



SUPREME™ FLEX

A PREMIUM LINE OF
CROSS-LINKED CLOSED
CELL INSULATION

www.rockal.org

ROCKAL SUPREME FLEX

you invest in a product that embodies durability, performance, and environmental responsibility.

ROCKAL
FOAM
FLEX
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ABOUT ROCKAL

Leading the Way in Insulation Solutions Since 1997

Rockal has been a trusted name in the insulation industry since its establishment in 1997. We specialize in the production of a wide range of high-quality insulation materials designed to meet the needs of modern construction and industrial applications. Our product range includes:

1997

Rockal has been a trusted name in the insulation industry since its establishment in 1997.

1998 – 2005

Rockal began production in 1998 with an annual output of 1500 tons of stone wool. By 2005, the production capacity had increased to 5000 tons per year. The company expanded to include stone wool slabs and pipes, offering superior thermal and acoustic insulation, with a focus on safety, sustainability, and meeting diverse market needs.



Stonewool:

Providing exceptional fire resistance, thermal insulation, and soundproofing.

Mineral-Wool:

Versatile insulation with excellent thermal and acoustic properties.

Waterproofing Membranes:

Durable solutions for protecting buildings from water infiltration.

XPS Foam:

High-performance insulation for energy-efficient buildings.

Cementation Insulation:

Ideal for improving thermal performance in challenging environments.

HVAC Accessories:

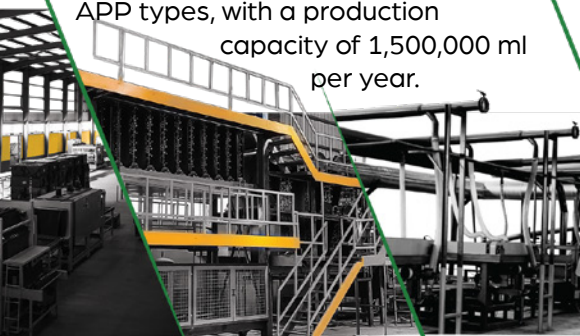
Essential products designed to enhance the efficiency and longevity of HVAC systems.

Since 2012, Rockal has expanded its reach internationally, exporting products to various global markets. Our commitment to quality and sustainability ensures that every product we manufacture is designed to help create energy-efficient, safe, and sustainable structures. We are proud to introduce our latest innovation, Cross-Linked Closed cell insulation, which offers

superior thermal insulation and increased durability. As always, all Rockal products are manufactured in-house, ensuring consistent quality and performance across our entire product range. At Rockal, we are dedicated to shaping a more sustainable future through innovative insulation solutions that provide long-lasting value to our customers worldwide.

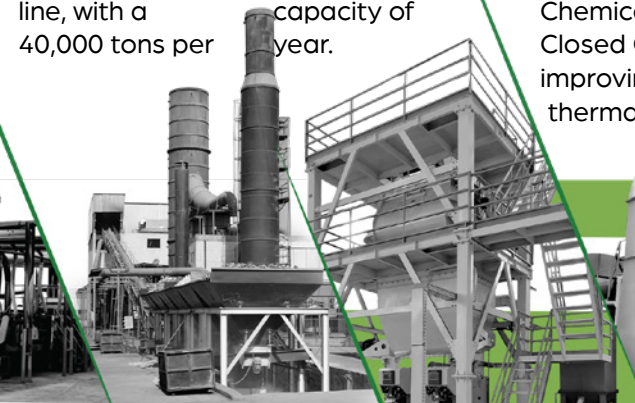
2020

Rockal introduced Bituminous Modified Membranes for enhanced waterproofing, including SBS and APP types, with a production capacity of 1,500,000 ml per year.



2022

Rockal upgraded its Stone Wool line, with a capacity of 40,000 tons per year.



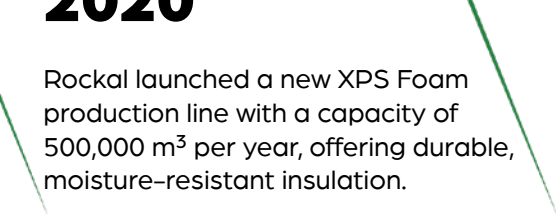
2025

Rockal adds a new line for Chemically Cross-Linked, Closed Cell Insulation, improving durability and thermal efficiency.



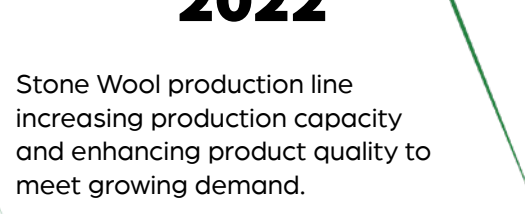
2020

Rockal launched a new XPS Foam production line with a capacity of 500,000 m³ per year, offering durable, moisture-resistant insulation.



