



General catalogue



TTM - Thermo Tecno Management

As one of the European market leaders in the production and distribution of technical insulating sheets, technical adhesive tapes and aluminum end caps, we aggregate a professional production backed by high-level consultancy, Innovation and know-how leading to a higher satisfaction for our customers.









We are a family owned business based in Alto Adige-Südtirol which is steadily increasing since 40 years. Our products and our service allow us to have customers throughout Europe, Russia and the USA.





TTM is a bridge that connects the manufacturers of materials for technical insulation and the industry. The company not only sales insulations products, but also plays a role of the consultant, who can understand the requirements of each individual project and proposes/provides the most suitable products in order to solve all the relevant issues.



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Jacketing in PVC Isolpak

Isolpak is a special rigid PVC jacketing film for insulated piping. This plastic sheet ensures a clean installation. Its application is easy and fast due to the curl (recoil) effect.

For jacketing of insulated pipes. A dry, clean fitting is guaranteed.

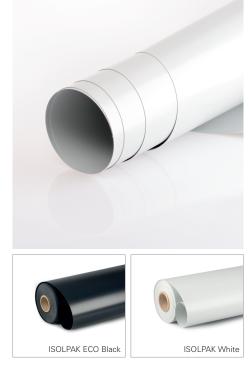
The inherent curl makes it the ideal material for quick and easy covering.

Isolpak is self-extinguishing and has considerable resistance to acids, alkalis, salts, oil, petrol, aliphatic hydrocarbons and corrosive atmospheres. In addition, the material cannot corrode and is virtually impermeable to water vapour. It is unaffected by fresh and salt water and is impervious to gases, grease and oil.

Isolpak is very light: one squaremetre, 0.350 mm thick, weighs only about 500 g. This low weight and ease of stacking facilitates transportation and storage.

Physiologically harmless, Isolpak has a light grey smooth surface which guarantees a long lasting elegant appearance. It requires no care or maintenance and also has very good antistatic characteristics.

The material has considerable resistance to temperature changes and is stable from -20°C up to +55°C in indoor use. The thermal conductivity $\,\lambda$ of Isolpak is 0.16 W/mK.



Normal protection Recyclable Great value for money



Material	temp. °C	resistance
Acetaldehyde up to 40%, acqueous	20	
Acetone, acqueous	20	0
Aldehyde, 100%	20	0
Aluminium salts	40	•
Ammonia, aqueous	40	•
Ammonia, gaseous	60	•
Benzene (pure aliphatic hydrocarbons)	60	•
Benzene-benzole mix (fuel)	20	
80/20% (carb.)		
Chlorine, gaseous (>1%), wet	20	
Chlorine, gaseous, dry	20	
Hydrogen chloride, dry	60	٠
Iron salts, diluted solutions	40	٠
Iron salts, saturated solutions	60	٠
Acetic acid, 25-60%	60	٠
Ethyl alcohol, solutions	40	٠
96%	60	
Glycerine	60	٠
Potassium hydroxide solution, 50%	60	•
Potassiferous salts	40	•

Material

Sodium chloride	40	0
Carbon monoxide, 100%, gaseous	60	•
Methyl alcohol, every conc.	40	•
Mineral oils	60	•
Sodium hydroxide, 60%, aqueous	60	•
Mercury	60	•
Nitric acid, diluted, acqueous 30-50%	50	•
Nitric acid, diluted, acqueous 50-65%	20	•
Nitric acid, diluted, acqueous 98%	20	0
Hydrochlorid acid, aqueous up to 30%	60	•
Hydrogen, gaseous	60	•
Sulphur dioxide, gaseous (wet)	40	•
Sulphur dioxide, gaseous (dry)	60	•
Sulphoric acid, 40-80%	60	•
Sulphoric acid, 80-90%	40	•
Sulphoric acid, 96%	20	0
Sulphoric acid, 96%, fuming	60	
Carbon tetrachloride	20	0
Hydrogen, gaseous	60	•

temp. °C resistance

resistant under certain conditions O non resistant resistant

PVC elbows

For the jacketing of the elbows and connections there are available special preformed bends and T-sections in many different sizes.

Our complete product range guarantees that the system looks complete and professional. Especially to ensure an easy and fast optimized application of the different accessories like: preformed bends, t-sections, Coroplast adhesive tape, aluminium end caps, special nails and glue. Every accessory is perfectly matching the original colour of Isolpak to guarantee a perfect optic.



,S and 3S-Standard in 90° and 45°, W bends with short radius and H bends with long radius - T/sections

Technical data for the Isolpak and the foil for the PVC preformed bends

Characteristic	Value	Unit	Measuring method
Moisture resistance factor μ	ca. 60.000		DIN 52615
Impact strength	400	kJ/m²	DIN EN ISO 8256
Tensile strength	>35	N/mm ²	DIN EN ISO 527
Elasticity modulus	ca. 1.800	N/mm ²	DIN EN ISO 527
Linear heat expansion coefficient	0,9 x 10-4	1/K	Leitz Dilatometro
Emissivity ε	97	%	ISO 10292-A

Standard range, other special dimensions on request

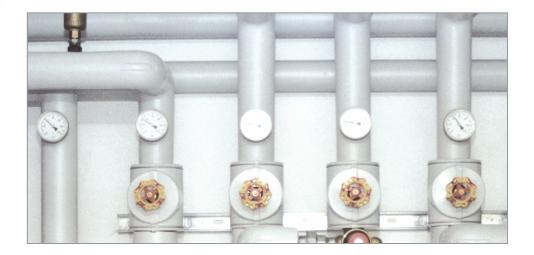
• ♦ = Available and on stock • = Available on request

