



Thermal & Acoustic Engineering Solutions (Pvt) Ltd.

All in one engineering solutions provider

Our Products

Glasswool

Glass wool blanket is a roll blanket product made of uniform and slender glass fiber and environmentally friendly thermosetting binder with a special process. It has a certain flexibility and can keep good thermal insulation performance in high or low temperature environments. As required value of thermal resistance, different kinds of high quality blankets can be made according to different density. The maximum density is up to 48kg/m³. By using Glass wool blanket, the contact surface of the insulation material is soft and flexible, which can better fit the duct wall, avoid gaps, and greatly reduces the heat and cold loss of the duct wall. In addition, there are few seams between the blanket insulation materials, which can effectively avoid hidden trouble caused by seams and reduce the loss of materials and accessories.



PRODUCTION SPECIFICATION

Item	Unit	Index
Density	Kg/m ³	32-96
Thickness	mm	25-150
Width	mm	600-1200
Length	mm	1200-2400
Color	Yellow, Pink, White, Brown or Customize	
Faced with	Aluminum Foil, Kaft Paper, BGT (Black Glass Tissue).	
Remark	special requirements can be customized.	

PRODUCTION SPECIFICATION

Item	Unit	Index
Density	Kg/m ³	10, 12, 16, 24, 32, 40, 48
Thickness	mm	25 ~ 150
Width	mm	30 ~ 1200
Length	mm	10000-30000 or Customized
Color	Pink, Yellow, Brown, White or Customize	
Faced with	unfaced, or faced with Aluminum Foil, Kaft Paper, BGT (Black Glass Tissue).	
Remark	special requirements can be customized.	

GLASS WOOL PIPE

Glass wool pipe section is processed by a special process from uniform and slender glass fiber and environmentally friendly formula binder. Due to the particularity of its glass fiber, the product has excellent performance of thermal insulation, extrusion resistance and impact resistance.



PRODUCTION SPECIFICATION

Item	Unit	Index
Density	Kg/m ³	32-96
Thickness	mm	25-120
Diameter	mm	18-530
Length	mm	1000-1200

Note: special requirements can be customized.

Both faced and unfaced pipes can be provided.

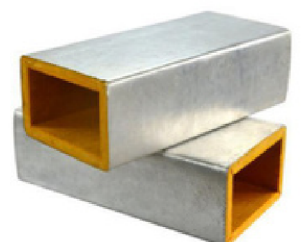
AC DUCT INSTALLATION

The fibrous glass duct system is used to conserve heating and cooling energy and to control duct-borne noise in commercial, institutional, or residential heating, ventilating, and air-conditioning ductwork operating in the range. FIBROUS GLASS INSULATED HVAC DUCT SYSTEMS are quiet, they have an efficient air delivery, and an improved indoor environmental quality. In addition to that it is a cost-effective energy conservation, and an enhanced occupant comfort.

PRODUCTION SPECIFICATION

Item	Unit	Index
Density	Kg/m ³	32-80
Thickness	mm	25-50
Width	mm	1200
Length	mm	10000-30000

Activate V



Our Products

Glass Wool Lamella and mat

Huadeli composite air duct uses glass wool board as the base material, and uses fireproof adhesive to stick glass cloth and aluminum foil cloth on both sides to make composite glass wool board. After cutting, tenoning, binding and other processes, the square pipes of various specifications are made (glass cloth inside, aluminum foil cloth outside).



PRODUCTION SPECIFICATION			
Product	Backing	Adhesive	Structure
Aluminum Foil Tape	Aluminium Foil	Water Acrylic /	Aluminum Foil + Adhesive + Release Liner
Aluminum Foil Tape without liner		Solvent Acrylic / Synthetic Rubber	Aluminum Foil + Adhesive
Glass Cloth Aluminum Foil Tape	Aluminium Foil + Fiberglass Scrim	Water Acrylic / Solvent Acrylic / Synthetic Rubber	Aluminum Foil + Fiberglass Scrim + Adhesive + Release Liner
Reinforced Aluminum Foil Tape	Aluminium Foil / White PP Film + Fiberglass Scrim + Kraft Paper	Water Acrylic	Aluminum Foil or White PP film + Fiberglass Scrim + Kraft Paper + Adhesive + Paper Release Liner
Black Aluminum Foil Tape	Aluminum Foil	Water Acrylic	Black Aluminum Foil + Adhesive + Release Liner
White PP Film Aluminium Foil Tape	White PP Film + Kraft Paper	Water Acrylic	White PP Film + Kraft Paper + Adhesive + Release Liner
Colored PET Aluminum Foil Tape	Aluminum Foil + Fiberglass Scrim + Colored PET	Synthetic Rubber	Aluminum Foil + Fiberglass Scrim + Colored PET + Adhesive + Release Liner

