

High performance insulation





For 40 years, Teknisol has been synonymous with innovation and quality in the insulation industry

Thanks to its **experience and constant commitment** in the search for advanced solutions, it has been able to respond to the challenges of a changing market.

Reliability, competence and care for the environment make it a benchmark in the industry.

INDEX

Introduction	page. 4
Rockwool	page. 12
Glass Wool	page. 16
EPS	page. 18
Polyurethane	page. 20
Phenolic Resins	page. 22
XPS (Styrofoam)	page. 24
Expanded Cellular Glass	page. 26
Elastomer	page. 28
TEKNOSOUND	page. 32
Ceramic Fibre	page. 34
TEKNO-FIRE	page. 36
3D Preforms	page. 38
Accessories	page. 40

We preserve your **ENERGY**

Teknisol, working for 40 years in the transformation and machining sector of

in the transformation and machining sector of thermal and acoustic insulation materials, being a benchmark for those in the industry who strive for maximum quality and safety.

> **Teknisol** stands out for its ability to produce high-tech solutions in many fields of application. **Teknisol** is an established production and sales company, renowned and appreciated both in the Italian and European market.



Teknisol offers advanced insulation solutions for a wide range of applications, including industrial, HVAC, maritime and passive fire protection. Its products guarantee excellent thermal, acoustic and safety performance, meeting the needs of energy efficiency and sustainability in every field of application.



ADVANCED TECHNOLOGY

Thanks to use of **advanced technologies**, cutting-edge insulating materials and state-of-the-art application techniques, Teknisol offers solutions with **superior performance in terms of thermal and acoustic insulation.**



DIVERSIFICATION

The know-how acquired over many years of business and constant technological research identifies Teknisol as a **partner of excellence** at the highest level in terms of efficiency and modernity, capable of identifying the best available solutions.



TAILOR-MADE SOLUTIONS

Teknisol creates **tailor-made solutions** to the specific needs of each customer, thanks to a **thorough analysis of projects** and needs, paying particular attention to quality, safety and process optimisation.



EASY INSTALLATION

A complete range of accessories for the application of all insulating materials makes Teknisol solutions practical and easy to install.

The fields of use:





Hvac



Maritime



Passive fire protection

• Industrial insulation

Our product range covers the **most advanced solutions** for the chemical, petrochemical, maritime, oil & gas, cogeneration system and LNG system industrial sectors.

• HVAC

Heating, Ventilation and Air Conditioning.

• Maritime sector

Teknisol solutions are developed to **improve comfort and safety** on cruise ships, ferries, yachts, cargo ships and off-shore platforms. To reach these objectives, use is required of insulation materials that are **non-combustible and certified**. **according to IMO** (International Maritime Organisation) **and M.E.D.** (Marine Equipment Directive 96/98/EC, Modules B and D) **standards**.

Passive fire protection

They are devices able to contain and limit the consequences of a fire. These devices consist of non-combustible or low combustible components that impede the spread of fire. The devices are **installed to protect structural components or plants** that do not require the intervention of an operator or operation of a system in case of fire.





WE SHAPE INSULATION

Thermal comfort, acoustic and optimal performance for a green environment



Insulating materials

Glass wool

Rockwool



Rockwool, obtained from fused volcanic rocks and spun into fibres, offers excellent thermal and acoustic properties and resistance to fire, guaranteeing high performance in every application.



Glass wool is material made of fine fibres obtained by fusing sand and other components in a hightemperature process, which offers excellent thermal and acoustic insulation performance.

EPS



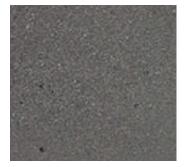
EPS (Sintered Expanded Polystyrene) is a lightweight, versatile plastic material with high performance, widely used in construction for the thermal insulation of walls, floors and roofs.

Polyurethane



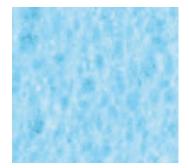
Polyurethane is a synthetic material with superior insulation performance compared to many other materials, ideal for applications in construction, plant insulation and the automotive industry.

Phenolic resins



Phenolic resins are synthetic polymers, characterised by their thermal, chemical and mechanical strength and durability, making them ideal for applications in high temperature environments.

