

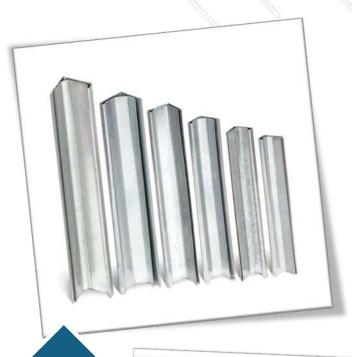
A Showcase of the Standout Duct Products of 2024



ENGINEERED FOR EFFICIENCY
BUILT TO LAST!

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DUCT SLIDE ON FLANGE SYSTEM

DUCT SLIDE ON FLANGE SYSTEM

Slide on Flange, Corner, Cleat & G-clamp



Product Features:

- Privilege® flanges are the easiest and fastest way to connect the transvers joint of rectangular ducts.
- Permanently flexible non-drying, non-toxic sealant injected into the profile during the manufacturing process.
- Available in 20 mm, 25 mm, 30 mm, 35 mm & 40 mm sizes.
- Complying with HVAC specification DW144, SMACNA standards.
- Full range of accessories to suit all sizes of flange.
- Manufactured with roll forming machine.
- Manufactured from premier quality galvanized steel material with Z-275 or G-90 coating.
- Suitable for HVAC specification Joint Rating up to J6 and pressure class A, B and C.

Design Specification: All galvanized steel sheet ductworks shall be transverse jointed with proprietary factory fabricated slide on duct flange system including 20, 25, 30, 35 and 40 mm size duct flange, with matching corner, cleats and clamps.

The flanges are manufactured by precision roll forming operations from galvanized steel sheet and shall not have a zinc coating less than 275gms/m2.

The flanges have material thickness not less than 0.70 mm, 0.80 mm & 1.0 mm for 20 mm, 25 mm, 30 mm, 35 mm & 40 mm flanges respectively.

The flanges have an integral non-drying, non-setting liquid based sealant in the flange pocket and technical data sheet is available for sealant used. No grease or lubricant has been used in for sealant. The non-drying sealant used in the flange is sourced from US, or European sources, to ensure quality sealing of the ductworks.





DUCT PINS

PRIVILEGE DUCT PINS

Privilege® Pins are designed to fix insulating materials to smooth surfaces such as air ducts, attenuators, chambers, and enclosures.

Privilege® Pins comprise of an aluminum nail (copper or steel alternatives on request) firmly mounted on a galvanized steel base.

Galvanized spring steel fastening clips (locking washers) are also supplied with the hangers available in different sizes, resistant to water, detergents, alcohols, aliphatic solvents, and aromatic solvents.



Insulation pins are used to mechanically fix and install insulation material that can be pierced by metal spindles. It is also referred as 'Stuck-up Pins', 'Hanger Pins' or Insulation Pins, are either weldable, or designed to be bonded with adhesive for non-welded systems. Non-weldable pins are designed with the spindle mounted to metal base. The metal base is available with a ready-to-use 'peel and stick' backing, or a perforated base to be bonded with suitable adhesive. A self-locking washer is applied over the protruding spindle to retain the insulation.

Product Features:

- Can be used to retain any type of insulation. (pierced by the pin)
- Pins available for different fixing methods: welding, self-adhesive (pressure-sensitive adhesive), or using suitable adhesive.
- One type of pin can be used to hang multiple types of insulation.
- Simple and easy to apply.
- Reduced inventory needs.
- Available in stainless steel, galvanized steel, aluminum, and mild steel copper coated.

1. PRIVILEGE® DUCT STUCK-UP PINS

These are easy to use and handle, ideal for site assembly and require no tools or machines.

Suitable for steel or other smooth surfaces which should be clean and dry, free of dust, grease, oil or any other loose matter.

Simply remove the release paper backing, place on the surface and impale the insulation over the pin. The locking washer is then pressed on to the pin to complete the final mechanical joint.



Bonding takes place immediately, but full-strength adherence is achieved after 24 hours.

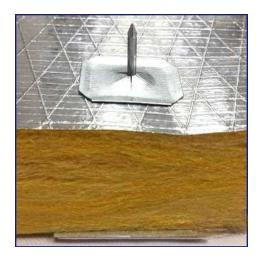
Design Specification: Privilege® Duct self-adhesive pins are designed to fix insulating materials to smooth surfaces such as air ducts, attenuators, chambers, and enclosures. Their use allows a proper quality fixture speedily and without the risk of corrosion.