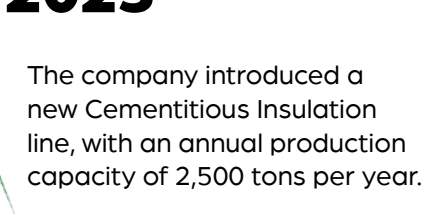
2022

Stone Wool production line increasing production capacity and enhancing product quality to meet growing demand.



2023

The company introduced a new Cementitious Insulation line, with an annual production capacity of 2,500 tons per year.



Leading the Way in Insulation Solutions Since 1997

2010: Rockal became the exclusive agent for major global insulation brands, boosting market share and beginning exports to 5 countries. The company also expanded its workforce to over 100 employees.

2015: Rockal expanded exports to 10 countries and began participating in international exhibitions like BIG5.

2017: A major milestone as Rockal transitioned to manufacturing locally after years of trading and importing insulation and HVAC accessories. The company started Research & Development for locally produced items such as Flexible Ducts, Duct Connectors, Stick-Up Pins, Anchor Pins, Insulation Adhesives, and Sealants.



Introduction

Introducing ROCKAL Supreme Flex, a premium line of cross-linked closed cell Insulation designed to meet diverse insulation and cushioning needs with exceptional performance and value. ROCKAL Supreme Flex is a versatile material with a closed-cell structure, offering outstanding thermal insulation, moisture resistance, and shock absorption. Widely used in industries such as construction, packaging, and automotive, it ensures reliable protection and energy efficiency.

ROCKAL Supreme Flex elevates these qualities by delivering superior insulation efficiency at a competitive cost, making it an ideal solution for both commercial and industrial needs. Reflecting ROCKAL's dedication to sustainability, this product line incorporates recycled materials into its production, reducing waste and environmental impact. By choosing ROCKAL Supreme Flex, you invest in a product that embodies durability, performance, and environmental responsibility.

Product overview

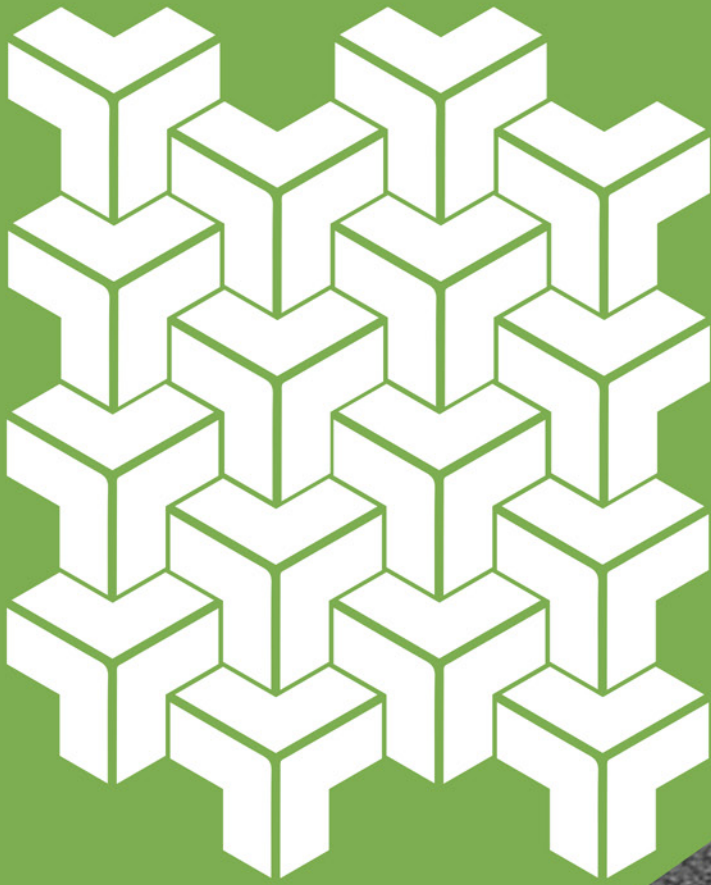
ROCKAL Supreme Flex is a high-performance material with a unique closed-cell structure, created by chemically or physically crosslinking molecules. This process enhances its physical properties, making it incredibly durable, flexible, and resistant to compression, tearing, and environmental factors such as moisture and UV radiation.

Due to its exceptional thermal insulation, soundproofing, and shock-absorbing qualities, ROCKAL Supreme Flex Insulation has become a preferred choice in industries ranging from construction and HVAC systems to automotive, sports equipment, and protective packaging. The material's lightweight nature, combined with its ability to maintain integrity under stress, ensures dependable performance across diverse applications.

