

# Clad Ultimate Double Hung

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## *Clad Ultimate Double Hung*

### **Unit Features**

Clad Ultimate Double Hung: CUDH

Clad Ultimate Double Hung Transom: CUDHT

Clad Ultimate Double Hung Picture: CUDHP

#### **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:**

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

# Clad Ultimate Double Hung

## Egress and Vent Openings: Standard Sill Liner

| 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   | 1-6 1/8       | (459) | 0-10 1/8                       | (257)  | 1.27            | (0.12)         | 2612   | 2-4 1/8       | (713) | 0-10 1/8                       | (257)  | 1.98            | (0.18)         |
| 1614   | 1-6 1/8       | (459) | 1-0 1/8                        | (308)  | 1.52            | (0.14)         | 2614   | 2-4 1/8       | (713) | 1-0 1/8                        | (308)  | 2.37            | (0.22)         |
| 1616   | 1-6 1/8       | (459) | 1-2 1/8                        | (359)  | 1.77            | (0.16)         | 2616   | 2-4 1/8       | (713) | 1-2 1/8                        | (359)  | 2.76            | (0.26)         |
| 1618   | 1-6 1/8       | (459) | 1-4 1/8                        | (410)  | 2.03            | (0.19)         | 2618   | 2-4 1/8       | (713) | 1-4 1/8                        | (410)  | 3.15            | (0.29)         |
| 1620   | 1-6 1/8       | (459) | 1-6 1/8                        | (460)  | 2.28            | (0.21)         | 2620   | 2-4 1/8       | (713) | 1-6 1/8                        | (460)  | 3.54            | (0.33)         |
| 1622   | 1-6 1/8       | (459) | 1-8 1/8                        | (511)  | 2.53            | (0.23)         | 2622   | 2-4 1/8       | (713) | 1-8 1/8                        | (511)  | 3.93            | (0.36)         |
| 1624   | 1-6 1/8       | (459) | 1-10 1/8                       | (562)  | 2.78            | (0.26)         | 2624   | 2-4 1/8       | (713) | 1-10 1/8                       | (562)  | 4.32            | (0.40)         |
| 1626   | 1-6 1/8       | (459) | 2-0 1/8                        | (613)  | 3.03            | (0.28)         | 2626   | 2-4 1/8       | (713) | 2-0 1/8                        | (613)  | 4.71            | (0.44)         |
| 1628   | 1-6 1/8       | (459) | 2-2 1/8                        | (664)  | 3.28            | (0.30)         | 2628   | 2-4 1/8       | (713) | 2-2 1/8                        | (664)  | 5.10            | (0.47)         |
| 1630   | 1-6 1/8       | (459) | 2-4 1/8                        | (714)  | 3.53            | (0.33)         | 2630   | 2-4 1/8       | (713) | 2-4 1/8                        | (714)  | 5.49            | (0.51)         |
| 1632   | 1-6 1/8       | (459) | 2-6 1/8                        | (765)  | 3.78            | (0.35)         | 2632 E | 2-4 1/8       | (713) | 2-6 1/8                        | (765)  | 5.88            | (0.55)         |
| 1634   | 1-6 1/8       | (459) | 2-8 1/8                        | (816)  | 4.04            | (0.37)         | 2634 E | 2-4 1/8       | (713) | 2-8 1/8                        | (816)  | 6.27            | (0.58)         |
| 1636   | 1-6 1/8       | (459) | 2-10 1/8                       | (867)  | 4.29            | (0.40)         | 2636 E | 2-4 1/8       | (713) | 2-10 1/8                       | (867)  | 6.66            | (0.62)         |
| 1640   | 1-6 1/8       | (459) | 3-2 1/8                        | (968)  | 4.79            | (0.44)         | 2640 E | 2-4 1/8       | (713) | 3-2 1/8                        | (968)  | 7.44            | (0.69)         |
| 1642   | 1-6 1/8       | (459) | 3-4 1/8                        | (1019) | 5.04            | (0.47)         | 2642 E | 2-4 1/8       | (713) | 3-4 1/8                        | (1019) | 7.83            | (0.73)         |
| 2012   | 1-10 1/8      | (561) | 0-10 1/8                       | (257)  | 1.55            | (0.14)         | 2812   | 2-6 1/8       | (764) | 0-10 1/8                       | (257)  | 2.12            | (0.20)         |
| 2014   | 1-10 1/8      | (561) | 1-0 1/8                        | (308)  | 1.86            | (0.17)         | 2814   | 2-6 1/8       | (764) | 1-0 1/8                        | (308)  | 2.53            | (0.24)         |
| 2016   | 1-10 1/8      | (561) | 1-2 1/8                        | (359)  | 2.17            | (0.20)         | 2816   | 2-6 1/8       | (764) | 1-2 1/8                        | (359)  | 2.95            | (0.27)         |
| 2018   | 1-10 1/8      | (561) | 1-4 1/8                        | (410)  | 2.47            | (0.23)         | 2818   | 2-6 1/8       | (764) | 1-4 1/8                        | (410)  | 3.37            | (0.31)         |
| 2020   | 1-10 1/8      | (561) | 1-6 1/8                        | (460)  | 2.78            | (0.26)         | 2820   | 2-6 1/8       | (764) | 1-6 1/8                        | (460)  | 3.79            | (0.35)         |
| 2022   | 1-10 1/8      | (561) | 1-8 1/8                        | (511)  | 3.09            | (0.29)         | 2822   | 2-6 1/8       | (764) | 1-8 1/8                        | (511)  | 4.21            | (0.39)         |
| 2024   | 1-10 1/8      | (561) | 1-10 1/8                       | (562)  | 3.39            | (0.32)         | 2824   | 2-6 1/8       | (764) | 1-10 1/8                       | (562)  | 4.62            | (0.43)         |
| 2026   | 1-10 1/8      | (561) | 2-0 1/8                        | (613)  | 3.70            | (0.34)         | 2826   | 2-6 1/8       | (764) | 2-0 1/8                        | (613)  | 5.04            | (0.47)         |
| 2028   | 1-10 1/8      | (561) | 2-2 1/8                        | (664)  | 4.01            | (0.37)         | 2828   | 2-6 1/8       | (764) | 2-2 1/8                        | (664)  | 5.46            | (0.51)         |
| 2030   | 1-10 1/8      | (561) | 2-4 1/8                        | (714)  | 4.31            | (0.40)         | 2830 E | 2-6 1/8       | (764) | 2-4 1/8                        | (714)  | 5.88            | (0.55)         |
| 2032   | 1-10 1/8      | (561) | 2-6 1/8                        | (765)  | 4.62            | (0.43)         | 2832 E | 2-6 1/8       | (764) | 2-6 1/8                        | (765)  | 6.29            | (0.58)         |
| 2034   | 1-10 1/8      | (561) | 2-8 1/8                        | (816)  | 4.93            | (0.46)         | 2834 E | 2-6 1/8       | (764) | 2-8 1/8                        | (816)  | 6.71            | (0.62)         |
| 2036   | 1-10 1/8      | (561) | 2-10 1/8                       | (867)  | 5.23            | (0.49)         | 2836 E | 2-6 1/8       | (764) | 2-10 1/8                       | (867)  | 7.13            | (0.66)         |
| 2040 E | 1-10 1/8      | (561) | 3-2 1/8                        | (968)  | 5.85            | (0.54)         | 2840 E | 2-6 1/8       | (764) | 3-2 1/8                        | (968)  | 7.97            | (0.74)         |
| 2042 E | 1-10 1/8      | (561) | 3-4 1/8                        | (1019) | 6.15            | (0.57)         | 2842 E | 2-6 1/8       | (764) | 3-4 1/8                        | (1019) | 8.38            | (0.78)         |
| 2412   | 2-2 1/8       | (663) | 0-10 1/8                       | (257)  | 1.83            | (0.17)         | 3012   | 2-8 1/8       | (815) | 0-10 1/8                       | (257)  | 2.26            | (0.21)         |
| 2414   | 2-2 1/8       | (663) | 1-0 1/8                        | (308)  | 2.20            | (0.20)         | 3014   | 2-8 1/8       | (815) | 1-0 1/8                        | (308)  | 2.70            | (0.25)         |
| 2416   | 2-2 1/8       | (663) | 1-2 1/8                        | (359)  | 2.56            | (0.24)         | 3016   | 2-8 1/8       | (815) | 1-2 1/8                        | (359)  | 3.15            | (0.29)         |
| 2418   | 2-2 1/8       | (663) | 1-4 1/8                        | (410)  | 2.92            | (0.27)         | 3018   | 2-8 1/8       | (815) | 1-4 1/8                        | (410)  | 3.59            | (0.33)         |
| 2420   | 2-2 1/8       | (663) | 1-6 1/8                        | (460)  | 3.28            | (0.31)         | 3020   | 2-8 1/8       | (815) | 1-6 1/8                        | (460)  | 4.04            | (0.38)         |
| 2422   | 2-2 1/8       | (663) | 1-8 1/8                        | (511)  | 3.65            | (0.34)         | 3022   | 2-8 1/8       | (815) | 1-8 1/8                        | (511)  | 4.48            | (0.42)         |
| 2424   | 2-2 1/8       | (663) | 1-10 1/8                       | (562)  | 4.01            | (0.37)         | 3024   | 2-8 1/8       | (815) | 1-10 1/8                       | (562)  | 4.93            | (0.46)         |
| 2426   | 2-2 1/8       | (663) | 2-0 1/8                        | (613)  | 4.37            | (0.41)         | 3026   | 2-8 1/8       | (815) | 2-0 1/8                        | (613)  | 5.38            | (0.50)         |
| 2428   | 2-2 1/8       | (663) | 2-2 1/8                        | (664)  | 4.73            | (0.44)         | 3028 E | 2-8 1/8       | (815) | 2-2 1/8                        | (664)  | 5.82            | (0.54)         |
| 2430   | 2-2 1/8       | (663) | 2-4 1/8                        | (714)  | 5.10            | (0.47)         | 3030 E | 2-8 1/8       | (815) | 2-4 1/8                        | (714)  | 6.27            | (0.58)         |
| 2432   | 2-2 1/8       | (663) | 2-6 1/8                        | (765)  | 5.46            | (0.51)         | 3032 E | 2-8 1/8       | (815) | 2-6 1/8                        | (765)  | 6.71            | (0.62)         |
| 2434 E | 2-2 1/8       | (663) | 2-8 1/8                        | (816)  | 5.82            | (0.54)         | 3034 E | 2-8 1/8       | (815) | 2-8 1/8                        | (816)  | 7.16            | (0.67)         |
| 2436 E | 2-2 1/8       | (663) | 2-10 1/8                       | (867)  | 6.18            | (0.57)         | 3036 E | 2-8 1/8       | (815) | 2-10 1/8                       | (867)  | 7.60            | (0.71)         |
| 2440 E | 2-2 1/8       | (663) | 3-2 1/8                        | (968)  | 6.91            | (0.64)         | 3040 E | 2-8 1/8       | (815) | 3-2 1/8                        | (968)  | 8.50            | (0.79)         |
| 2442 E | 2-2 1/8       | (663) | 3-4 1/8                        | (1019) | 7.27            | (0.68)         | 3042 E | 2-8 1/8       | (815) | 3-4 1/8                        | (1019) | 8.94            | (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<br>Std. Sill Liner |        | Egress Opening  |                |
|--------|---------------|--------|-----------------------------------|--------|-----------------|----------------|
|        | ft - in       | mm     | ft - in                           | mm     | ft <sup>2</sup> | m <sup>2</sup> |
| 3212   | 2-10 1/8      | (866)  | 0-10 1/8                          | (257)  | 2.40            | (0.22)         |
| 3214   | 2-10 1/8      | (866)  | 1-0 1/8                           | (308)  | 2.87            | (0.27)         |
| 3216   | 2-10 1/8      | (866)  | 1-2 1/8                           | (359)  | 3.34            | (0.31)         |
| 3218   | 2-10 1/8      | (866)  | 1-4 1/8                           | (410)  | 3.82            | (0.35)         |
| 3220   | 2-10 1/8      | (866)  | 1-6 1/8                           | (460)  | 4.29            | (0.40)         |
| 3222   | 2-10 1/8      | (866)  | 1-8 1/8                           | (511)  | 4.76            | (0.44)         |
| 3224   | 2-10 1/8      | (866)  | 1-10 1/8                          | (562)  | 5.24            | (0.49)         |
| 3226 E | 2-10 1/8      | (866)  | 2-0 1/8                           | (613)  | 5.71            | (0.53)         |
| 3228 E | 2-10 1/8      | (866)  | 2-2 1/8                           | (664)  | 6.18            | (0.57)         |
| 3230 E | 2-10 1/8      | (866)  | 2-4 1/8                           | (714)  | 6.66            | (0.62)         |
| 3232 E | 2-10 1/8      | (866)  | 2-6 1/8                           | (765)  | 7.13            | (0.66)         |
| 3234 E | 2-10 1/8      | (866)  | 2-8 1/8                           | (816)  | 7.60            | (0.71)         |
| 3236 E | 2-10 1/8      | (866)  | 2-10 1/8                          | (867)  | 8.08            | (0.75)         |
| 3240 E | 2-10 1/8      | (866)  | 3-2 1/8                           | (968)  | 9.03            | (0.84)         |
| 3242 E | 2-10 1/8      | (866)  | 3-4 1/8                           | (1019) | 9.50            | (0.88)         |
| 3612   | 3-2 1/8       | (967)  | 0-10 1/8                          | (257)  | 2.68            | (0.25)         |
| 3614   | 3-2 1/8       | (967)  | 1-0 1/8                           | (308)  | 3.21            | (0.30)         |
| 3616   | 3-2 1/8       | (967)  | 1-2 1/8                           | (359)  | 3.74            | (0.35)         |
| 3618   | 3-2 1/8       | (967)  | 1-4 1/8                           | (410)  | 4.27            | (0.40)         |
| 3620   | 3-2 1/8       | (967)  | 1-6 1/8                           | (460)  | 4.79            | (0.45)         |
| 3622   | 3-2 1/8       | (967)  | 1-8 1/8                           | (511)  | 5.32            | (0.49)         |
| 3624   | 3-2 1/8       | (967)  | 1-10 1/8                          | (562)  | 5.85            | (0.54)         |
| 3626 E | 3-2 1/8       | (967)  | 2-0 1/8                           | (613)  | 6.38            | (0.59)         |
| 3628 E | 3-2 1/8       | (967)  | 2-2 1/8                           | (664)  | 6.91            | (0.64)         |
| 3630 E | 3-2 1/8       | (967)  | 2-4 1/8                           | (714)  | 7.44            | (0.69)         |
| 3632 E | 3-2 1/8       | (967)  | 2-6 1/8                           | (765)  | 7.97            | (0.74)         |
| 3634 E | 3-2 1/8       | (967)  | 2-8 1/8                           | (816)  | 8.50            | (0.79)         |
| 3636 E | 3-2 1/8       | (967)  | 2-10 1/8                          | (867)  | 9.03            | (0.84)         |
| 3640 E | 3-2 1/8       | (967)  | 3-2 1/8                           | (968)  | 10.08           | (0.94)         |
| 3642 E | 3-2 1/8       | (967)  | 3-4 1/8                           | (1019) | 10.61           | (0.99)         |
| 4012   | 3-6 1/8       | (1069) | 0-10 1/8                          | (257)  | 2.96            | (0.27)         |
| 4014   | 3-6 1/8       | (1069) | 1-0 1/8                           | (308)  | 3.54            | (0.33)         |
| 4016   | 3-6 1/8       | (1069) | 1-2 1/8                           | (359)  | 4.13            | (0.38)         |
| 4018   | 3-6 1/8       | (1069) | 1-4 1/8                           | (410)  | 4.71            | (0.44)         |
| 4020   | 3-6 1/8       | (1069) | 1-6 1/8                           | (460)  | 5.30            | (0.49)         |
| 4022   | 3-6 1/8       | (1069) | 1-8 1/8                           | (511)  | 5.88            | (0.55)         |
| 4024   | 3-6 1/8       | (1069) | 1-10 1/8                          | (562)  | 6.47            | (0.60)         |
| 4026 E | 3-6 1/8       | (1069) | 2-0 1/8                           | (613)  | 7.05            | (0.66)         |
| 4028 E | 3-6 1/8       | (1069) | 2-2 1/8                           | (664)  | 7.64            | (0.71)         |
| 4030 E | 3-6 1/8       | (1069) | 2-4 1/8                           | (714)  | 8.22            | (0.76)         |
| 4032 E | 3-6 1/8       | (1069) | 2-6 1/8                           | (765)  | 8.81            | (0.82)         |
| 4034 E | 3-6 1/8       | (1069) | 2-8 1/8                           | (816)  | 9.39            | (0.87)         |
| 4036 E | 3-6 1/8       | (1069) | 2-10 1/8                          | (867)  | 9.97            | (0.93)         |

