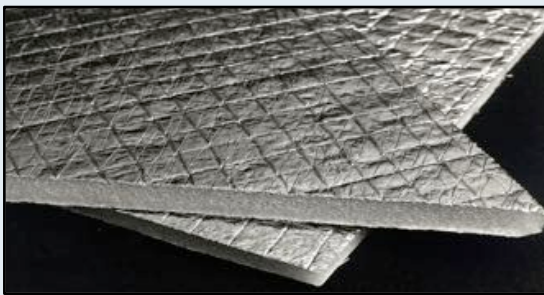


METAL BUILDING PARTS & SALES

A Supplier of Metal Building Insulation

Metal Building Parts & Sales is a one-stop supplier for metal buildings from parts to repairs to metal building packages. Whether you need quality reflective insulation, fiberglass, or a hybrid system, our specialized knowledge of metal buildings will help you obtain all the resources for your project.



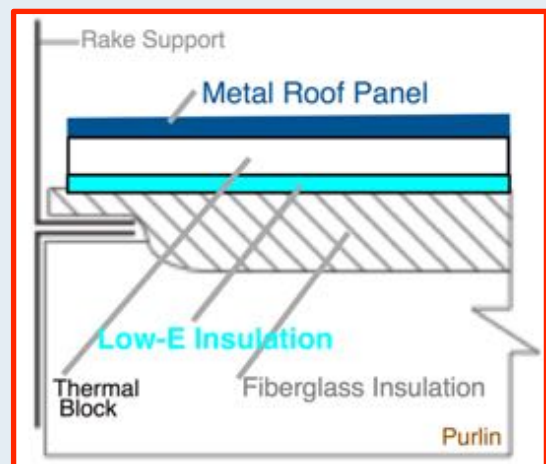
Low-E Reflective Insulation -

A quality reflective insulation that is simple to install and environmentally friendly. It has a Class A Class 1 fire rating. By providing superior thermal performance either stand alone or in conjunction with mass insulations, Low-E can help increase energy savings.

Meet the new energy codes with a Hybrid System

Low-E + 6" Fiberglass = R30 Roof Insulation

Keeping pace with the new energy code requirements – and how to meet them in metal buildings – can be a challenge. One easy solution is the hybrid system consisting of 6" faced fiberglass insulation with Low-E Insulation between the fiberglass and the metal roof panels. This hybrid system was tested at the Oak Ridge National Laboratory using 6" faced fiberglass (R19) with Low-E above (R11) and thermal blocks (R5) to make an R30 tested system.



Fiberglass Insulation -

Property	Test Method	Value		
Thermal Resistance	ASTM C 177/C 518	Thickness	Pre-lam.	Post-lam.
		3.4"	R-10.8	R-10
		3.7"	R-11.9	R-11
		4.3"	R-14.1	R-13
		5.3"	R-17.3	R-16
		6.3"	R-20.6	R-19
		8.0"	R-27.1	R-25
9.25"	R-32.5	R-30		



Fiberglass Insulation is a light density fibrous glass blanket used as part of the insulation system in the roofs and sidewalls of metal buildings. Several methods are used to insulate metal buildings. The usual method is to apply the insulation over the structural members (purlins and girts) and inside the exterior panels. This method generally accommodates single layer installations. Methods are also available to apply insulation between purlins so as to accommodate greater insulation thicknesses and better thermal performance.

The hybrid system uses 6" faced insulation with Low-E insulation above and thermal blocks to achieve a high R factor of R30 in the roof system which is now required by most building codes. Fiberglass insulation is designed to be laminated with a variety of facings to provide attractive interior finishes, abuse resistance, and assistance in control of moisture. The most common facing is the WMP-VR white, other facing options available.



Low-E Reflective Insulation -

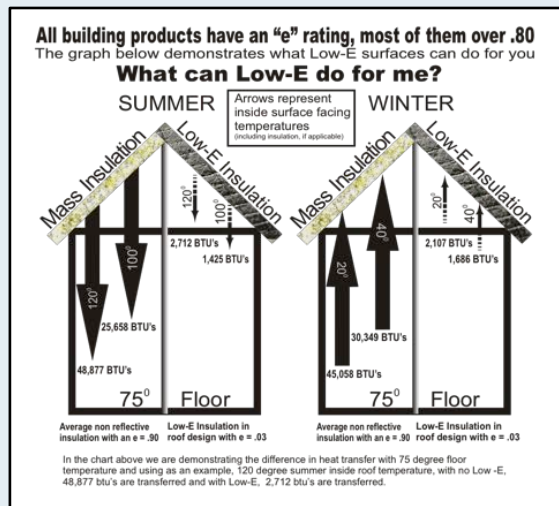


WHY LOW-E?

