CertainTeed

sustainable insulation.

Residential and Commercial Insulation Products

Submittal Form







Submitted to:		
Job name:	 	
Submitted by:		
Date:		

This Submittal Form is provided to assist you in specifying and selecting the proper CertainTeed Insulation products. Basic product descriptions and performance data are included. For further information or technical assistance, contact your local CertainTeed representative.

CertainTeed Corporation, P.O. Box 860, Valley Forge, PA 19482

1-800-233-8990

Visit our web site at: www.certainteed.com/insulation Customer Service 1-800-441-9850 • Fax 1-800-735-2381

Many of CertainTeed's Manufacturing plants are registered to ISO 9001:2000 standards.



	Product	Description		Values	and Thickr	nesses	Applicable Standards		
	Unfaced Building	Sustainable Insulation® manufactured in widths to		R	Nominal Thickness	ĺ	R	Nominal Thickness	Complies with ASTM C665, Type I. Is noncombustible, meeting test
ш	Insulation	permit pressure fit installation.	П	49	15"		21	5½"	criteria of ASTM E136. Thermal
		Used with a separate vapor		38	12"		20	5½"	performance determined by
		retarder or where no vapor retarder is required or		38C**	101/4"		19	61/4"	ASTM C653 and C518.
		recommended.		30	10"		15	3½"	
				30C**	8¼"		13	3½"	
				25	8"		11	31/2"	
				22	6½"				
				**Cathedra	al Ceiling Batt				
	Kraft Faced	Sustainable Insulation®		R	Nominal		R	Nominal	Complies with ASTM C665, Type II,
ш	Building Insulation	manufactured with a kraft paper facing with a vapor		38	Thickness 12"		21	Thickness 5½"	Class C, Category 1. Thermal performance determined by
	insulation	permeance rating of 1.0 or		38C**	101/4"	님	20	5½"	ASTM C653 and C518.
		less. Includes stapling flanges.		30	1074	님	19	61/4"	
				30C**	81/4"		15	3½"	
				25	8"		13	3½"	
				22	6½"	ᅵ	11	3½"	
					al Ceiling Batt			J 072	
	SpeedyR [™] Kraft Faced Building Insulation	Sustainable Insulation® manufactured with a kraft paper facing with a vapor permeance rating of 1.0 or less. No stapling required.		R 21 19 13	Nominal Thickness 5½" 6¼" 3½"				Complies with ASTM C665, Type II, Class C, Category 1. Thermal performance determined by ASTM C653 and C518.
	Masonry Wall Insulation	Sustainable Insulation® unfaced batts designed for use behind paneling in masonry-type construction where cavity depth is limited by the furring strips. Used with a separate vapor retarder or where no vapor retarder is required or recommended.		R 6 6	Nominal Thickness 1¾" ¾"				Complies with ASTM C665, Type I. Is noncombustible, meeting test criteria of ASTM E136. Thermal performance determined by ASTM C653 and C518.