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<br>HP Sill Liner |       | Egress Opening  |                | CN     | Opening Width |       | Opening Height<br>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   | 1-6 1/8       | (459) | 0-9 1/4                         | (235) | 1.16            | (0.11)         | 2612   | 2-4 1/8       | (713) | 0-9 1/4                         | (235) | 1.80            | (0.17)         |
| 1614   | 1-6 1/8       | (459) | 0-11 1/4                        | (286) | 1.41            | (0.13)         | 2614   | 2-4 1/8       | (713) | 0-11 1/4                        | (286) | 2.19            | (0.20)         |
| 1616   | 1-6 1/8       | (459) | 1-1 1/4                         | (337) | 1.66            | (0.15)         | 2616   | 2-4 1/8       | (713) | 1-1 1/4                         | (337) | 2.58            | (0.24)         |
| 1618   | 1-6 1/8       | (459) | 1-3 1/4                         | (387) | 1.92            | (0.18)         | 2618   | 2-4 1/8       | (713) | 1-3 1/4                         | (387) | 2.97            | (0.28)         |
| 1620   | 1-6 1/8       | (459) | 1-5 1/4                         | (438) | 2.17            | (0.20)         | 2620   | 2-4 1/8       | (713) | 1-5 1/4                         | (438) | 3.36            | (0.31)         |
| 1622   | 1-6 1/8       | (459) | 1-7 1/4                         | (489) | 2.42            | (0.22)         | 2622   | 2-4 1/8       | (713) | 1-7 1/4                         | (489) | 3.75            | (0.35)         |
| 1624   | 1-6 1/8       | (459) | 1-9 1/4                         | (540) | 2.67            | (0.25)         | 2624   | 2-4 1/8       | (713) | 1-9 1/4                         | (540) | 4.15            | (0.39)         |
| 1626   | 1-6 1/8       | (459) | 1-11 1/4                        | (591) | 2.92            | (0.27)         | 2626   | 2-4 1/8       | (713) | 1-11 1/4                        | (591) | 4.54            | (0.42)         |
| 1628   | 1-6 1/8       | (459) | 2-1 1/4                         | (641) | 3.17            | (0.29)         | 2628   | 2-4 1/8       | (713) | 2-1 1/4                         | (641) | 4.93            | (0.46)         |
| 1630   | 1-6 1/8       | (459) | 2-3 1/4                         | (692) | 3.42            | (0.32)         | 2630   | 2-4 1/8       | (713) | 2-3 1/4                         | (692) | 5.32            | (0.49)         |
| 1632   | 1-6 1/8       | (459) | 2-5 1/4                         | (743) | 3.67            | (0.34)         | 2632 E | 2-4 1/8       | (713) | 2-5 1/4                         | (743) | 5.71            | (0.53)         |
| 1634   | 1-6 1/8       | (459) | 2-7 1/4                         | (794) | 3.93            | (0.36)         | 2634 E | 2-4 1/8       | (713) | 2-7 1/4                         | (794) | 6.10            | (0.57)         |
| 1636   | 1-6 1/8       | (459) | 2-9 1/4                         | (845) | 4.18            | (0.39)         | 2636 E | 2-4 1/8       | (713) | 2-9 1/4                         | (845) | 6.49            | (0.60)         |
| 1640   | 1-6 1/8       | (459) | 3-1 1/4                         | (946) | 4.68            | (0.43)         | 2640 E | 2-4 1/8       | (713) | 3-1 1/4                         | (946) | 7.27            | (0.68)         |
| 1642   | 1-6 1/8       | (459) | 3-3 1/4                         | (997) | 4.93            | (0.46)         | 2642 E | 2-4 1/8       | (713) | 3-3 1/4                         | (997) | 7.66            | (0.71)         |
| 2012   | 1-10 1/8      | (561) | 0-9 1/4                         | (235) | 1.42            | (0.13)         | 2812   | 2-6 1/8       | (764) | 0-9 1/4                         | (235) | 1.93            | (0.18)         |
| 2014   | 1-10 1/8      | (561) | 0-11 1/4                        | (286) | 1.73            | (0.16)         | 2814   | 2-6 1/8       | (764) | 0-11 1/4                        | (286) | 2.35            | (0.22)         |
| 2016   | 1-10 1/8      | (561) | 1-1 1/4                         | (337) | 2.03            | (0.19)         | 2816   | 2-6 1/8       | (764) | 1-1 1/4                         | (337) | 2.77            | (0.26)         |
| 2018   | 1-10 1/8      | (561) | 1-3 1/4                         | (387) | 2.34            | (0.22)         | 2818   | 2-6 1/8       | (764) | 1-3 1/4                         | (387) | 3.19            | (0.30)         |
| 2020   | 1-10 1/8      | (561) | 1-5 1/4                         | (438) | 2.65            | (0.25)         | 2820   | 2-6 1/8       | (764) | 1-5 1/4                         | (438) | 3.60            | (0.33)         |
| 2022   | 1-10 1/8      | (561) | 1-7 1/4                         | (489) | 2.95            | (0.27)         | 2822   | 2-6 1/8       | (764) | 1-7 1/4                         | (489) | 4.02            | (0.37)         |
| 2024   | 1-10 1/8      | (561) | 1-9 1/4                         | (540) | 3.26            | (0.30)         | 2824   | 2-6 1/8       | (764) | 1-9 1/4                         | (540) | 4.44            | (0.41)         |
| 2026   | 1-10 1/8      | (561) | 1-11 1/4                        | (591) | 3.57            | (0.33)         | 2826   | 2-6 1/8       | (764) | 1-11 1/4                        | (591) | 4.86            | (0.45)         |
| 2028   | 1-10 1/8      | (561) | 2-1 1/4                         | (641) | 3.87            | (0.36)         | 2828   | 2-6 1/8       | (764) | 2-1 1/4                         | (641) | 5.28            | (0.49)         |
| 2030   | 1-10 1/8      | (561) | 2-3 1/4                         | (692) | 4.18            | (0.39)         | 2830   | 2-6 1/8       | (764) | 2-3 1/4                         | (692) | 5.69            | (0.53)         |
| 2032   | 1-10 1/8      | (561) | 2-5 1/4                         | (743) | 4.49            | (0.42)         | 2832 E | 2-6 1/8       | (764) | 2-5 1/4                         | (743) | 6.11            | (0.57)         |
| 2034   | 1-10 1/8      | (561) | 2-7 1/4                         | (794) | 4.79            | (0.45)         | 2834 E | 2-6 1/8       | (764) | 2-7 1/4                         | (794) | 6.53            | (0.61)         |
| 2036   | 1-10 1/8      | (561) | 2-9 1/4                         | (845) | 5.10            | (0.47)         | 2836 E | 2-6 1/8       | (764) | 2-9 1/4                         | (845) | 6.95            | (0.65)         |
| 2040 E | 1-10 1/8      | (561) | 3-1 1/4                         | (946) | 5.71            | (0.53)         | 2840 E | 2-6 1/8       | (764) | 3-1 1/4                         | (946) | 7.78            | (0.72)         |
| 2042 E | 1-10 1/8      | (561) | 3-3 1/4                         | (997) | 6.02            | (0.56)         | 2842 E | 2-6 1/8       | (764) | 3-3 1/4                         | (997) | 8.20            | (0.76)         |
| 2412   | 2-2 1/8       | (663) | 0-9 1/4                         | (235) | 1.68            | (0.16)         | 3012   | 2-8 1/8       | (815) | 0-9 1/4                         | (235) | 2.06            | (0.19)         |
| 2414   | 2-2 1/8       | (663) | 0-11 1/4                        | (286) | 2.04            | (0.19)         | 3014   | 2-8 1/8       | (815) | 0-11 1/4                        | (286) | 2.51            | (0.23)         |
| 2416   | 2-2 1/8       | (663) | 1-1 1/4                         | (337) | 2.40            | (0.22)         | 3016   | 2-8 1/8       | (815) | 1-1 1/4                         | (337) | 2.95            | (0.27)         |
| 2418   | 2-2 1/8       | (663) | 1-3 1/4                         | (387) | 2.76            | (0.26)         | 3018   | 2-8 1/8       | (815) | 1-3 1/4                         | (387) | 3.40            | (0.32)         |
| 2420   | 2-2 1/8       | (663) | 1-5 1/4                         | (438) | 3.13            | (0.29)         | 3020   | 2-8 1/8       | (815) | 1-5 1/4                         | (438) | 3.84            | (0.36)         |
| 2422   | 2-2 1/8       | (663) | 1-7 1/4                         | (489) | 3.49            | (0.32)         | 3022   | 2-8 1/8       | (815) | 1-7 1/4                         | (489) | 4.29            | (0.40)         |
| 2424   | 2-2 1/8       | (663) | 1-9 1/4                         | (540) | 3.85            | (0.36)         | 3024   | 2-8 1/8       | (815) | 1-9 1/4                         | (540) | 4.74            | (0.44)         |
| 2426   | 2-2 1/8       | (663) | 1-11 1/4                        | (591) | 4.21            | (0.39)         | 3026   | 2-8 1/8       | (815) | 1-11 1/4                        | (591) | 5.18            | (0.48)         |
| 2428   | 2-2 1/8       | (663) | 2-1 1/4                         | (641) | 4.57            | (0.42)         | 3028   | 2-8 1/8       | (815) | 2-1 1/4                         | (641) | 5.63            | (0.52)         |
| 2430   | 2-2 1/8       | (663) | 2-3 1/4                         | (692) | 4.94            | (0.46)         | 3030 E | 2-8 1/8       | (815) | 2-3 1/4                         | (692) | 6.07            | (0.56)         |
| 2432   | 2-2 1/8       | (663) | 2-5 1/4                         | (743) | 5.30            | (0.49)         | 3032 E | 2-8 1/8       | (815) | 2-5 1/4                         | (743) | 6.52            | (0.61)         |
| 2434   | 2-2 1/8       | (663) | 2-7 1/4                         | (794) | 5.66            | (0.53)         | 3034 E | 2-8 1/8       | (815) | 2-7 1/4                         | (794) | 6.96            | (0.65)         |
| 2436 E | 2-2 1/8       | (663) | 2-9 1/4                         | (845) | 6.02            | (0.56)         | 3036 E | 2-8 1/8       | (815) | 2-9 1/4                         | (845) | 7.41            | (0.69)         |
| 2440 E | 2-2 1/8       | (663) | 3-1 1/4                         | (946) | 6.75            | (0.63)         | 3040 E | 2-8 1/8       | (815) | 3-1 1/4                         | (946) | 8.30            | (0.77)         |
| 2442 E | 2-2 1/8       | (663) | 3-3 1/4                         | (997) | 7.11            | (0.66)         | 3042 E | 2-8 1/8       | (815) | 3-3 1/4                         | (997) | 8.75            | (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<br>HP Sill Liner |       | Egress Opening  |                |
|--------|---------------|--------|---------------------------------|-------|-----------------|----------------|
|        | ft - in       | mm     | ft - in                         | mm    | ft <sup>2</sup> | m <sup>2</sup> |
| 3212   | 2-10 1/8      | (866)  | 0-9 1/4                         | (235) | 2.19            | (0.20)         |
| 3214   | 2-10 1/8      | (866)  | 0-11 1/4                        | (286) | 2.66            | (0.25)         |
| 3216   | 2-10 1/8      | (866)  | 1-1 1/4                         | (337) | 3.14            | (0.29)         |
| 3218   | 2-10 1/8      | (866)  | 1-3 1/4                         | (387) | 3.61            | (0.34)         |
| 3220   | 2-10 1/8      | (866)  | 1-5 1/4                         | (438) | 4.08            | (0.38)         |
| 3222   | 2-10 1/8      | (866)  | 1-7 1/4                         | (489) | 4.56            | (0.42)         |
| 3224   | 2-10 1/8      | (866)  | 1-9 1/4                         | (540) | 5.03            | (0.47)         |
| 3226   | 2-10 1/8      | (866)  | 1-11 1/4                        | (591) | 5.50            | (0.51)         |
| 3228 E | 2-10 1/8      | (866)  | 2-1 1/4                         | (641) | 5.98            | (0.56)         |
| 3230 E | 2-10 1/8      | (866)  | 2-3 1/4                         | (692) | 6.45            | (0.60)         |
| 3232 E | 2-10 1/8      | (866)  | 2-5 1/4                         | (743) | 6.92            | (0.64)         |
| 3234 E | 2-10 1/8      | (866)  | 2-7 1/4                         | (794) | 7.40            | (0.69)         |
| 3236 E | 2-10 1/8      | (866)  | 2-9 1/4                         | (845) | 7.87            | (0.73)         |
| 3240 E | 2-10 1/8      | (866)  | 3-1 1/4                         | (946) | 8.82            | (0.82)         |
| 3242 E | 2-10 1/8      | (866)  | 3-3 1/4                         | (997) | 9.29            | (0.86)         |
| 3612   | 3-2 1/8       | (967)  | 0-9 1/4                         | (235) | 2.45            | (0.23)         |
| 3614   | 3-2 1/8       | (967)  | 0-11 1/4                        | (286) | 2.98            | (0.28)         |
| 3616   | 3-2 1/8       | (967)  | 1-1 1/4                         | (337) | 3.50            | (0.33)         |
| 3618   | 3-2 1/8       | (967)  | 1-3 1/4                         | (387) | 4.03            | (0.37)         |
| 3620   | 3-2 1/8       | (967)  | 1-5 1/4                         | (438) | 4.56            | (0.42)         |
| 3622   | 3-2 1/8       | (967)  | 1-7 1/4                         | (489) | 5.09            | (0.47)         |
| 3624   | 3-2 1/8       | (967)  | 1-9 1/4                         | (540) | 5.62            | (0.52)         |
| 3626   | 3-2 1/8       | (967)  | 1-11 1/4                        | (591) | 6.15            | (0.57)         |
| 3628 E | 3-2 1/8       | (967)  | 2-1 1/4                         | (641) | 6.68            | (0.62)         |
| 3630 E | 3-2 1/8       | (967)  | 2-3 1/4                         | (692) | 7.21            | (0.67)         |
| 3632 E | 3-2 1/8       | (967)  | 2-5 1/4                         | (743) | 7.74            | (0.72)         |
| 3634 E | 3-2 1/8       | (967)  | 2-7 1/4                         | (794) | 8.27            | (0.77)         |
| 3636 E | 3-2 1/8       | (967)  | 2-9 1/4                         | (845) | 8.79            | (0.82)         |
| 3640 E | 3-2 1/8       | (967)  | 3-1 1/4                         | (946) | 9.85            | (0.92)         |
| 3642 E | 3-2 1/8       | (967)  | 3-3 1/4                         | (997) | 10.38           | (0.96)         |
| 4012   | 3-6 1/8       | (1069) | 0-9 1/4                         | (235) | 2.70            | (0.25)         |
| 4014   | 3-6 1/8       | (1069) | 0-11 1/4                        | (286) | 3.29            | (0.31)         |
| 4016   | 3-6 1/8       | (1069) | 1-1 1/4                         | (337) | 3.87            | (0.36)         |
| 4018   | 3-6 1/8       | (1069) | 1-3 1/4                         | (387) | 4.46            | (0.41)         |
| 4020   | 3-6 1/8       | (1069) | 1-5 1/4                         | (438) | 5.04            | (0.47)         |
| 4022   | 3-6 1/8       | (1069) | 1-7 1/4                         | (489) | 5.63            | (0.52)         |
| 4024   | 3-6 1/8       | (1069) | 1-9 1/4                         | (540) | 6.21            | (0.58)         |
| 4026   | 3-6 1/8       | (1069) | 1-11 1/4                        | (591) | 6.80            | (0.63)         |
| 4028 E | 3-6 1/8       | (1069) | 2-1 1/4                         | (641) | 7.38            | (0.69)         |
| 4030 E | 3-6 1/8       | (1069) | 2-3 1/4                         | (692) | 7.96            | (0.74)         |
| 4032 E | 3-6 1/8       | (1069) | 2-5 1/4                         | (743) | 8.55            | (0.79)         |
| 4034 E | 3-6 1/8       | (1069) | 2-7 1/4                         | (794) | 9.13            | (0.85)         |
| 4036 E | 3-6 1/8       | (1069) | 2-9 1/4                         | (845) | 9.72            | (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