Research and Development

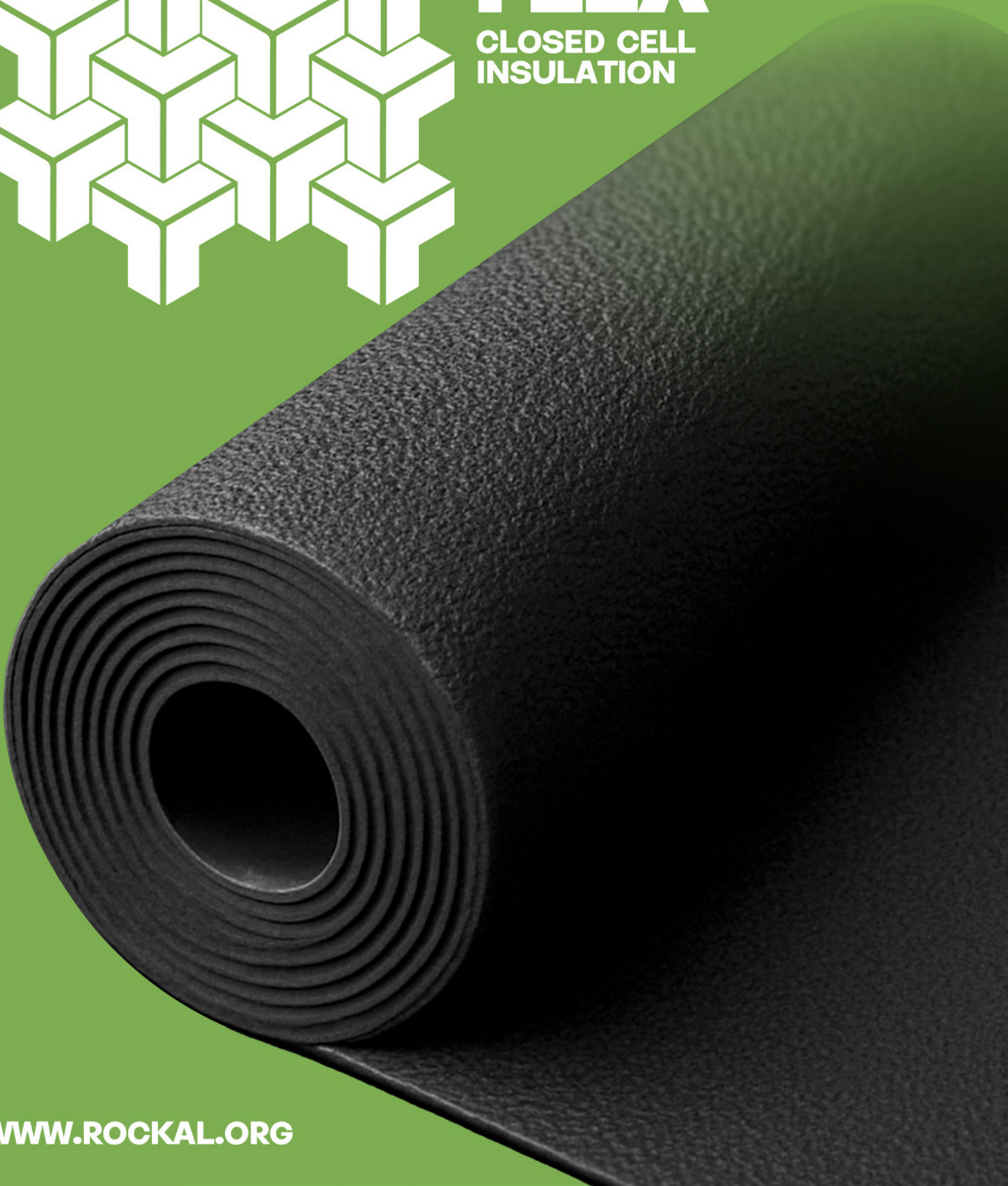
At Rockal, continuous Research and Development (R&D) is at the core of our commitment to innovation and excellence. With ROCKAL Supreme Flex, we aim to further elevate the performance of our products by integrating cutting-edge technologies and materials. Our R&D team consistently works on refining the cross-linking process, exploring new ways to improve the material's flexibility, thermal efficiency, and overall sustainability.

We are dedicated to staying ahead of industry trends and meeting the evolving needs of our clients. Through ongoing testing and optimization, ROCKAL Supreme Flex remains a top choice, offering unmatched versatility and performance for various applications. This focus on innovation ensures that our products not only meet but exceed the expectations of industries worldwide, ensuring long-term value and reliability for all our customers.



SUPREME FLEX

**CLOSED CELL
INSULATION**



SUPREME FLEX PIPE



ROCKAL Supreme Flex in HVAC

Thermal insulation is essential in the HVAC industry to ensure energy efficiency, minimize heat loss or gain, and maintain optimal indoor temperatures.

By reducing energy consumption and preventing condensation, effective insulation not only enhances system performance but also extends the lifespan of HVAC components. ROCKAL, a market leader in HVAC thermal insulation, has set industry benchmarks with its innovative products, including ROCKAL Rock Wool and ROCKAL Supreme Fiber, both renowned for their reliability and superior thermal and acoustic insulation properties. Building on this legacy, ROCKAL Supreme Flex, our cross linked solution, offers a lightweight, durable, and moisture-resistant alternative tailored to the unique demands of HVAC systems. Its closed-cell structure ensures exceptional thermal efficiency while simplifying installation, making it a versatile addition to our comprehensive insulation portfolio. Below are some detailed use cases where ROCKAL Supreme Flex insulation products excel:

ROCKAL Supreme Flex sheets can be used to insulate air ducts to minimize heat loss or gain during air distribution. It maintains consistent air temperatures and increases system efficiency. The sheets also prevent condensation on duct surfaces, avoiding mold and mildew growth.