Product	Description	R-Values and Thicknesses*	Applicable Standards
Basement Wall Insulation	Sustainable Insulation® available with perforated white flame resistant polypropylene or foil facings. Used to insulate walls of unfinished crawlspaces and basements. Flame spread rating is 25 or less. Available in 48" and 72" widths.	R Nominal Thickness 11 33%	Complies with ASTM C665, Type II, Class A, Category 2. Thermal performance determined by ASTM C653 and C518.
MemBrain™ Smart Vapor Retarder and Air Barrier Film	Vapor retarder sheeting intended for use with unfaced, vapor permeable mass insulation (fiber glass and mineral wool) in wall and ceiling cavities. MemBrain is a polyamide film that changes its permeability with ambient humidity conditions.	Roll Nominal Thickness 8 ft. 2 mil 9 ft. 2 mil 10 ft. 2 mil 12 ft. 2 mil	Water vapor permeance values are determined by ASTM E96. ≤ 1.0 perm (57 ng/Pa•s•m²) (ASTM E96, Standard Desiccant method) > 10 perms (570 ng/Pa•s•m²) (ASTM E96, Standard Water method)
NoiseReducer [™] Products	Description	R-Values and Thicknesses*	Applicable Standards
Sound Attenuation Batts	Sustainable Insulation [®] unfaced batts manufactured in widths to permit pressure fit installation in steel stud systems.	R Nominal Thickness	Complies with ASTM C665, Type I. Is noncombustible, meeting test criteria of ASTM E136. Thermal performance determined by ASTM C653 and C518.
Acoustical Ceiling Batts	Sustainable Insulation® 24" x 48" batts either unfaced or with tabless kraft paper facing. For use in suspended ceiling systems.	R Nominal Thickness 19 61/4" 11 31/2"	Complies with ASTM C665, Type I (unfaced), Type II, Class C, Category 1, (faced). Thermal performance determined by ASTM C653 and C518.
NoiseReducer [™]	Residential Sustainable Insulation® batts are available with a white kraft facing for easy attachment to interior wood stud framing.	R Nominal Thickness 11 3½"	Complies with ASTM C665, Type II, Class C, Category 2. Thermal performance determined by ASTM C653 and C518.
Commercial Products	Description	R-Values and Thicknesses*	Applicable Standards
CertaPro™ AcoustaTherm™ Batts	Sustainable Insulation® manufactured in widths to permit friction fit installation. Unfaced is used with a separate vapor retarder or where no vapor retarder is required or recommended.	R Nominal Thickness 30 10" (Unfaced) 19 6½" (Unfaced, Kraft-faced no tabs) 11 3½" (Unfaced, Kraft-faced no tabs) 8 (Unfaced)	Unfaced complies with ASTM C553, Type I, ASTM C665, Type I and is noncombustible, per ASTM E136. Kraft Faced complies with ASTM C665, Type II, Class C, Category 1. Thermal performance determined by ASTM C518.

Commercial Products	Description	R-Values and Thicknesses*	Applicable Standards			
CertaPro [™] Partition Batts	Sustainable Insulation® unfaced flexible blanket-type batts for use in commercial construction for acoustical and thermal insulation in shaft and partition walls.	R Nominal Thickness 5.8 1½"	Complies with ASTM C553, Type I, II, ASTM C665, Type I and is noncombustible, per ASTM E136.			
CertaPro™ Thermal Kraft Faced Batts	Sustainable Insulation® manufactured with a flanged kraft paper facing providing a vapor retarder with a perm rating of 1.0 or less.	R	Complies with ASTM C553, Type I and ASTM C665, Type II, Class C, Category 1. Thermal performance determined by ASTM C177 or ASTM C518.			
CertaPro™ Thermal Foil Faced Batts	Sustainable Insulation® manufactured with a flanged foil/kraft vapor retarder providing a perm rating of 0.05 or less. Has a flame spread rating of 75 or less.	R Nominal Thickness □ 38 12" □ 30 10" □ 13 3½" □ 11 3½" □ 19 6¼"	Complies with ASTM C553, Type I and ASTM C665, Type III, Class B, Category 1. Thermal performance determined by ASTM C177 and ASTM C518.			
CertaPro [™] Thermal FSK-25 Faced Batts	Sustainable Insulation® manufactured with a flanged flame resistant foil-scrim-kraft facing. Used where a flame spread rating of 25 or less is required for insulation facings. The facing has a perm rating of 0.02 or less.	R Nominal Thickness □ 38 12" □ 13 3½" □ 30 10" □ 11 3½" □ 19 6¼" □ 11 3½"	Complies with ASTM C553, Type I and ASTM C665, Type III, Class A, Category 1. Thermal performance determined by ASTM C177 or ASTM C518.			
CertaPro™ Thermal Extended Flange FSK Faced, White PSK Faced Batts	Sustainable Insulation® manufactured with a white flame-resistant poly-scrim-kraft facing (PSK) or flame-resistant foil-scrim-kraft facing (FSK). Used where a flame spread rating of 25 or less is required for insulation facings. All facings have a perm rating of 0.02 or less and a 4" extended flange.	30 (FSK only) 10" 19 (PSK & FSK) 61/4"	PSK & FSK comply with ASTM C553, Type 1. PSK complies with ASTM C665, Type II, Class A, Category 1. FSK complies with ASTM C665, Type III, Class A, Category 1. Thermal performance determined by ASTM C177 and ASTM C518.			
Product	Description	R-Values and Thicknesses*	Specification Compliance			
CertaPro™ Commercial Board	Flexible to rigid boards for residential and commercial construction. Manufactured unfaced, with a reinforced white kraft and foil laminate (ASJ) or an aluminum foil, glass scrim kraft laminate (FSK). Available in four densities:	CB 150 CB 225 CB 300 CB 600 R-Value Thickness R-Value Thickness R-Value Thickness 16.0 4" 17.4 4" 17.4 4" — 14.0 3½" 15.2 3½" 15.2 3½" — 12.0 3" 13.0 3" 13.0 3" — 10.0 2½" 10.9 2½" 10.9 2½" — 8.0 2" 8.7 2" 8.7 2" 9.1 2"	Product ASTM C612 ASTM C553 CB 150 Type IA Types I, II & III CB 225 Type IA — CB 300 Types IA & IB — CB 600 Types IA & IB —			
	CB 150: Light weight, used where flexibility is desired. CB 225: Semi-rigid board type. CB 300: Board type with greater rigidity and compressive strength for a smoother more abuse resistant surface. CB 600: A rigid board product.	6.0 1½" 6.5 1½" 6.5 1½" 6.8 1½" — — 4.3 1" 4.3 1" 4.5 1"	ASTM C1136 (Facing only) Type II: FSK; Type I: ASJ			

