

Band-Aid for Buildings



MULTI-PURPOSE UV-RESISTANT, HIGHLY FLEXIBLE SURFACE DRESSING

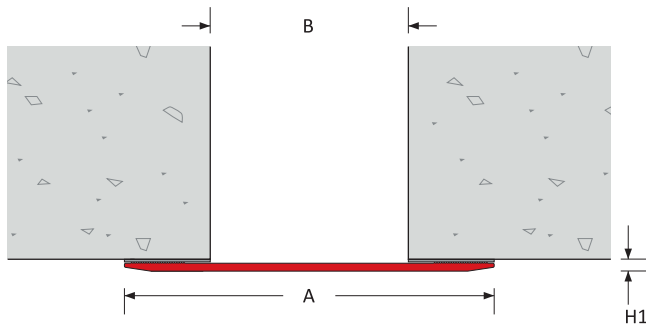
elastatec 1400



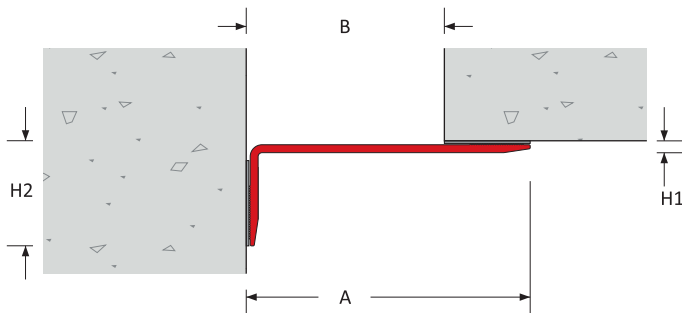
VEXCOLT

Elastatec 1400 : A07-A09

Elastatec 1400 : A07







Elastatec 1400 : A09



Expansion Joint Selection Criteria

Load Rating

Product Details

Joint Location	Crack/Gap Width B (mm)	Movement Capacity (mm)		Eurocode Rating				Product Dimensions				Product Number
		±	[Total]					Height		Sightline	Blockout	
								H1 (mm)	H2 (mm)	A (mm)	C (mm)	
Wall - Wall Ceiling - Ceiling Roof - Roof	0-10	± 5	[10]	NOT TRAFFICABLE				3	-	25	-	1400-A07-010
	11-25	± 12	[25]							50		1400-A07-025
	26-50	± 25	[50]							80		1400-A07-050
	51-75	± 37	[75]							120		1400-A07-075
	76-100	± 50	[100]							160		1400-A07-100
	101-125	± 63	[125]							200		1400-A07-125
	126-150	± 75	[150]							250		1400-A07-150
Corner Wall Wall - Ceiling Roof - Wall	0-10	± 5	[10]	NOT TRAFFICABLE				3	8	17	-	1400-A09-010
	11-25	± 12	[25]						12	38		1400-A09-025
	26-50	± 25	[50]						15	65		1400-A09-050
	51-75	± 37	[75]						25	95		1400-A09-075
	76-100	± 50	[100]						33	127		1400-A09-100
	101-125	± 63	[125]						40	160		1400-A09-125
	126-150	± 75	[150]						50	200		1400-A09-150

General Areas of Application

Sealing of external and internal non-trafficable joints in walls, ceilings and roofs

Sealing of expansion joints where anticipated expansion and contraction characteristics approximate +/-50% of gap width and up to +/-25% in the shear plane

Sealing of control joints where sealants would normally be applied or where sealants have failed

Specific Areas of Application

Repair of joints where sealants have failed or are no longer functional

Sealing of undersized joints and joints where finishes have been applied across construction joints

Sealing of joints subject to early stress or engineering design or construction defects.

