

# Wood Ultimate Double Hung

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# Wood Ultimate Double Hung

## Unit Features

Wood Ultimate Double Hung: WUDH

Wood Ultimate Double Hung Transom: WUDHT

Wood Ultimate Double Hung Picture: WUDHP

### Operating Hardware:

- Sash lock and keeper: Open style crescent cam lock with sash release lever, surface mounted. Color: Satin Taupe.
  - Optional Colors: White, Brass, Satin chrome, Antique Brass, Bronze, Oil Rubbed Bronze, Satin Nickel.
- Balance System: Block and tackle balance system.
- Optional Sash lift: same colors as offered in locks.
- Optional window opening control device field applied.

### Optional Glass: WUDH - 7/8" (22) glazing, WUDHP 2" - 1" (25) glazing only

- Tripane Low E1 outer piece and Low E1 Argon inner piece
- Tripane Low E1 outer piece and Low E1 Krypton-Argon inner piece
- Tripane Low E2 outer piece and Low E2 Argon inner piece
- Tripane Low E2 outer piece and Low E2 Krypton-Argon inner piece
- Tripane Low E3 outer piece and Low E1 Argon inner piece
- Tripane Low E3 outer piece and Low E1 Krypton-Argon inner piece

### CE Optional Glazing:

- Glazing method: Insulating
- Glazing seal: Silicone glazed
- Standard glass is insulating Low E2 Argon or air
- Optional dual glazing available: Low E1 Argon or air, Low E3 Argon or air, Low E2/ERS argon or air, Low E3/ERS Argon or air, clear, laminated clear and tints, tempered, sandblasted
- Optional Tripane glass types for WUDH - 7/8" (22) glazing, WUDHP 2" - 1"(25) glazing only: Low E1/E1 Argon or Krypton-Argon, Low E2/E2 Argon or Krypton-Argon, Low E3/E1 Argon or Krypton-Argon
- Glass panes available in 3, 4, and 6 mm thicknesses
- Laminated panes available in 7.0 and 7.8 mm thicknesses
- Glazing will be altitude adjusted for higher elevations, Argon, Argon-Krypton, and Krypton gas not included

### CE Mulling Options:

- Muller assemblies up to 70 3/4" (1797) x 80 3/8" (2042) as 1H x multi-width
- Muller assemblies with 1" (25) LVL or 3/8" (10) aluminum mull reinforcement up to 124 7/8" (3172) x 100 3/8" (2550) as a multi-wide or multi-high assembly

# Wood Ultimate Double Hung

## Egress and Vent Openings: Standard Sill

CN	Opening Width		Opening Height Std. Sill Liner		Egress Opening		CN	Opening Width		Opening Height Std. Sill Liner		Egress Opening	
	ft - in	mm	ft - in	mm	ft <sup>2</sup>	m <sup>2</sup>		ft - in	mm	ft - in	mm	ft <sup>2</sup>	m <sup>2</sup>
1612	1-5 55/64	(454)	0-10 9/64	(257)	1.26	(0.12)	2612	2-3 55/64	(708)	0-10 9/64	(257)	1.96	(0.18)
1614	1-5 55/64	(454)	1-0 9/64	(308)	1.51	(0.14)	2614	2-3 55/64	(708)	1-0 9/64	(308)	2.35	(0.22)
1616	1-5 55/64	(454)	1-2 9/64	(359)	1.75	(0.16)	2616	2-3 55/64	(708)	1-2 9/64	(359)	2.74	(0.25)
1618	1-5 55/64	(454)	1-4 9/64	(410)	2.00	(0.19)	2618	2-3 55/64	(708)	1-4 9/64	(410)	3.12	(0.29)
1620	1-5 55/64	(454)	1-6 9/64	(461)	2.25	(0.21)	2620	2-3 55/64	(708)	1-6 9/64	(461)	3.51	(0.33)
1622	1-5 55/64	(454)	1-8 9/64	(511)	2.50	(0.23)	2622	2-3 55/64	(708)	1-8 9/64	(511)	3.90	(0.36)
1624	1-5 55/64	(454)	1-10 9/64	(562)	2.75	(0.26)	2624	2-3 55/64	(708)	1-10 9/64	(562)	4.28	(0.40)
1626	1-5 55/64	(454)	2-0 9/64	(613)	2.99	(0.28)	2626	2-3 55/64	(708)	2-0 9/64	(613)	4.67	(0.43)
1628	1-5 55/64	(454)	2-2 9/64	(664)	3.24	(0.30)	2628	2-3 55/64	(708)	2-2 9/64	(664)	5.06	(0.47)
1630	1-5 55/64	(454)	2-4 9/64	(715)	3.49	(0.32)	2630	2-3 55/64	(708)	2-4 9/64	(715)	5.44	(0.51)
1632	1-5 55/64	(454)	2-6 9/64	(765)	3.74	(0.35)	2632 E	2-3 55/64	(708)	2-6 9/64	(765)	5.83	(0.54)
1634	1-5 55/64	(454)	2-8 9/64	(816)	3.99	(0.37)	2634 E	2-3 55/64	(708)	2-8 9/64	(816)	6.22	(0.58)
1636	1-5 55/64	(454)	2-10 9/64	(867)	4.24	(0.39)	2636 E	2-3 55/64	(708)	2-10 9/64	(867)	6.61	(0.61)
1640	1-5 55/64	(454)	3-2 9/64	(969)	4.73	(0.44)	2640 E	2-3 55/64	(708)	3-2 9/64	(969)	7.38	(0.69)
1642	1-5 55/64	(454)	3-4 9/64	(1019)	4.98	(0.46)	2642 E	2-3 55/64	(708)	3-4 9/64	(1019)	7.77	(0.72)
2012	1-9 55/64	(555)	0-10 9/64	(257)	1.54	(0.14)	2812	2-5 55/64	(759)	0-10 9/64	(257)	2.10	(0.20)
2014	1-9 55/64	(555)	1-0 9/64	(308)	1.84	(0.17)	2814	2-5 55/64	(759)	1-0 9/64	(308)	2.52	(0.23)
2016	1-9 55/64	(555)	1-2 9/64	(359)	2.15	(0.20)	2816	2-5 55/64	(759)	1-2 9/64	(359)	2.93	(0.27)
2018	1-9 55/64	(555)	1-4 9/64	(410)	2.45	(0.23)	2818	2-5 55/64	(759)	1-4 9/64	(410)	3.35	(0.31)
2020	1-9 55/64	(555)	1-6 9/64	(461)	2.75	(0.26)	2820	2-5 55/64	(759)	1-6 9/64	(461)	3.76	(0.35)
2022	1-9 55/64	(555)	1-8 9/64	(511)	3.06	(0.28)	2822	2-5 55/64	(759)	1-8 9/64	(511)	4.18	(0.39)
2024	1-9 55/64	(555)	1-10 9/64	(562)	3.36	(0.31)	2824	2-5 55/64	(759)	1-10 9/64	(562)	4.59	(0.43)
2026	1-9 55/64	(555)	2-0 9/64	(613)	3.67	(0.34)	2826	2-5 55/64	(759)	2-0 9/64	(613)	5.01	(0.47)
2028	1-9 55/64	(555)	2-2 9/64	(664)	3.97	(0.37)	2828	2-5 55/64	(759)	2-2 9/64	(664)	5.42	(0.50)
2030	1-9 55/64	(555)	2-4 9/64	(715)	4.27	(0.40)	2830 E	2-5 55/64	(759)	2-4 9/64	(715)	5.84	(0.54)
2032	1-9 55/64	(555)	2-6 9/64	(765)	4.58	(0.43)	2832 E	2-5 55/64	(759)	2-6 9/64	(765)	6.25	(0.58)
2034	1-9 55/64	(555)	2-8 9/64	(816)	4.88	(0.45)	2834 E	2-5 55/64	(759)	2-8 9/64	(816)	6.67	(0.62)
2036	1-9 55/64	(555)	2-10 9/64	(867)	5.18	(0.48)	2836 E	2-5 55/64	(759)	2-10 9/64	(867)	7.08	(0.66)
2040 E	1-9 55/64	(555)	3-2 9/64	(969)	5.79	(0.54)	2840 E	2-5 55/64	(759)	3-2 9/64	(969)	7.91	(0.73)
2042 E	1-9 55/64	(555)	3-4 9/64	(1019)	6.09	(0.57)	2842 E	2-5 55/64	(759)	3-4 9/64	(1019)	8.32	(0.77)
2412	2-1 55/64	(657)	0-10 9/64	(257)	1.82	(0.17)	3012	2-7 55/64	(809)	0-10 9/64	(257)	2.24	(0.21)
2414	2-1 55/64	(657)	1-0 9/64	(308)	2.18	(0.20)	3014	2-7 55/64	(809)	1-0 9/64	(308)	2.69	(0.25)
2416	2-1 55/64	(657)	1-2 9/64	(359)	2.54	(0.24)	3016	2-7 55/64	(809)	1-2 9/64	(359)	3.13	(0.29)
2418	2-1 55/64	(657)	1-4 9/64	(410)	2.90	(0.27)	3018	2-7 55/64	(809)	1-4 9/64	(410)	3.57	(0.33)
2420	2-1 55/64	(657)	1-6 9/64	(461)	3.26	(0.30)	3020	2-7 55/64	(809)	1-6 9/64	(461)	4.01	(0.37)
2422	2-1 55/64	(657)	1-8 9/64	(511)	3.62	(0.34)	3022	2-7 55/64	(809)	1-8 9/64	(511)	4.46	(0.41)
2424	2-1 55/64	(657)	1-10 9/64	(562)	3.98	(0.37)	3024	2-7 55/64	(809)	1-10 9/64	(562)	4.90	(0.46)
2426	2-1 55/64	(657)	2-0 9/64	(613)	4.34	(0.40)	3026	2-7 55/64	(809)	2-0 9/64	(613)	5.34	(0.50)
2428	2-1 55/64	(657)	2-2 9/64	(664)	4.69	(0.44)	3028 E	2-7 55/64	(809)	2-2 9/64	(664)	5.78	(0.54)
2430	2-1 55/64	(657)	2-4 9/64	(715)	5.05	(0.47)	3030 E	2-7 55/64	(809)	2-4 9/64	(715)	6.23	(0.58)
2432	2-1 55/64	(657)	2-6 9/64	(765)	5.41	(0.50)	3032 E	2-7 55/64	(809)	2-6 9/64	(765)	6.67	(0.62)
2434 E	2-1 55/64	(657)	2-8 9/64	(816)	5.77	(0.54)	3034 E	2-7 55/64	(809)	2-8 9/64	(816)	7.11	(0.66)
2436 E	2-1 55/64	(657)	2-10 9/64	(867)	6.13	(0.57)	3036 E	2-7 55/64	(809)	2-10 9/64	(867)	7.55	(0.70)
2440 E	2-1 55/64	(657)	3-2 9/64	(969)	6.85	(0.64)	3040 E	2-7 55/64	(809)	3-2 9/64	(969)	8.44	(0.78)
2442 E	2-1 55/64	(657)	3-4 9/64	(1019)	7.21	(0.67)	3042 E	2-7 55/64	(809)	3-4 9/64	(1019)	8.88	(0.83)

