Opening drawings are pictured with the conversion tables.

Sizes designated with "E" meet egress requirements based on standard and optional [Glass and Glazing](#). All other glass options, please contact a Marvin representative.

Egress/Vent and Daylight Openings: Operable

CN	Opening Width		Opening Height		Egress Opening		Daylight Opening Width		Daylight Opening Height		Daylight Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²	ft-in	mm	ft-in	mm	sq. ft.	m ²
4012	3-5 21/32	(1058)	0-10 11/16	(271)	3.09	(0.29)	3-2 47/64	(984)	0-10 3/4	(273)	2.89	(0.27)
4014	3-5 21/32	(1058)	1-0 11/16	(322)	3.67	(0.34)	3-2 47/64	(984)	1-0 3/4	(324)	3.43	(0.32)
4016	3-5 21/32	(1058)	1-2 11/16	(373)	4.25	(0.39)	3-2 47/64	(984)	1-2 3/4	(375)	3.97	(0.37)
4018	3-5 21/32	(1058)	1-4 11/16	(424)	4.83	(0.45)	3-2 47/64	(984)	1-4 3/4	(425)	4.51	(0.42)
4020	3-5 21/32	(1058)	1-6 11/16	(475)	5.41	(0.50)	3-2 47/64	(984)	1-6 3/4	(476)	5.04	(0.47)
4022	3-5 21/32	(1058)	1-8 11/16	(525)	5.98	(0.56)	3-2 47/64	(984)	1-8 3/4	(527)	5.58	(0.52)
4024	3-5 21/32	(1058)	1-10 11/16	(576)	6.56	(0.61)	3-2 47/64	(984)	1-10 3/4	(578)	6.12	(0.57)
4026 E	3-5 21/32	(1058)	2-0 25/64	(619)	7.06	(0.66)	3-2 47/64	(984)	2-0 3/4	(629)	6.66	(0.62)
4028 E	3-5 21/32	(1058)	2-2 25/64	(670)	7.63	(0.71)	3-2 47/64	(984)	2-2 3/4	(679)	7.20	(0.67)
4030 E	3-5 21/32	(1058)	2-4 25/64	(721)	8.21	(0.76)	3-2 47/64	(984)	2-4 3/4	(730)	7.73	(0.72)
4032 E	3-5 21/32	(1058)	2-6 25/64	(772)	8.79	(0.82)	3-2 47/64	(984)	2-6 3/4	(781)	8.27	(0.77)
4034 E	3-5 21/32	(1058)	2-8 25/64	(823)	9.37	(0.87)	3-2 47/64	(984)	2-8 3/4	(832)	8.81	(0.82)
4036 E	3-5 21/32	(1058)	2-10 25/64	(873)	9.95	(0.92)	3-2 47/64	(984)	2-10 3/4	(883)	9.35	(0.87)
4040 E	3-5 21/32	(1058)	3-2 25/64	(975)	11.11	(1.03)	3-2 47/64	(984)	3-2 3/4	(984)	10.42	(0.97)
4042 E	3-5 21/32	(1058)	3-4 25/64	(1026)	11.68	(1.09)	3-2 47/64	(984)	3-4 3/4	(1035)	10.96	(1.02)
4050 E	3-5 21/32	(1058)	4-0 25/64	(1229)	14.0	(1.30)	3-2 47/64	(984)	4-0 3/4	(1238)	13.11	(1.22)
4056 E	3-5 21/32	(1058)	4-6 25/64	(1381)	15.73	(1.46)	3-2 47/64	(984)	4-6 3/4	(1391)	14.73	(1.37)
4060 E	3-5 21/32	(1058)	4-10 25/64	(1483)	16.89	(1.57)	3-2 47/64	(984)	4-10 3/4	(1492)	15.80	(1.47)
4412	3-9 21/32	(1160)	0-10 11/16	(271)	3.39	(0.31)	3-6 47/64	(1085)	0-10 3/4	(273)	3.19	(0.30)
4414	3-9 21/32	(1160)	1-0 11/16	(322)	4.02	(0.37)	3-6 47/64	(1085)	1-0 3/4	(324)	3.78	(0.35)
4416	3-9 21/32	(1160)	1-2 25/64	(365)	4.56	(0.42)	3-6 47/64	(1085)	1-2 3/4	(375)	4.38	(0.41)
4418	3-9 21/32	(1160)	1-4 11/16	(424)	5.29	(0.49)	3-6 47/64	(1085)	1-4 3/4	(425)	4.97	(0.46)
4420	3-9 21/32	(1160)	1-6 11/16	(475)	5.93	(0.55)	3-6 47/64	(1085)	1-6 3/4	(476)	5.56	(0.52)
4422	3-9 21/32	(1160)	1-8 11/16	(525)	6.56	(0.61)	3-6 47/64	(1085)	1-8 3/4	(527)	6.16	(0.57)
4424	3-9 21/32	(1160)	1-10 25/64	(569)	7.10	(0.66)	3-6 47/64	(1085)	1-10 3/4	(578)	6.75	(0.63)
4426 E	3-9 21/32	(1160)	2-0 25/64	(619)	7.73	(0.72)	3-6 47/64	(1085)	2-0 3/4	(629)	7.35	(0.68)
4428 E	3-9 21/32	(1160)	2-2 25/64	(670)	8.37	(0.78)	3-6 47/64	(1085)	2-2 3/4	(679)	7.94	(0.74)
4430 E	3-9 21/32	(1160)	2-4 25/64	(721)	9.0	(0.84)	3-6 47/64	(1085)	2-4 3/4	(730)	8.53	(0.79)
4432 E	3-9 21/32	(1160)	2-6 25/64	(772)	9.63	(0.90)	3-6 47/64	(1085)	2-6 3/4	(781)	9.13	(0.85)
4434 E	3-9 21/32	(1160)	2-8 25/64	(823)	10.27	(0.95)	3-6 47/64	(1085)	2-8 3/4	(832)	9.72	(0.90)
4436 E	3-9 21/32	(1160)	2-10 25/64	(873)	10.90	(1.01)	3-6 47/64	(1085)	2-10 3/4	(883)	10.31	(0.96)
4440 E	3-9 21/32	(1160)	3-2 25/64	(975)	12.17	(1.13)	3-6 47/64	(1085)	3-2 3/4	(984)	11.50	(1.07)
4442 E	3-9 21/32	(1160)	3-4 25/64	(1026)	12.81	(1.19)	3-6 47/64	(1085)	3-4 3/4	(1035)	12.09	(1.12)
4450 E	3-9 21/32	(1160)	4-0 25/64	(1229)	15.34	(1.43)	3-6 47/64	(1085)	4-0 3/4	(1238)	14.47	(1.34)
4456 E	3-9 21/32	(1160)	4-6 25/64	(1381)	17.24	(1.60)	3-6 47/64	(1085)	4-6 3/4	(1391)	16.25	(1.51)
4460 E	3-9 21/32	(1160)	4-10 25/64	(1483)	18.51	(1.72)	3-6 47/64	(1085)	4-10 3/4	(1492)	17.44	(1.62)

NOTE: Refer to Product Performance Chapter for International Building Code. Net Clear Opening drawings are pictured with the conversion tables.

Sizes designated with "E" meet egress requirements based on standard and optional [Glass and Glazing](#). All other glass options, please contact a Marvin representative.

Egress/Vent and Daylight Openings: Operable

CN	Opening Width		Opening Height		Egress Opening		Daylight Opening Width		Daylight Opening Height		Daylight Opening	
	ft - in	mm	ft - in	mm	ft²	m²	ft-in	mm	ft-in	mm	sq. ft.	m²
4812	4-1 21/32	(1261)	0-10 11/16	(271)	3.69	(0.34)	3-10 47/64	(1187)	0-10 3/4	(273)	3.49	(0.32)
4814	4-1 21/32	(1261)	1-0 25/64	(315)	4.27	(0.40)	3-10 47/64	(1187)	1-0 3/4	(324)	4.14	(0.38)
4816	4-1 21/32	(1261)	1-2 25/64	(365)	4.96	(0.46)	3-10 47/64	(1187)	1-2 3/4	(375)	4.79	(0.44)
4818	4-1 21/32	(1261)	1-4 11/16	(424)	5.75	(0.53)	3-10 47/64	(1187)	1-4 3/4	(425)	5.44	(0.51)
4820	4-1 21/32	(1261)	1-6 11/16	(475)	6.44	(0.60)	3-10 47/64	(1187)	1-6 3/4	(476)	6.09	(0.57)
4822	4-1 21/32	(1261)	1-8 25/64	(518)	7.03	(0.65)	3-10 47/64	(1187)	1-8 3/4	(527)	6.73	(0.63)
4824	4-1 21/32	(1261)	1-10 25/64	(569)	7.72	(0.72)	3-10 47/64	(1187)	1-10 3/4	(578)	7.38	(0.69)
4826 E	4-1 21/32	(1261)	2-0 25/64	(619)	8.41	(0.78)	3-10 47/64	(1187)	2-0 3/4	(629)	8.03	(0.75)
4828 E	4-1 21/32	(1261)	2-2 25/64	(670)	9.10	(0.85)	3-10 47/64	(1187)	2-2 3/4	(679)	8.68	(0.81)
4830 E	4-1 21/32	(1261)	2-4 25/64	(721)	9.79	(0.91)	3-10 47/64	(1187)	2-4 3/4	(730)	9.33	(0.87)
4832 E	4-1 21/32	(1261)	2-6 25/64	(772)	10.48	(0.97)	3-10 47/64	(1187)	2-6 3/4	(781)	9.98	(0.93)
4834 E	4-1 21/32	(1261)	2-8 25/64	(823)	11.17	(1.04)	3-10 47/64	(1187)	2-8 3/4	(832)	10.63	(0.99)
4836 E	4-1 21/32	(1261)	2-10 25/64	(873)	11.86	(1.10)	3-10 47/64	(1187)	2-10 3/4	(883)	11.28	(1.05)
4840 E	4-1 21/32	(1261)	3-2 25/64	(975)	13.24	(1.23)	3-10 47/64	(1187)	3-2 3/4	(984)	12.58	(1.17)
4842 E	4-1 21/32	(1261)	3-4 25/64	(1026)	13.93	(1.29)	3-10 47/64	(1187)	3-4 3/4	(1035)	13.23	(1.23)
4850 E	4-1 21/32	(1261)	4-0 25/64	(1229)	16.69	(1.55)	3-10 47/64	(1187)	4-0 3/4	(1238)	15.82	(1.47)
4856 E	4-1 21/32	(1261)	4-6 25/64	(1381)	18.76	(1.74)	3-10 47/64	(1187)	4-6 3/4	(1391)	17.77	(1.65)
4860 E	4-1 21/32	(1261)	4-10 25/64	(1483)	20.14	(1.87)	3-10 47/64	(1187)	4-10 3/4	(1492)	19.07	(1.77)
5412	4-7 21/32	(1414)	0-10 25/64	(264)	4.01	(0.37)	4-4 47/64	(1339)	0-10 3/4	(273)	3.94	(0.37)
5414	4-7 21/32	(1414)	1-0 25/64	(315)	4.79	(0.44)	4-4 47/64	(1339)	1-0 3/4	(324)	4.67	(0.43)
5416	4-7 21/32	(1414)	1-2 25/64	(365)	5.56	(0.52)	4-4 47/64	(1339)	1-2 3/4	(375)	5.40	(0.50)
5418	4-7 21/32	(1414)	1-4 25/64	(416)	6.33	(0.59)	4-4 47/64	(1339)	1-4 3/4	(425)	6.13	(0.57)
5420	4-7 21/32	(1414)	1-6 25/64	(467)	7.11	(0.66)	4-4 47/64	(1339)	1-6 3/4	(476)	6.87	(0.64)
5422	4-7 21/32	(1414)	1-8 25/64	(518)	7.88	(0.73)	4-4 47/64	(1339)	1-8 3/4	(527)	7.60	(0.71)
5424	4-7 21/32	(1414)	1-10 25/64	(569)	8.65	(0.80)	4-4 47/64	(1339)	1-10 3/4	(578)	8.33	(0.77)
5426 E	4-7 21/32	(1414)	2-0 25/64	(619)	9.43	(0.88)	4-4 47/64	(1339)	2-0 3/4	(629)	9.06	(0.84)
5428 E	4-7 21/32	(1414)	2-2 25/64	(670)	10.20	(0.95)	4-4 47/64	(1339)	2-2 3/4	(679)	9.80	(0.91)
5430 E	4-7 21/32	(1414)	2-4 25/64	(721)	10.97	(1.02)	4-4 47/64	(1339)	2-4 3/4	(730)	10.53	(0.98)
5432 E	4-7 21/32	(1414)	2-6 25/64	(772)	11.75	(1.09)	4-4 47/64	(1339)	2-6 3/4	(781)	11.26	(1.05)
5434 E	4-7 21/32	(1414)	2-8 25/64	(823)	12.52	(1.16)	4-4 47/64	(1339)	2-8 3/4	(832)	11.99	(1.11)
5436 E	4-7 21/32	(1414)	2-10 25/64	(873)	13.29	(1.23)	4-4 47/64	(1339)	2-10 3/4	(883)	12.73	(1.18)
5440 E	4-7 21/32	(1414)	3-2 25/64	(975)	14.84	(1.38)	4-4 47/64	(1339)	3-2 3/4	(984)	14.19	(1.32)
5442 E	4-7 21/32	(1414)	3-4 25/64	(1026)	15.61	(1.45)	4-4 47/64	(1339)	3-4 3/4	(1035)	14.92	(1.39)
5450 E	4-7 21/32	(1414)	4-0 25/64	(1229)	18.70	(1.74)	4-4 47/64	(1339)	4-0 3/4	(1238)	17.85	(1.66)
5456 E	4-7 21/32	(1414)	4-6 25/64	(1381)	21.02	(1.95)	4-4 47/64	(1339)	4-6 3/4	(1391)	20.05	(1.86)
5460 E	4-7 21/32	(1414)	4-10 25/64	(1483)	22.57	(2.10)	4-4 47/64	(1339)	4-10 3/4	(1492)	21.52	(2.00)

NOTE: Refer to Product Performance Chapter for International Building Code. Net Clear Opening drawings are pictured with the conversion tables.

Sizes designated with "E" meet egress requirements based on standard and optional [Glass and Glazing](#). All other glass options, please contact a Marvin representative.

Egress/Vent and Daylight Openings: Operable

CN	Opening Width		Opening Height		Egress Opening		Daylight Opening Width		Daylight Opening Height		Daylight Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²	ft-in	mm	ft-in	mm	sq. ft.	m ²
6012	5-1 21/32	(1566)	0-10 25/64	(264)	4.45	(0.41)	4-10 47/64	(1492)	0-10 3/4	(273)	4.38	(0.41)
6014	5-1 21/32	(1566)	1-0 25/64	(315)	5.30	(0.49)	4-10 47/64	(1492)	1-0 3/4	(324)	5.20	(0.48)
6016	5-1 21/32	(1566)	1-2 25/64	(365)	6.16	(0.57)	4-10 47/64	(1492)	1-2 3/4	(375)	6.02	(0.56)
6018	5-1 21/32	(1566)	1-4 25/64	(416)	7.02	(0.65)	4-10 47/64	(1492)	1-4 3/4	(425)	6.83	(0.63)
6020	5-1 21/32	(1566)	1-6 25/64	(467)	7.87	(0.73)	4-10 47/64	(1492)	1-6 3/4	(476)	7.65	(0.71)
6022	5-1 21/32	(1566)	1-8 25/64	(518)	8.73	(0.81)	4-10 47/64	(1492)	1-8 3/4	(527)	8.46	(0.79)
6024	5-1 21/32	(1566)	1-10 25/64	(569)	9.59	(0.89)	4-10 47/64	(1492)	1-10 3/4	(578)	9.28	(0.86)
6026 E	5-1 21/32	(1566)	2-0 25/64	(619)	10.44	(0.97)	4-10 47/64	(1492)	2-0 3/4	(629)	10.10	(0.94)
6028 E	5-1 21/32	(1566)	2-2 25/64	(670)	11.30	(1.05)	4-10 47/64	(1492)	2-2 3/4	(679)	10.91	(1.01)
6030 E	5-1 21/32	(1566)	2-4 25/64	(721)	12.15	(1.13)	4-10 47/64	(1492)	2-4 3/4	(730)	11.73	(1.09)
6032 E	5-1 21/32	(1566)	2-6 25/64	(772)	13.01	(1.21)	4-10 47/64	(1492)	2-6 3/4	(781)	12.54	(1.17)
6034 E	5-1 21/32	(1566)	2-8 25/64	(823)	13.87	(1.29)	4-10 47/64	(1492)	2-8 3/4	(832)	13.36	(1.24)
6036 E	5-1 21/32	(1566)	2-10 25/64	(873)	14.72	(1.37)	4-10 47/64	(1492)	2-10 3/4	(883)	14.17	(1.32)
6040 E	5-1 21/32	(1566)	3-2 25/64	(975)	16.44	(1.53)	4-10 47/64	(1492)	3-2 3/4	(984)	15.81	(1.47)
6042 E	5-1 21/32	(1566)	3-4 25/64	(1026)	17.29	(1.61)	4-10 47/64	(1492)	3-4 3/4	(1035)	16.62	(1.54)
6050 E	5-1 21/32	(1566)	4-0 25/64	(1229)	20.72	(1.92)	4-10 47/64	(1492)	4-0 3/4	(1238)	19.88	(1.85)
6056 E	5-1 21/32	(1566)	4-6 25/64	(1381)	23.29	(2.16)	4-10 47/64	(1492)	4-6 3/4	(1391)	22.33	(2.07)
6060 E	5-1 21/32	(1566)	4-10 25/64	(1483)	25. 0	(2.32)	4-10 47/64	(1492)	4-10 3/4	(1492)	23.96	(2.23)

NOTE: Refer to Product Performance Chapter for International Building Code. Net Clear Opening drawings are pictured with the conversion tables.

Sizes designated with "E" meet egress requirements based on standard and optional [Glass and Glazing](#). All other glass options, please contact a Marvin representative.

NOTE: Clear Opening Height conversions are for units using block and tackle balances. Hybrid Spiral balanced units will exhibit reduced sash travel. Contact a Marvin representative for additional information.