Sealing of failed joints particularly where the building envelope has to be resealed against the ingress of water

Elastatec 1400 : A07-A09

Features

Material

Highly resilient elastomeric joint tape
Excellent resistance to notching and wear

Durability

Oil, Chemical and UV resistant
Weathering and ageing resistant

Industry Standards

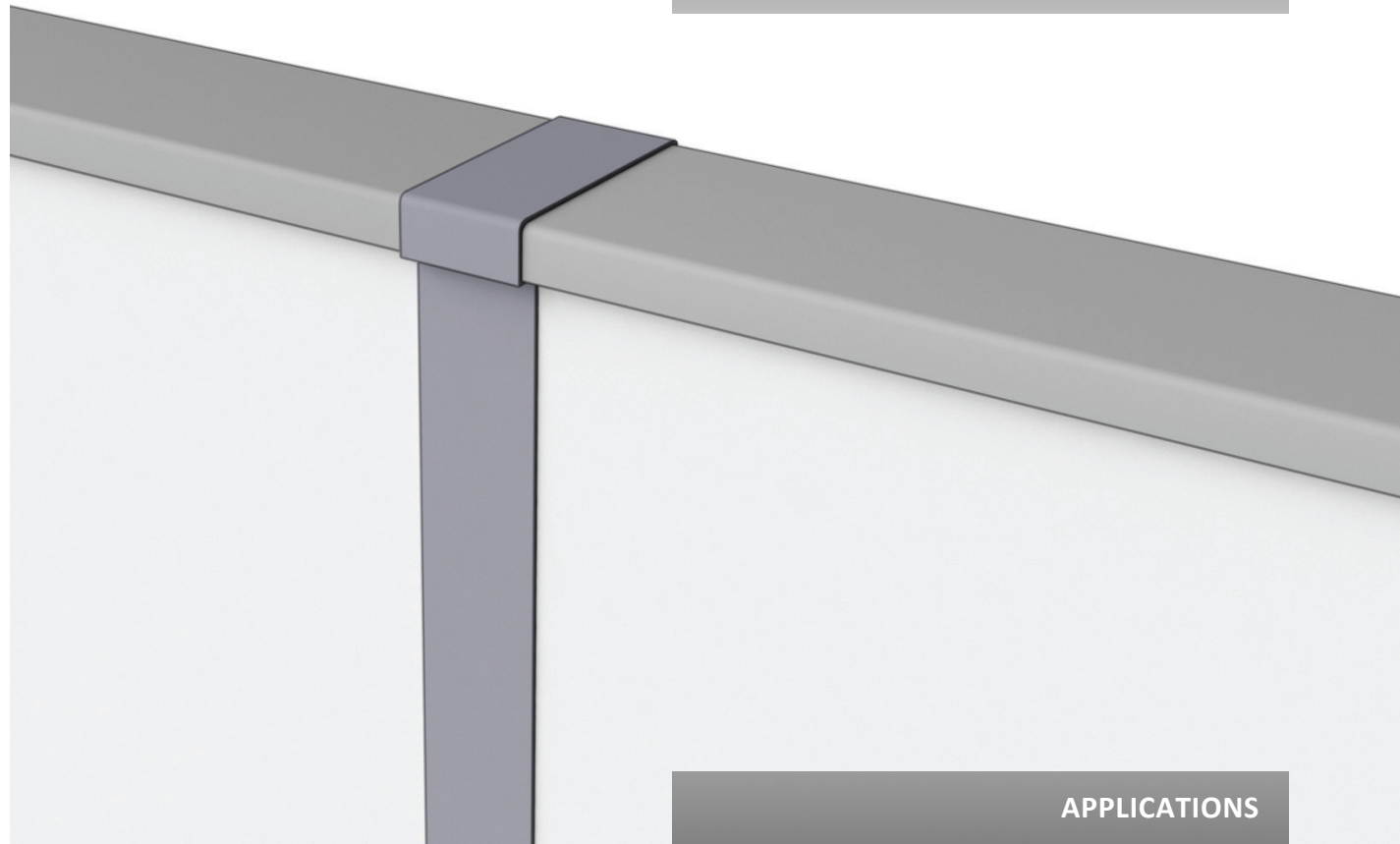
ASTM C290 'Standard Specification for Elastomeric Joint Seals' compliant
DIN 18540 'Sealing of exterior wall joints in building using joint sealants and seal tapes' compliant

External and Internal Locations

External & Internal Wall to Wall
Corner Wall
Wall to Ceiling
Ceiling to Ceiling
Roof to Roof (not trafficable)
Roof to Wall
Parapet Walls

Product Characteristics

Gap Width(s)	10, 25, 50, 75, 100, 125, 150mm
Temperature Range	-60°C to 80°C
Movement	Up to 100% of gap width
Depth(s)	3mm
Colours	Grey, Beige. Any colour can be matched (Min order applies)
Paintability	Recommended flexible paint to specified RAL No



