

Falcon Foam[®] — Specifications

Section 1; General

1.1 System description — Falcon Foam Tapered Roof Insulation is EPS (molded expanded polystyrene) roof insulation suitable for use in single-ply membranes, modified bitumens, and conventional BUR roof systems, either loose laid and ballasted, adhered or mechanically attached. Falcon Foam Tapered Roof Insulation is a custom designed and factory cut, labeled and packaged system designed for positive drainage for any roof decks. Shop drawings showing the placement of specially marked tapered panels are provided with all Falcon Foam Tapered Roof Insulation systems.

1.2 Quality assurance — The roof insulation system will be a Falcon Foam Tapered Roof Insulation system manufactured by Falcon Foam. The manufacturer will have a third party quality assurance program complying with applicable building code requirements. The manufacturer must be capable of supplying a 20-year thermal performance warranty when requested.

1.3 References — Falcon Foam Tapered Roof Insulation must comply with ASTM C 578 (superseding Federal Specification HH-I-524C) and all major model building codes.

1.4 Submittals — Falcon Foam will submit customized shop drawings for approval of all tapered systems. Falcon Foam will provide manufacturer's literature describing material and recommended practices.

Section 2; Products

2.1 Materials — All Falcon Foam Tapered Roof Insulation must comply with ASTM C 578, Type I; 0.90 pcf ____, Type VIII; 1.15 pcf ____, Type II; 1.35 pcf ____, or Type IX; 1.80 pcf ____. Thickness shall be ____ inches. R-value shall be ____. Falcon Foam Tapered Roof Insulation shall have a minimum thickness of ____. The tapered system shall be factory fabricated with a slope of ____. The tapered system shall provide an average R-value of ____. All Falcon Foam Tapered Roof Insulation panels will be clearly marked to correspond with Falcon Foam provided shop drawing.

Related Materials: Coverboards, when required, shall be a minimum 1/2" wood fiberboard meeting ASTM C 208 and ASTM C 209, or a minimum of 1/2" perlite meeting ASTM C 728-82.

In metal deck construction, a thermal barrier such as 1/2" gypsum or 3/4" perlite may be required. Local building codes must be followed regarding the use of EPS in metal deck construction.

Section 3; Execution

3.1 Preparation — Falcon Foam Tapered Roof Insulation must be applied to a sound, clean and moisture-free deck surface. The deck shall be sufficiently rigid to support the roofers and mechanical equipment without deflection that will strain or otherwise rupture any of the roofing components or deform the deck.

3.2 Installation — Apply Falcon Foam Tapered Roof Insulation in accordance with roof insulation catalog recommendations or as required by local building codes. The decision to use a vapor retarder and the details thereof rest solely with the building architect, designer, building owner or their designated representative.

Applications to Deck: (For built-up roofs, modified bitumen systems and fully adhered single-ply systems.)

- a. Concrete Deck: The primed deck shall be solidly mopped with steep asphalt at an application rate of 25 lbs./square. Allow to cool to 225°F and embed the EPS roof insulation. Each EPS insulation board shall be 'walked in' as it is embedded in the hot asphalt.

b. Steel Deck: The thermal barrier (if required) shall be mechanically fastened to the steel deck. The thermal barrier shall be solidly mopped with steep asphalt at a rate of 25 lbs./square. Allow it to cool to 225°F – 250°F and embed the EPS roof insulation. Each EPS insulation board shall be ‘walked in’ as it is embedded in the hot asphalt.

Never apply asphalt to any polystyrene insulation at a temperature that exceeds 250°F. Do not apply flame directly to EPS when installing a modified bitumen roof system.

3.3 Limitations — Falcon Foam EPS is manufactured with a fire retardant; however, it will burn upon exposure to an adequate source of heat or flame. EPS should be kept away from any open flame or source of ignition. Do not install or use EPS with coal tar pitch or highly solvent extended mastics without adequate separation.

3.4 Protection — Installed insulation shall not be left exposed to the weather. Install no more insulation than can be completely covered by the complete roofing system on the same day. Installed insulation that has become wet shall be removed and replaced with dry insulation. Protect installed roof insulation and membrane from roof traffic damage.