Daylight Measurements: Transom

CN	Daylight Opening Width		Daylight Opening Height		Daylight Opening	
	ft-in	mm	ft-in	mm	sq. ft.	m ²
1612	1-2 47/64	(374)	1-0 3/4	(324)	1.30	(0.12)
1620	1-2 47/64	(374)	1-8 3/4	(527)	2.12	(0.20)
2012	1-6 47/64	(476)	1-0 3/4	(324)	1.66	(0.15)
2020	1-6 47/64	(476)	1-8 3/4	(527)	2.70	(0.25)
2412	1-10 47/64	(577)	1-0 3/4	(324)	2.01	(0.19)
2420	1-10 47/64	(577)	1-8 3/4	(527)	3.28	(0.30)
2612	2-0 47/64	(628)	1-0 3/4	(324)	2.19	(0.20)
2620	2-0 47/64	(628)	1-8 3/4	(527)	3.56	(0.33)
2812	2-2 47/64	(679)	1-0 3/4	(324)	2.37	(0.22)
2820	2-2 47/64	(679)	1-8 3/4	(527)	3.85	(0.36)
3012	2-4 47/64	(730)	1-0 3/4	(324)	2.54	(0.24)
3020	2-4 47/64	(730)	1-8 3/4	(527)	4.14	(0.38)
3212	2-6 47/64	(781)	1-0 3/4	(324)	2.72	(0.25)
3220	2-6 47/64	(781)	1-8 3/4	(527)	4.43	(0.41)
3612	2-10 47/64	(882)	1-0 3/4	(324)	3.08	(0.29)
3620	2-10 47/64	(882)	1-8 3/4	(527)	5.01	(0.47)
4012	3-2 47/64	(984)	1-0 3/4	(324)	3.43	(0.32)
4020	3-2 47/64	(984)	1-8 3/4	(527)	5.58	(0.52)
5412	4-4 47/64	(1339)	1-0 3/4	(324)	4.67	(0.43)
5420	4-4 47/64	(1339)	1-8 3/4	(527)	7.60	(0.71)

Daylight Measurements: Picture

CN	Daylight Opening Width		Daylight Opening Height		Daylight Opening	
	ft-in	mm	ft-in	mm	sq. ft.	m ²
4038	2-10 47/64	(882)	2-7 27/64	(798)	7.58	(0.70)
4042	2-10 47/64	(882)	2-11 27/64	(900)	8.54	(0.79)
4046	2-10 47/64	(882)	3-3 27/64	(1001)	9.51	(0.88)
4050	2-10 47/64	(882)	3-7 27/64	(1103)	10.47	(0.97)
4054	2-10 47/64	(882)	3-11 27/64	(1204)	11.44	(1.06)
4058	2-10 47/64	(882)	4-3 27/64	(1306)	12.40	(1.15)
4062	2-10 47/64	(882)	4-7 27/64	(1408)	13.37	(1.24)
4066	2-10 47/64	(882)	4-11 27/64	(1509)	14.33	(1.33)
4070	2-10 47/64	(882)	5-3 27/64	(1611)	15.30	(1.42)
4074	2-10 47/64	(882)	5-7 27/64	(1712)	16.26	(1.51)
4078	2-10 47/64	(882)	5-11 27/64	(1814)	17.23	(1.60)
4086	2-10 47/64	(882)	6-7 27/64	(2017)	19.16	(1.78)
4090	2-10 47/64	(882)	6-11 27/64	(2119)	20.12	(1.87)

4838	3-6 47/64	(1085)	2-7 27/64	(798)	9.32	(0.87)
4842	3-6 47/64	(1085)	2-11 27/64	(900)	10.51	(0.98)
4846	3-6 47/64	(1085)	3-3 27/64	(1001)	11.70	(1.09)
4850	3-6 47/64	(1085)	3-7 27/64	(1103)	12.89	(1.20)
4854	3-6 47/64	(1085)	3-11 27/64	(1204)	14.07	(1.31)
4858	3-6 47/64	(1085)	4-3 27/64	(1306)	15.26	(1.42)
4862	3-6 47/64	(1085)	4-7 27/64	(1408)	16.45	(1.53)
4866	3-6 47/64	(1085)	4-11 27/64	(1509)	17.63	(1.64)
4870	3-6 47/64	(1085)	5-3 27/64	(1611)	18.82	(1.75)
4878	3-6 47/64	(1085)	5-11 27/64	(1814)	21.19	(1.97)
4878	3-6 47/64	(1085)	5-11 27/64	(1814)	21.19	(1.97)
4886	3-6 47/64	(1085)	6-7 27/64	(2017)	23.57	(2.19)
4890	3-6 47/64	(1085)	6-11 27/64	(2119)	24.76	(2.30)

5238	3-10 47/64	(1187)	2-7 27/64	(798)	10.20	(0.95)
5242	3-10 47/64	(1187)	2-11 27/64	(900)	11.49	(1.07)
5246	3-10 47/64	(1187)	3-3 27/64	(1001)	12.79	(1.19)
5250	3-10 47/64	(1187)	3-7 27/64	(1103)	14.09	(1.31)
5254	3-10 47/64	(1187)	3-11 27/64	(1204)	15.39	(1.43)
5258	3-10 47/64	(1187)	4-3 27/64	(1306)	16.69	(1.55)
5262	3-10 47/64	(1187)	4-7 27/64	(1408)	17.99	(1.67)
5266	3-10 47/64	(1187)	4-11 27/64	(1509)	19.28	(1.79)
5270	3-10 47/64	(1187)	5-3 27/64	(1611)	20.58	(1.91)
5274	3-10 47/64	(1187)	5-7 27/64	(1712)	21.88	(2.03)
5278	3-10 47/64	(1187)	5-11 27/64	(1814)	23.18	(2.15)
5286	3-10 47/64	(1187)	6-7 27/64	(2017)	25.78	(2.39)
5290	3-10 47/64	(1187)	6-11 27/64	(2119)	27.07	(2.52)

CN	Daylight Opening Width		Daylight Opening Height		Daylight Opening	
	ft-in	mm	ft-in	mm	sq. ft.	m ²
6038	4-6 47/64	(1390)	2-7 27/64	(798)	11.94	(1.11)
6042	4-6 47/64	(1390)	2-11 27/64	(900)	13.46	(1.25)
6046	4-6 47/64	(1390)	3-3 27/64	(1001)	14.98	(1.39)
6050	4-6 47/64	(1390)	3-7 27/64	(1103)	16.50	(1.53)
6054	4-6 47/64	(1390)	3-11 27/64	(1204)	18.02	(1.67)
6058	4-6 47/64	(1390)	4-3 27/64	(1306)	19.54	(1.82)
6062	4-6 47/64	(1390)	4-7 27/64	(1408)	21.06	(1.96)
6066	4-6 47/64	(1390)	4-11 27/64	(1509)	22.58	(2.10)
6070	4-6 47/64	(1390)	5-3 27/64	(1611)	24.11	(2.24)
6074	4-6 47/64	(1390)	5-7 27/64	(1712)	25.63	(2.38)
6078	4-6 47/64	(1390)	5-11 27/64	(1814)	27.15	(2.52)
6086	4-6 47/64	(1390)	6-7 27/64	(2017)	30.19	(2.80)
6090	4-6 47/64	(1390)	6-11 27/64	(2119)	31.71	(2.95)

6838	5-2 47/64	(1593)	2-7 27/64	(798)	13.69	(1.27)
6842	5-2 47/64	(1593)	2-11 27/64	(900)	15.43	(1.43)
6846	5-2 47/64	(1593)	3-3 27/64	(1001)	17.17	(1.60)
6850	5-2 47/64	(1593)	3-7 27/64	(1103)	18.92	(1.76)
6854	5-2 47/64	(1593)	3-11 27/64	(1204)	20.66	(1.92)
6858	5-2 47/64	(1593)	4-3 27/64	(1306)	22.40	(2.08)
6862	5-2 47/64	(1593)	4-7 27/64	(1408)	24.14	(2.24)
6866	5-2 47/64	(1593)	4-11 27/64	(1509)	25.89	(2.40)
6870	5-2 47/64	(1593)	5-3 27/64	(1611)	27.63	(2.57)
6874	5-2 47/64	(1593)	5-7 27/64	(1712)	29.37	(2.73)
6878	5-2 47/64	(1593)	5-11 27/64	(1814)	31.11	(2.89)
6886	5-2 47/64	(1593)	6-7 27/64	(2017)	34.60	(3.21)
6890	5-2 47/64	(1593)	6-11 27/64	(2119)	36.34	(3.38)

Minimum and Maximum Guidelines

Minimum and Maximum Certified Frame Size												
Unit Type		Minimum				Maximum				Max Glass		
		Width		Height		Width		Height		Sash Size Glass Type	Sq. Feet	Sq. Meters
		in	mm	in	mm	in	mm	in	mm			
USH G2	Equal Sash	14 1/4	(362)	23 1/2	(597)	65 1/4	(1657)	127 1/2	(3239)	Equal	25	2.323
UDHG2	Equal Sash	14 1/4	(362)	23 1/2	(597)	65 1/4	(1657)	127 1/2	(3239)	Equal	25	2.323
UDHG2	Cottage	14 1/4	(362)	23 1/2	(597)	65 1/4	(1657)	127 1/2	(3239)	Small	7/16	0.041
										Large	25	2.323
UDHG2	Reverse Cottage	14 1/4	(362)	23 1/2	(597)	65 1/4	(1657)	127 1/2	(3238)	Small	7/16	0.041
										Large	25	2.323
UDHG2 / USH G2	w/ Combination	21 1/4	(540)	31 1/2	(800)	45 1/4	(1149)	79 1/2	(2019)			
UDHTRG2	One Sash	14 1/4	(362)	14 1/2	(368)	73 1/4	(1861)	27 11/16	(703)	Standard	10 25/64	0.965
UDHPG2	One Sash	14 1/4	(362)	14 27/32	(377)	61 1/4	(1556)	103 1/2	(2629)	Standard	37 19/32	3.492
						67 1/4	(1708)	69 1/2	(1765)	Standard	26 63/64	2.507

Minimum and Maximum Extended Frame Size								
Unit Type		Maximum				Max Glass		
		Width		Height		Sash Size Glass Type	Sq. Feet	Sq. Meters
		in	mm	in	mm			
UDHTRG2	One Sash	120	(3048)	127 1/2	(3239)	Standard Tempered	61	5.667
UDHPG2	One Sash	120	(3048)	127 1/2	(3239)	Standard Tempered	61	5.667

IZ3 Minimum and Maximum Frame Size									
Unit Type		Minimum				Maximum			
		Width		Height		Width		Height	
		in	mm	in	mm	in	mm	in	mm
USH G2	Equal Sash	14 1/4	(362)	23 1/2	(597)	53 1/4	(1353)	119 1/2	(3035)
UDHG2	Equal Sash	14 1/4	(362)	23 1/2	(597)	53 1/4	(1353)	119 1/2	(3035)
UDHTRG2	One Sash	14 1/4	(362)	14 1/2	(368)	73 1/4	(1861)	27 11/16	(703)
UDHPG2	One Sash	14 1/4	(362)	14 27/32	(377)	61 1/4	(1556)	93 1/2	(2375)

Certified Sizes and Ratings

Product	Air Test to PSF	Water Tested to psf	Structural Tested to psf	Certification Rating	Design Pressure	Overall Width		Overall Height	
						in	mm	in	mm
UDHG2 (4040)	1.57	7.5	75	LC-PG50	DP50	45 1/4	(1149)	87 1/2	(2223)
UDHG2 (4044)	1.57	7.5	75	LC-PG50	DP50	45 1/4	(1149)	95 1/2	(2426)
UDHG2 (4450)	1.57	7.5	75	LC-PG50	DP50	49 1/4	(1251)	107 1/2	(2731)
UDHG2 (5044) *	1.57	6	60	LC-PG35	DP35	55 1/4	(1403)	95 1/2	(2426)
UDHG2 (5456)	1.57	6	60	LC-PG35	DP35	59 1/4	(1505)	119 1/2	(3035)
UDHG2 (6060)	1.57	7.5	45	LC-PG30	DP30	65 1/4	(1657)	127 1/2	(3239)
UDHPG2 (6668)	1.57	7.5	75	CW-PG50	DP50	67 1/4	(1708)	69 1/2	(1765)
UDHPG2 (60102)	1.57	7.5	75	CW-PG50	DP50	61 1/4	(1556)	103 1/2	(2629)
UDHINRG2 (4020)	1.57	7.5	75	LC-PG50	DP50	45 1/4	(1149)	27 11/16	(703)
UDHINRG2 (6820)	1.57	7.5	75	LC-PG50	DP50	73 1/4	(1861)	27 11/16	(703)
UDHINRG2 (6820)	1.57	7.5	75	LC-PG50	DP50	73 1/4	(1861)	27 11/16	(703)
UDHG2 (5044) *	1.57	6	60	LC-PG35	DP35	55 1/4	(1403)	95 1/2	(2426)
UDHG2CW (4826)	1.57	7.5	75	CW-PG50	DP50	53 1/4	(1353)	59 1/2	(1511)
UDHG2CW (4848)	1.57	7.5	75	CW-PG50	DP50	53 1/4	(1353)	103 1/2	(2629)
UDHG2CW (5056)	1.57	7.5	60	CW-PG40	DP40	55 1/4	(1403)	119 1/2	(3035)
UDHG2CW (5456)	1.57	7.5	45	CW-PG30	DP30	59 1/4	(1505)	119 1/2	(3035)

NOTE: CW Performance is an Option

*Tested with the Performance Bracket removed\

Certified Sizes and Ratings (IZ3)

Product	Air Test to PSF	Water Tested to psf	Structural Tested to psf	Certification Rating	Design Pressure	Overall Width		Overall Height	
						in	mm	in	mm
UDHG2 (4036 - IZ3)	1.57	9.75	97.5	LC-PG65	DP65	45 1/4	(1149)	79 1/2	(2019)
UDHG2 (4450 - IZ3)	1.57	9.75	97.5	LC-PG65	DP65	49 1/4	(1251)	107 1/2	(2731)
UDHG2IZ3 (4256 - IZ3)	1.57	9.75	97.5	LC-PG65	DP65	47 1/4	(1200)	119 1/2	(3035)
UDHG2 (4848 - IZ3)	1.57	9.75	97.5	LC-PG65	DP65	53 1/4	(1353)	103 1/2	(2629)
UDHTRG2IZ3 (6820-IZ3)	1.57	9.75	97.5	LC-PG65	DP65	73 1/4	(1861)	27 11/16	(703)
UDHPG2IZ3 (60102-IZ3)	1.57	9.75	97.5	CW-PG65	DP65	61 1/4	(1556)	103 1/2	(2629)

Measurement Conversions

Ultimate Double Hung G2 Operating Unit						
Unit Measurements		Width		Height		
From	To					
Rough Opening		in	mm		in	mm
OM of Frame	Rough Opening	+ 1	(25)		+ 1/2	(13)
Masonry Opening	Rough Opening	+ 1/2	(13)		+ 1/4	(06)
Masonry Opening w/BMC	Rough Opening	-2 1/8	(54)		-1 29/32	(48)
Masonry Opening w/Flat Casing	Rough Opening	-5 1/2	(140)		-3 19/32	(91)
Masonry Opening w/BMC (all sides)	Rough Opening	-2 1/8	(54)		-1 55/64	(47)
Masonry Opening w/Flat Casing (all sides)	Rough Opening	-5 1/2	(140)		-5 15/64	(133)
Frame		in	mm		in	mm
OM of BMC	OM of Frame	-2 5/8	(67)		-1 29/32	(48)
OM of Flat Casing	OM of Frame	-6	(152)		-3 19/32	(91)
Daylight Opening	OM of Frame	+ 6 33/64	(165)	× 2	+ 10	(254)
Glass Size	OM of Frame	+ 5 1/4	(133)	× 2	+ 7 1/2	(191)
Top Sash		in	mm		in	mm
OM of Frame	OM of Top Sash	-3 11/64	(81)	÷ 2	-3/4	(19)
Daylight Opening	OM of Top Sash	+ 3 11/32	(85)		+ 4 1/4	(108)
Bottom Sash		in	mm		in	mm
OM of Frame	OM of Bottom Sash	-3 11/64	(81)	÷ 2	-1/32	(01)
Daylight Opening	OM of Bottom Sash	+ 3 11/32	(85)		+ 4 31/32	(126)
Glass		in	mm		in	mm
Daylight Opening	Glass	+ 1 17/64	(32)		+ 1 1/4	(32)
Aluminum Screen		in	mm		in	mm
Daylight Opening	OM of Screen	+ 4 41/64	(118)		+ 8 1/4	(210)
Aluminum Half Screen		in	mm		in	mm
OM of Frame	OM of Screen	-1 7/8	(48)	÷ 2	+ 7/16	(11)
Daylight Opening	OM of Screen	+ 4 41/64	(118)		+ 5 7/16	(138)
Extruded Aluminum Screen		in	mm		in	mm
Daylight Opening	OM of Screen	+ 4 41/64	(118)		+ 8 1/4	(210)
Extruded Aluminum Half Screen		in	mm		in	mm
OM of Frame	OM of Screen	-1 7/8	(48)	÷ 2	+ 23/32	(18)
Daylight Opening	OM of Screen	+ 4 41/64	(118)		+ 5 45/64	(145)
Combination		in	mm		in	mm
OM of Frame	OM of Combination	-1 51/64	(45)		-1 11/16	(43)
Daylight Opening	OM of Combination	+ 4 23/32	(120)	× 2	+ 8 5/16	(211)

NOTE: For standard cottage style double hung conversion, see info under unit features