Styrofoam (XPS)



Lightweight and insulating Styrofoam is made of polystyrene beads expanded and fused together. Resistant to water and deformation, it is ideal for thermal insulation and pipe protection. Our range of insulating products offers maximum thermal and acoustic comfort in any environment. Designed to improve energy efficiency and reduce environmental impact, our materials pay particular attention to sustainability, combining innovation and respect for the environment.

Cellular glass



Cellular glass is a thermal insulator resistant to fire, moisture and temperature changes. Ideal for industrial systems and extreme environments, it is durable, environmentally friendly and fully recyclable.

Elastomer



The soft and elastic elastomer adapts to uneven surfaces to ensure an excellent thermal barrier. It is used to insulate pipes, ducts and industrial plants.

Ceramic fibre



Light, refractory ceramic fibre withstands more than 1000°C and is used in industry and for the production of furnaces and plants. Ideal for insulation in extreme temperature conditions.



Coatings

- 1. BARE
- 2. ALUMINIUM MESH
- 3. EMBOSSED ALUMINIUM
- 4. ALUTEK
- 5. WHITE PVC
- 6. GLASS FIBRE

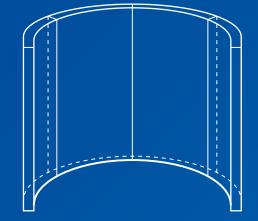
We shape **PROTECTION NEEDS**

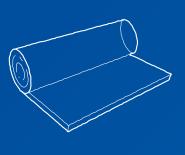


Covers + Tees

Elbows

Sections





Mats

We sell mats in different densities and thicknesses, made according to the technical specifications required to meet various insulation needs.



Panels

We sell and produce panels in various types of materials, densities, thicknesses and coatings, made according to the technical specifications required to ensure optimal insulation performance. Teknisol products, in various shapes and materials, can meet all insulation needs in the most wide-ranging application areas.

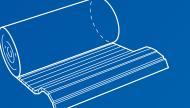
Felt

We sell wool felt and lamella felt in glass wool and rockwool, available in different densities, thicknesses and coatings, made according to the technical specifications required to meet insulation needs in various <u>environments.</u>



Tubes

We provide elastomer tubes with various technical characteristics, designed to meet various needs in the insulation industry.



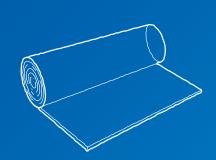






Special products

Thanks to use of CNC mills, we can manufacture tailormade products for industrial plants, guaranteeing precision and customisation.



Rolls

We produce rolls for noise abatement and passive fire protection; in particular our products Teknosound and Tekno-Fire, Designed to guarantee performance in both areas.

We sell elastomer rolls with different technical characteristics, suitable to meet a wide range of needs in the field of insulation and protection.

3D Preforms

We produce 3D preforms using CNC mills and we can provide any type of geometry thanks to use of advanced software, ensuring high precision and customisation









Industrial

Maritime



Hvac



Products in **ROCKWOOL**

Obtained from the fusion and **spinning of natural rocks**, which have excellent thermo-chemical properties, rockwool

is acid-resistant, chemically neutral, rot-proof and combines excellent sound absorption with high temperature resistance.

Properties:

- Melting temperature over 1000 °C;
- Safe in the event of fire;
- Total stability in humid conditions;
- Reduced noise and acoustic loads;
- Fire protection;
- Non-combustible;
- Thermal insulation;
- Sound-proof

TEKNISOL uses finishes with proven quality, durability and aesthetic value for its insulation materials, to develop efficient solutions and **easy installation** that optimise application times.





Teknorock 90 Coppelle + Tee + Curve

STANDARD DIMENSIONS Thickness: 20-100 mm Diameters: 15-324 mm Length: 1000mm Other dimensions available on request





Thermorock Panels

STANDARD DIMENSIONS

Thickness: 20-100 mm Length: 1000mm Other dimensions available on request



Products in **ROCKWOOL**



Teknorock 90 Sections

STANDARD DIMENSIONS Thickness: 20-100 mm Diameters: 15-324 mm Length: 1000mm

Other dimensions available on request





Curved base



Reduction



Valve covers

Teknorock 90 Special products

STANDARD DIMENSIONS

Thickness: 20-100 mm Diameters: 15-324 mm Other dimensions available on request











Teknorock 90 Lamella felt

STANDARD DIMENSIONS Thickness: 20-100 mm Length: 1000mm Other dimensions available on request