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

Egress and Vent Openings: Standard Sill Liner

CN	Opening Width		Opening Height Std. Sill Liner		Egress Opening	
	ft - in	mm	ft - in	mm	ft <sup>2</sup>	m <sup>2</sup>
3212	2-9 55/64	(860)	0-10 9/64	(257)	2.38	(0.22)
3214	2-9 55/64	(860)	1-0 9/64	(308)	2.85	(0.27)
3216	2-9 55/64	(860)	1-2 9/64	(359)	3.32	(0.31)
3218	2-9 55/64	(860)	1-4 9/64	(410)	3.79	(0.35)
3220	2-9 55/64	(860)	1-6 9/64	(461)	4.27	(0.40)
3222	2-9 55/64	(860)	1-8 9/64	(511)	4.74	(0.44)
3224	2-9 55/64	(860)	1-10 9/64	(562)	5.21	(0.48)
3226	2-9 55/64	(860)	2-0 9/64	(613)	5.68	(0.53)
3228	E 2-9 55/64	(860)	2-2 9/64	(664)	6.15	(0.57)
3230	E 2-9 55/64	(860)	2-4 9/64	(715)	6.62	(0.61)
3232	E 2-9 55/64	(860)	2-6 9/64	(765)	7.09	(0.66)
3234	E 2-9 55/64	(860)	2-8 9/64	(816)	7.56	(0.70)
3236	E 2-9 55/64	(860)	2-10 9/64	(867)	8.03	(0.75)
3240	E 2-9 55/64	(860)	3-2 9/64	(969)	8.97	(0.83)
3242	E 2-9 55/64	(860)	3-4 9/64	(1019)	9.44	(0.88)
3612	3-1 55/64	(962)	0-10 9/64	(257)	2.67	(0.25)
3614	3-1 55/64	(962)	1-0 9/64	(308)	3.19	(0.30)
3616	3-1 55/64	(962)	1-2 9/64	(359)	3.72	(0.35)
3618	3-1 55/64	(962)	1-4 9/64	(410)	4.24	(0.39)
3620	3-1 55/64	(962)	1-6 9/64	(461)	4.77	(0.44)
3622	3-1 55/64	(962)	1-8 9/64	(511)	5.30	(0.49)
3624	3-1 55/64	(962)	1-10 9/64	(562)	5.82	(0.54)
3626	E 3-1 55/64	(962)	2-0 9/64	(613)	6.35	(0.59)
3628	E 3-1 55/64	(962)	2-2 9/64	(664)	6.87	(0.64)
3630	E 3-1 55/64	(962)	2-4 9/64	(715)	7.40	(0.69)
3632	E 3-1 55/64	(962)	2-6 9/64	(765)	7.92	(0.74)
3634	E 3-1 55/64	(962)	2-8 9/64	(816)	8.45	(0.79)
3636	E 3-1 55/64	(962)	2-10 9/64	(867)	8.98	(0.83)
3640	E 3-1 55/64	(962)	3-2 9/64	(969)	10.03	(0.93)
3642	E 3-1 55/64	(962)	3-4 9/64	(1019)	10.55	(0.98)
4012	3-5 55/64	(1063)	0-10 9/64	(257)	2.95	(0.27)
4014	3-5 55/64	(1063)	1-0 9/64	(308)	3.53	(0.33)
4016	3-5 55/64	(1063)	1-2 9/64	(359)	4.11	(0.38)
4018	3-5 55/64	(1063)	1-4 9/64	(410)	4.69	(0.44)
4020	3-5 55/64	(1063)	1-6 9/64	(461)	5.27	(0.49)
4022	3-5 55/64	(1063)	1-8 9/64	(511)	5.85	(0.54)
4024	3-5 55/64	(1063)	1-10 9/64	(562)	6.44	(0.60)
4026	E 3-5 55/64	(1063)	2-0 9/64	(613)	7.02	(0.65)
4028	E 3-5 55/64	(1063)	2-2 9/64	(664)	7.60	(0.71)
4030	E 3-5 55/64	(1063)	2-4 9/64	(715)	8.18	(0.76)
4032	E 3-5 55/64	(1063)	2-6 9/64	(765)	8.76	(0.81)
4034	E 3-5 55/64	(1063)	2-8 9/64	(816)	9.34	(0.87)
4036	E 3-5 55/64	(1063)	2-10 9/64	(867)	9.92	(0.92)

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

Egress and Vent Openings: High Performance Sill Liner

CN	Opening Width		Opening Height HP Sill Liner		Egress Opening		CN	Opening Width		Opening Height HP Sill Liner		Egress Opening	
	ft - in	mm	ft - in	mm	ft <sup>2</sup>	m <sup>2</sup>		ft - in	mm	ft - in	mm	ft <sup>2</sup>	m <sup>2</sup>
1612	1-5 55/64	(454)	0-9 17/64	(235)	1.15	(0.11)	2612	2-3 55/64	(708)	0-9 17/64	(235)	1.79	(0.17)
1614	1-5 55/64	(454)	0-11 17/64	(286)	1.40	(0.13)	2614	2-3 55/64	(708)	0-11 17/64	(286)	2.18	(0.20)
1616	1-5 55/64	(454)	1-1 17/64	(337)	1.65	(0.15)	2616	2-3 55/64	(708)	1-1 17/64	(337)	2.57	(0.24)
1618	1-5 55/64	(454)	1-3 17/64	(388)	1.89	(0.18)	2618	2-3 55/64	(708)	1-3 17/64	(388)	2.95	(0.27)
1620	1-5 55/64	(454)	1-5 17/64	(438)	2.14	(0.20)	2620	2-3 55/64	(708)	1-5 17/64	(438)	3.34	(0.31)
1622	1-5 55/64	(454)	1-7 17/64	(489)	2.39	(0.22)	2622	2-3 55/64	(708)	1-7 17/64	(489)	3.73	(0.35)
1624	1-5 55/64	(454)	1-9 17/64	(540)	2.64	(0.25)	2624	2-3 55/64	(708)	1-9 17/64	(540)	4.11	(0.38)
1626	1-5 55/64	(454)	1-11 17/64	(591)	2.89	(0.27)	2626	2-3 55/64	(708)	1-11 17/64	(591)	4.50	(0.42)
1628	1-5 55/64	(454)	2-1 17/64	(642)	3.13	(0.29)	2628	2-3 55/64	(708)	2-1 17/64	(642)	4.89	(0.45)
1630	1-5 55/64	(454)	2-3 17/64	(692)	3.38	(0.31)	2630	2-3 55/64	(708)	2-3 17/64	(692)	5.28	(0.49)
1632	1-5 55/64	(454)	2-5 17/64	(743)	3.63	(0.34)	2632	2-3 55/64	(708)	2-5 17/64	(743)	5.66	(0.53)
1634	1-5 55/64	(454)	2-7 17/64	(794)	3.88	(0.36)	2634 E	2-3 55/64	(708)	2-7 17/64	(794)	6.05	(0.56)
1636	1-5 55/64	(454)	2-9 17/64	(845)	4.13	(0.38)	2636 E	2-3 55/64	(708)	2-9 17/64	(845)	6.44	(0.60)
1640	1-5 55/64	(454)	3-1 17/64	(946)	4.62	(0.43)	2640 E	2-3 55/64	(708)	3-1 17/64	(946)	7.21	(0.67)
1642	1-5 55/64	(454)	3-3 17/64	(997)	4.87	(0.45)	2642 E	2-3 55/64	(708)	3-3 17/64	(997)	7.60	(0.71)
2012	1-9 55/64	(555)	0-9 17/64	(235)	1.41	(0.13)	2812	2-5 55/64	(759)	0-9 17/64	(235)	1.92	(0.18)
2014	1-9 55/64	(555)	0-11 17/64	(286)	1.71	(0.16)	2814	2-5 55/64	(759)	0-11 17/64	(286)	2.34	(0.22)
2016	1-9 55/64	(555)	1-1 17/64	(337)	2.01	(0.19)	2816	2-5 55/64	(759)	1-1 17/64	(337)	2.75	(0.26)
2018	1-9 55/64	(555)	1-3 17/64	(388)	2.32	(0.22)	2818	2-5 55/64	(759)	1-3 17/64	(388)	3.17	(0.29)
2020	1-9 55/64	(555)	1-5 17/64	(438)	2.62	(0.24)	2820	2-5 55/64	(759)	1-5 17/64	(438)	3.58	(0.33)
2022	1-9 55/64	(555)	1-7 17/64	(489)	2.92	(0.27)	2822	2-5 55/64	(759)	1-7 17/64	(489)	3.99	(0.37)
2024	1-9 55/64	(555)	1-9 17/64	(540)	3.23	(0.30)	2824	2-5 55/64	(759)	1-9 17/64	(540)	4.41	(0.41)
2026	1-9 55/64	(555)	1-11 17/64	(591)	3.53	(0.33)	2826	2-5 55/64	(759)	1-11 17/64	(591)	4.82	(0.45)
2028	1-9 55/64	(555)	2-1 17/64	(642)	3.84	(0.36)	2828	2-5 55/64	(759)	2-1 17/64	(642)	5.24	(0.49)
2030	1-9 55/64	(555)	2-3 17/64	(692)	4.14	(0.38)	2830	2-5 55/64	(759)	2-3 17/64	(692)	5.65	(0.53)
2032	1-9 55/64	(555)	2-5 17/64	(743)	4.44	(0.41)	2832 E	2-5 55/64	(759)	2-5 17/64	(743)	6.07	(0.56)
2034	1-9 55/64	(555)	2-7 17/64	(794)	4.75	(0.44)	2834 E	2-5 55/64	(759)	2-7 17/64	(794)	6.48	(0.60)
2036	1-9 55/64	(555)	2-9 17/64	(845)	5.05	(0.47)	2836 E	2-5 55/64	(759)	2-9 17/64	(845)	6.90	(0.64)
2040	1-9 55/64	(555)	3-1 17/64	(946)	5.66	(0.53)	2840 E	2-5 55/64	(759)	3-1 17/64	(946)	7.73	(0.72)
2042 E	1-9 55/64	(555)	3-3 17/64	(997)	5.96	(0.55)	2842 E	2-5 55/64	(759)	3-3 17/64	(997)	8.14	(0.76)
2412	2-1 55/64	(657)	0-9 17/64	(235)	1.66	(0.15)	3012	2-7 55/64	(809)	0-9 17/64	(235)	2.05	(0.19)
2414	2-1 55/64	(657)	0-11 17/64	(286)	2.02	(0.19)	3014	2-7 55/64	(809)	0-11 17/64	(286)	2.49	(0.23)
2416	2-1 55/64	(657)	1-1 17/64	(337)	2.38	(0.22)	3016	2-7 55/64	(809)	1-1 17/64	(337)	2.93	(0.27)
2418	2-1 55/64	(657)	1-3 17/64	(388)	2.74	(0.25)	3018	2-7 55/64	(809)	1-3 17/64	(388)	3.38	(0.31)
2420	2-1 55/64	(657)	1-5 17/64	(438)	3.10	(0.29)	3020	2-7 55/64	(809)	1-5 17/64	(438)	3.82	(0.35)
2422	2-1 55/64	(657)	1-7 17/64	(489)	3.46	(0.32)	3022	2-7 55/64	(809)	1-7 17/64	(489)	4.26	(0.40)
2424	2-1 55/64	(657)	1-9 17/64	(540)	3.82	(0.35)	3024	2-7 55/64	(809)	1-9 17/64	(540)	4.70	(0.44)
2426	2-1 55/64	(657)	1-11 17/64	(591)	4.18	(0.39)	3026	2-7 55/64	(809)	1-11 17/64	(591)	5.15	(0.48)
2428	2-1 55/64	(657)	2-1 17/64	(642)	4.54	(0.42)	3028	2-7 55/64	(809)	2-1 17/64	(642)	5.59	(0.52)
2430	2-1 55/64	(657)	2-3 17/64	(692)	4.90	(0.45)	3030 E	2-7 55/64	(809)	2-3 17/64	(692)	6.03	(0.56)
2432	2-1 55/64	(657)	2-5 17/64	(743)	5.26	(0.49)	3032 E	2-7 55/64	(809)	2-5 17/64	(743)	6.48	(0.60)
2434	2-1 55/64	(657)	2-7 17/64	(794)	5.62	(0.52)	3034 E	2-7 55/64	(809)	2-7 17/64	(794)	6.92	(0.64)
2436 E	2-1 55/64	(657)	2-9 17/64	(845)	5.97	(0.56)	3036 E	2-7 55/64	(809)	2-9 17/64	(845)	7.36	(0.68)
2440 E	2-1 55/64	(657)	3-1 17/64	(946)	6.69	(0.62)	3040 E	2-7 55/64	(809)	3-1 17/64	(946)	8.25	(0.77)
2442 E	2-1 55/64	(657)	3-3 17/64	(997)	7.05	(0.66)	3042 E	2-7 55/64	(809)	3-3 17/64	(997)	8.69	(0.81)

