

**FIRE RATING: 45/60/90 MINUTES**

FIRE-RATED SELF-CLOSING DOUBLE-HUNG WINDOW



**PRODUCT DESCRIPTION**

Optimum's 45-90 Minute Fire-Rated Cold-Rolled Steel Double-Hung 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.



UL CLASSIFIED & LABELED



HOSE STREAM TESTED



NON-TEMPERATURE RISE



POSITIVE PRESSURE

**AUTHORIZED DIMENSIONS**

	<b>45 MIN</b>	<b>60 MIN</b>	<b>90 MIN</b>
Min. Frame Dimension	20" x 30"	20" x 30"	20" x 30"
Max. Frame Dimension	60" x 120"	60" x 120"	56 1/2" x 120"
Wire Glass Max. Exposed Area	1,296 in <sup>2</sup>	n/a	n/a
Ceramic Glass Max. Exposed Area	3,325 in <sup>2</sup>	3,325 in <sup>2</sup>	2,627 in <sup>2</sup>

**FEATURES**

- Cold-Rolled sections formed from GALVANIZED STEEL
- EPDM and Silicone Pile Weather-Stripping
- Frames are coped and mechanically assembled
- Self-Closing mechanism w/ Fusible links
- Factory glazed with mechanically fastened steel glazing beads
- Zinc Enrich Epoxy Primer and Powder Coated finish
- One Lift Handle at center of lower sash up to 23" (two handles thereafter)
- One Sweep lock at center of sash up to 30" (two sweep locks thereafter)
- One Self-Latching Lock at center of upper sash
- Can accommodate glazing ranging from 3/16" to 3/4" in O.A. thickness

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

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**LISTINGS/STANDARDS**

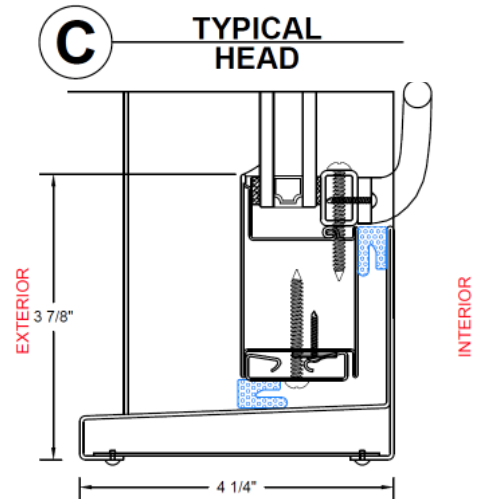
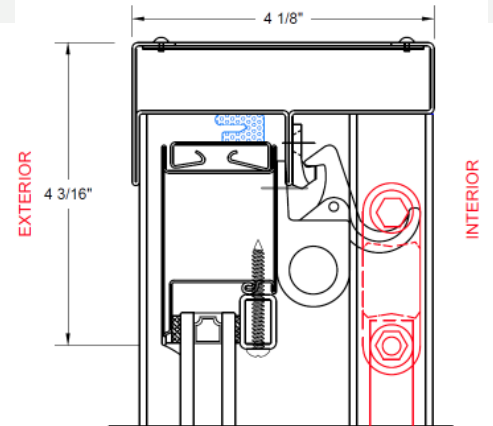
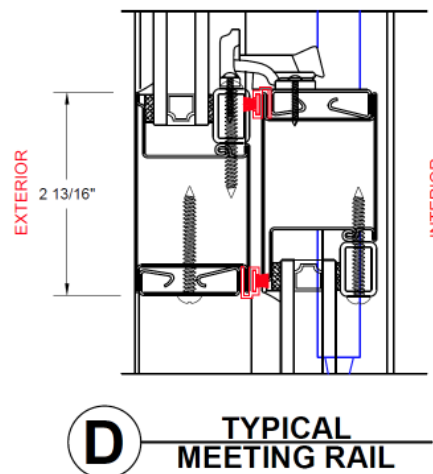
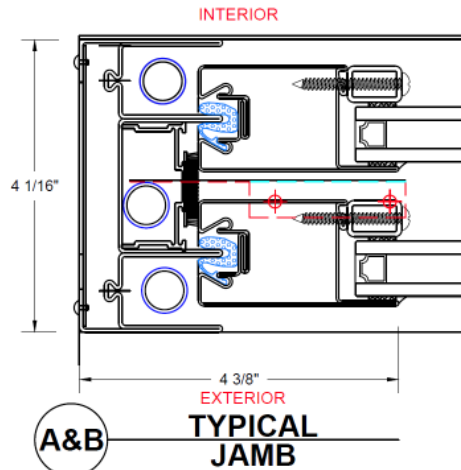
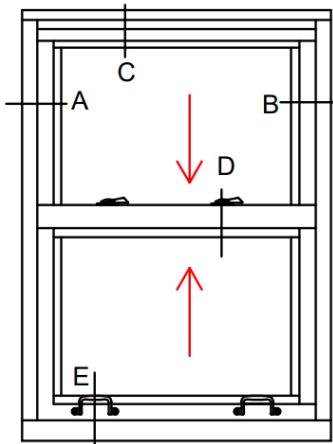
Classified and labeled by Underwriters Laboratories Inc.® and Underwriters Laboratories of Canada®. File numbers R12349. Tests performed in accordance with:

UL 9	NFPA 80	ASTM E283	NFRC 100
UL10C	NFPA 257	ASTM E331	NFRC 200
		ASTM E330	NFRC 400
			NFRC 500

**DETAILS:** For complete set, visit: [www.OptimumWindow.com](http://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)
- Insect Half Screens
- Limit Stops
- Installation Straps
- Break Metal for Trim
- Two-tone finish



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