

SUBMITTAL SHEET

Technical Insulation Products

Submitted to _____

Job name _____

Submitted by _____

Date _____

☐ Duct Wrap

A blanket-type insulation composed of glass fibers. Product is available as unfaced or with FSK or PSK vapor retarder facing. On faced products, a 2" (51 mm) stapling/taping tab is provided on one edge.

Product Details*

	Type	Nominal Thickness	R	Installed R-Value
☐	75	1"	3.4	2.8
☐	75	1-1/2"	5.2	4.2
☐	75	2"	6.9	5.6
☐	75	2-1/8"	7.3	6.0
☐	75	3"	10.3	8.3
☐	75	4"	13.8	11.0
☐	75	4-1/2"	15.2	12.0
☐	100	1"	3.8	3.0
☐	100	1-1/2"	5.8	4.5
☐	100	2"	7.7	6.0
☐	150	1"	4.2	3.2
☐	150	1-1/2"	6.3	4.8
☐	150	2"	8.3	6.4

Applicable Standards

Complies with:

- ASTM C1290
Type I – Unfaced, Type III – FSK Faced
- ASTM C553
Type I – Type 75, 100 and 150, Type II – Type 100 and 150, Type III – Type 150
- CAN/CGSB-51.11s
- ASTM C1136 (Facings)
Type II – FSK Faced
- Thermal performance determined by:
ASTM C177 and/or ASTM C518
- GREENGUARD Certification Standards:
Low-emitting products for the indoor environment.
Meets product emission standard under GREENGUARD Gold.

Notes

*Additional R-Values and thicknesses may be available. Product availability may vary by location.
Contact your CertainTeed representative for more information.

Technical Insulation Products

☐ ToughGard® R Duct Liner

A fiberglass acoustical liner for HVAC sheet metal duct systems operating at velocities up to 6,000 fpm (30.5 m/s) and temperatures to 250°F (121°C). Absorbs unwanted crosstalk, equipment and air rush noise.

Product Details*

	Type	Nominal Thickness	R
☐	150	1"	4.2
☐	150	1-1/2"	6.0
☐	150	2"	8.0
☐	200	1-1/2"	2.1

Applicable Standards

- Complies with:
- ASTM C1071
Type I, roll insulation
 - Thermal performance determined by:
ASTM C177 or ASTM C518
 - Acoustic Performance determined by:
ASTM C423 using Type A mounting per ASTM E795

Notes

☐ Ultra*Duct® Black Duct Board

A resin-bonded glass fiber board with a reinforced foil laminate air barrier/vapor retarder on the outside surface. Ultra*Duct Black is designed for fabrication into supply and return air duct work for HVAC systems operating at velocities up to 6,000 fpm (25.4 m/s) and temperatures up to 250°F (121°C).

Product Details*

	Type	Nominal Thickness	R
☐	475	1"	4.3
☐	800	1-1/2"	6.5
☐	800	2"	8.7

Applicable Standards

- Complies with:
- AUL 181 for Factory Made Air Ducts and Air Connectors, Class 1 Rigid
 - Thermal performance determined by:
ASTM C177 or ASTM C518
 - Acoustic Performance determined by:
ASTM C423 using Type A mounting per ASTM E795

Notes

☐ CrimpWrap™ Crimped Pipe & Tank Wrap

This product is made from a continuous fiberglass blanket. It is a unique flexible insulation composed of variably oriented glass fibers firmly bonded together with a thermosetting resin. Product is available with either foil scrim or white ASJ vapor retarder facings.

Product Details*	Thickness	Diameter	Minimum Nominal Pipe		Thickness	Diameter	Minimum Nominal Pipe
	☐	1"		6"	☐	3"	16"
	☐	1-1/2"		8"	☐	3-1/2"	18"
	☐	2"		10"	☐	4"	20"
	☐	2-1/2"		12"			

Applicable Standards

- Complies with:
- ASTM C612
Type IA. Type II, except for thermal conductivity at 75°F mean temperature
 - ASTM C1393
Type IIIA, Category 2
 - Thermal Performance determined by:
ASTM C177 and/or ASTM C518

Notes

Technical Insulation Products

□ High Temperature Blanket

Blanket insulation composed of rotary glass fibers bonded with a thermosetting resin and formed into plain, flexible and resilient thermal insulation. Designed for use on industrial equipment, panel systems, pipe fittings and tanks operating at temperatures up to 1000 degrees (538°C).