APPLICATIONS

Airport Terminals | Educational | Exhibition Centres
Department Stores | Distribution & Retail Warehouses
Factories | Hospitals | Museums | Offices & Hotels
Parking | Places of Worship | Residential Buildings
Rail, Metros & Elevated Rail Stations | Roads & Bridges
Shopping Centres | Sports Stadiums | Supermarkets

Technical Specification

Product Description

Elastatec 1400 is a highly resilient Polysulphide tape designed to be used to span expansion and control gaps in the external façade, roofs and interior walls and ceilings of buildings. Elastatec Polysulphide tape has excellent resistance to fuels, ozone, salt water, and sunlight.

The Properties of Polysulphide

Polysulphide based materials are known for their excellent resistance to solvents and lubricants as well as offering excellent electrical resistance and corrosion protection. This polymer is mainly used in the form of a low-molecular-weight liquid that cures in place to create an elastomeric seal.

The sulfur content is high, about 80 percent by weight, making the elastomer a high-density material with a high resistance to swelling by hydrocarbon oils. The properties of Polysulphide lends it for use in the construction industry as well as in the gas and oil industry where it is formed into oil-resistant and weather-resistant seals and gaskets. They are also used in gasoline hoses and as binders for solid rocket propellants.

The structure of the polymer makes Polysulphides inherently resistant to UV and oxidation and there is a wide body of evidence supporting the durability of Polysulphides in the most extreme environments.

Due to their high Polysulphide polymer content Elastatec tapes exhibit high and low cryogenic temperature serviceability, resistance to vibration, impact, shock, and thermal cycling and excellent adhesion capability to similar and dissimilar substrates.

Elastatec Properties

Material Properties

Property	UOM	Characteristic
Material		Polysulphide
Density	g/ml	1.70 ± 0.05
Optimal Installation Temperature Range	°C	Min 5°C : Max 40°C

Mechanical Properties

Property	UOM	Characteristic
Hardness	Shore A	35 ± 2.5
Elongation at break	%	300%
Approved Movement Capacity	% of gap width	± 50%
Temperature Stability (50% Relative Humidity)	°C	-60°C to +80°C
Polymer Content	%	≥ 35%
Tear Resistance	N/mm ²	6.0
Tensile Stress 100% Elongation (at 23°C)	N/mm ²	0.4
Tensile Stress 100% Elongation (at -20°C)	N/mm ²	0.6
Recovery Characteristics	%	94% (±2.5%)

Mechanical properties were measured at +23°C and 50% relative humidity unless otherwise noted. Values are subject to change at higher or lower temperatures and/or differing relative humidities. All technical data, measurements and information in this data sheet are based on laboratory tests.

Actual measured data may deviate in practice.

General Information

Product Applications

Elastatec 1400 is suitable for a wide range of non-trafficable applications across virtually all joint types and meets the most stringent demands of joints with expansion and compression factors up to +/-50% of expansion gap width. In the shear plane Elastatec 1400 will accommodate in excess of 25% of gap width.

Areas of Application

Designed for sealing expansion joints, control joints, isolation joints and instances where different building components abut, Elastatec 1400 can be used in conjunction with:

1. Porous surfaces such as aerated concrete, concrete, plaster and render and stone
2. Non-porous surfaces such as ceramic tiles, glass and metal including cladding panels

It is important to note that differing adhesives are used depending upon whether the substrate is porous or not.

Elastatec 1400 may be applied to accommodate movement at:

- Expansion joints
- Isolation joints
- Control joints
- Joints in parapet walls

It is also suitable for rapid and long-lasting joint repair such as:

- Failed and under-dimensioned joints
- Joints suffering from sealant failure
- Sealing of joints where finishes have mistakenly been applied across construction joints
- Linear cracks in facades where joints have not been pre-planned.
- Joints between building materials with differing linear coefficients of thermal expansion
- Joints subjected to early stress and particularly thermal stress where temperatures exceed 40°C

Storage and Shelf Life

As a fully cured product Elastatec tapes have an unlimited shelf life provided the materials are stored in original packaging and where storage temperatures do not exceed 35°C.