ROCKAL Supreme Flex pipes are applied to insulate HVAC piping, including chilled water lines, hot water pipes, and refrigerant lines. Similar to the benefits of insulating ducts, Supreme Flex Pipes Prevent heat loss in hot water pipes and heat gain in chilled water pipes. Additionally, they Reduce condensation, especially in chilled water systems, ensuring system longevity. Provides protection against freezing in colder environments.

ROCKAL Supreme Flex sheets are installed inside AHUs and other equipment to reduce noise transmission and vibrations. When installed on outdoor equipment and ducts, they protect against weathering agents and increase the lifespan of equipment along with their insulation qualities.

SUPREME FLEX ROLL



PRODUCT TYPES

ROCKAL Supreme Flex is available in multiple forms

Supreme Flex Pipe: chemically cross-linked, closed cell Insulation in pipe sleeve form. Can be covered with Aluminum sheet or Polyethylene film. Available with a self adhesive version
Available thicknesses (10,12,20,25,40,50) mm..
Dimensions: Pipe sleeve length is 2000 mm and the internal diameter ranges from 6 mm to 711 mm (28")

Supreme Flex roll: chemically cross-linked, closed cell Insulation in sheet/roll form. Can be covered with Aluminum sheet or Polyethylene film. Available with a self adhesive version.
Available thicknesses (3,5,10,12,15,20,25,30,35,40,50) mm.
Dimensions: Roll width is 1000mm or 1500 mm and Length changes based on thickness for loadability.

Technical Specification

CHARACTERISTIC	STANDARD	SUPREME FLEX VALUE
Density (Kg/m ³)	ASTM D 3575	28-30
Thermal Conductivity (W/mk)	ASTM D 3575	0.032 : 0.039
Operation temperature range (°C)		-80 : 110
Fire rating	ASTM E 84	FSI <25, SDI <50
	EN 13501	Tubes: Euroclass BL-s2, d0 Sheets: Euroclass B-s3, d0
	BS 476 Part 6&7	Class 0
Compressive strength at 10% compression (KPa)	ASTM D 3575	24
Water absorption after 28 days (%vol)	ASTM D 3575	0-2%
Water vapor diffusion factor (μ-value)	ASTM E 96/E96M	65000
Corrosion prevention	EN 13468	PH Neutral (7)
Leachable Ions	ASTM C 871	Very low
Resistance to Fungi	ASTM G21	Fully resistant
Resistance to Bacteria	ISO 22196	Fully resistant

SUPREME FLEX TAPE



Supreme Flex Tape is a flexible, self-adhesive closed cell insulation tape designed to seal the joints of Rockal Supreme Flex Insulation in HVAC systems. By providing a secure, continuous barrier over seams, it prevents condensation and vapor penetration, ensuring the insulation system remains airtight and thermally efficient. Its conformable structure allows it to adapt easily to bends and irregular surfaces, making it ideal for achieving a clean, professional finish and long-lasting protection against moisture intrusion.

Technical Data

PROPERTY	VALUE
Color	Dark grey, black
Thickness	3 mm
Width	25 mm, 30 mm
Length	9 meters
Application Temperature	10°C to 40°C

Supreme Flex Glue

Rockal Supreme Glue is a premium-grade solvent-based adhesive specially formulated for bonding cross-linked closed-cell polyethylene (XLPE) insulation. Designed to ensure a strong, durable, and uniform bond, it is the recommended adhesive for Rockal Supreme Flex insulation and is also suitable for use with a wide range of closed-cell insulation products.

The adhesive offers quick tack, excellent spreadability, and long-lasting adhesion even under demanding service conditions.

Technical Data

PROPERTY	VALUE
Appearance	Yellow
Base	solvent-based
Application method	Brush, roller
Density	0.87 g/cm ³
Tack time (open time)	5–10 minutes
Full cure time	3 days
Viscosity	680 mPa.s
Solid Content	21%
Service temperature range	-30 °C to +105 °C
size	0.25L - 4L



