

## TG-9044-IC Insulation Coating - Smarter Building Systems LLC - 401-481-8422

**SBS Solutions TG-9044-IC Insulation Coating** is a modified flexible epoxy-ceramic based coating that provides the ultimate performance in Insulation, Corrosion and Moisture Protection. The SBS TG- 9044-IC Insulation Coating is thermally reflective and thermally insulating. Should the thermally reflectivity be obscured for some reason, the thermal insulation properties are not diminished. These insulation properties also provide a sound reduction of up to 65% (based upon independent testing).

**Note:** The construction industry makes use of R-value (measure of resistance), for bulk insulation materials. The bulk insulation material relies upon trapped air as the Insulator. The R-value determination assumes that the trapped air will be at 75°F (24°C), 0% moisture and with Zero air movement. A 75°F (24°C) steady state temperature, Zero wind and zero moisture are not real-world conditions. Buildings leak air, and water vapor from the atmosphere, showers, cooking, breathing, etc. constantly move back and forth through walls and ceilings. The real-world determination, for what is really necessary, is the BTU testing; such as ASTM 518.

Based upon the ASTM 518 BTU values, it can be readily determined that the TG-9044-IC Insulation Coating is equivalent to an R-30 value, or better. Furthermore, the SBS TG-9044-IC effectively and efficiently seals and waterproofs the substrate it is applied on.

The SBS TG-9044-IC Insulation Coating can be applied directly over most substrates, including wood, concrete, Brick, PVC, Stucco, Metal and even EPDM. The few surfaces that are not recommended, for direct application, are Teflon, high-plasticized vinyl, polyethylene, and silicone rubber. For these, consult with the factory about the use of a specialized primer.

The SBSTG-9044-IC Insulation Coating is proprietary flexible ceramic/epoxy material and will maintain flexibility down to -92°F (-68°C) and has an upward Service Temperature of over 350°F (+175°C). In case of a heavy Hail Storm, the SBS TG-9044-IC Insulation Coating has been tested and found to be able to withstand up to a 2.5-inch hail stone impacting at 140-mph. Unlike ceramic filled water-based acrylic paints, the SBS TG-9044-IC Insulation Coating is highly UV-resistant as a single-single coat system.

ASTM B-117	Salt Fog Test - 500-hours: Passed
ASTM 518	Thermal Conductance Test: 2.62 BTU(h)(ft <sup>2</sup> )(F)
ASTM 518	Thermal Conductivity Test: 0.0139 BTU(in)/(h)(ft <sup>2</sup> )(F) Thermal Conductivity Test: 0.002 W/mK
ASTM D-2240	Hardness Shore D: 85
ASTM E-108-91A	Fire Class Rating: Class A
ASTM D-638	Tensile Strength: 1,393-psi
ASTM E-96	Vapor Transmission: 0.7 perms
ASTM G-53	500-hour accelerate weathering test: double bend with no cracking, highly flexible

### Features, Advantages and Benefits

- Very High Thermal Insulation Capacity.
- Very High Noise Insulation Capacity.
- Superior adhesion to most substrates.
- No Primers or Top-Coats are necessary.
- Extremely durable wear resistant surface.
- At 10-mils thickness is a highly conformable coating; taking on the surface finish of the substrate.
- Can be applied by brush, roller or with spray equipment for Interior or Exterior use.
- UV, Weather, Chemical, Salt and Abrasion Resistant.
- Environmentally Friendly: Contains no Zinc, Lead or Chromates - Zero "0" VOC formulations are available.
- Can be applied over "Wet Surfaces" and is good for submersible applications.
- Can be built up to over 40-mils for increased performance, where needed.
- Can be used for roofs, walls, ducts, basements, etc., and on a variety of substrates.
- Approximate pot life (once mixed) is 8-hours at 80°F (27°C).
- Approximate tack dry time is 1 to 2 hours at 80°F (27°C).
- Approximate initial curing time is 8-hours at 80°F (27°C).
- Coverage is approximately 120-ft<sup>2</sup> per gallon at 10-mils thickness.
- The Shelf life for original, unopened containers is approximately 1-year, if stored properly

