

## Sustainable Insulation™

### FIBERGLASS BUILDING INSULATION

CertainTeed Sustainable Insulation™ is an easy to install, cost effective solution to help save energy in residential and commercial new construction, as well as for renovating or retrofitting existing buildings. In addition to its thermal properties, this fiberglass building insulation also provides excellent acoustical performance. It is designed for use in standard wood stud and steel frame assemblies.

Sustainable Insulation brings you long-lasting comfort through increased thermal performance and reduced noise levels and meets the growing demand for sustainable construction, offering exceptional performance while contributing to a greener future. It is compression packaged for ease of handling, and it's broad availability of R-values, sizes and facings ensures the right product for the job. The product resists mold and mildew and will not rot or deteriorate.

### **Features & Benefits**

Installing Fiberglass Building Insulation is an easy, cost-effective method to help conserve energy in residential and commercial new construction, remodeling and reinsulation projects.

### **Composition & Materials**

The product is composed of tan, uniformly textured, inorganic fibrous glass and formed with a formaldehyde-free, thermosetting binder.

## **Application**

The National Electrical Code prohibits installation of any insulation over or within 3" (76 mm) of recessed light fixtures, unless approved insulated ceiling (IC) lighting fixtures are used. Standard kraft facing is flammable and should not be left exposed. Kraft faced insulation must be installed behind and in substantial contact with the unexposed surface of the ceiling, floor or wall finish.

Special care should be taken when working with an open flame. Where a flame spread rating of 25 is required, insulation must be unfaced or have a foil scrim kraft (FSK) facing.

Because of potential skin irritation, unfaced building insulation should not be installed in an exposed area where it will be subject to human contact.

All building insulation should be kept dry. Wet fiberglass insulation will lose its effectiveness until it dries. Fiberglass 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.

### **Quality Assurance**

Our products meet the most stringent certificates:

# APPLICABLE STANDARDS, CODE COMPLIANCE

Model Building Codes:

- (ICC)
- · California quality standards

### Material Standards:

- ASTM C553 Type I, II
- ASTM C665
  Type I, unfaced
  Type II, Class C, Category 1, kraft faced
- GREENGUARD® Gold Certified
- Environmental Product Declaration (EPD)
- Health Product Declaration (HPD)

# PHYSICAL/CHEMICAL PROPERTIES

PROPERTY (UNIT)	TEST	VALUE
Thermal Performance:	ASTM C518	R-Values for insulation only, as stated in table on other side
Surface Burning Characteristics (flame spread / smoke developed): Unfaced	ASTM E84 Fire Rated	25 / 50
omacca	Cluss A	23 / 30
Critical Radiant Flux (W/cm²):	ASTM E790	<u>≥</u> 0.12
Noncombustability (Unfaced):	ASTM E136	Pass
Water Vapor Permeance (of Kraft Facing) Type II Vapor Retarder:	ASTM E96, Desiccant Method	≤1.0 perm (57 ng/Pa•s•m2)
Water Vapor Sorption:	ASTM C1104	<u>&lt;</u> 5%
Odor Emission:	ASTM E790	Pass
Corrosion Resistance:	ASTM C1104	Pass
Fungi Resistance:	ASTM C1338	Pass













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### 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. CertainTeed 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. Unfaced rigid 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. If unfaced insulation is used, a separate vapor retarder, like MemBrain® the Smart Vapor Retarder, should be installed where required.

### **INSTALLATION IN STEEL FRAMING:**

- Standard practice for installing fiberglass 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 fiberglass 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.

### **Available Sizes**

Available standard sizes are listed in the table. Contact CertainTeed for non-standard sizes.

R-VALUE		тніск	NESS	w	WIDTH		
R	RSI	IN	MM	IN	MM		
UNFACED							
8	1.4	2-1/2	64	16 & 24	406 & 610		
11	1.9	3-1/2	89	15, 15-1/4, 19, 23, 23-1/4, 44, 48 & 84	381, 387, 483, 584, 591, 1118, 1219 & 2134		
13	2.3	3-1/2	89	15-1/4, 16, 23-1/4 & 24	387, 406, 591 & 610		
15	2.6	3-1/2	89	15-1/4, 16, 23-1/4 & 24	387, 406, 591 & 610		
19	3.3	6-1/4	159	15, 15-1/4, 16, 19, 23, 23-1/4, 24 & 48	279, 286, 381, 387, 406, 483, 584, 591, 610 & 1219		
21	3.7	5-1/2	140	15-1/4 & 23-1/4	387 & 591		
23	4.1	5-1/2	140	15-1/4	387		
25	4.4	8	203	15, 16 & 24	381, 406 & 610		
30	5.3	10	254	16, 19 & 24	406, 483 & 610		
30C*	5.3	8-1/4	210	15-1/4 & 23-1/4	387 & 591		
38	6.7	12	305	16 & 24	406 & 610		
38C*	6.7	10-1/4	260	15-1/4 & 23-1/4	387 & 591		
49		15	381	16 & 24	406 & 610		
KRAFT FACED							
11	1.9	3-1/2	89	15, 16, 23 & 24	381, 406, 584 & 610		
13	2.3	3-1/2	89	15, 15-1/4, 16, 19, 23 & 24	381, 387, 406, 483, 584 & 610		
15	2.6	3-1/2	89	15, 16 & 23	381, 406 & 584		
19	3.3	6-1/4	159	15, 16, 23 & 24	381, 406, 584 & 610		
21	3.7	5-1/2	140	15 & 23	381 & 584		
23	4.1	5-1/2	140	15-1/4	387		
25	4.4	8	203	16 & 24	406 & 610		
30	5.3	10	254	16, 19-1/4 & 24	406, 489 & 610		
30C*	5.3	8-1/4	210	15 & 23	381 & 584		
38	6.7	12	305	16 & 24	406 & 610		
38C*	6.7	10-1/4	260	15 & 23	381 & 584		
49		15	381	16, 19-1/4 & 24	406, 483 & 610		

<sup>\*</sup> Cathedral Ceiling Batts

### **TECHNICAL SERVICES**

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

### **MAINTENANCE**

An inspection and preventative maintenance program for the insulation and vapor retarder system is recommended to ensure optimum performance.

## **AVAILABILITY & 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 Fiberglass Building Insulation. Full warranty information can be found at certainteed.com/warranty.