The adhesive foam backing is of the highest quality and the locking washer ensure an outstanding assembly. In order to meet all requirements, we produce a wide range of pins lengths.

Fastening Washer:

Galvanized spring steel fastening clips (locking washers) are supplied with the hangers. They ensure a perfect upholding of the insulation. These clips ensure the insulation is held securely in place on the pins, acting as a locker washer.

- Galvanized steel.
- Beveled edges.



2. PRIVILEGE® DUCT PERFORATED PINS

Perforated Base Hangers (also known as insulation pins) are designed to fix efficiently insulation on concrete or any other rough surface.

There are a wide range of lengths available.

Perforated Base Hangers consist of an aluminum nail, galvanized steel (copper available on request) firmly mounted on a perforated galvanized steel base.

Galvanized locking washers is supplied with the hangers. They ensure a perfect upholding of the insulation.



The clips ensure that the insulation is held securely in place on the pins, acting as a locking washer.

Perforated Base Hangers:

- Galvanized steel perforated base 50 mm x 50 mm
 (2" x 2") and 35 mm x 35 mm (1-3/8" 1-3/8").
- Aluminum pins diameter 2.8 mm and lengths from 30 mm to 110 mm.

Fastening Clips:

- Galvanized spring steel.
- Beveled edges.

3. PRIVILEGE® DUCT WELD PINS

Privilege® Duct Weld Pins are used to permanently secure insulation to the sheet metal. Privilege® Duct Weld Pins are designed and manufactured to work in any standard resistance welding equipment.

Features:

- Cup head prevents linear tear.
- Superior strength.
- Faster operation.
- Unmatched product consistency.
- Fire resistance as no glue or adhesive are involved.



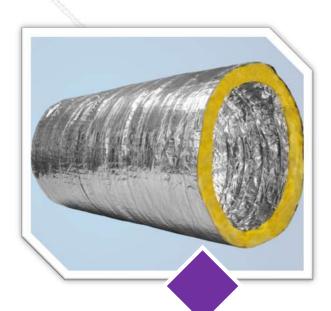
3. Placement of Pin.

2. Ignition.

4. Completion of Pin Weld.









FLEXIBLE DUCTS

INSULATED FLEXIBLE DUCTS

Delta Duct Flexible Duct is a very strong fully flexible compressible light weight air duct which is widely used in Air Conditioning and Ventilation Systems for Commercial, Industrial and Residential applications. Delta Duct Flexible Duct is extremely durable and will maintain dimensional stability when fully extended.



Application:

- Economical & ideal solution for connecting equipment's in air conditioning and ventilation systems, for applications such as, office Buildings and many other Industrial and Residential projects.
- Available Uninsulated & Insulated with quality fiberglass insulation.
- Offers high degree of flexibility, which allows it to be easily connected to any desired position.
- A quick and economical means of correcting misalignment between system components.
- Allows ducting around obstacles where fabricated and fitted ducts would be difficult and costly to install.
- Highly efficient when correctly installed & provides a maintenance free service life under normal operating conditions.

Features:

- Tear and puncture resistant construction
- Delta Duct Flexible Duct offers smooth air tight inner core when correctly installed which provides low friction loss.
- Highly resistant to corrosion and microorganism.
- Spring steel wire helix assures dimensional stability, resists mechanical abuse and provides more efficient air distribution.

Models:

1. Delta Duct FD3

2. Delta Duct FD4

3. Delta Duct FD5

4. Delta Duct FD3 - RN

5. Delta Duct FD4 - RN

6. Delta Duct FD5 - RN

7. Delta Flex

8. Delta Flex - AC



1. DELTA DUCT FD3

Delta Duct FD3 is insulated flexible duct with outer jacket as metalized PET laminated over clear polyester, middle layer is of good quality fiber glass insulation & inner core is double layer of clear polyester permanently bonded with flame retardant bonding adhesive with coated steel spring helix.



Specification:

Diameter : 4" to 20"

Insulation Density : (16, 24, 32) kg/m3

Insulation Thickness : 25 mm
Length : 25 feets

Maximum Velocity : 5000 FPM (25.5 m/s) Max. Positive Pressure : 10" W.C. (2.5 KPa)

Max. Negative Pressure : 1/2" W.C. (0.12 KPa)
Insulation R Value : 4.2 or 6 (F-hr/BTU)

2. DELTA DUCT FD4

Delta Duct FD4 is insulated flexible duct with outer jacket as metalized PET laminated over clear polyester, middle layer is of Good quality fiber glass insulation & inner core is double layer of metalized PET & clear polyester permanently bonded with flame retardant bonding adhesive with coated steel spring helix.