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

Egress and Vent Openings: High Performance Sill Liner

CN	Opening Width		Opening Height HP Sill Liner		Egress Opening	
	ft - in	mm	ft - in	mm	ft <sup>2</sup>	m <sup>2</sup>
3212	2-9 55/64	(860)	0-9 17/64	(235)	2.18	(0.20)
3214	2-9 55/64	(860)	0-11 17/64	(286)	2.65	(0.25)
3216	2-9 55/64	(860)	1-1 17/64	(337)	3.12	(0.29)
3218	2-9 55/64	(860)	1-3 17/64	(388)	3.59	(0.33)
3220	2-9 55/64	(860)	1-5 17/64	(438)	4.06	(0.38)
3222	2-9 55/64	(860)	1-7 17/64	(489)	4.53	(0.42)
3224	2-9 55/64	(860)	1-9 17/64	(540)	5.00	(0.46)
3226	2-9 55/64	(860)	1-11 17/64	(591)	5.47	(0.51)
3228 E	2-9 55/64	(860)	2-1 17/64	(642)	5.94	(0.55)
3230 E	2-9 55/64	(860)	2-3 17/64	(692)	6.41	(0.60)
3232 E	2-9 55/64	(860)	2-5 17/64	(743)	6.88	(0.64)
3234 E	2-9 55/64	(860)	2-7 17/64	(794)	7.35	(0.68)
3236 E	2-9 55/64	(860)	2-9 17/64	(845)	7.82	(0.73)
3240 E	2-9 55/64	(860)	3-1 17/64	(946)	8.76	(0.81)
3242 E	2-9 55/64	(860)	3-3 17/64	(997)	9.23	(0.86)
3612	3-1 55/64	(962)	0-9 17/64	(235)	2.44	(0.23)
3614	3-1 55/64	(962)	0-11 17/64	(286)	2.96	(0.28)
3616	3-1 55/64	(962)	1-1 17/64	(337)	3.49	(0.32)
3618	3-1 55/64	(962)	1-3 17/64	(388)	4.01	(0.37)
3620	3-1 55/64	(962)	1-5 17/64	(438)	4.54	(0.42)
3622	3-1 55/64	(962)	1-7 17/64	(489)	5.06	(0.47)
3624	3-1 55/64	(962)	1-9 17/64	(540)	5.59	(0.52)
3626	3-1 55/64	(962)	1-11 17/64	(591)	6.12	(0.57)
3628 E	3-1 55/64	(962)	2-1 17/64	(642)	6.64	(0.62)
3630 E	3-1 55/64	(962)	2-3 17/64	(692)	7.17	(0.67)
3632 E	3-1 55/64	(962)	2-5 17/64	(743)	7.69	(0.71)
3634 E	3-1 55/64	(962)	2-7 17/64	(794)	8.22	(0.76)
3636 E	3-1 55/64	(962)	2-9 17/64	(845)	8.75	(0.81)
3640 E	3-1 55/64	(962)	3-1 17/64	(946)	9.80	(0.91)
3642 E	3-1 55/64	(962)	3-3 17/64	(997)	10.32	(0.96)
4012	3-5 55/64	(1063)	0-9 17/64	(235)	2.69	(0.25)
4014	3-5 55/64	(1063)	0-11 17/64	(286)	3.27	(0.30)
4016	3-5 55/64	(1063)	1-1 17/64	(337)	3.86	(0.36)
4018	3-5 55/64	(1063)	1-3 17/64	(388)	4.44	(0.41)
4020	3-5 55/64	(1063)	1-5 17/64	(438)	5.02	(0.47)
4022	3-5 55/64	(1063)	1-7 17/64	(489)	5.60	(0.52)
4024	3-5 55/64	(1063)	1-9 17/64	(540)	6.18	(0.57)
4026	3-5 55/64	(1063)	1-11 17/64	(591)	6.76	(0.63)
4028 E	3-5 55/64	(1063)	2-1 17/64	(642)	7.34	(0.68)
4030 E	3-5 55/64	(1063)	2-3 17/64	(692)	7.93	(0.74)
4032 E	3-5 55/64	(1063)	2-5 17/64	(743)	8.51	(0.79)
4034 E	3-5 55/64	(1063)	2-7 17/64	(794)	9.09	(0.84)
4036 E	3-5 55/64	(1063)	2-9 17/64	(845)	9.67	(0.90)

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

Daylight Measurements: Double Hung

Wood Ultimate Double Hung Daylight Measurements			Width										
			CN	16		20		24		26		28	
			DLO	1-2 15/16	(379)	1-6 15/16	(481)	1-10 15/16	(583)	2-0 15/16	(633)	2-2 15/16	(684)
CN	DLO Height		Square Feet (Square Meters)										
12	0-10 15/16	(278)	1.13	(0.11)	1.44	(0.13)	1.74	(0.16)	1.89	(0.18)	2.05	(0.19)	
14	1-0 15/16	(329)	1.34	(0.12)	1.70	(0.16)	2.06	(0.19)	2.24	(0.21)	2.42	(0.22)	
16	1-2 15/16	(379)	1.55	(0.14)	1.96	(0.18)	2.38	(0.22)	2.59	(0.24)	2.79	(0.26)	
18	1-4 15/16	(430)	1.76	(0.16)	2.23	(0.21)	2.70	(0.25)	2.93	(0.27)	3.17	(0.29)	
20	1-6 15/16	(481)	1.96	(0.18)	2.49	(0.23)	3.02	(0.28)	3.28	(0.30)	3.54	(0.33)	
22	1-8 15/16	(532)	2.17	(0.20)	2.75	(0.26)	3.33	(0.31)	3.63	(0.34)	3.92	(0.36)	
24	1-10 15/16	(583)	2.38	(0.22)	3.02	(0.28)	3.65	(0.34)	3.97	(0.37)	4.29	(0.40)	
26	2-0 15/16	(633)	2.59	(0.24)	3.28	(0.30)	3.97	(0.37)	4.32	(0.40)	4.66	(0.43)	
28	2-2 15/16	(684)	2.79	(0.26)	3.54	(0.33)	4.29	(0.40)	4.66	(0.43)	5.04	(0.47)	
30	2-4 15/16	(735)	3.00	(0.28)	3.81	(0.35)	4.61	(0.43)	5.01	(0.47)	5.41	(0.50)	
32	2-6 15/16	(786)	3.21	(0.30)	4.07	(0.38)	4.93	(0.46)	5.36	(0.50)	5.79	(0.54)	
34	2-8 15/16	(837)	3.42	(0.32)	4.33	(0.40)	5.25	(0.49)	5.70	(0.53)	6.16	(0.57)	
36	2-10 15/16	(887)	3.62	(0.34)	4.59	(0.43)	5.57	(0.52)	6.05	(0.56)	6.54	(0.61)	
40	3-2 15/16	(989)	4.04	(0.38)	5.12	(0.48)	6.20	(0.58)	6.74	(0.63)	7.28	(0.68)	
42	3-4 15/16	(1040)	4.25	(0.39)	5.38	(0.50)	6.52	(0.61)	7.09	(0.66)	7.66	(0.71)	

Wood Ultimate Double Hung Daylight Measurements			Width								
			CN	30		32		36		40	
			DLO	2-4 15/16	(735)	2-6 15/16	(786)	2-10 15/16	(887)	3-2 15/16	(989)
CN	DLO Height		Square Feet (Square Meters)								
12	0-10 15/16	(278)	2.20	(0.20)	2.35	(0.22)	2.65	(0.25)	2.96	(0.27)	
14	1-0 15/16	(329)	2.60	(0.24)	2.78	(0.26)	3.14	(0.29)	3.50	(0.32)	
16	1-2 15/16	(379)	3.00	(0.28)	3.21	(0.30)	3.62	(0.34)	4.04	(0.38)	
18	1-4 15/16	(430)	3.40	(0.32)	3.64	(0.34)	4.11	(0.38)	4.58	(0.43)	
20	1-6 15/16	(481)	3.81	(0.35)	4.07	(0.38)	4.59	(0.43)	5.12	(0.48)	
22	1-8 15/16	(532)	4.21	(0.39)	4.50	(0.42)	5.08	(0.47)	5.66	(0.53)	
24	1-10 15/16	(583)	4.61	(0.43)	4.93	(0.46)	5.56	(0.52)	6.20	(0.58)	
26	2-0 15/16	(633)	5.01	(0.47)	5.36	(0.50)	6.05	(0.56)	6.74	(0.63)	
28	2-2 15/16	(684)	5.41	(0.50)	5.79	(0.54)	6.54	(0.61)	7.28	(0.68)	
30	2-4 15/16	(735)	5.81	(0.54)	6.22	(0.58)	7.02	(0.65)	7.82	(0.73)	
32	2-6 15/16	(786)	6.22	(0.58)	6.65	(0.62)	7.51	(0.70)	8.37	(0.78)	
34	2-8 15/16	(837)	6.62	(0.61)	7.08	(0.66)	7.99	(0.74)	8.91	(0.83)	
36	2-10 15/16	(887)	7.02	(0.65)	7.51	(0.70)	8.48	(0.79)	9.45	(0.88)	
40	3-2 15/16	(989)	7.82	(0.73)	8.37	(0.78)	9.45	(0.88)	N/A		
42	3-4 15/16	(1040)	8.23	(0.76)	8.79	(0.82)	9.93	(0.92)	N/A		

NOTE: Daylight Opening square footage values are "per sash."



Daylight Measurements: Transom and Pictures

Wood Ultimate Double Hung Transom Daylight Measurements			Width						
			CN	16		20		24	
			DLO	1-2 15/16	(379)	1-6 15/16	(481)	1-10 15/16	(583)
CN	DLO Height		Square Feet (Square Meters)						
12	0-10 15/16	(278)	1.13	(0.11)	1.44	(0.13)	1.74	(0.16)	
20	1-6 15/16	(481)	1.96	(0.18)	2.49	(0.23)	3.02	(0.28)	

Wood Ultimate Double Hung Transom Daylight Measurements			Width						
			CN	26		28		30	
			DLO	2-0 15/16	(633)	2-2 15/16	(684)	2-4 15/16	(735)
CN	DLO Height		Square Feet (Square Meters)						
12	0-10 15/16	(278)	1.89	(0.18)	2.05	(0.19)	2.20	(0.20)	
20	1-6 15/16	(481)	3.28	(0.30)	3.54	(0.33)	3.81	(0.35)	

Wood Ultimate Double Hung Transom Daylight Measurements			Width						
			CN	32		36		40	
			DLO	2-6 15/16	(786)	2-10 15/16	(887)	3-2 15/16	(989)
CN	DLO Height		Square Feet (Square Meters)						
12	0-10 15/16	(278)	2.35	(0.22)	2.65	(0.25)	2.96	(0.27)	
20	1-6 15/16	(481)	4.07	(0.38)	4.59	(0.43)	5.12	(0.48)	

Wood Ultimate Double Hung Picture Daylight Measurements			Width										
			CN	40		48		52		60		68	
			DLO	2-10 15/16	(887)	3-6 15/16	(1091)	3-10 15/16	(1192)	4-6 15/16	(1395)	5-2 15/16	(1599)
CN	DLO Height		Square Feet (Square Meters)										
38	2-8 1/4	(819)	7.82	(0.73)	9.62	(0.89)	10.51	(0.98)	12.30	(1.14)	14.10	(1.31)	
42	3-0 1/4	(921)	8.80	(0.82)	10.81	(1.00)	11.82	(1.10)	13.83	(1.28)	15.84	(1.47)	
46	3-4 1/4	(1022)	9.77	(0.91)	12.00	(1.12)	13.12	(1.22)	15.36	(1.43)	17.59	(1.63)	
50	3-8 1/4	(1124)	10.74	(1.00)	13.19	(1.23)	14.42	(1.34)	16.88	(1.57)	19.34	(1.80)	
54	4-0 1/4	(1226)	11.71	(1.09)	14.39	(1.34)	15.73	(1.46)	18.41	(1.71)	21.09	(1.96)	
58	4-4 1/4	(1327)	12.68	(1.18)	15.58	(1.45)	17.03	(1.58)	19.93	(1.85)	22.84	(2.12)	
62	4-8 1/4	(1429)	13.65	(1.27)	16.77	(1.56)	18.34	(1.70)	21.46	(1.99)	24.59	(2.28)	
66	5-0 1/4	(1530)	14.62	(1.36)	17.97	(1.67)	19.64	(1.82)	22.99	(2.14)	26.33	(2.45)	
70	5-4 1/4	(1632)	15.59	(1.45)	19.16	(1.78)	20.94	(1.95)	24.51	(2.28)	28.08	(2.61)	
74	5-8 1/4	(1734)	16.56	(1.54)	20.35	(1.89)	22.25	(2.07)	26.04	(2.42)	29.83	(2.77)	
78	6-0 1/4	(1835)	17.53	(1.63)	21.54	(2.00)	23.55	(2.19)	27.56	(2.56)	31.58	(2.93)	
86	6-8 1/4	(2038)	19.47	(1.81)	23.93	(2.22)	26.16	(2.43)	30.62	(2.84)	35.07	(3.26)	
90	7-0 1/4	(2140)	20.44	(1.90)	25.12	(2.33)	27.46	(2.55)	32.14	(2.99)	36.82	(3.42)	

**Minimum and Maximum Guidelines: Double Hung Units**

Minimum and Maximum Guidelines											
Unit Type		Min Frame Size				Max Frame Size				Max Glass Size	
		Width		Height		Width		Height			
		in	mm	in	mm	in	mm	in	mm	Sq. Feet	Sq. Meters
WUDH	11/16" (18) IG	13 3/8	(340)	25	(635)	45 3/8	(1153)	97	(2464)	11	1.022
WUDH	7/8" (22) Tripane	13 3/8	(340)	25	(635)	45 3/8	(1153)	97	(2464)	7	0.650
WUDHT	11/16" (18) IG	13 3/8	(340)	13 3/8	(340)	104	(2642)	59 1/2	(1511)	25	2.323
WUDHP	1" (25) IG	13 3/8	(340)	15 9/16	(395)	120	(3048)	120	(3048)	49	4.552