SUPREME FLEX

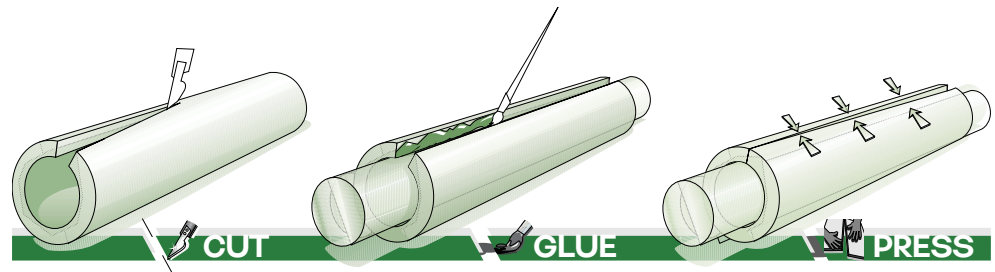
CLOSED CELL INSULATION

Installation

ROCKAL SUPREME FLEX INSTALLATION GUIDE

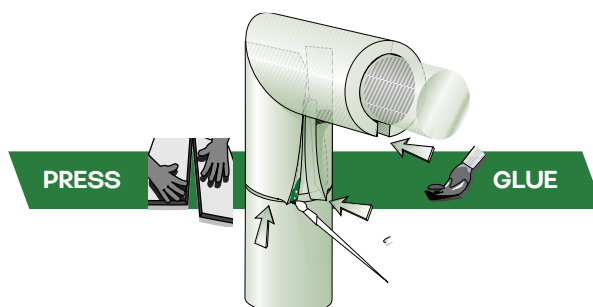
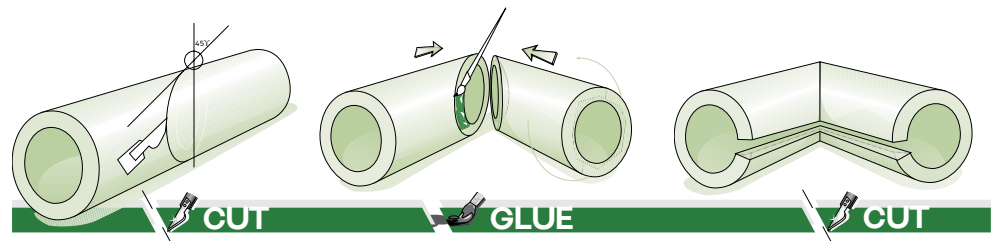
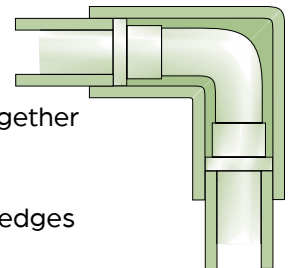
Installing Sleeves on Pipes

- When installing sleeves on new pipes: The sleeves are fitted while leaving the necessary spaces for welding or testing.
- When installing sleeves on existing pipes
 1. Cut the insulating sleeve lengthwise.
 2. A sharp knife should be used to ensure a clean and smooth cut.
 3. Evenly apply adhesive to the cut edges.
 4. Wait for the adhesive to dry, then press the edges together to ensure strong adhesion.



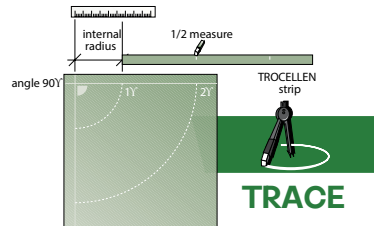
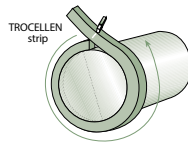
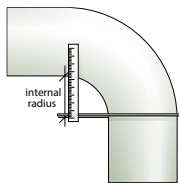
Insulating Right-Angled Joints

1. Cut a sleeve at 45 degrees.
2. Rotate one section and glue the diagonal ends together to form a right angle.
3. Cut the inner part of the joint sleeve lengthwise.
4. Cover the elbow joint with the sleeve, glue the cut edges together, press to bond.

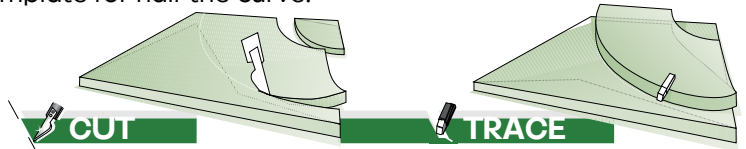
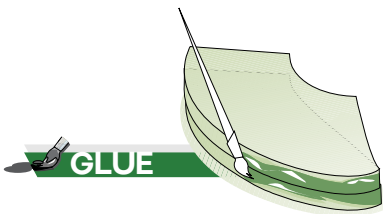


Insulating Curved Sections

- Trace the geometric shape of the curve onto a sheet:
 - Use a metal ruler to calculate the internal radius of the curve.
 - Use a measure tape to measure the pipe's circumference, mark half the measurement on the sheet as the outer radius of the curve.

