

# Technical Insulation

Product Selection Guide









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## Solutions for Your Every Challenge

Inside this catalog you'll discover how CertainTeed's comprehensive line of Technical Insulation can help you to meet the challenges of today's market.

With customer service that's second to none, we're focused on building your business success by delivering the right products on time, every time. Through our global team of researchers and building scientists, we offer the technical support and one-on-one assistance that enables you to find the right insulation solution for every project.

To learn more about the many services we provide to our partners, talk to your CertainTeed representative or give us a call. We're always happy to hear from you.

## **Condensation Control**

In the cooling months, duct systems that are run through ceilings or walls typically carry air that is much colder than the surrounding air; if the space humidity is high enough, the duct surface may reach dewpoint and "sweat."

If the ducts sweat enough the result can be corrosion, damaged ceilings and potential for microbial growth on the wet surfaces. In the case of duct wrap, proper sealing of the exterior vapor retarder jacket with tapes or sealant systems is essential.



## Our Commitment To Sustainability

CertainTeed takes pride in providing the best solutions to make the spaces where we work, live, and play healthier, safer, and more comfortable.

Since early last century, our ongoing mission is to create innovative solutions that improve energy efficiency and comfort—always in the context of responsible environmental stewardship.

Preservation of resources through industrial ecology—environmentally sound manufacturing processes, energy and water management, waste reduction—is paramount.

Our pledge to product stewardship means our design teams use lifecycle thinking to improve the sustainability of a product. Many of CertainTeed's insulation products can help building professionals qualify toward credits for LEED® through the U.S. Green Building Council (USGBC) and the National Association of Home Builders' Green Building (NAHB) Program. They also contribute to the Living Building Challenge, WELL, and regional sustainability programs.

See how we fare by visiting https://certainteed.ecoscorecard.com/

#### **CERTAINTEED WORDS INTO ACTION**

- Our L'Anse, Michigan ceilings plant obtains its electricity from a nearby biomass-fueled power plant. Waste heat from the biomass plant is utilized in the manufacturing process.
- Our vinyl fence, decking, and railing products are manufactured using 100% hyrdropower.
- Our take-back program for end-of-life and job-site scrap vinyl siding helps eliminate landfill waste. Some of the material is recycled into our siding products.
- CertainTeed insulation products use a high amount of both pre- and post-consumer recycled content.
- Many CertainTeed interior products, such as insulation, gypsum, and ceilings, have third-party verified Environmental Product Declarations.

### **Insulation Benefits**



#### THERMAL PERFORMANCE

High efficiency fiberglass insulation enables you to significantly improve the thermal performance of your buildings.



#### **ACOUSTIC PERFORMANCE**

Adding insulation helps prevent unwanted outside noise from penetrating interior spaces, and — when added to interior walls — limits transmission of noise from room to room.



#### SUPERIOR MOISTURE PROTECTION

Beyond traditional facings, vapor retarders can help reduce the risk of mold and mildew, improving indoor air quality and providing a healthier environment for occupants. There's also less chance you'll be called back to deal with moisture problems.

# INSULPURE™ Duct Wrap

Blanket-type insulation composed of glass fibers bonded together with a thermosetting binder system. Unfaced or faced with a foil scrim kraft (FSK) vapor retarder facing. Used to insulate rectangular and round heating, ventilating and air conditioning ductwork.

Duct wrap products provide increased thermal efficiency that reduces unwanted heat loss or gain from equipment and ductwork. This means a likely savings of energy and improved system performance. When properly installed in the correct thickness, duct wrap virtually eliminates condensation problems.

### InsulPure Duct Wrap

CertainTeed offers a softer, less itchy product, InsulPure<sup>™</sup> Duct Wrap, in both standard and wide widths. We deliver on our commitment to improve installation performance by offering options such as unfaced wrap, an FSK and/or PSK vapor retarder facing and an integrated taping tab on one edge of faced wrap.

This blanket-type insulation is composed of glass fibers bonded together with a thermosetting binder system.

### InsulPure WideWrap Duct Wrap

All InsulPure WideWrap Duct Wrap is engineered to insulate rectangular and round heating, ventilating and air conditioning ductwork. Constructed specifically to accommodate longer duct lengths, the 5' widths allow for less labor, less waste and a cleaner installed appearance.

This blanket-type insulation is composed of glass fibers bonded together with a thermosetting binder system.

#### Check with your local distributor for InsulPure WideWrap availability.

PRODUCT		IINAL (NESS	UNCOMPRESSED R-VALUE			INSTALLED DUCT R-VALUE		UNCOMPRESSED K-VALUE		INSTALLED K-VALUE	
Туре	in.	mm.	h•ft²•°F/Btu	m²•°C/W	h•ft²•°F/Btu	m²•°C/W	Btu∙in/ h∙ft²•°F	W/m²•°C	Btu∙in/ h∙ft²•°F	W/m²•°C	
	1	25	3.4	0.61	2.8	0.49	0.29	0.042	0.27	0.039	
	1-1/2	38	5.2	0.91	4.2	0.74	0.29	0.042	0.27	0.039	
75	2	51	6.9	1.21	5.6	1.00	0.29	0.042	0.26	0.039	
/5	2-1/8	54	7.3	1.29	6.0	1.06	0.29	0.042	0.27	0.039	
	3	76	10.3	1.82	8.3	1.46	0.29	0.042	0.27	0.039	
	4	102	13.8	2.43	11.0	1.94	0.29	0.042	0.27	0.039	
	1	25	3.8	0.68	3.0	0.53	0.26	0.038	0.25	0.036	
100	1-1/2	38	5.8	1.02	4.5	0.79	0.26	0.038	0.25	0.036	
	2	51	7.7	1.35	6.0	1.06	0.26	0.038	0.25	0.035	
	1	25	4.2	0.73	3.2	0.56	0.24	0.035	0.23	0.033	
150	1-1/2	38	6.3	1.10	4.8	0.85	0.24	0.035	0.23	0.033	
	2	51	8.3	1.47	6.4	1.13	0.24	0.035	0.23	0.033	

#### INSULPURE DUCT WRAP THERMAL PERFORMANCE

Sizes listed above are Standard Stock. Additional sizes may be available. Check with Territory Manager for Made to Order products and quantities.

Tested in accordance with ASTM C518 and/or ASTM C177 at 75°F (24°C) mean temperature. R means resistance to heat flow. The higher the R-value, the greater the installed properly. If you do it is essential that this insulation be installed properly. If you do it yourself, follow the installation instructions carefully.



#### INSULPURE DUCT WRAP ACOUSTICAL PERFORMANCE

PRODUCT		NOMINAL THICKNESS		TRAN	TRANSMISSION LOSS (DB)AT OCTAVE BAND CENTER FREQUENCIES (HZ)						
Туре	Facing	in.	mm.	125	250	500	1000	2000	4000		
	FSK	1	38	13	17	26	34	45	55		
75	FSK	1-1/2	51	13	17	26	36	47	58		
75	FSK	2	64	14	18	28	38	49	62		
	FSK	3	76	14	18	29	40	51	64		
100	FSK	1-1/2	38	14	18	27	37	47	37		
100	FSK	2	51	14	18	28	39	49	61		

Typical sound transmission loss values for InsulPure Duct Wrap on 20-gauge sheet metal when tested according to ASTM E90.

