

# Metal Building Filler Insulation

with ECOSE® Technology

Submittal Date \_\_\_\_\_



## Description

Knauf Metal Building Filler Insulation with ECOSE Technology is a resilient, flexible unfaced blanket insulation made from inorganic fibers bonded with ECOSE Technology. The filler blanket is designed for use as a thermal and acoustical insulation to fill voids in walls and roofs of metal buildings. It is not suitable for application of facings and does not meet the requirements of NAIMA 202-96.

## ECOSE Technology

ECOSE Technology is a revolutionary new binder chemistry that makes Knauf Insulation products even more sustainable than ever. It is based on rapidly renewable bio-based materials rather than non-renewable petroleum-based chemicals traditionally used in fiber glass insulation products. ECOSE Technology reduces binder embodied energy and does not contain phenol, formaldehyde, acrylics or artificial colors.

## Application

Knauf Metal Building Filler Insulation with ECOSE Technology is used as unfaced thermal and acoustical insulation to fill voids in walls and roofs of metal buildings. **The product is not suitable for application of facings.**

## Features and Benefits

### Energy Conservation

- Knauf Metal Building Filler Insulation with ECOSE Technology has excellent thermal properties and reduces the building's operating costs for heating and air conditioning.

## Sustainability

- **Carbon negative:** meaning Knauf thermal insulation products recover the energy that it took to make them in just hours or a few days, depending on the application. Once installed, the product continues to save energy and reduce carbon generation as long as it is in place.
- Fiber glass insulation with ECOSE Technology contains three primary ingredients:
  - Sand, one of the world's most abundant and renewable resources
  - Post-consumer recycled bottle glass
  - ECOSE Technology which reduces binder embodied energy by up to 70%

## Specification Compliance

Knauf Metal Building Filler Insulation with ECOSE Technology complies to the property requirements of the following specifications:

- ASTM E 136
- GREENGUARD Children and Schools<sup>SM</sup> Certification

## Technical Data

### Surface Burning Characteristics

- Does not exceed 25 Flame spread, 50 Smoke developed when tested in accordance with ASTM E 84, NFPA 255 and UL 723.

### Odor (ASTM C 1304)

- No objectionable odor emission.

### Corrosion (ASTM C 1617)

- The corrosion rate in mils/year will not exceed the rate of corrosion of 1 ppm chloride solution.

## Resistance to Microbial Growth (ASTM C 1338)

- Does not promote microbial growth.

## Water Vapor Sorption (ASTM C 1104)

- Less than 0.2% by volume or 5% by weight.

## Noncombustibility (ASTM E 136)

- Noncombustible.

## Fiber Glass and Mold

Fiber glass insulation will not sustain mold growth. However, mold can grow on almost any material when it becomes wet and contaminated. Carefully inspect any insulation that has been exposed to water. If it shows any sign of mold, it must be discarded. If the material is wet but shows no evidence of mold, it should be dried rapidly and thoroughly. If it shows signs of facing degradation from wetting, it should be replaced. Air handling insulation used in the air stream must be discarded if exposed to water.

## Notes

The chemical physical properties of Knauf Metal Building Filler Insulation with ECOSE Technology represent typical average values determined in accordance with accepted test methods. The data is subject to normal manufacturing and testing variations. The data is supplied as a technical service and is subject to change without notice. References to numerical flame spread ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

Check with your Knauf Insulation sales representative to assure information is current.

| Filler Insulation FORMS AVAILABLE |                 |   |               |
|-----------------------------------|-----------------|---|---------------|
| R-value                           | Thickness       | Width   | Length        |
| R-10                              | 3 1/4" (76 mm)  | 36" (914 mm)<br>48" (1219 mm)<br>60" (1524 mm)<br>72" (1824 mm) | 100' (30.5 m) |
| R-11                              | 3 1/2" (89 mm)  |   | 90' (27.4 m)  |
| R-13                              | 4 1/4" (102 mm) |   | 85' (25.9 m)  |
| R-19                              | 6 1/4" (152 mm) |   | 55' (16.8 m)  |
| R-25                              | 8" (203 mm)     |   | 40' (12.2 m)  |
| R-30                              | 9 1/2" (241 mm) |   | 35' (10.7 m)  |