Product Details*

Type	Width	Nominal Thickness	
Type 1: Rolls	24"	1"	☐
		2"	☐
		2-1/2"	☐
		3"	☐
		3-1/2"	☐
		4"	☐
	36"	1"	☐
		2"	☐
		2-1/2"	☐
		3"	☐
		3-1/2"	☐
		4"	☐
	72"	1"	☐
		2"	☐
		2-1/2"	☐
		3"	☐
		3-1/2"	☐
		4"	☐
Type 1: Batts	24"	1"	☐
		2"	☐
		2-1/2"	☐
		3"	☐
		3-1/2"	☐
		4"	☐
Type 2: Batts	24"	1"	☐
		1-1/2"	☐
		2"	☐
		2-1/2"	☐
		3"	☐
		3-1/2"	☐
		4"	☐

Applicable Standards

- Standard for Mineral Fiber Thermal Insulation for Buildings
- CAN/ULC-S702-09
Type I (pre-formed insulation without a membrane)
 - ASTM C553
Types I, II, V and VI
 - Density
Type 1: 1.25 lb/ft³
Type 2: 2.25 lb/ft³
 - CAN/CGSB 51.11
Type 2 Class 4

Notes

Technical Insulation Products

☐ 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 multiple densities:

CB 110 and 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.

Product Details*

	Type	Thickness	R	Facing	
☐	110	1-1/2"	6.0	Unfaced only	
☐	110	3-1/2"	14.0		
☐	110	6"	25.0		
☐	150	1-1/2"	6.0	Unfaced only	
☐	150	2"	8.0		
☐	150	2-1/2"	10.0		
☐	150	3"	12.0		
☐	150	3-1/2"	14.0		
☐	150	4"	16.0	Unfaced FSK ASJ	
☐	180	1-1/2"	6.0		
☐	180	2"	8.0		
☐	180	2-1/2"	10.0		
☐	180	3"	12.0		
☐	180	3-1/2"	14.0	Unfaced	
☐	180	4"	16.0		
☐	225	1"	4.2		
☐	225	1-1/2"	6.3	Unfaced	
☐	225	2"	8.3		
☐	225	2-1/2"	10.4		
☐	225	3"	12.5	FSK	
☐	225	3-1/2"	14.6		
☐	225	4"	16.6		
☐	250	1"	4.2	ASJ	
☐	250	2"	8.3		
☐	300	1"	4.3		
☐	300	1-1/2"	6.5	Unfaced	
☐	300	2"	8.7		
☐	300	2-1/2"	10.9		
☐	300	3"	13.0	FSK	
☐	300	3-1/2"	15.2		
☐	300	4"	17.4		
☐	450	1"	4.5	ASJ	
☐	450	2"	9.1		
☐	600	1"	4.5		
☐	600	1-1/2"	6.8	Unfaced only	
☐	600	2"	9.1		

Applicable Standards

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	—

ASTM C1136 (Facing only) Type II: FSK; Type I: ASJ

Notes

Technical Insulation Products

□ Metal Building Insulation

A flexible blanket insulation furnished in rolls and intended to be laminated on one side with a suitable vapor retarder. It is used as a thermal and acoustical insulation in the roofs and sidewalls of pre-engineered metal buildings and post frame construction. Plain, unfaced Metal Building Insulation may be used as an additional layer of insulation over laminated metal building insulation in systems or over the top of BUR or single ply roofs in metal reroof applications to achieve greater thermal performance.