#### **INSULPURE DUCT WRAP PHYSICAL PROPERTIES**

PROPERTIES	PERFORMANCE	TEST METHOD		
Operating Limits: Temperature	Unfaced: 35-450°F (1.7-232°C) Faced: 35-250°F (1.7-121°C)	ASTM C411		
Surface Burning Characteristics (Fire Hazard Classification)	Maximum: Flame Spread Index: 25 Smoke Developed Index: 50	ASTM E84, UL 723, CAN/ULC-S102		
Water Vapor Sorption	< 5% by Weight	ASTM C1104		
Water Vapor Transmission (Facing Only)	FSK and white FSK:0.02 perms	ASTM E96, Desiccant Method		
Corrosiveness	Pass	ASTM C665		
Fungi Resistance	Pass	ASTM C1338		
Odor Emissions	Pass	ASTM C1304		
Noncombustible	Pass	ASTM E136		



### Superior Handling Performance

#### LOW FIBER AND DUST GENERATION

Fiberglass boards, wraps and liners are safe to handle and install using standard respirators and recommended safety precautions. By reducing the generation of loose fiber and dust during normal handling, our CertainTeed product strives to improve the quality of the work environment for the installers, as well as the end-users of our products.

#### INSULPURE DUCT WRAP TYPICAL SIZES

PRO	DUCT	тнісн	(NESS	LENGTH		WI	DTH
Туре		in.	mm.	ft.	m	in.	mm.
	unfaced	1	25	150	45.7	9-72	229-1829
	unfaced	1-1/2	38	100	45.7	9-72	229-1829
	unfaced	2	51	75	22.9	9-72	229-1829
	unfaced	2-1/2	64	75	22.9	9-72	229-1829
	unfaced	3	76	50	15.2	9-72	229-1829
75	FSK/PSK	1-1/2	38	100	30.5	48	1219
	FSK/PSK	2	51	75	22.9	48	1219
	FSK/PSK	2-1/8	54	75	22.9	48	1219
	FSK/PSK	2-1/2	64	75	22.9	60	1524
	FSK/PSK	3	76	50	15.2	48	1219
	FSK/PSK	4	102	50	15.2	48	1219
	unfaced	1	25	150	45.7	9-72	229-1829
100	FSK/PSK	1	25	100	30.5	48	1219
100	FSK/PSK	1-1/2	38	100	30.5	48	1219
	FSK/PSK	2	51	75	22.9	48	1219
150	FSK/PSK	1-1/2	38	75	22.9	48	1219
150	FSK/PSK	2	51	50	15.2	48	1219

Sizes listed above are Standard Stock. Additional sizes may be available. Check with Territory Manager for Made to Order products and quantities.

## ToughGard® R Duct Liner and Board

ToughGard® Duct Liner and Ultra Duct Black Duct Board feature CertainTeed's exclusive ToughGard facing. Designed for exceptional thermal and acoustical performance, ToughGard is a tough, durable airstream surface containing an EPA-registered antimicrobial agent to help reduce the potential of microbial growth. ToughGard's low air-friction loss and excellent thermal and acoustical insulating properties provide quiet and efficient HVAC system operation.



## ToughGard® R Duct Liner 🌞 🜒 🐚

ToughGard® R rotary duct liner offers outstanding thermal and acoustical performance in duct liner applications. Composed of rotary-type glass fibers, it features a durable, moisture-resistant air stream surface with an antimicrobial agent and a sustainable base mat. Note: The antimicrobial properties are intended to only protect this product. ToughGard® R absorbs unwanted crosstalk and equipment noises while helping to lower HVAC operating costs by reducing heat gain and heat loss in duct systems.

PRODUCT	THICKNESS		K-VALUE		C-VALUE		R-VALUE	
Туре	in.	mm.	Btu•in/h•ft²•°F	W/m•°C	Btu•in/h•ft²•°F	W/m•°C	h•ft²•°F/Btu	m²•°C/W
	1	25	0.24	0.035	0.24	1.36	4.2	0.73
150	1-1/2	38	0.24	0.035	0.16	0.91	6.3	1.10
	2	51	0.24	0.035	0.12	0.68	8.3	1.47
200	1/2	13	0.24	0.035	0.48	2.73	2.1	0.37

#### **TOUGHGARD® R DUCT LINER THERMAL PERFORMANCE**

Thermal conductance (C) and resistance (R) values are derived from the material thermal conductivity (k) value. Tested in accordance with ASTM C518 and/or ASTM C177 at 75° F (24° C) mean temperature.

#### TOUGHGARD® R DUCT LINER ACOUSTICAL PERFORMANCE

PRODUCT	тніск	NESS	ABSORPTION COEFFICIENTS AT OCTAVE BAND CENTER FREQUENCIES (HZ)								
Туре	in.	mm.	125	250	500	1000	2000	4000	NRC		
	1	25	0.18	0.36	0.59	0.86	0.95	0.90	0.70		
150	1-1/2	38	0.35	0.51	0.83	0.93	0.97	0.96	0.80		
	2	51	0.34	0.64	0.96	1.03	1.00	1.03	0.90		
200	1/2	13	0.09	0.14	0.40	0.60	0.73	0.84	0.45		

Sound absorption tested in accordance with ASTM C423 using Type A mounting per ASTM E795.

#### **TOUGHGARD® R DUCT LINER PHYSICAL PROPERTIES**

PROPERTIES	PERFORMANCE	TEST METHOD		
Operating Limits: Temperature Air Velocity	Maximum: 250°F (121°C) 6000 fpm (30.5 m/s)	ASTM C411, ASTM C1071, UL 181		
Surface Burning Characteristics (Fire Hazard Classification)	Maximum: Flame Spread Index: 25 Smoke Developed Index: 50	ASTM E84, UL 723, CAN/ULC-S102		
Water Vapor Sorption	< 5% by Weight	ASTM C1104		
Corrosion Resistance	Pass	ASTM C665		
Fungi Resistance	Pass; No growth	ASTM C1338, ASTM G21		
Limited Combustible	< 3500 Btu/lb)	NFPA 259		

#### **TOUGHGARD® R DUCT LINER TYPICAL SIZES**

PRODUCT	DENSITY	NOMINAL THICKNESS		LEN	GTH	WIDTH*		
Туре	pcf	in.	mm	ft.	m	in.	mm	
		1	25	50-100	15.2-30.5	34-72	864-1829	
150	1.5 (24 kg/m3)	1-1/2	38	50-100	15.2-30.5	34-72	864-1829	
		2	51	50-75	15.2-22.9	34-72	864-1829	
200	2.0 (32 kg/m3)	1/2	13	50-100	15.2-30.5	34-72	864-1829	

\* In 1/4" (6mm) increments. Not all widths between 34" (864 mm) and 72" (1829 mm) are standard; please contact CertainTeed for standard sizes.

Sizes listed above are Standard Stock. Additional sizes may be available. Check with Territory Manager for Made to Order products and quantities.



## ToughGard® Rigid Liner Board 🔅 🜒 🐚

Developed to line large sheet metal ducts and plenums, this rigid, fiberglass board consists of black resin-bonded glass fibers with a smooth, durable black mat facing applied to the air stream surface.