Measurement Conversions

Ultimate Double Hung G2 Transoms					
Unit Measurements		Width		Height	
From	To				
Rough Opening		in	mm	in	mm
OM of Frame	Rough Opening	+ 1	(25)	+ 1/2	(13)
Masonry Opening	Rough Opening	+ 1/2	(13)	+ 1/4	(06)
Masonry Opening w/BMC	Rough Opening	-2 1/8	(54)	-1 29/32	(48)
Masonry Opening w/Flat Casing	Rough Opening	-5 1/2	(140)	-3 19/32	(91)
Masonry Opening w/BMC (all sides)	Rough Opening	-2 1/8	(54)	-1 55/64	(47)
Masonry Opening w/Flat Casing (all sides)	Rough Opening	-5 1/2	(140)	-5 15/64	(133)
Frame		in	mm	in	mm
OM of BMC	OM of Frame	-2 5/8	(67)	-1 29/32	(48)
OM of Flat Casing	OM of Frame	-6	(152)	-3 19/32	(91)
Daylight Opening	OM of Frame	+ 6 33/64	(165)	+ 6 15/16	(176)
Glass Size	OM of Frame	+ 5 1/4	(133)	+ 5 11/16	(145)
Sash		in	mm	in	mm
OM of Frame	OM of Sash	-3 11/64	(81)	-1 51/64	(46)
Daylight Opening	OM of Sash	+ 3 11/32	(85)	+ 5 9/64	(131)
Glass Size		in	mm	in	mm
Daylight Opening	Glass	+ 1 17/64	(32)	+ 1 1/4	(32)

Double Hung Picture					
Unit Measurements		Width		Height	
From	To				
Rough Opening		in	mm	in	mm
OM of Frame	Rough Opening	+ 1	(25)	+ 1/2	(13)
Masonry Opening	Rough Opening	+ 1/2	(13)	+ 1/4	(06)
Masonry Opening w/BMC	Rough Opening	-2 1/8	(54)	-1 29/32	(48)
Masonry Opening w/Flat Casing	Rough Opening	-5 1/2	(140)	-3 19/32	(91)
Masonry Opening w/BMC (all sides)	Rough Opening	-2 1/8	(54)	-1 55/64	(47)
Masonry Opening w/Flat Casing (all sides)	Rough Opening	-5 1/2	(140)	-5 15/64	(133)
Frame		in	mm	in	mm
OM of BMC	OM of Frame	-2 5/8	(67)	-1 29/32	(48)
OM of Flat Casing	OM of Frame	-6	(152)	-3 19/32	(91)
Daylight Opening	OM of Frame	+ 6 33/64	(165)	+ 8 5/64	(205)
Glass Size	OM of Frame	+ 5 1/4	(133)	+ 6 53/64	(174)
Sash		in	mm	in	mm
OM of Frame	OM of Sash	-1 23/32	(44)	-2 7/16	(62)
Daylight Opening	OM of Sash	+ 4 51/64	(122)	+ 5 5/16	(135)
Glass		in	mm	in	mm
Daylight Opening	Glass	+ 1 17/64	(32)	+ 1 1/4	(32)

Measurement Conversions

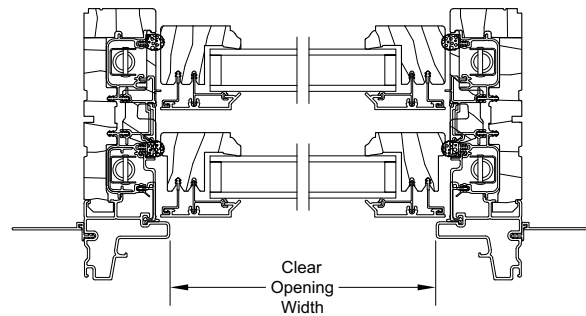
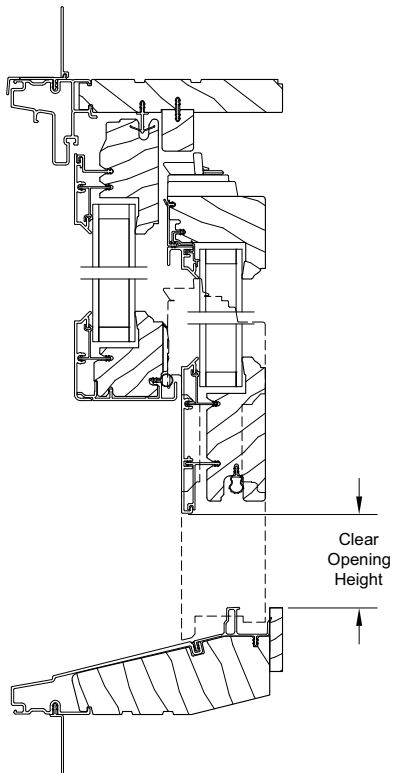
Egress Formulas with Standard Screen

Clear Opening Width:

- Clear Opening Width = Frame OM Width - 3 19/32" (91)

Clear Opening Height:

- Clear Opening Height = Glass Size Height - 1 5/16" (33)
- Clear Opening Area (ft²) = (clear Opening Width x Clear Opening Height) / 144



Standard Unit Measurements: Double Hung

CN	Masonry Opening		Rough Opening		Frame Size		Sash Size		Screen OM		1/2 Screen OM		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
16	1-9 3/4	(552)	1-10 1/4	(565)	1-9 1/4	(540)	1-6 5/64	(459)	1-7 3/8	(492)	1-7 3/8	(492)	14 47/64	(374)
20	2-1 3/4	(654)	2-2 1/4	(667)	2-1 1/4	(641)	1-10 5/64	(561)	1-11 3/8	(594)	1-11 3/8	(594)	18 47/64	(476)
24	2-5 3/4	(756)	2-6 1/4	(768)	2-5 1/4	(743)	2-2 5/64	(662)	2-3 3/8	(695)	2-3 3/8	(695)	22 47/64	(577)
26	2-7 3/4	(806)	2-8 1/4	(819)	2-7 1/4	(794)	2-4 5/64	(713)	2-5 3/8	(746)	2-5 3/8	(746)	24 47/64	(628)
28	2-9 3/4	(857)	2-10 1/4	(870)	2-9 1/4	(845)	2-6 5/64	(764)	2-7 3/8	(797)	2-7 3/8	(797)	26 47/64	(679)
30	2-11 3/4	(908)	3-0 1/4	(921)	2-11 1/4	(895)	2-8 5/64	(815)	2-9 3/8	(848)	2-9 3/8	(848)	28 47/64	(730)
32	3-1 3/4	(959)	3-2 1/4	(972)	3-1 1/4	(946)	2-10 5/64	(865)	2-11 3/8	(899)	2-11 3/8	(899)	30 47/64	(781)
36	3-5 3/4	(1060)	3-6 1/4	(1073)	3-5 1/4	(1048)	3-2 5/64	(967)	3-3 3/8	(1000)	3-3 3/8	(1000)	34 47/64	(882)
40	3-9 3/4	(1162)	3-10 1/4	(1175)	3-9 1/4	(1149)	3-6 5/64	(1069)	3-7 3/8	(1102)	3-7 3/8	(1102)	38 47/64	(984)
44	4-1 3/4	(1264)	4-2 1/4	(1276)	4-1 1/4	(1251)	3-10 5/64	(1170)	3-11 3/8	(1203)	3-11 3/8	(1203)	42 47/64	(1085)
48	4-5 3/4	(1365)	4-6 1/4	(1378)	4-5 1/4	(1353)	4-2 5/64	(1272)	4-3 3/8	(1305)	4-3 3/8	(1305)	46 47/64	(1187)
54	4-11 3/4	(1518)	5-0 1/4	(1530)	4-11 1/4	(1505)	4-8 5/64	(1424)	4-9 3/8	(1457)	4-9 3/8	(1457)	52 47/64	(1339)
60	5-5 3/4	(1670)	5-6 1/4	(1683)	5-5 1/4	(1657)	5-2 5/64	(1577)	4-9 3/8	(1457)	4-9 3/8	(1457)	58 47/64	(1492)

Standard Double Hung Unit Measurements																
Height																
CN	Masonry Opening		Rough Opening		Frame Size		Top Sash Size		Bottom Sash Size		Screen OM		1/2 Screen OM		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm	ft-in	mm	ft - in	mm	ft - in	mm	ft - in	mm
12	2-7 3/4	(806)	2-8	(813)	2-7 1/2	(800)	1-3	(381)	1-3 23/32	(399)	2-5 3/4	(756)	1-4 3/16	(411)	10 3/4	(273)
14	2-11 3/4	(908)	3-0	(914)	2-11 1/2	(902)	1-5	(432)	1-5 23/32	(450)	2-9 3/4	(857)	1-6 3/16	(462)	12 3/4	(324)
16	3-3 3/4	(1010)	3-4	(1016)	3-3 1/2	(1003)	1-7	(483)	1-7 23/32	(501)	3-1 3/4	(959)	1-8 3/16	(513)	14 3/4	(375)
18	3-7 3/4	(1111)	3-8	(1118)	3-7 1/2	(1105)	1-9	(533)	1-9 23/32	(552)	3-5 3/4	(1060)	1-10 3/16	(564)	16 3/4	(425)
20	3-11 3/4	(1213)	4-0	(1219)	3-11 1/2	(1207)	1-11	(584)	1-11 23/32	(603)	3-9 3/4	(1162)	2-0 3/16	(614)	18 3/4	(476)
22	4-3 3/4	(1314)	4-4	(1321)	4-3 1/2	(1308)	2-1	(635)	2-1 23/32	(653)	4-1 3/4	(1264)	2-2 3/16	(665)	20 3/4	(527)
24	4-7 3/4	(1416)	4-8	(1422)	4-7 1/2	(1410)	2-3	(686)	2-3 23/32	(704)	4-5 3/4	(1365)	2-4 3/16	(716)	22 3/4	(578)
26	4-11 3/4	(1518)	5-0	(1524)	4-11 1/2	(1511)	2-5	(737)	2-5 23/32	(755)	4-11 3/4	(1518)	2-6 3/16	(767)	24 3/4	(629)
28	5-3 3/4	(1619)	5-4	(1626)	5-3 1/2	(1613)	2-7	(787)	2-7 23/32	(806)	5-1 3/4	(1568)	2-8 3/16	(818)	26 3/4	(679)
30	5-7 3/4	(1721)	5-8	(1727)	5-7 1/2	(1715)	2-9	(838)	2-9 23/32	(857)	5-5 3/4	(1670)	2-10 3/16	(868)	28 3/4	(730)
32	5-11 3/4	(1822)	6-0	(1829)	5-11 1/2	(1816)	2-11	(889)	2-11 23/32	(907)	5-9 3/4	(1772)	3-0 3/16	(919)	30 3/4	(781)
34	6-3 3/4	(1924)	6-4	(1930)	6-3 1/2	(1918)	3-1	(940)	3-1 23/32	(958)	6-1 3/4	(1873)	3-2 3/16	(970)	32 3/4	(832)
36	6-7 3/4	(2026)	6-8	(2032)	6-7 1/2	(2019)	3-3	(991)	3-3 23/32	(1009)	6-5 3/4	(1975)	3-4 3/16	(1021)	34 3/4	(883)
40	7-3 3/4	(2229)	7-4	(2235)	7-3 1/2	(2223)	3-7	(1092)	3-7 23/32	(1111)	7-1 3/4	(2178)	3-8 3/16	(1122)	38 3/4	(984)
42	7-7 3/4	(2330)	7-8	(2337)	7-7 1/2	(2324)	3-9	(1143)	3-9 23/32	(1161)	7-5 3/4	(2280)	3-10 3/16	(1173)	40 3/4	(1035)
50	8-11 3/4	(2737)	9-0	(2743)	8-11 1/2	(2731)	4-5	(1346)	4-5 23/32	(1365)	8-9 3/4	(2686)	4-6 3/16	(1376)	48 3/4	(1238)
56	9-11 3/4	(3042)	10-0	(3048)	9-11 1/2	(3035)	4-11	(1499)	4-11 23/32	(1517)	9-9 3/4	(2991)	5-0 3/16	(1529)	54 3/4	(1391)
60	10-7 3/4	(3245)	10-8	(3251)	10-7 1/2	(3239)	5-3	(1600)	5-3 23/32	(1619)	9-10 3/4	(3016)	5-4 3/16	(1630)	58 3/4	(1492)

Standard Unit Measurements: Picture

Standard Double Hung 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
40	3-5 3/4	(1060)	3-6 1/4	(1073)	3-5 1/4	(1048)	3-3 17/32	(1004)	2-10 47/64	(882)
48	4-1 3/4	(1264)	4-2 1/4	(1276)	4-1 1/4	(1251)	3-11 17/32	(1207)	3-6 47/64	(1085)
52	4-5 3/4	(1365)	4-6 1/4	(1378)	4-5 1/4	(1353)	4-3 17/32	(1309)	3-10 47/64	(1187)
60	5-1 3/4	(1568)	5-2 1/4	(1581)	5-1 1/4	(1556)	4-11 17/32	(1512)	4-6 47/64	(1390)
68	5-9 3/4	(1772)	5-10 1/4	(1784)	5-9 1/4	(1759)	5-7 17/32	(1715)	5-2 47/64	(1593)

Standard Double Hung 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
38	3-3 3/4	(1010)	3-4	(1016)	3-3 1/2	(1003)	3-1 1/16	(941)	2-7 27/64	(798)
42	3-7 3/4	(1111)	3-8	(1118)	3-7 1/2	(1105)	3-5 1/16	(1043)	2-11 27/64	(900)
46	3-11 3/4	(1213)	4-0	(1219)	3-11 1/2	(1207)	3-9 1/16	(1145)	3-3 27/64	(1001)
50	4-3 3/4	(1314)	4-4	(1321)	4-3 1/2	(1308)	4-1 1/16	(1246)	3-7 27/64	(1103)
54	4-7 3/4	(1416)	4-8	(1422)	4-7 1/2	(1410)	4-5 1/16	(1348)	3-11 27/64	(1204)
58	4-11 3/4	(1518)	5-0	(1524)	4-11 1/2	(1511)	4-9 1/16	(1449)	4-3 27/64	(1306)
62	5-3 3/4	(1619)	5-4	(1626)	5-3 1/2	(1613)	5-1 1/16	(1551)	4-7 27/64	(1408)
66	5-7 3/4	(1721)	5-8	(1727)	5-7 1/2	(1715)	5-5 1/16	(1653)	4-11 27/64	(1509)
70	5-11 3/4	(1822)	6-0	(1829)	5-11 1/2	(1816)	5-9 1/16	(1754)	5-3 27/64	(1611)
74	6-3 3/4	(1924)	6-4	(1930)	6-3 1/2	(1918)	6-1 1/16	(1856)	5-7 27/64	(1712)
78	6-7 3/4	(2026)	6-8	(2032)	6-7 1/2	(2019)	6-5 1/16	(1957)	5-11 27/64	(1814)
86	7-3 3/4	(2229)	7-4	(2235)	7-3 1/2	(2223)	7-1 1/16	(2161)	6-7 27/64	(2017)
90	7-7 3/4	(2330)	7-8	(2337)	7-7 1/2	(2324)	7-5 1/16	(2262)	6-11 27/64	(2119)

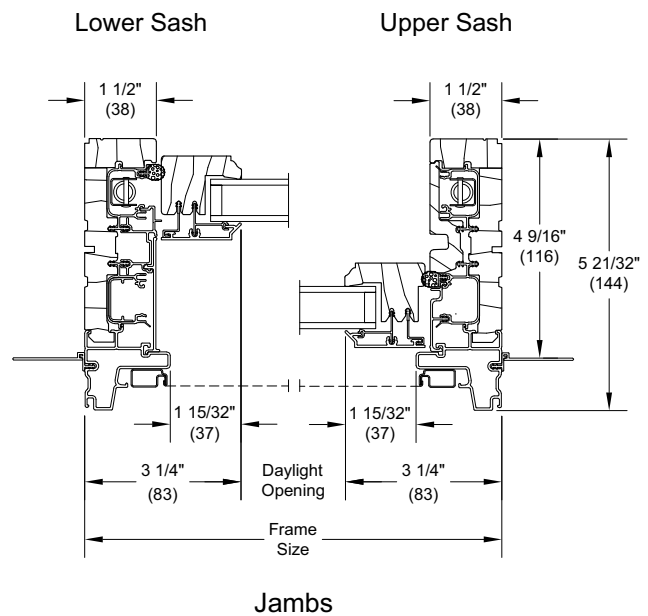
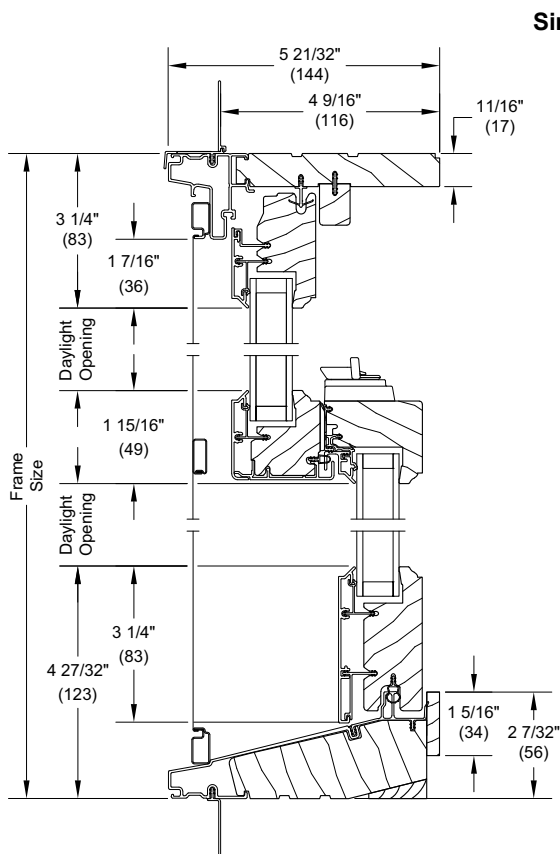
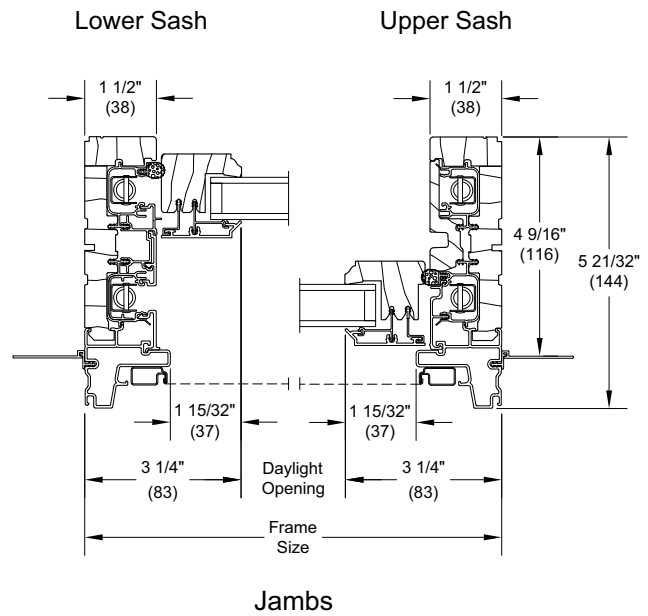
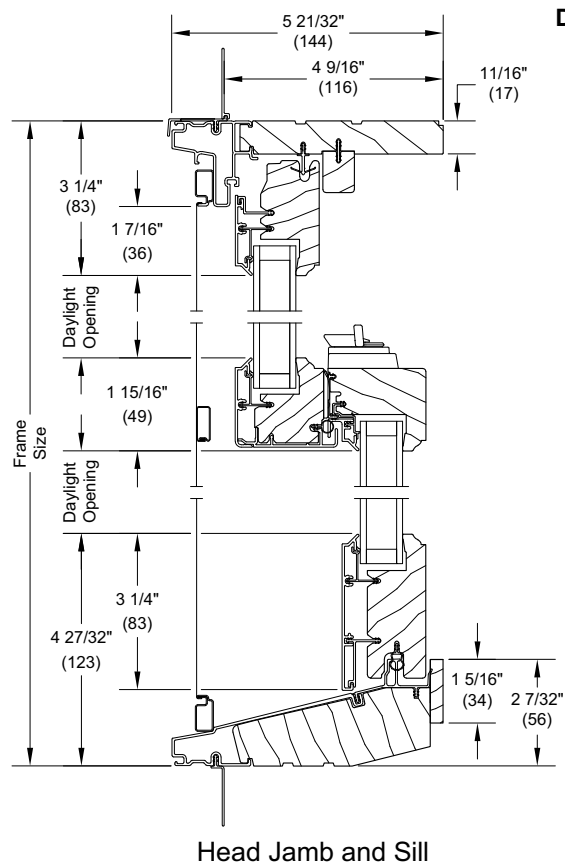
Standard Unit Measurements: Transom