| Clad 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)    | 5.56  | (0.52)     | 6.05  | (0.56)    | 6.53  | (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)    |       |

| Clad 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)    | 6.53  | (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)     | 8.36  | (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)    | 8.36  | (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   |           |       |



**Daylight Measurements: Transom**

| Clad Ultimate<br>Double Hung Transom<br>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  | 1-0 15/16  | (329) | 1.34                        | (0.12)    | 1.70  | (0.16)    | 2.06  | (0.19)     |       |
| 20  | 1-8 15/16  | (532) | 2.17                        | (0.20)    | 2.75  | (0.26)    | 3.33  | (0.31)     |       |

| Clad Ultimate<br>Double Hung Transom<br>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  | 1-0 15/16  | (329) | 2.24                        | (0.21)    | 2.42  | (0.22)    | 2.60  | (0.24)    |       |
| 20  | 1-8 15/16  | (532) | 3.63                        | (0.34)    | 3.92  | (0.36)    | 4.21  | (0.39)    |       |

| Clad Ultimate<br>Double Hung Transom<br>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  | 1-0 15/16  | (329) | 2.78                        | (0.26)    | 3.14  | (0.29)     | 3.50  | (0.32)    |       |
| 20  | 1-8 15/16  | (532) | 4.50                        | (0.42)    | 5.08  | (0.47)     | 5.66  | (0.53)    |       |

Daylight Measurements: Picture

| Clad Ultimate<br>Double Hung Picture<br>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 5/16   | (820)  | 7.83                        | (0.73)     | 9.63  | (0.89)    | 10.53  | (0.98)     | 12.32  | (1.14)    | 14.11  | (1.31)    |        |
| 42  | 3-0 5/16   | (922)  | 8.80                        | (0.82)     | 10.82 | (1.01)    | 11.83  | (1.10)     | 13.85  | (1.29)    | 15.86  | (1.47)    |        |
| 46  | 3-4 5/16   | (1023) | 9.78                        | (0.91)     | 12.01 | (1.12)    | 13.13  | (1.22)     | 15.37  | (1.43)    | 17.61  | (1.64)    |        |
| 50  | 3-8 5/16   | (1125) | 10.75                       | (1.00)     | 13.21 | (1.23)    | 14.44  | (1.34)     | 16.90  | (1.57)    | 19.36  | (1.80)    |        |
| 54  | 4-0 5/16   | (1226) | 11.72                       | (1.09)     | 14.40 | (1.34)    | 15.74  | (1.46)     | 18.42  | (1.71)    | 21.11  | (1.96)    |        |
| 58  | 4-4 5/16   | (1328) | 12.69                       | (1.18)     | 15.59 | (1.45)    | 17.04  | (1.58)     | 19.95  | (1.85)    | 22.85  | (2.12)    |        |
| 62  | 4-8 5/16   | (1430) | 13.66                       | (1.27)     | 16.78 | (1.56)    | 18.35  | (1.70)     | 21.48  | (2.00)    | 24.60  | (2.29)    |        |
| 66  | 5-0 5/16   | (1531) | 14.63                       | (1.36)     | 17.98 | (1.67)    | 19.65  | (1.83)     | 23.00  | (2.14)    | 26.35  | (2.45)    |        |
| 70  | 5-4 5/16   | (1633) | 15.60                       | (1.45)     | 19.17 | (1.78)    | 20.96  | (1.95)     | 24.53  | (2.28)    | 28.10  | (2.61)    |        |
| 74  | 5-8 5/16   | (1734) | 16.57                       | (1.54)     | 20.36 | (1.89)    | 22.26  | (2.07)     | 26.05  | (2.42)    | 29.85  | (2.77)    |        |
| 78  | 6-0 5/16   | (1836) | 17.54                       | (1.63)     | 21.55 | (2.00)    | 23.56  | (2.19)     | 27.58  | (2.56)    | 31.60  | (2.94)    |        |
| 86  | 6-8 5/16   | (2039) | 19.48                       | (1.81)     | 23.94 | (2.22)    | 26.17  | (2.43)     | 30.63  | (2.85)    | 35.09  | (3.26)    |        |
| 90  | 7-0 5/16   | (2141) | 20.45                       | (1.90)     | 25.13 | (2.33)    | 27.47  | (2.55)     | 32.16  | (2.99)    | 36.84  | (3.42)    |        |