#### **RIGID LINER BOARD PHYSICAL PROPERTIES**

PROPERTIES	PERFORMANCE	TEST METHOD
Operating Limits: Temperature Air Velocity	Maximum: 250°F (121°C) 6000 fpm (30.5 m/s)	ASTM C411, ASTM C1071, UL 181
Surface Burning Characteristics (Fire Hazard Classification)	Maximum: Flame Spread Index: 25 Smoke Developed Index: 50	ASTM E84, UL 723
Water Vapor Sorption	<3% by Weight	ASTM C1104
Corrosion Resistance	Pass	ASTM C665
Fungi Resistance	Pass; No growth	ASTM C1338, ASTM G21
Limited Combustible	< 3500 Btu/lb	NFPA 259

#### **RIGID LINER BOARD THERMAL PERFORMANCE**

тніси	NESS	K-VALUE		C-VA	LUE	<b>R-VALUE</b>	
in.	mm.	Btu•in/h•ft²•°F	W/m•°C	Btu•in/h•ft²•°F	W/m•°C	h•ft²•°F/Btu	m²•°C/W
1	25	0.23	0.033	0.23	1.31	4.3	0.77
1-1/2	38	0.23	0.033	0.15	0.87	6.5	1.15
2	51	0.23	0.033	0.12	0.65	8.7	1.53

Thermal conductance (C) and resistance (R) values are derived from the material thermal conductivity (k) value. Tested in accordance with ASTM C518 and/or ASTM C177 at 75° F (24° C) mean temperature.

#### **RIGID LINER BOARD ACOUSTICAL PERFORMANCE**

тнісі	KNESS	ABSORPTION COEFFICIENTS AT OCTAVE BAND CENTER FREQUENCIES (HZ)								
in.	mm.	125	250	500	1000	2000	4000	NRC		
1	25	0.07	0.28	0.71	0.90	0.93	0.93	0.70		
1-1/2	38	0.10	0.51	0.89	0.95	0.92	0.93	0.80		
2	51	0.17	0.76	1.05	1.02	0.95	0.96	0.95		

Sound absorption tested in accordance with ASTM C423 using Type A mounting per ASTM E795.

#### **RIGID LINER BOARD TYPICAL SIZES**

тнісн	THICKNESS		WIDTH		стн	DENSITY	
in.	mm	in.	mm	in.	m	lb/ft³	kg/m³
1	25	24-48	610-1219	48-120	1219-3048	3.00	48
1-1/2	38	24-48	610-1219	48-120	1219-3048	3.00	48
2	51	24-48	610-1219	48-120	1219-3048	3.00	48

NOTE: Contact CertainTeed for minimum order quantities and availability.

Sizes listed above are Standard Stock. Additional sizes may be available. Check with Territory Manager for Made to Order products and quantities.



### Indoor Air Quality (IAQ) and Duct Liners

Duct liners provide the dual benefit of thermal as well as acoustic performance in a single cost-effective product. Liners have become more attractive or beneficial over the years as automated coil lines install liners in a more cost-effective manner.

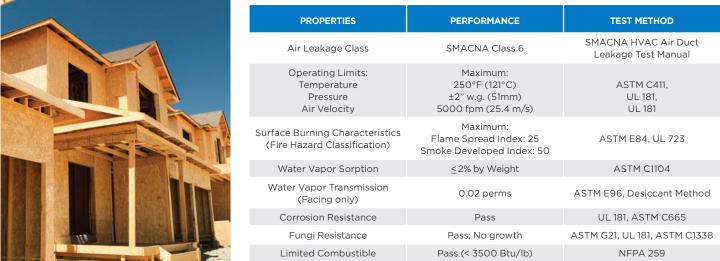
Liners have evolved over the years as well, reducing the potential for erosion of the fiberglass liner at the surface from the air velocity and turbulence present inside a duct system.

Providing high quality liners is only part of good system design. Proper system design is essential in any duct system. Improper filtration and condensation control can create IAQ problems even with lined or unlined ductwork.

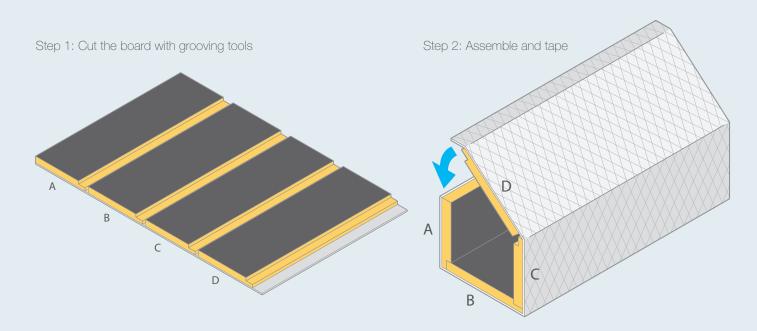


## Ultra\*Duct™ Black Duct Board 🜞 🜒 🐚

Easy to fabricate and install, this durable, lightweight duct board is made from resin-bonded glass fibers. Duct board decreases the chance of condensation with an exterior reinforced foil laminate air barrier/vapor retarder facing and non-woven glass mat bonding to the air stream surface. Exceptional thermal efficiency and low leakage rate improve the overall quality of the indoor environment while lowering operating costs. High-performance properties of duct board make it a perfect for both residential and commercial heating, ventilating and air-conditioning systems.



#### ULTRA\*DUCT™ BLACK DUCT BOARD PHYSICAL PROPERTIES





#### ULTRA\*DUCT™ BLACK DUCT BOARD THERMAL PERFORMANCE

PRODUCT	THICKNESS		K-VALUE		C-VA	LUE	<b>R-VALUE</b>	
El	in.	mm.	Btu•in/h•ft²•°F	W/m•°C	Btu•in/h•ft²•°F	W/m•°C	h•ft²•°F/Btu	m²•°C/W
475	1	25	0.23	0.033	0.23	1.31	4.3	0.76
	1-1/2	38	0.23	0.033	0.15	0.87	6.5	1.15
800	800 2	51	0.23	0.033	0.12	0.65	8.7	1.53

Thermal conductance (C) and resistance (R) values are derived from the material thermal conductivity (k) value. Tested in accordance with ASTM C518 and/or ASTM C177 at 75°F (24°C) mean temperature.

#### ULTRA\*DUCT™ BLACK DUCT BOARD ACOUSTICAL PERFORMANCE

PRODUCT	тніск	NESS	ABSORPTION COEFFICIENTS AT OCTAVE BAND CENTER FREQUENCIES (HZ				UENCIES (HZ)		
El	in.	mm.	125	250	500	1000	2000	4000	NRC
475	1	25	0.04	0.20	0.70	0.98	1.05	1.01	0.75
	1	25	0.07	0.22	0.77	1.00	1.03	1.05	0.75
800	1-1/2	38	0.14	0.46	1.02	1.10	1.07	1.05	0.90
	2	51	0.17	0.76	1.05	1.02	0.95	0.96	0.95

Sound absorption tested in accordance with ASTM C423 using Type A mounting per ASTM E795.

#### ULTRA\*DUCT™ BLACK DUCT BOARD TYPICAL SIZES

PRODUCT TYPES		THICKNESS		WIDTH		LENGTH		NO. BOARDS	
El	Edge	in.	mm	in.	mm	in.	mm	Carton	Pallet
475	Shiplap or Butt Edge	1	25	48	1219	120	3048	6	44
475	Shiplap or Butt Edge	1	25	48	1219	96	2438	8	44
	Shiplap or Butt Edge	1	25	48	1219	120	3048	6	44
800	Shiplap or Butt Edge	1-1/2	38	48	1219	120	3048	4	30
	Shiplap or Butt Edge	1-1/2	38	48	1219	96	2438	6	30
	Butt Edge	2	51	48	1219	120	3048	3	22

NOTE: Contact CertainTeed for minimum order quantities and availability.



## AcoustaBoard<sup>™</sup> Black ()

AcoustaBoard<sup>™</sup> Black is used for applications requiring an exposed black faced sound-absorbing insulation. It has a durable nonwoven facing that is fully bonded to the insulation. It is widely used to improve acoustics in theaters, sound studios and entertainment facilities — controlling reverberation or the echoing sound and unwanted background noise eliminating echoes — and is ideal for interiors that are meant to be dark. It is lightweight, easy to fabricate and install, and carries a Class A/Class I fire hazard classification of ASTM E84 25/50 for exposed applications.