Externa	External thickness Insulation thickness (mm)												
mm	Pipe diam.	10	15	20	25	30	40	50	60	70	80	90	100
12			•	•									
17	3/8		•	• •	• •	• •	• •	•					
21	1/2	•	•	• •	• •	• •	• •	• •					
27	3/4			• •	• •	• •	• •	• •					
34	1			• •	• •	• •	• •	• •	•	•	• •		•
43	1 1/4			• •	• •	• •	• •	• •	•	•	• •		
48	1 1/2			• •	• •	• •	• •	• •	•	•		•	•
60	2			• •	• •	• •	• •	• •	•	•	• •	•	•
70				• •	• •	• •	• •	• •	• •	•			
76	2 1/2			• •	• •	• •	• •	• •	• •	• •	• •	•	•
89	3			• •	• •	• •	• •	• •	• •	• •	• •	•	•
102				• •	• •	• •	• •	• •	• •	• •			•
108				• •	• •	• •	• •	• •	• •	• •			•
114	4			•	• •	• •	• •	• •	• •		•	•	
134					• •	• •	• •	• •	• •	• •			•
140	5				• •	• •	• •	• •		• •	•	•	•
159					• •	• •	• •	• •	• •	• •			•
168	6				• •	• •	• •	• •	• •	• •	•	•	•
194						• •	• •	• •	• •	• •			•
219					• •	• •	• •	•	•	•			
267					• •	• •		•	•				•
273	10				• •					•			
324	12				• •	• •		•					



Accessories for mounting

The program Isolpak is applicable to every kind of insulation. The metal or plastic pipes need to be insulated with the different insulation materials like glass or rock wool, polyurethane, EPS or elastomeric insulation.



First the insulation must be attached to the pipe without gaps. When using mineral wool sections, loose fill wool can be used to cover the bends and other shapes.

The insulation has to be affixed to the pipe consistently.

To attach the lsolpak jacketing we advise to start with the moulded pieces, e.g. bends and T-sections.

Allow an extra 20-30 mm for overlapping. Because of the curl effect Isolpak clings around the insulation pipe almost by itself. Isolpak is fixed along the longitudinal seams either by using plastic push-in rivets in distances of about 150mm or special solvent-based adhesive continuously along the seams.

Along the overlaps Coroplast 252 SE adhesive tape can be used.



Accessories

Terminali

For a neat finish of the Jacketing in PVC, ALU or Isolpak ALU there aluminum end caps in all different sizes available.



They are available in natural aluminum, Isolpak gray, red, blue and black for the distinction of outward conduct hot and cold return, and the other pipelines that carry fluids.

NEW: Also available as PVC end caps in Isolpak color, black, sand grey and white color.

Available dimensions							
Insulatio	n thickness	length	m/box	m/carton			
1/2″	15 mm	10 m	50 m	500 m			
3/4″ 1″	20 mm 25 mm	10 m 10 m	50 m 50 m	500 m 500 m			
1 1/4"	20 mm	10 m	50 m	500 m			
1 1/2"	40 mm	10 m	50 m	500 m			
2"	50 mm	10 m 10 m	50 m 50 m	500 m 500 m			
2 1/2" 3"	60 mm 70 mm	10 m	50 m 10 m	500 m 100 m			
3 1/4″	80 mm	10 m	10 m	100 m			
4″	100mm	10 m	10 m	100 m			



Terminali to complete the jacketing available in: aluminum, red, blue, black and grey Isolpak

1.4

Cutting unit

For cladding and jacketing foils in PVC, PE, PP, ALU





- compact and easy handling
- handhold for easy tranportation
- easy unwind the foil
- up to 20% faster
- NEW: with meter [up to 70cm]!
- fast moving sliding carriage on wheels
- suitable for lefties and righties
- no lubrification needed
- · perfectly straigth cut
- the centre blip for a fast exchange
- the precise position of the roll in the cutter unit guarantees perfect unwinding
- handle bar can be removed
- cutting thicknesses up to 0,42 mm
- strong but light aluminum frame
- simple removable high quality blades -Martor Solingen (D) easily replaceable
- up to 1000 cuts per side





Available sizes / tables				
for foils	length/width/height	weight*		
100 cm 120 cm 140 cm	127 x 22 x30 cm 147 x 22 x 30 cm 167 x 22 x 30 cm	11,5 kg 12,5 kg 13,5 kg		

Packaing: carton box (product unmounted) * weight of the table without foil



Coroplast Tape 252 SE

Coroplast Tape 301

plasticized PVC adhesive tape ideally for ISOLPAK cladding system

plasticized PVC adhesvie tpae [with VDE approval]





Applications, properties and advantages:

- DIN EN 60 454-3-1, F-PVC/105/A-Tx
- sealing tape for insulating foils (i.e..: ISOGENOPAK); and the construction of air conduits
- anti-corrosion tape for exposed pipes (with Coroplast Primer)
- anti-corrosion tape for internal lines
- can be applied easily even at low temperatures
- very good ageing properties
- · flame retardant and self-extinguishing
- resistant to a large extent to dilute acids and alkalis
- ductile film

Applications, properties and advantages:

- DIN EN 60 454-3-1, F-PVC/105/A-Tx TIPO 10
- for all normal insulating work, repairing of damaged insulation [rubber, PVC, PE, ...], taping of cable ends and branchings, stripping of armatures and coils, marking.
- bundling and binding of cable harnesses
- flame retardant and resistant to ageing in accordance with conditions of VDE 0340, part 1/5.75
- resistant to a large extent to dilute acids and alkalis.
- · resistant to motor vehicle operating fluids
- unchanged favourable material properties following application even with varying temperatures
- thanks to its high ductility can be applied without folds around all uneven surfaces

Technical data

backing material
adhesive
tape thickness
color
width
length
tensile strength
elongation at break
adhesion to steel
adhesive strength to backing
temperature resistance
water vapour permeability

acrylic 0,15 mm [±0,03mm] light grey 788 19, 25, 30, 38 and 50 25 and 33 25 N/cm 190 % 2,0 N/cm 2,2 N/cm -10 up to +105° C < 40 g/m² x 24 h

plasticized PVC film

Technical data

backing material
adhesive
tape thickness
color

width length tensile strength elongation at break adhesion to steel temperature resistance water vapour permeability plasticized PVC film acryllic 0,10 mm [±0,03mm] black, grey, white, blu, yellow, green, red. 19, 25, 30, 50 and 100 25 and 33m 20 N/cm 180 % 1,8 N/cm -10 up to +105° C < 40 g/m² x 24 h

Normal protection

1.5

TTM PVC Tape 352 FR

plasticized PVC adhesive tape ideally for ISOLPAK cladding system

TTM PVC Tape 701

plasticized PVC adhesvie tape



Applications, properties and advantages:

