

# SMARTBATT™ with MoistureSense™ Technology

## PRODUCT DESCRIPTION

**Basic Use:** SMARTBATT™ Fiber Glass Building Insulation is intended for use in either residential or commercial construction as thermal and acoustical insulation in ceilings, walls and floors.

SMARTBATT is the first and only kraft faced vapor retarder that can be used in standard wood stud and steel frame assemblies as well as in any fire rated applications.

**Benefits:** When installed properly, SMARTBATT provides enhanced drying which helps prevent mold and mildew growth by reducing the potential for moisture accumulation. Installing SMARTBATT insulation is an easy, cost-effective method to help conserve energy in the residential and commercial new construction and remodeling markets. In addition to its thermal properties, SMARTBATT also provides excellent acoustical performance.

SMARTBATT's integrated smart vapor retarder facing allows closed building envelope systems to increase their drying potential with seasonal climatic changes. SMARTBATT has the ability to alter its permeability based on changes in relative humidity within the wall cavity. It is compression packaged for ease of handling and its broad availability of R-Values and sizes ensures the right product for the job. The product resists mold and mildew and will not rot or deteriorate.

**Composition and Materials:** The product is composed of tan, uniformly textured, inorganic fibrous glass and formed with a formaldehyde-free binding agent. The blue facing is a kraft paper that has an integrated smart vapor retarder and now meets Class A fire rating.

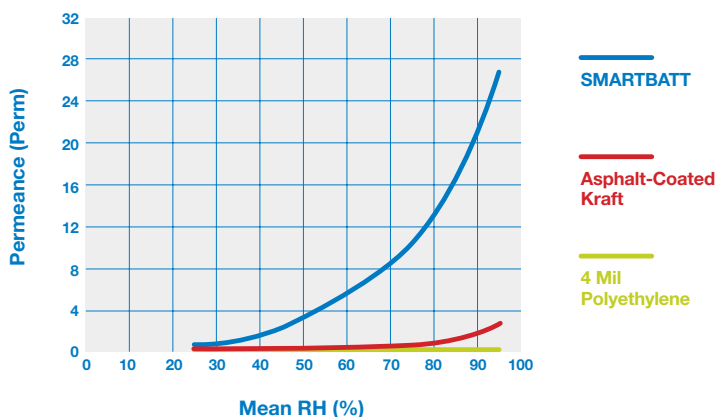
**Sizes:** Available standard sizes are listed in the table on the other side. Contact CertainTeed for non-standard sizes.

**Limitations:** The moisture management benefits associated with the use of SMARTBATT are most significant in cold and mixed climates. SMARTBATT is not as advantageous in hot-humid or hot-dry climates. However, if a vapor retarder is desired, SMARTBATT is most effective at managing moisture no matter what climate.

All fiber glass insulation should be kept dry. Wet fiber glass insulation will lose its effectiveness until it dries. Fiber glass will often dry naturally and regain its original R-Value. However, under conditions where the insulation will not dry thoroughly it should be removed and allowed to dry or be replaced.



Water Vapor Permeance Comparison



Product Name	SMARTBATT™ with MoistureSense™ Technology
Manufacturer	CertainTeed Corporation
Address	20 Moores Road Malvern, PA 19355
Phone	800-233-8990
Website	www.certainteed.com/insulation

## TECHNICAL DATA

### Applicable Standards

- Model Building Codes:
  - ICC
- Material Standards:
  - ASTM C665  
Type II, Class A, Category 1
  - GREENGUARD Gold Certified

### Fire Resistance

- Fire Hazard Classification:
  - ASTM E84  
Kraft faced insulation:  
Max. Flame Spread Index: 25  
Max. Smoke Developed; Index: 50
- Critical Radiant Flux (insulation only):
  - ASTM E970 /  $\geq 0.12 \text{ W/cm}^2$
- Noncombustibility:
  - ASTM E136 / Insulation only: Pass testing

### Physical/Chemical Properties

- Thermal Performance:
  - ASTM C518 / R-Values for insulation only, as stated in table on other side
- Water Vapor Sorption:
  - ASTM C1104 /  $\leq 5\%$
- Water Vapor Permeance (of kraft facing):
  - ASTM E96, Desiccant Method / Facing:  $\leq 1.0 \text{ perm (57 ng/Pa}\cdot\text{s}\cdot\text{m}^2)$
  - ICC Type II vapor retarder
- Fungi Resistance:
  - ASTM C1338 / Pass testing
- Odor Emission:
  - ASTM C1304 / Pass testing
- Corrosiveness:
  - ASTM C665 / Pass testing

### Quality Assurance

CertainTeed's commitment to quality and environmental management has ensured the registration of the Athens, Chowchilla and Kansas City plants to ISO 9001:2008 and ISO 14001:2004 standards.

## INSTALLATION

For most areas, vapor retarders should be installed on the warm-in-winter side of the insulation (toward the interior). Check with local practice and building codes. SMARTBATT insulation is not intended to be installed with the facing placed toward the exterior of the building.

### Installation in Wood Framing:

**Studs** – Faced insulation fits between wood studs with flanges stapled either to the faces or sides of the studs. Pull flanges taut while stapling every 8"-12" (203-305 mm) to prevent gaps. Tabless friction fit insulation is pressure fitted between studs.

**Ceiling Joists** – Faced insulation is placed between joists with vapor retarder facing down. Flanges can be stapled to bottom faces or sides of joists if insulation is installed before ceiling finish. Only unfaced insulation is installed over existing insulation.

**Floor Joists** – Faced insulation is installed with the vapor retarder facing up and in contact with the floor. All insulation must be supported between joists on an approved support such as wire.

**Cathedral Ceilings** – Faced insulation with vapor retarder facing down is stapled between the rafters. A 1" air space is recommended between insulation and roof sheathing.

### Installation in Steel Framing:

- Standard practice for installing fiber glass batts in steel studs is to friction fit batts into stud cavities. When batts completely fill stud cavities they are constrained by studs at their edges and by wall facings front and rear. For faced product, use tabless batts or leave stapling flanges folded.
- When fiber glass batts are installed in steel ceiling or floor joists or rafters from below, they must be supported with wire or a ceiling finish material.
- Ventilation and vapor retarder requirements are the same as with wood framing.

**Fire Rated Applications** – Stapling not required to meet Class A standard.

## AVAILABILITY AND COST

For availability and cost, contact your local contractor or distributor, or call CertainTeed Sales Support Group at 800-233-8990.

## WARRANTY

Refer to CertainTeed's Lifetime Limited Warranty for Fiber Glass Building Insulation (30-21-1321).

## MAINTENANCE

No maintenance required.

## TECHNICAL SERVICES

Technical assistance can be obtained either from your local CertainTeed sales representative, or by calling CertainTeed Sales Support Group at 800-233-8990.

AVAILABLE SIZES		
R-VALUE	THICKNESS	BATT LENGTHS
11	3½"	48", 93", 96", 105"
13	3½"	48", 93", 96", 105"
15	3½"	48", 93", 96", 105"
19	6¼"	48", 93", 96", 105"
20	5½"	48", 93", 96", 105"
21	5½"	48", 93", 96", 105"
30	10"	48"
30C	8¼"	48"
38	12"	48"
38C	10¼"	48"