#### ACOUSTABOARD<sup>™</sup> BLACK ACOUSTICAL PERFORMANCE

PRODUCT	тнісн	NESS		ABSORPTION COEFFICIENTS AT OCTAVE BAND CENTER FREQUENCIES (HZ)						
Туре	in.	mm.	125	250	500	1000	2000	4000	NRC	
	1	25	0.07	0.28	0.71	0.90	0.93	0.93	0.70	
300	1-1/2	38	0.10	0.51	0.89	0.95	0.92	0.93	0.80	
	2	51	0.17	0.76	1.05	1.02	0.95	0.96	0.95	

Sound absorption tested in accordance with ASTM C423 using Type A mounting per ASTM E795.

#### **ACOUSTABOARD™ BLACK TYPICAL SIZES**

PRODUCT TYPES	тніск	NESS	DIMENSIONS		DENSITIES		<b>R-VALUES</b>	
Туре	in.	mm	in.	mm	lb/ft <sup>3</sup>	kg/m <sup>3</sup>	R	RSI
	1	25	48 x 96	1219 X 2438	3.00	48	4.3	0.76
300	1-1/2	3851	48 x 96	1219 X 2438	3.00	48	6.5	1.14
	2		48 x 96	1219 X 2438	3.00	48	8.7	1.53

Sizes listed above are Standard Stock. Additional sizes may be available. Check with Territory Manager for Made to Order products and quantities.



# AcoustaBlanket<sup>™</sup> Black ()

This fiberglass blanket has a durable surface and is used for applications requiring black sound-absorbing insulation. AcoustaBlanket<sup>™</sup> Black is flexible for easy fabrication and installation on irregular surfaces. It improves acoustics in theaters, sound studios and entertainment facilities — and is ideal for interiors that are meant to be dark. AcoustaBlanket Black carries a Class A/Class I fire hazard classification with an ASTM E84 25/50 rating.

PRODU	CT TYPES	тніси	NESS	wi	отн	LEN	бтн	R-VA	LUES
Туре	Density	in.	mm	in.	mm	ft.	m	R	RSI
	1.5 pcf (24 kg/m³)	1	25	48	1219	100	30.5	4.2	0.74
150	1.5 pcf (24 kg/m³)	1-1/2	38	48	1219	50	15.2	6.3	1.11
	1.5 pcf (24 kg/m³)	2	51	48	1219	50	15.2	8.3	1.46
200	2.0 pcf (32 kg/m³)	1/2	13	48	1219	100	30.5	2.1	0.37

#### **ACOUSTABLANKET™ BLACK TYPICAL SIZES**

Sizes listed above are Standard Stock. Additional sizes may be available. Check with Territory Manager for Made to Order products and quantities.

### Acoustic Applications

Sound quality is as important as thermal comfort in occupied spaces. Creating a quiet environment is an important design feature for both architects and end-users of buildings. AcoustaBlanket Black was designed with theaters and libraries in mind, but schools, offices and retail spaces are also including noise reduction into their project requirements.

Fiberglass blankets and boards provide superior sound-reducing benefits and meets the standards of Class A and ASTM E84 25/50. Installation of acoustic fiberglass mat can be behind a porous surface or directly applied to walls or ceilings. Available with a black mat surface, these products are unobtrusive treatments for controlling and attenuating sound.



## Acoustic Solutions

Fiberglass acoustic insulation is specifically designed for theaters, sound studios and other interior spaces where sound quality is of paramount importance.



## **Commercial Board**

Composed of resin-bonded glass fibers in a range of densities, Commercial Board can be used to add both thermal insulation and sound absorption to interior spaces. Commercial Board stiffness ranges from rigid to more flexible for curved and/or sharp-edged applications. It is available unfaced, for use where an exterior finish will be applied, or faced with a vapor retardant finish in either a clean metallic (FSK) or attractive white (ASJ) surface. Commercial Board is easy to cut to size and shape and to install. Additionally, unfaced and FSK faced Commercial Board are compliant where a fire hazard classification of ASTM E84 25/50 is required.

PRODUCT TYPES	тніск	NESS	DEN	ISITY	THERMAL R	ESISTANCE	THERMAL CONDUCTIVITY		
Туре	in.	mm	lb/ft <sup>3</sup>	Kg/m³	°F•ft²•h/Btu	m²•°C/W	Btu/h•ft²•°F	W/m²•°C	
	1-1/2	38	1.1	17.57	6.0	1.06	0.25	0.036	
CB 110	3-1/2	89	1.1	17.57	14.0	2.47	0.25	0.036	
	6	153	1.1	17.57	25.0	4.20	0.25	0.036	
	1-1/2	38	1.50	24	6.0	1.06	0.25	0.036	
	2	51	1.50	24	8.0	1.41	0.25	0.036	
00.150	2-1/2	64	1.50	24	10.0	1.76	0.25	0.036	
CB 150	3	76	1.50	24	12.0	2.11	0.25	0.036	
	3-1/2	89	1.50	24	14.0	2.47	0.25	0.036	
	4	102	1.50	24	16.0	2.82	0.25	0.036	
	1-1/2	38	1.80	24	6.0	1.06	0.24	0.035	
	2	51	1.80	24	8.0	1.41	0.24	0.035	
CB 180	2-1/2	64	1.80	24	10.0	1.76	0.24	0.035	
CB 180	3	76	1.80	24	12.0	2.11	0.24	0.035	
	3-1/2	89	1.80	24	14.0	2.47	0.24	0.035	
	4	102	1.80	24	16.0	2.82	0.24	0.035	
	1	25	2.25	36	4.2	0.73	0.24	0.035	
	1-1/2	38	2.25	36	6.3	1.10	0.24	0.035	
	2	51	2.25	36	8.3	1.47	0.24	0.035	
CB 225	2-1/2	64	2.25	36	10.4	1.83	0.24	0.035	
	3	76	2.25	36	12.5	2.19	0.24	0.035	
	3-1/2	89	2.25	36	14.6	2.56	0.24	0.035	
	4	102	2.25	36	16.6	2.91	0.24	0.035	
CB 250	1	25	2.50	40	4.2	0.73	0.24	0.035	
CB 250	2	51	2.50	40	8.3	1.47	0.24	0.035	
	1	25	3.00	48	4.3	0.77	0.23	0.033	
	1-1/2	38	3.00	48	6.5	1.15	0.23	0.033	
	2	51	3.00	48	8.7	1.53	0.23	0.033	
CB 300	2-1/2	64	3.00	48	10.9	1.92	0.23	0.033	
	3	76	3.00	48	13.0	2.30	0.23	0.033	
	3-1/2	89	3.00	48	15.2	2.68	0.23	0.033	
	4	102	3.00	48	17.4	3.06	0.23	0.033	
CB 450	1	25	4.50	72	4.5	0.80	0.22	0.032	
CD 450	2	51	4.50	72	9.1	1.60	0.22	0.032	
	1	25	6.00	96	4.5	0.80	0.22	0.032	
CB 600	1-1/2	38	6.00	96	6.8	1.20	0.22	0.032	
	2	51	6.00	96	9.1	1.60	0.22	0.032	

#### COMMERCIAL BOARD AVAILABLE SIZES AND THERMAL PERFORMANCE

All Service Jacket (ASJ) is not available in Type CB 150. CB 110, 150 and 600 are not available in FSK, WMP or ASJ facings.