Product Details*

	Nominal Thickness	Pre Lamination	Post Lamination	Length
☐	3-3/8"	10.8	10	100'
☐	3-3/4"	11.9	11	100'
☐	4-3/8"	14.0	13	75'
☐	5-1/2"	17.3	16	50'
☐	6-3/8"	20.5	19	50'
☐	6-3/4"	22.7	21*	45'
☐	8"	27.0	25*	30'
☐	9-1/2"	32.4	30*	25'

All types come in the widths 36", 48", 60", 72"

* Made to order

Applicable Standards

Metal Building Insulation has physical properties that regularly meet the requirements of the following specifications:

ASTM C991, Type I Plain and NAIMA 202-96.

Notes

□ Metal Building Insulation Filler Blanket

A flexible blanket insulation furnished in rolls and **not intended to be laminated and does not designed meet the standards of NIAMA**. It is used as a thermal and acoustical insulation in the roofs and sidewalls of pre-engineered metal buildings and post frame construction. The product will be used as unfaced thermal and acoustical insulation in light frame commercial buildings. It may also be used as a second layer in pre-engineered metal building insulation systems and as a primary layer of insulation in post frame structures. It will meet its stated R-Value and will comply with ASTM C665, CAN-ULC-S702.1 and national building codes.

Product Details*

	Thickness Diameter	R	Length
☐	3"	10.0	100'
☐	3-1/2"	11.0	100'
☐	4-3/8"	13.0	75'
☐	6-1/4"	19.0	50'
☐	8"	25.0	40'
☐	10"	30.0	30'

Applicable Standards

Metal Building Insulation Filler Blanket specifications:

- ASTM C665 Type 1
- ASTM C553 Type 1
- ASTM C991, Type 1

Notes

□ Universal Blanket

Available in five different densities, Universal Blanket can be fabricated into a variety of shapes and sizes to fit almost any application. Designed for general purpose applications where a flexible thermal, acoustical insulation is required. Will withstand temperatures up to 450 degrees.

Product Details*

Type	Nominal Thickness	Type	Nominal Thickness
□ 501	1-1/2"	□ 1001	1"
□ 501	2"	□ 1001	1-1/2"
□ 501	3"	□ 1001	2"
□ 501	4"	□ 1001	3"
□ 751	1-1/2"	□ 1001	4"
□ 751	2"	□ 1501	1"
□ 751	3"	□ 1501	1-1/2"
□ 751	4"	□ 2001	1"

Applicable Standards

- Metal Building Insulation Filler Blanket specifications:
- ASTM C553
Type I, Type II, Type III
 - ASTM C1139
Type II, Grades 1, 2, 3 & 4
 - MIL-22023D, Type I & Type II
- Fire Safety Standards:
- NFPA 90A
 - NFPA 90A

Notes

Technical Insulation Products

☐ Rigid Liner Board with ToughGard® Facing

Typically used for office furniture, acoustical panels, baffles, architectural panels and ceiling panels. Available in varying densities - used by fabricators who process it into finished acoustical insulation products.

Product Details*

	Type	Nominal Thickness		Type	Nominal Thickness
☐	300	1"	☐	300	4"
☐	300	1-1/2"	☐	600	1"
☐	300	2"	☐	600	1-1/2"
☐	300	3"	☐	600	2"

Applicable Standards

Material Standards:

- OEM 300 (ASTM C612), Type IA & IB
- OEM 600 (ASTM C612), Type IA & IB

Fire Safety Standards:

- Fire Hazard Classification (ASTM E84, UL 723, NFPA 255)
- Max. Flame Spread Index 25
- Max. Smoke Developed Index 50

Notes

☐ CertaPro® AcoustaBoard™ Black

Rigid or semi-rigid fiberglass board with a black mat facing for acoustical applications in sound studios or other acoustically sensitive applications requiring a black exposed surface.

Available in two densities:

Semi-rigid board type.

Board type with greater rigidity and compressive strength for a smoother, more abuse-resistant surface.

Product Details*

	Type	R	Thickness
☐	300	4.3	1"
☐	300	6.5	1-1/2"
☐	300	8.7	2"

Applicable Standards

Product	ASTM C612
Type300	Types IA & IB

Notes

Technical Insulation Products

☐ Certapro® AcoustaBlanket™ Black

1/2" to 2" thick black fiberglass blanket with a durable fire-resistant black composite surface used for acoustical control applications in theaters, sound studios or other acoustically sensitive applications requiring a black exposed surface.