**Minimum and Maximum Guidelines, Certified Sizes and Ratings: Double Hung Units**

| Minimum and Maximum Guidelines |                                |                        |       |         |       |                        |        |         |        |                |            |
|--------------------------------|--------------------------------|------------------------|-------|---------|-------|------------------------|--------|---------|--------|----------------|------------|
| Unit Type                      |                                | Min Rough Opening Size |       |         |       | Max Rough Opening Size |        |         |        | Max Glass Size |            |
|                                |                                | Width                  |       | Height  |       | Width                  |        | Height  |        |                |            |
|                                |                                | in                     | mm    | in      | mm    | in                     | mm     | in      | mm     | Sq. Feet       | Sq. Meters |
| CUDH                           | 1/8" (3)<br>(Low E glass)      | 14 3/8                 | (365) | 24 7/8  | (632) | 46 3/8                 | (1178) | 96 7/8  | (2461) | 11             | 1.022      |
| CUDH                           | 3/16" (5)<br>(tint)            | 14 3/8                 | (365) | 24 7/8  | (632) | 46 3/8                 | (1178) | 96 7/8  | (2461) | 9              | 0.836      |
| CUDHT                          | .70" IG in<br>1 5/8" (16) Sash | 14 3/8                 | (365) | 14 3/16 | (360) | 121                    | (3073) | 60      | (1524) | 25             | 2.323      |
| CUDHP                          | 1" (25) IG in<br>2" (51) Sash  | 14 3/8                 | (365) | 15 1/2  | (394) | 121                    | (3073) | 120 1/2 | (3061) | 49             | 4.552      |

NOTE: Maximum Interior Shade width 72" (1829) and Maximum Interior Shade height 112 3/8" (2854)

| 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     |
| Clad Ultimate Double Hung 3644                  | 1.57              | 6                   | 60                       | LC-PG40-H            | 40                   | 41 3/8        | (1051) | 96 3/8         | (2448) |
| Clad Ultimate Double Hung 4036                  | 1.57              | 6                   | 60                       | LC-PG40-H            | 40                   | 45 3/8        | (1153) | 80 3/8         | (2042) |
| Clad Ultimate Double Hung Transom               | 1.57              | 6                   | 60                       | LC-PG40-TR           | 40                   | 69 3/8        | (1762) | 27 11/16       | (703)  |
| Clad Ultimate Double Hung Picture 6894          | 1.57              | 6                   | 60                       | CW-PG40-FW           | 40                   | 69 3/8        | (1762) | 96 3/8         | (2448) |
| Clad Ultimate Double Hung High Performance 3644 | 1.57              | 8.25                | 60                       | LC-PG40-H            | 40                   | 41 3/8        | (1051) | 96 3/8         | (2448) |
| Clad Ultimate Double Hung High Performance 4036 | 1.57              | 8.25                | 60                       | LC-PG40-H            | 40                   | 45 3/8        | (1153) | 80 3/8         | (2042) |

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

| Minimum and Maximum Guidelines |                |                        |       |         |       |                        |        |         |        |                |            |
|--------------------------------|----------------|------------------------|-------|---------|-------|------------------------|--------|---------|--------|----------------|------------|
| Unit Type                      |                | Min Rough Opening Size |       |         |       | Max Rough Opening Size |        |         |        | Max Glass Size |            |
|                                |                | Width                  |       | Height  |       | Width                  |        | Height  |        |                |            |
|                                |                | in                     | mm    | in      | mm    | in                     | mm     | in      | mm     | Sq. Feet       | Sq. Meters |
| CUDH                           | Storm Plus IZ3 | 22 3/8                 | (568) | 24 7/8  | (632) | 46 3/8                 | (1178) | 76 3/8  | (1940) | 7 9/16         | 0.701      |
| CUDHT                          | Storm Plus IZ3 | 14 3/8                 | (365) | 14 3/16 | (360) | 74 3/8                 | (1889) | 28 3/16 | (716)  | 9 7/16         | 0.878      |
| CUDHP                          | Storm Plus IZ3 | 14 3/8                 | (365) | 15 1/2  | (394) | 121                    | (3073) | 120 1/2 | (3061) | 38 5/16        | 3.559      |

NOTE: Maximum Interior Shade width 72" (1829) and Maximum Interior Shade height 112 3/8" (2854)

| 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     |
| Clad Ultimate Double Hung StormPlus IZ3 3234          | 1.57              | 8.25                | 82.5                     | LC-PG55-H            | +55/-65              | 37 3/8        | (949)  | 76 3/8         | (1940) |
| Clad Ultimate Double Hung StormPlus IZ3 3234 2W       | 1.57              | 8.25                | 82.5                     | LC-PG55-H            | +55/-65              | 74 3/4        | (1899) | 76 3/8         | (1940) |
| Clad Ultimate Double Hung StormPlus IZ3 4026          | 1.57              | 8.25                | 82.5                     | LC-PG55-H            | +55/-65              | 45 3/8        | (1153) | 60 3/8         | (1534) |
| Clad Ultimate Double Hung StormPlus IZ3 4026 2W       | 1.57              | 8.25                | 82.5                     | LC-PG55-H            | +55/-65              | 90 3/4        | (2305) | 60 3/8         | (1534) |
| Clad Ultimate Double Hung Picture StormPlus IZ3 60108 | 1.57              | 8.25                | 82.5                     | CW-PG55-FW           | +55/-65              | 60            | (1524) | 108            | (2743) |
| Clad Ultimate Double Hung Transom Storm Plus IZ3      | 1.57              | 4.5                 | 45                       | LC-PG55-TR           | +55/-65              | 73 3/8        | (1864) | 28 3/8         | (721)  |

## Impact Zone 3 - Product Modifications

### Impact Glazing Zone 3 (IZ3):

#### Frame:

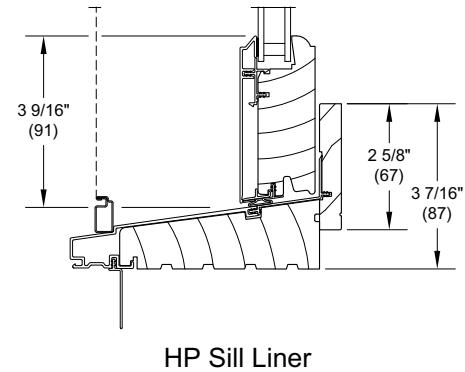
- Sealant added at sill liner
- Sill brackets added for bottom sash retention
- Screws through the jamb liner to reinforce the frame

#### 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



## Measurement Conversions

| Double Hung Operating Unit    |                   |           |       |        |           |       |
|-------------------------------|-------------------|-----------|-------|--------|-----------|-------|
| Unit Measurements             |                   | Width     |       | Height |           |       |
| From                          | To                | in        | mm    |        | in        | mm    |
| <b>Rough Opening</b>          |                   |           |       |        |           |       |
| 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 11/16  | (43)  |
| Masonry Opening w/Flat Casing | Rough Opening     | -6 1/2    | (165) |        | -3 7/8    | (98)  |
| <b>Frame</b>                  |                   |           |       |        |           |       |
| OM of BMC                     | OM of Frame       | -2 5/8    | (67)  |        | -1 15/16  | (49)  |
| OM of Flat Casing             | OM of Frame       | -6        | (152) |        | -3 5/8    | (92)  |
| Daylight Opening              | OM of Frame       | + 6 7/16  | (164) | × 2    | + 10 1/2  | (267) |
| <b>Top Sash</b>               |                   |           |       |        |           |       |
| OM of Frame                   | OM of Top Sash    | -2 29/32  | (74)  | + 2    | -1 5/16   | (33)  |
| Daylight Opening              | OM of Top Sash    | + 3 17/32 | (90)  |        | + 3 31/32 | (101) |
| <b>Bottom Sash</b>            |                   |           |       |        |           |       |
| OM of Frame                   | OM of Bottom Sash | -2 29/32  | (74)  | + 2    | + 7/16    | (11)  |
| Daylight Opening              | OM of Bottom Sash | + 3 17/32 | (90)  |        | + 5 11/16 | (145) |
| <b>Glass</b>                  |                   |           |       |        |           |       |
| Daylight Opening              | Glass             | + 1 1/16  | (27)  |        | + 1 1/16  | (27)  |
| <b>Screen</b>                 |                   |           |       |        |           |       |
| OM of Frame                   | OM of Screen      | -2 1/16   | (52)  |        | -1 7/8    | (48)  |
| Daylight Opening              | OM of Screen      | + 4 3/8   | (111) | × 2    | + 8 5/8   | (219) |
| <b>Half Screen</b>            |                   |           |       |        |           |       |
| OM of Frame                   | OM of Screen      | -2 1/16   | (52)  | + 2    | -3/16     | (05)  |
| Daylight Opening              | OM of Screen      | + 4 3/8   | (111) |        | + 5 1/16  | (129) |
| <b>Combination</b>            |                   |           |       |        |           |       |
| OM of Frame                   | OM of Combination | -1 15/16  | (49)  |        | -1 25/32  | (45)  |
| Daylight Opening              | OM of Combination | + 4 1/2   | (114) | × 2    | + 8 23/32 | (221) |

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. CUDH 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 CUDH 2424)
2. 24" + 24" = 48"
3. 48" divide by 2/5 (0.4) = 19 13/64 (20)
4. 48" - 20" = 28"
5. The top sash will be a 2420 and the bottom sash will be a 2428. The call number for the example is: CUDH 2420/28.

**Measurement Conversions**

| Double Hung Transoms          |               |           |           |           |           |
|-------------------------------|---------------|-----------|-----------|-----------|-----------|
| 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               | Rough Opening | + 1/2     | (13)      | + 1/4     | (06)      |
| Masonry Opening w/BMC         | Rough Opening | -2 1/8    | (54)      | -1 11/16  | (43)      |
| Masonry Opening w/Flat Casing | Rough Opening | -6 1/2    | (165)     | -3 7/8    | (98)      |
| <b>Frame</b>                  |               | <b>in</b> | <b>mm</b> | <b>in</b> | <b>mm</b> |
| OM of BMC                     | OM of Frame   | -2 5/8    | (67)      | -1 15/16  | (49)      |
| OM of Flat Casing             | OM of Frame   | -6        | (152)     | -3 5/8    | (92)      |
| <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 3/8    | (61)      |
| Daylight Opening              | OM of Sash    | + 3 17/32 | (90)      | + 4 3/8   | (111)     |
| <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)      |

| 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               | Rough Opening | + 1/2     | (13)      | + 1/4     | (06)      |
| Masonry Opening w/BMC         | Rough Opening | -2 1/8    | (54)      | -1 11/16  | (43)      |
| Masonry Opening w/Flat Casing | Rough Opening | -6 1/2    | (165)     | -3 7/8    | (98)      |
| <b>Frame</b>                  |               | <b>in</b> | <b>mm</b> | <b>in</b> | <b>mm</b> |
| OM of BMC                     | OM of Frame   | -2 5/8    | (67)      | -1 15/16  | (49)      |
| OM of Flat Casing             | OM of Frame   | -6        | (152)     | -3 5/8    | (92)      |
| Daylight Opening              | OM of Frame   | + 6 7/16  | (164)     | + 8 3/32  | (205)     |
| <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)      | -2 9/16   | (65)      |
| Daylight Opening              | OM of Sash    | + 4 7/8   | (124)     | + 5 17/32 | (140)     |
| <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)      |

## Measurement Conversions

### Egress Formulas

#### Clear Opening Width:

- Clear Opening Width = Frame OM Width - 3 9 /32" (83)

#### Clear Opening Height:

- Units with Standard Sill Liner
  - Clear Opening Height = ((Frame OM Height - 8 3/8" (213)) / 2) - 1 7/8 (48)
- Units with High Performance Sill Liner
  - Clear Opening Height = ((Frame OM Height - 8 3/8" (213)) / 2) - 2 3/4" (70)