- sealing tape for insulating foils (i.e.: ISOLPAK, ISOGENOPAK); and the construction of air conduits
- with plastic side protection plates
 can be applied easily even at low temperatures
- very good ageing properties
- flame retardant
- resistant to a large extent to dilute acids and alkalis

plasticized PVC film

19, 25, 30, 38 and 50

rubber

0,13 mm

10. 25 m

20 N/cm

1,5 N/cm

2,6 N/cm

-12 up to +80 $^\circ$ C

< 50 g/m² x 24 h

200 %

light grey 788

• ductile film

Applications, properties and advantages:

- for all normal insulating work, repairing of damaged insulation [rubber, PVC, PE, ...], taping of cable ends and branchings, stripping of armatures and coils, marking.
- bundling and binding of cable harnesses
- flame retardant and resistant to ageing
- resistant to a large extent to dilute acids and alkalis
- unchanged favourable material properties following application even with varying temperatures
- thanks to its high ductility can be applied without folds around all uneven surfaces



Technical data

backing material
adhesive
tape thickness
color
width
length
tensile strength
elongation at break
adhesion to steel
adhesive strength to backing
temperature resistance
water vapour permeability

Technical data

backing material
adhesive
tape thickness
color
width
length
tensile strength
elongation at break
adhesion to steel
temperature resistance
water vapour permeability

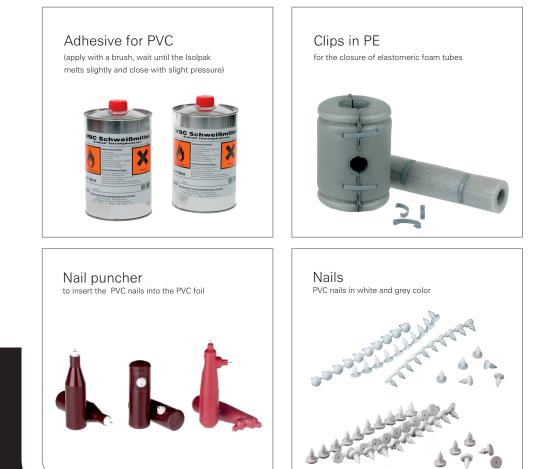
plasticized PVC film rubber 0,10 mm black, different colors 19, 25, 30, 38 and 50 10, 25 m 18 N/cm 190 % 1,5 N/cm -12 up to +80 ° C < 50 g/m² x 24 h

Fastening and mounting accessories

Wire - Adhesive - Nail puncher - PVC Nails



Galvanized wire to fastening of insulation.



Innovative Great value for money Accessories

1.7

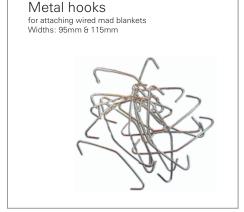
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Fastening and mounting accessories

Stapler - Adhesive - Nail puncher - PVC Nails



Stapler / Tacker for PVC plastic staples





Technical data / vinyl tape							
Description	U.m.	Value	DIN				
Thickness	mm	0,10	DIN 53370				
Weight per m ²	Gr/m²	115	DIN 53352				
Stabillity term. lo/tr	%	+-3%	DIN 16938				
Tensile strength .	N/mm²	19	UNI 3789				
Tensile strength h	N/mm²	16	UNI 3789				
Elongation a.b. long	%	200	UNI 37890				
Elongation a.b. tras	%	190	UNI 3789				
Resist. laceraz. Ion	N/m	50	ASTM 624				
Resist. laceraz. tra	N/m	47	ASTM 624				



Accessories

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Embossed aluminum

Embossed aluminum foil 99.5% for the jacketing of insulated pipes, easily instalable due to the curling effect. The embossing increases the mechanical strength of the foil.



The jacketing alternative to Isolpak PVC but with a greater fire protection. (i.e. emergency exits)

The wide range of special pieces such as bends, T-connections and boxes for valves allow a complete and easy installation.

Method of application:

Cut the required length of the foil on a special cutting unit. Wrap the insulated pipe, fix the joints with aluminum tape Coroplast or with special nails [with an applied magnetic drift]. The curves are available premolded in different sizes.



Preformed ALU bends

Limit of use:

- Maximum diameter of the pipe 500 mm
- Surface temperature 250 ° C
- Application with low internal mechanical stress

Also available in various thicknesses and widths without curl effect for industrial applications.

length	width	thickness
25 m	100 cm	0,20 mm
25 m	100 cm	0,10 mm
50 m	100 cm	0,05 mm
100 m	100 cm	0,20 mm
200 m	100 cm	0,10 mm
*other dimensio	n on request	





Isolpak ALU / ALU WHITE / BLACK

The innovation for outdoor applications

Isolpak ALU is an innovative insulation jacketing for outdoor use. Isolpak ALU is the consistent further development of PVC Isolpak the undisputed market leader in Italy of the plastic insulation covering. The meanwhile proven multi-layer construction provides unprecedented features in technology and efficiency.



The key success factors of Isogenopak and Isolpak like the easy installation and machine free handling were combined with new high technological foil and were further developed and improved to a economic alternative to current real metal jacketing systems.

ALUMINIUM OPTIC

Isolpak ALU combines the technical advantages of plastic and aluminum, but is an inexpensive alternative to real aluminum sheets.

Even strong deformations represent no problem for the film as it returns to the starting position. Dents and bruises are a thing of the past. Especially on project sites where artisans still have to finish other work you can be sure that your Isolpak ALU installations still looks great after a few weeks.

NEW POSSIBILITIES

Due to the highly UV-protective film Isolpak ALU has an advantage also in difficult environments such as on the roof for solar collector pipes, etc.

DURABILITY

The high chemical resistance combined with low thermal conductivity ensures that the long-term investment pays off.



International building projects have different product requirements. TTM completes the system with a white and black version, all project types and colors.





Jacketing Isolpak ALU

Perfect appearance coupled with economic benefits

Isolpak ALU differs particularly by its metallic appearance to other PVC sheathings. Especially thanks to the intermediate layer of pure aluminum. A layer of an extremely durable UV-protective film protects the middle layer of aluminum from harmful external influences and corrosion, this guarantees that functionality and appearance in the long run.





Dents and indentations are a thing of the past, even after months of construction the foil will be still in top condition.

The perfectly smooth surface also allows for quick and easy cleaning as compared to embossed aluminum installations.