Standard Double Hung 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
16	1-9 3/4	(552)	1-10 1/4	(565)	1-9 1/4	(540)	1-6 1/16	(459)	1-2 47/64	(374)
20	2-1 3/4	(654)	2-2 1/4	(667)	2-1 1/4	(641)	1-10 1/16	(560)	1-6 47/64	(476)
24	2-5 3/4	(756)	2-6 1/4	(768)	2-5 1/4	(743)	2-2 1/16	(662)	1-10 47/64	(577)
26	2-7 3/4	(806)	2-8 1/4	(819)	2-7 1/4	(794)	2-4 1/16	(713)	2-0 47/64	(628)
28	2-9 3/4	(857)	2-10 1/4	(870)	2-9 1/4	(845)	2-6 1/16	(764)	2-2 47/64	(679)
30	2-11 3/4	(908)	3-0 1/4	(921)	2-11 1/4	(895)	2-8 1/16	(814)	2-4 47/64	(730)
32	3-1 3/4	(959)	3-2 1/4	(972)	3-1 1/4	(946)	2-10 1/16	(865)	2-6 47/64	(781)
36	3-5 3/4	(1060)	3-6 1/4	(1073)	3-5 1/4	(1048)	3-2 1/16	(967)	2-10 47/64	(882)
40	3-9 3/4	(1162)	3-10 1/4	(1175)	3-9 1/4	(1149)	3-6 1/16	(1068)	3-2 47/64	(984)
54	4-11 3/4	(1518)	5-0 1/4	(1530)	4-11 1/4	(1505)	4-8 1/16	(1424)	4-4 47/64	(1339)

Standard Double Hung 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
12	1-7 15/16	(506)	1-8 3/16	(513)	1-7 11/16	(500)	1-5 7/8	(454)	1-0 3/4	(324)
20	2-3 15/16	(710)	2-4 3/16	(716)	2-3 11/16	(703)	2-1 7/8	(657)	1-8 3/4	(527)

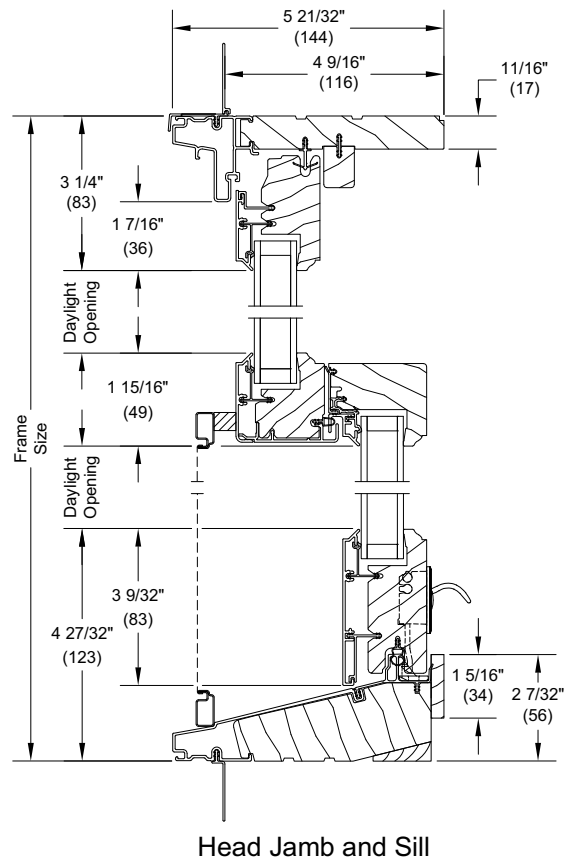
Section Details: Operating

Scale: 3" = 1' 0"



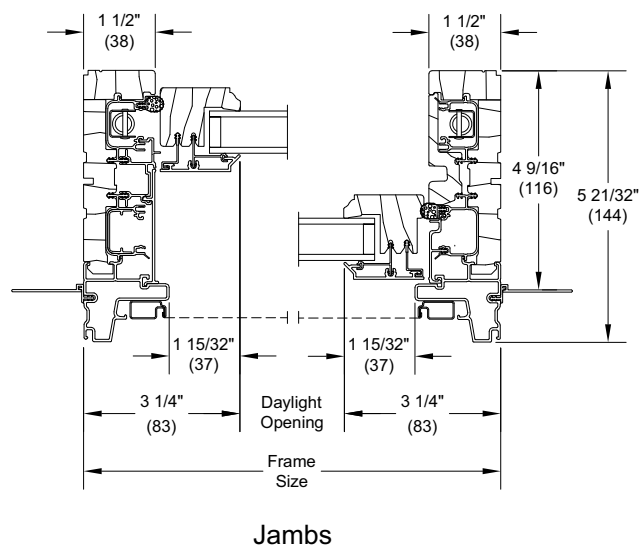
Section Details: Operating (with Optional Lift Lock Hardware)

Scale: 3" = 1' 0"



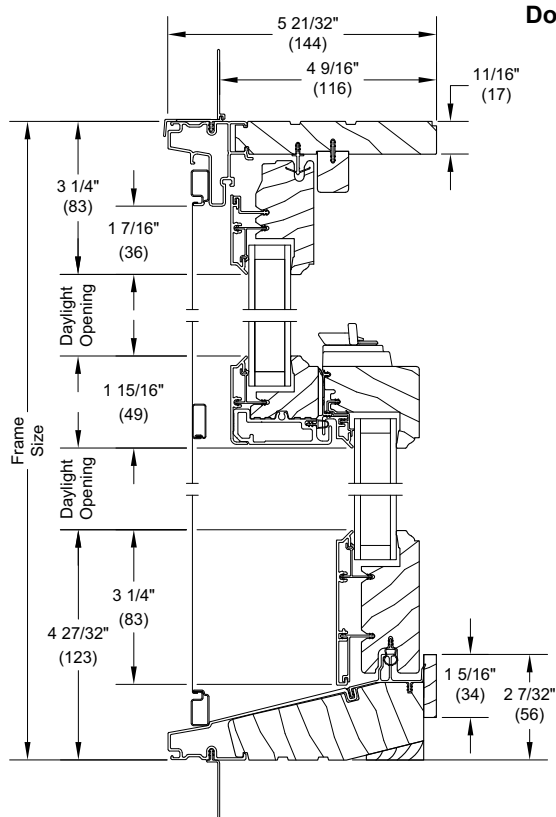
Lower Sash

Upper Sash



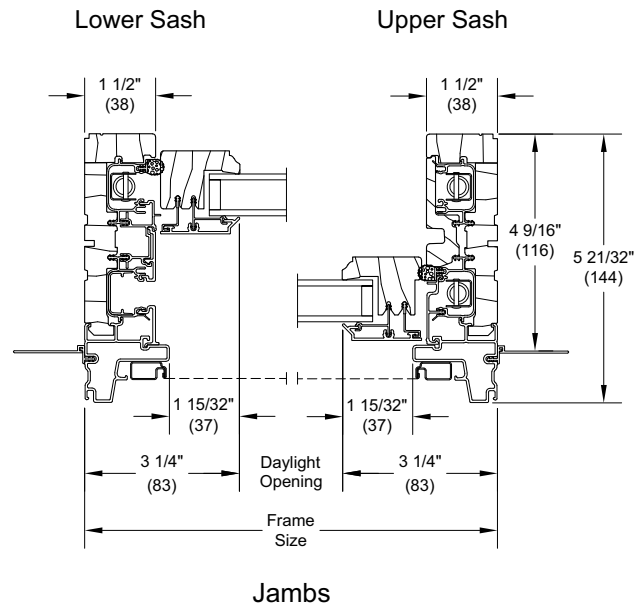
Section Details: Operating (Commercial Window Performance Rating)

Scale: 3" = 1' 0"

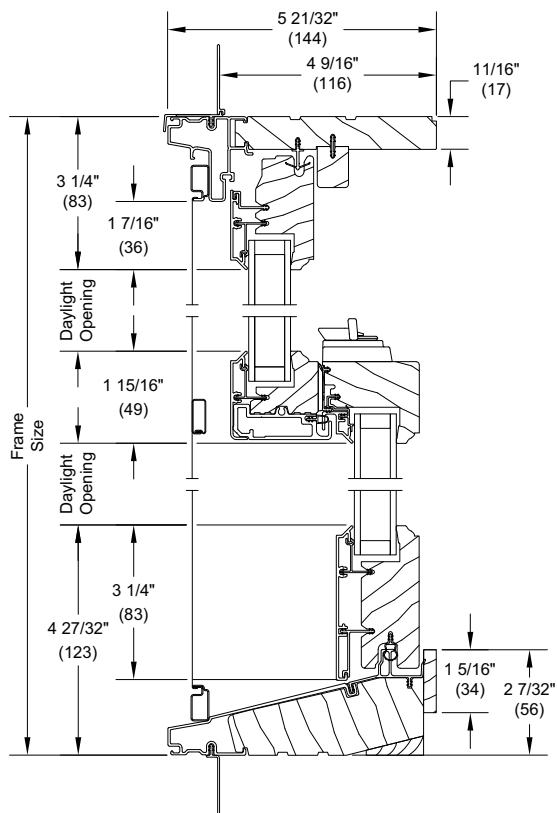


Head Jamb and Sill

Double Hung

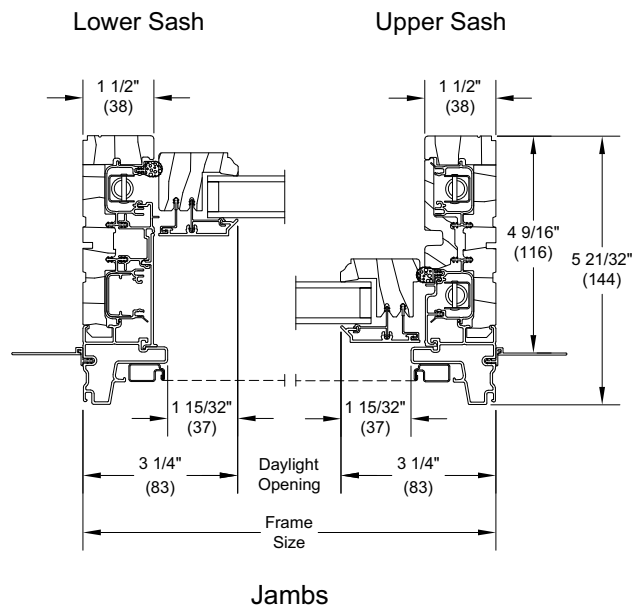


Jambs



Head Jamb and Sill

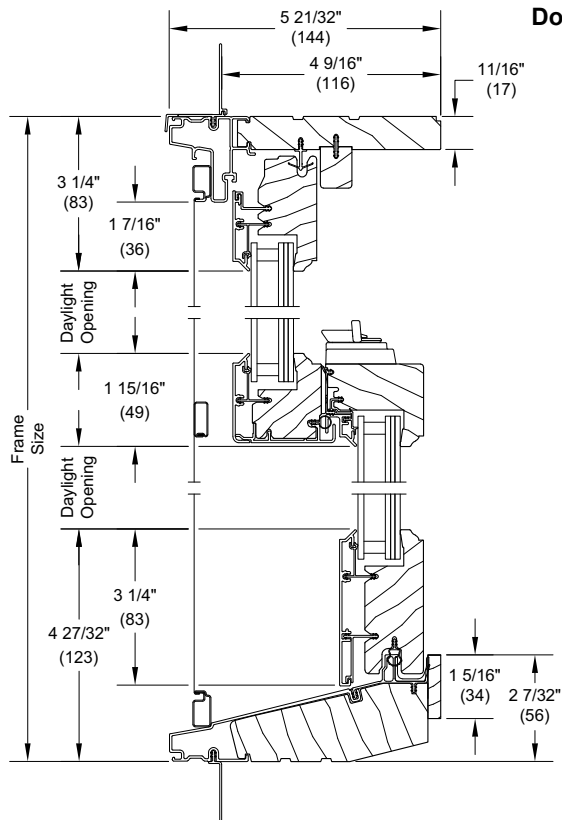
Single Hung



Jambs

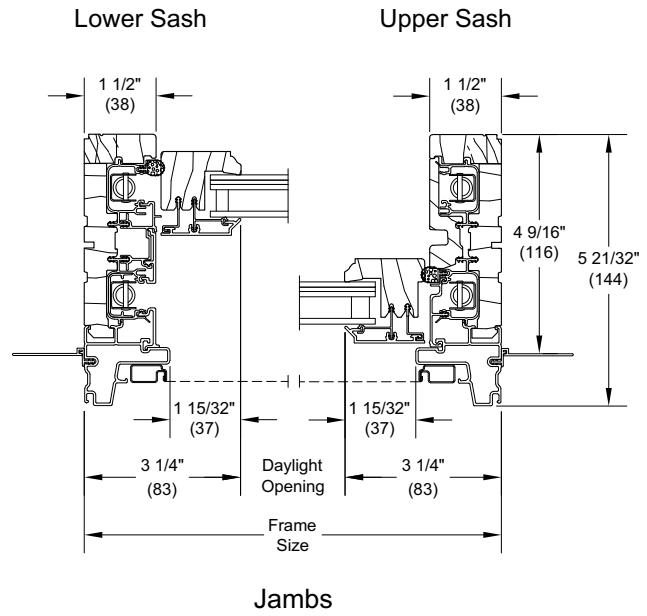
Section Details: IZ3 Operating

Scale: 3" = 1' 0"

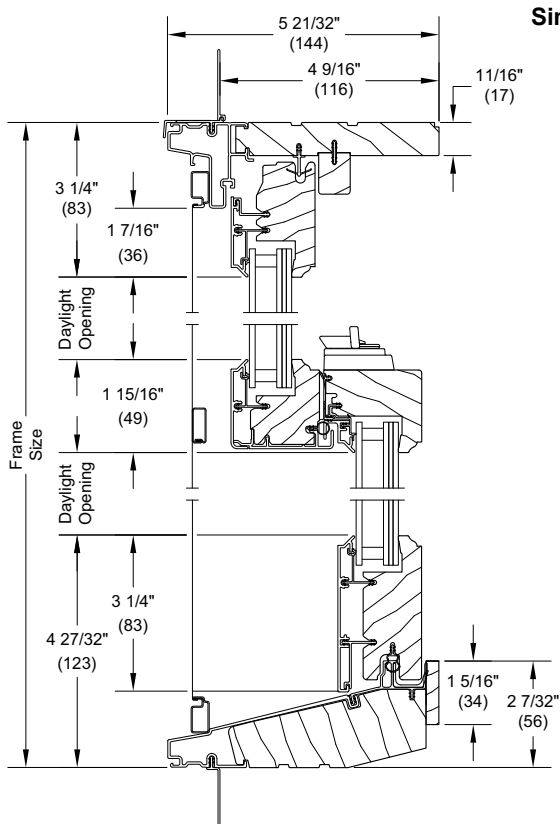


Head Jamb and Sill

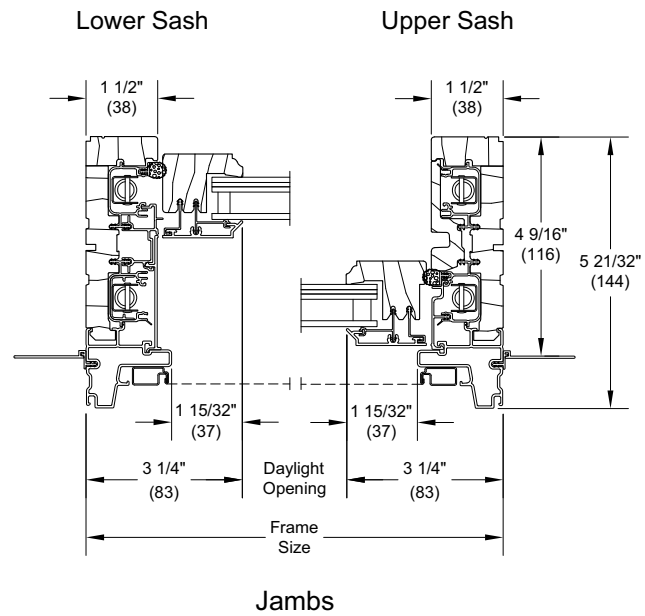
Double Hung



Jambs



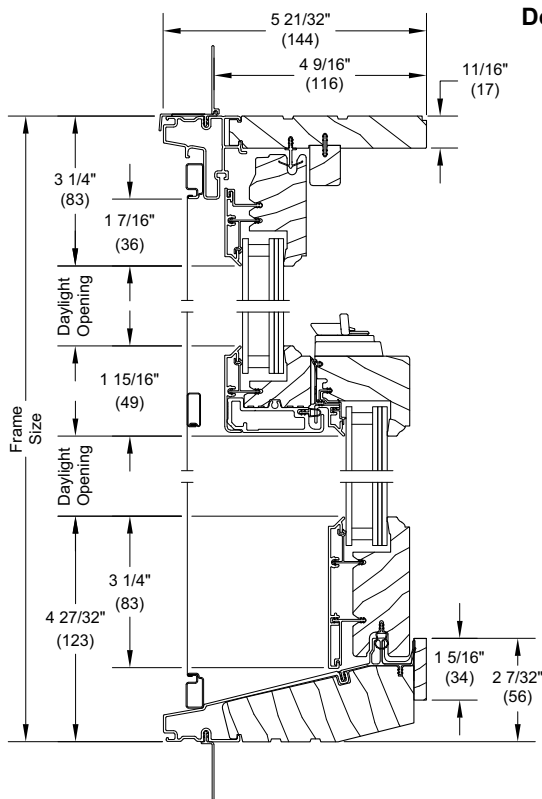
Single Hung



Jambs

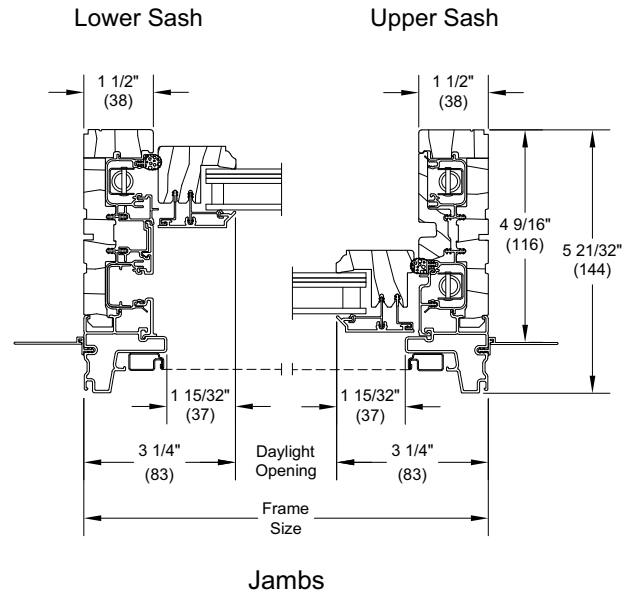
Section Details: IZ3 Operating

Scale: 3" = 1' 0"