Vinyl flooring

Vinyl flooring is a type of flooring with a polymer core made from polyvinyl chloride, better known as PVC. Vinyl floor application layer is composed of transparent PVC, which during the manufacturing process is given a treatment in order to resist against scratches, stains and bacteria, as well as to improve its abrasion. Each of our products are manufactured with the best quality material, to guarantee the best results

Characteristics and properties

- Durability
- Easy to install
- Easy to clean
- waterproof
- Warmth
- Design options

PRODUCT SPECIFICATIONS

- THICKNESS – 2.0 mm & 3.0mm
- WEAR LAYER – 0.5mm
- APPLICATION METHOD – Glue down
- SURFACE TEXTURE – Wood grain
- SURFACE TREATMENT – UV coating
- PLANK SIZE - 6" X 36" | 152.4 mm X 914.4 mm
- AREA OF 1.5 SQ.FT PER PLANK



Our Products

Rock wool

ROOF/ WALL INSULATION

Effective and durable roof insulation increases the energy efficiency of residential and commercial properties, throughout the year. Our products are made from premium stone wool to keep your properties safe and the indoor environment comfortable.

Internal wall insulation can be used in both commercial and residential properties to improve indoor comfort and boost energy efficiency.

There are various methods of adding insulation for inside walls, each designed to reduce thermal transmission, increase acoustic performance or raise fire safety



INDUSTRIAL INSULATION

Industrial insulation, can help protect your operation and employees from heat, fire, noise and corrosion. You'll find a range of industrial insulation types, covering everything from industrial pipe insulation and temperature regulating storage tank insulation to outdoor column insulation. We also offer solutions for vessels, chimneys, boilers and cold boxes. Whether you're operating in petrochemicals, power generation, refining or gas processing, our ultra durable and flexible products can meet the unique challenges of your industry.

Technical Parameters

Product Types	B40	B50	B60	B80	B100	Standard
Nominal Density (kg/m ³)	40	50	60	80	100	
Thermal Conductivity (W/mK)*	0.036	0.035	0.034	0.034	0.035	ASTM C518
Sound Absorption	Please contact your local representative for more information					ISO 354
Fire Performance	Non-combustible / Euro Class A1 (without facing)					EN 13501-1
Water Vapor Absorption (Moisture Resistance)	< 0.04 %, by volume					ASTM C1104/C1104M
Water Absorption (Partial Immersion)	< 1.0 kg/m ²					EN 1609

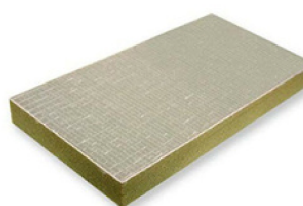
* Thermal conductivity is tested at mean temperature of 20°C in accordance with ASTM C518 by external accredited laboratory. It is recommended to have a safety factor of 20% as design value.

* For UL approved products, please contact our local representative.

Dimension

Product Type	Thickness (mm)	Length x Width (mm)
Thermalrock B40	50	5000 X 1200
	50	7500 x 1200
Thermalrock B50	50	5000 x 1200
	50	7500 x 1200
Thermalrock B60	50	5000 x 1200
	50	7500 x 1200
Thermalrock B80	25	8000 x 1200
	25	10000 x 1200
	50	5000 x 1200
	50	7500 x 1200
Thermalrock B100	25	5000 x 1200
	25	8000 x 1200
	50	2500 x 1200
	50	4000 x 1200

Type of Application	ROCKWOOL Products	Types of Building	Key Performances
Drywall partition	Safe 'n' Silent Pro330 Pro350 Pro370	Residential Commercial Industrial	■ Non-combustible ■ High melting point ■ Sag resistant
Drywall lining	Safe 'n' Silent Pro330 Pro350 Pro370 (black matte facing available)	Residential Commercial Industrial	■ Noise reduction ■ Thermal insulation ■ Moisture resistant ■ Water repellent