Teknorock 90 Smooth felt

STANDARD DIMENSIONS Thickness: 20-100 mm

Length: 1000mm Other dimensions available on request



Teknorock 90 Mats

STANDARD DIMENSIONS Thickness: 20-100 mm Length: 1000mm Other dimensions available on reques







Industrial



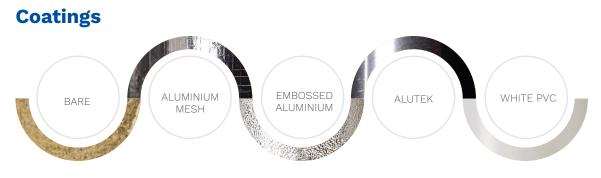
Hvac



Products in GLASS WOOL

Mineral glass wool consists of glass fibres woven and bonded together with thermosetting resins. The open cell structure gives the finished products thermal and acoustic insulation performance.

- Low thermal coefficients of conductivity;
- High acoustic absorption;
- Ample working temperature limit: up to 350 °C;
- Water repellent, with rapid elimination of any condensate;
- Non-combustible; no toxic gas emissions;
- Flexible and withstands bacterial agents.





Tekno-Glassfibre

STANDARD DIMENSIONS Thickness: 20-100 mm Length: 1200mm Other dimensions available on request





Tekno-Glassfibre Panels

STANDARD DIMENSIONS

Thickness: 20-100 mm Length: 1200mm Other dimensions available on request









Products in **EPS**

Expanded Polystyrene is a rigid, colourless transparent material that can be applied in fields requiring an easy-towork polymer, transparency and good thermo-mechanical performance.

The closed cell structure gives the product excellent insulating properties.

Teknisol uses **finishes of proven quality, durability and aesthetic value** for its insulation materials. Efficient solutions that are easy to install and optimise application times for savings in labour costs.

Coatings





Teknofoam-pse Covers + Tees + Elbows

STANDARD DIMENSIONS

Thickness: 20-100 mm Diameters: 15-324 mm Length: 1000mm Other dimensions available on request





Teknofoam-pse Sections

STANDARD DIMENSIONS

Thickness: 20-100 mm Diameters: 15-324 mm Length: 1000mm Other dimensions available on request



Teknofoam-pse Special products

STANDARD DIMENSIONS

Thickness: 20-100 mm Other dimensions available on request





Reduction

Curved

base







Certified products

Products in POLYURETHANE

Polyurethane is a versatile and high-performance material, widely used in **many industrial** sectors. Thanks to its unique strength and flexibility, it is used in the chemical, pharmaceutical, maritime and cryogenic industries.

In these sectors, polyurethane is used to produce components requiring high performance in terms of durability, insulation and resistance against chemicals and low temperatures. Its ability to adapt to different needs makes it a fundamental material for many modern industrial applications.



Coatings



Teknofoam Covers + Tees + Elbows

STANDARD DIMENSIONS

Thickness: 20-100 mm Diameters: 15-324 mm Length: 1000mm Other dimensions available on request





Curved base

Reduction

Teknofoam Sections

STANDARD DIMENSIONS

Thickness: 20-100 mm Diameters: 15-324 mm Length: 1000 mm Other dimensions available on request



Teknofoam Special products

STANDARD DIMENSIONS Thickness: 20-100 mm

Other dimensions available on reques





Valve covers





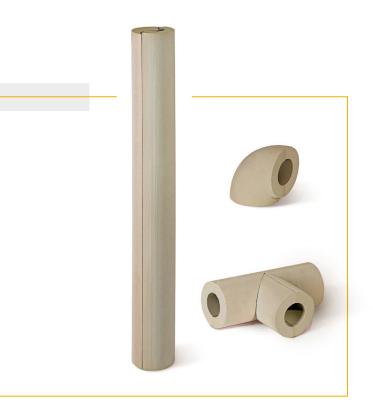
Certified products

Products in **PHENOLIC RESINS**

Phenolic resins are thermosetting polymers with excellent resistance to heat, chemical agents and degradation. These characteristics make them ideal for numerous applications in the **industrial**, chemical, pharmaceutical and maritime sectors.