#### Vent Opening

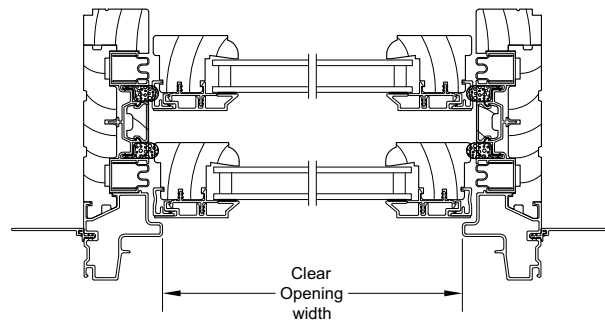
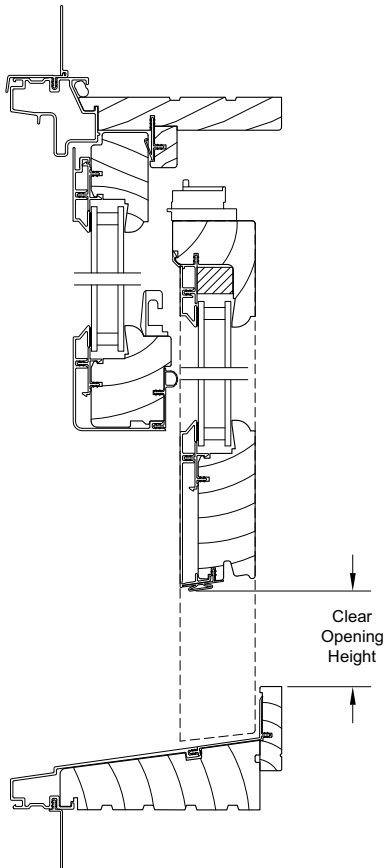
- Vent Width = Jamb to Jamb
- Vent Height = Top of Sill Liner to btm of btm sash fully opened
- Vent Width X Vent Height / 144

#### Clear Opening Width with Interior Shade:

- Clear Opening Width = Frame OM Width - 4 9/16" (116)

#### Clear Opening Height with Interior Shade:

- Units with Standard Sill Liner
  - Clear Opening Height = ((Frame OM Height - 8 3/8" (213)) / 2) - 2 9/32 (58)





**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                                     | 1-9 7/8         | (556)  | 1-10 3/8      | (568)  | 1-9 3/8    | (543)  | 1-2 15/16        | (379) |
| 20                                     | 2-1 7/8         | (657)  | 2-2 3/8       | (670)  | 2-1 3/8    | (645)  | 1-6 15/16        | (481) |
| 24                                     | 2-5 7/8         | (759)  | 2-6 3/8       | (772)  | 2-5 3/8    | (746)  | 1-10 15/16       | (583) |
| 26                                     | 2-7 7/8         | (810)  | 2-8 3/8       | (822)  | 2-7 3/8    | (797)  | 2-0 15/16        | (633) |
| 28                                     | 2-9 7/8         | (860)  | 2-10 3/8      | (873)  | 2-9 3/8    | (848)  | 2-2 15/16        | (684) |
| 30                                     | 2-11 7/8        | (911)  | 3-0 3/8       | (924)  | 2-11 3/8   | (899)  | 2-4 15/16        | (735) |
| 32                                     | 3-1 7/8         | (962)  | 3-2 3/8       | (975)  | 3-1 3/8    | (949)  | 2-6 15/16        | (786) |
| 36                                     | 3-5 7/8         | (1064) | 3-6 3/8       | (1076) | 3-5 3/8    | (1051) | 2-10 15/16       | (887) |
| 40                                     | 3-9 7/8         | (1165) | 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 |        | Daylight Opening |        |
|  | ft - in         | mm     | ft - in       | mm     | ft - in    | mm     | ft - in          | mm     |
| 12                                     | 2-8 5/8         | (829)  | 2-8 7/8       | (835)  | 2-8 3/8    | (822)  | 0-10 15/16       | (278)  |
| 14                                     | 3-0 5/8         | (930)  | 3-0 7/8       | (937)  | 3-0 3/8    | (924)  | 1-0 15/16        | (329)  |
| 16                                     | 3-4 5/8         | (1032) | 3-4 7/8       | (1038) | 3-4 3/8    | (1026) | 1-2 15/16        | (379)  |
| 18                                     | 3-8 5/8         | (1133) | 3-8 7/8       | (1140) | 3-8 3/8    | (1127) | 1-4 15/16        | (430)  |
| 20                                     | 4-0 5/8         | (1235) | 4-0 7/8       | (1241) | 4-0 3/8    | (1229) | 1-6 15/16        | (481)  |
| 22                                     | 4-4 5/8         | (1337) | 4-4 7/8       | (1343) | 4-4 3/8    | (1330) | 1-8 15/16        | (532)  |
| 24                                     | 4-8 5/8         | (1438) | 4-8 7/8       | (1445) | 4-8 3/8    | (1432) | 1-10 15/16       | (583)  |
| 26                                     | 5-0 5/8         | (1540) | 5-0 7/8       | (1546) | 5-0 3/8    | (1534) | 2-0 15/16        | (633)  |
| 28                                     | 5-4 5/8         | (1641) | 5-4 7/8       | (1648) | 5-4 3/8    | (1635) | 2-2 15/16        | (684)  |
| 30                                     | 5-8 5/8         | (1743) | 5-8 7/8       | (1749) | 5-8 3/8    | (1737) | 2-4 15/16        | (735)  |
| 32                                     | 6-0 5/8         | (1845) | 6-0 7/8       | (1851) | 6-0 3/8    | (1838) | 2-6 15/16        | (786)  |
| 34                                     | 6-4 5/8         | (1946) | 6-4 7/8       | (1953) | 6-4 3/8    | (1940) | 2-8 15/16        | (837)  |
| 36                                     | 6-8 5/8         | (2048) | 6-8 7/8       | (2054) | 6-8 3/8    | (2042) | 2-10 15/16       | (887)  |
| 40                                     | 7-4 5/8         | (2251) | 7-4 7/8       | (2257) | 7-4 3/8    | (2245) | 3-2 15/16        | (989)  |
| 42                                     | 7-8 5/8         | (2353) | 7-8 7/8       | (2359) | 7-8 3/8    | (2346) | 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   | 1-9 7/8         | (556)  | 1-10 3/8      | (568)  | 1-9 3/8    | (543)  | 1-2 15/16        | (379) |
| 20   | 2-1 7/8         | (657)  | 2-2 3/8       | (670)  | 2-1 3/8    | (645)  | 1-6 15/16        | (481) |
| 24   | 2-5 7/8         | (759)  | 2-6 3/8       | (772)  | 2-5 3/8    | (746)  | 1-10 15/16       | (583) |
| 26   | 2-7 7/8         | (810)  | 2-8 3/8       | (822)  | 2-7 3/8    | (797)  | 2-0 15/16        | (633) |
| 28   | 2-9 7/8         | (860)  | 2-10 3/8      | (873)  | 2-9 3/8    | (848)  | 2-2 15/16        | (684) |
| 30   | 2-11 7/8        | (911)  | 3-0 3/8       | (924)  | 2-11 3/8   | (899)  | 2-4 15/16        | (735) |
| 32   | 3-1 7/8         | (962)  | 3-2 3/8       | (975)  | 3-1 3/8    | (949)  | 2-6 15/16        | (786) |
| 36   | 3-5 7/8         | (1064) | 3-6 3/8       | (1076) | 3-5 3/8    | (1051) | 2-10 15/16       | (887) |
| 40   | 3-9 7/8         | (1165) | 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 |       | Daylight Opening |       |
|  | 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) | 1-0 15/16        | (329) |
| 20   | 2-3 15/16       | (710) | 2-4 3/16      | (716) | 2-3 11/16  | (703) | 1-8 15/16        | (532) |

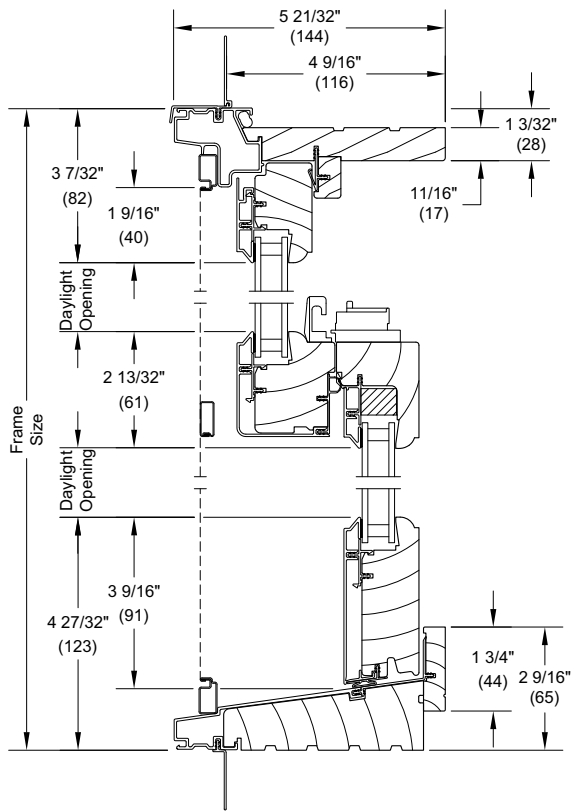
| Standard Double Hung Picture Unit Measurements |                 |        |               |        |            |        |                  |        |
|--|-----------------|--------|---------------|--------|------------|--------|------------------|--------|
| Width  |                 |        |               |        |            |        |                  |        |
| CN   | Masonry Opening |        | Rough Opening |        | Frame Size |        | Daylight Opening |        |
|  | ft - in         | mm     | ft - in       | mm     | ft - in    | mm     | ft - in          | mm     |
| 40   | 3-5 7/8         | (1064) | 3-6 3/8       | (1076) | 3-5 3/8    | (1051) | 2-10 15/16       | (887)  |
| 48   | 4-1 7/8         | (1267) | 4-2 3/8       | (1280) | 4-1 3/8    | (1254) | 3-6 15/16        | (1091) |
| 52   | 4-5 7/8         | (1368) | 4-6 3/8       | (1381) | 4-5 3/8    | (1356) | 3-10 15/16       | (1192) |
| 60   | 5-1 7/8         | (1572) | 5-2 3/8       | (1584) | 5-1 3/8    | (1559) | 4-6 15/16        | (1395) |
| 68   | 5-9 7/8         | (1775) | 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 |        | Daylight Opening |        |
|  | ft - in         | mm     | ft - in       | mm     | ft - in    | mm     | ft - in          | mm     |
| 38   | 3-4 5/8         | (1032) | 3-4 7/8       | (1038) | 3-4 3/8    | (1026) | 2-8 5/16         | (820)  |
| 42   | 3-8 5/8         | (1133) | 3-8 7/8       | (1140) | 3-8 3/8    | (1127) | 3-0 5/16         | (922)  |
| 46   | 4-0 5/8         | (1235) | 4-0 7/8       | (1241) | 4-0 3/8    | (1229) | 3-4 5/16         | (1023) |
| 50   | 4-4 5/8         | (1337) | 4-4 7/8       | (1343) | 4-4 3/8    | (1330) | 3-8 5/16         | (1125) |
| 54   | 4-8 5/8         | (1438) | 4-8 7/8       | (1445) | 4-8 3/8    | (1432) | 4-0 5/16         | (1226) |
| 58   | 5-0 5/8         | (1540) | 5-0 7/8       | (1546) | 5-0 3/8    | (1534) | 4-4 5/16         | (1328) |
| 62   | 5-4 5/8         | (1641) | 5-4 7/8       | (1648) | 5-4 3/8    | (1635) | 4-8 5/16         | (1430) |
| 66   | 5-8 5/8         | (1743) | 5-8 7/8       | (1749) | 5-8 3/8    | (1737) | 5-0 5/16         | (1531) |
| 70   | 6-0 5/8         | (1845) | 6-0 7/8       | (1851) | 6-0 3/8    | (1838) | 5-4 5/16         | (1633) |
| 74   | 6-4 5/8         | (1946) | 6-4 7/8       | (1953) | 6-4 3/8    | (1940) | 5-8 5/16         | (1734) |
| 78   | 6-8 5/8         | (2048) | 6-8 7/8       | (2054) | 6-8 3/8    | (2042) | 6-0 5/16         | (1836) |
| 86   | 7-4 5/8         | (2251) | 7-4 7/8       | (2257) | 7-4 3/8    | (2245) | 6-8 5/16         | (2039) |
| 90   | 7-8 5/8         | (2353) | 7-8 7/8       | (2359) | 7-8 3/8    | (2346) | 7-0 5/16         | (2141) |

# Clad Ultimate Double Hung

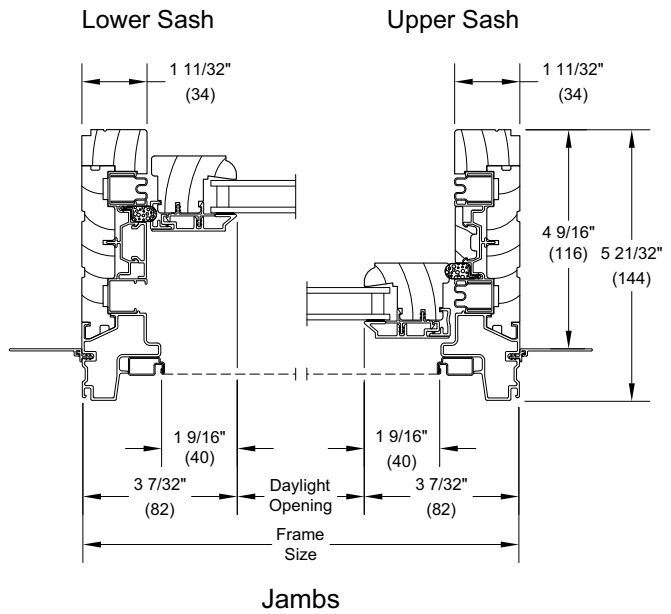
## Section Details: Operating

Scale: 3" = 1' 0"