Packaging

Elastatec tape is supplied in the following roll lengths and with the minimum order quantities:

Product Reference	Width (mm)	Roll Dimensions (mm)		Minimum Order Qty	
		Tape Width (mm)	Length (LM)	Rolls	LM
1400-A07/A09-010	10	25	15	7	105
1400-A07/A09-025	25	50	15	7	105
1400-A07/A09-050	50	80	15	7	105
1400-A07/A09-075	75	120	15	7	105
1400-A07/A09-100	100	160	12	8	96
1400-A07/A09-125	125	200	12	8	96
1400-A07/A09-150	150	250	12	8	96

Handling and Protection

Whilst Elastatec tapes are inert and physiologically harmless nevertheless protective clothing and gloves should be used. Disposal of waste materials should be in accordance with pertinent regulations.

Special Colours

We can manufacture Elastatec to order in a variety of colours to match RAL designations subject to the following minimum order quantities

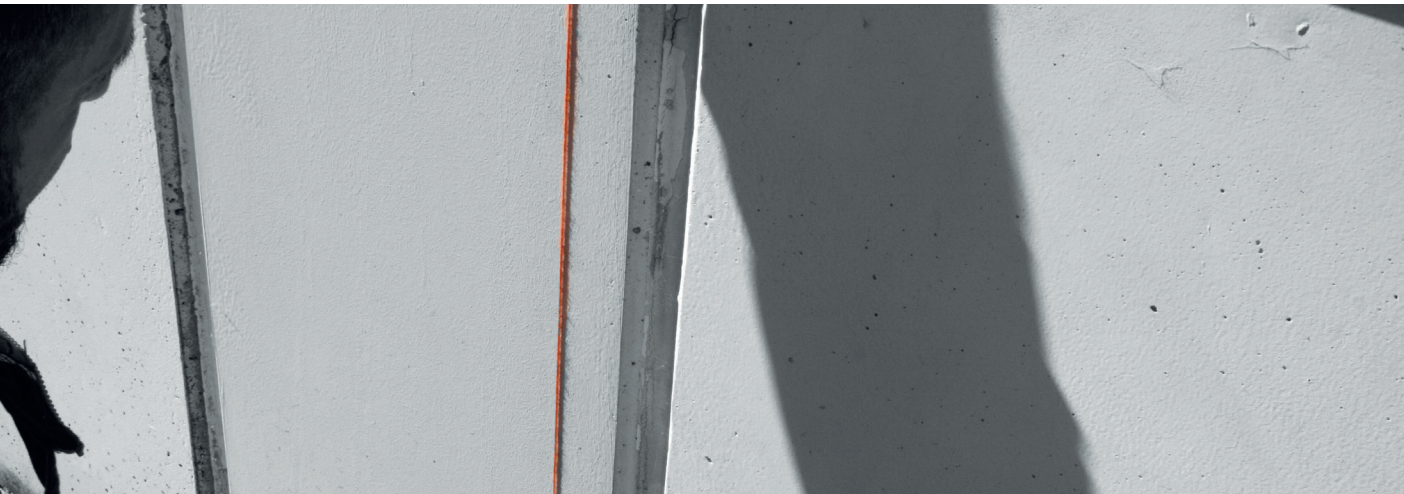
Product Reference	Gap Size (mm)	Special Colours	
		Tape Width (mm)	Min. Order (LM)
1400-A07/A09-010	10	25	1695
1400-A07/A09-025	25	50	900
1400-A07/A09-050	50	80	495
1400-A07/A09-075	75	120	390
1400-A07/A09-100	100	160	288
1400-A07/A09-125	125	200	240
1400-A07/A09-150	150	250	180



1 Measure

Measure required distance based on the width of Elastatec tape shown in the table below.

Product Reference	Gap Size (mm)	Tape Width (mm)	Adhesive Width (each side)mm
1400-010-003	10	25	7.5
1400-025-003	25	50	12.0
1400-050-003	50	80	15.0
1400-075-003	75	120	22.5
1400-100-003	100	160	30.0
1400-125-003	125	200	37.5
1400-150-003	150	250	50.0



2 Plumb line

Create plumb line based on the required measurement.