*NOTE: Maximum Interior Shade width 72" (1829) and Maximum Interior Shade height 113" (2870)*

Minimum and Maximum for CE Mark - WUDH Operable, Transom and Picture									
Unit Type		Min Frame Size Unit				Max Frame Size Unit			
		Width		Height		Width		Height	
		in	mm	in	mm	in	mm	in	mm
WUDH	11/16" (8) or 7/8" (22) IG	13 3/8	(340)	25	(635)	45 3/8	(1153)	81	(2057)
WUDHT	11/16" (8) or 7/8" (22) IG	13 3/8	(340)	13 3/8	(340)	79 3/8	(2016)	27 11/16	(703)
WUDHP	11/16" (8) IG	13 3/8	(340)	15 9/16	(395)	61 3/8	(1559)	57	(1448)
WUDHP	1" (25) IG	13 3/8	(340)	15 9/16	(395)	61 3/8	(1559)	105	(2667)

## Certified Sizes and Ratings: Double Hung Units

Product	Air Tested to psf	Water Tested to psf	Structural Tested to psf	Certification Rating	Design Pressure (DP)	Overall Width		Overall Height	
						in	mm	in	mm
Wood Ultimate Magnum Double Hung 3036	1.57	6	60	LC-PG40-H	40	35 3/8	(899)	81	(2057)
Wood Double Hung Window 3644	1.57	6	60	LC-PG40-H	40	41 3/8	(1051)	97	(2464)
Wood Double Hung Window 3644 High Performance	1.57	8.25	60	LC-PG40-H	40	41 3/8	(1051)	97	(2464)
Wood Ultimate Double Hung 4026	1.57	6	60	LC-PG40-H	40	45 3/8	(1153)	61	(1549)
Wood Ultimate Double Hung 4036	1.57	6	45	LC-PG40-H	40	45 3/8	(1153)	81	(2057)
Wood Double Hung Window 4036 High Performance	1.57	8.25	60	LC-PG40-H	40	45 3/8	(1153)	81	(2057)
Wood Ultimate Double Hung 2830 High Performance	1.57	7.5	75	LC-PG50-H	50	33 3/8	(848)	69	(1753)
Wood Ultimate Double Hung 3026 High Performance	1.57	7.5	75	LC-PG50-H	50	35 3/8	(899)	61	(1549)

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

**Impact Zone 3 - Minimum and Maximum Guidelines, Certified Sizes and Ratings**

Minimum and Maximum Guidelines - Storm Plus											
Unit Type		Min Frame Size				Max Frame Size				Max Glass Size	
		Width		Height		Width		Height			
		in	mm	in	mm	in	mm	in	mm	Sq. Feet	Sq. Meters
WUDH	Storm Plus IZ3	20 3/8	(518)	25	(635)	45 3/8	(1153)	77	(1956)	7.562	0.703
WUDHT	Storm Plus IZ3	13 3/8	(340)	13 3/8	(340)	104	(2642)	59 1/2	(1511)	25	2.323
WUDHP	Storm Plus IZ3	13 3/8	(340)	15 9/16	(395)	60	(1524)	106 15/16	(2716)	38.021	3.532

*NOTE: Maximum Interior Shade width 72" (1829) and Maximum Interior Shade height 113" (2870)*

Product	Air Tested to psf	Water Tested to psf	Structural Tested to psf	Certification Rating	Design Pressure (DP)	Overall Width		Overall Height	
						in	mm	in	mm
Wood Ultimate Double Hung Picture StormPlus IZ3	1.57	8.25	82.5	CW-PG55-FW	+55/-65	60	(1524)	106 15/16	(2716)
Wood Ultimate Double Hung Transom StormPlus IZ3	1.57	8.25	82.5	LC-PG55-TR	+55/-65	73 3/8	(1864)	25 3/8	(645)
Wood Ultimate Double Hung StormPlus IZ3 3234	1.57	8.25	82.5	LC-PG55-H	+55/-65	37 3/8	(949)	77	(1956)
Wood Ultimate Double Hung StormPlus IZ3 4026	1.57	8.25	82.5	LC-PG55-H	+55/-65	45 3/8	(1153)	61	(1549)

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

## Wood Ultimate Double Hung

### Impact Zone 3 - Minimum and Maximum Guidelines, Certified Sizes and Ratings

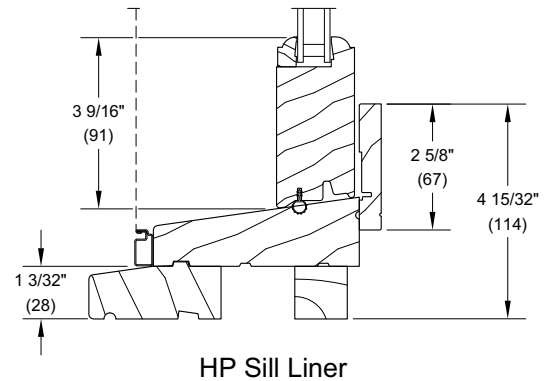
#### Impact Glazing Zone 3 (IZ3):

##### Frame:

- Sealant added at sill liner
- Sill brackets added for bottom sash retention
- Screws through the jamb liner to reinforce the frame

##### Sash:

- Top check rail has different profile for interlock
- Bottom check rail has profile for interlock
- Painted stainless steel stamped interlock for top sash for sash retention
- Mil finish stainless steel stamped interlock for bottom sash retention
- End plate with over molded stainless steel tilt latch blade
- Long cladding clip screws through it at check rail to reinforce stiles
- Stainless steel tilt pins for sash retention
- Different check rail cladding connector profile for interlock
- Keeper insert to keep lock from disengaging during impact



##### Glazing:

- PVC tube in check rail to reinforce check rail and to protect tilt cord from sealant
- Backfilled with Dow 995 silicone sealant
- Interior glass used is laminated with a PVB inner layer
- Exterior glass is standard annealed. All CUDH operator sizes certified are OK with annealed glass. Optional tempered glass is available
- Simulated Divided Lites are available on IZ3 products
- Grilles Between the Glass are not available in IZ3 unit

*NOTE: CE mark is not available on Impact units.*

## Measurement Conversions

Double Hung Operating Unit						
Unit Measurements		Width		Height		
From	To					
<b>Rough Opening</b>		<b>in</b>	<b>mm</b>		<b>in</b>	<b>mm</b>
OM of Frame	Rough Opening	+ 1	(25)		+ 1/2	(13)
Masonry Opening w/BMC	Rough Opening	-2 1/8	(54)		-1 1/16	(27)
<b>Top Sash</b>		<b>in</b>	<b>mm</b>		<b>in</b>	<b>mm</b>
OM of Frame	OM of Top Sash	-2 29/32	(74)	÷ 2	- 1 11/16	(43)
<b>Bottom Sash</b>		<b>in</b>	<b>mm</b>		<b>in</b>	<b>mm</b>
OM of Frame	OM of Bottom Sash	-2 29/32	(74)	÷ 2	+ 1/8	(03)
<b>Glass</b>		<b>in</b>	<b>mm</b>		<b>in</b>	<b>mm</b>
Daylight Opening	Glass	+ 1 1/16	(27)		+ 1 1/16	(27)
<b>Screen</b>		<b>in</b>	<b>mm</b>		<b>in</b>	<b>mm</b>
OM of Frame	OM of Screen	-1 1/2	(38)		-1 7/8	(48)
Daylight Opening	OM of Screen	+ 4 15/16	(125)	× 2	+ 9 9/32	(236)
<b>Half Screen</b>		<b>in</b>	<b>mm</b>		<b>in</b>	<b>mm</b>
OM of Frame	OM of Screen	-1 1/2	(38)	÷ 2	+1/4	(06)
Daylight Opening	OM of Screen	+ 4 15/16	(125)		+ 5 13/16	(148)
<b>Combination</b>		<b>in</b>	<b>mm</b>		<b>in</b>	<b>mm</b>
OM of Frame	OM of Combination	-1 1/2	(38)		-1 11/16	(43)
Daylight Opening	OM of Combination	+ 4 15/16	(125)	× 2	+ 9 7/16	(240)
<b>Interior Shade</b>		<b>in</b>	<b>mm</b>		<b>in</b>	<b>mm</b>
OM of Frame	Shade Surround	-1 15/32	(37)	× 4	-2 11/16	(68)

*NOTE: 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. Add the top and the bottom glass heights together
3. Divide the total glass height by the ration of the top sash
4. Round to the nearest standard glass height
5. Subtract from the total glass height

### Example

1. WUDH with a 2/5 - 3/5 cottage style. If the rough opening is 2'-6 3/8" x 4'-8 7/8" (RO for a WUDH 2424)
2. 24" + 24" = 48"
3. 48" divide by 2/5 (0.4) = 19 13/64 (20)
4. 48" - 20" = 28"

The top sash will be a 2420 and the bottom sash will be a 2428. The call number for the example is: WUDH 2420/28.

**Measurement Conversions**

Double Hung Transoms with Subsill					
Unit Measurements		Width		Height	
From	To				
<b>Rough Opening</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
OM of Frame	Rough Opening	+ 1	(25)	+ 1/2	(13)
Masonry Opening w/BMC	Rough Opening	-2 1/8	(54)	-1 1/16	(27)
<b>Sash</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
OM of Frame	OM of Sash	-2 29/32	(74)	-2 1/8	(54)
Daylight Opening	OM of Sash	+ 3 17/32	(90)	+ 4 11/32	(110)
<b>Glass</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Daylight Opening	Glass	+ 1 1/16	(27)	+ 1 1/16	(27)
<b>Interior Shade</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
OM of Frame	Shade Surround	-1 15/32	(37)	-2 3/32	(53)

Double Hung Picture					
Unit Measurements		Width		Height	
From	To				
<b>Rough Opening</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
OM of Frame	Rough Opening	+ 1	(25)	+ 1/2	(13)
Masonry Opening w/BMC	Rough Opening	-2 1/8	(54)	-1 1/16	(27)
<b>Sash</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
OM of Frame	OM of Sash	-1 9/16	(40)	-3 3/32	(79)
Daylight Opening	OM of Sash	+ 4 7/8	(124)	+ 5 21/32	(144)
<b>Glass</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Daylight Opening	Glass	+ 1 1/16	(27)	+ 1 1/16	(27)
<b>Interior Shade</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
OM of Frame	Shade Surround	-1 15/32	(37)	-2 11/16	(68)

**Egress Formulas for Double Hung**

**Clear Opening:**

- Clear Opening Width = Frame OM Width - 5 1/2" (140)

**Units with Standard Sill Liner**

- Clear Opening Height = (Frame OM Height\* / 2) - 6 3/8" (162)

**Units with High Performance Sill Liner**

- Clear Opening Height = (Frame OM Height\* / 2) - 7 1/4" (184)

\*including subsill

**Vent Opening**

- Vent Opening Width = Jamb to Jamb Width
- Vent Opening Height = Top of sill liner to btm of btm sash fully opened
- Vent Width \* Vent Height / 144

**Clear Opening Width with Interior Shade:**

- Clear Opening Width = Frame OM Width - 4 3/16" (107)

**Clear Opening Height with Interior Shade:**

- Units with Standard Sill Liner
  - Clear Opening Height = (Frame OM Height\* / 2) - 6 1/16" (154)

**Standard Unit Measurements: Double Hung**

Standard Double Hung Unit Measurements								
Width								
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
16	2-0 1/2	(622)	1-10 3/8	(568)	1-9 3/8	(543)	1-2 15/16	(379)
20	2-4 1/2	(724)	2-2 3/8	(670)	2-1 3/8	(645)	1-6 15/16	(481)
24	2-8 1/2	(826)	2-6 3/8	(772)	2-5 3/8	(746)	1-10 15/16	(583)
26	2-10 1/2	(876)	2-8 3/8	(822)	2-7 3/8	(797)	2-0 15/16	(633)
28	3-0 1/2	(927)	2-10 3/8	(873)	2-9 3/8	(848)	2-2 15/16	(684)
30	3-2 1/2	(978)	3-0 3/8	(924)	2-11 3/8	(899)	2-4 15/16	(735)
32	3-4 1/2	(1029)	3-2 3/8	(975)	3-1 3/8	(949)	2-6 15/16	(786)
36	3-8 1/2	(1130)	3-6 3/8	(1076)	3-5 3/8	(1051)	2-10 15/16	(887)
40	4-0 1/2	(1232)	3-10 3/8	(1178)	3-9 3/8	(1153)	3-2 15/16	(989)

