

## Why Silvercote developed envelope solutions.

Industry wide challenges in meeting increasingly stringent building codes are the driving force behind Silvercote Envelope Solutions for Energy Saver<sup>™</sup>. Energy Saver is designed to provide optimal overall energy performance for your building.

We want to make complex building designs simple. We provide custom fabricated insulation and fabric, but also all necessary accessories and components to install your project correctly the first time.

We strive to provide customized insulation to meet for your specific project needs.

## **Energy Saver is the optimal Silvercote Envelope Solution!**

- Our premier system can meet or exceed IECC 2015 energy code requirements
- Provides a clean and finished appearance of roofs and walls by hiding the purlins and girts
- Improves acoustical performance compared to no insulation
- When installed to Silvercote's specifications provides a barrier to air leakage and contributes to a better airtight building
- Silvercote's fabric welding technology creates a continuous single custom sized fabric

# What is Energy Saver?

Energy Saver can provide our highest R-value roof and wall envelope insulation system for new construction. It consists of a network of banding straps, a bright interior support fabric and unfaced ECOSE® glass mineral wool insulation creating a total building envelope. The Energy Saver system is designed primarily for use in metal buildings, but can also be used in the roof and wall for other types of building construction.



Energy Saver FP provides OSHA-compliant leading edge fall protection. The roof system fabric is installed under the roof secondary structure and is supported by a banding grid system. ECOSE glass mineral wool insulation is installed in varying thickness between and across the purlins to obtain the desired insulating values.

The Energy Saver wall system is offered in a single or double layer ECOSE glass mineral wool insulation system. Fabric is installed in the interior resulting in a bright finished wall appearance.

### Improve productivity

71 percent of office workers list noise as a key impediment to productivity. In fact, noise pollution is a major environmental problem and exposure to excessive noise causes stress, poor concentration, productivity reduction, fatigue and loss of psychological well-being. ECOSE glass mineral wool insulation in walls, ceilings, floors and ducts significantly reduces the amount of noise inside buildings.

Use Energy Saver Envelope in:

- Manufacturing facilities
- Aircraft hangers
- Sports arenas
- Retail locations

Insulation products, specifically wall and ceiling insulations also reduce noise transfer from one room to another.

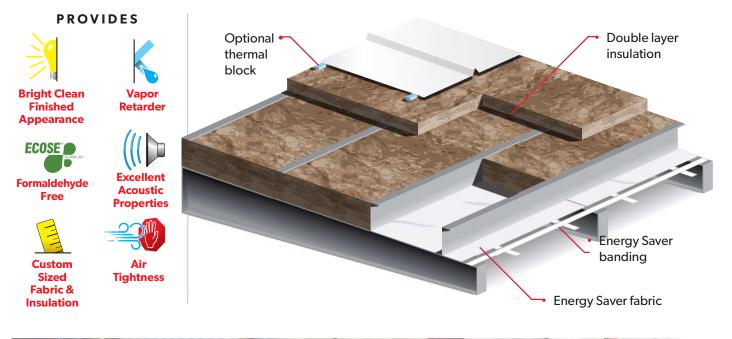




## **Energy Saver Roof**

Energy Saver FP™ (OSHA-compliant leading edge fall protection) roof system fabric is installed under the roof secondary structure and is supported by a banding grid system. Unfaced glass mineral wool insulation is installed between and above the purlins in varying thickness combinations to obtain the desired insulating values.

- Provides a continuous vapor retarder
- Our Energy Saver fabric welding process produces seams that exceed the ASTMD-751 Standard of the fabric itself
- Free online, Energy Saver Roof Fall Protection system training available







# OSHA-compliant leading edge fall protection for roofs

Energy Saver FP protects the installation crew while the building is being insulated and roofed by providing OSHA-compliant leading edge fall protection when installed by a Silvercote certified contractor. Our certification

is free and can be completed at silvercote.com

To meet OSHA guidelines, an insulation support and fall protection system must restrain and support 400 pounds dropped from at least 42" above the highest walking or working surface.

Energy Saver FP provides fall protection at the leading edge only and is just one component of a total fall protection plan for the job. Other means of fall protection are still required within six feet (6') of any exterior roof edge, roof opening or common rafter where the system has not been completely installed in both bays.

#### Tensile strength testing -

We conduct daily testing on actual production samples of welded Energy Saver FP fabric to ensure your safety. Production samples must exhibit a seam strength of more than double the required failure strength to meet our standards and be considered acceptable for use in our roof Energy Saver FP system.