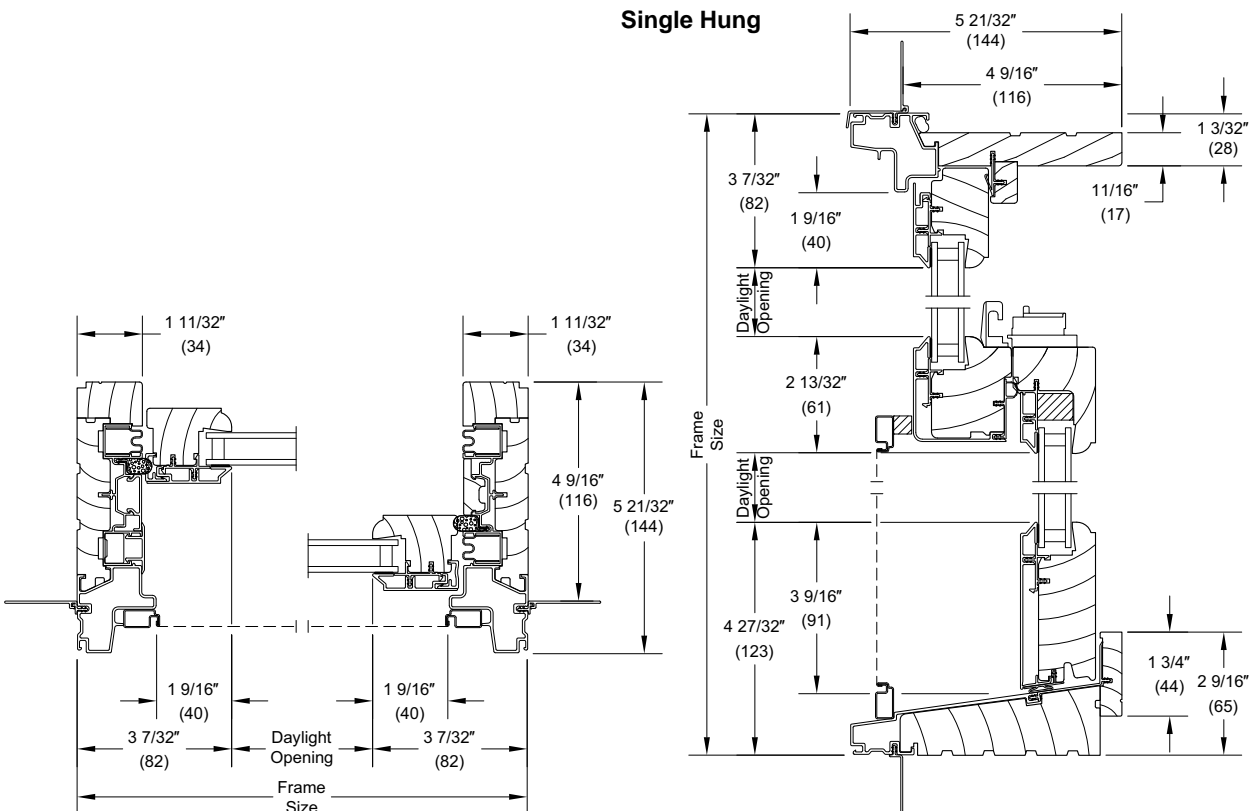
Head Jamb and Sill

### Double Hung



Jamb

### Single Hung



Head Jamb and Sill

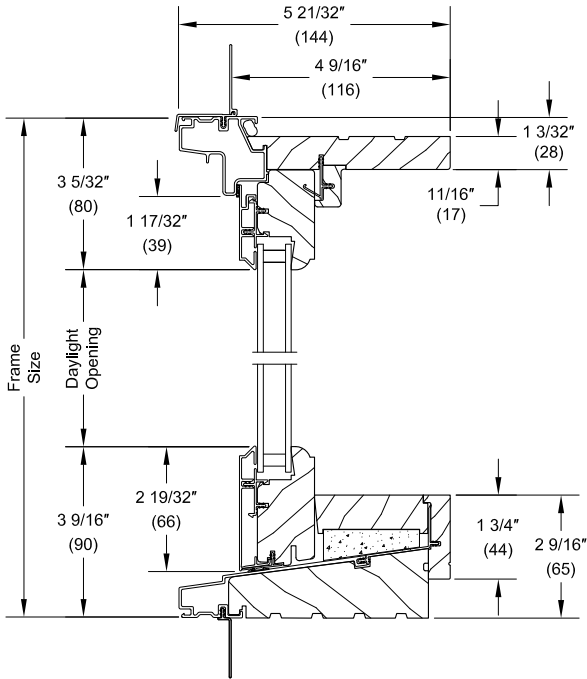
Jamb

# Clad Ultimate Double Hung

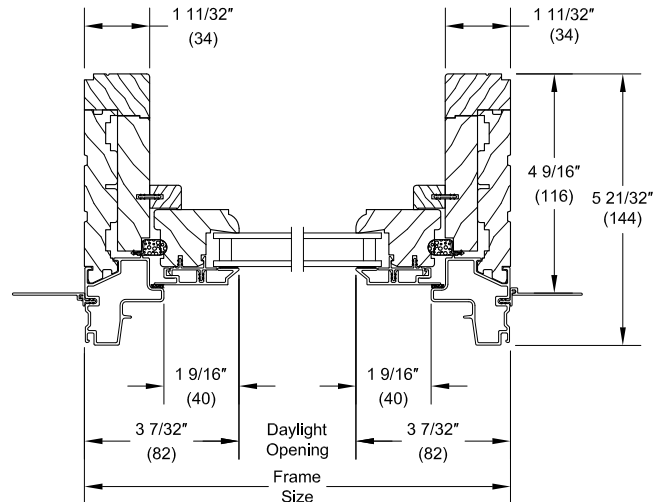
## Section Details: 1 5/8" Transom and 2" Picture

Scale: 3" = 1' 0"

### 1 5/8" Transom

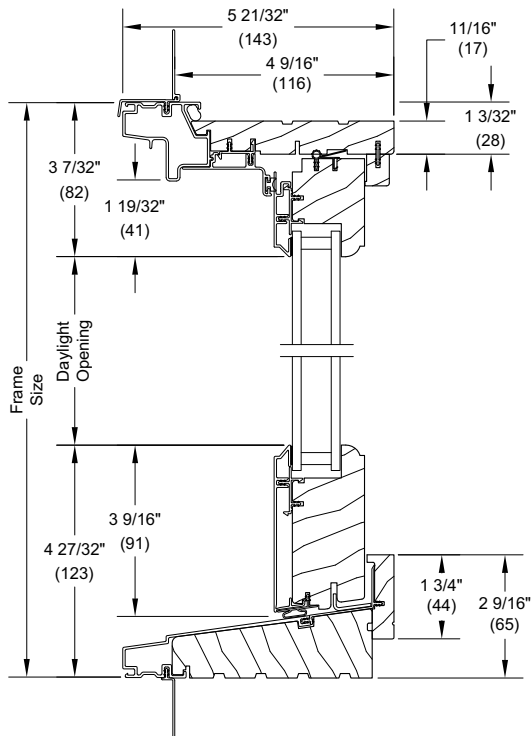


Head Jamb and Sill

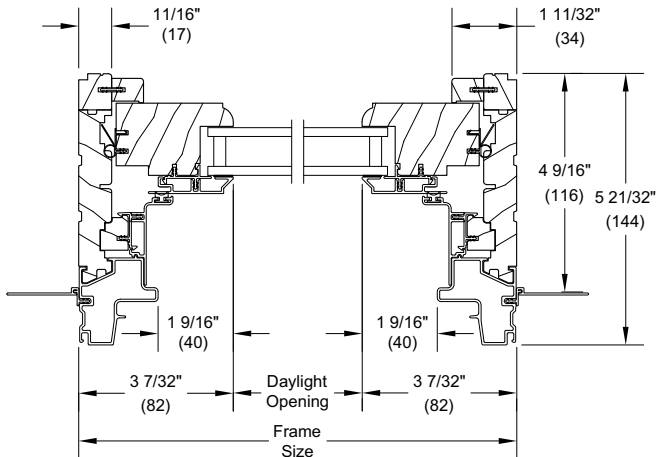


Jambs

### 2" Picture



Head Jamb and Sill

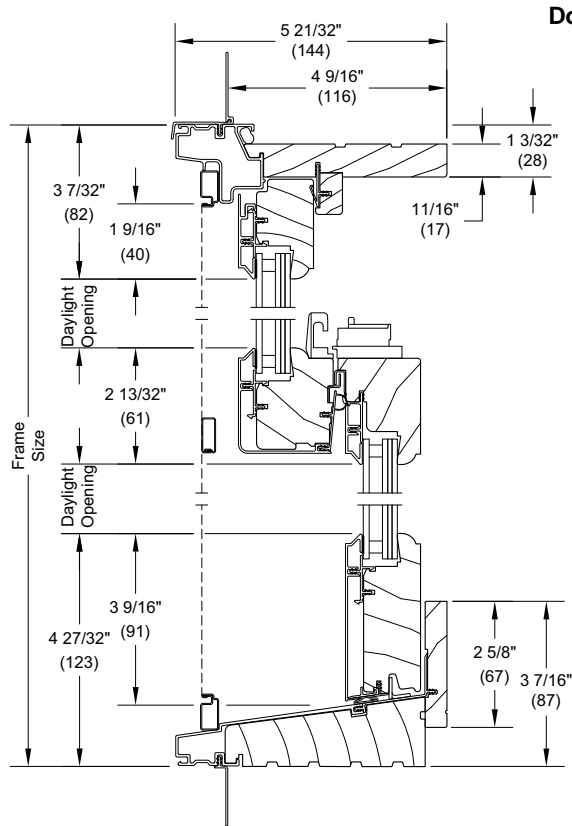


Jambs

# Clad Ultimate Double Hung

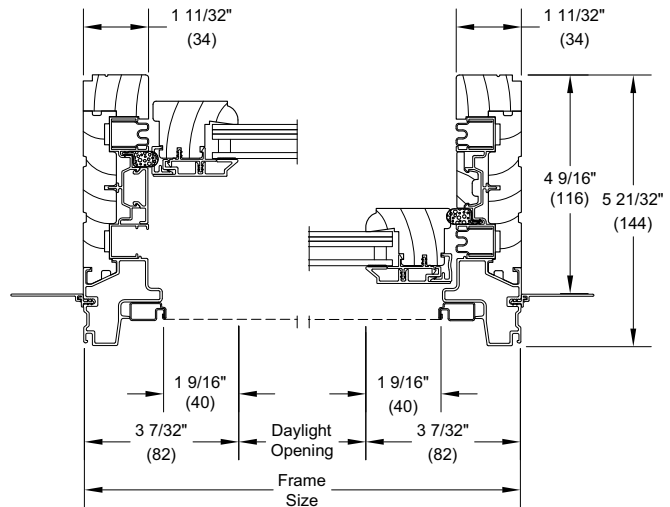
## Section Details: Operating Impact Zone 3

Scale: 3" = 1' 0"