Standard Double Hung Unit Measurements								
Height								
CN	Masonry Opening		Rough Opening		Frame Size (w/subsill)		Daylight Opening	
	ft - in	mm	ft - in	mm	ft-in	mm	ft - in	mm
12	2-10 9/16	(878)	2-9 1/2	(851)	2-9	(838)	0-10 15/16	(278)
14	3-2 9/16	(980)	3-1 1/2	(953)	3-1	(940)	1-0 15/16	(329)
16	3-6 9/16	(1081)	3-5 1/2	(1054)	3-5	(1041)	1-2 15/16	(379)
18	3-10 9/16	(1183)	3-9 1/2	(1156)	3-9	(1143)	1-4 15/16	(430)
20	4-2 9/16	(1284)	4-1 1/2	(1257)	4-1	(1245)	1-6 15/16	(481)
22	4-6 9/16	(1386)	4-5 1/2	(1359)	4-5	(1346)	1-8 15/16	(532)
24	4-10 9/16	(1488)	4-9 1/2	(1461)	4-9	(1448)	1-10 15/16	(583)
26	5-2 9/16	(1589)	5-1 1/2	(1562)	5-1	(1549)	2-0 15/16	(633)
28	5-6 9/16	(1691)	5-5 1/2	(1664)	5-5	(1651)	2-2 15/16	(684)
30	5-10 9/16	(1792)	5-9 1/2	(1765)	5-9	(1753)	2-4 15/16	(735)
32	6-2 9/16	(1894)	6-1 1/2	(1867)	6-1	(1854)	2-6 15/16	(786)
34	6-6 9/16	(1996)	6-5 1/2	(1969)	6-5	(1956)	2-8 15/16	(837)
36	6-10 9/16	(2097)	6-9 1/2	(2070)	6-9	(2057)	2-10 15/16	(887)
40	7-6 9/16	(2300)	7-5 1/2	(2273)	7-5	(2261)	3-2 15/16	(989)
42	7-10 9/16	(2402)	7-9 1/2	(2375)	7-9	(2362)	3-4 15/16	(1040)



**Standard Unit Measurements: Transom/Picture**

Standard Double Hung Transom Unit Measurements								
Width								
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
16	2-0 1/2	(622)	1-10 3/8	(568)	1-9 3/8	(543)	1-2 15/16	(379)
20	2-4 1/2	(724)	2-2 3/8	(670)	2-1 3/8	(645)	1-6 15/16	(481)
24	2-8 1/2	(826)	2-6 3/8	(772)	2-5 3/8	(746)	1-10 15/16	(583)
26	2-10 1/2	(876)	2-8 3/8	(822)	2-7 3/8	(797)	2-0 15/16	(633)
28	3-0 1/2	(927)	2-10 3/8	(873)	2-9 3/8	(848)	2-2 15/16	(684)
30	3-2 1/2	(978)	3-0 3/8	(924)	2-11 3/8	(899)	2-4 15/16	(735)
32	3-4 1/2	(1029)	3-2 3/8	(975)	3-1 3/8	(949)	2-6 15/16	(786)
36	3-8 1/2	(1130)	3-6 3/8	(1076)	3-5 3/8	(1051)	2-10 15/16	(887)
40	4-0 1/2	(1232)	3-10 3/8	(1178)	3-9 3/8	(1153)	3-2 15/16	(989)

Standard Double Hung Transom Unit Measurements								
Height								
CN	Masonry Opening		Rough Opening		Frame Size (no subsill)		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
12	1-6 15/16	(481)	1-5 7/8	(454)	1-5 3/8	(441)	0-10 15/16	(278)
20	2-2 15/16	(684)	2-1 7/8	(657)	2-1 3/8	(645)	1-6 15/16	(481)

Standard Double Hung Picture Unit Measurements								
Width								
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
40	3-8 1/2	(1130)	3-6 3/8	(1076)	3-5 3/8	(1051)	2-10 15/16	(887)
48	4-4 1/2	(1334)	4-2 3/8	(1280)	4-1 3/8	(1254)	3-6 15/16	(1091)
52	4-8 1/2	(1435)	4-6 3/8	(1381)	4-5 3/8	(1356)	3-10 15/16	(1192)
60	5-4 1/2	(1638)	5-2 3/8	(1584)	5-1 3/8	(1559)	4-6 15/16	(1395)
68	6-0 1/2	(1842)	5-10 3/8	(1788)	5-9 3/8	(1762)	5-2 15/16	(1599)

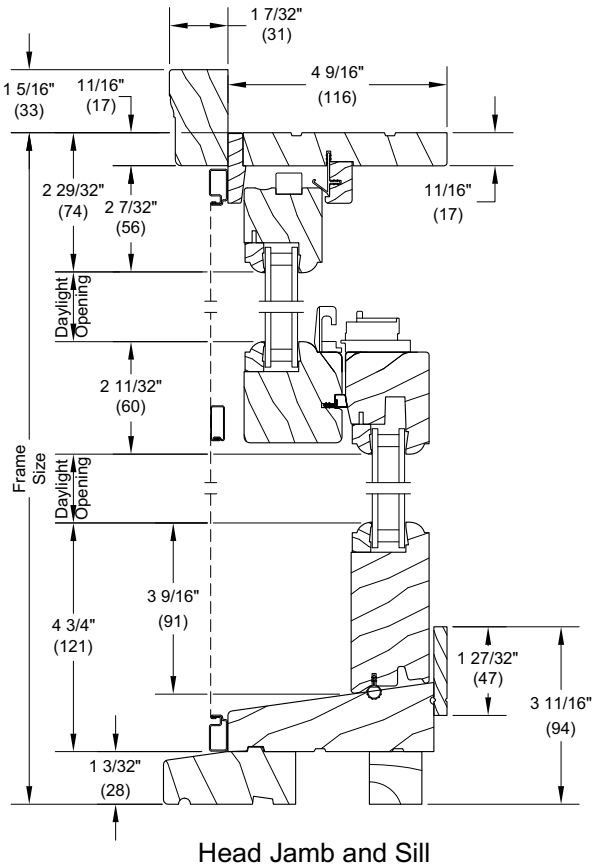
Standard Double Hung Picture Unit Measurements								
Height								
CN	Masonry Opening		Rough Opening		Frame Size (w/subsill)		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
38	3-6 9/16	(1081)	3-5 1/2	(1054)	3-5	(1041)	2-8 1/4	(819)
42	3-10 9/16	(1183)	3-9 1/2	(1156)	3-9	(1143)	3-0 1/4	(921)
46	4-2 9/16	(1284)	4-1 1/2	(1257)	4-1	(1245)	3-4 1/4	(1022)
50	4-6 9/16	(1386)	4-5 1/2	(1359)	4-5	(1346)	3-8 1/4	(1124)
54	4-10 9/16	(1488)	4-9 1/2	(1461)	4-9	(1448)	4-0 1/4	(1226)
58	5-2 9/16	(1589)	5-1 1/2	(1562)	5-1	(1549)	4-4 1/4	(1327)
62	5-6 9/16	(1691)	5-5 1/2	(1664)	5-5	(1651)	4-8 1/4	(1429)
66	5-10 9/16	(1792)	5-9 1/2	(1765)	5-9	(1753)	5-0 1/4	(1530)
70	6-2 9/16	(1894)	6-1 1/2	(1867)	6-1	(1854)	5-4 1/4	(1632)
74	6-6 9/16	(1996)	6-5 1/2	(1969)	6-5	(1956)	5-8 1/4	(1734)
78	6-10 9/16	(2097)	6-9 1/2	(2070)	6-9	(2057)	6-0 1/4	(1835)
86	7-6 9/16	(2300)	7-5 1/2	(2273)	7-5	(2261)	6-8 1/4	(2038)
90	7-10 9/16	(2402)	7-9 1/2	(2375)	7-9	(2362)	7-0 1/4	(2140)

# Wood Ultimate Double Hung

## Section Details: Operating

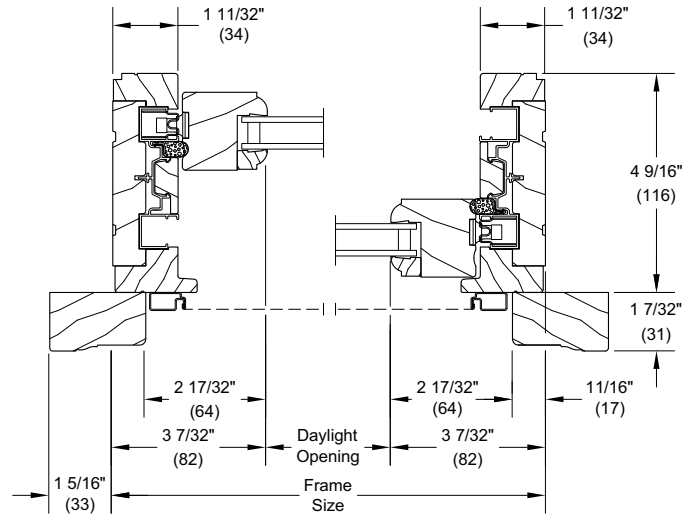
Scale: 3" = 1' 0"

### Double Hung



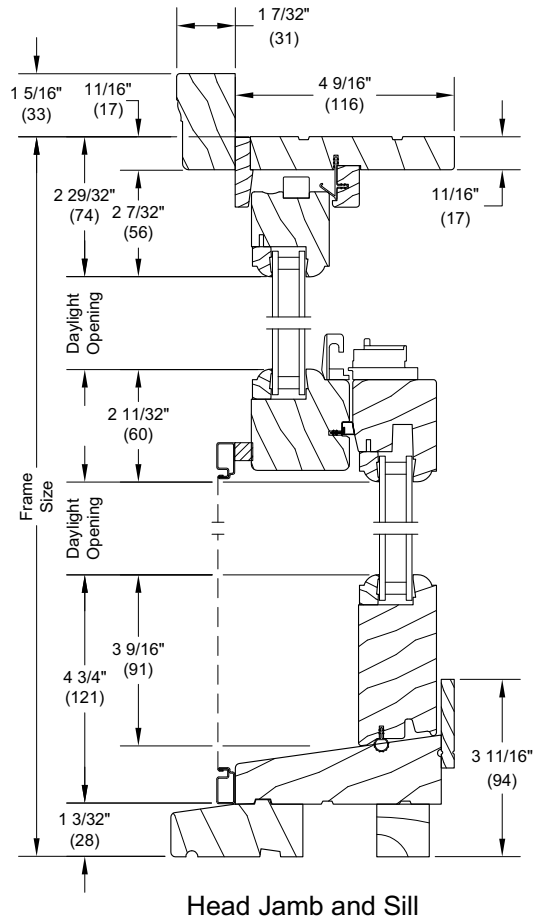
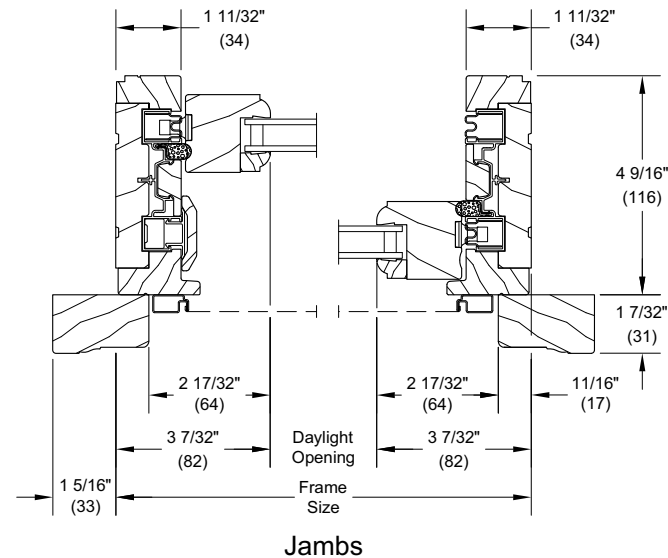
### Lower Sash