	Product	Description		R-Values and Thicknesses*					Specification Compliance			
	CertaPro™	Rigid or semi-rigid fiber glass			Type 225	;	Type :	300	Product	ASTM C612		
Ш	AcoustaBoard™ Black [†]	board with a black mat facing for acoustical applications in sound		R-Va	alue Thi	ckness	R-Value	Thickness	Type 225	Type IA		
	2.aon	studios or other acoustically		8.	7	2"	8.7	2"	Type 300	Types IA & IB		
		sensitive applications requiring		6.	5 1	1½"	6.5	11/2"				
		a black exposed surface.		4.	3	1"	4.3	1"				
		Available in two densities: Semi-rigid board type.										
		Board type with greater rigidity and compressive strength for a smoother more abuse resistant surface.										
	CertaPro™	1/2" to 2" thick black fiber			Type 150)	Type 2	200	Complies with			
Ш	AcoustaBlanket [™] Black [†]	glass blanket with a durable fire-resistant black composite			Thickness		Thickne	ess	Type I and II.			
	Diack	surface used for acoustical control			1"		_			determined by ASTM pe A mounting.		
		applications in theaters, sound			1½"		1/2"			ance determined by		
		studios or other acoustically sensitive applications requiring			2"		1 –		ASTM C177 o	or C518.		
		a black exposed surface.										
	Metal Building	A flexible blanket insulation			Nomina	al			Metal Building Insulation 202-96			
Ш	Insulation 202-96 [†]	furnished in rolls and intended		R	Thickne	-	Widths	Lengths	has physical p			
	202-90	to be laminated on one side with a suitable vapor retarder.	Ц	30	91⁄4"		", 48", 60", 72"	25'		the requirements g specifications:		
		It is used as a thermal and	Ц	25	8"		", 48", 60", 72"	30'		Type I Plain and		
		acoustical insulation in the roofs and sidewalls of pre-engineered	Ц	21	6¾"		", 48", 60", 72"	45'	NAIMA 202-9			
		metal buildings and post frame		19	63%"		", 48", 60", 72"	50'				
		construction. Plain unfaced,	Ц	16	5½"		", 48", 60", 72"	50'				
		Metal Building Insulation 202-96 may be used as an additional		13	43% "		", 48", 60", 72"	75'				
		layer of insulation over laminated		11	3¾"		", 48", 60", 72" ", 48", 60", 72"	100'				
		metal building insulation in systems or over the top of BUR or single ply roofs in metal reroof applications to achieve greater thermal performance.		10	070	100	, 40 , 60 , 72	100				
	Commercial Blanket	This product is used as a thermal or acoustical insulation			Nomina					properties that regularly irements of the		
ш	Insulation [†]	in commercial buildings where		R 30	Thickne		Widths 48", 60", 72"	Lengths 25'	following spec			
		wide rolls of unfaced insulation		25	8"		48 , 60 , 72 48", 60", 72"	40'	• .	Type I and ASTM C665,		
		are required such as retrofitting a warehouse. It is also used		21	6½"		48", 60", 72" 48", 60", 72"	45'	Type I.			
		in post frame construction. In		19	61/4"		48", 60", 72"	50'	ASTM C665,	Гуре I.		
		roofs and sidewalls this product		11	31/2"		48", 60", 72"	100'				
		can be used as a second layer over the unfaced side of Metal Building Insulation 202-96. Additionally, it may be installed over old roof decks (BUR and metal) prior to application of a new standing seam roof. Limitations: This product is not intended to be laminated with vapor retarder facing and does not meet the requirements of NAIMA 202-96.										