Slight irregularities in the pipe insulation will be invisible because of the smooth and homogeneous surface. The curling effect completes a perfect, clean and fast installation.

Also, larger pipe diameter can be coated with Isolpak ALU, for those though we recommend thicker versions up to 0.45 mm which then are also a bit stiffer in the construction.

Isolpak ALU - the complete system

In addition to the rolls to make the straight lines the Isolpak ALU system is completed with a wide range of PVC premolded forms.









Jacketing Isolpak ALU

Unbeatable advantages, low material cost, ease of Material preparation and fast installation

Costs and resources are becoming increasingly expensive, Isolpak ALU is more favorable and less volatile than metals and metal sheets and can be simply fastened with rivets and special UV-protection tapes.



Large fluctuations in the metals prices have always resulted to uncertainty when calculating the project prices. Different thicknesses need to be stored and are then on stock. Not so with Isolpak ALU, one or maximum two thicknesses are enough for almost all standard pipe diameters. A supply chain optimum can be guaranteed.

For the application it does not require expensive equipment and trained staff. A matching cutting table and the necessary tools and you can start immediately.

The easy and quick processing of Isolpak ALU allows daily a high meter output.

The standard rolls of 1000mm x 25m only weigh about 12.5 kg and can be easily carried anywhere and cut at the sight.

A sign for the environment, hygiene and safety

- Ϋ Isolpak ALU does not use any heavy metals
- **Ϋ** Free of ozone-depleting CFC and HCFC compounds
- **Ϋ** The material is almost [<0.5%] completely free of plasticizers.
- Ÿ Free of silicones
- **Ϋ** Isolpak ALU can be used without any restriction in food processing plants.

During the processing of Isopak ALU, only litt waste is produced, the portions of the material can be mostly re-used. A sign for the environment, hygiene and safety.





Description	Value	Unit	Test method
Standard thicknesses	200, 230, 280, 340, 450	mμ	
Tensile impact strength	> 285	N/15mm	EN ISO 527-3
Elongation at break	35	%	EN ISO 527-3
Puncture resistance 3,0mm	110	Ν	prEN 14 477
Fire class	B1	on request	DIN 4102
Impact strength	≥400	kJ/m ²	ISO 8256
Tensile strength	> 35	N/mm ²	ISO 527
Sd-Value	ca. 1600		
LOI (Limiting Oxygen Index)	35	% O ₂	ASTM D 2863-77

Various jacketings / insulation facings



Pure aluminum foils

This insulation laminate is used as vapour barrier and reflection layer for mineral wool facing in form of slabs, lamella mats, pipe covers etc. Norm DIN 1784, EN 485, EN 546, EN 573.

Standard thicknesses	0,03 up to 0,30m m in Lega EN AW - 1050A
Fire class	DIN 4102 A1
Sd value	>1500 (³ 50 mµ)
Temperature resistance	ca. 600 ° C
Width	500, 1000, 1200 mm
Length	25, 50, 100 m

Alu glass scrim laminate

This insulation laminate is used as vapour barrier and reflection layer for mineral wool facing in form of slabs, lamella mats, pipe covers etc.





Aluminum multilayer laminate reinforced with PET, PVC, LDPE

This insulation laminate are used as vapour barrier and reflection layer for mineral wool facing in form of slabs, lamella mats, pipe covers etc







- 16-22 mic aluminum foil - glass scrim 5x5

- 22 g/m² LDPE

- 16-22 mic PET

- 12-18 mic aluminum foil

- 20-80 g/m² LDPE o HDPE

- Adhesive

- Adhesive



- PET / ALU - glass scrim 5x5





- 23 mic PET
- Adhesive
- 7 mic matt aluminum foil
- Adhesive
- 100 mic HDPE

Coroplast Tape 912

Coroplast AWX Line

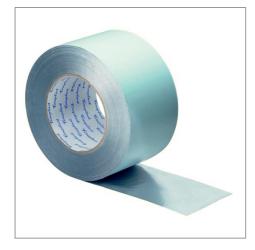
Reinforced aluminium adhesive tape

All-Wheater-Quality



Applications, properties and advan-tages:

- · For sealing intersections on aluminiumlaminated insulating mats.
- Visually perfect sealing on lamella mats through dense mesh structure (5x5mm).
- · High mechanical stability.
- Strong adhesive suitable for use on construction sites.
- Very strong adhesion and initial tack
- Moisture-proof.
- Extremely good ageing properties
- High shear strength, even in fluctuating temperatures.



Applications, properties and advantages:

Coroplast AWX line: Acrylic

- with VDE approval mark, P-BHH-2015-1004, falme-retardant in accordance with DIN 4102, building material class B1 and for 1530 AWX: A2, P-BHH-2010-1002.
- for impermeable sealing of intersections in aluminium-laminated insulating mats.
- resistence up to $+130^{\circ}$ C and easy to apply as low as -25°C.
- Test certificate of the German BG Verkehr/Schiffssicherheit 118.115.

Adhesive tapes available with AWX technology: 910, 930, 944, 942, 912, 1231, 1232, 1410, 1430, 1450

Normal protection Recyclable Great value for money

Accessories

Technical data backing material

covering

adhesive tape thickness

width

length

tensile strength

elongation at break adhesion to steel

aluminium foil reinforced with fibreglass scrim (5x5 mm) siliconized release film synthetic rubber / acrylic 912AWX 0,13 mm ± 0,02 50, 75 and 100 mm 50, 100 m > 30 N/cm 10 % 6 N/cm temperature resistance -40 up to +80° C water vapour permeability< 1g/m² x 24 h

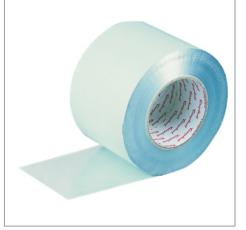


Coroplast Alu Tape 910 SE

Flame retardant pure aluminium tapes

Coroplast Alu Tape 930 SE

Flame retardant pure aluminium tapes



Applications, properties and advantages:

- With approval seal P-BHH-2012-1010, flame retardant in accordance with DIN 4102, building materials class B1.
- For sealing intersections on aluminiumlaminated insulating systems.
- Aggressive tack for application on sites.
- Acts as water vapour barrier.
- Insensitive to moisture.
- Easy to apply even at low temperatures.
- High shearing strength even with varying temperatures.
- Very high adhesive force and high initial stickiness.
- 910 Alu SE: The standard quality for insulating work.