### Upper Sash



### Jambs

### Single Hung

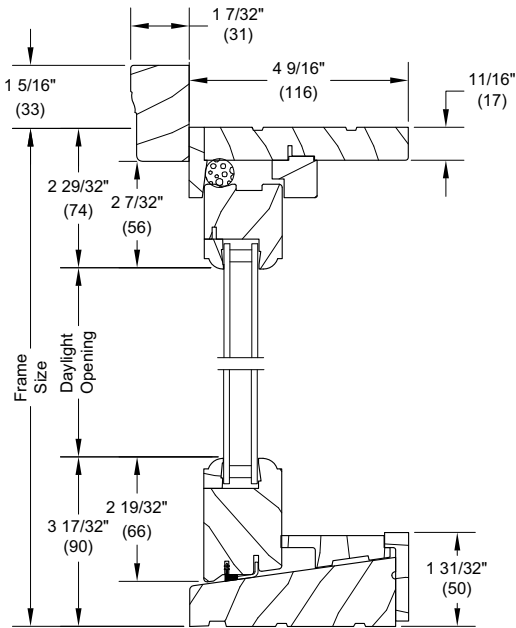


# Wood Ultimate Double Hung

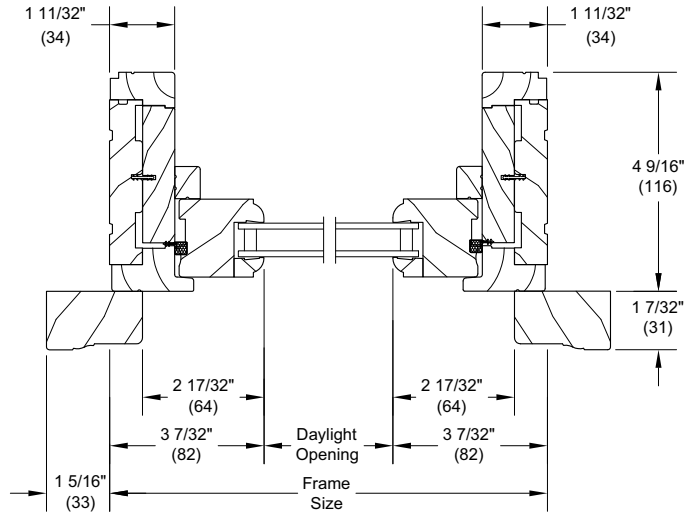
## Section Details: 1 5/8" Transom/Picture

Scale: 3" = 1' 0"

### 1 5/8" Transom

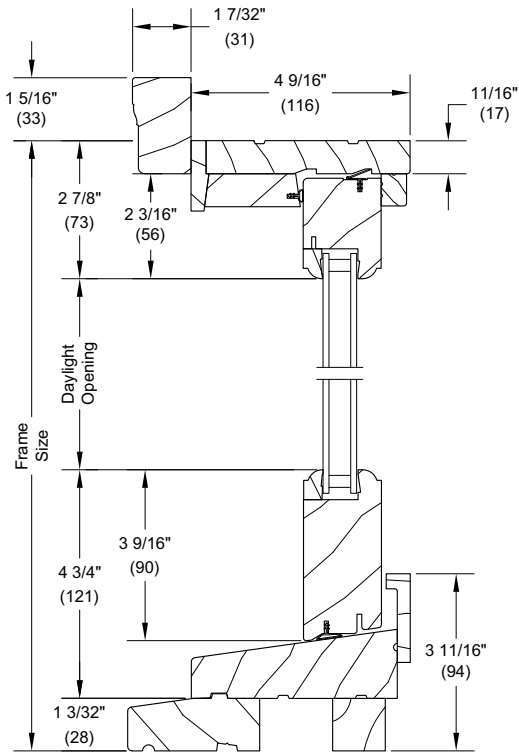


Head Jamb and Sill

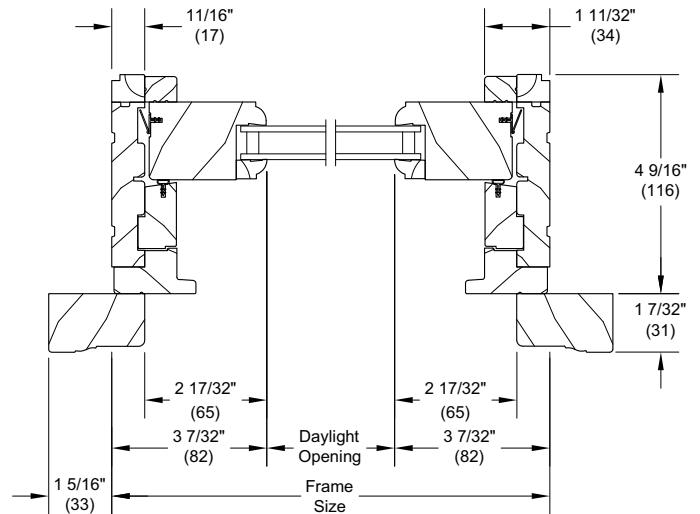


Jamb

### 1 5/8" Picture



Head Jamb and Sill



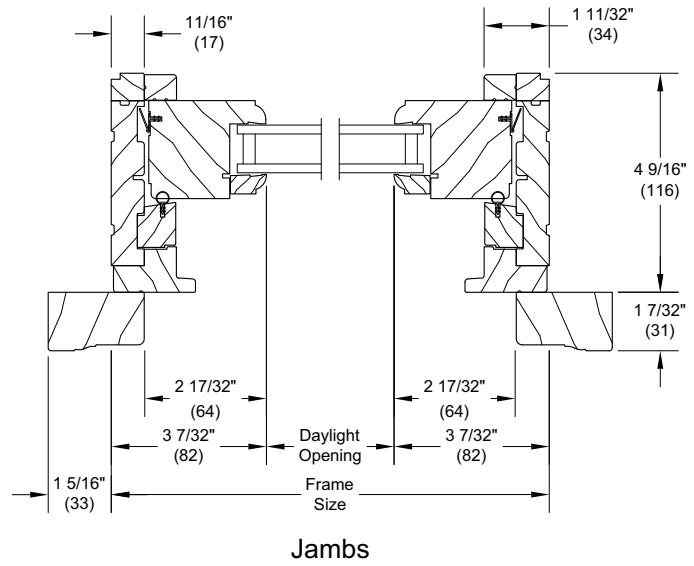
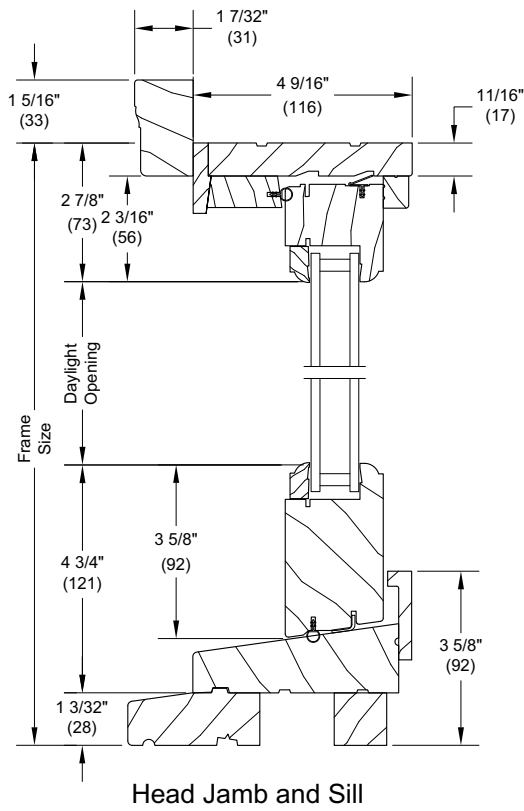
Jamb

# Wood Ultimate Double Hung

## Section Details: 2" Picture

Scale: 3" = 1' 0"

### 2" Picture

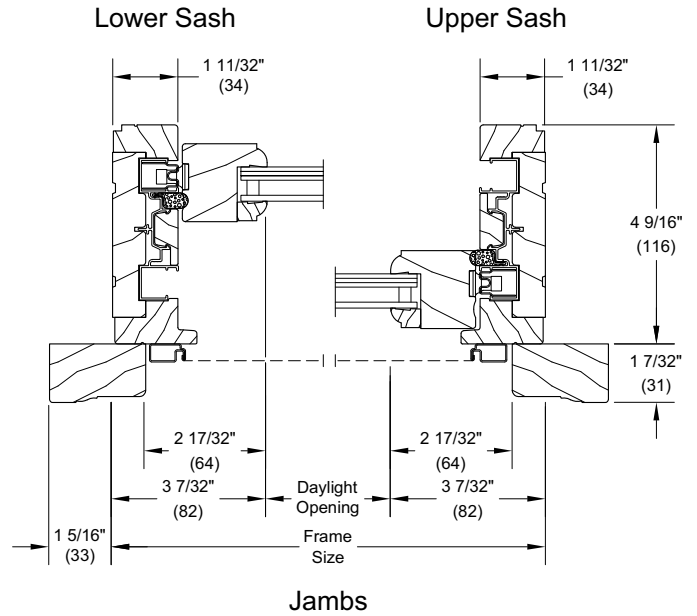
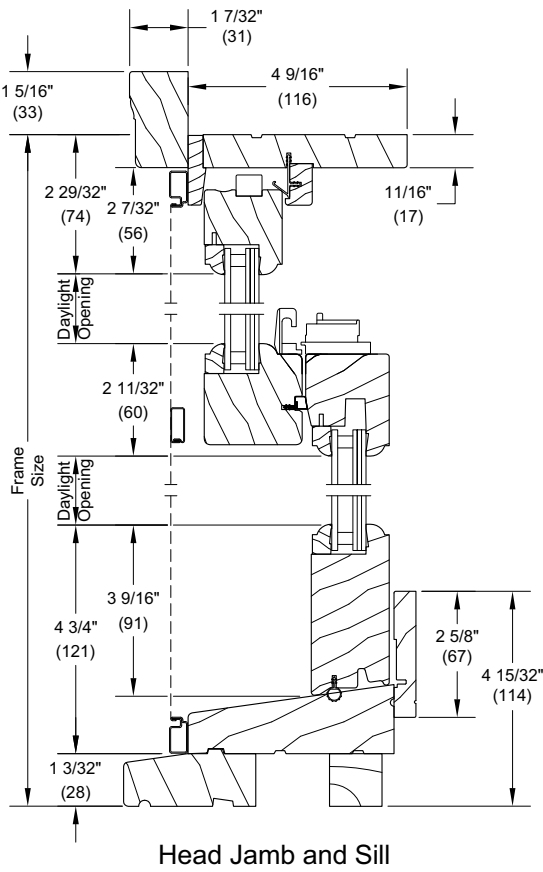


# Wood Ultimate Double Hung

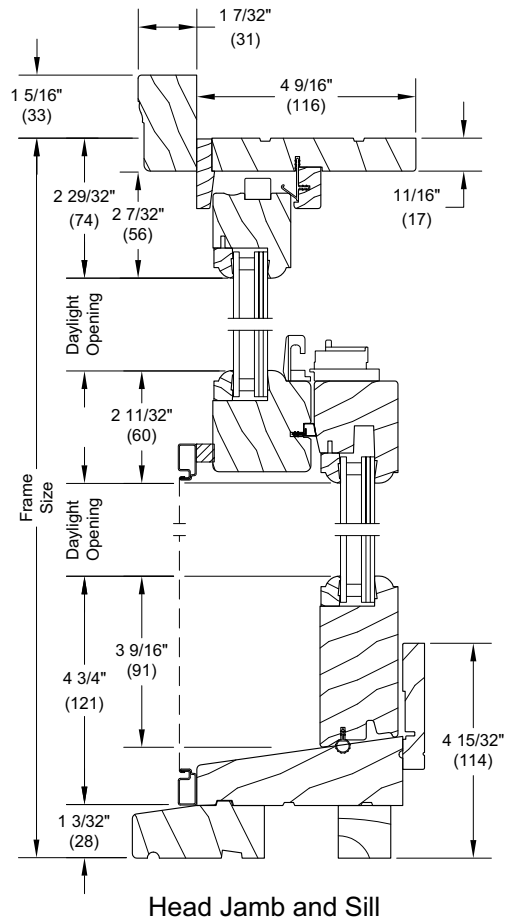
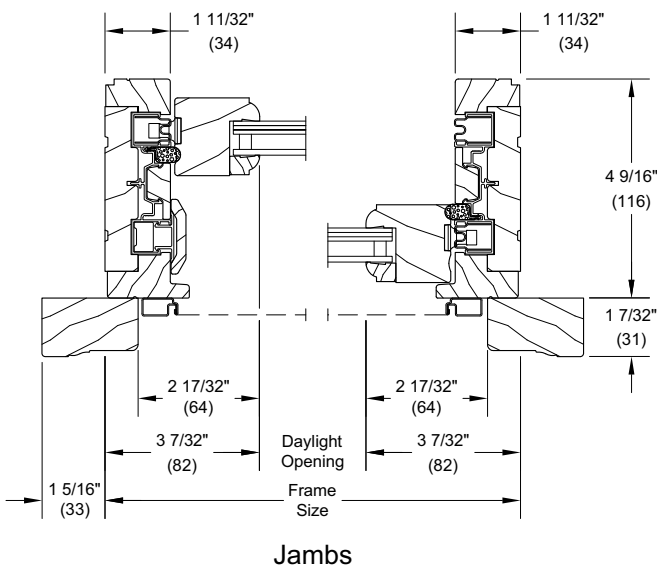
## Section Details: Operating Impact Zone 3

Scale: 3" = 1' 0"

### Double Hung



### Single Hung



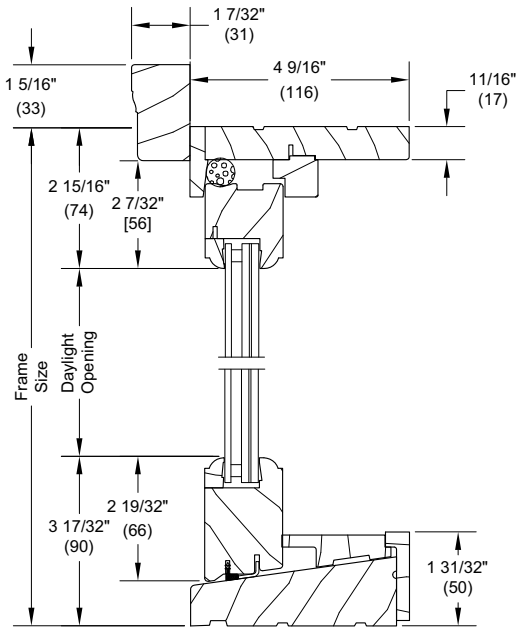
NOTE: CE mark is not available on Impact units.