In particular, phenolic resins are used in the production of components that have to withstand extreme conditions such as high temperatures and corrosive environments. Their versatility and resistance to stress make them a fundamental material for the **manufacture of** articles intended for critical uses in industrial and specialist fields.





Teknofoam-phen 40

Covers + Tees + Elbows

STANDARD DIMENSIONS

Thickness: 20-100 mm Diameters: 15-324 mm Length: 1000mm Other dimensions available on request





Teknofoam-phen 40 Sections

STANDARD DIMENSIONS

Thickness: 20-100 mm Diameters: 15-324 mm Length: 1000mm Other dimensions available on request



Teknofoam-phen 40 Special products

STANDARD DIMENSIONS

Thickness: 20-100 mm Other dimensions available on request





Reduction

Curved base







Certified products

Products in XPS

Styrofoam, also known as extruded expanded polystyrene, is light and highly insulating material, widely used in the industrial sector and in residential installations. Thanks to its excellent thermal and acoustic insulation properties, it is used in the manufacture of panels, packaging materials and building components, guaranteeing energy efficiency and protection against extreme temperatures.

Its versatility and strength make it an ideal choice for high impact designs in the residential sector, where it is essential to optimise comfort and sustainability.



Coatings



Teknofoam-styro

Covers + Tees + Elbows

STANDARD DIMENSIONS

Thickness: 20-100 mm Diameters: 15-324 mm Length: 1000mm Other dimensions available on request





Teknofoam-styro Sections

STANDARD DIMENSIONS

Thickness: 20-100 mm Diameters: 15-324 mm Length: 1000mm Other dimensions available on request



Teknofoam-styro Special products

STANDARD DIMENSIONS

Thickness: 20-100 mm Other dimensions available on request





Reduction

Curved base







Industrial



Maritime



Products in EXPANDED CELLULAR GLASS

Foamglas is a high-performance insulating material made from expanded cellular glass. Featuring a closed cell structure, it is resistant to humidity, fire and offers excellent thermal and acoustic insulation capacity. Thanks to its **lightness and** rigidity, it is often used in industrial, construction and maritime applications, where protection against heat **loss** or the risk of condensation is required. Foamglas is also environmentally friendly, as it is made from recyclable materials and contains no substances that are harmful for the environment.



Teknoglass Covers + Tees + Elbows

STANDARD DIMENSIONS

Thickness: 20-100 mm Diameters: 15-324 mm Length: 1000mm Other dimensions available on request





Teknoglass Sections

STANDARD DIMENSIONS

Thickness: 20-100 mm Diameters: 15-324 mm Length: 1000mm Other dimensions available on request



Teknoglass Special products

STANDARD DIMENSIONS

Thickness: 20-100 mm Other dimensions available on request





Reduction

Curved base



Valve covers





Industrial

Hvac



Products in **ELASTOMER**

Expanded elastomer is a **versatile material** that combines the elastic properties of elastomers with the lightness

and insulation of expanded products. Due to its **capacity to adapt** to different applications, it is widely used in various sectors, such as the automotive industry, construction and plant engineering.

This material offers excellent performance in terms of **resistance to wear, thermal and acoustic insulation** and good protection against vibration and impact.

Its flexibility and durability make it ideal for applications that require both comfort and high strength over time.



Tubi elastomero BL-s2-d0 - C

STANDARD DIMENSIONS

Thickness: 6-50 mm Diameters: 15-114 mm Length: 2000mm Other dimensions available on request





Rotoli elastomero Elastomer TC

STANDARD DIMENSIONS Thickness: 6-50 mm Length: 1000mm Other dimensions available on request





Isopipe Elastomer HT-HF

STANDARD DIMENSIONS

Thickness: 6-50 mm Tube diameter: 15-114 mm Length of roll: 1000 mm Tube length: 2000mm Other dimensions available on request

ADVANTAGES

• Working temperature from -50° to +150°



Products in **ELASTOMER**



Isopipe

Elastomer solar covering

STANDARD DIMENSIONS

Thickness: 6-50 mm Tube diameter: 15-114 mm Length: 2000mm Other dimensions available on request **ADVANTAGES**

- Strong external protective film from -40° to +80°
- Excellent strength against atmospheric agents





Isopipe Elastomer HP covering

STANDARD DIMENSIONS

Thickness: 6-50 mm Tube diameter: 15-114 mm Length of roll: 1000 mm Tube length: 2000mm Other dimensions available on request