Technical data:

back

liner

back

tape

width

lengt

tensi

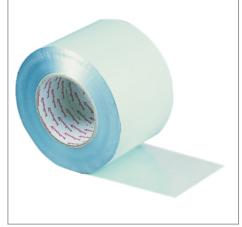
elong

adhe

temp

wate

ing material	pure aluminum foil
	adhesive-repelling PE film
ing thickness	0,03 mm
thickness	0,06 mm
h	50, 75 and 100 mm
th	50 and 100 m
le strength	25 N/cm
gation at break	5 %
sion to steel	9 N/cm
perature resistance	-40 up to $+80^{\circ}$ C
r vapour perm.	$< 1g/m^2 \ x \ 24 \ h$



Applications, properties and advantages:

- With approval seal P-BHH-2012-1010, flame retardant in accordance with DIN 4102, building materials class B1.
- For sealing intersections on aluminiumlaminated insulating systems.
- Aggressive initial tack for application on critical sites.
- Insensitive to moisture.
- Easy to apply even at low temperatures.
- High shearing strength even with varying temperatures.
- Very high adhesive force
- approval of German See-Berufsgenossenschaft and U.S.Coast Guard 164.1123/EC0736/118.155.

Technical data: backing material pure aluminum foil adhesive-repelling PE film liner backing thickness 0,025 mm* 0,05 mm tape thickness width 50, 75 and 100 mm 50 and 100 m length tensile strength 20 N/cm elongation at break 5 % adhesion to steel 9 N/cm temperature resistance -40~up to $+80^\circ\,\text{C}$ water vapour perm. $< 1 g/m^2 x 24 h$

* various other thicknesses available too (Coroplast 942 40my / Coroplast 944 50my)

Normal protection

Recyclable

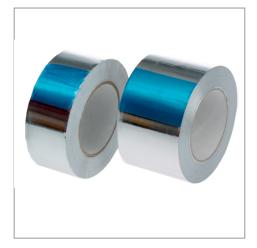
Great value for money

TTM Alu Tape AA 330

Aluminium adhesive tape with PE-liner

TTM Alu Tape AA 342

Aluminium adhesive tape



Applications, properties and advantages:

- · Soft aluminium foil with cold weather acrylic adhesive and protected by PE-liner
- Ideal for sealing joints and seams against moisture and vapor on foil jacketing insulation. Suitable for many other permanent sealing, holding, splicing or masking applications.
- Aggressive tack for application on sites.
- Excellent peel adhesion.
- Outstanding low temperature and ageing resistance.
- Very high adhesive force and high initial stickiness.

Technical data:

carrier

adhesive thickness width

length tensile stre

elongation peel adhes service terr

applying te

liner

	aluminum foil, soft
	PE film
	acrylic
	26 µm
	50, 75 and 100 mm
	50 and 100 m
ngth	45 N/25mm
at break	3 %
ion	15 N/25mm
nperature	-30 up to +120 $^\circ$ C
mperature	-5 up to +40 $^\circ\text{C}$

Technical data:

carrier	aluminum foil, soft
liner	siliconized paper
adhesive	acrylic
carrier thickness	40 µm
tape thickness	0,07 mm
width	50, 75 and 100 mn
length	50 and 100 m
tensile strength	22 N/cm
elongation at break	4 %
adhesion to steel	7 N/cm
service temperature	-30 up to $+110~^\circ\text{C}$

foil, soft d paper d 100 mm





Applications, properties and advantages:

- Flame retardant aluminium tape with extra strong carrier of 40 μ m
- · For sealing intersections on aluminiumlaminated insulating systems.
- · Aggressive initial tack for application on critical sites.
- Insensitive to moisture.
- · Easy to apply even at low temperatures.
- Works as a vapor barrier
- · Very high adhesive force

Great value for money

Coroplast 918

Coroplast 933 ALU black

Aluminium-vapored polyester adhesive tape Black aluminium adhesive tape



Application, properties and advantages:

- for sealing intersections on aluminiumlaminated insulating systems (when flame resistance in the sense of DIN 4102 building materials class B1 is not required), for the spiral-form fixing of insulating mats and shells in place of binding wire
- as assembly aid, masking tape and sealing tape in the industrial fabrication of furniture and device elements
- appiled directly from the roll without interliner, time and cost saving assembly
- simple to handle even with confined application conditions thanks to small core (1")
 very low unwinding force through the adhe
 - sive-repelling tape surface.
- self-extinguishing in accordance with VDE 0340

Application, properties and advantages:

- for sealing intersections on matt black surfaces
- suitable as assembly aid for rubber systems sealings
- strong adhesive suitable for construction on sites
- additional mechanical protection for rubber system sealings
- no painting needed at black sealing intersections
- no visible edge at insulating systems

Technical data:

carrier	alun
	plas
colour	alun
tape thickness	0,05
width	50,
length	50 a
tensile strength	45 N
elongation at break	150
adeshion on steel	2,4
temperature stability	-40
water vapour	
permeability	< 3

	aluminium-vapoured thermo-
	plastic polyester (met-PP)
	aluminium
	0,05 mm
	50, 75 and 100 mm
	50 and 100 m
	45 N/cm
eak	150 %
el	2,4 N/cm
bility	-40 up to $+80^\circC$
	$< 3,0 \text{ g/m}^2 \text{ x } 24 \text{ h}$

Technical data:

carrier	alumi
covering	silicor
adhesive	synth
thickness	0,05 r
lstandard widths	50, 75
length	50 m
tensile strength	20 N/
elongation at break	5 %
adhesion on steel	8,0 N/
temperature stability	-40 up
water vapour	
permeability	< 1 g

aluminium foil, varnished black siliconized release paper synthetic rubber 0,05 mm 50 m 20 N/cm 5 % 3,0 N/cm 40 up to+80 °C < 1 g/m² x 24h

Normal protection



Coroplast 839

Coroplast 8200

Textile polyester adhesive tape for the fabrication of wire harnesses

Plastic-coated textile tape for universal use



Application, properties and advantages:

- · for bundling and binding of cable harnesses
- excellent resistance to ageing
- good resistance to high and low temperatures
- · able to be torn easily by hand
- high adhesive force
- solventfree, PVC compatible
- tight woven structure



advantages:

- · textile adhesive tape as insulating tape and for universal use for industry and the trades, for installation and repair work in the
- laying of cables and for marking purposes · resistant to a large extent to dilute acids
 - and alkalis
- good adhesion also on rough surfaces
- · able to be torn laterally easily by hand
- high adhesive force
- excellent electrical properties



Technical data:

carrier

carrier	PET cloth
	Tearable by hand
tape thickness	0,17 mm [±0,02]
colour	black, white other colours
	available on request
width	9, 19 and 25 mm
length	25 and 50m
tensile strength	60 N/cm
elongation at break	30 %
adhesion to steel	4,8 N/cm
temperature range:	-40 up to $+125\ensuremath{^\circ}\ensuremath{C}$
unwind force	2 - 9 N/19 mm [hand] 1 - 8 N/19 mm [machine]

Technical data:

carrer
adhesive
tape thickness
width
length
colour
elongation at break
tensile strength
temperature stability
adhesion on steel

PE-coated cloth tape rubber 0,3 mm 50, 75 and 100 mm 25 e 50 m silver, black, white 3 % 40 N/cm -20 up to +80° C 5,0 N/cm

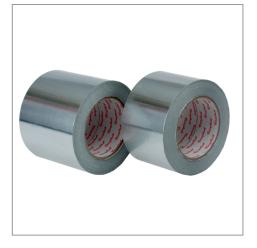


Isolpak ALU Tape Isolpak ALU Tape 1232X - 1233X

Aluminum Clad tapes for outdoor application

1336X White

White aluminum Clad tape for outdoor application





Applications, properties and advantages:

- · For sealing of seams and intersections of aluminium laminated insulation systems.
- Tapes coated with acrylic adhesive, which sticks extremely good on aluminiumlaminate systems i.e. Isolpak ALU, Clad
- Barrier against water and water vapour.
- Insensitive to moisture.
- · Resistant to outdoor weathering
- · Very good ageing properties.
- · Easy to apply even at low temperatures, superior cold weather adhesion.
- Aggressive tack for application on sites.
- Excellent high and low temperature performance.
- Solvent free.
- Available up to 1.000 mm widths e.g. large-area lamination of mineral wool, fibreglass facings or industrial foam products

Technical data

backing material 1232 X	Special multilayer film w. 4 layer [UV / ALU / PVC / ALU]
backing material 1233 X	Special multilayer film with 2 layer [UV/ALU]
tape thickness	0,12 mm [1232] 0,08 mm [1233X]
adhesive	UV acrylic
width	19, 25, 30 and 50mm
length	25 and 50 m
tensile strength	65 N/cm [1232 X] 40 N/cm [1233X]
elongation at break	50 % [1232X] 45 % [1233X]
adhesion to steel	12 N/cm [1232 X] 8 N/cm [1233X]
temperature resistance	-40 up to +120° C

Applications, properties and advantages:

- For sealing of seams and intersections of aluminium laminated insulation systems.
- Tapes coated with acrylic adhesive, which sticks extremely good on aluminiumlaminate systems.
- Barrier against water and water vapour.
- Insensitive to moisture.
- · Resistant to outdoor weathering
- For Clad WT and Isolpak WHITE systems
- · Easy to apply even at low temperatures, superior cold weather adhesion.
- · Aggressive tack for application on sites.
- Excellent high and low temperature performance.
- Solvent free.
- Available up to 1.000 mm widths e.g. large-area lamination of mineral wool, fibreglass facings or industrial foam products.

Technical data

backing material 1336 X	Special multilayer film with 2 layer [UV/ALU]
tape thickness	0,08 mm
adhesive	UV acrylic
width	19, 25, 30 and 50mm
length	25 and 50 m
tensile strength	120 N/cm
elongation at break	45 %
adhesion to steel	8,5 N/cm
temperature resistance	-40 up to $+120^{\circ}$ C

Extreme

UV protection

Innovative

ISOLPAK 1336X UV Black

Black aluminum Clad tape for outdoor application

TTM Tape Alu-Butyl

Alu/Butyl adhesive tapes with grey and black butyl



Applications, properties and advantages:

- For sealing of seams and intersections of aluminium laminated insulation systems.
- Tapes coated with acrylic adhesive, which sticks extremely good on aluminium-laminate systems.
- Barrier against water and water vapour.
- Insensitive to moisture.
- Resistant to outdoor weathering
- For Clad B and Isolpak BLACK systems
- Easy to apply even at low temperatures, superior cold weather adhesion.
- Aggressive tack for application on sites.
- Excellent high and low temperature perfor-
- mance.
- Solvent free.
- Available up to 1,000 mm widths e.g. large-area lamination of mineral wool, fibreglass facings or industrial foam products.

Technical data

backing material	Special BLACK UV-protection film
tape thickness	0,08 mm
adhesive	UV acrylic
width	19, 25, 30 and 50mm
length	25 and 50 m
tensile strength	120 N/cm
elongation at break	45 %
adhesion to steel	8,5 N/cm
temperature resistance	-40 up to +120° C

Applications, properties and advantages:

- repair of gutters and roof surfaces, safe pipe joints, sealed underground, the vapor barrier in conjunction with the construction of piping insulation, waterproof seal edge of the groove in the insulation with sheet metal shells
- secure closure against moisture infiltration
- excellent vapor barrier
- excellent resistance against aging
- good handling and adhesivity even under the most difficult situations
- the aluminum multilayer film is resistant to abrasion
- available with black or grey butyl
- different backing materials available like aluminum, black or white UV-protection film

Technical data

backing material
adhesive
tape thickness
standard width
length
color
elongation at break
tensile strength
temperature resistance
adhesion to steel

PETP/alu multilayer butyl (grey o black) 0,62 mm 50, 75 and 100 mm 10 and 15 m silver, white, black 3 % 40 N/cm -30 up to + 80° C 5.0 N/cm Innovative Extreme UV protection Outdoor application

Elastomeric rubber foam tape for thermal and acustical insulation

It is an elastomer foam tape, self adhesive, used for the insulation of hot and cold water pipes and / or as a gasket. it's made of a synthetic rubber material of closed cell foam in black color. With a protection film and glass scrim for more stability. Alternatively, also with polyethylene (PE) foam mesh available.