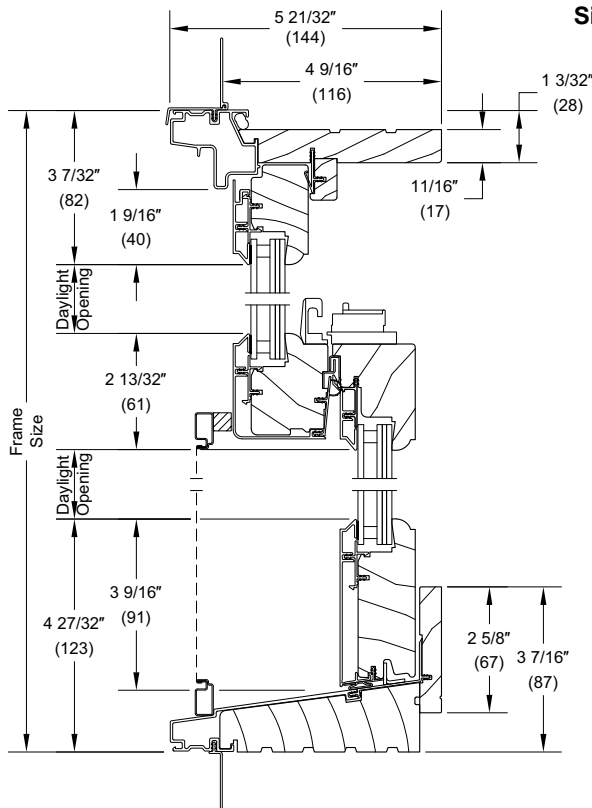


Head Jamb and Sill

### Double Hung

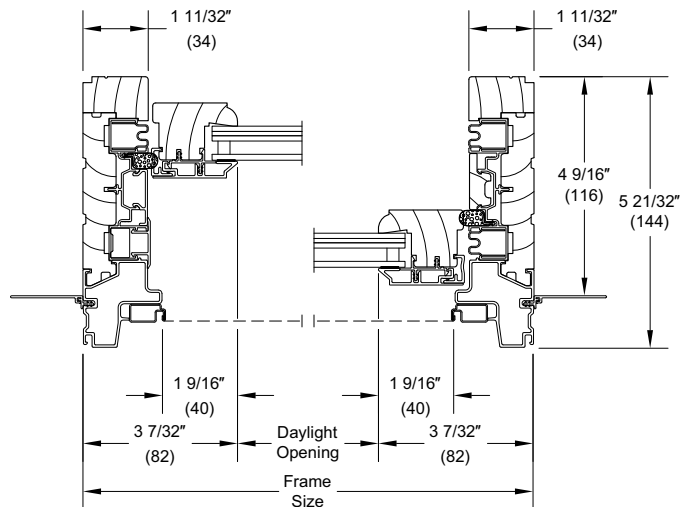


Jambs



Head Jamb and Sill

### Single Hung



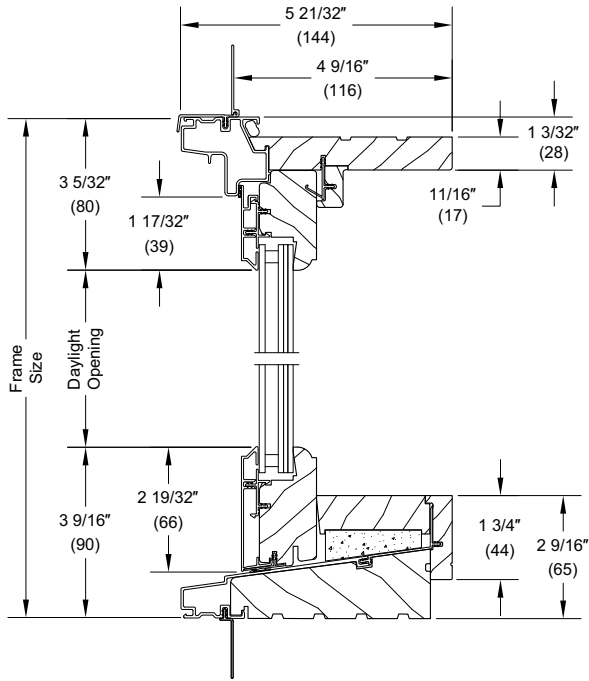
Jambs

# Clad Ultimate Double Hung

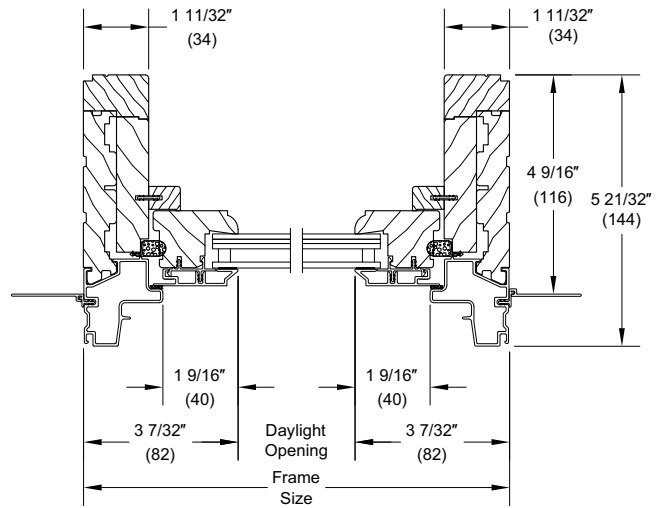
## Section Details: Transom/Picture Impact Zone 3

Scale: 3" = 1' 0"

### Transom

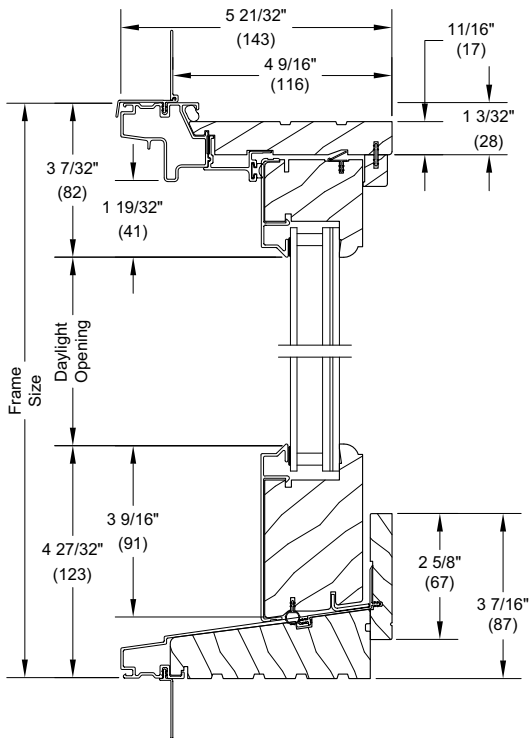


Head Jamb and Sill

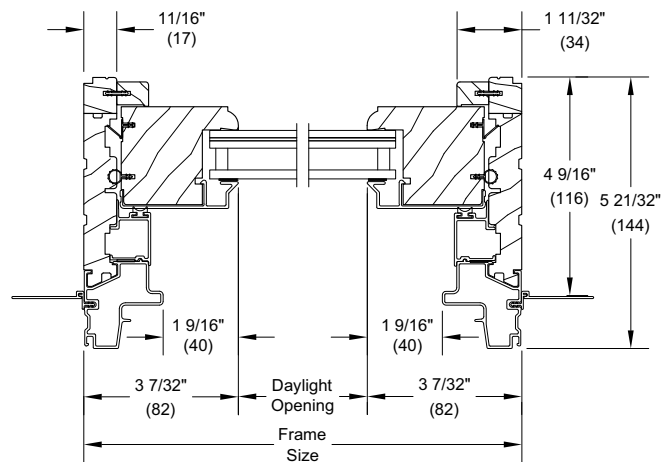


Jamb

### Picture



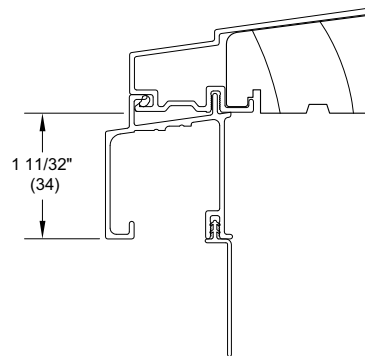
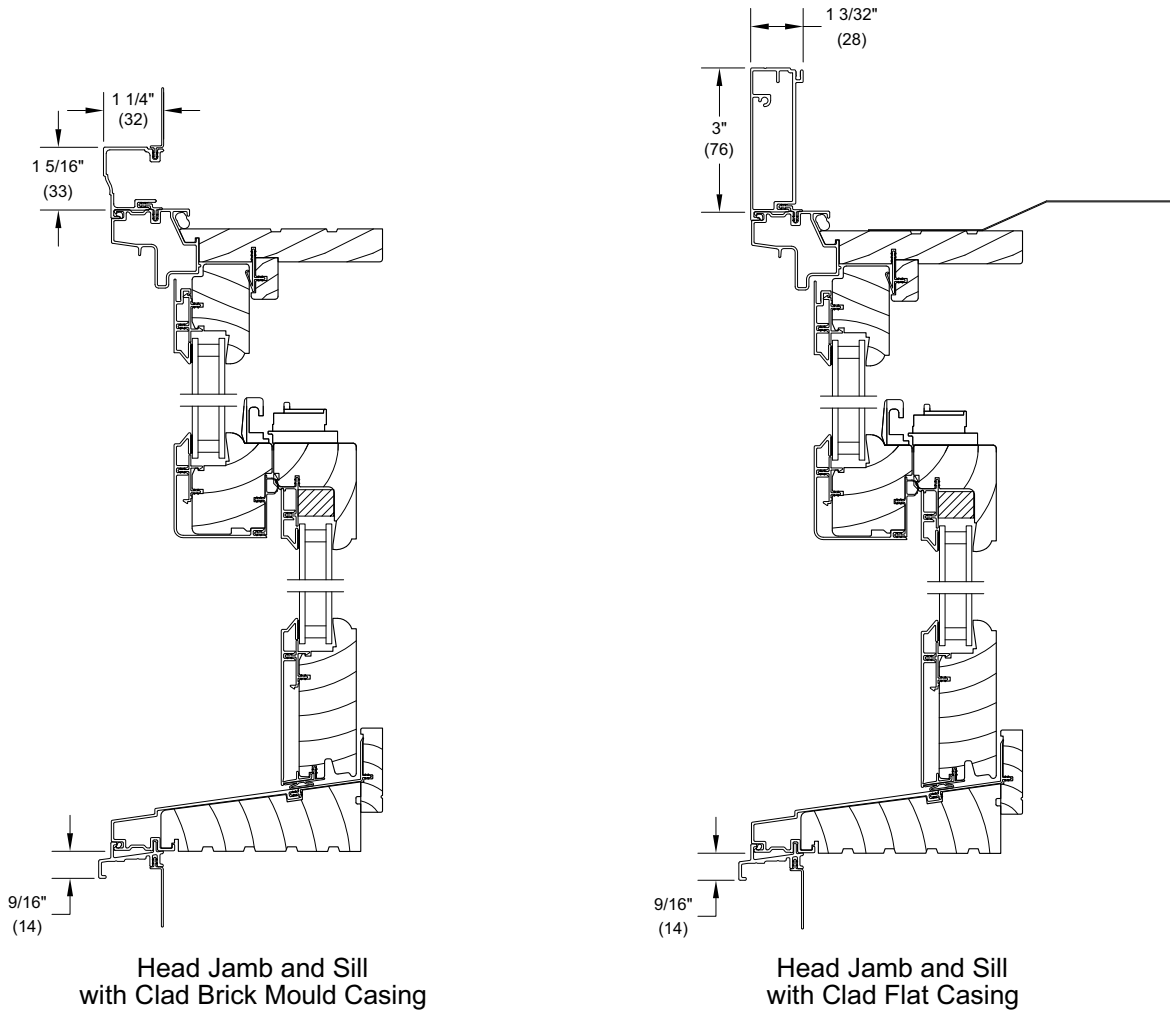
Head Jamb and Sill



Jamb

**Section Details: Casings**

Scale: 3" = 1' 0"

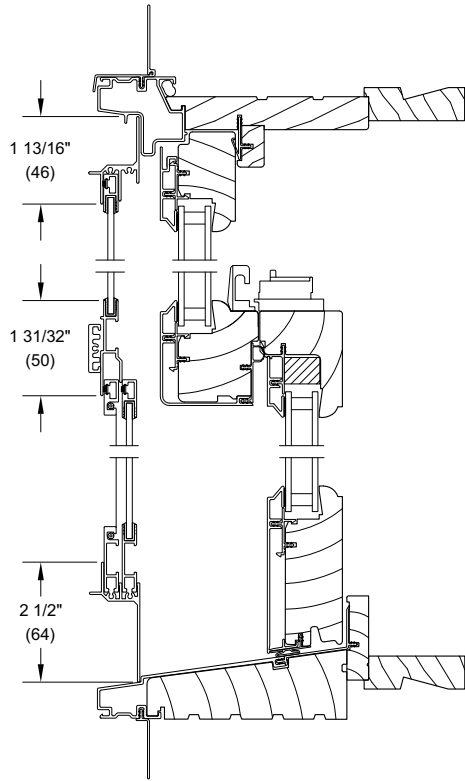


Sill with (A217) simulated thick subsill  
Scale: 2:1

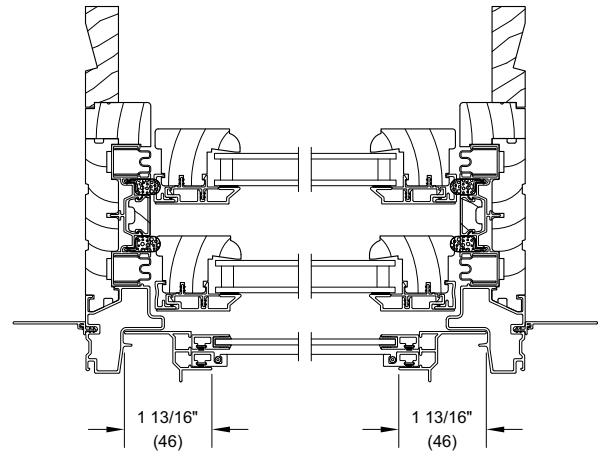
# Clad Ultimate Double Hung

## Section Details: 6 9/16" Combination

Scale: 3" = 1' 0"