Product Details*	Type	R	Thickness
	☐ 150	4.2	1"
	☐ 150	6.3	1-1/2"
	☐ 150	8.3	2"

Applicable Standards

- Complies with:
- ASTM C553
Type I and II
 - Acoustic Performance determined by:
ASTM C423 using Type A mounting
 - Thermal resistance determined by:
ASTM C177 or C518

Notes

Product Characteristics

Sound Transmission Loss

CertainTeed's fiberglass 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 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.

Fire Safety

CertainTeed Unfaced Fiberglass Building Insulation products 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.

Surface Burning Characteristics

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

Product	Flame Spread	Smoke Developed
Duct Wrap	25	50
ToughGard® R Duct Liner	25	50
Rigid Liner Board with ToughGard® Facing	25	50
Ultra*Duct® Black Duct Board	25	50
Marine Thermal Blanket	25	50
CrimpWrap™ Crimped Pipe & Tank Wrap	25	50
High Temperature Blanket	25	50
Commercial Board	25	50
Metal Building Insulation	25	50
Metal Building Insulation Filler Blanket	25	50
Universal Blanket	25	50
OEM Acoustical Board	25	50
CertaPro® AcoustaBoard™ Black	25	50
CertaPro® AcoustaBlanket™ Black	25	50

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

Approximate STC Ratings

Steel Stud Partitions With Gypsum Wallboard Facings (1/2" & 5/8")	No Insulation				3-1/2" of CertainTeed Fiberglass Insulation			
	16" O.C. 2-1/2" Studs		24" O.C. 3-5/8" Studs		16" O.C. 2-1/2" Studs		24" O.C. 3-5/8" Studs	
	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"
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 Fiberglass 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

2.02 Materials

Thermal Insulation

Insulation for (ceilings) (walls) (floors) (ducts) 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. for R-Value of _____.

Sound Control Insulation

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

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 Technical Fiberglass 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.

Technical Insulation Products

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, including but not limited to;
1. Duct Wrap
 2. ToughGard® R Duct Liner
 3. Rigid Liner Board
 4. Ultra*Duct® Black Duct Board
 5. Marine Thermal Blanket
 6. CrimpWrap™ Crimped Pipe & Tank Wrap
 7. High Temperature Blanket
 8. Commercial Board, Unfaced, FSK Faced, ASJ Faced
 9. Metal Building Insulation
 10. Metal Blanket Insulation Filler Blanket
 11. Universal Blanket
 12. OEM Acoustical Board
 13. CertaPro® AcoustaBoard™ Black
 14. CertaPro® AcoustaBlanket™ Black
- B. Where applicable, specify product thicknesses, length/width dimensions and density to meet thermal and acoustical performance specifications.
- C. Specify type of vapor retarder facing to meet water vapor transmission and fire rating specifications.

2.02 Products and Applications

1. Duct Wrap
Type: _____. R-Value: _____.
3. ToughGard® R Duct Liner
Type: _____. R-Value: _____.

Part 3 – Execution

3.01 Approved Manufacturer and Products

- A. Verify that all insulation may be installed in accordance with project drawings, 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

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

4. Rigid Liner Board
R-Value: _____.
5. Ultra*Duct® Black Duct Board
Type: _____. R-Value: _____.
6. CrimpWrap™ Crimped Pipe & Tank Wrap
Thickness: _____.
7. High Temperature Blanket
R-Value: _____.
8. Commercial Board,
Unfaced, FSK Faced, ASJ Faced
Type: _____. R-Value: _____.
9. Metal Building Insulation
R-Value: _____.
10. Metal Building Insulation Filler Blanket
R-Value: _____.
11. Universal Blanket
Type: _____. R-Value: _____.
12. CertaPro® AcoustaBoard™ Black
Type: _____. R-Value: _____.
13. CertaPro® AcoustaBlanket™ Black
Type: _____. R-Value: _____.

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.