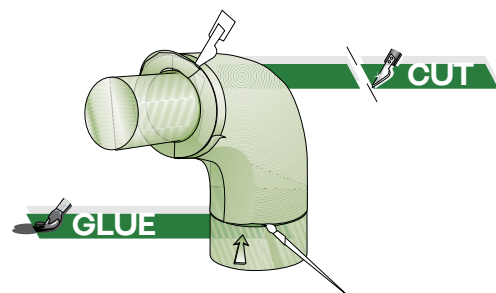
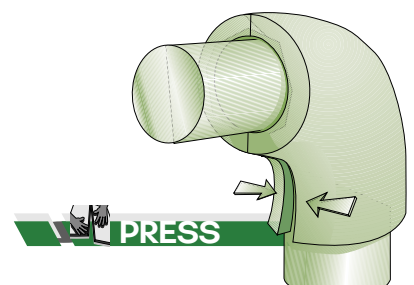
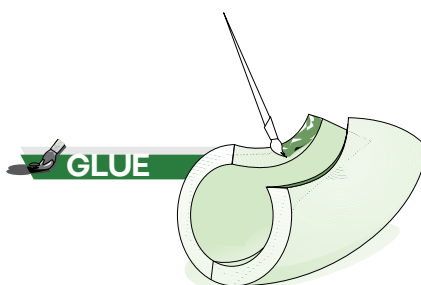


- Cut along the marked lines to create a template for half the curve. Use it as a template for other sections.



- Lay one section over the other and apply adhesive to the longer edges.

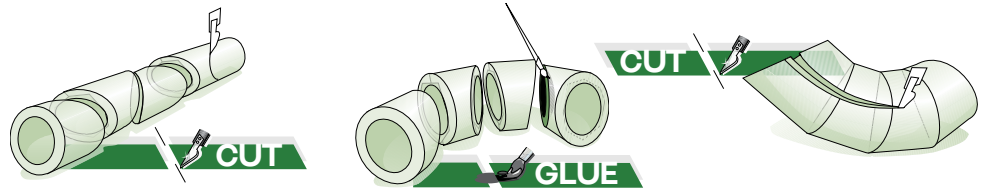
- Once the adhesive is dry, join the longer edges, ensuring a perfect bond.
- Apply adhesive to the shorter edges.
- Fit the insulating material onto the curved section and press the inner cut edges together firmly.



- Use metal tape as a guide to cut the exposed ends at a right angle for connection with other sleeves.

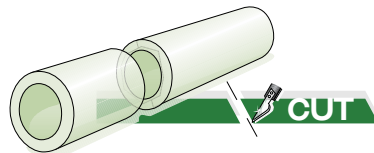
Alternative Methods for Insulating Curved Sections

- Cut a sleeve into multiple segments (three or four) making the cuts at a constant angle. However, Alternate the direction of cutting, making each section have a long and short edge.
- Rotate sections such that all short edges are on the same side. Fit the sections together and attach them using adhesive.
- Cut the curved section lengthwise to fit on the pipe.