ADVANTAGES

- Working temperature from -40° to +110°
- External coating in aluminium 60m
- Coating temperature in aluminium from -35° to +120°







Isopipe Elastomero uv plus covering

STANDARD DIMENSIONS

Thickness: 6-50 mm Tube diameter: 15-114 mm Length of roll: 1000 mm Tube length: 2000mm Other dimensions available on request

ADVANTAGES

- Working temperature from -40° to +110°
- External coating in aluminium 99m
- Coating temperature in aluminium from -40° to +100°



Isopipe Elastomero heavy duty covering

STANDARD DIMENSIONS

Thickness: 6-50 mm Tube diameter: 15-114 mm Length of roll: 1000 mm Tube length: 2000mm Other dimensions available on request

ADVANTAGES

- Working temperature from -40° to +110°
- External coating in aluminium 230m
- Coating temperature in aluminium from -25° to +75°



Products in **ELASTOMER**

	-			
U				
				-

TEKNOSOUND

Specific product for acoustic insulation



Industrial

Hvac

The **solution** to the problem of **noise**

TEKNOSOUND was developed to offer **high performance solutions** to the problems of solid or air-transmitted noise, thanks to the high performance of acoustic damping and absorption of the highest level in only **12 mm thick**.

TeknoSound is a **two-component pre-coupled product**, consisting of a 10 mm elastomer layer combined with a 2 mm thick layer of high-intensity mass and weight of 4 kg/m².

Resists **extreme temperatures** and sudden temperature changes without losing efficiency (-40/+110 °C). The product is supplied at a height of 1 m and is available both in a **standard version** and with **adhesive**.





Fields of use

TEKNOSOUND is an extremely versatile and flexible product, easy to work with and apply. Ideally used in 4 main applications, mainly in the residential sector but also industrial:



Insulation of walls, applied in cavities

(vertical flat surfaces, the version with adhesive is often used)

Insulation of water drainage towers and tubing in general

(circular ducts and 90° elbows)



Insulation and damping of vibrations in ventilation ducts

(rectangular ducts and T connections)



(horizontal flat surfaces, ceiling plenums)









Industrial



Passive fire protection



Products in CERAMIC FIBRE

Ceramic fibre is a high performance material, known for its **resistance to extreme temperatures** and its thermal and acoustic insulation capacity.

Composed of thin filaments of ceramic material, it is mainly used in **industrial applications** where effective insulation is required in high temperature environments, such as in the glass, metalworking, energy and plant engineering industries.

Thanks to its **resistance to fire and its lightness**, ceramic fibre is particularly appreciated where high thermal protection performance is required and contributes to the **durability and safety of components**.

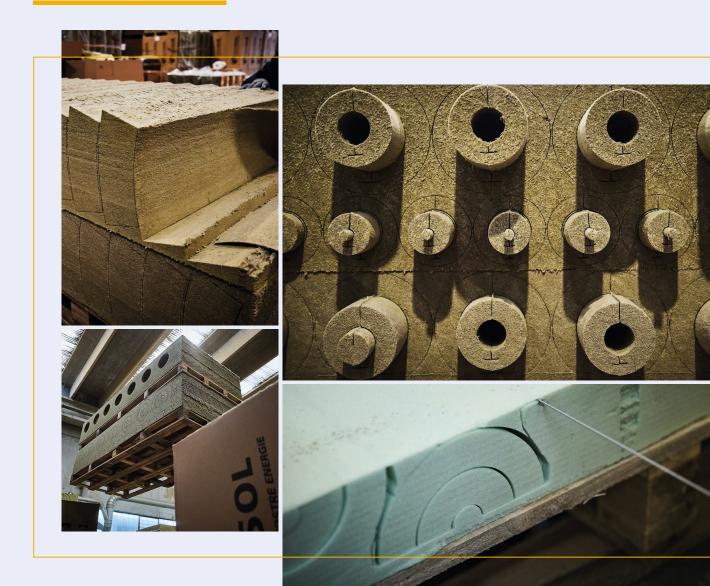


Tekno-Ceramics Mats or rolls

STANDARD DIMENSIONS Thickness: 13-50 mm Other dimensions available on request



Various production phases some Teknisol insulating solutions



Products in **CERAMIC FIBRE**

TEKNO-FIRE

Specific product for passive fire protection





Industrial

Passive fire protection

TEKNO-FIRE is a fire protection mat made with an external coating in **non-combustible** glass fibre fabric.