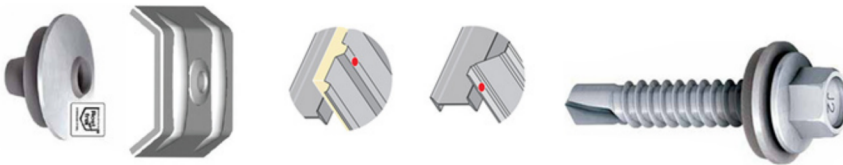


Our Products

ROOFING AND CLADDING

EJOT® SAPHIR Self-drilling screw JT2-6-5.5

Ø mm	Screw Length mm	Sandwich Panel Thickness mm	Clamping Thickness mm	PU	Order description
16 mm CS Washer (Main Fixing Light/Medium Section)					
5.5	25	-	3 - 10 mm	-	JT2-6-5.5x25-G14
5.5	35	-	3 - 20 mm	-	JT2-6-5.5x35-G16
5.5	55	-	3 - 40 mm	-	JT2-6-5.5x55-G16
5.5	65	12 - 45 mm	12 - 50 mm	-	JT2-6-5.5x65-G16
5.5	85	32 - 65 mm	32 - 70 mm	-	JT2-6-5.5x85-G16
5.5	105	52 - 85 mm	52 - 90 mm	-	JT2-6-5.5x105-G16
5.5	125	72 - 105 mm	72 - 110 mm	-	JT2-6-5.5x125-G16
5.5	145	92 - 125 mm	92 - 130 mm	-	JT2-6-5.5x145-G16
5.5	165	112 - 145 mm	112 - 150 mm	-	JT2-6-5.5x165-G16
19 mm CS Washer (Main Fixing Light/Medium Section)					
5.5	25	-	3 - 10 mm	-	JT2-6-5.5x25-G19
5.5	35	-	3 - 20 mm	-	JT2-6-5.5x35-G19
5.5	55	-	3 - 40 mm	-	JT2-6-5.5x55-G19
5.5	65	12 - 45 mm	12 - 50 mm	-	JT2-6-5.5x65-G19
5.5	85	32 - 65 mm	32 - 70 mm	-	JT2-6-5.5x85-G19
5.5	105	52 - 85 mm	52 - 90 mm	-	JT2-6-5.5x105-G19
5.5	125	72 - 105 mm	72 - 110 mm	-	JT2-6-5.5x125-G19
5.5	145	92 - 125 mm	92 - 130 mm	-	JT2-6-5.5x145-G19
5.5	165	112 - 145 mm	112 - 150 mm	-	JT2-6-5.5x165-G19



Application Range

- Fastening of profiled steel sheets and sandwich panels onto 1.5–5 mm steel substrate

Features

- Case-hardened steel
- EJO GUARD - high-grade coating to improve the corrosion protection (15 Kesternich cycles, DIN 50018, 1997, 1000 h salt spray test, DIN EN ISO 9227 – NSS)
- Galvalume EPDM bonded washer

Technical Data

Drilling capacity $t_f + t_{fl}$ 1.5 + 5.0 mm
Drive hexagon A/F8 mm

Minimum shear strength of the screw		Minimum tensile strength of the screw	
Ø mm	kN	Ø mm	kN
5.5	8.95	5.5	12.5

EJOT® SAPHIR Self-drilling screw JT2-2-4.8

Ø mm	Screw Length mm	Sandwich Panel Thickness mm	Clamping Thickness mm
14 mm CS Washer (Stitching Screw)			
4.8	19	-	-

Application Range

- Side lap stitching of profiled steel sheets

Features

- Case-hardened steel
- EJO GUARD - high-grade coating to improve the corrosion protection (15 Kesternich cycles, DIN 50018, 1997, 1000 h salt spray test, DIN EN ISO 9227 – NSS)
- Galvalume EPDM bonded washer

