



## GENERAL DESCRIPTION

The Energy Saver FP™ system is an economical, high R-value insulation and leading edge fall protection system\* consisting of a network of straps (white painted galvanized banding), a bright white support fabric and unfaced fiberglass blanket insulation. The Energy Saver FP system is designed primarily for use in metal buildings\*\*, but it can also be used in various types of roof and wall construction in other types of building construction. The fabric is fastened to the underside of the roof framing and is supported by the banding. Unfaced fiberglass insulation is installed above the fabric in varying thicknesses to obtain desired insulating values.

\* When installed by a Guardian-Certified contractor.

\*\* Note: Energy Saver FP System is not recommended for high humidity applications.

## PRODUCT SPECIFICATIONS

**DESCRIPTION:** Acceptable system shall be the Energy Saver FP system manufactured by Guardian Building Products Distribution, Inc., with an insulation R-value of \_\_\_\_\_ and an installed thickness of \_\_\_\_\_ inches, or greater, as required to completely fill cavity from the fabric surface to the underside of roof panels. Roof system shall be a single or a double (select one) layer system. Care should be taken to completely fill the purlin cavity to avoid condensation. In the event that there is no insulation positioned between the roof sheet and the purlin, a foam thermal break (1/4" x 3") tape, or a thermal block (1" x 3" extruded polystyrene) shall be applied.

### System components shall meet the following minimum specifications:

**STEEL STRAP:** Cold rolled structural steel grade 50 class 1 (per ASTM A653-05A), zinc coated, primed and painted for corrosion resistance and aesthetics. .022" min x 1" wide.

**FASTENERS:** Use 12-14 TY3 3/4" self-drilling fasteners with 3/4" OD washers, for up to 1/4" thick, light gauge steel (typically purlins). For heavier gauge steel (typically primary framing), up to 3/8", use 12-24 TY5 1 1/4" self-drilling fasteners with a banding clip. All fasteners shall be colored to match fabric color. Energy Saver FP banding clips to be installed per Guardian Building Products' instructions.

**SEALANTS:** Shall be fast-tack solvent-based synthetic rubber adhesive for sealing Energy Saver FP fabric laps and edges. Two-sided tape approved by Guardian Building Products may be substituted for synthetic rubber adhesive.

**INSULATION:** Shall be fiberglass blanket insulation meeting ASTM C 991, Type 1 (unfaced) and ASTM E 136, or other insulation form as may be recommended and submitted by Guardian Building Products and approved by the architect during submittals. Fiberglass blanket shall be rated FHC 25/50 with a flame spread rating of 25 or less and a smoke developed rating of 50 or less tested in accordance with ASTM E 84. R-value will vary per description above.

**INSULATION HANGERS:** Shall be Insul-Hold coils for supporting insulation between wall girts at frequency specified in Guardian Building Products' installation instructions (available at [www.guardianbp.com](http://www.guardianbp.com)).

**ENERGY SAVER FP™ FABRIC** is woven reinforced high-density polyethylene yarns coated on both sides with a continuous white or colored polyethylene film. This material is manufactured in large custom-fit pieces by hot air welding from roll goods. Pieces are fabricated to substantially fit the large defined building areas with minimum practical sealing to be done on job site. Fabric is folded or rolled to allow for rapid pullout on the strap support system.

The standard color is white; however, additional colors are available by custom order (minimum order size and lead time will vary). Energy Saver FP fabric can be cleaned with mild dishwashing detergent; chemical cleaners should be avoided.

Weight.....	5 oz./sq. yd. (+/- 10% (ASTM D-1910)
Tensile Strength.....	160 lbs. warp x 145 lbs. weft (ASTM D-751, Grab)
Tear Strength.....	55 lbs. warp x 50 lbs. weft (ASTM D-751, Tongue)
Thickness.....	8.0 Mils (+/- 10%)
Moisture Vapor Transmission .....	.015 (ASTM E-96 Method A)
Mullen Burst.....	270 PSI (ASTM D-751)
Puncture Resistance.....	81 LBS (ASTM D-4833)
Flame Resistance.....	Flame Spread - 5/Smoke Developed - 20 (ASTM E-84) NFPA 701-PASS
Sound Absorption .....	NRC Rating 0.70 (ASTM C-423 - 02a)
UV Weathering.....	UV stabilizers added for extra protection

Note: These are typical property values and are intended as guides only. These figures listed do not represent specification limits.

**ACCESSORIES PROVIDED**

- Adhesive to bond the fabric to the steel framing and a disposable brush.
- Self-drilling fasteners (12-14 TY3 ¾”) to connect the banding to the purlins/girts, and heavy-duty fasteners (12-24 TY5 1 ¼”) to connect the banding to the rafters.
- Banding clips for attachment of bands (see Banding Clip Installation Instructions for detail).
- Optional accessories for wall applications include Insul-Hold coils (used to support insulation within the girt cavity), and 1/4” foam tape (used to isolate the wall panels from the girts).

A detailed architectural specification is available for download at [www.guardianbp.com](http://www.guardianbp.com).

The Energy Saver FP system provides OSHA-compliant leading edge fall protection when installed according to manufacturer’s instructions by a Guardian-certified installing contractor. See our Energy Saver FP Contractor Agreement for complete details.