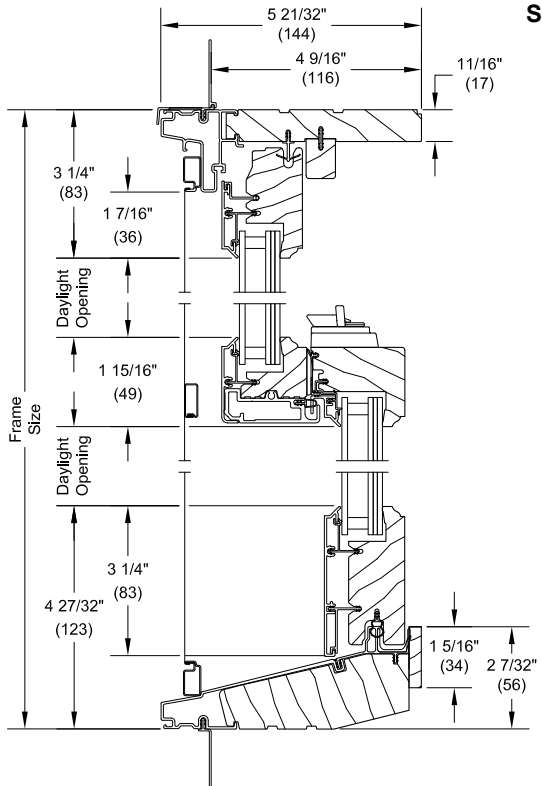


Head Jamb and Sill

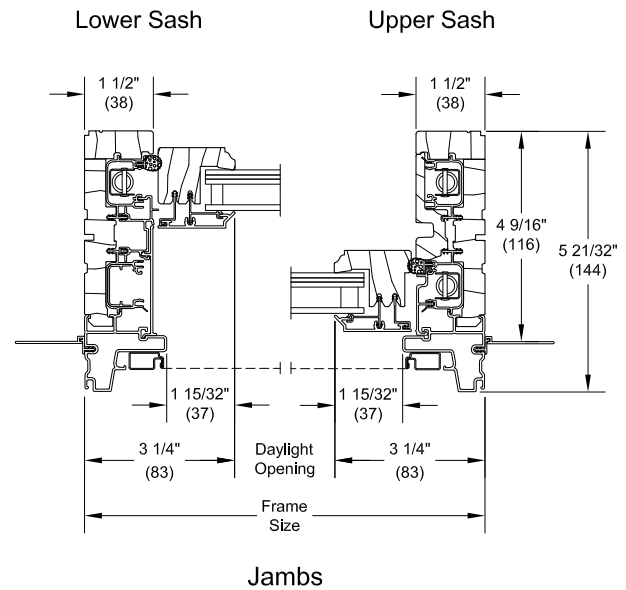
Double Hung



Single Hung



Head Jamb and Sill

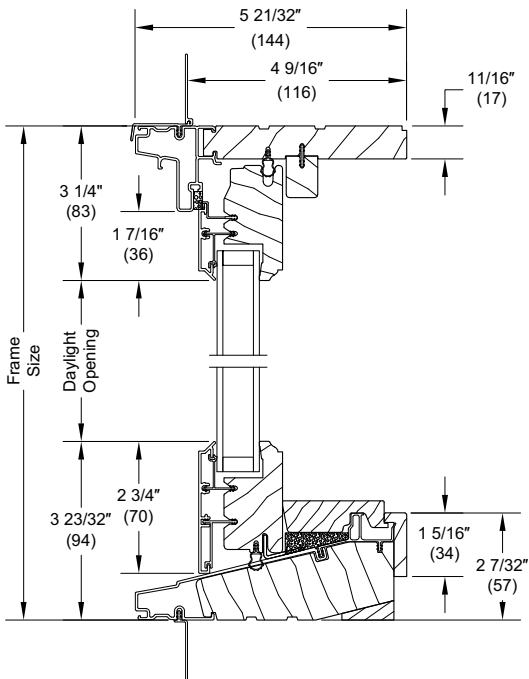


NOTE: Reinforced check rail required for applicable sizes

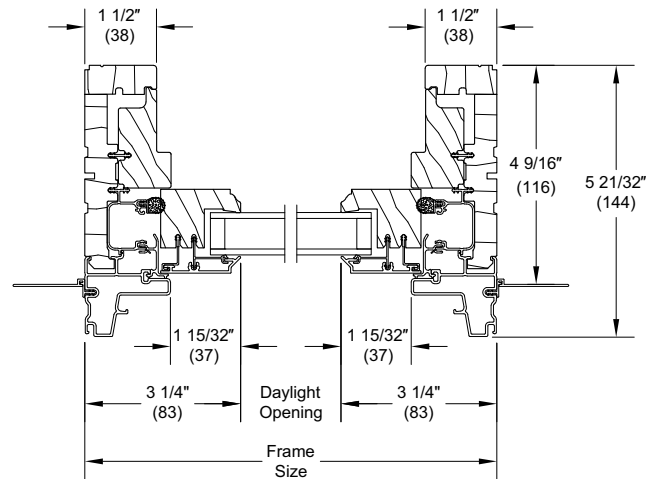
Section Details: Transom and Picture

Scale: 3" = 1' 0"

Transom

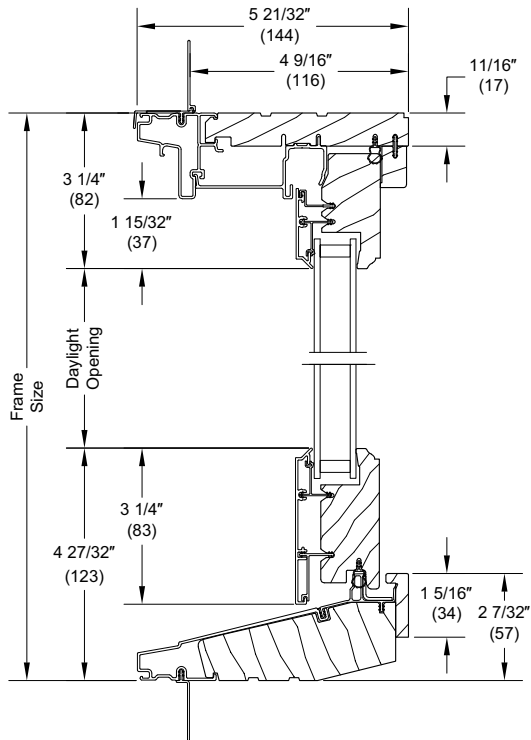


Head Jamb and Sill

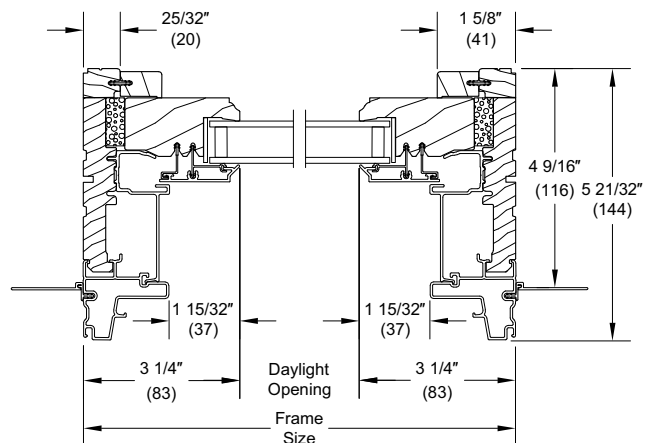


Jambs

Picture



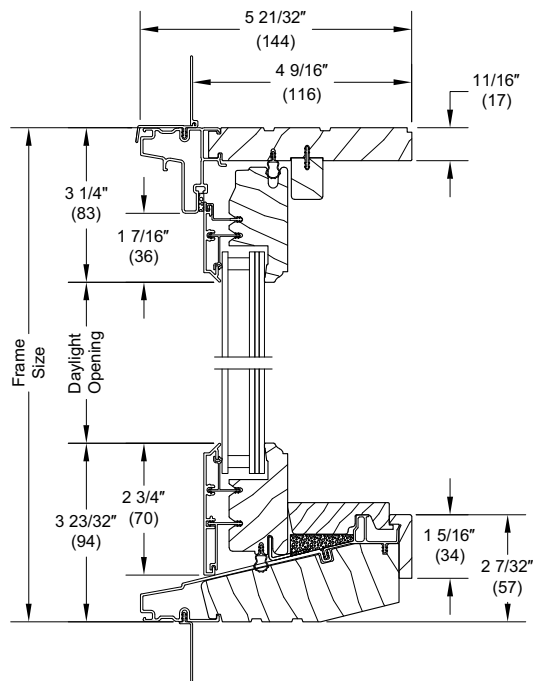
Head Jamb & Sill



Jambs

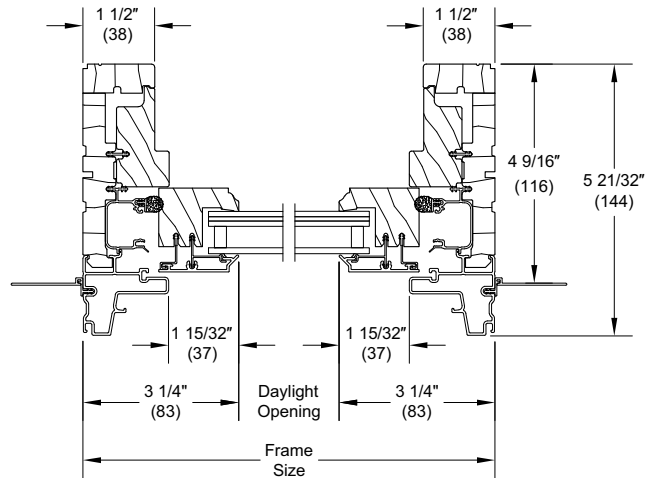
Section Details: IZ3 Transom and Picture

Scale: 3" = 1' 0"

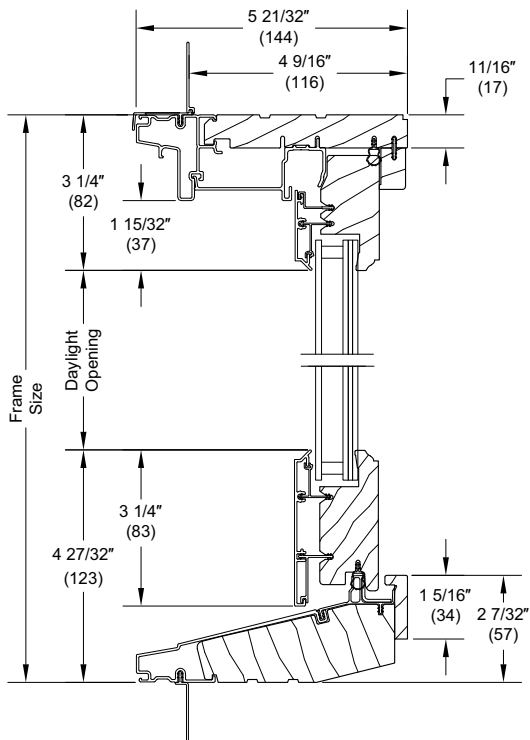


Head Jamb and Sill

Transom

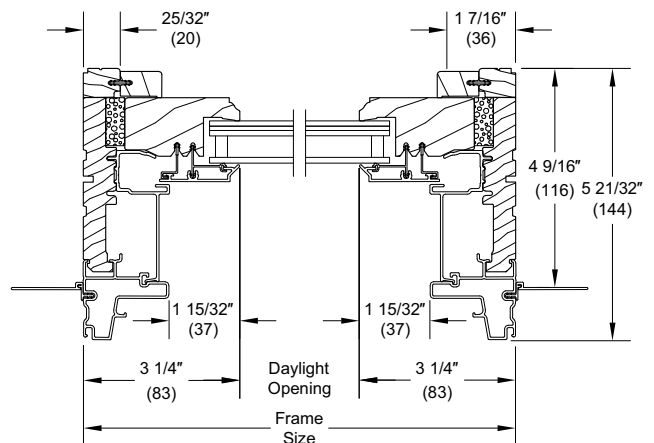


Jamb



Head Jamb & Sill

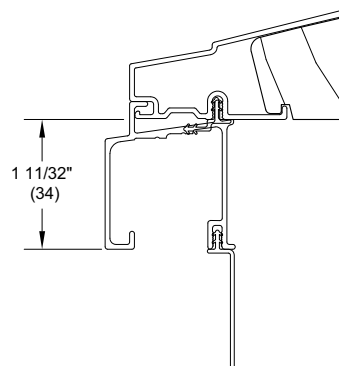
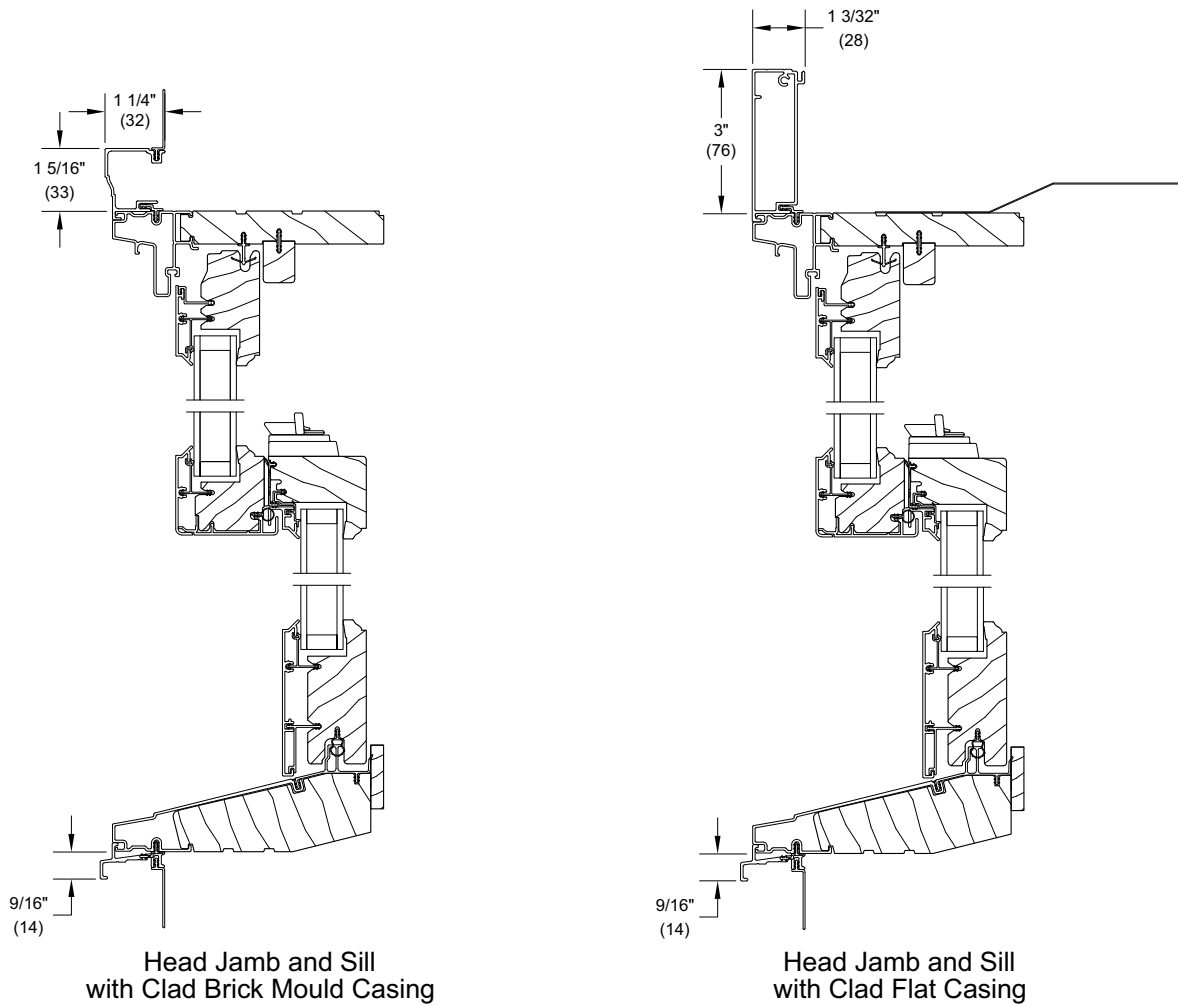
Picture