Specification:

Diameter : 4" to 20"

Insulation Density : (16, 24, 32) kg/m3

Insulation Thickness : 25 mm
Length : 25 feets

Maximum Velocity : 5000 FPM (25.5 m/s)

Max. Positive Pressure : 10" W.C. (2.5 KPa)

Max. Negative Pressure : 1/2" W.C. (0.12 KPa)

Insulation R Value : 4.2 or 6 (F-hr/BTU)

3. DELTA DUCT FD5

Delta Duct FD5 is insulated flexible duct with outer jacket as metalized PET laminated over clear polyester, middle layer is of Good quality fiber glass insulation & inner core is double layer of ALU PET & clear polyester permanently bonded with flame retardant bonding adhesive with coated steel spring helix.



Specification:

Diameter : 4" to 20"

Insulation Density : (16, 24, 32) kg/m3

Insulation Thickness : 25 mm
Length : 25 feets

Maximum Velocity : 5000 FPM (25.5 m/s)

Max. Positive Pressure : 10" W.C. (2.5 KPa)

Max. Negative Pressure : 1/2" W.C. (0.12 KPa)

Insulation R Value : 4.2 or 6 (F-hr/BTU)



4. DELTA DUCT FD3 - RN

Delta Duct FD3 - RN is insulated flexible duct with outer jacket as reinforced metalized PET laminated over clear polyester, middle layer is of Good quality fiber glass insulation & inner core is double layer of clear polyester permanently bonded with flame retardant bonding adhesive with coated steel spring helix.



Specification:

Diameter : 4" to 20"

Insulation Density : (16, 24, 32) kg/m3

Insulation Thickness : 25 mm
Length : 25 feets

Maximum Velocity : 5000 FPM (25.5 m/s)

Max. Positive Pressure : 10" W.C. (2.5 KPa)

Max. Negative Pressure : 1/2" W.C. (0.12 KPa)

Insulation R Value : 4.2 or 6 (F-hr/BTU)

5. DELTA DUCT FD4 - RN

Delta Duct FD4 - RN is insulated flexible duct with outer jacket as reinforced metalized PET laminated over clear polyester, middle layer is of Good quality fibre glass insulation & inner core is double layer of metalized PET & clear polyester permanently bonded with flame retardant bonding adhesive with coated steel spring helix.



Specification:

Diameter : 4" to 20"

Insulation Density : (16, 24, 32) kg/m3

Insulation Thickness : 25 mm
Length : 25 feets

Maximum Velocity : 5000 FPM (25.5 m/s)

Max. Positive Pressure : 10" W.C. (2.5 KPa)

Max. Negative Pressure : 1/2" W.C. (0.12 KPa)

Insulation R Value : 4.2 or 6 (F-hr/BTU)

6. DELTA DUCT FD5 - RN

Delta Duct FD5-RN is insulated flexible duct with outer jacket as reinforced metalized PET laminated over clear polyester, middle layer is of Good quality fiber glass insulation & inner core is double layer of ALU PET & clear polyester permanently bonded with flame retardant bonding adhesive with coated steel spring helix.



Specification:

Diameter : 4" to 20"

Insulation Density : (16, 24) kg/m3

Insulation Thickness : 25 mm
Length : 25 feets

Operating Temperature : - 30°C to + 150°C

Maximum Velocity : 5000 FPM (25.5 m/s)

Max. Positive Pressure : 10" W.C. (2.5 KPa)

Max. Negative Pressure : 1/2" W.C. (0.12 KPa)

Insulation R Value : 4.2 or 6 (F-hr/BTU)



7. DELTA Flex

Delta Flex is UL listed flexible duct according to UL 181 Class 1 standard. Also classified by Underwriters Laboratories INC, in accordance with ADC flexible duct performance and installation standards using ASTM C518.

Delta Flex is insulated flexible duct with outer jacket as reinforced metalized PET laminated over clear polyester, middle layer is of



Good quality fiber glass insulation & inner core is double layer of ALU PET & clear polyester permanently bonded with flame retardant bonding adhesive with coated steel spring helix.