Flexible self adhesive tapes PE grey, white or black

Technical data

Description Base μ value Thermal conductivity [I] Fire class Elastomeric foam Acoustical insulation value Temperature resistance Resistance against fungus Odor

Elastomeric foam tape Elastomeric foam Cl1 [K-Flex, Armacell or Mobius foam] >5000 DIN 52615 at 0°C=0,036 W/(m.k.)DIN 52613 Cl1 - M1 FEF (flexible elastomeric foam) >28 dBDIN 52218 -25°C - +122°C excellent neutral

Tape dimensions

Thickness	width	length
3 mm	50 mm	10 m
3 mm	50 mm	15 m

all tapes are single wrapped and packed into cartons

Technical data of the adhesive Adhesive synthetic rubber

Peel [20', glass] Peel [24 hour, glass] > 25 N/inch Tack Shear

> 25 N/inch > 32 N/inch $50^{\circ}C: > 24 \text{ h}$

Great value for money

Aplomb

Aplomb is a acustical sound absorbation panelling compound of a crosslinked expanded polyethylene and a polyurethane foam with a middle layer of a 0,35 mm thick lead foil specific for the insulation of water pipe systems.

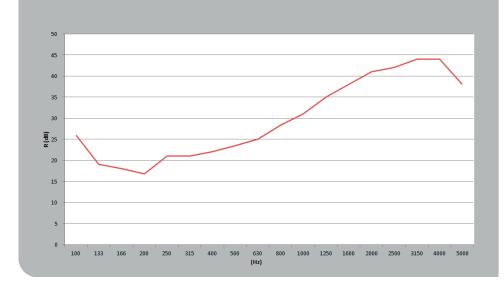


Applications, properties and advantages:

- urban sewage and rainwater
- industrial piping
- civil and industrial machinery
- ducts

Technical data:

construction	product construction of 3 layers
	A) polyethylene x-linked foam of 3mm
	B) lead film with 0,35m thickness
	C) polyurethane 10 or 20mm
sound absorbation	RW=29,0
length	2 m
width	1000 mm
fire resistance	
class	ITA Classe 2 (self estinguishing)





Aplomb XP

Aplomb XP is multilayer, composed of a layer of polyurethane (open cells) with a density of 35 kg / m² and a layer of crosslinked polyethylene (physically completely closed cells) with an interposed sheet of high density rubber with a metal net. With a memory effect. Resistant to temperatures from -50 ° C to +80 °C.



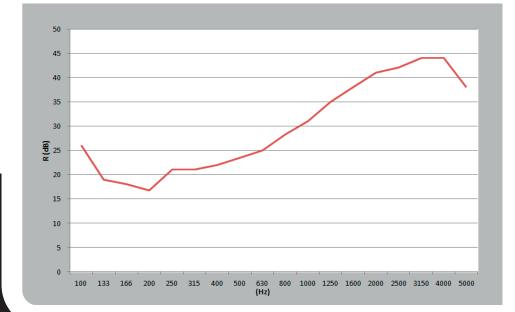
Three-layer product composed of:

1st layer: 3 mm Polyethylene [physical X-link] 2nd layer: high density rubber 2mm + net 3rd layer: 10mm polyurethane

Standard dimensions

width: length: thicknesses: 1000 mm 2000 or 3000 mm 13-23 mm ecc. Other dimensions upon request Tolerances: DIN 7715 Part 2.

FIRE RESISTANCE ITA Classe 2 Norm UI94 - HF1. Norma DIN 75200 MVSS 302.





S|Fonik

The S|Fonik product uses high density elastomeric foam material of up to 1300 - 1400 Kg/m3 realised with excellent visco-elastic properties and with polimer partially crosslinked and antifire retardant ingredients.



Application, properties and advantages:

- Ÿ product harmless and safe regarding health issues compared to products containing lead
- Ϋ́ Fire retardant class 1 (ITA)
- Ÿ Price range very competitive and also stable compared to international price fluctuation of lead
- Ÿ Performances comparable to products containing lead

Technical data

length	1000 mm
width	1200 mm
thickness	13 mm
specific weigth:	1.300 – 1.400 Kg/m3
ecological info:	CFC and HCFC free
sound absorbation	RW 26 dB
	UNI EN ISO 140-3 /
UNI EN ISO 717-1	
FIRE CLASS	
CL. 1 (IT) - BS 476 Pt. 5,3 (CH)	6 1989 Cl. 0 (UK) - Brandkennziffer

50 45 40 35 30 (ap) 25 20 20 15 10 0 200 400 800 1600 3150 100 (Hz) -ISO 717-1 TTM Sfonik

 Normal protection

 Recyclable

 Great value for money

 Accessories

Hangers / Pins

non-adhesive - selfadhesive - welding pins



Perforated pins from TTM allow quick and easy installation of insulating materials on smooth, rough and irregular surfaces (eg concrete, masonry, metals). For mounting you can use either of the special glue, which screws or rivets. (Included washers ø 32 mm)

washer

mounting bracket with non-adhesive material and perforated backing plate and

galvanized steel / stainless steel approx. ø 2.7 mm steel

stainless steel, aluminum 19-140 mm

50mm x 50mm ø 32 mm / 38 mm

steel / stainless steel

Design

Material backing

Material nail

Dimension

Washer diam.

Material washer

TTM self-adhesive pins enable a quick and uncomplicated fixing of insulation on smooth and clean surfaces. The high grade adhesive on the base, ensures that these pins provide a secure fixing for the insulation. Including safety discs ø 32 mm

Design

Material backing Material nail

Dimension Washer diam. Material washer

mounting bracket with self-adhesive material, backing plate and washer galvanized steel / stainless steel approx. ø 2.7 mm steel stainless steel, aluminum 19-140 mm 50mm x 50mm ø 32 mm / 38 mm steel / stainless steel



The welding of the pawl with washer allows the fixing of the insulating material in a single operation. The nail coated with a plastic film allows easy attachment of the insulation material coated with aluminum or metal mesh.