Jamb

Section Details: Casings

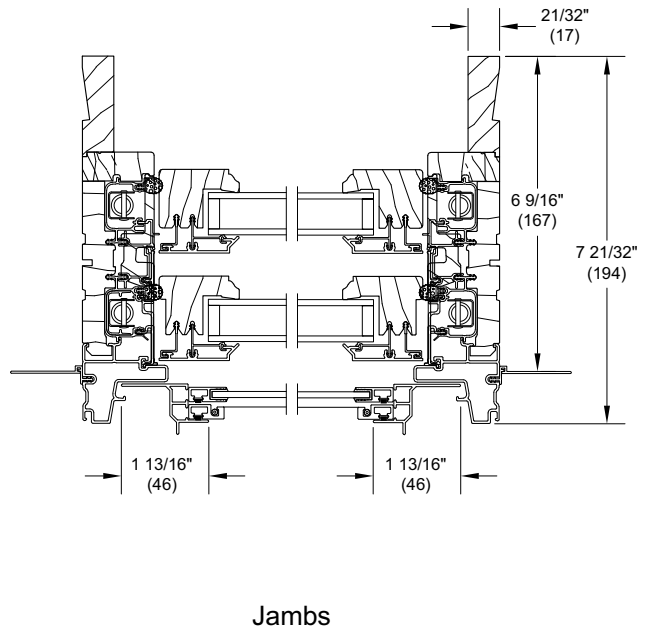
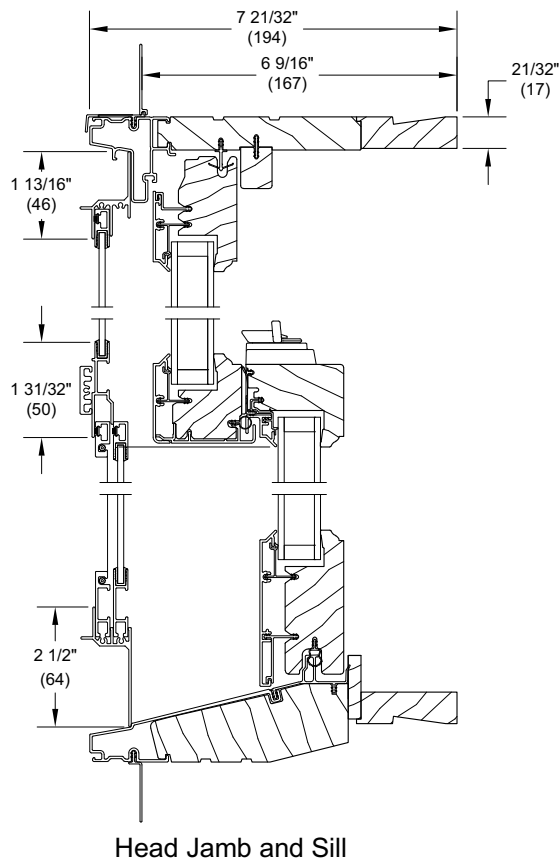
Scale: 3" = 1' 0"



Sill with (A217) Simulated Thick Subsill
Scale: 2:1

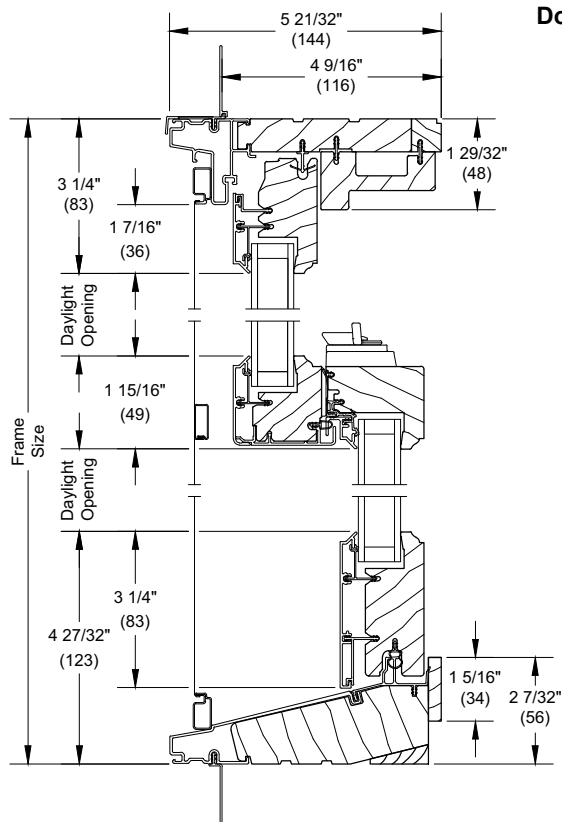
Section Details: 6 9/16" Combination

Scale: 3" = 1' 0"



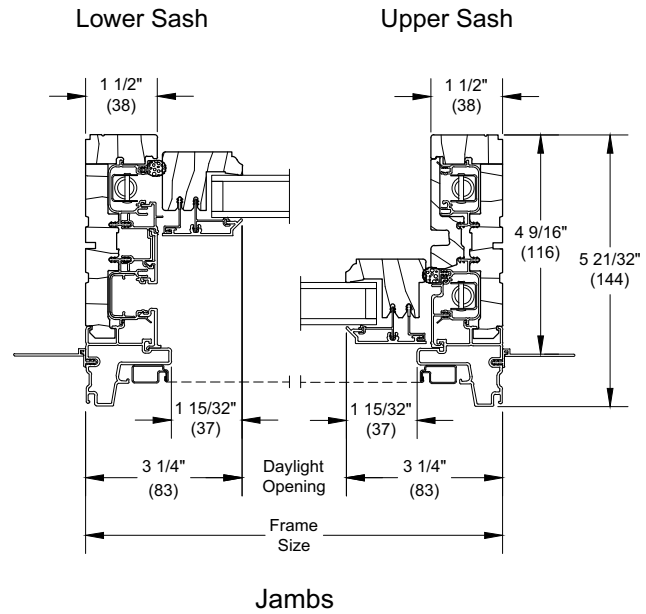
Section Details: Operating (with Lock Status Sensor)

Scale: 3" = 1' 0"

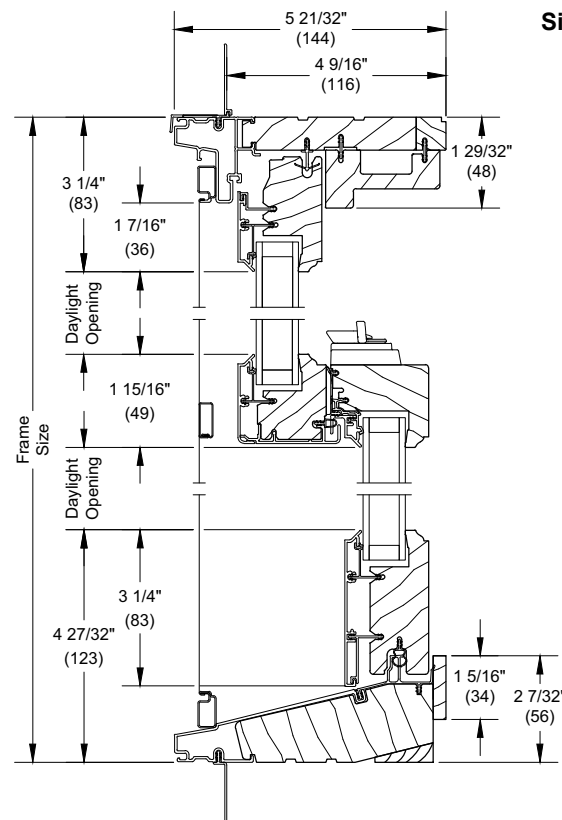


Head Jamb and Sill

Double Hung

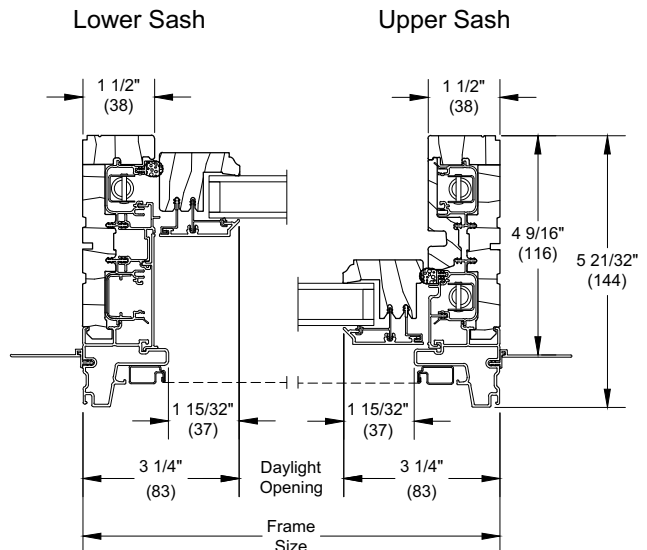


Jambs



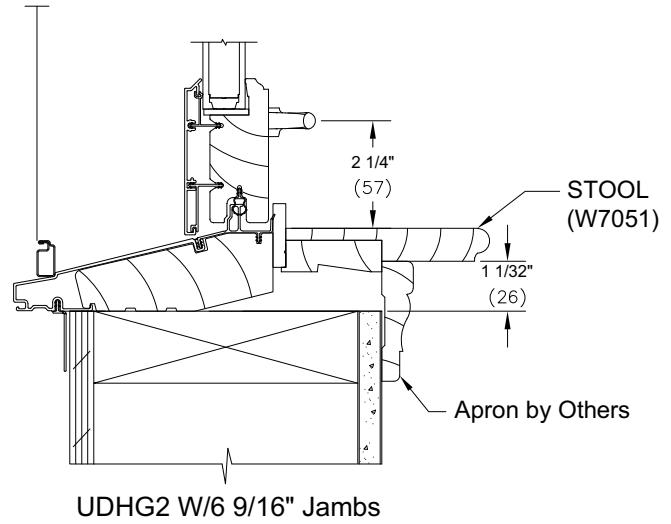
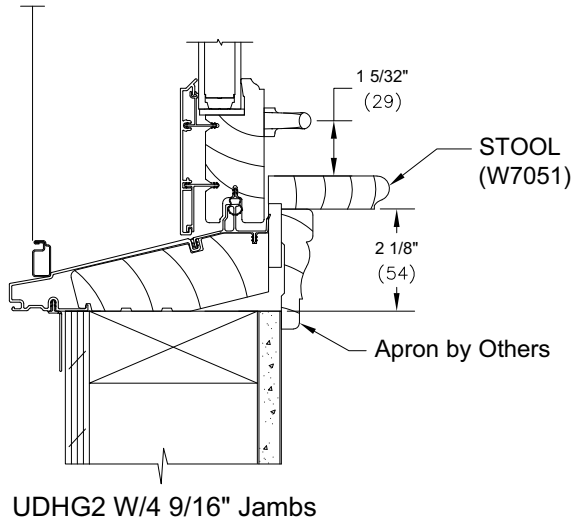
Head Jamb and Sill

Single Hung



Jambs

Ultimate Double Hung G2 Stool and Apron Details



NOTE: Stool is field-applied only.

Bows and Bays: Min/Max Sizing and Projection

Configuration	Rough Opening									
	Width		x	Height		Width		x	Height	
	in	mm		in	mm	in	mm		in	mm
Bow - 3 Wide	65 15/32	(1663)	x	33 5/32	(842)	136 7/16	(3466)	x	81 5/32	(2061)
Bow - 4 Wide	86 3/8	(2194)	x	33 5/32	(842)	164 3/16	(4170)	x	81 5/32	(2061)
Bow - 5 Wide	106 11/32	(2701)	x	33 5/32	(842)	163 3/4	(4159)	x	93 5/32	(2366)
Bow - 6 Wide	125 5/32	(3179)	x	33 5/32	(842)	147 5/8	(3750)	x	93 5/32	(2366)
Bay - 30°	63 11/32	(1609)	x	33 5/32	(842)	128 29/32	(3274)	x	81 5/32	(2061)
Bay - 45°	58 5/16	(1481)	x	33 5/32	(842)	116 1/4	(2953)	x	81 5/32	(2061)
Bay - 90°	23	(584)	x	32 7/8	(835)	47	(1194)	x	80 7/8	(2054)

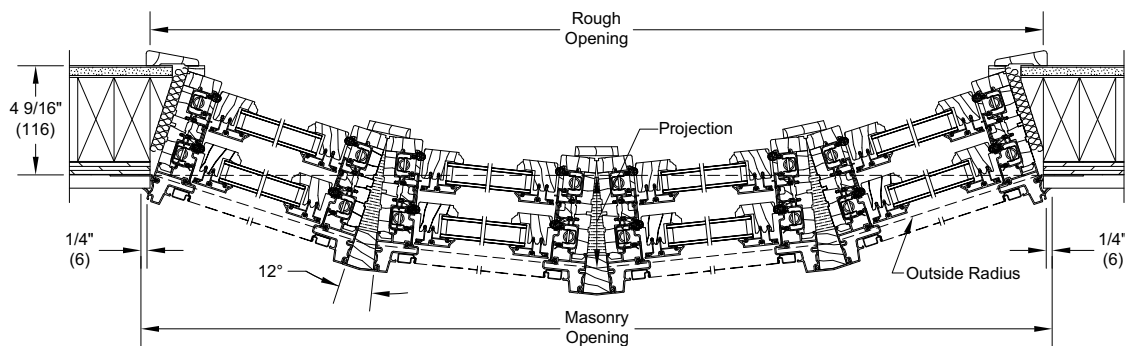
Configuration	Projection Depth			
	Minimum		Maximum	
	in	mm	in	mm
Bow - 3 Wide	3 13/32	(87)	7 9/16	(192)
Bow - 4 Wide	6 7/8	(175)	15 1/8	(384)
Bow - 5 Wide	10 1/4	(260)	20 1/16	(510)
Bow - 6 Wide	15 1/4	(387)	26 7/32	(666)
Bay - 30°	8 5/8	(219)	18 5/8	(473)
Bay - 45°	12 21/32	(321)	26 13/16	(681)
Bay - 90°	22 1/16	(560)	42 1/16	(1068)

Bows and Bays: Measurement Conversions

Unit Measurements		Width		Height	
From	To				
Rough Opening - 30° Bay		in	mm	in	mm
Masonry Opening with BMC	Rough Opening (w/ head and seat boards)	-3 25/32	(96)	-1/4	(06)
Masonry Opening w/out BMC	Rough Opening (w/ head and seat boards)	-1 7/32	(31)	+ 3/8	(10)
Rough Opening - 45° Bay		in	mm	in	mm
Masonry Opening with BMC	Rough Opening (w/ head and seat boards)	-4 31/32	(126)	-1/4	(06)
Masonry Opening w/out BMC	Rough Opening (w/ head and seat boards)	-1 13/16	(46)	+ 3/8	(10)
Rough Opening - 90° Bay		in	mm	in	mm
Masonry Opening with BMC	Rough Opening (w/ head and seat boards)	-10 3/16	(259)	-1/4	(06)
Masonry Opening w/out BMC	Rough Opening (w/ head and seat boards)	-10 3/16	(259)	+ 3/8	(10)
Rough Opening - 3W Bow		in	mm	in	mm
Masonry Opening with BMC	Rough Opening (w/ head and seat boards)	-2 45/64	(69)	-25/32	(20)
Masonry Opening w/out BMC	Rough Opening (w/ head and seat boards)	-37/64	(15)	+ 1/4	(06)
Rough Opening - 4W Bow		in	mm	in	mm
Masonry Opening with BMC	Rough Opening (w/ head and seat boards)	-3 1/32	(77)	-25/32	(20)
Masonry Opening w/out BMC	Rough Opening (w/ head and seat boards)	-51/64	(20)	+ 1/4	(06)
Rough Opening - 5W Bow		in	mm	in	mm
Masonry Opening with BMC	Rough Opening (w/ head and seat boards)	-3 25/64	(86)	-25/32	(20)
Masonry Opening w/out BMC	Rough Opening (w/ head and seat boards)	-1 1/64	(26)	+ 1/4	(06)
Rough Opening - 6W Bow		in	mm	in	mm
Masonry Opening with BMC	Rough Opening (w/ head and seat boards)	-3 25/32	(96)	-25/32	(20)
Masonry Opening w/out BMC	Rough Opening (w/ head and seat boards)	-1 7/32	(31)	+ 1/4	(06)