Technical Data

Drilling capacity $t_f + t_{fl}$ 1.0 + 1.0 mm
Drive hexagon A/F8 mm

Component t_{dR} [mm]	1.50	2.00	2.50	3.00	4.00	5.00
Characteristic transverse tensile strength V_{Rk} [kN] for component t_{dR} [mm]	0.50	-	-	-	-	-
	0.55	-	-	-	-	-
	0.63	2.60 ac	2.80 ac	2.80 ac	2.80 abcd	3.80 abcd
	0.75	3.00	3.50 ac	3.50 ac	3.50 ac	4.60 ac
	0.88	3.40	4.20	4.20 ac	4.20 ac	5.30 ac
	1.00	3.80	4.50	4.50 ac	4.50 ac	8.00 ac
	1.13	4.20	4.90	4.90	4.90 ac	6.70 ac
	1.25	4.60	5.30	5.30	5.30 ac	7.30 ac
	1.50	5.30	6.00	6.00	6.00	8.10
	1.75	5.30	6.00	6.00	6.00	8.10
	2.00	5.30	6.00	6.00	6.00	8.10
	0.50	-	-	-	-	-
Characteristic pull-out strength N_{Rk} [kN] for component t_{dR} [mm]	0.55	-	-	-	-	-
	0.63	1.60 ac	2.20 ac	2.20 ac	2.20 abcd	2.20 abcd
	0.75	1.60	2.50 ac	2.90 ac	2.90 ac	2.90 ac
	0.88	1.60	2.50	3.60 ac	3.60 ac	3.80 ac
	1.00	1.60	2.50	3.60 ac	4.70 ac	4.70 ac
	1.13	1.60	2.50	3.60	4.80 ac	5.70 ac
	1.25	1.60	2.50	3.60	4.80 ac	6.80 ac
	1.50	1.60	2.50	3.60	6.80	6.80
	1.75	1.60	2.50	3.60	6.80	6.80
	2.00	1.60	2.50	3.60	6.80	6.80
	0.50	-	-	-	-	-
	0.55	-	-	-	-	-

Our Products

ROCK FON

Rock fon stone wool ceiling tiles and panels are known for their beauty and performance characteristics - acoustic control, fire protection, humidity resistance, durability and light reflection. The Rock fon product range not only comprises a wide selection of acoustic ceiling tiles, but it also features islands and baffles.

Our specialty metal ceilings are designed and fabricated to the highest standards. Metal ceiling panels and tiles are a great choice for commercial ceiling tiles and are available in a range of shapes, sizes, and finishes, in standard and custom configurations.

We offer Chicago Metallic suspension systems that provide a range of options for ceilings. The assortment includes great-looking, high-performance solutions that are the preferred choice of many contractors.



Standard Panels

Edge Designation	Item Number	Modular Size (nominal)*	NRC	AC	Fire Class	Light Reflectance	Sag Resistance (relative humidity)	Low VOC	lbs/ sqft	sqft/ carton
Square Lay-In	SQ 16100	2' x 2' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	64
	SQ 16101	2' x 4' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	64
	SQ 16102	2' x 5' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	80
	SQ 16103	2' x 6' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	96
	SQ 16104	2' x 8' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	128
	SQ 16105	30" x 30" x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	37.5
	SQ 16106	20" x 60" x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	66.67
Square Taper Narrow	SQ 16107	4' x 4' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	128
	SLN 16200	2' x 2' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	32
	SLN 16201	2' x 4' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	64
	SLN 16202	2' x 5' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	60
	SLN 16203	2' x 6' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	72
	SLN 16204	2' x 8' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	96
	SLN 16205	30" x 30" x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	37.5
Angled Taper	SLN 16209	20" x 60" x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	50
	SLN 16207	4' x 4' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	96
	SLT 16300	2' x 2' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	32
	SLT 16301	2' x 4' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	64
	SLT 16302	2' x 5' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	60
	SLT 16303	2' x 6' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	72
	SLT 16304	2' x 8' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	96
Direct Mount	SLT 16305	30" x 30" x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	37.5
	SLT 16309	20" x 60" x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	50
	SLT 16307	4' x 4' x 1"	0.95	190	A	0.85	up to 100%	✓	0.69	96
	DMT 14350	2' x 2' x 3/4"	0.70	190	A	0.85	up to 100%	✓	0.69	40
	DMT 14351	2' x 4' x 3/4"	0.70	190	A	0.85	up to 100%	✓	0.69	80
	DMT 14353	2' x 6' x 3/4"	0.70	190	A	0.85	up to 100%	✓	0.69	96
	DMT 14354	2' x 8' x 1"	0.70	190	A	0.85	up to 100%	✓	0.84	96
Shiplap	DMT 16355	30" x 30" x 1"	0.70	190	A	0.85	up to 100%	✓	0.84	37.5
	DMT 16357	4' x 4' x 1"	0.70	190	A	0.85	up to 100%	✓	0.84	96
	SLP 16457	4' x 4' x 1"	0.90	190	A	0.85	up to 100%	✓	0.84	96