# Wood Ultimate Double Hung

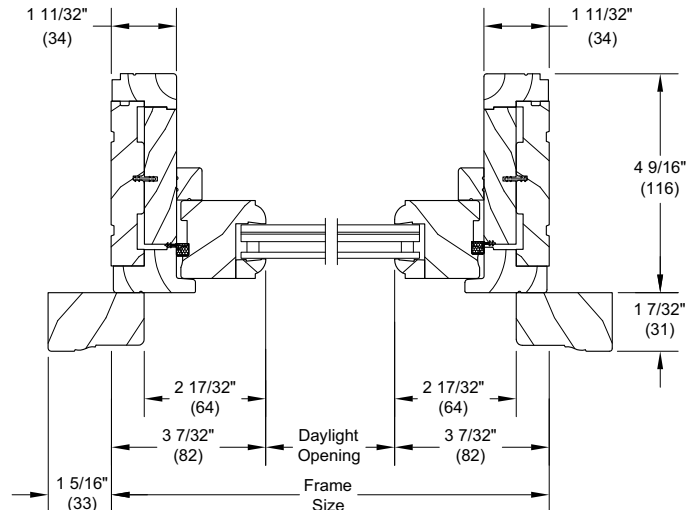
## Section Details: Picture Impact Zone 3

Scale: 3" = 1' 0"

### 1 5/8" Transom

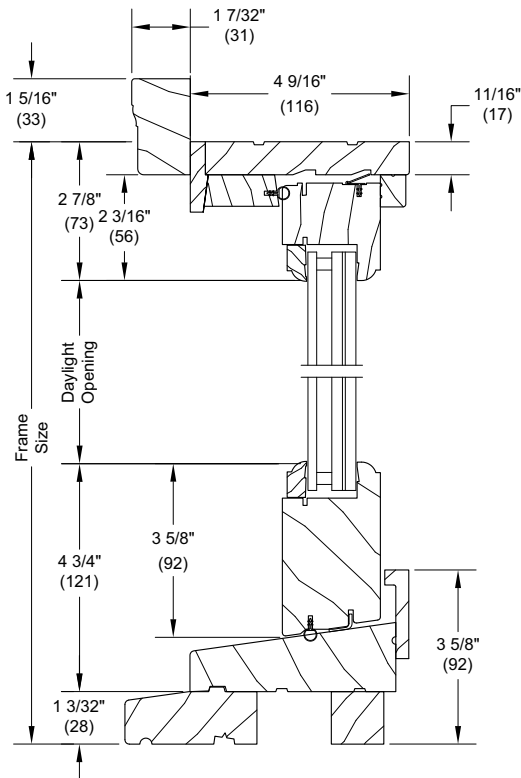


Head Jamb and Sill

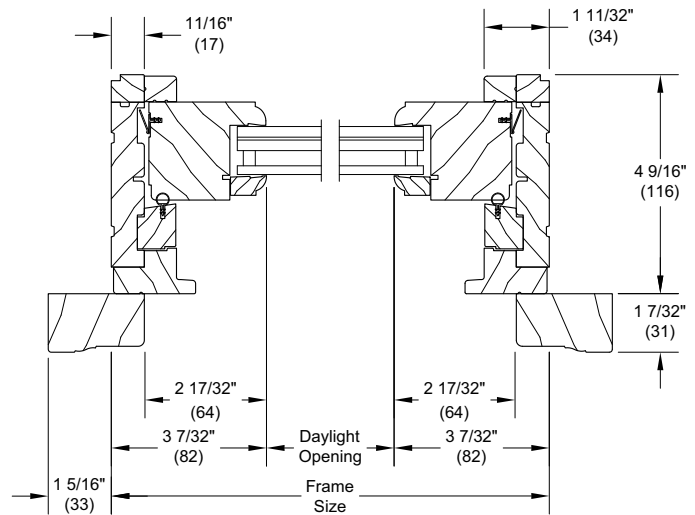


Jamb

### 2" Picture



Head Jamb and Sill



Jambs

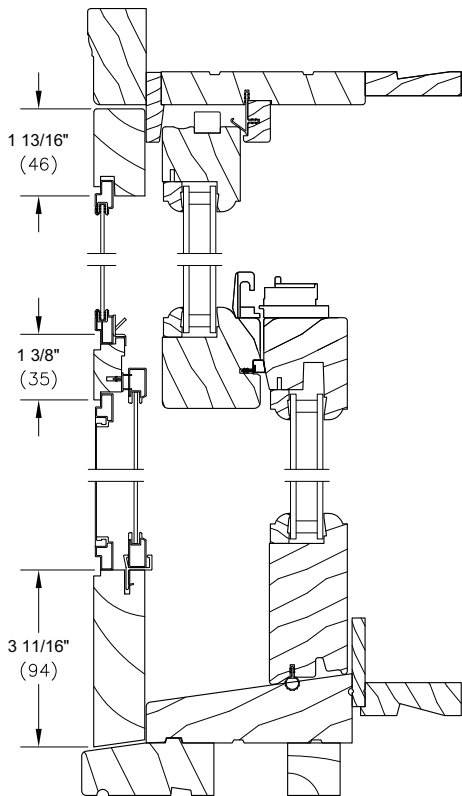
NOTE: CE mark is not available on Impact units.

# Wood Ultimate Double Hung

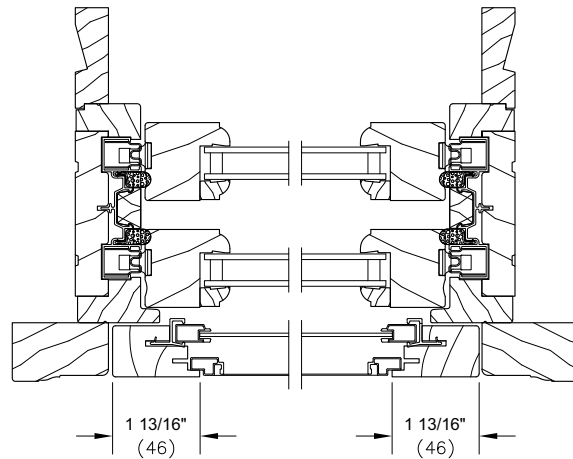
## Section Details: Combination/Storm Sash

Scale: 3" = 1' 0"

**Combination w/ 6 9/16"**

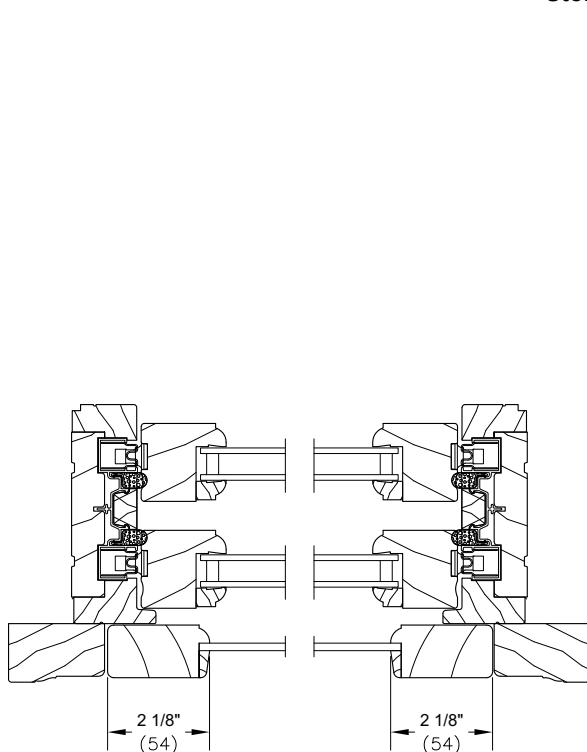


**Head Jamb and Sill**

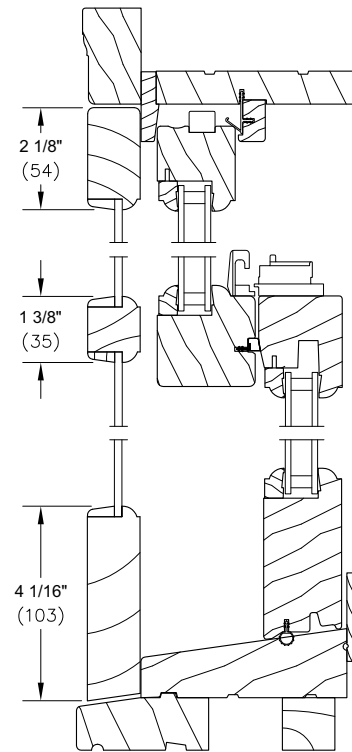


**Jambs**

**Storm Sash**



**Jambs**

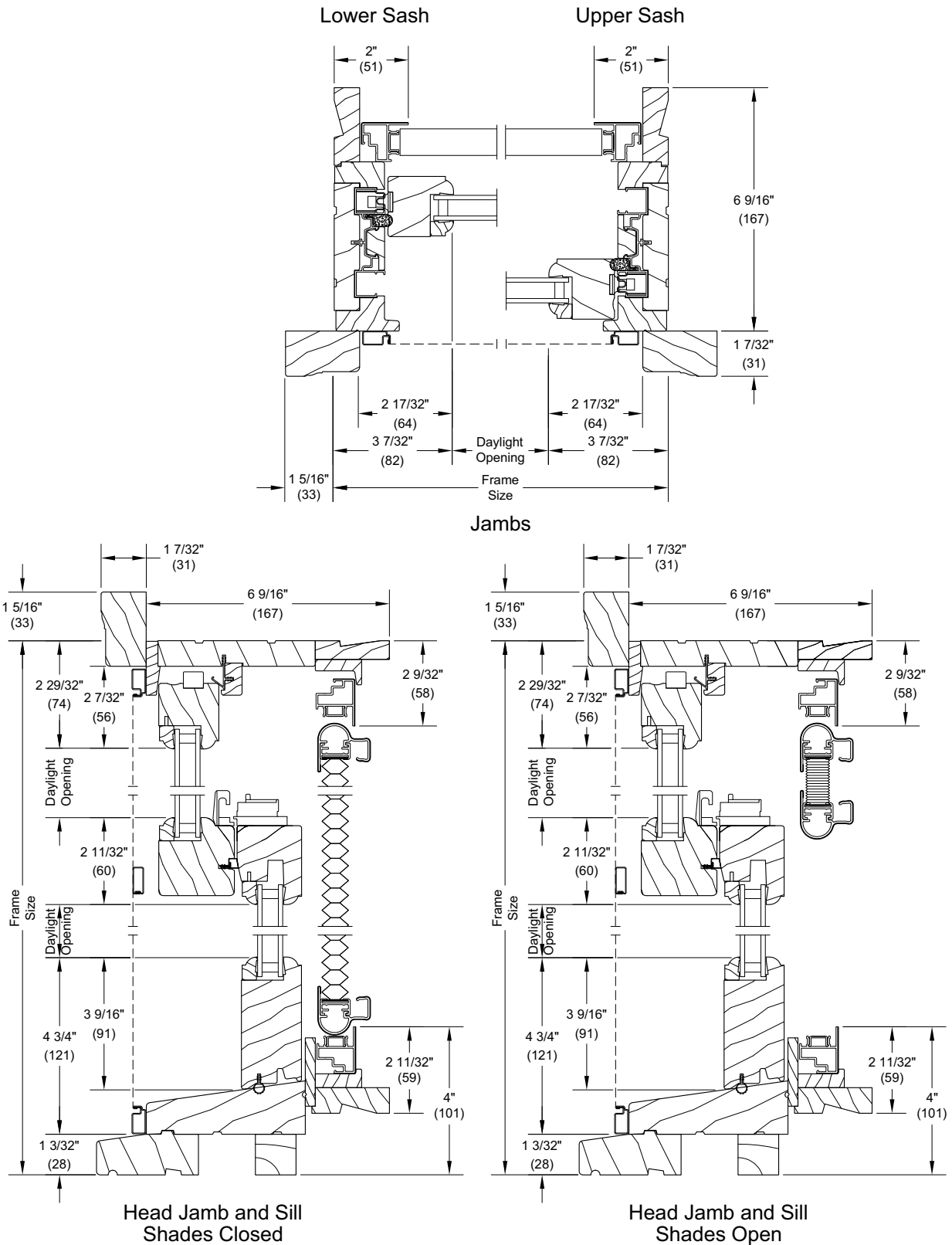


**Head Jamb and Sill**

# Wood Ultimate Double Hung

## Section Details: Interior Shade Option

Scale: 3" = 1' 0"