#### **COMMERCIAL BOARD ACOUSTICAL PERFORMANCE**

PRODUCT	тніск	NESS		ABSORPTION	COEFFICIENTS /	AT OCTAVE BAN	D CENTER FREG	UENCIES (HZ)	
Туре	in.	mm	125	250	500	1000	2000	4000	NRC
	1-1/2	38	0.25	0.51	0.85	0.97	1.00	1.03	0.85
CB 110	3-1/2	89	0.55	1.15	1.29	1.18	1.14	1.18	1.20
	6	153	1.09	1.45	1.26	1.13	1.11	1.10	1.25
	1-1/2	38	0.19	0.51	0.82	0.89	0.92	0.96	0.70
	2	51	0.23	0.61	0.94	0.95	0.92	0.93	0.80
CB 150	2-1/2	64	0.41	0.78	0.96	1.02	0.95	0.96	0.95
CB 150	3	76	0.41	0.51	0.89	0.95	0.92	0.93	0.80
	3-1/2	89	0.60	0.94	1.07	1.02	0.95	0.96	0.95
	4	102	0.64	1.08	1.09	1.13	1.11	1.10	1.25
	2	51	0.31	0.92	1.18	1.15	0.93	0.93	1.05
CB 180	2-1/2	64	0.41	0.89	1.22	1.24	1.16	1.18	1.15
	3	76	0.57	1.32	1.16	1.09	0.95	1.01	1.15
	1	25	0.06	0.30	0.68	0.85	0.91	0.94	0.70
	1-1/2	38	0.12	0.48	0.83	0.90	0.90	0.89	0.80
	2	51	0.22	0.63	1.04	1.00	1.00	0.97	0.90
CB 225	2-1/2	64	0.31*	0.81*	1.08*	1.02*	1.04*	1.03*	1.00*
	3	76	0.34	0.95	1.08	1.99	0.98	0.99	1.00
	3-1/2	89	0.54	1.11	1.12	1.01	1.02	1.00	1.05
	4	102	0.70	1.15	1.12	0.99	1.01	1.08	1.05
CB 250	1	25	0.05	0.25	0.66	0.98	1.04	1.07	0.75
CD 250	2	51	0.21	0.79	1.21	1.14	1.09	1.07	1.05
	1	25	0.08	0.25	0.72	0.88	0.93	0.94	0.70
	1-1/2	38	0.10	0.51	0.89	0.95	0.92	0.93	0.80
	2	51	0.21	0.73	1.08	1.04	1.04	0.96	0.95
CB 300	2-1/2	64	0.31	0.81	1.08	1.02	1.04	1.03	1.00
	3	76	0.41	0.96	1.13	1.03	1.03	1.02	1.05
	3-1/2	89	0.72	1.14	1.11	1.00	1.02	1.00	1.05
	4	102	0.75	1.18	1.09	1.00	1.00	1.02	1.05
CB 450	1	25	0.09	0.33	0.79	1.06	1.07	1.06	0.80
	2	51	0.32	0.95	1.19	1.11	1.04	1.02	1.05
	1	25	0.05	0.27	0.78	0.97	0.97	0.91	0.75
CB 600	1-1/2	38	0.17	0.50	0.98	1.03	0.99	0.98	0.90
	2	51	0.31	0.89	1.07	0.99	1.02	0.98	1.00

\* Estimated sound absorption coefficients and NRC. Sound absorption tested in accordance with ASTM C423 using Type A mounting per ASTM E795. Sizes listed above are Standard Stock. Check with Territory Manager for Made to Order products and quantities.

Additional sizes may be available.

#### **COMMERCIAL BOARD PHYSICAL PROPERTIES**

PROPERTIES	PERFORMANCE	TEST METHOD		
Operating Limits	Up to 250°F (faced) or 450°F (unfaced)	ASTM C411		
Surface Burning Characteristics	Maximum: Flame Spread Index: 25 Smoke Developed Index: 50	ASTM E84, UL 723, NFPA 255		
Vibration Resistance	Will not crack, split, shrink, or crumble	ASTM C1139		
Moisture Absorption	< 5% by Weight	ASTM C1104		
Fungi Resistance	Pass	ASTM C1338		
Odor Emissions	Pass	ASTM C1304		
Water Transmission (Facing Only)	.02 Perms	ASTM E96, Desiccant Method		
Limited Combustible	Pass (< 3500 Btu/lb)	NFPA 259		

## CrimpWrap® Pipe and Tank Wrap

CrimpWrap<sup>®</sup> provides the thermal and compressive strength of rigid insulation board in a unique flexible blanket of variably oriented glass fibers firmly bonded together with a thermosetting resin. Available with either Foil Scrim Kraft (FSK) or white ASJ vapor retarder facings, CrimpWrap can control heat loss or gain on large diameter piping and equipment. Insulating tanks and pipes with service temperatures from 35°F to 850°F (2°C to 454°C), CrimpWrap also provides hot surface protection for the installer during system operation.

#### **CRIMPWRAP® THERMAL PERFORMANCE**

MEAN TEM	PERATURE	APPARENT THERMAL CONDUCTIVITY				
in.	mm	Btu•in/h•ft²•°F.	W/m•°C			
1	25	0.24	0.035			
1-1/2	38	0.24	0.035			
2	51	0.24	0.035			

#### **CRIMPWRAP® PHYSICAL PROPERTIES**

PROPERTIES	PERFORMANCE	TEST METHOD
Maximum Use Temperature (See Limitations)	850°F (454°C)	ASTM C411
Water Vapor Sorption Maximum % by Weight	< 5%	ASTM C1104
Density	2.5 lb/ft <sup>s</sup> (40 kg/m <sup>s</sup> )	ASTM C167
Surface Burning Characteristics (Fire Hazard Classification)	Maximum: Flame Spread Index: 25 Smoke Developed Index: 50	ASTM E84
Corrosiveness	Pass	ASTM C665
Fungi Resistance	Pass	ASTM C1338
Odor Emissions	Pass	ASTM C1304
Water Vapor Transmission (Facing Only)	.02 Perms	ASTM E96, Desiccant Method
Compressive Resistance, Minimum Load Required to Produce a 10% Reduction in Thickness	25 lb/ft³ (1.2 kPA)	ASTM C165

CrimpWrap® Products

CrimpWrap<sup>®</sup> is specifically designed for insulating tanks and large diameter pipes in commercial and industrial construction projects.



#### **CRIMPWRAP® AVAILABLE SIZES**

тніск	THICKNESS		отн	LENGTH		
in.	mm	in.	mm	ft.	m	
1-1/2	38	48	1219	25-9" to 30	7.85 to 9.14	
2	51	48	1219	19-2" to 25	5.84 to 7.92	
2-1/2	64	48	1219	15-2" to 20	4.62 to 6.10	
3	76	48	1219	13-2" to 20	4 to 6.10	
3-1/2	89	48	1219	13-2" to 15	4 to 4.57	
4	102	48	1219	13" to 14	3.96 to 4.27	



NOTE: Contact CertainTeed for minimum order quantities.

Sizes listed above are Standard Stock. Additional sizes may be available. Check with Territory Manager for Made to Order products and quantities.

