PRODUCT DESCRIPTION
Optimum’s 45-Minute Fire-Rated Hot-Rolled Casement Windows are used in non-temperature rise applications and through various glazing options, can be modified to address most fire-rated applications. Its narrow profiles provide open vision areas that allow natural daylight without compromising life-safety and design flexibility. The entire Fire-Rated line has been through rigorous testing. Initially, a “heat test” is performed where the window is exposed to temperatures up to 1600 degrees Fahrenheit. They will then endure the “Hose Stream Test”, wherein which the glass holds fast even during this extreme change in temperature. Where other units of different material will react poorly when placed under these extreme conditions, Optimum’s Fire-Rated Steel windows will hold and maintain its integrity.

AUTHORIZED DIMENSIONS

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<tr>
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<th>MIN</th>
<th>MAX.</th>
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<tbody>
<tr>
<td>Operable Dimension</td>
<td>18” x 24”</td>
<td>36” x 60”</td>
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<tr>
<td>Wire Glass Max. Exposed Area</td>
<td>n/a</td>
<td>1,296 in²</td>
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<tr>
<td>Ceramic Glass Max. Exposed Area</td>
<td>n/a</td>
<td>3,325 in²</td>
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FEATURES
- Solid Hot-Rolled steel sections
- Fully Weather-Stripped frame
- Mitered & Fully welded corners
- Can accommodate glazing ranging from 3/16” to 1” in O.A. thickness
- Factory glazed with mechanically fastened steel glazing beads
- Spring loaded hinges & Self Closing mechanism with fusible link
- Double Casement window available
- Equipped with (1) Cam lock at center of sash up to 36” in height (two thereafter)
- Zinc Enrich Epoxy Primer and Powder Coated finish

NOTE: This product is intended for use in locations requiring fire-protective rated openings.
LISTINGS/STANDARDS

Classified and labeled by Underwriters Laboratories Inc.® and Underwriters Laboratories of Canada®. File numbers R12349. Tests performed in accordance with:

<table>
<thead>
<tr>
<th>UL 9</th>
<th>NFPA 80</th>
<th>ASTM E283</th>
<th>NFRC 100</th>
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<td>NFRC 500</td>
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DETAILS: For complete set, visit: www.OptimumWindow.com

AVAILABLE OPTIONS:

- Non-Metallic Custom Color match
- Wire or Ceramic Glass
- Insulated Glass Units available
- Low-E Coated IGU
- Safety Impact Glass available
- Surface Applied Grids (spacers between glass n/a)
- Exterior or Interior flanged frame
- Insect Screens
- Double Casement window available
- Installation Straps
- Limit Stops
- Break Metal for Trim
- Steel L-Angle Glazing Bead

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