

# Fiber Glass Building Insulation

## PRODUCT DESCRIPTION

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

The product is available unfaced or kraft faced and is designed for use in standard wood stud and steel frame assemblies.

**Benefits:** Installing Fiber Glass Building Insulation is an easy, cost-effective method to help conserve energy in residential and commercial new construction, remodeling and re-insulation projects. In addition to its thermal properties, Fiber Glass Building Insulation provides excellent acoustical performance. It is compression packaged for ease of handling, and its 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.

**Composition and Materials:** The product is composed of tan, uniformly textured, inorganic fibrous glass and formed with a formaldehyde-free binding agent.

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

**Limitations:** 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 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.

## 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.



<b>Product Name</b>	CertainTeed Fiber Glass Building Insulation
<b>Manufacturer</b>	CertainTeed Corporation
<b>Address</b>	20 Moores Road Malvern, PA 19355
<b>Phone</b>	800-233-8990
<b>Website</b>	<a href="http://www.certainteed.com/insulation">www.certainteed.com/insulation</a>

## TECHNICAL DATA

### Applicable Standards

- 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® Children & Schools Certified

### Fire Resistance

- Fire Hazard Classification:
  - ASTM E84 / Class A Fire Rated  
Unfaced Insulation: Max. Flame Spread Index: 25; Max. Smoke Developed; Index: 50  
Kraft faced insulation: Not rated for flame spread/smoke developed
- Critical Radiant Flux
  - ASTM E790 /  $\geq 0.12$  W/cm<sup>2</sup>
- Noncombustibility:
  - ASTM E136 / Unfaced insulation: Pass

### 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 / Unperforated facing:  $\leq 1.0$  perm (57 ng/Pa•s•m<sup>2</sup>)
  - Type II vapor retarder
- Fungi Resistance:
  - ASTM C1338 / pass
- Odor Emission:
  - ASTM C1304 / pass
- Corrosiveness:
  - ASTM C665 / pass

### 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.

**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 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.

**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 the local CertainTeed sales representative, or by calling CertainTeed Sales Support Group at 800-233-8990.

AVAILABLE SIZES					
R-Value		Thickness		Width	
R	RSI	in.	mm	in.	mm
<b>UNFACED</b>					
8	1.4	2-1/2	64	16 & 24	406 & 610
11	1.9	3-1/2	89	11-1/4, 15, 15-1/4, 19, 23, 23-1/4, 44, 48 & 84	286, 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 & 23-1/4	387 & 591
19	3.3	6-1/4	159	11, 11-1/4, 15, 15-1/4, 16, 19, 23, 23 3/4, 24 & 48	279, 286, 381, 387, 406, 483, 584, 591, 610 & 1219
21	3.7	5-1/2	140	15, 15-1/4 & 23-1/4	381, 387 & 591
25	4.4	8	203	15, 16, 19, 23, 24, 32 & 46-1/2	381, 406, 483, 584, 610, 813 & 1181
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
<b>KRAFT FACED</b>					
11	1.9	3-1/2	89	11, 15, 16, 23 & 24	279, 381, 406, 584 & 610
13	2.3	3-1/2	89	11, 15, 16, 19, 23 & 24	279, 381, 406, 483, 584 & 610
15	2.6	3-1/2	89	15 & 23	381 & 584
19	3.3	6-1/4	159	11, 15, 16, 19, 23 & 24	279, 381, 406, 483, 584 & 610
21	3.7	5-1/2	140	15 & 23	381 & 584
22	3.9	6-1/2	165	15, 19 & 23	381, 483 & 584
25	4.4	8	203	15 & 23	381 & 584
26	4.6	8	203	16 & 24	406 & 610
30	5.3	10	254	11, 15, 16, 19, 19-1/4 & 24	279, 381, 406, 483, 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

\* Cathedral Ceiling Batts

