



Installation Method

- Double Layer** **100 Series**
 Single Layer **300 Series**

Product Required

Certified-R Metal Building Faced

- R-10** **R-11** **R-13**
 R-16 **R-19**

ELAMINATOR Insulation Unfaced

- R-10** **R-11** **R-13**
 R-16 **R-19** **R-25**

Facing

- _____
 (see attached data sheet)

Uses

The Owens Corning ELAMINATOR[®] Insulation System is used to insulate metal building roof assemblies (both standing seam and screw-down type) with fiberglass metal building insulations. The system provides excellent interior appearance; the faced surface of the insulation is uniform in appearance without noticeable exposed seams. No unsightly suspension clips, wires, or bands are required. The system places the insulation over and/or between the purlins: facing tabs are overlapped across the purlins. This contributes to good condensation control. With less compression at the purlins, thermal performance is enhanced. Insulation installed with the ELAMINATOR system can provide a range of thermal performance. In-place U-values meet or exceed recognized energy conservation standards.

ELAMINATOR Insulation System uses the Certified ELAMINATOR Operator Program (CEOP) to provide qualified machine operators to install the insulation system for the 300 Series machines. Owens Corning requires

each franchisee to assure that a qualified operator is enrolled in the program and on every ELAMINATOR project.



Description

The Owens Corning ELAMINATOR Insulation System utilizes two series of machines designed to travel along the purlins dispensing faced insulation or facing from rolls: 100 Series and 300 Series. Both control the tension applied to the rolls as they are dispensed and correctly position the facing with respect to the purlins so that installed insulation is consistent and fully expanded.

The 300 Series machines are designed to meet OSHA regulations for low-slope roofs, no more than 3:12 slope. To use the machines, the top flange of the purlin or bar joist structure, must withstand 200 lbs. with minimum deflection. Owens Corning believes the ELAMINATOR 300 Series machines, if operated according to written instructions, comply with 29 CFR, 1926.501 (b)(10), with the roofing contractor providing a warning line system and 100% personal fall protection for his workers outside the warning line system. The 300 Series machines provide a guardrail system and complete the warning line system. It is the responsibility of the ELAMINATOR licensee and the roofing contractor to comply with all OSHA fall protection standards.

The 100 Series machines require 100% personal fall protection for the ELAMINATOR installers or use with Sky-Web II[®], slopes up to 3:12. 100 Series has two machines: 100 and 120.



Figure 1: 100 Series – 100 Machines



Figure 2: 100 Series – 120 Machines



Figure 3: 300 Series

ELAMINATOR® Insulation System

The *ELAMINATOR* Insulation System offers a choice of installation methods:

(1) Two-Layer with faced Owens Corning Certified-R Metal Building Insulation or unfaced *ELAMINATOR* Insulation between the purlins using the 100 machines which install the faced insulation parallel to the purlins or the 120 machines to install patented folded facing with pieces of *ELAMINATOR* Insulation. Unfaced *ELAMINATOR* Insulation or Certified-R Metal Building Insulation is installed as a second layer over the first in the insulation layer and purlins, parallel to the roof sheets.

Two-Layer unfaced Owens Corning *ELAMINATOR* Insulation or Certified-R Metal Building Insulation between and parallel to the purlins using the 300 Series machines which first install the facing parallel to the purlins. Then the unfaced *ELAMINATOR* Insulation or Certified-R Metal Building Insulation is installed as a second layer over the first unfaced insulation layer and purlins, parallel to the roof sheets.

(2) Single-Layer unfaced Owens Corning *ELAMINATOR* Insulation or Certified-R Metal Building Insulation is installed over the purlins, parallel with the roof sheets, using the 100 or 300 Series machines to install the facing parallel to the purlins.

The patented *ELAMINATOR* Insulation System is available for installation of Owens Corning Metal Building Insulations via a nationwide network of franchisees.

Insulation Specifications

The *ELAMINATOR* system offers a choice of two installation methods (see below).

Selection of the most applicable method is at the discretion of the franchisee depending on installed R-value, job site conditions, and other project specifics.

In both cases, installation shall be in strict accordance with Owens Corning's published *ELAMINATOR* installation instructions, as well as with applicable provisions of the Occupational Safety and Health Act, and with state and/or local safety and health codes.

Vapor Control Considerations

Franchisees offer a selection of vapor retarder facings applied and ready for installation. Facings with a maximum permeance rating of 0.1 perm are recommended for optimum moisture condensation control. Detailed performance and physical property data concerning available facings is available from facing manufacturer.

(1) Two-Layer

The *ELAMINATOR* system and machines shall be used to install the first layer of Owens Corning faced Certified-R Metal Building Insulation, parallel to and between the purlins or *ELAMINATOR* Insulation. The insulation shall have an R-value of _____ and be faced or be applied unfaced over a facing with permeance rating not greater than _____ perm as tested in accordance with ASTM E 96. The materials shall have a Flame Spread rating of 25 or less and a Smoke Developed rating of 50 or less as tested in accordance with UL 723, ASTM E 84, or NFPA 255. The Certified-R Metal Building insulation shall be marked on the unfaced side with NAIMA 202-9 identification, R-value, and manufacturer identification (OCF). The insulation or facing shall be pulled taut and held in position with the *ELAMINATOR* machines while being secured only at the end wall rafters with double-sided adhesive tape. Facing tabs shall be overlapped over the purlins as the *ELAMINATOR* machines are advanced, to ensure proper alignment and facing overlap, and vapor retarder integrity.

The second layer, of Owens Corning unfaced *ELAMINATOR* Insulation or

Certified-R Metal Building Insulation, shall be installed manually across the purlins, parallel with the roof sheets without gaps or voids. Insulation shall be Owens Corning unfaced *ELAMINATOR* Insulation or Certified-R Metal Building Insulation having an R-value of _____.

One-inch thermal spacer blocks* are installed after all Fiberglass metal building insulation is in place. Thermal spacer blocks* must be installed with standing seam roofs to meet stated U-values.

(2) Single-Layer

The *ELAMINATOR* system and machines shall be used to install the vapor retarder facing ahead of and separately from the insulation, parallel to the purlins. The vapor retarder facing shall have a permeance rating of not greater than _____ perm as tested in accordance with ASTM E 96. It shall have a Flame Spread rating of 25 or less and a Smoke Developed rating of 50 or less as tested in accordance with UL 723, ASTM E 84, or NEPA 255.

The facing shall be pulled taut and held in position with the *ELAMINATOR* machines after being secured to the end wall rafters with double-sided adhesive tape. Facing tabs shall be overlapped on top of purlins, as the *ELAMINATOR* machines are advanced, to ensure proper alignment and overlapping of the facing, and vapor retarder integrity.

Unfaced insulation shall be installed manually across the purlins, or perpendicular with thermal blocks, on top of the facing and parallel to the roof sheets. The insulation shall be Owens Corning unfaced *ELAMINATOR* Insulation or Certified-R Metal Building Insulation having an R-value of _____. It shall be installed so there are no gaps or voids. It shall have a Flame Spread rating of 25 or less and a Smoke Developed rating of 50 or less as tested in accordance with UL 723, ASTM E 84, or NFPA 255. One-inch thermal spacer blocks* are required with standing seam roofs to meet stated U-values.

*Recommended 1" thick FOAMULAR® 250 pink extruded polystyrene. *ELAMINATOR* Insulation not to be laminated.



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