#### **CRIMPWRAP® STRETCH-OUT LENGTHS**

NOMINAL PIPE SIZ	PIPE OI DIAM			CRIMPWRAP THICKNESS												
in.	in.		in.	mm	in.	mm	in.	mm	in	mm	in.	mm	in.	mm	in.	mm
in.	in.	mm	1	25	1.5	38	2	51	2.5	64	3.0	76	3.5	89	4	102
6	6.63	168	27.13	689	_	_	_	_	_	_	_	_	_	_	_	_
8	8.63	219	33.38	848	36.5	928	_	_	_	_	_	_	_	_	_	_
10	10.75	273	40	1017	43.25	1097	46.38	1177	_	_	_	-	_	_	_	_
12	12.75	324	46.13	1177	49.5	1257	52.63	1337	55.75	1416	_	_	_	_	_	_
14	14	356	50.25	1277	53.38	1357	56.5	1436	59.75	1516	_	_	_	_	_	_
16	16	406	56.5	1436	59.75	1516	62.88	1596	66	1676	69.13	1756	_	-	_	-
18	18	457	62.88	1596	66	1676	69.13	1756	72.25	1835	75.38	1915	78.5	1995	_	_
20	20	508	69.13	1756	72.25	1835	75.38	1915	78.5	1995	81.63	2075	84.88	2155	88	2234
22	22	559	75.38	1915	78.5	1995	81.63	2075	84.88	2155	88	2234	91.13	2314	94.25	2394
24	24	610	81.63	2075	84.88	2155	88	2234	91.13	2314	94.25	2394	97.38	2474	100.5	2553
26	26	660	88	2234	91.13	2314	94.25	2394	97.38	2474	100.5	2553	103.63	2633	106.88	2713
28	28	711	94.25	2394	97.38	2474	100.5	2553	103.63	2633	106.88	2713	110	2793	113.13	2873
30	30	762	100.5	2553	103.63	2633	106.88	2713	110	2973	113.13	2873	116.25	2952	119.38	3032
32	32	813	106.88	2713	110	2793	113.13	2873	116.25	2952	119.38	3032	122.5	3112	125.63	3192
34	34	864	113.13	2873	116.25	2952	119.38	3032	122.5	3112	125.63	3192	128.75	3272	132	3351
36	36	914	119.38	3032	122.5	3112	125.63	3192	128.88	3272	132	3351	135.13	3431	138.25	3511

The lengths shown in this table do not have a 3" staple flap incorporated into the calculated dimensions. If a staple flap is desired, add 3" to the number shown.

# Metal Building Insulation

CertainTeed Metal Building Insulation meets NAIMA 202-96 and can provide thermal and acoustical insulation for the roofs and sidewalls of pre-engineered metal buildings and post frame construction. CertainTeed's Metal Building Insulation is composed of inorganic glass fibers bonded with a thermosetting resin, formed as a uniformly textured blanket insulation and furnished in rolls. Once laminated with a suitable vapor retarder, Metal Building Insulation reduces moisture flow and sound transmission.

#### METAL BUILDING INSULATION THERMAL PERFORMANCE

	R-VALUES				
mm	R	RSI			
86	10	1.76			
95	11	1.94			
111	13	2.29			
133	16	2.82			
162	19	3.35			
171	21	3.70			
203	25	4.40			
235	30	5.30			
	86 95 111 133 162 171 203	MINATING      R        mm      R        86      10        95      11        111      13        133      16        162      19        171      21        203      25			

#### METAL BUILDING INSULATION SOUND ABSORPTION - UNFACED

<b>R-VALUE</b>		HICKNESS	ABSORPTION COEFFICIENTS AT OCTAVE BAND CENTER FREQUENCIES (HZ)						(HZ)
R	in.	mm	125	250	500	1000	2000	4000	NCR
10	3.375	86	0.29	0.82	1.02	0.94	0.95	0.98	0.95
11	3.75	95	0.39	0.91	1.01	0.92	0.93	0.98	0.95
13	4.375	111	0.53	0.97	1.04	0.90	0.95	0.98	0.95
16	5.25	133	0.67	1.05	1.02	0.92	0.98	0.99	1.00
19	6.375	162	0.89	1.22	1.02	0.98	1.01	1.00	1.05

Sound absorption tested in accordance with ASTM C423 using Type A mounting per ASTM E795.

#### METAL BUILDING INSULATION AVAILABLE SIZES\*

R-VALUE	NOMINAL THICKNESS		v	VIDTH	LENGTH		
	in.	mm	in.	mm	ft.	m	
10	3.375	86	36, 48, 60, 72	914, 1219, 1524, 1829	100	30.5	
11	3.75	95	36, 48, 60, 72	914, 1219, 1524, 1829	100	30.5	
13	4.375	111	36, 48, 60, 72	914, 1219, 1524, 1829	75	22.9	
16	5.25	133	36, 48, 60, 72	914, 1219, 1524, 1829	50	15.2	
19	6.375	162	36, 48, 60, 72	914, 1219, 1524, 1829	50	15.2	
21**	6.75	171	36, 48, 60, 72	914, 1219, 1524, 1829	45	13.7	
25**	8	203	36, 48, 60, 72	914, 1219, 1524, 1829	30	9.1	
30**	9.25	235	36, 48, 60, 72	914, 1219, 1524, 1829	25	7.6	

\*Non-standard widths are available and subject to an upcharge on an individual basis determined by

manufacturer's capability, quantity, lead timesand packaging availability.

\*\*R-21, R-25 and R-30 are made to order.



## Metal Building Insulation 202-96

Metal Building Insulation is used as a thermal and acoustical insulation in the roofs and sidewalls of pre-engineered metal buildings and post frame construction.

CONSTRUCTION TYPE		TRANSMISSION	N LOSS IN DB A	T THE OCTAVE	FREQUENCIES	;	STC
Roofs	125	250	500	1000	2000	4000	Rating
No Insulation	12	13	19	24	30	32	24
R-10 Faced 202-96 Insulation Over the Purlins	12	16	26	37	45	49	29
R-19 Faced 202-96 Insulation Over the Purlins	13	20	30	41	49	51	32
202-96 Insulation Over & Between the Purlins to Fill the Cavity (R-25 Combined)	14	24	34	44	53	56	36
Walls	125	250	500	1000	2000	4000	Rating
No Insulation	12	14	19	19	20	27	21
R-10 Faced 202-96 Insulation Over the Girts	13	16	25	32	37	46	28
R-13 Faced 202-96 Insulation Over the Girts	13	17	26	33	38	47	29
R-13 Faced 202-96 Insulation Over the Girts 3-5/8″ Steel Studs on 24″ Centers with 1/2″ Gypsum Board on Interior.	26	40	51	60	64	65	50
R-13 Faced 202-96 Insulation Over the Girts 3-5/8" Steel Studs on 24" Centers with R-11 Batts & 1/2" Gypsum Board on Interior.	31	43	55	68	73	75	50

#### METAL BUILDING INSULATION SOUND TRANSMISSION

Sound Transmission Class (STC) in accordance with ASTM E90

- Roof construction is 24ga. standing seam roof with 8" Z purlins on 5' centers.

Wall construction is 26ga. wall panels screwed to 8" Z girts placed on 7' centers.
 Interior metal furring wall studs were 358" by 25ga. on 24' centers.

# Metal Building Insulation Filler Blanket

The best choice where wide rolls of unfaced insulation are required, such as retrofitting a warehouse, the uniformly textured blanket is made from inorganic glass fibers. A range of R-values are available to meet energy code requirements.

Metal Building Insulation Filler Blanket Insulation can be used in roofs and sidewalls as a sound layer over the unfaced side of Metal Building Insulation. Available up to 10" thick, and bonded with a thermostatting resin, Filler Blanket is also used in post frame construction and may be installed over old roof decks (BUR and metal) prior to application of a new standing seam roof.