 $^{^{\}dagger}$ Indicates Sustainable Insulation product may not be available in all areas

^{*}Additional R-values & thicknesses may be available. Contact your CertainTeed representative for more information.

Premium Blowing Wool Products	Description	R-Values*	Bags per 1,000 sq.	r . ft.	Minimur Pounds	n Weig per so	ght Min. q. ft. Settl	Installe ed Thic		Applicat Standar				
InsulSafe® SP	Fiber glass blowing insulation for pneumatic application in open attics or closed cavities.	60 49 44 38 30 22 19	31.4 25.2 22.4 19.1 14.9 10.8 9.3 6.2		0.972 0.780 0.695 0.591 0.462 0.334 0.289 0.192		18.5 16.7 14.5 11.7 8.75 7.75	22.00" 18.50" 16.75" 14.50" 11.75" 8.75" 7.75" 5.25"		18.50" AST 16.75" The 14.50" is d 11.75" AST 8.75" AST 7.75" non 5.25" mee		18.50" ASTM C764 16.75" Thermal perl 14.50" is determine 11.75" ASTM C687 8.75" ASTM C518 7.75" noncombust		764, Type I. performance nined by 687 and 518. Is bustible, criteria of
OPTIMA® System	System including OPTIMA premium fiber glass blowing insulation and OPTIMA non-woven fabric or equivalent.	15 23 30 39 47 56	18.8 29.5 38.8 49.6 60.3 71.0		0.525 0.825 1.088 1.388 1.688 1.988		5.50 7.25 9.25 11.2	3.50" (2 × 4) 5.50" (2 × 6) 7.25" (2 × 8) 9.25" (2 × 10) 11.25" (2 × 12) 13.25" (2 × 14)		C764, Toperforma	ned by ASTM nd ASTM bustible, criteria			
Spray Foam Products	Description	R-Values	and Thick	nesse	es*									
CertaSpray® Open Cell Foam	A two-component water blown spray polyurethane foam applied as a spray insulation. The foam provides thermal insulation for the interior of buildings and reduces air infiltration through the building envelope.	3.7 5.6 7.4	ckness R 1 11 1.5 13 2 15 2.5 16	2 1 0	3 3.5 4 4.5	R 18.7 20.6 22.5 26.2	Thickness in 5.5 6 7	R 30.0 33.7 37.5 41.2	Thickness in 8 9 10 11	ss R 45.0	Thickness in 12			

CertaSpray®
Closed Cell
Foam

A two-component HFC-245fa blown spray polyurethane foam applied as a spray insulation. The foam provides thermal insulation for the interior of buildings and reduces air infiltration through the building envelope.

	Thickness								
R	in								
6.4	1	19.2	3	32.0	5	51.2	8	76.8	12
9.6	1.5	22.4	3.5	35.2	5.5	57.6	9		
12.8	2	25.6	4	38.4	6	64.0	10		
16.0	2.5	28.8	4.5	44.8	7	70.4	11		

Complies with ASTM C1029 Type II

Product Characteristics

Sound Transmission Loss

CertainTeed's Fiber Glass products can reduce sound transmission when properly installed in construction assemblies and can add from 3 to 12 points to the STC rating depending on the type of assembly. The actual rating is dependent on the workmanship, mass of total material, thickness of insulation and the air tightness of the construction. In wood stud assemblies, separation of the wall

surfaces plus the addition of insulation in stud cavities are the most effective means of reducing sound transmission. This may be accomplished by installing resilient channels on one side of the partition, or with staggered or double wall constructions. The table on the following page lists some typical sound rated partition assemblies.

