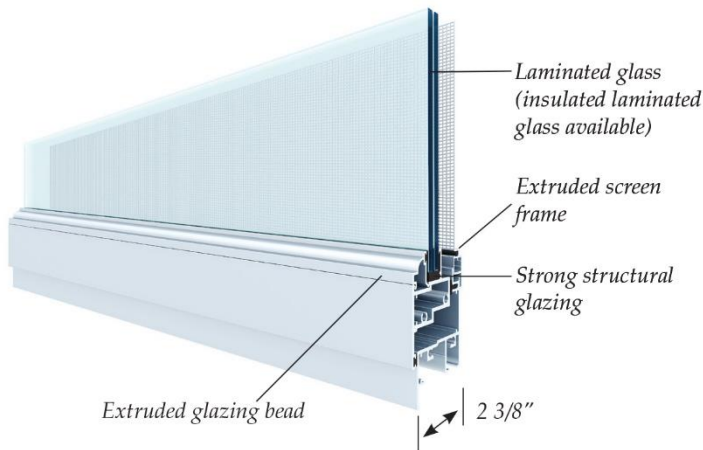
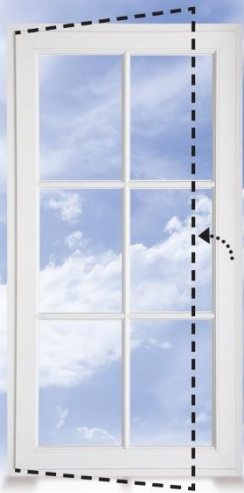


238 CASEMENT WINDOW

Industry leading casement with design pressures up to +110/-195 PSF, Ogee glazing beads and muntins, standard stainless steel package, multipoint locks and matching sightlines to the fixed and project out windows.



Available Finishes

White, Bronze, Bone White Kynar or equivalent, Class I Clear Anodized, Aspen Wood Grain Finishes, Custom Colors

Standard Glass Colors

Clear, Gray, Dark Gray (Turtle Code), Bronze, Solexia Green, Azuria Blue, White Interlayer, Mist (Pattern 62), Rain

Glass Types

- 7/16" Laminated
- 3/4" Insulated Laminated

Glass Coatings

- Energy Efficient LoE Coatings

Standard Hardware

- Single arm stainless steel roto operator and nesting crank handle
- Stainless steel operator track
- Pair of stainless steel 4 bar concealed hinges
- All stainless steel multipoint lock bars
- Snubber blocks
- Small operator on units less than 24", Large operator on units 24" or more

Standard Features

- Extruded screen frame with Super-View™ screen fiberglass mesh
- Extruded snap on glazing beads (in contoured ogee or contemporary square profiles)
- Stainless steel assembly screws and corner keys
- Double Weatherstripping
- 1/2" exterior flange frame

Optional Items

- Limit opening devices
- Hinges with washability feature (for high-rise use)
- Custodial type locks (for institutional use)
- Equal leg frames
- Square glazing beads
- Extruded double applied raised profile 1" and 3 1/2" muntins (not applicable with insulated glass)
- Muntin grids inside insulated glass (GBGs)



SIZE LIMITATIONS (In inches)

| Minimum | Size | Maximum | Size |
|----------------|------|----------------|------|
| Minimum Width | 18 | Maximum Width | 42 |
| Minimum Height | 17 | Maximum Height | 84 |

MODULAR SIZES (In inches)

| | | | | | |
|---------|---------|-----------|-----------|-----------|-----------|
| 20 x 24 | 24 x 24 | 28 x 24 | 30 x 24 | 32 x 24 | 36 x 24 |
| 20 x 30 | 24 x 30 | 28 x 30 | 30 x 30 | 32 x 30 | 36 x 30 |
| 20 x 36 | 24 x 36 | 28 x 36 | 30 x 36 | 32 x 36 | 36 x 36 e |
| 20 x 42 | 24 x 42 | 28 x 42 | 30 x 42 e | 32 x 42 e | 36 x 42 e |
| 20 x 48 | 24 x 48 | 28 x 48 e | 30 x 48 e | 32 x 48 e | 36 x 48 e |
| 20 x 54 | 24 x 54 | 28 x 54 e | 30 x 54 e | 32 x 54 e | 36 x 54 e |
| 20 x 60 | 24 x 60 | 28 x 60 e | 30 x 60 e | 32 x 60 e | 36 x 60 e |
| 20 x 66 | 24 x 66 | 28 x 66 e | 30 x 66 e | 32 x 66 e | |
| 20 x 72 | 24 x 72 | 28 x 72 e | 30 x 72 e | 32 x 72 e | |
| 20 x 78 | 24 x 78 | 28 x 78 e | | | |
| 20 x 84 | 24 x 84 | | | | |

All window dimensions shown are tip to tip of exterior 1/2" flange on frame.

e = Indicates windows that comply with egress (emergency escape) opening requirements when properly located on wall opening.

COMMODITY SIZES (In inches)

| | | |
|-----------------|-------------------|-----------------------|
| 19 1/8 x 17 | 26 1/2 x 17 | 37 x 17 |
| 19 1/8 x 26 | 26 1/2 x 26 | 37 x 26 |
| 19 1/8 x 38 3/8 | 26 1/2 x 38 3/8 | 37 x 38 3/8 e |
| 19 1/8 x 50 5/8 | 26 1/2 x 50 5/8 e | 37 x 50 5/8 e |
| 19 1/8 x 63 | 26 1/2 x 63 e | 37 x 63 e |
| 19 1/8 x 72 | 26 1/2 x 72 e | 37 x 76 e (July 2014) |

PERFORMANCE RESULTS

| | | |
|---|--|---|
| Maximum Water Resistance | | 16.5 PSF |
| Large Missile Laminated Glass | 26 1/2" x 50 5/8" Window (Ann/Ann or HS/HS Glass) 37" x 63" Window (Ann/Ann or HS/HS Glass) 37" x 76" Window (Ann/Ann or HS/HS Glass) | +110 /-195 PSF +110 /-120 PSF +60 /-60 PSF |
| Large Missile Insulated Laminated Glass | 26 1/2" x 50 5/8" Window (Temp-Air-Ann/Ann Glass) 37" x 63" Window (Temp-Air-Ann/Ann Glass) 37" x 76" Window (Temp-Air-Ann/Ann Glass) 26 1/2" x 50 5/8" Window (Temp-Air-Temp/Temp Glass) 37" x 63" Window (Temp-Air-Temp/Temp Glass) 37" x 76" Window (Temp-Air-Temp/Temp Glass) | +99.7 /-104.3 PSF +60 /-60 PSF +60 /-60 PSF +110 /-195 PSF +110 /-117 PSF +60 /-60 PSF |
| Forced Entry Test (AAMA 1302.5) | | Passed |

* Performance values for small missile are also available.

ENERGY VALUES (NFRC Approved)

| 238 Casement | U-Factor | SHGC | VT |
|--|----------|------|------|
| 7/16" Laminated Gray | 1.02 | 0.40 | 0.33 |
| 7/16" Laminated Clear | 1.02 | 0.51 | 0.58 |
| 7/16" Laminated Clear LoE 366 | 1.02 | 0.26 | 0.40 |
| 3/4" Insulated Laminated Clear LoE 366 | 0.63 | 0.21 | 0.42 |
| 3/4" Insulated Laminated Clear LoE 270 | 0.63 | 0.27 | 0.46 |