#### **MBI FILLER BLANKET INSULATION AVAILABLE SIZES**

тніск	NESS	wi	LEN	бтн	<b>R-VALUES</b>		
in.	mm	in.	mm	ft.	m	R	RSI
3-1/2	89	48, 60, 72	1219, 1524, 1829	100	30.5	11	1.9
6-1/4	159	48, 60, 72	1219, 1524, 1829	50	15.2	19	3.3
6-1/2	165	48, 60, 72	1219, 1524, 1829	45	13.7	21	3.6
8	203	48, 60, 72	1219, 1524, 1829	40	12.2	25	4.4
10	254	48, 60, 72	1219, 1524, 1829	25	7.6	30	5.3

## Metal Building Insulation Filler Blanket

Used as a thermal or acoustical insulation in commercial buildings, Filler Blanket offers increased comfort, lower energy use and noise control.





## **Universal Blanket Insulation**

Universal Blanket is utilized in general purpose applications where a flexible thermal acoustical insulation is required. Available in several different densities and able to withstand temperatures up to 450°F (232°C). It will help lower energy consumption by reducing heat transfer through equipment walls. Universal Blanket can be fabricated into a variety of shapes and sizes to fit almost any application. When properly installed, it will maintain thermal and acoustical efficiency under normal conditions, won't be affected by aging and temperature changes, and if installed with a suitable vapor retarder, will help to prevent condensation from forming on the equipment.

PRODUCT	THICKNESS		ABSORPTION COEFFICIENTS AT OCTAVE BAND CENTER FREQUENCIES (HZ)								
Туре	in.	mm.	125	250	500	1000	2000	4000	NRC		
	1-1/2	38	0.21	0.49	0.71	0.79	0.80	0.80	0.70		
501	2	51	0.23	0.62	0.87	0.87	0.85	0.87	0.80		
	4	102	0.51	0.92	1.01	1.93	0.95	1.06	0.95		
	1	25	0.14	0.33	0.64	0.77	0.83	0.86	0.65		
751	1-1/2	38	0.17	0.45	0.78	0.84	0.92	0.93	0.75		
	3	76	0.36	0.82	1.02	1.00	0.96	1.01	0.95		
1001	1-1/2	38	0.21	0.53	0.79	0.85	0.85	0.87	0.75		
1001	2	51	0.28	0.69	0.94	0.91	0.90	0.93	0.85		

#### UNIVERSAL BLANKET INSULATION ACOUSTICAL PERFORMANCE

Sound absorption tested in accordance with ASTM C423 using Type A mounting per ASTM E795.

## HT (High Temperature) Blanket Insulation

Our High Temperature Blanket is composed of rotary glass fibers bonded with a thermosetting resin and formed into plain, flexible and resilient thermal insulation. HT blankets contain recycled glass and are designed for use on industrial equipment, panel systems, pipe fittings and tanks operating at temperatures up to 1000°F (538°C). HT Blanket Type 1 rolls and batts — used on panel systems, as a flexible wrap or on industrial ovens — and Type 2 batts — meant for metal mesh blankets, on boilers, vessels and other industrial equipment — are easy to handle, cut with a knife and install.



HT Blanket Insulation

	K FACTOR AT °F AT MEAN TEMPERATURES								
ТҮРЕ	75	100	200	300	400	500	600		
1	.025	0.27	0.34	0.43	0.56	TBD	TBD		
2	0.23	0.24	0.30	0.36	0.46	0.52	0.64		

PRODUCT	THICKNESS		LEN	IGTH	wi	DTH
TYPE 1	in.	mm	ft.	m	ft.	mm
	1	25	100	30.5		
	2	51	70	21.3		
	2-1/2 3	64 76	55 40	16.8 12.2	24	610
	3-1/2	89	35	12.2		
	4	102	30	9.1		
	1	25	100	30.5		
	2	51	70	21.3		
	2-1/2	64	55	16.8	36	914
	3	76	40	12.2	00	514
Rolls	3-1/2	89	35 30	10.7 9.1		
	4	102 25	100	30.5		
	2	51	70	21.3		
	2-1/2	64	55	16.8	72	1829
	3	76	40	12.2		
	3-1/2	89	35	10.7		
	4	102	30	9.1		
	1	25	48 96	1.219 2.438		
	2	51	48	1.219		
	2	51	96	2.438		
Datta	2-1/2	64	48 96	1.219 2.438	24	C10
Batts	3	76	48	1.219	24	610
	3	70	96	2.438		
	3-1/2	89	48 96	1.219		
			48	2.438 1.219		
	4	102	96	2.438		
TYPE 2	in.	mm	ft.	m	ft.	mm
	1	25	48 96	1.219 2.438		
	1-1/2	25	48	1.219		
			96 48	2.438 1.219		
	2	1	40 96	2.438		
Batts	2-1/2	1	48 96	1.219 2.438	24	610
	3	1	48	1.219		
			96	2.438		
	3-1/2	1	48 96	1.219 2.438		
	4	1	48	1.219		
	l ·	·	96	2.438		

#### **HT BLANKET TYPICAL SIZES**

# ULTIMATE U SeaProtect

When you need a product that can withstand temperatures as high as 1200°F (650°C), and save weight, look to ULTIMATE. Used in marine applications, ULTIMATE U SeaProtect is up to 45% lighter than stone wool and provides excellent fire protection in addition to thermal and acoustic insulation. Composed of high melting point temperature fibers, non-combustible ULTIMATE U SeaProtect is available unfaced or faced on one side with a fiber scrim reinforced with aluminum, black cloth tissue, glass fiber fabric, or a wire mesh.

ULTIMATE	PRODUCT RANGE	PRODUCT FORM	DENSITY (KG/M <sup>3</sup> )	FACING		THICKNESS (MM)
		Roll	24		► Unfaced	20 mm
		Roll	36	Alu1	► Aluminum	25 mm
		Slab	56	G120	► Glass cloth (black)	30mm
U	SeaProtect	SIGD	76	G220	► Glass cloth (white)	40 mm
			86	G420	► Glass cloth (white)	50 mm
		Wired Mat	90	B-AI ► B Facing* (Alu outside)		70 mm
			_	B-Gl	B Facing* (Glass cloth outside)	100 mm

#### SELECTION TABLE Example: U SeaProtect Roll 24 20 mm

\* B facing is a laminated composite facing combining glass cloth and aluminum foil.



### Bending Around the Stiffeners — Fast, Easy and Efficient

Example shown with ULTIMATE U MPN 66.



#### **STANDARD DESIGN**

#### Lightweight and easy logistics • 4 products to cover all Steel A-Fire Classifications

STEEL	PLATE		STIFFENER		COMPLETE SOLUTION
	PRODUCTS*	WEIGHT (kg/m <sup>2</sup> )	PRODUCTS*	WEIGHT (kg/m²)	WEIGHT (kg/m²)
A-15 Bulkhead	U SeaProtect Slab 24 50mm U SeaProtect Roll 24 50mm	1.20	U SeaProtect Slab 76 25mm U SeaProtect Slab 24 50mm U SeaProtect Roll 24 50mm	1.90 1.20	2.53 2.04
A-30 Bulkhead A-60 Bulkhead	U SeaProtect Slab 36 70mm U SeaProtect Roll 36 70mm	2.52	U SeaProtect Slab 36 70mm U SeaProtect Roll 36 70mm	2.52	4.28
Restricted	o Searrotect Kon 50 / Omm		U SeaProtect Slab 76 25mm	1.90	3.85
A-60 Bulkhead	U SeaProtect Slab 56 70mm	3.92	U SeaProtect Slab 76 25mm	1.90	5.25
			U SeaProtect Slab 76 25mm	1.90	2.53
A-15 Deck A-30 Deck	U SeaProtect Slab 24 50mm U SeaProtect Roll 24 50mm	1.20	U SeaProtect Slab 24 50mm U SeaProtect Roll 24 50mm	1.20	2.04
A-60 Deck	U SeaProtect Slab 36 70mm U SeaProtect Roll 36 70mm	2.52	U SeaProtect Slab 36 70mm U SeaProtect Roll 36 70mm	2.52	4.28
	0 Seaprotect Roll 36 70mm		U SeaProtect Slab 76 25mm	1.90	3.85