Insulating "T" Joints

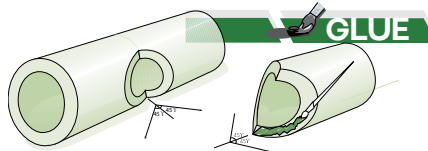
45° Cut Method



1. Divide the sleeve into two sections, one being 1/3 of the total length and the other 2/3.

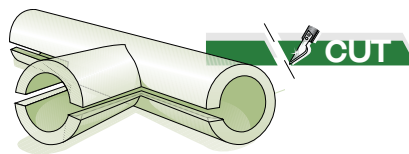


2. Make two 45° cuts in the longer section at the center.

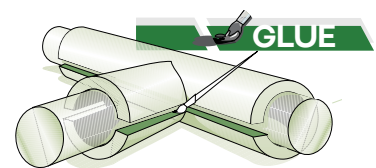


3. Make two 45° cuts at the end of the shorter section.

4. Join and glue the cut edges to form a "T" joint.

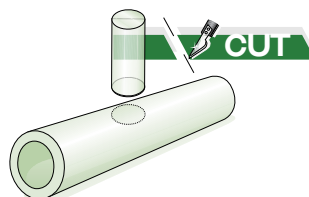


5. Cut the T joint lengthwise and apply glue.



6. Install on the pipe and join the cut surfaces together.

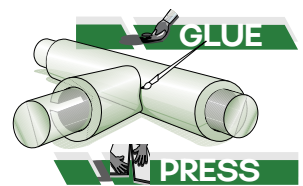
Circular Hole Method



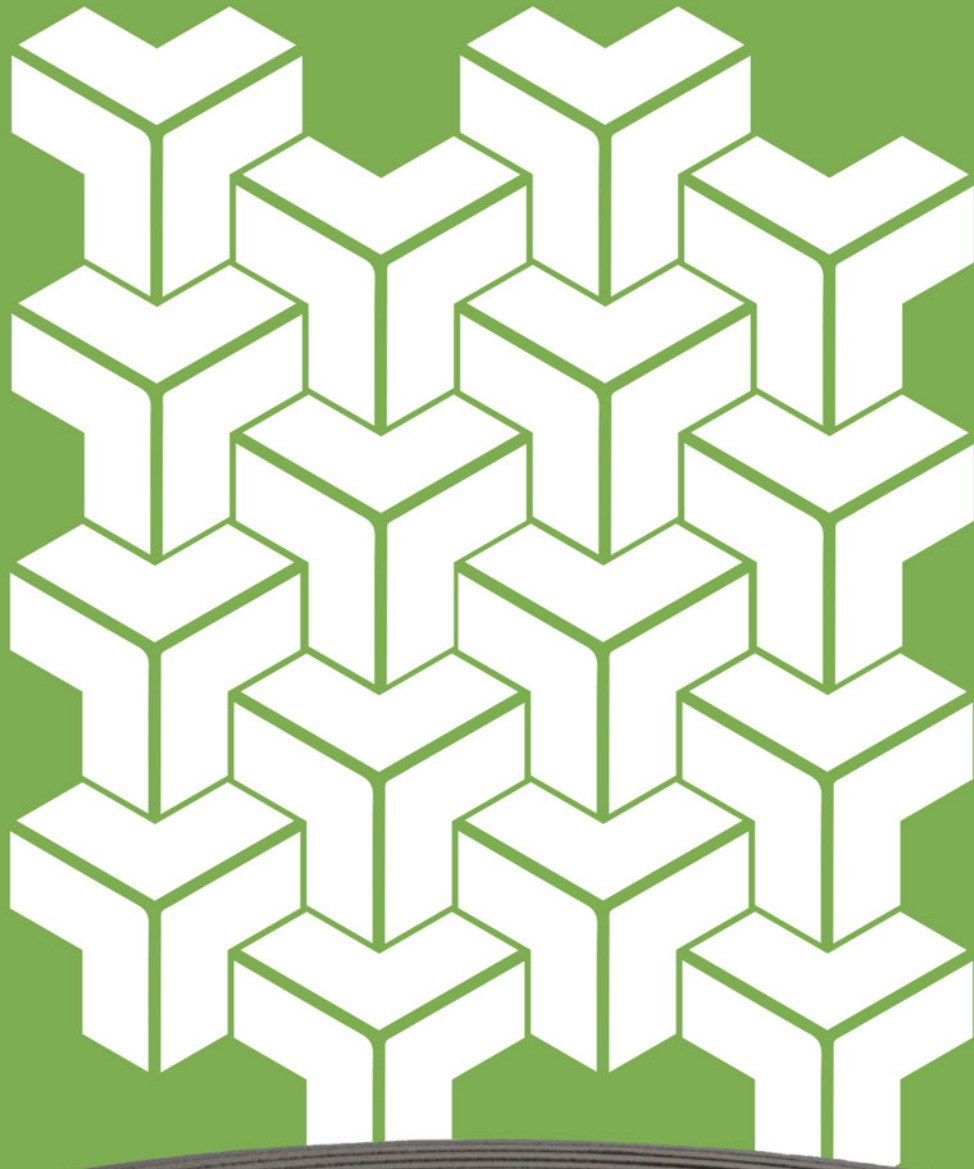
1. Punch a hole in the insulating sleeve the same size of the pipe.



2. Shape the end of another sleeve to fit into the hole.



3. Press and glue the parts together firmly.



SUPREME FLEX

CLOSED CELL INSULATION

Availability

Supreme Flex Pipes Available Dimensions

Inner Diameter	Thickness						
	MM	10 MM (3/8")	12 MM (1/2")	20 MM (3/4")	25 MM (1")	40 MM (1-1/2")	50 MM (2")
1/4"	6	10x06	12x06	20x06	25x06	40x06	
3/8"	9	10x09	12x09	20x09	25x09	40x09	
1/2"	12	10x12	12x12	20x12	25x12	40x12	50x12
	13	10x13	12x13	20x13	25x13	40x13	50x13
5/8"	16	10x16	12x16	20x16	25x16	40x16	50x16
	19	10x19	12x19	20x19	25x19	40x19	50x19
3/4"	20	10x20	12x20	20x20	25x20	40x20	50x20
	21	10x21	12x21	20x21	25x21	40x21	50x21
7/8"	22	10x22	12x22	20x22	25x22	40x22	50x22
1"	25	10x25	12x25	20x25	25x25	40x25	50x25
	27	10x27	12x27	20x27	25x27	40x27	50x27
1-1/8"	28	10x28	12x28	20x28	25x28	40x28	50x28
1-1/4"	32	10x32	12x32	20x32	25x32	40x32	50x32
1-1/3"	33	10x33	12x33	20x33	25x33	40x33	50x33
1-3/8"	35	10x35	12x35	20x35	25x35	40x35	50x35
	38	10x38	12x38	20x38	25x38	40x38	50x38
1-1/2"	40	10x40	12x40	20x40	25x40	40x40	50x40
	42	10x42	12x42	20x42	25x42	40x42	50x42
1-2/3"	43	10x43	12x43	20x43	25x43	40x43	50x43
	48	10x48	12x48	20x48	25x48	40x48	50x48
2"	50	10x50	12x50	20x50	25x50	40x50	50x50
2-1/8"	54	10x54	12x54	20x54	25x54	40x54	50x54
2-1/3"	60	10x60	12x60	20x60	25x60	40x60	50x60
2-1/2"	63	10x63	12x63	20x63	25x63	40x63	50x63
	65	10x65	12x65	20x65	25x65	40x65	50x65
3"	75	10x75	12x75	20x75	25x75	40x75	50x75
	76	10x76	12x76	20x76	25x76	40x76	50x76
	77	10x77	12x77	20x77	25x77	40x77	50x77
	80	10x80	12x80	20x80	25x80	40x80	50x80
3-1/2"	90	10x90	12x90	20x90	25x90	40x90	50x90
4"	102	10x102	12x102	20x102	25x102	40x102	50x102
4-1/3"	110	10x110	12x110	20x110	25x110	40x110	50x110
4-1/2"	115	10x115	12x115	20x115	25x115	40x115	50x115
5"	125	10x125	12x125	20x125	25x125	40x125	50x125
	140			20x140	25x140	40x140	50x140
	160			20x160	25x160	40x160	50x160
6-1/2"	166			20x166	25x166	40x166	50x166
	168			20x168	25x168	40x168	50x168
8"	200			20x200	25x200	40x200	50x200
8-3/4"	220			20x220	25x220	40x220	50x220
11"	273			20x273	25x273	40x273	50x273
12"	300			20x300	25x300	40x300	50x300
13"	323			20x323	25x323	40x323	50x323
14"	356			20x356	25x356	40x356	50x356
16"	406			20x406	25x406	40x406	50x406
18"	457			20x457	25x457	40x457	50x457
23-5/8"	600			20x600	25x600	40x600	50x600
24"	609			20x609	25x609	40x609	50x609
28"	711			20x711	25x711	40x711	50x711