Specification:

Operating Temperature : - 30°C to + 150°C Class : 1

8. DELTA Flex AC

Delta Flex - AC is UL listed flexible duct according to UL 181 Class 1 standard. Also classified by Underwriters Laboratories INC, in accordance with ADC flexible duct performance and installation standards using ASTM C518.

Delta Flex - AC is insulated flexible duct with outer jacket as reinforced metalized PET laminated over clear polyester, middle



layer is of Good quality fiber glass insulation with BGT facing & inner core is perforated double layer of ALU PET & clear polyester permanently bonded with flame retardant bonding adhesive with coated steel spring helix.

Specification:

Diameter : 4" to 20" : 5000 FPM (25.5 m/s)
Insulation Density : 48 kg/m3 : Max. Positive Pressure : 2" W.C. (0.5 KPa)
Insulation Thickness : 25 mm : Max. Negative Pressure : 1/2" W.C. (0.12 KPa)
Length : 25 feets : Insulation R Value : 4.2 or 6 (F-hr/BTU)

Operating Temperature : - 30°C to + 150°C Class : 1

- Delta Flex complies with UAE Fire & Life Safety Code 2018.
 - The insulation is DCL certified.
 - The insulation confirms with Dubai Green Building Code.



UNINSULATED FLEXIBLE DUCTS

1. DELTA Duct FD25

Delta Duct FD25 is made of triple layer of ALU PET, coated fiberglass woven fabric & Metalized PET film permanently bonded using flame retardant bonding adhesive to a coated spring steel wire helix.



Specification:

Diameter : 4" to 20" Length : 25 feets

Maximum Velocity : 5000 FPM (25.5 m/s)

Max. Positive Pressure : 10" W.C. (2.5 KPa)

Max. Negative Pressure : 1/2" W.C. (0.12 KPa)

2. DELTA Duct FD50

Delta Duct FD50 is made of triple layer of ALU PET, Metalized PET & Clear PET film permanently bonded using flame retardant bonding adhesive to a coated spring steel wire helix.



Specification:

Diameter : 4" to 20" Length : 25 feets

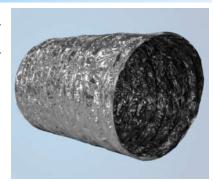
Maximum Velocity : 5000 FPM (25.5 m/s)

Max. Positive Pressure : 10" W.C. (2.5 KPa)

Max. Negative Pressure : 1/2" W.C. (0.12 KPa)

3. DELTA Duct FD100

Delta Duct FD100 is made of Double lamination of metalized PET & polyester film permanently bonded using flame retardant bonding adhesive to a coated spring steel wire helix.



Specification:

Diameter : 4" to 20" Length : 25 feets

Maximum Velocity : 5000 FPM (25.5 m/s)

Max. Positive Pressure : 10" W.C. (2.5 KPa)

Max. Negative Pressure : 1/2" W.C. (0.12 KPa)

4. DELTA Duct FD200

Delta Duct FD200 is made of Double lamination of ALU PET & polyester film permanently bonded using flame retardant bonding adhesive to a coated spring steel wire helix.



Specification:

Diameter : 4" to 20" Length : 25 feets

Maximum Velocity : 5000 FPM (25.5 m/s)

Max. Positive Pressure : 10" W.C. (2.5 KPa)

Max. Negative Pressure : 1/2" W.C. (0.12 KPa)

SEMI RIGID FLEXIBLE DUCTS

Delta Duct Semi Rigid Flexible Duct complies with UL 181 Class 0 standard having surface burning characteristic zero (i.e. flame spread and smoke developed). Delta Duct is manufactured in accordance with (NFPA 90A & 90B standard).

Fire resistant, non-combustible, light weight, very strong with high degree of flexibility.

Application:

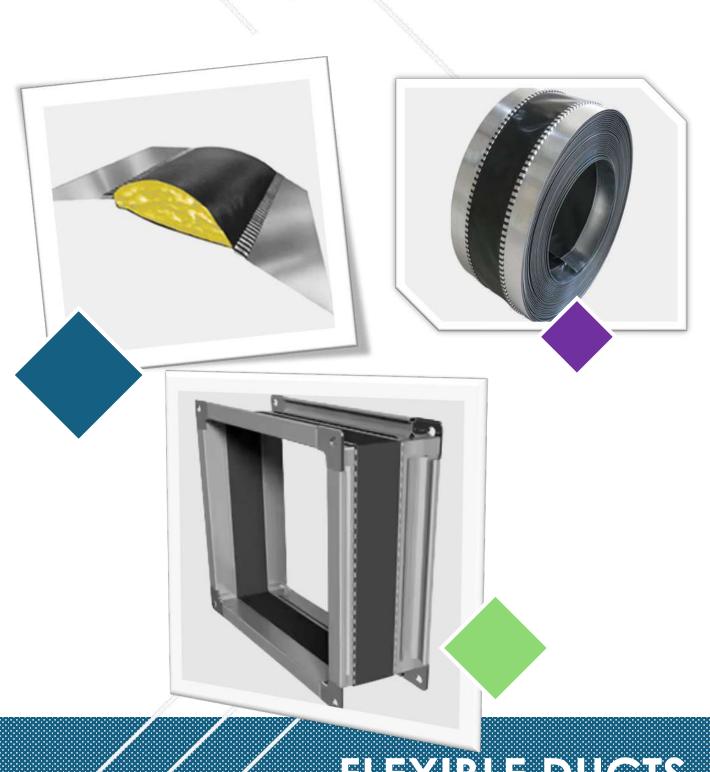
- Ideal for Dryer, Bathroom or Kitchen Ventilation for Commercial, Industrial and Residential applications.
- Offers high degree of flexibility, which allows it to be easily connected to any desired position.
- No need for additional supports.
- Semi rigid but flexible for easy installation.
- Fire resistant, non-combustible and resistance to chemical fumes.
- High resistance to UV rays.
- Easy to transport & store.
- Quick and easy installation.
- Air tight.
- Energy efficient, low operation and maintenance cost.

Features:

- Fire Resistant to BS 476 part 6 & 7.
- Extremes heat resistance; non-combustible.
- Low operating cost, fully lined for efficient air delivery.
- Compressed ducts reduce freight and storage costs.
- Leak proof interlocked crimp locking.







FLEXIBLE DUCTS
CONNECTOR

FLEXIBLE DUCT CONNECTORS

1. UNINSULATED FLEXIBLE DUCT CONNECTOR

Delta-flex Duct Connectors are very strong, fully flexible duct connectors and are widely used in air conditioning systems for commercial, industrial and residential applications. Ready carton dispensing completes the fabrication quicker more efficiently, and more economically than conventional method.



Applications:

Isolation of sound and vibration from the source, double lock seam joined duct flexible connector fabric is used which is fixed to galvanized steel sheet metal is anchored with the equipment and the other end is anchored with the ductwork.

Delta-flex offers flexibility in fabric and metal width. Delta-flex Flexible Duct Connector is complied with NFPA 701-2019 (Formerly UL 214). All Delta-flex Flexible Duct Connector are deigned to meet the stringent criteria of NFPA 701-2019 airtight and waterproof.

Available fabric options: Vinyl / Neoprene / Silicone

2. INSULATED FLEXIBLE DUCT CONNECTOR

Delta-flex is a very strong fully flexible insulated duct connector and is widely used in air conditioning systems for commercial, industrial, and residential applications.

Ready carton dispensing completes the fabrication quicker more efficiently, and more economically than conventional method.