It contains two layers of high temperature biosoluble ceramic fibre, all sewn with thread on the long sides of the mat.

Advantages

- Standard dimensions for pipes and channels;
- Maximum adaptation flexibility;
- Cannot be altered over time;
- Easy installation and replacement of parts;
- Reduced management and maintenance costs;
- Monitoring of product without system stop;
- On request, it can be created in any format, for off standard needs.



FIRE RESISTANCE CLASS: EI 120



Fields of use

TEKNO-FIRE can be used to protect against fire and heat in:

- horizontal service ducts and/or vertical generic ducts
- inspection hatches in steel sheet metal (600 X 450 mm)
- on electrical duct protection channels
- water pipes
- •gas tubes
- compartments or protections produced requiring El 120 characteristics

Coating

White glass fibre fabric (internal part); 400 g/m³ aluminium-coated glass fibre fabric (outer part).

Internal material

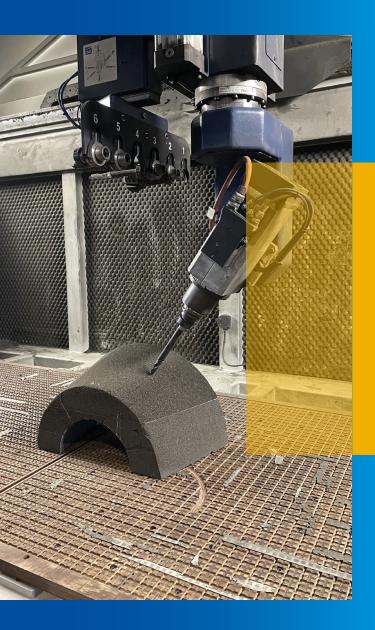
Bio-soluble fibre felt, non-combustible 100 kg/m³.

Supply format

Length 7.30 m x width 0.67 m

On request, you can have mats already cut to size, sewn on all 4 sides (tailor-made kit).







Industrial



3D Preforms

This processing method allows creation of all types of **shaped preforms** based on customer requirements. Thanks to this technology, we can create special pieces in the Insulation sector, such as:

- Moulded elbows
- Curved bases
- Concentric and eccentric reductions
- Reductions
- Valve and Flange boxes



Workable materials:



We can create moulds or special pieces on request or using dwg and iges files provided by the customer.

Strengths

The strength of production created using an innovative pantograph is its versatility, since we can work in several sectors to develop profiles and moulds for:



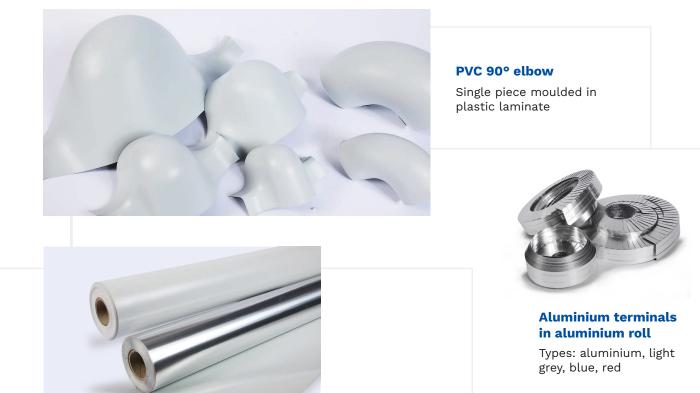
Accessories



Teknisol offers a wide range of complementary accessories to ensure efficient and quality installation.

From tapes to elbows, sheets to adhesives, fixture systems to mesh and screws, each solution is designed to **optimise the installation** and performance of Teknisol solutions, ensuring durability and reliability.

Thanks to innovative products and high quality materials, **we support installation professionals** with practical and efficient solutions for every need.