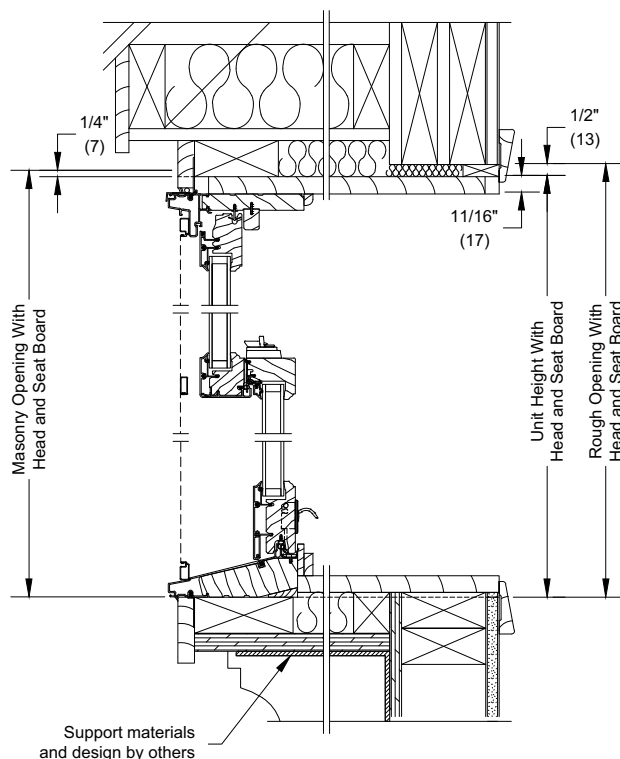
Bow Rough Opening and Projection

Call Number (Width)	Number Wide	Bow					
		MO		RO		Projection	
16	3	5-6 1/16	(1678)	5-5 31/64	(1663)	0-4 35/64	(115)
16	4	7-3 11/64	(2214)	7-2 23/64	(2194)	0-9 3/32	(231)
16	5	8-11 11/32	(2726)	8-10 21/64	(2701)	1-1 35/64	(344)
16	6	10-6 11/32	(3209)	10-5 1/8	(3178)	1-8 11/64	(512)
20	3	6-5 57/64	(1979)	6-5 5/16	(1964)	0-5 3/8	(137)
20	4	8-6 47/64	(2609)	8-5 59/64	(2589)	0-10 3/4	(273)
20	5	10-6 15/32	(3212)	10-5 29/64	(3187)	1-4	(406)
20	6	12-4 27/32	(3781)	12-3 5/8	(3750)	1-11 53/64	(605)
24	3	7-5 23/32	(2279)	7-5 9/64	(2264)	0-6 13/64	(158)
24	4	9-10 19/64	(3005)	9-9 1/2	(2984)	1-0 13/32	(315)
24	5	12-1 39/64	(3698)	12-0 19/32	(3673)	1-6 29/64	(469)
26	3	7-11 41/64	(2429)	7-11 1/16	(2414)	0-6 5/8	(168)
26	4	10-6 5/64	(3202)	10-5 9/32	(3182)	1-1 15/64	(336)
26	5	12-11 11/64	(3941)	12-10 5/32	(3915)	1-7 11/16	(500)
28	3	8-5 35/64	(2579)	8-4 31/32	(2565)	0-7 3/64	(179)
28	4	11-1 55/64	(3400)	11-1 1/16	(3380)	1-2 1/16	(357)
28	5	13-8 47/64	(4184)	13-7 23/32	(4158)	1-8 59/64	(531)
30	3	8-11 15/32	(2730)	8-10 57/64	(2715)	0-7 29/64	(189)
30	4	11-9 41/64	(3598)	11-8 27/32	(3577)	1-2 57/64	(378)
32	3	9-5 3/8	(2880)	9-4 51/64	(2865)	0-7 7/8	(200)
32	4	12-5 27/64	(3795)	12-4 5/8	(3775)	1-3 23/32	(399)
36	3	10-5 7/32	(3180)	10-4 5/8	(3166)	0-8 45/64	(221)
36	4	13-8 63/64	(4191)	13-8 3/16	(4170)	1-5 3/8	(441)
40	3	11-5 3/64	(3481)	11-4 29/64	(3466)	0-9 17/32	(242)



Bows and Bays: Standard Heights

Call Number Height	MO Height (w/head&seat boards)		RO Height (w/ head & seat boards)		Frame Size Height (w/ head & seat boards)	
	ft-in	mm	ft-in	mm	ft-in	mm
12	2-8 29/32	(836)	2-9 5/32	(842)	2-8 3/8	(822)
14	3-0 29/32	(937)	3-1 5/32	(944)	3-0 3/8	(924)
16	3-4 29/32	(1039)	3-5 5/32	(1045)	3-4 3/8	(1026)
18	3-8 29/32	(1141)	3-9 5/32	(1147)	3-8 3/8	(1127)
20	4-0 29/32	(1242)	4-1 5/32	(1249)	4-0 3/8	(1229)
22	4-4 29/32	(1344)	4-5 5/32	(1350)	4-4 3/8	(1330)
24	4-8 29/32	(1445)	4-9 5/32	(1452)	4-8 3/8	(1432)
26	5-0 29/32	(1547)	5-1 5/32	(1553)	5-0 3/8	(1534)
28	5-4 29/32	(1649)	5-5 5/32	(1655)	5-4 3/8	(1635)
30	5-8 29/32	(1750)	5-9 5/32	(1757)	5-8 3/8	(1737)
32	6-0 29/32	(1852)	6-1 5/32	(1858)	6-0 3/8	(1838)
34	6-4 29/32	(1953)	6-5 5/32	(1960)	6-4 3/8	(1940)
36	6-8 29/32	(2055)	6-9 5/32	(2061)	6-8 3/8	(2042)
40	7-4 29/32	(2258)	7-5 5/32	(2265)	7-4 3/8	(2245)
42	7-8 29/32	(2360)	7-9 5/32	(2366)	7-8 3/8	(2346)



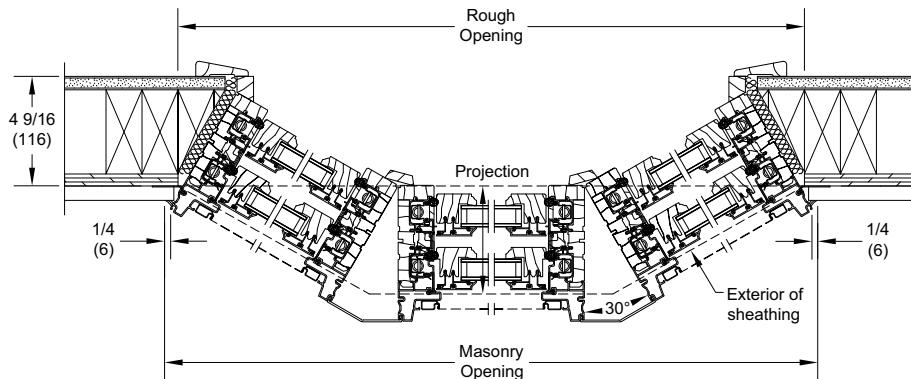
Bay Standard Width Call Number: 30° - Operable Center Unit

Call Number (Width)			30° Bay					
Side	Center	Side	MO		RO		Projection	
16	16	16	5-4 35/64	(1640)	5-3 21/64	(1609)	0-11 19/64	(287)
16	20	16	5-8 35/64	(1741)	5-7 21/64	(1710)	0-11 19/64	(287)
16	24	16	6-0 35/64	(1843)	5-11 21/64	(1812)	0-11 19/64	(287)
16	26	16	6-2 35/64	(1894)	6-1 21/64	(1863)	0-11 19/64	(287)
16	28	16	6-4 35/64	(1944)	6-3 21/64	(1914)	0-11 19/64	(287)
16	30	16	6-6 35/64	(1995)	6-5 21/64	(1964)	0-11 19/64	(287)
16	32	16	6-8 35/64	(2046)	6-7 21/64	(2015)	0-11 19/64	(287)
16	36	16	7-0 35/64	(2148)	6-11 21/64	(2117)	0-11 19/64	(287)
16	40	16	7-4 35/64	(2249)	7-3 21/64	(2218)	0-11 19/64	(287)
20	20	20	6-3 31/64	(1917)	6-2 17/64	(1886)	1-1 19/64	(338)
20	24	20	6-7 31/64	(2019)	6-6 17/64	(1988)	1-1 19/64	(338)
20	26	20	6-9 31/64	(2070)	6-8 17/64	(2039)	1-1 19/64	(338)
20	28	20	6-11 31/64	(2120)	6-10 17/64	(2089)	1-1 19/64	(338)
20	30	20	7-1 31/64	(2171)	7-0 17/64	(2140)	1-1 19/64	(338)
20	32	20	7-3 31/64	(2222)	7-2 17/64	(2191)	1-1 19/64	(338)
20	36	20	7-7 31/64	(2324)	7-6 17/64	(2293)	1-1 19/64	(338)
20	40	20	7-11 31/64	(2425)	7-10 17/64	(2394)	1-1 19/64	(338)
24	24	24	7-2 13/32	(2195)	7-1 3/16	(2164)	1-3 19/64	(389)
24	26	24	7-4 13/32	(2246)	7-3 3/16	(2215)	1-3 19/64	(389)
24	28	24	7-6 13/32	(2296)	7-5 3/16	(2265)	1-3 19/64	(389)
24	30	24	7-8 13/32	(2347)	7-7 3/16	(2316)	1-3 19/64	(389)
24	32	24	7-10 13/32	(2398)	7-9 3/16	(2367)	1-3 19/64	(389)
24	36	24	8-2 13/32	(2500)	8-1 3/16	(2469)	1-3 19/64	(389)
24	40	24	8-6 13/32	(2601)	8-5 3/16	(2570)	1-3 19/64	(389)
26	26	26	7-7 7/8	(2334)	7-6 21/32	(2303)	1-4 19/64	(414)
26	28	26	7-9 7/8	(2384)	7-8 21/32	(2353)	1-4 19/64	(414)
26	30	26	7-11 7/8	(2435)	7-10 21/32	(2404)	1-4 19/64	(414)
26	32	26	8-1 7/8	(2486)	8-0 21/32	(2455)	1-4 19/64	(414)
26	36	26	8-5 7/8	(2588)	8-4 21/32	(2557)	1-4 19/64	(414)
26	40	26	8-9 7/8	(2689)	8-8 21/32	(2658)	1-4 19/64	(414)
28	28	28	8-1 11/32	(2472)	8-0 1/8	(2441)	1-5 19/64	(439)
28	30	28	8-3 11/32	(2523)	8-2 1/8	(2492)	1-5 19/64	(439)
28	32	28	8-5 11/32	(2574)	8-4 1/8	(2543)	1-5 19/64	(439)
28	36	28	8-9 11/32	(2676)	8-8 1/8	(2645)	1-5 19/64	(439)
28	40	28	9-1 11/32	(2777)	9-0 1/8	(2746)	1-5 19/64	(439)
30	30	30	8-6 51/64	(2611)	8-5 37/64	(2580)	1-6 19/64	(465)
30	32	30	8-8 51/64	(2662)	8-7 37/64	(2631)	1-6 19/64	(465)
30	36	30	9-0 51/64	(2764)	8-11 37/64	(2733)	1-6 19/64	(465)
30	40	30	9-4 51/64	(2865)	9-3 37/64	(2834)	1-6 19/64	(465)
32	32	32	9-0 17/64	(2750)	8-11 3/64	(2719)	1-7 19/64	(490)
32	36	32	9-4 17/64	(2852)	9-3 3/64	(2821)	1-7 19/64	(490)
32	40	32	9-8 17/64	(2953)	9-7 3/64	(2922)	1-7 19/64	(490)
36	36	36	9-11 3/16	(3028)	9-9 31/32	(2997)	1-9 19/64	(541)
36	40	36	10-3 3/16	(3129)	10-1 31/32	(3098)	1-9 19/64	(541)
40	40	40	10-10 1/8	(3305)	10-8 29/32	(3274)	1-11 19/64	(592)

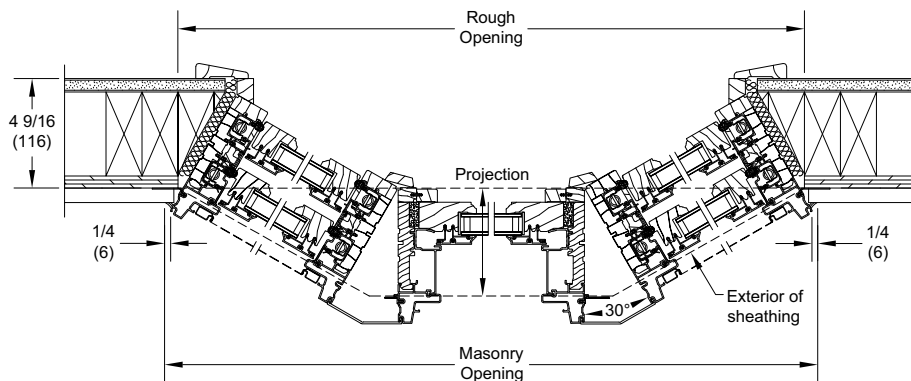
Bay Section Details: 30°

Not to Scale

Operating Center Unit



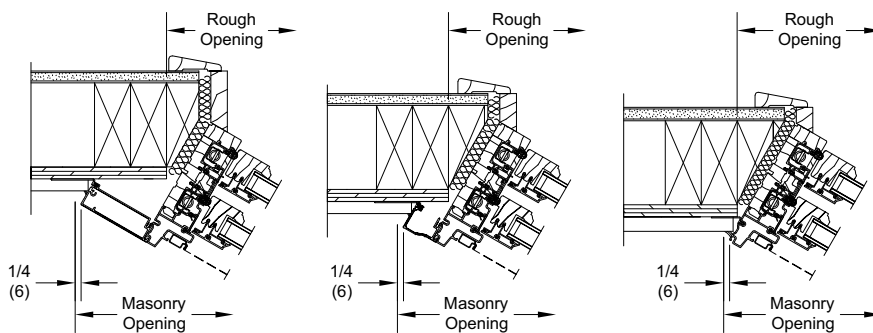
Picture Center Unit



Flat Casing

Brick Mould Casing

No Casing



NOTE: 30° UDHG2 Bay with optional Brick Mould Casing. Bow or Bay assemblies with clad brick mould casing use enclosed profile casing. For 30° bay masonry opening widths using clad brick mould casing, add 3 21/32" (93) to the rough opening width.

30° UDHG2 Bay with optional 3 1/2" (89) Flat Casing. Bow or bay assemblies with clad flat casing use enclosed profile casing. For 30° bay masonry opening widths using clad flat casing, add 6 7/16" (164) to the rough opening width.

Bay Rough Opening and Projection Calculations: 30°

Ultimate Double Hung G2 Bay	
30-Degree (no casing)	
Projection	(OM width of flanker unit PLUS 1.223) x 0.5
Rough Opening Width	(Projection x 1.732) x 2 PLUS 2.82 + Width of Center Unit
Masonry Opening Unit	Add 1 7/32" (31) to Rough Opening width
Rough Opening Height (with Head and Seat boards)	OM height on center unit(s) PLUS 25/32" (20)
Masonry Opening Height (with Head and Seat boards)	Rough Opening height PLUS 1/4" (6)

NOTE: If no head board, Deduct 11/16" (17) from Rough Opening Height

Clad BMC or Flat Casing will change Rough Opening and Projection. Contact your Marvin representative.

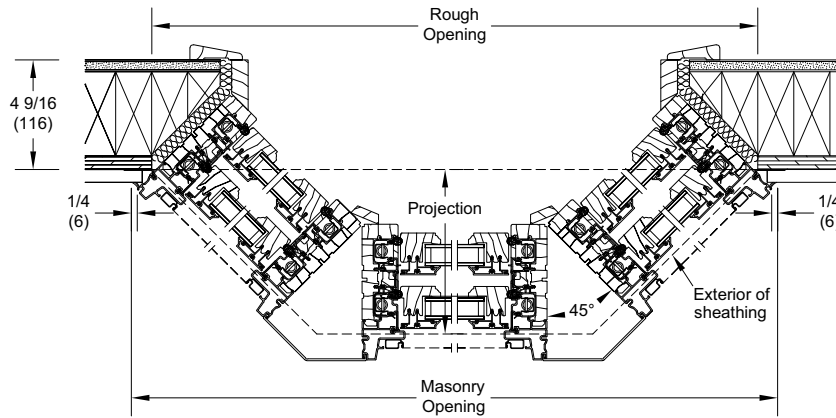
Bay Standard Width Call Number: 45° - Operable Center Unit

Call Number (Width)			45° Bay					
Side	Center	Side	MO		RO		Projection	
16	16	16	5-0 7/64	(1527)	4-10 5/16	(1481)	1-4 29/64	(418)
16	20	16	4-8 1/2	(1435)	4-6 45/64	(1389)	1-0 41/64	(321)
16	24	16	5-0 1/2	(1537)	4-10 45/64	(1491)	1-0 41/64	(321)
16	26	16	5-2 1/2	(1587)	5-0 45/64	(1542)	1-0 41/64	(321)
16	28	16	5-4 1/2	(1638)	5-2 45/64	(1593)	1-0 41/64	(321)
16	30	16	5-6 1/2	(1689)	5-4 45/64	(1643)	1-0 41/64	(321)
16	32	16	5-8 1/2	(1740)	5-6 45/64	(1694)	1-0 41/64	(321)
16	36	16	6-0 1/2	(1841)	5-10 45/64	(1796)	1-0 41/64	(321)
16	40	16	6-4 1/2	(1943)	6-2 45/64	(1897)	1-0 41/64	(321)
20	20	20	5-2 5/32	(1579)	5-0 23/64	(1533)	1-3 15/32	(393)
20	24	20	5-6 5/32	(1680)	5-4 23/64	(1635)	1-3 15/32	(393)
20	26	20	5-8 5/32	(1731)	5-6 23/64	(1685)	1-3 15/32	(393)
20	28	20	5-10 5/32	(1782)	5-8 23/64	(1736)	1-3 15/32	(393)
20	30	20	6-0 5/32	(1833)	5-10 23/64	(1787)	1-3 15/32	(393)
20	32	20	6-2 5/32	(1884)	6-0 23/64	(1838)	1-3 15/32	(393)
20	36	20	6-6 5/32	(1985)	6-4 23/64	(1939)	1-3 15/32	(393)
20	40	20	6-10 5/32	(2087)	6-8 23/64	(2041)	1-3 15/32	(393)
24	24	24	5-11 13/16	(1824)	5-10 1/64	(1778)	1-6 19/64	(465)
24	26	24	6-1 13/16	(1875)	6-0 1/64	(1829)	1-6 19/64	(465)
24	28	24	6-3 13/16	(1926)	6-2 1/64	(1880)	1-6 19/64	(465)
24	30	24	6-5 13/16	(1976)	6-4 1/64	(1931)	1-6 19/64	(465)
24	32	24	6-7 13/16	(2027)	6-6 1/64	(1982)	1-6 19/64	(465)
24	36	24	6-11 13/16	(2129)	6-10 1/64	(2083)	1-6 19/64	(465)
24	40	24	7-3 13/16	(2230)	7-2 1/64	(2185)	1-6 19/64	(465)
26	26	26	6-4 41/64	(1947)	6-2 27/32	(1901)	1-7 23/32	(501)
26	28	26	6-6 41/64	(1997)	6-4 27/32	(1952)	1-7 23/32	(501)
26	30	26	6-8 41/64	(2048)	6-6 27/32	(2003)	1-7 23/32	(501)
26	32	26	6-10 41/64	(2099)	6-8 27/32	(2053)	1-7 23/32	(501)
26	36	26	7-2 41/64	(2201)	7-0 27/32	(2155)	1-7 23/32	(501)
26	40	26	7-6 41/64	(2302)	7-4 27/32	(2257)	1-7 23/32	(501)
28	28	28	6-9 15/32	(2069)	6-7 43/64	(2024)	1-9 1/8	(537)
28	30	28	6-11 15/32	(2120)	6-9 43/64	(2074)	1-9 1/8	(537)
28	32	28	7-1 15/32	(2171)	6-11 43/64	(2125)	1-9 1/8	(537)
28	36	28	7-5 15/32	(2272)	7-3 43/64	(2227)	1-9 1/8	(537)
28	40	28	7-9 15/32	(2374)	7-7 43/64	(2328)	1-9 1/8	(537)
30	30	30	7-2 19/64	(2192)	7-0 1/2	(2146)	1-10 35/64	(573)
30	32	30	7-4 19/64	(2243)	7-2 1/2	(2197)	1-10 35/64	(573)
30	36	30	7-8 19/64	(2344)	7-6 1/2	(2299)	1-10 35/64	(573)
30	40	30	8-0 19/64	(2446)	7-10 1/2	(2400)	1-10 35/64	(573)
32	32	32	7-7 1/8	(2315)	7-5 21/64	(2269)	1-11 61/64	(609)
32	36	32	7-11 1/8	(2416)	7-9 21/64	(2370)	1-11 61/64	(609)
32	40	32	8-3 1/8	(2518)	8-1 21/64	(2472)	1-11 61/64	(609)
36	36	36	8-4 25/32	(2560)	8-2 63/64	(2514)	2-2 25/32	(680)
36	40	36	8-8 25/32	(2661)	8-6 63/64	(2616)	2-2 25/32	(680)
40	40	40	9-2 7/16	(2805)	9-0 41/64	(2759)	2-5 39/64	(752)