#### THIN DESIGN THIN SOLUTIONS BETWEEN AND AROUND THE STIFFENERS

STEEL	PLATE		STIFFENER		COMPLETE SOLUTION
	PRODUCTS*	WEIGHT (kg/m²)	PRODUCTS*	WEIGHT (kg/m²)	WEIGHT (kg/m²)
A-15 Bulkhead	U SeaProtect Slab 66 30mm	1.98	No insulation around stiffeners	_	1.98
A-30 Bulkhead Restricted	U SeaProtect Slab 46 40mm	1.84	U SeaProtect Slab 46 30mm	1.38	2.81
	U SeaProtect Slab 36 70mm U SeaProtect Roll 36 70mm	2.52	U SeaProtect Slab 76 20mm	1.52	3.58
A-30 Bulkhead	U SeaProtect Slab 76 40mm U SeaProtect Slab 76	3.04	U SeaProtect Slab 76 20mm	1.52	4.10
	20mmX2	5.04	U SeaProtect Slab 76 25mm	1.90	4.37
A-60 Bulkhead	U SeaProtect Slab 86 50mm	4.30	U SeaProtect Slab 76 25mm	1.90	5.63
A-15 Deck	U SeaProtect Slab 36 70mm U SeaProtect Roll 36 70mm	2.52	No insulation around stiffeners	_	2.52
A-15 Deck	U SeaProtect Slab 24 50mm U SeaProtect Roll 24 50mm	1.20	U SeaProtect Slab 76 20mm	1.52	2.26
A-15 Deck		100	U SeaProtect Slab 76 20mm	1.52	2.96
	U SeaProtect Slab 76 25mm	1.90	U SeaProtect Slab 76 25mm	1.90	3.23
A-60 Deck	U SeaProtect Slab 66 50mm	3.30	U SeaProtect Slab 76 25mm	1.90	4.63

\*All U SeaProtect products are available for each construction with different facings approved by a recognized test laboratory (Alu facing Alu1, glass cloth facings G120, G220 ,G420, B facing, etc.).



Products highlighted in colors are part of the U SeaProtect Easy Logisitcs Portfolio. These products are available with a low Minimum Order Quantity (equivalent to 1 pallet) for various facings. For more information, please contact your local CertainTeed representative.



## **Glass Master Grooving Machines**

Fabricate fiberglass duct systems more expediently, more economically, and, most importantly, in a safer way. That's what you accomplish with Glass Master duct board grooving machines, hand tools, and accessories.

The precision, speed, and accuracy of the SG-220 Grooving Machine helps you work 15 to 20 times faster than standard hand grooving. For high quality fiberglass spiral duct liner, the SG-420 Grooving Machine works 40 to 50 times faster than standard hand grooving techniques.

Standard features on both machines:

- Rugged structural steel construction
- Durable powder coat finish
- Foot-actuated switch for safe, dependable operation
- Easy access to all working parts
- Swivel casters, two with brakes



## Fab-Master Tools and Accessories

Useful hand fabrication tools, replacement blades, and accessories help make your shop or field work easier and more efficient.

- Round Hole Cutter
- Cuts-All Tool
- Peeler Knife
- Caster Set
- Toggle Clamp Spindles
- Fab Knife

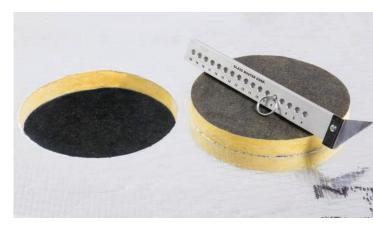
## Fab-Master Hand Tools

We also put our engineering know-how to work developing a quick, easy fabrication system for hand-grooved boards.

Incorporating many of the same design features perfected for our high-volume grooving machines, the Fab-Master dramatically reduces time spent measuring and determining where to cut. Easy-to-read, pre-numbered tools substantially narrow the margin for error in fiberglass duct fabrication.

- Lightweight, ergonomic anodized aluminum tools
- Large tool sledding areas facilitate smooth, precision cuts and minimize operator fatigue
- High quality spring steel cutting blades sharpened, heat treated, and coated or an incredibly long life







# Sustainability, Clarified.

Every CertainTeed product undergoes rigorous quality assurance assessments by our in-house engineering and installation experts. But that's merely the beginning. Products are then subjected to the stringent criteria of EPD and HPD certification to assure you that long-term impact is not detrimental.



### What's an EPD?

An Environmental Product Declaration, or EPD, is a rigorous third-party examination of a product or product family's environmental impact.

EPDs are certified by ULE and based on a Life Cycle Assessment (LCA) that is performed using established Product Category Rules (PCRs). According to UL, these include:

- a detailed breakdown of material content
- production process and life cycle stage diagrams
- health and safety information related to a product's creation and use
- a diagram of relative primary energy usage by life cycle stage

"Green construction is here to stay, and we're one of the leading manufacturers in ensuring building products meet high environmental and safety standards. Thirdparty verification is a significant step toward achieving a more sustainable, healthier world."

#### Bryon Magill, VP Product Management, Insulation



### What's an HPD?

In a Health Product Declaration, or HPD, manufacturers report what makes up their products and, if applicable, any potential hazards. The HPD Collaborative is composed of organizations,

corporations, and companies intent on minimizing the impact that manufacturing and construction have on our environment and health.

CertainTeed Insulation was first in the industry to provide HPDs to customers, showing consumers our commitment to well-being, and our actions toward improving the environment.

To view the third-party verified EPD and HPD certifications, please visit: Gypsum - https://www.certainteed.com/drywall/sustainability/ Insulation - https://www.certainteed.com/insulation/insulation-epds-hpds/





#### • Brand

Search products by name, brand, category





- Certifications and Ecolabels
- Rating Systems
  USGBC
  - IWBI™ ILFI™ Enterprise™ GBI



## Ecomedes

Our ecomedes Sustainable Product Platform allows you to quickly access the product information and certifications you need, calculate contributions to LEED and other green building rating systems, and create and save a group of products using the project feature.

The information is free to access and always up to date. You can sign up for an account using your name and an email, and start specifying!

Ecomedes allows the AEC Community, Designers, and Owners to find, compare, and optimize the selection of sustainable building products for any project based on environmental characteristics such as certifications, ecolabels, recycled content, and contributions to green building rating systems.

## NAIMA

The mission of the North American Insulation Manufacturers Association (NAIMA) is to realize a more comfortable, energy efficient, and sustainable future through insulation. As the recognized voice of the industry, NAIMA leverages the collective expertise of fiberglass and mineral wool insulation product manufacturers to help people make informed insulation choices. Their Insulation Institute<sup>™</sup> works with public interest, energy, and environmental groups—as well as homeowners and industry professionals—to be an ongoing source of authoritative knowledge.

#### Create a more comfortable home. Visit CertainTeed.com/Insulation or call 800-233-8990.







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SAINT-GOBAIN

## learn more at certainteed.com/insulation





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InsulPure Duct Wrap Insulation

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