



**PRODUCT DATA SHEET**

**Energy Protect™  
Building Insulation  
Coating**

**USES:**

- ✓ Commercial buildings
- ✓ Walls
- ✓ Windows/Skylights
- ✓ Ceilings
- ✓ Ductwork
- ✓ Hospitals/Schools
- ✓ Interior or Exterior
- ✓ Historic Preservation
- ✓ Other Building Surfaces

**BENEFITS:**

- ✓ Energy savings
- ✓ Mold resistant, without use of harsh chemicals
- ✓ Moisture resistant
- ✓ Cost effective, with long-term savings and short payback
- ✓ Non-toxic, water-based, low VOC
- ✓ Allows light transmission, while reducing glare
- ✓ Outstanding durability and weathering
- ✓ Easily applied by brush, roller or paint sprayer.
- ✓ Ideal for solid block walls, not easily insulated by fibrous insulation
- ✓ Space saving
- ✓ Can be painted over
- ✓ Provides protection from harmful UV rays
- ✓ Breathable, won't act as a vapor barrier
- ✓ Easy cleanup

**Award Winning Energy Saving and Asset Protection Coatings**



**OVERVIEW:**

Thermal insulation, mold resistant, UV and moisture resistant coating for commercial buildings. Sustainable coating which reduces energy costs and carbon emissions. Indoor and outdoor use. Use over brick, painted walls, glass, plexiglass, concrete, stucco, drywall, and many other surfaces. It can be used over both metal and non-metal substrates. Can be painted over. Once cured, can perform at temperatures between -40F (-40C) up to 256F (125C).

Clear or white, nanotechnology-based insulation and mold resistant coating for easy energy efficiency of commercial buildings. Long-term performance and durability resulting in lower maintenance costs and longer asset life. Allows retrofit insulation of historical buildings without interfering with design aesthetics. Color: Translucent (Clear Coat) with matte finish or white with a matte finish. Note: The clear coating will give glass and plexiglass a slightly 'frosted' look.

**ADVANTAGES:**

**THERMAL INSULATION:** Excellent thermal insulation performance to maximize control of heat loss, contributing to reduced energy costs. Resistant to moisture infiltration, for consistent thermal performance over time.

**MOLD RESISTANCE:** Resistant to growth of mold and mildew. Coating has been tested to ASTM D5590 and ASTM G21 for mold resistance. Reduces chance of food contamination.

**LIGHT TRANSMISSION (clear version):** Can be used to insulate skylights and factory windows that do not require complete clarity. Gives glass a slightly frosted look for security and reduced glare. Allows 90%-92% visible light transmission as tested on pane glass.

**ENVIRONMENTALLY FRIENDLY:** Non-toxic, non-flammable, water-based coating is low VOC, low odor, and environmentally friendly. Syneffex™ coatings are a sustainable, green technology.

**SURFACE PROTECTION:** Highly moisture resistant, vapor permeable (breathes), as well as UV resistant, protecting underlying building surfaces from weathering and damage due to the elements.

**CONTACT/ORDERING:**

Phone: 800-858-3176  
Order Online: [www.syneffex.com](http://www.syneffex.com)



Sustainability Simplified.™  
Very Simple.



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## Award Winning Energy Saving and Asset Protection Coatings

### PRODUCT DATA:

Theoretical coverage rate for One Gallon (3.79 Liters)	Yields approximately 4 mils/100 microns wet film thickness (1 coat) over 450 square feet (42 square meters) of surface area, depending on surface.
Coverage rate for typical application for One Gallon (3.79 litres)	Yields approximately 12 mils/300 microns wet film thickness (3 coats) over 150 square feet (14 square meters) of surface area, depending on surface.
Typical applied coat thickness	4 wet mils (100 microns) per coat
Typical dry film thickness (DFT) of 1 coat	0.75 mil (19 microns) DFT
Typical touch dry time for 1 coat	1-2 hours
Typical hard dry time	72 hours
Typical full cure time	30 days, dependent upon environmental variables
Shelf life	2 years, from date of manufacture
VOC content	100 g/L (calculated)
Viscosity	3000-3500 (cps)
Mold Resistance - ASTM D5590 & ASTM G21	Zero or minimal growth
Cross Hatch Adhesion - ASTM D-3359	0% 5B, edges remain smooth, no flaking
Pull Apart Strength - ASTM D-4541	2400-2450 psi
Flame Spread- ASTM E84	Class A
Thermal resistance (ISO 8990:1999) concrete wall with plaster	28.98% increase in thermal resistance, 3-coat thickness, tested over
Thermal transmission (SO 8990:1999) concrete wall with plaster	34.8% decrease in thermal transmission, 3-coat thickness, tested over
Spectrophotometer over pane glass coat thickness	90%-92% visible light transmission (clear version), 80% reduction in UV, 3-
Emissivity	0.91
Permeability	5 perms/inch @ 23 deg C.

### OTHER TESTING:

ASTM C518 at freezing, 0C/32F, over glass, available upon request.

### LIMITATIONS:

- Do not use as a final floor covering.
- Do not install where long-term submersion in liquid or continuous exposure to liquids is a possibility.
- Do not install over poor surfaces, such as those with flaking paint, grease or other contaminants.
- Do not allow application to be subject to rain or condensation for at least 72 hours.
- Do not allow application to be subject to freezing temperatures during first 30 days.
- Do not rely on visual measurement for coating thickness. Always use a wet film thickness (WFT) and/or dry film thickness (DFT) gauge in several areas to ensure proper application thickness. See Application Handbook for further details.

### NOTE ABOUT CURE TIME:

The product is dry to touch within a few minutes to an hour. The coating reaches full insulating ability AFTER a cure time of approximately 30 days, which is dependent upon environmental variables, humidity, and number of coats used. Test of thermal performance should be performed after full cure. Thermal benefits will typically begin to be seen approximately two weeks after application, and will continue to improve as the cure time completes. Final cure is complete when thermal performance has reached a steady state. Cure time won't interfere with normal operations.

All statements, technical information and recommendations contained in this document are based upon tests or experience that Syneffex™ believes are reliable. However, many factors beyond Syneffex's control can affect the use and performance of a Syneffex™ product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the Syneffex™ product to determine whether it is fit for a particular purpose and suitable for the user's method of application. No warranty, expressed or implied is given regarding the accuracy of this information. Except where prohibited by law, Syneffex™ will not be liable for any loss or damage arising from the Syneffex™ product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability. For questions, contact Syneffex™ at 800-858-3176 or contact@syneffex.com. Products are Made in the USA.