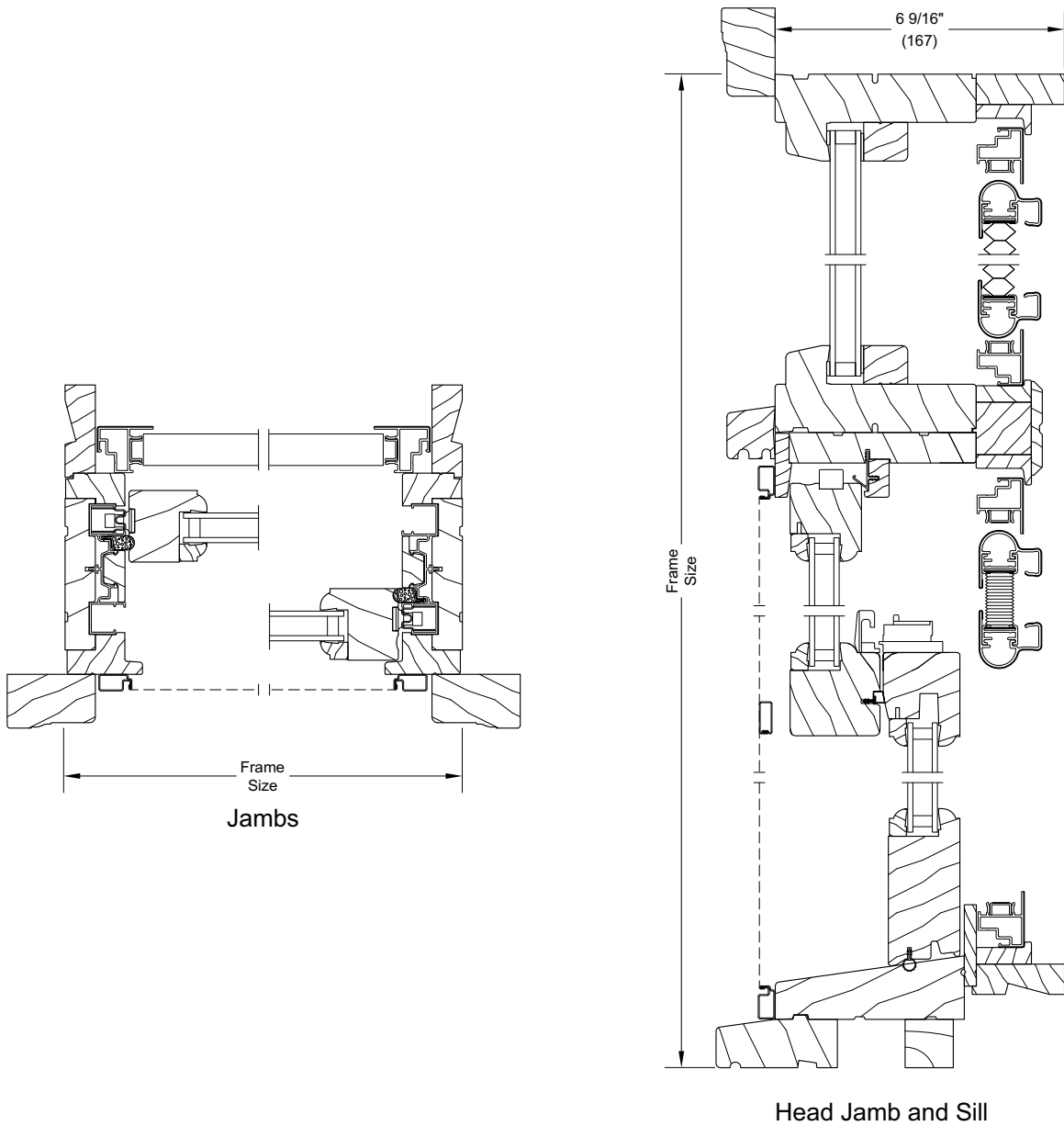




# Wood Ultimate Double Hung

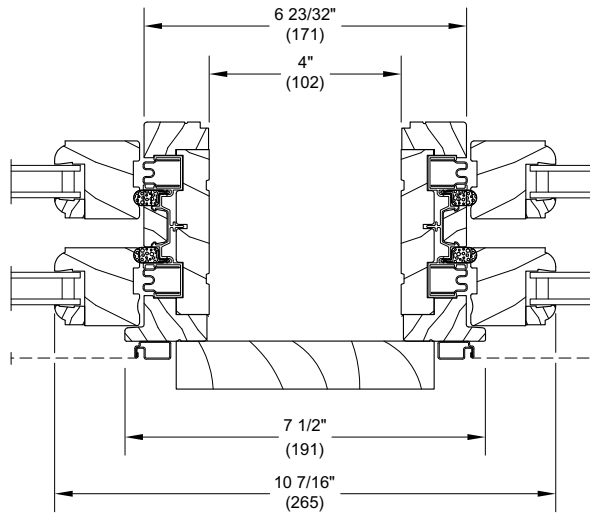
## Section Detail: Muller Direct Glaze with Interior Shade Option

Scale: 3" = 1' 0"

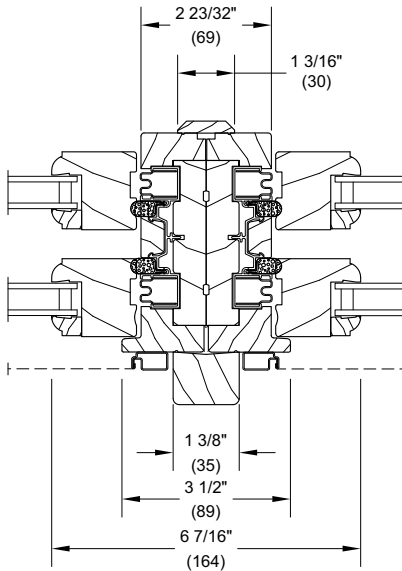


**Section Details: Mullions**

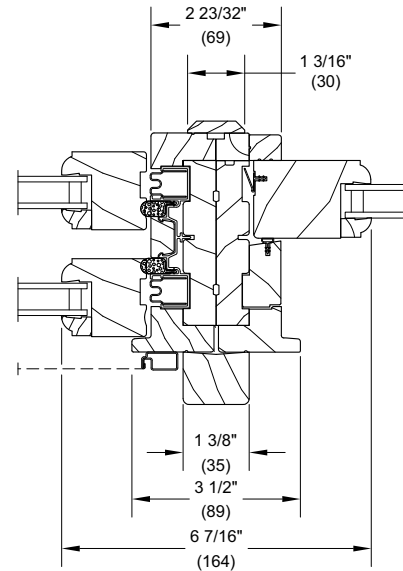
Scale: 3" - 1' 0"



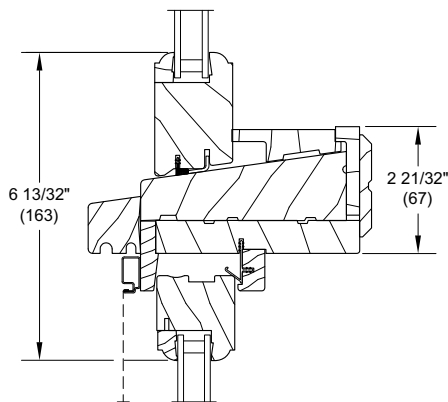
Vertical Mullion - with 4" Space Mull Operator/Operator



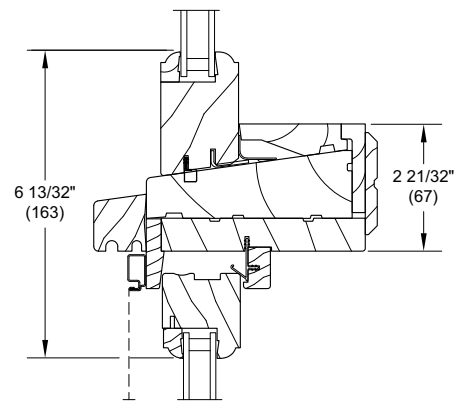
Vertical Mullion Operator/Operator/Direct Mull



Vertical Mullion Operator/Picture/Direct Mull



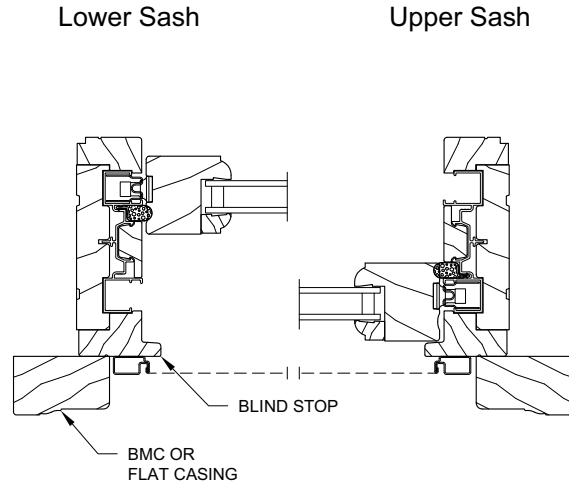
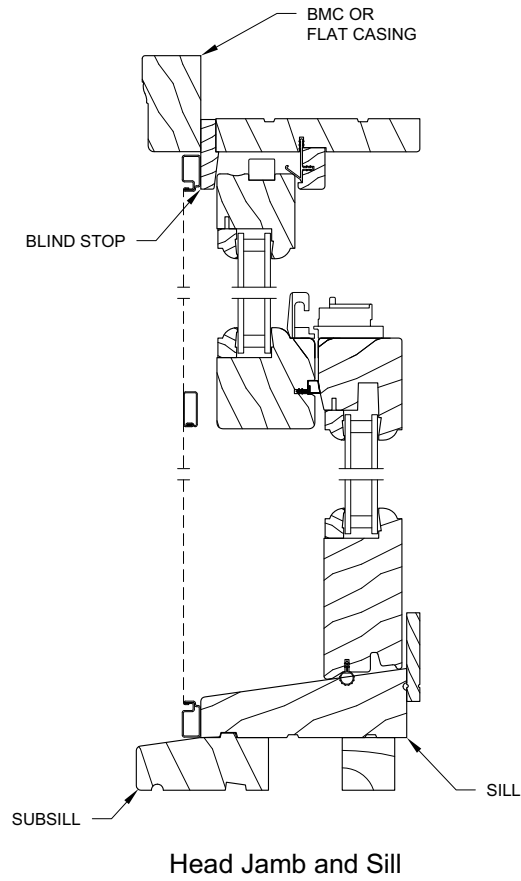
Transom mullered over WUDH



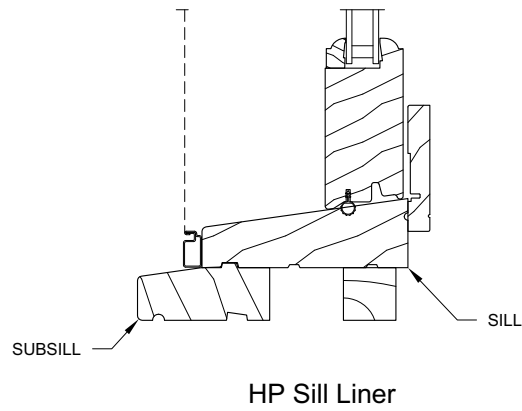
RT Transom mullered over WUDH

**Section Details: Operator with Cedar Dress Option**

Scale: 3" - 1' 0"



Jamb



# Wood Ultimate Double Hung

## Section Details: Picture with Cedar Dress Option

Scale: 3" - 1' 0"