Surface
Burning
Characteristics

These products have the following maximum flame spread and smoke developed ratings when tested per ASTM E84:

Flame Spread	Smoke Developed
5	0
5	0
5	5
5	5
25	50
25	50
75	150
20	55
<25	<50
<25	<450
<25	<450
	5 5 5 5 25 25 25 75 20 <25 <25

FSK-25, Basement Wall and standard foil-faced insulation products have a critical radiant flux flame propagation resistance equal to or greater than 0.12 w/cm².

Fire Safety

CertainTeed Unfaced Fiber Glass Building Insulation, OPTIMA®, InsulSafe® SP, and UltraTherm® are noncombustible per ASTM E136 test criteria.

Many building codes require that foam plastic insulation be covered with an approved 15-minute thermal barrier. Consult local building code officials to ensure the application meets local building codes and regulations.

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Approximate STC Ratings

Wood Frame Partitions With Gypsum		No Ins	ulation		3½" of CertainTeed Fiber Glas Insulation (batts or blown)			
Wallboard Facings (1/2" & 5/8")	1/2	2"	5	%"		1/2"	5/8	
Single studs/single layer facings	3	4	;	35		39	38	3
Single studs/resilient channel	3	9	4	40		46	50)
Staggered studs/single layer facings	3	9	4	43		50	51	
Double stud walls/single layer facings	4	6	4	45		57	57	,
		No Insi	ulation				ed Fiber G tts or blow	
Steel Stud Partitions With Gypsum	16" (D.C.	24'	' O.C.	16"	O.C.	24" O	.C.
Wallboard Facings (1/2" & 5/8")	2½" S ½"	tuds %"	3%" ½"	Studs 5/8"	2 ½" ½"	Studs 5/8"	3%" St ½"	uds %"
Single layer facings	36	39	36	39	45	47	48	50
Double layer one side, single layer other side	39	44	42	47	51	52	52	55
Double layer each side	45	48	50	52	55	57	55	58

Guide Specifications for CertainTeed Fiber Glass Thermal and Acoustical Insulations

Note to the specifier: Provide information as required; delete inappropriate items and fill in where indicated.

This guide specification applies to thermal and acoustical insulation in walls, ceilings and floors. It follows Construction Specifications Institute (CSI) format.

PART 1 - GENERAL

1.01 Work included

State type of insulation and where it is to be installed.

1.02 Related Work

State if separate vapor retarder and/or air barrier is to be installed.

1.03 References

Include appropriate insulation standards.

PART 2 - PRODUCTS

2.01 Acceptable Manufacturers CertainTeed Corporation

Certainteed Corpora

2.02 Materials

for R-Value of.

Thermal Insulation

Insulation for (ceilings) (walls) (floors)
shall be CertainTeed ______
inches thick,
with R-Value of _____,
or Insulation for (ceilings) (or other
approved location) shall be CertainTeed
______ installed at minimum of
______ inches thick,
with ______ bags/1,000 sq. ft.

Sound Control Insulation

Insulation for (ceilings) (walls) (floors) shall be CertainTeed ______.

Acoustical Ceiling Batts

Insulation over suspended ceilings shall be CertainTeed kraft-faced (3½" R-11) (6½" R-19) Acoustical Ceiling Batts.

PART 3 - EXECUTION

3.01 Preparation

Verify that mechanical and electrical services in (ceilings) (walls) (floors) have been installed and tested and, if appropriate, verify that adjacent materials are dry and ready to receive insulation.

3.02 Installation

Installation shall be in accordance with CertainTeed's instructions.

Guide Specifications for CertainTeed Commercial Fiber Glass Insulation Products

PART 1 - GENERAL

1.01 Summary

- A. This section includes commercial building thermal/acoustical insulation for application to:
- 1. Exterior building walls;
- 2. Interior partition walls, shaft walls, and other interior surfaces:
- 3. Ceiling suspension systems.

1.02 Submittals

- A. Prepare and submit for approval information as required by the conditions of the contract and Division 1 Submittals sections.
- B. Submit product data for each thermal and acoustical insulation product specified.