Edge Designation	Item Number	Modular Size (nominal)*	NRC	AC	Fire Class	Light Reflectance	Sag Resistance (relative humidity)	Low VOC	lbs/ sqft	sqft/ carton
Semi-Concealed	SCD 14550	2' x 2' x 3/4"	0.90	190	A	0.85	up to 100%	✓	0.69	40
	SCD 14551	2' x 4' x 3/4"	0.90	190	A	0.85	up to 100%	✓	0.69	80
	SCD 14552	2' x 5' x 3/4"	0.90	190	A	0.85	up to 100%	✓	0.69	80
	SCD 14553	2' x 6' x 3/4"	0.90	190	A	0.85	up to 100%	✓	0.69	96
	SCD 16554	2' x 8' x 1"	0.90	190	A	0.85	up to 100%	✓	0.84	96
	SCD 16555	30" x 30" x 1"	0.90	190	A	0.85	up to 100%	✓	0.84	37.5
Fully Concealed	CDK 14600	2' x 2' x 7/8"	0.90	190	A	0.85	up to 100%	✓	0.75	40
	CDK 14601	2' x 4' x 7/8"	0.90	190	A	0.85	up to 100%	✓	0.75	80
	CDK 14602	2' x 5' x 7/8"	0.90	190	A	0.85	up to 100%	✓	0.75	100
	CDK 14603	2' x 6' x 7/8"	0.90	190	A	0.85	up to 100%	✓	0.75	72
	CDK 16604	2' x 8' x 1"	0.90	190	A	0.85	up to 100%	✓	0.84	96
	CDK 16605	30" x 30" x 1"	0.90	190	A	0.85	up to 100%	✓	0.84	37.5

*Refer to the Rockfon® Module System brochure for module tile sizes.

15/16" Suspension Systems 200, 1200 and Fire Rated systems					9/16" Suspension Systems 4000, 4200, 4500, 4600 and Fire Rated systems			
SQ - Square Lay-In	SLT - Angled Taper	SLP - Shiplap	SCD - Semi-Concealed	CDK - Fully Concealed	SLN - Square Taper Narrow			
					4000 - Tempus	4200 - Integrity	4500 - Ultralite 1/4" reveal	4600 - Ultralite 1/8" reveal

Rockfon Sonar® Properties

Material

Stone wool (Mineral Wool) ceiling tiles with factory applied latex paint and latex laquer on glass scrim surface
ASTM E1264 CLASSIFICATION: Type XX - Stone wool base with membrane-faced overlay, Pattern E



Fire Performance

Surface burning characteristics:
UL723 (ASTM E84) Flame Spread Index: 0
Smoke Developed Index (UL Labeled): 0
CAN/ULC S102 Flame Spread Index: 10
Smoke Developed Index: 5



Sustainability

Many of Rockfon stone wool acoustic solutions are GREENGUARD Gold low VOC certified and meet the State of California's Department of Public Health Services Standard Practice for Specification Section 01350 (California Section 01350) for testing chemical emissions.

Selected potential applications: LEED, WELL, CHPS, Green Globes, BREEAM Int. and CALGreen

- ✓ GREENGUARD Gold available*
- ✓ Environmental Product Declaration available*
- ✓ Health Product Declaration available*

* Applicable to all edge types



Environment

Up to 48% recycled content. Recycled content based on U.S. manufacturing.



Warranty

30-Year Limited Product Warranty
See rockfon.com



Clean Room

ISO Class 5



Thermal Insulation

R Value (BTU Units): 2.6 - 3.5
RSI Value (Watts Units): 0.46 - 0.62



Hygiene

Stone wool provides no sustenance to microorganisms