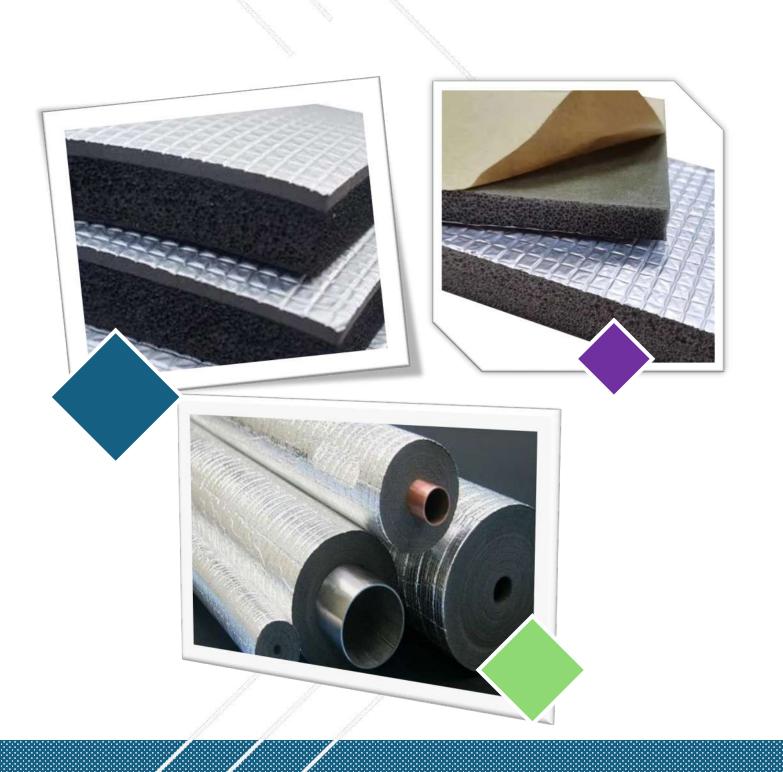


Applications:

Isolation of sound and vibration from the source and insulated fabric preventing condensation. Double lock seam joint provides strong and airtight metal - fabric - metal joint. Galvanized steel sheet metal is anchored with the equipment on one end and the other end is anchored with the ductwork. Delta-flex offers flexibility in fabric and metal width mostly available ex stock.

Available fabric options: Vinyl / Neoprene / Silicone





XLPE INSULATION

XLPE - Polyolefin Insulation



• Fire Class & Smoke Emission

Delta Duct XLPE is CLASS O rated (BS 476 Parts 6 & 7) and passed ASTM E84.

• Zero Water Vapor Permeability & Low Water Absorption Rate

Delta Duct XLPE can be installed on ducts or pipes without any other additional water vapor barriers. The excellent protection against condensation ensures a long-term.

• Excellent Thermal Efficiency

Delta Duct XLPE has low thermal conductivity of 0.033 W/mK (ASTM C518), which guarantees a high thermal performance, improvement of the installation, excellent dimensional properties, and full closed cell structure stand for durable values of thermal of the longest technical life of the products.

• Environment Friendly Foam

Delta Duct XLPE is a CFC and HCFC free product and doesn't contain substances that contribute to the Ozone Depletion Potential (ODP) or to the Global Warming Potential (GWP). Delta Duct XLPE very low emission level (VOC).

Cost Saving

Delta Duct XLPE requires a limited number of accessories (tape and glue); this facilities a short installation time and low installation costs. Delta Duct XLPE is specially recommended for medical, pharmaceutical and food processing facilities as well as schools and hospitals.



TECHNICAL DETAILS

Description:

Flexible closed cell insulation material with high water vapor diffusion resistance and low thermal conductivity.

Material:

Cross linked polyolefin foam with density of 25 ±3 kg/m3 (foam core only) and grey color.

Self-adhesive coating:

Pressure sensitive adhesive coating.

Applications:

Thermal insulation / protection for pipes, air ducts, vessels (incl. elbows, fittings, flanges, etc.) and process equipment to prevent condensation, save energy and block sound propagation.

Property	Value/ Assestment	Tested acc. to:
Temperature range Max. line temperature Min. line temperature	+105°C -80°C	DIN EN 14706 : 2005 (E) ASTM C411
Thermal conductivity $\lambda[W/(m\cdot K)]$ at 23[°C]	0.033	ASTM C518 : 2010
Water vapour diffusion resistance factor ()	54,000	BS EN 12086 : 1997
Water vapour permeance [perms]	0	ASTM E96
Water absorption [kg/m²]	0.05	BS EN 12087:1997
Reaction to fire	Class O Class A	BS 476 Parts 6&7 ASTM E84
Smoke and toxicity 1. Smoke toxicity levels 2. Toxic smoke	Passed R = 0.77	IMO MSC 61 (67); A. 1, P. 2 BS 6853 : 1999
Sound absorption	α = 0.35 (25 mm)	ISO 354
UV resistance*	Excellent	ASTM G155
Resistance to corrosion	Excellent	ASTM B117
Compression set	35.77% (for 25 mm) 34.22% (for 32 mm)	ASTM D3574
Resistance to fungi	Passed	ASTM G21: 2009
Resistance to bacteria	Passed	ISO 22196 : 2007
Chemical Analysis (Leachable ions)	Very low	ASTM C871
Emission (VOC level)	<4 g/m²/hr.	ASTM D5116
Environment friendly Ozone resistance Ozone depletion potential Global warming potential CFC & HCFC, dust, fibres, asbestos	Excellent 0 <5 Free	
Storage life Can be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0°C - 45°C).	1 year for self-adhesive sheets / rolls self-adhesive tapes	



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