PVC sheet

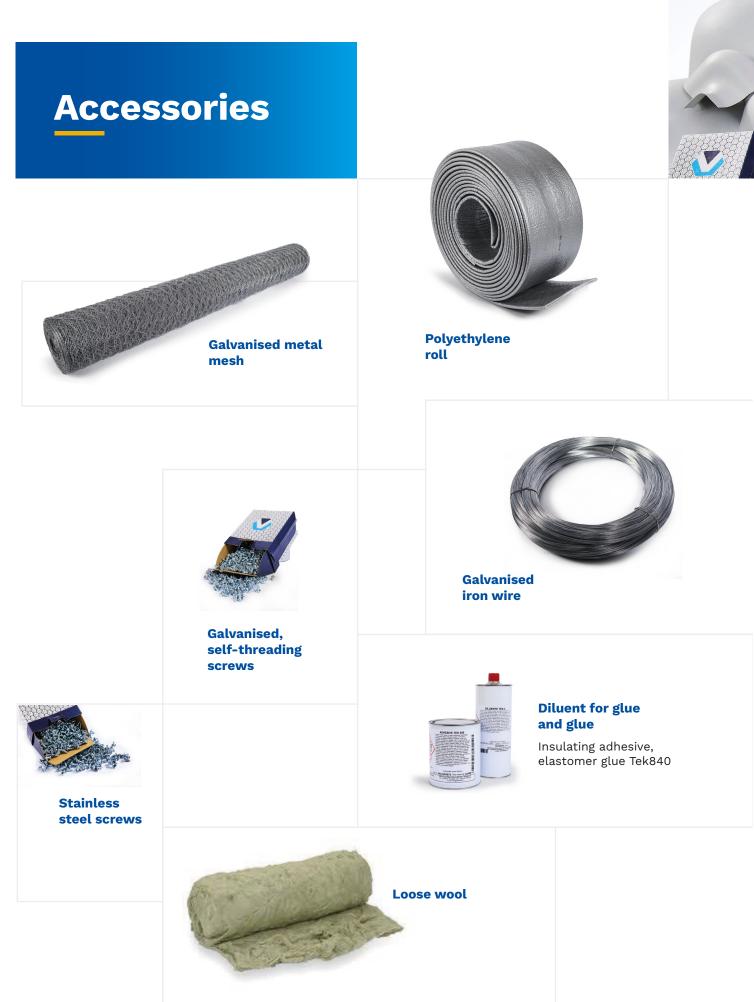
Self-wrapping rigid PVC sheet

ISOGENPAK + ALUTEK sheet

With or without adhesive ISOGENPAK



To fix sheets and elbows in PVC and ALUTEK







Joint cover adhesive tape in PVC Black or grey



Joint cover adhesive tape in black aluminium

Pure 30 aluminium



Joint cover adhesive tape in smooth aluminium

Pure aluminium





Anti-condensate adhesive tape in elastomer

Self-extinguishing in Class 1



Vinyl strips

Colours; white, blue, light grey, black, red, green



PRODUCTS		IN ROCKWOOL	GLASS WOOL	EPS
	COVERS	S		⊘
O CO	TEES	S		
-0	ELBOWS	S		~
	SECTIONS	S		<
(a;)	SPECIAL PRODUCTS	S		\bigcirc
	MATS	S		
	PANELS	S	S	
	FELT	O	S	
	ROLLS			
	TUBES			
	IUBES			

FIELDS OF APPLICATION		ROCKWOOL	FIBREGLASS	EPS
	INDUSTRIAL	⊘	⊘	⊘
(fæ)	HVAC	O	S	
	MARITIME	O		
Eð	FIRE PROTECTION			

MATERIALI ISOLANTI

POLYURETHANE	PHENOLIC RESINS	XPS STYROFOAM	CELLULAR GLASS	ELASTOMER	CERAMIC FIBRE				
S	<	⊘	\bigcirc						
S	S	S	S						
⊘	S	S							
0	•	S							
0	S	S							
					\bigcirc				
				\bigcirc					
				O					

POLYURETHANE	PHENOLIC RESINS	XPS STYROFOAM	CELLULAR GLASS	ELASTOMER	CERAMIC FIBRE
⊘	<	⊘	<	⊘	\bigcirc
				Ø	
					
					S

TEKNISOL



TEKNISOL srl

via 1º Maggio, 38/38A 20028 San Vittore Olona Milano – Italia

Tel: +39 0331 514605 Fax: +39 0331 519224 info@teknisol.it

www.teknisol.it



www.teknisol.it