3 Prepare Surface

To obtain the best sealing results, correct joint tape sizing and pre-treatment of the bonding surfaces is required.

Friable concrete substrates must be prepared by grinding, sandblasting or wire brushing.

Spalling, rust and all coatings on metal must be removed by sandblasting or grinding.

At the time of gluing, the bonding surfaces must be clean, free of oil and grease, dry and free of substances that could prevent adhesion.



4 Mask Edges

Mask the outer edges of the bonding surface.



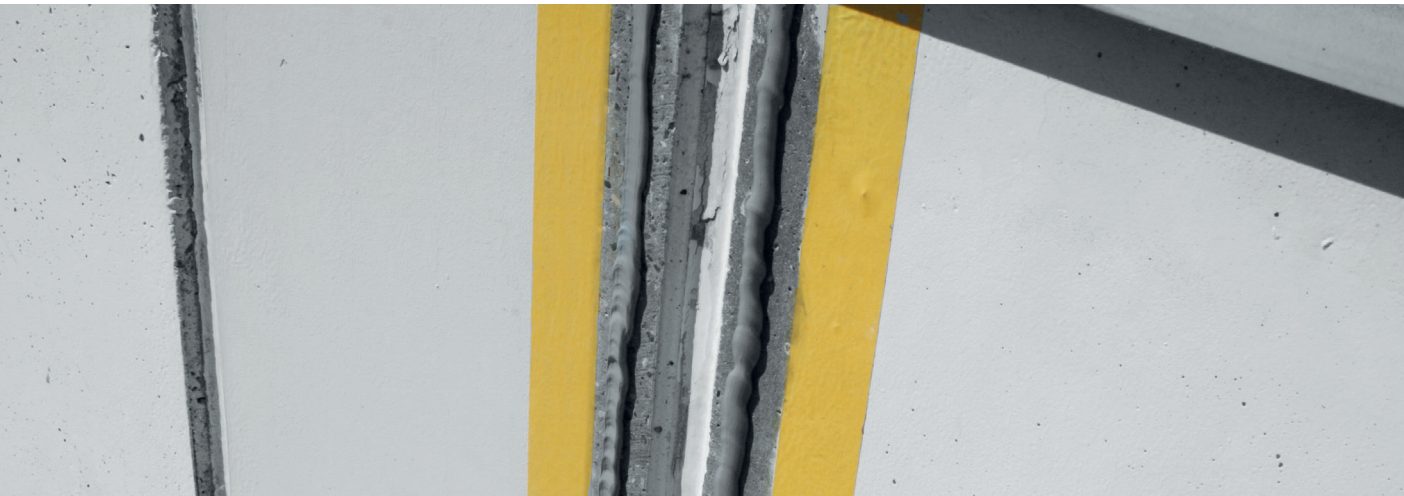


5 Apply Primer

Apply Elastatec Primer.

Elastatec B1 Primer is designed for porous surfaces.

Elastatec S2 Primer is used for non-porous substrates



6 Apply Adhesive

For gaps up to 100mm wide apply a seam of Elastatec TK 51 adhesive to the primed surfaces either side of the gap.

For gaps >100mm wide apply a seam of Elastatec TC 30S adhesive to the primed surfaces either side of the gap.

7 Apply Elastatec Tape

Carefully apply Elastatec tape ensuring that it is affixed centrally between the taped surfaces.



8 Remove Protective Backing

Peel back and remove the white protective backing.





9 Roll Sides

Using a small roller carefully roll the ribbed sides of the Elastatec tape to ensure embedment in the adhesive.

Apply the roller in an outward direction towards the edges of the tape to achieve a smooth consistent finish and to prevent any excess adhesive entering the underlying gap.



10 Remove Excess Adhesive

Using a scraper remove any excess adhesive.