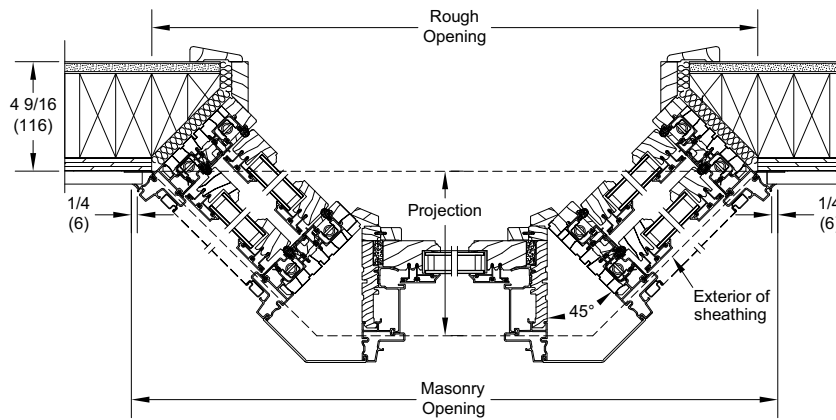
Bay Section Detail: 45°

Not to Scale

Operating Center Unit



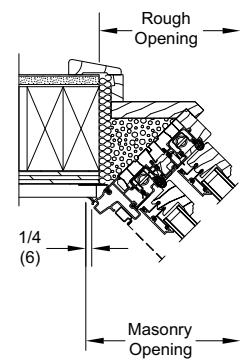
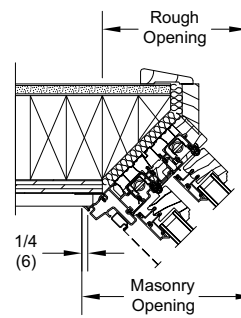
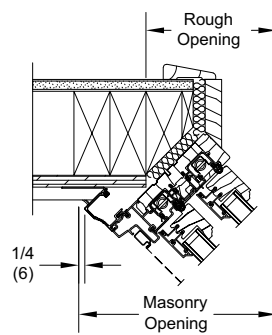
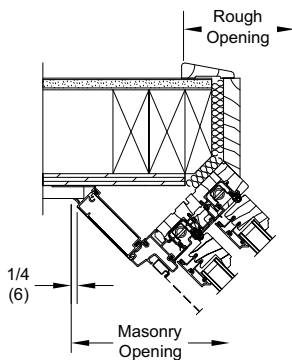
Picture Center Unit



Flat Casing

Brick Mould Casing

No Casing



NOTE: 45° UDHG2 Bay with optional Brick Mould Casing. Bow or bay assemblies with clad brick mould casing use enclosed profile casing. For 45° bay masonry opening widths using clad brick mould casing, add 3 7/8" (98) to the rough opening width.

45° UDHG2 Bay with optional Flat Casing. Bow or bay assemblies with clad flat casing use enclosed profile casing. For 45° bay masonry opening widths, using clad flat casing, add 6 1/16" (154) to the rough opening width.

Bay Rough Opening and Projection Calculations: 45°

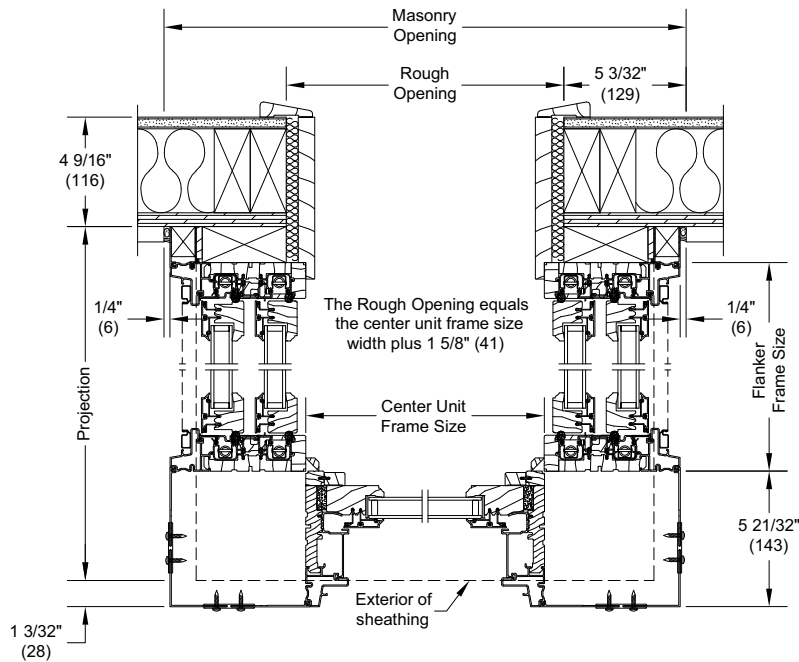
Ultimate Double Hung G2 Bay	
45-Degree (no casing)	
Projection	OM width of flanker unit PLUS 1.89 x 0.707
Rough Opening Width	Projection x 2 + 4.03 Plus OM width of Center Unit
Masonry Opening Width	Add 1 13/16" (46) to Rough Opening width
Rough Opening Height (with Head and Seat Boards)	OM height on center unit(s) Plus 25/32" (20)
Masonry Opening Height (with Head and Seat Boards)	Rough Opening height Minus 1 /4" (6)

NOTE: If no head board, Deduct 11/16" (17) from Rough Opening Height

Clad BMC or Flat Casing will change Rough Opening and Projection. Contact your Marvin representative.

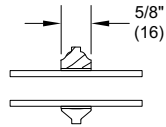
Bay Section Detail: 90°

Not to Scale

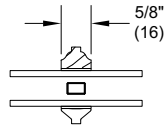


Ultimate Double Hung G2 Bay	
90-Degree (no casing)	
Projection	OM width of flanker unit PLUS 6 1/16" (154)
Rough Opening Width	OM width of Center Unit(s) PLUS 1 5/8" (41)
Masonry Opening Unit	Add 10 3/16" (259) to Rough Opening width
Rough Opening Height (with Head and Seat boards)	OM height on center unit(s) PLUS 25/32" (20)
Masonry Opening Height (with Head and Seat boards)	Rough Opening height MINUS 1/4" (6)

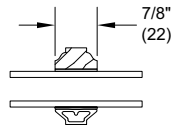
Lite Options



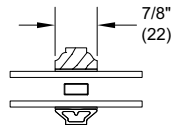
5/8" SDL



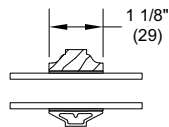
5/8" SDL
W/Spacer



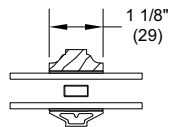
7/8" SDL



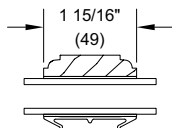
7/8" SDL
W/Spacer Bar



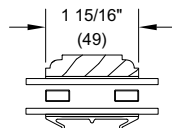
1 1/8" SDL



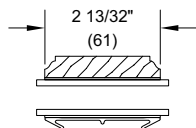
1 1/8" SDL
W/Spacer Bar



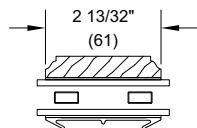
1 15/16 " SDL



1 15/16 " SDL
W/Two Spacer Bars



2 13/32" SDL

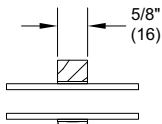


2 13/32" SDL
W/Two Spacer Bars

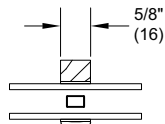
NOTE: Due to the inherent qualities of tempered glass, daylight gaps may be seen when using simulated divided lite bars. Daylight gaps could be visible between the internal spacer bar and surface applied bars when viewing from an acute angle to the glass on the following applications:

- Tempered glass over 72" high while using 5/8" SDL bars
- Tempered glass over 91" high while using 7/8" SDL bars.

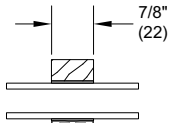
Optional Interior Square Simulated Divided Lite Option



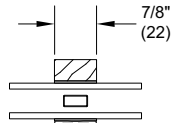
5/8" SDL



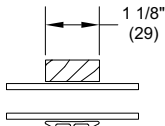
5/8" SDL
W/Spacer



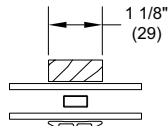
7/8" SDL



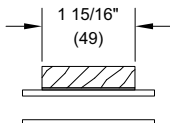
7/8" SDL
W/Spacer Bar



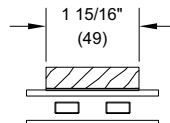
1 1/8" SDL



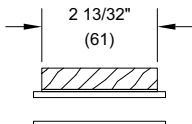
1 1/8" SDL
W/Spacer Bar



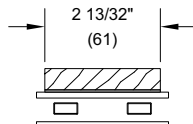
1 15/16" SDL



1 15/16" SDL
W/Two Spacer Bars



2 13/32" SDL



2 13/32" SDL
W/Two Spacer Bars

NOTE: Due to the inherent qualities of tempered glass, daylight gaps may be seen when using simulated divided lite bars. Daylight gaps could be visible between the internal spacer bar and surface applied bars when viewing from an acute angle to the glass on the following applications:

- Tempered glass over 72" high while using 5/8" SDL bars
- Tempered glass over 91" high while using 7/8" SDL bars.

Standard Divided Lite Options

SDL Patterns (5/8" or 7/8" SDL)

CN HEIGHT	CN Width												
	16	20	24	26	28	30	32	36	40	44	48	54	60
12	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	4W2H	4W2H	5W2H	5W2H
14	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	4W2H	4W2H	5W2H	5W2H
16	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	4W2H	4W2H	5W2H	5W2H
18	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	4W2H	4W2H	5W2H	5W2H
20	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	4W2H	4W2H	5W2H	5W2H
22	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	4W2H	4W2H	5W2H	5W2H
24	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	4W2H	4W2H	5W2H	5W2H
26	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	4W2H	4W2H	5W2H	5W2H
28	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	4W2H	4W2H	5W2H	5W2H
30	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	4W2H	4W2H	5W2H	5W2H
32	2W3H	3W3H	3W3H	3W3H	3W3H	3W3H	4W3H	4W3H	4W3H	4W3H	4W3H	5W3H	5W3H
34	2W3H	3W3H	3W3H	3W3H	3W3H	3W3H	4W3H	4W3H	4W3H	4W3H	4W3H	5W3H	5W3H
36	2W3H	3W3H	3W3H	3W3H	3W3H	3W3H	4W3H	4W3H	4W3H	4W3H	4W3H	5W3H	5W3H
40	2W4H	3W4H	3W4H	3W4H	3W4H	3W4H	4W4H	4W4H	4W4H	4W4H	4W4H	5W4H	5W4H
42	2W4H	3W4H	3W4H	3W4H	3W4H	3W4H	4W4H	4W4H	4W4H	4W4H	4W4H	5W4H	5W4H
50	2W4H	3W4H	3W4H	3W4H	3W4H	3W4H	4W4H	4W4H	4W4H	4W4H	4W4H	5W4H	5W4H
56	2W4H	3W4H	3W4H	3W4H	3W4H	3W4H	4W4H	4W4H	4W4H	4W4H	4W4H	5W4H	5W4H
60	2W4H	3W4H	3W4H	3W4H	3W4H	3W4H	4W4H	4W4H	4W4H	4W4H	4W4H	5W4H	5W4H

SDL Patterns (1 1/8" SDL)

CN HEIGHT	CN Width												
	16	20	24	26	28	30	32	36	40	44	48	54	60
12	2W1H	2W1H	3W1H	3W1H	3W1H	3W1H	3W1H	3W1H	4W1H	4W1H	4W1H	5W1H	5W1H
14	2W1H	2W1H	3W1H	3W1H	3W1H	3W1H	3W1H	3W1H	4W1H	4W1H	4W1H	5W1H	5W1H
16	2W1H	2W1H	3W1H	3W1H	3W1H	3W1H	3W1H	3W1H	4W1H	4W1H	4W1H	5W1H	5W1H
18	2W2H	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	5W2H	5W2H
20	2W2H	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	5W2H	5W2H
22	2W2H	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	5W2H	5W2H
24	2W2H	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	5W2H	5W2H
26	2W2H	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	5W2H	5W2H
28	2W2H	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	5W2H	5W2H
30	2W2H	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	5W2H	5W2H
32	2W3H	2W3H	3W3H	3W3H	3W3H	3W3H	3W3H	3W3H	4W3H	4W3H	4W3H	5W3H	5W3H
34	2W3H	2W3H	3W3H	3W3H	3W3H	3W3H	3W3H	3W3H	4W3H	4W3H	4W3H	5W3H	5W3H
36	2W3H	2W3H	3W3H	3W3H	3W3H	3W3H	3W3H	3W3H	4W3H	4W3H	4W3H	5W3H	5W3H
40	2W4H	2W4H	3W4H	3W4H	3W4H	3W4H	3W4H	3W4H	4W4H	4W4H	4W4H	5W4H	5W4H
42	2W4H	2W4H	3W4H	3W4H	3W4H	3W4H	3W4H	3W4H	4W4H	4W4H	4W4H	5W4H	5W4H
50	2W4H	2W4H	3W4H	3W4H	3W4H	3W4H	3W4H	3W4H	4W4H	4W4H	4W4H	5W4H	5W4H
56	2W4H	2W4H	3W4H	3W4H	3W4H	3W4H	3W4H	3W4H	4W4H	4W4H	4W4H	5W4H	5W4H
60	2W4H	2W4H	3W4H	3W4H	3W4H	3W4H	3W4H	3W4H	4W4H	4W4H	4W4H	5W4H	5W4H

Standard Divided Lite Options

Pictures

Picture - 1 1/8" SDL or 1 1/8" Grille					
CN HEIGHT	CN Width				
	40	48	52	60	68
38	3W2H	4W2H	4W2H	5W2H	6W2H
42	3W4H	4W4H	4W4H	5W4H	6W4H
46	3W4H	4W4H	4W4H	5W4H	6W4H
50	3W4H	4W4H	4W4H	5W4H	6W4H
54	3W4H	4W4H	4W4H	5W4H	6W4H
58	3W4H	4W4H	4W4H	5W4H	6W4H
62	3W4H	4W4H	4W4H	5W4H	6W4H
66	3W4H	4W4H	4W4H	5W4H	6W4H
70	3W6H	4W6H	4W6H	5W6H	6W6H
74	3W6H	4W6H	4W6H	5W6H	6W6H
78	3W6H	4W6H	4W6H	5W6H	6W6H
86	3W8H	4W8H	4W8H	5W8H	6W8H
90	3W8H	4W8H	4W8H	5W8H	6W8H

Picture - 5/8" or 7/8" SDL, 3/4" Grille, or GBG					
CN HEIGHT	CN Width				
	40	48	52	60	68
38	4W4H	5W4H	5W4H	6W4H	7W4H
42	4W4H	5W4H	5W4H	6W4H	7W4H
46	4W4H	5W4H	5W4H	6W4H	7W4H
50	4W4H	5W4H	5W4H	6W4H	7W4H
54	4W4H	5W4H	5W4H	6W4H	7W4H
58	4W4H	5W4H	5W4H	6W4H	7W4H
62	4W4H	5W4H	5W4H	6W4H	7W4H
66	4W4H	5W4H	5W4H	6W4H	7W4H
70	4W6H	5W6H	5W6H	6W6H	7W6H
74	4W6H	5W6H	5W6H	6W6H	7W6H
78	4W6H	5W6H	5W6H	6W6H	7W6H
86	4W8H	5W8H	5W8H	6W8H	7W8H
90	4W8H	5W8H	5W8H	6W8H	7W8H

Transoms

Transom - 1 1/8" SDL or 1 1/8" Grille										
CN HEIGHT	CN Width									
	16	20	24	26	28	30	32	36	40	54
12	2W1H	2W1H	3W1H	3W1H	3W1H	3W1H	3W1H	3W1H	4W1H	5W1H
20	2W2H	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	5W2H

TRANSOM - 5/8, or 7/8, SDL, 3/4, Grille, or GBG										
CN HEIGHT	CN Width									
	16	20	24	26	28	30	32	36	40	54
12	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	5W2H
20	2W2H	3W2H	3W2H	3W2H	3W2H	3W2H	4W2H	4W2H	4W2H	5W2H