Head Jamb and Sill



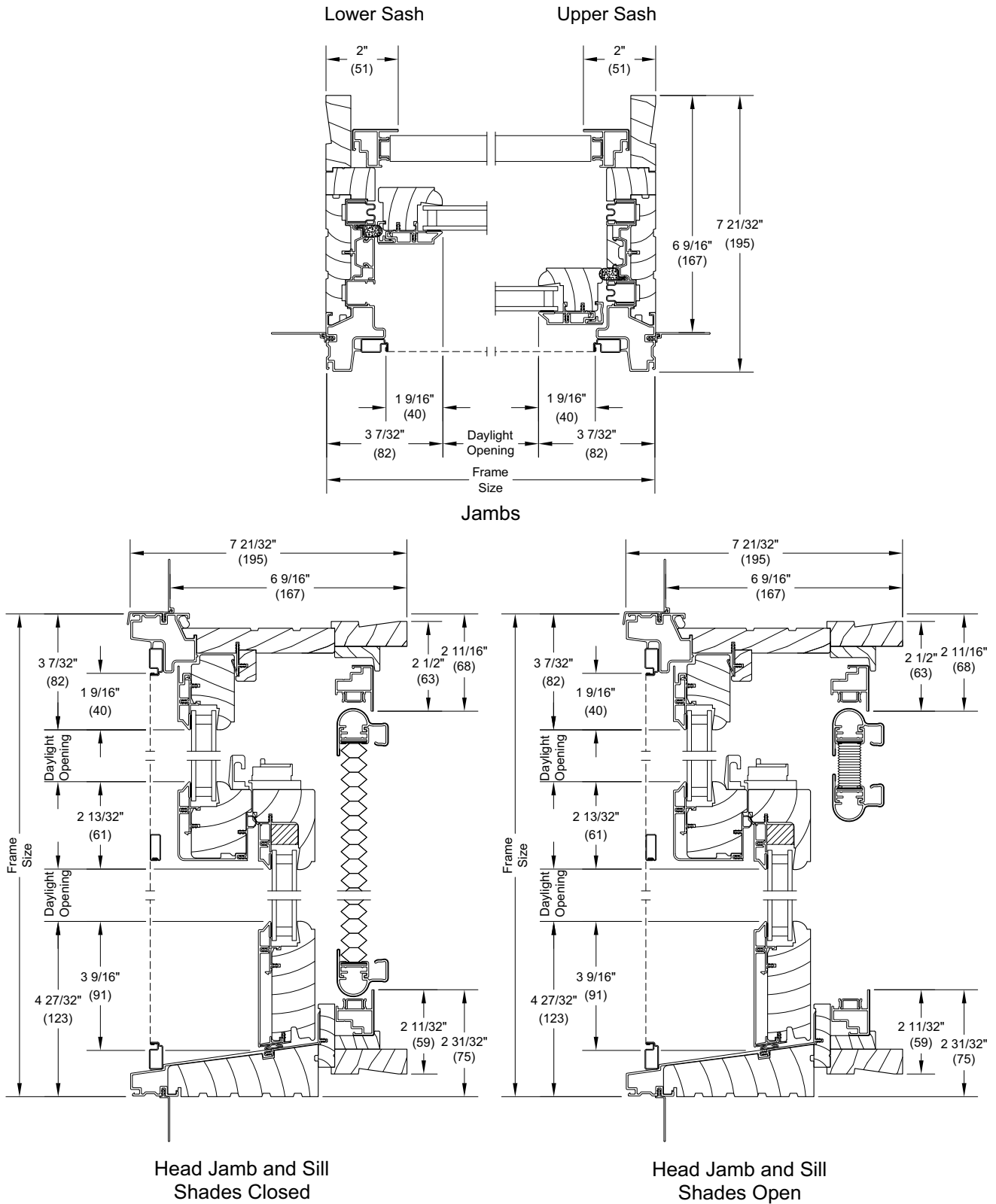
Jamb



# Clad Ultimate Double Hung

## Section Details: Interior Shade Option

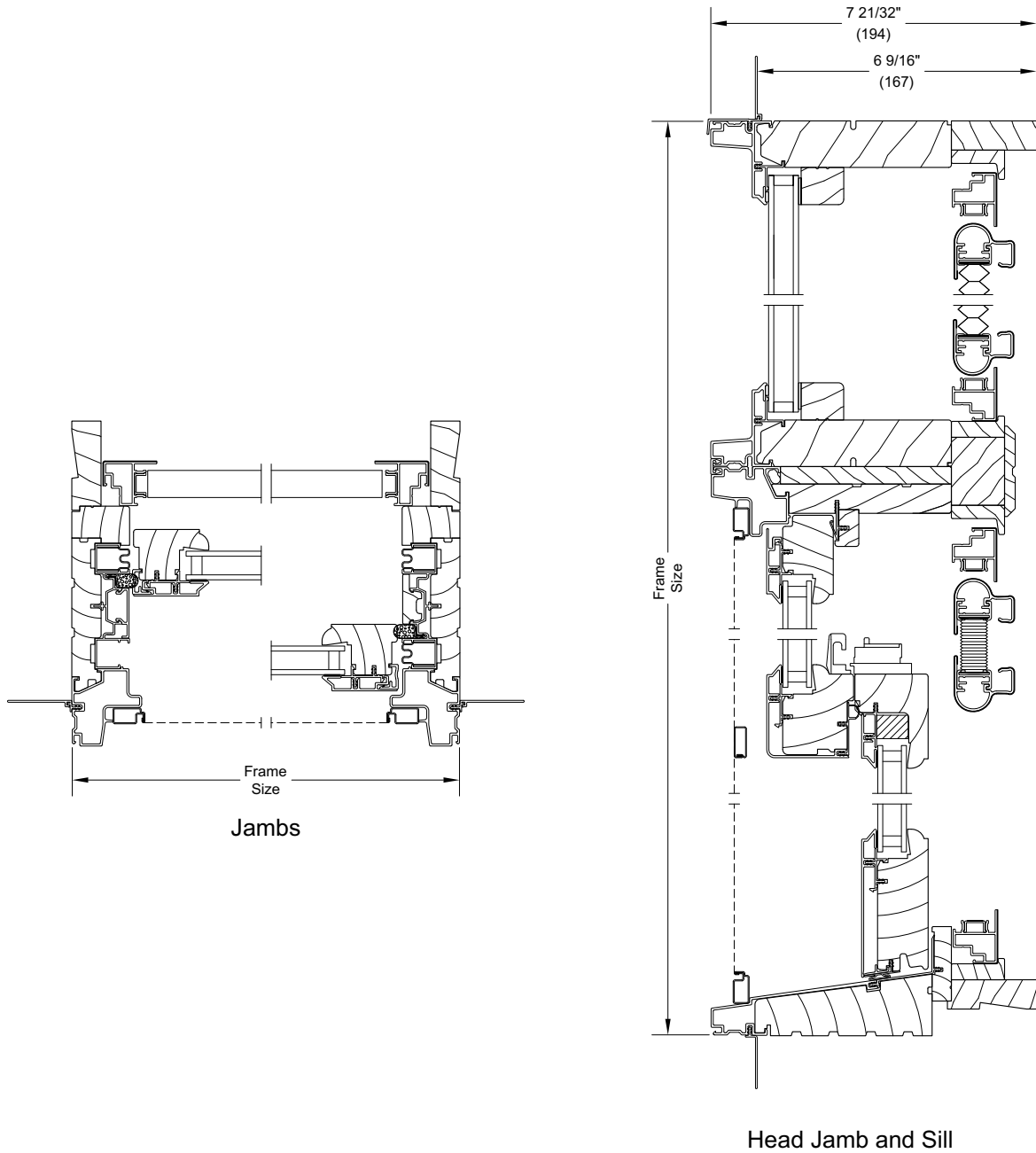
Scale: 3" = 1' 0"



*Clad Ultimate Double Hung*

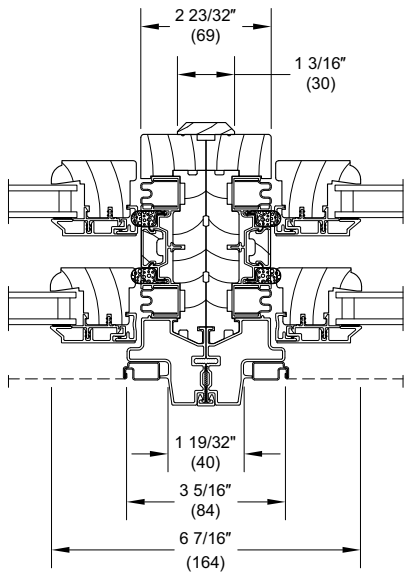
**Section Details: Muller Direct Glaze with Interior Shade Option**

Scale: 3" = 1' 0"

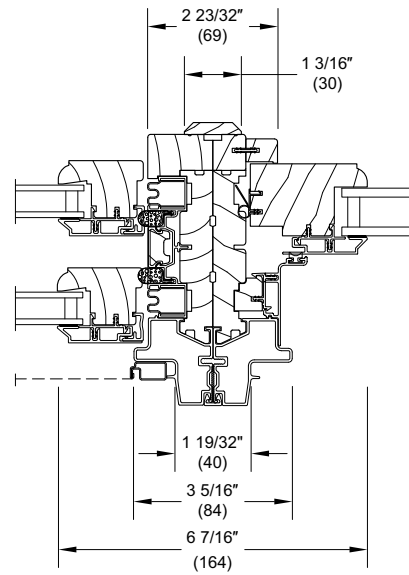


**Section Details: Mullions**

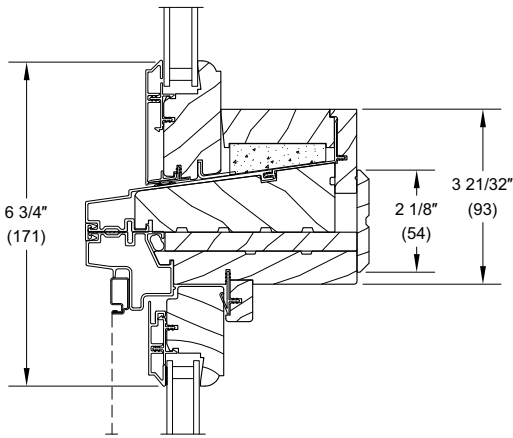
Scale: 3" - 1' 0"



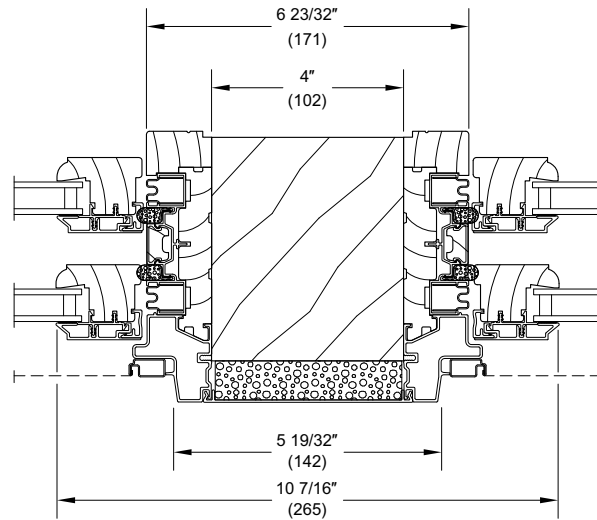
Vertical Mullion  
Operator/Operator



Vertical Mullion  
Operator/Picture



Horizontal Mullion  
Transom/Operator



4" Space Mull