- ✦ Mold Resistant
- ✦ Waterproof
- ✦ Easy Installation
- ✦ Flexible

Low-E Insulation is the perfect solution for metal building applications of all shapes and sizes. Installed by itself Low-E performs as an insulation, thermal break, and vapor barrier. Low-E installed in combination with traditional fiberglass insulation will achieve High R-Systems. Class A White Low-E is very effective when installed in retrofit applications when additional insulation is required in existing steel buildings. The white aluminum facing presents a clean appearance while providing one of the safest exposed interior finishes on the market.

Low-E Reflective Insulation -



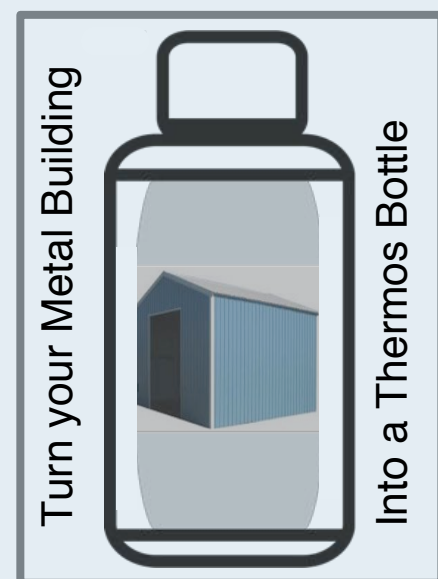
A double sided scrimless aluminum foil laminated to polyethylene foam (1/4" nominal thickness). The core foam is bonded to two exterior faces of 99.4% pure, highly polished aluminum (not to be mistaken by the metalized finish on competitors' products called Mylar). The core is closed cell microscopic air bubbles (an alternative to bubble wrap). The patented process flame bonds the foil to the foam without glues. Low-E stops 97% of radiant energy that it encounters from passing through the product. Low-E Insulation has a variety of products, sizes (width 4', 6' length 125', 84'), facings (foil & white foil), and edgings (trimmed, staple flange, EZ seal).

Benefits of Low-E Insulation

It resists all three types of heat transfer - Conduction, Convection, and most importantly, Radiant Energy Transfer. The design incorporates the proven effectiveness of the Thermos Bottle with improved flexibility. And unlike other types of mass insulations, Low-E Insulation does not absorb moisture at all. In fact, Low-E Insulation installed in conjunction with mass insulations can help them stay drier and warmer, eliminating dew points that may occur in the mass insulation, improving the performance of the mass insulation.

- **Significantly reduces cost of installation**
- **Saves money on heating & cooling**
- **Stops 97% of radiant energy transfer**
- **Seals tightly around fasteners**
- **Superior water vapor retarder**
- **Maintains consistent System R-values**
- **Helps control condensation**
- **Absorbs high impacts**
- **Light-weight**
- **Clean and non-toxic**
- **Resists mold, mildew, most insects**
- **Excellent fire rating**

Full Scale Fire Test: NFPA 286 - Passed / Flame and smoke: ASTM E-84 / Flame Spread: Less than 25 / Smoke Developed: Less than 50 / PERM Rating: E-96 - .008



LOW-E Class A White Insulation



Update a Metal Building Interior with Low-E Class A White Insulation - a quality reflective insulation that is simple to install and environmentally friendly with a white foil facing. It presents a clean appearance while providing one of the safest exposed interior finishes on the market with a flame rating of 10 and smoke rating of 15 without the use of toxic flame retarding or hazardous core materials.



Before & After

Install New Insulation over Old - Roof or Wall

To improve the look of a metal building interior as well as superior thermal performance, install Low-E Class A White Insulation over old insulation for a fresh new look.

**Give an old building
a new look
as well as better
thermal performance**



Basic installation steps: Install over old insulation. Wipe off wall girts or roof purlins with cloth and install 1 1/2" double-faced tape (If no channel, add base angle to attach insulation from inside). Starting at top of wall or eave strut, install Low-E keeping straight down or across, pull off back of double-faced tape and stick Low-E to girt or purlin. Put the next roll up against the first roll, starting at the top again and tape seams together.

Continue the install using a fender washer and self-drilling screw, attach Low-E to girt or purlin 1' on center. Use a piece of trim 1" x 2" at top of wall or rafter to finish out. To give building higher R factor, add 3"-4" plain fiberglass insulation stuffed between the purlins prior to Low-E installation.



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