Design	welding nails with mounting plate
Material backing	galvanized steel / stainless steel approx. ø 2.7 mm steel stainless steel, aluminum
Length	15 - 150 mm
Diameter plate	ø 30 mm
Insulator	plastic

Recyclable







Isolpak ALU BUTYL tape UV

Aluminum Clad butyll tapes for outdoor application

Isolpak ALU White BUTYL tape UV

White aluminum Clad butyl tape for outdoor application



Applications, properties and advantages:

- For sealing of seams and intersections of aluminium laminated insulation systems.
- Tapes coated with acrylic adhesive, which sticks extremely good on aluminiumlaminate systems i.e. Isolpak ALU, Clad
- Barrier against water and water vapour.
- Insensitive to moisture.
- Resistant to outdoor weathering
- Very good ageing properties.
- Easy to apply even at low temperatures, superior cold weather adhesion.
- Aggressive tack for application on sites.
- Excellent high and low temperature performance.
- Solvent free.
- Available up to 1.000 mm widths e.g. large-area lamination of mineral wool, fibreglass facings or industrial foam products.

Technical data

backing material	Special multilayer film w. 2 layer [UV protection film / ALU]
adhesive	synthetic rubber compound
tape thickness	0,65 mm
adhesive color	black, upon request grey
width	50mm
length	25m
tensile strength	25 N/cm
elongation at break	30 %
adhesion to steel	5 N/cm
temperature resistance	-30 up to $+$ 80° C



Applications, properties and advantages:

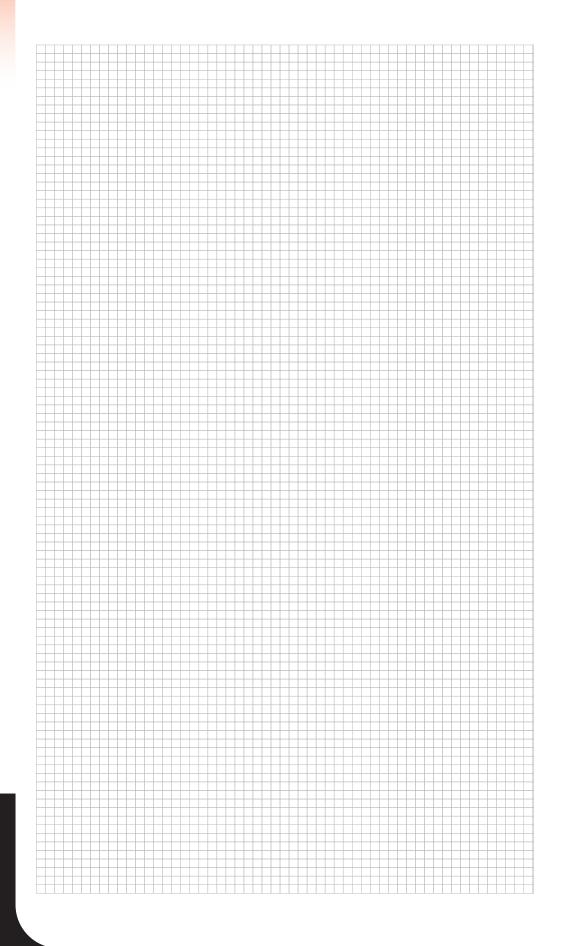
- For sealing of seams and intersections of aluminium laminated insulation systems.
- Tapes coated with acrylic adhesive, which sticks extremely good on aluminiumlaminate systems.
- Barrier against water and water vapour.
- Insensitive to moisture.
- Resistant to outdoor weathering
- For Clad WT and Isolpak WHITE systems
- Easy to apply even at low temperatures, superior cold weather adhesion.
- Aggressive tack for application on sites.
- Excellent high and low temperature perfor-
- mance. • Solvent free.
- Available up to 1.000 mm widths e.g. large-area lamination of mineral wool, fibreglass facings or industrial foam products.

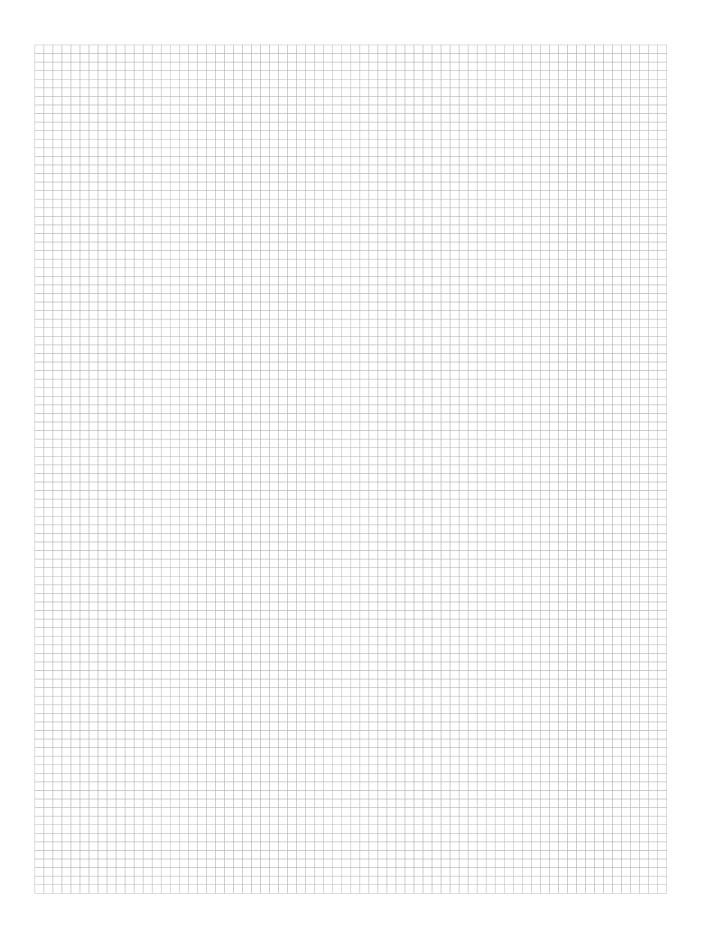
Technical data

backing material	Special multilayer film w. 2 layer
	[UV WHITE protection film / ALU]
adhesive	synthetic rubber compound
tape thickness	0,66 mm
adhesive color	black, upon request grey
width	50mm
length	25m
tensile strength	25 N/cm
elongation at break	30 %
adhesion to steel	5 N/cm
temperature resistance	-30 up to $+$ 80° C











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Subject to change. If in doubt please get in touch with us. The application examples can be taken into account as particular situations. We decline, therefore, every responsability for other applications.