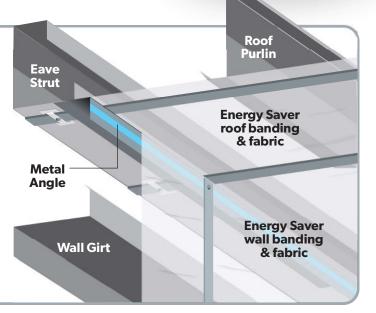




## **IT'S IN THE DETAILS**

There are many different connection needs based on manufacturer specifications for your building. A secure connection must be made around the entire perimeter and each penetration of the Energy Saver fabric to create a sealed envelope.

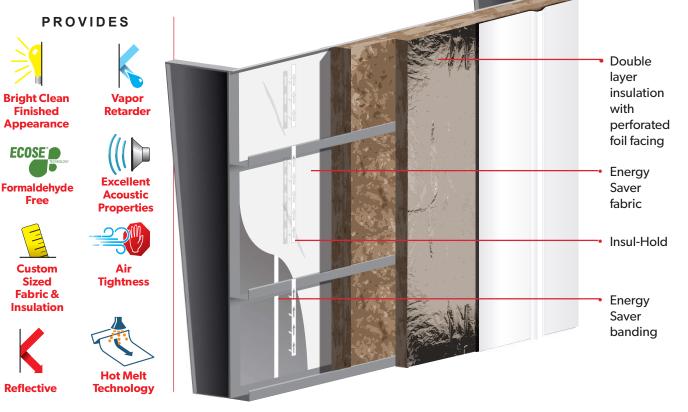
Silvercote provides specifications for many standard connections. **See the Energy Saver Install Instructions at Silvercote.com for specific details.** 



## **Double Layer Wall System**

An unfaced glass mineral wool insulation layer is used to fill the girt cavity. A second layer of foil laminated glass mineral wool insulation layer creates the thermal barrier needed to meet todays energy codes.

- Maximizes R-value with cavity filling system that provides excellent thermal properties with an additional external perforated faced layer of insulation
- Reduced air-infiltration
- Our Energy Saver fabric welding process produces seams that exceed the ASTMD-751 Standard of the fabric itself
- Insul-Hold (hangers) retains the insulation in proper cavity location
- Unique hot melt lamination technology virtually eliminates wrinkles



# **Cavity Install Options**

#### Vertical Install Provides:

- Standard glass widths = Shorter lead times
- Works with all girt spaces
- Single or double layer application

#### Horizontal Installation Provides:

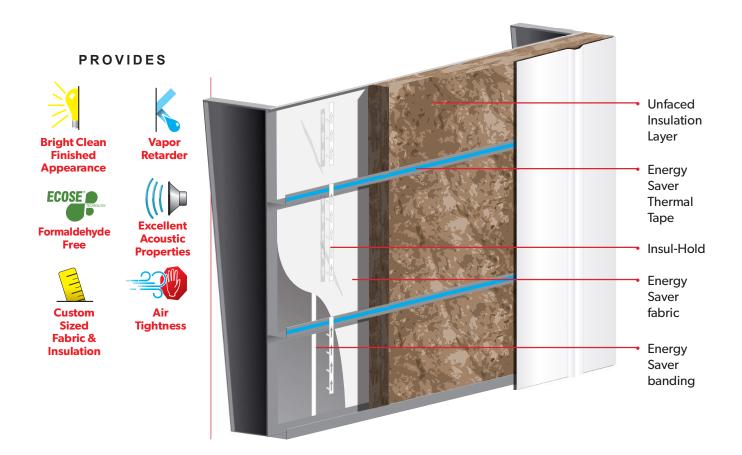
- Custom cut glass widths to fit girt spaces
- Reduced field cutting = Decreased labor costs
- Fewer butt joints reduces possibility of cold bridging
- Single or double layer application



### **Single Layer Wall System**

Unfaced glass mineral wool insulation is available in multiple thicknesses to fill the wall girt cavity.

- Our Energy Saver fabric welding process produces seams that exceed the ASTMD-751 Standard of the fabric itself
- Use of Insul-Hold retains the insulation in proper cavity location
- Energy Saver Foam Tape provides a limited thermal bridge effect



### **Providing a thermal break**

Energy Saver Thermal Tape provides a thermal separation between the exterior metal panels and the building structural. This helps to prevent temperature transfer and condensation through the metal to the interior of the building. Supplied in 50' long rolls it is adhesive backed for easy application. It is recommended that it be applied to all secondary steel or girts with direct contact to the exterior panels.