ROCKAL SUPREME FLEX

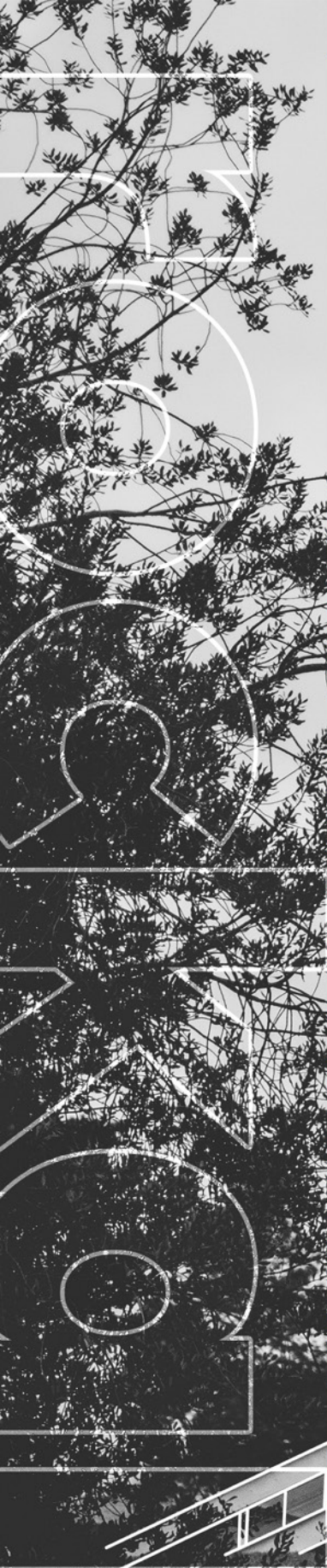
Supreme Flex Sheets Available Dimensions

THICKNESS		SIZE	SURFACE Area	TYPE
INCH	MM			
1/8"	3	1.2m x 20m	24m ²	Roll
1/4"	5	1.2m x 20m	24m ²	Roll
3/8"	10	1.2m x 20m	24m ²	Roll
1/2"	12	1.2m x 20m	24m ²	Roll
5/8"	15	1.2m x 20m	24m ²	Roll
3/4"	20	1.2m x 20m	24m ²	Roll
1"	25	1.2m x 2.4m	2.88m ²	Sheet
1-1/6"	30	1.2m x 2.4m	2.88m ²	Sheet
1-3/8"	35	1.2m x 2.4m	2.88m ²	Sheet
1-1/2"	40	1.2m x 2.4m	2.88m ²	Sheet
2"	50	1.2m x 2.4m	2.88m ²	Sheet

Tubes tolerance

PARAMETER	SPECIFICATION	TOLERANCE
Inner Diameter (ID)	6-50 mm	-1 mm, +1.5 mm
	54-160 mm	-1.5 mm, +2.5 mm
	>= 160 mm	-2 mm, +3.5 mm
Thickness	<= 10-25 mm	± 1.5 mm
	30-50 mm	-2 mm, +3.5 mm
Length		±20 mm

Product thickness	Roll and sheet Tolerances		
	Thickness	Length	Width
< 25 mm	± 1.5 mm	±20 mm (sheets)	±20 mm
>= 25 mm	-2 mm, +3.5 mm	±50 mm (rolls)	



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