1.03 Quality Assurance

A. Installers shall be qualified to perform work of this section and shall be experienced in the performance of installation operations as appropriate to the project.

1.04 Delivery and Storage

A. Deliver all insulation materials and accessories to the project site in manufacturer's original, unopened, undamaged packaging, with all identification labels intact. Store in a safe place protected from dust, dirt, moisture and physical abuse before and during installation.

PART 2 - PRODUCTS

2.01 Approved Manufacturer and Products

- A. All thermal/acoustical insulation materials shall be in accordance with Division 1 Submittals, manufactured by CertainTeed Corporation, including but not limited to:
- 1. CertaPro AcoustaTherm Batts, Unfaced or Kraft Faced (no tabs).
- 2. CertaPro Partition Batts, Unfaced.
- 3. CertaPro Thermal Kraft Faced Batts.
- 4. CertaPro Thermal Foil Faced Batts.
- 5. CertaPro Thermal FSK-25 Faced Batts.
- 6. CertaPro Thermal Extended Flange Batts, FSK Faced.

- 7. CertaPro Thermal Extended Flange Batts, Black PSK Faced.
- 8. CertaPro Thermal Extended Flange Batts, White PSK Faced.
- 9. Building Insulation, Unfaced, Kraft Faced.
- 10. CertaPro Commercial Board, Unfaced, FSK Faced, ASJ Faced.
- 11. CertaPro AcoustaBoard Black.
- 12. CertaPro AcoustaBlanket Black.
- 13. Metal Building Insulation 202-96 (Rev. 2000).
- 14. Commercial Blanket Insulation.
- B. Where applicable, specify product thicknesses and length/width dimensions so insulation completely fills wall cavities to meet thermal and acoustical performance specifications.
- C. Specify type of vapor retarder facing to meet water vapor transmission and fire rating specifications.

2.01 Products and Applications

- A. Curtain Wall Insulation:
- 1. CertaPro AcoustaTherm Batts, Unfaced or Kraft Faced (no tabs). R-Value: 2. CertaPro Thermal Kraft, Foil, or FSK-25 Faced Batts.
- R-Value: 3. CertaPro Commercial Board, Unfaced, FSK or ASJ Faced. R-Value:
- B. Partition Insulation:
- 1. CertaPro Partition Batts, Unfaced. R-Value: 5.8.
- C. Interior Cavity Wall Insulation:
- 1. CertaPro AcoustaTherm Batts, Unfaced or Kraft Faced. R-Value:

- 2. CertaPro Thermal Batts, Kraft, Foil, or FSK-25 Faced. R-Value:
- 3. CertaPro Thermal Extended Flange Batts, FSK or PSK Faced. R-Value: _
- D. Insulation over ceiling suspension systems:
- 1. CertaPro AcoustaTherm Batts, Unfaced or Kraft Faced (no tabs).

E. Insulation for acoustic control in
theaters, sound studios, etc.:
 CertaPro AcoustaBoard Black.
R-Value:
2. CertaPro AcoustaBlanket Black.
R-Value:
F. Insulation for metal building ceiling
and side wall applications:
1. CertainTeed Metal Building 202-96
(Rev. 2000).
R-Value:
2. Commercial Blanket Insulation.
R-Value: .

PART 3 - EXECUTION

3.01 Inspection

- A. Verify that all insulation may be installed in accordance with project drawings, thermal and acoustical design requirements and fire ratings.
- B. Confirm that all exterior and interior wall, partition, and floor/ceiling assembly construction has been completed to the point where the insulation may be correctly installed.

3.02 Installation

B. Install all insulation in compliance with manufacturer's published instructions and good workmanship so that acoustical and thermal performance requirements are met.

3.03 Safety Precautions

- A. Properly protect insulation contractor's employees during installation of all insulation. Protection shall include proper attire when handling and applying insulation materials, and shall include but not be limited to gloves, hard hats, disposable dust respirators, and eye protection.
- B. Conduct all job site operations in compliance with applicable provisions of the Occupational Safety and Health Act and/or local safety and health codes and regulations.

Notes, Special Instructions, Applications, etc.











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