11 Remove Masking Tape



12 Smooth Bond Seam

Smooth the visible bond seam further by hand or with a soft brush and neutral soap solution



13 Application Complete

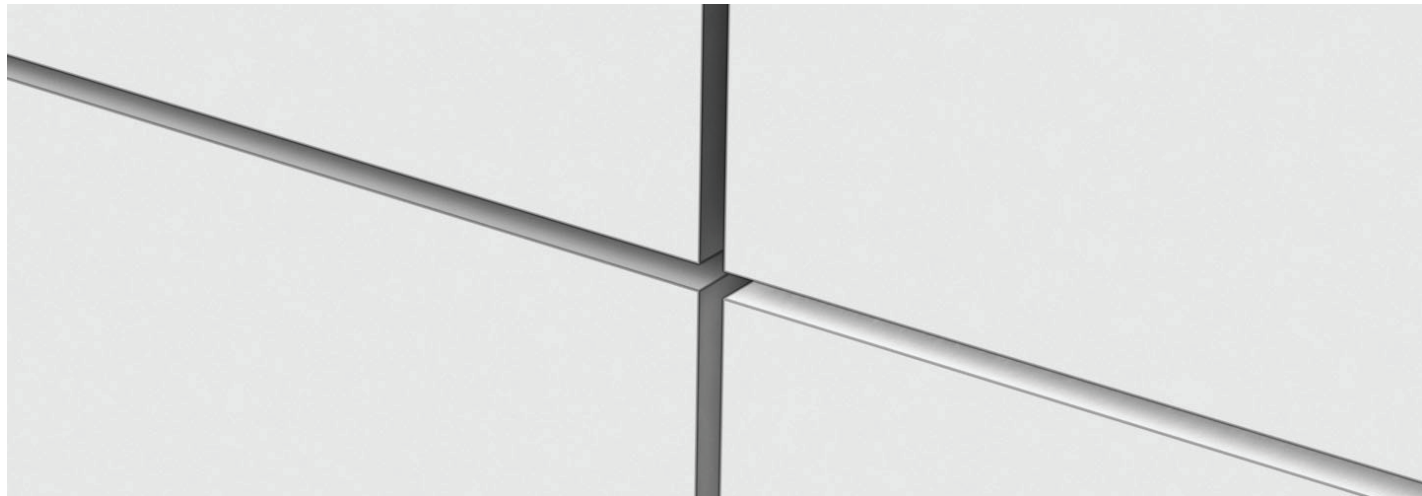


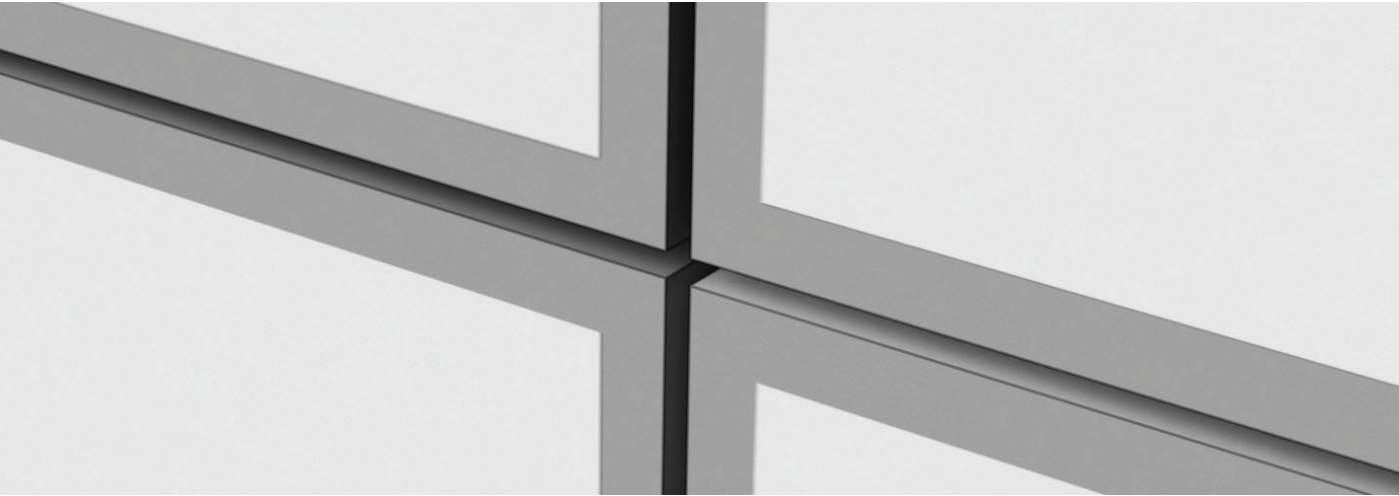


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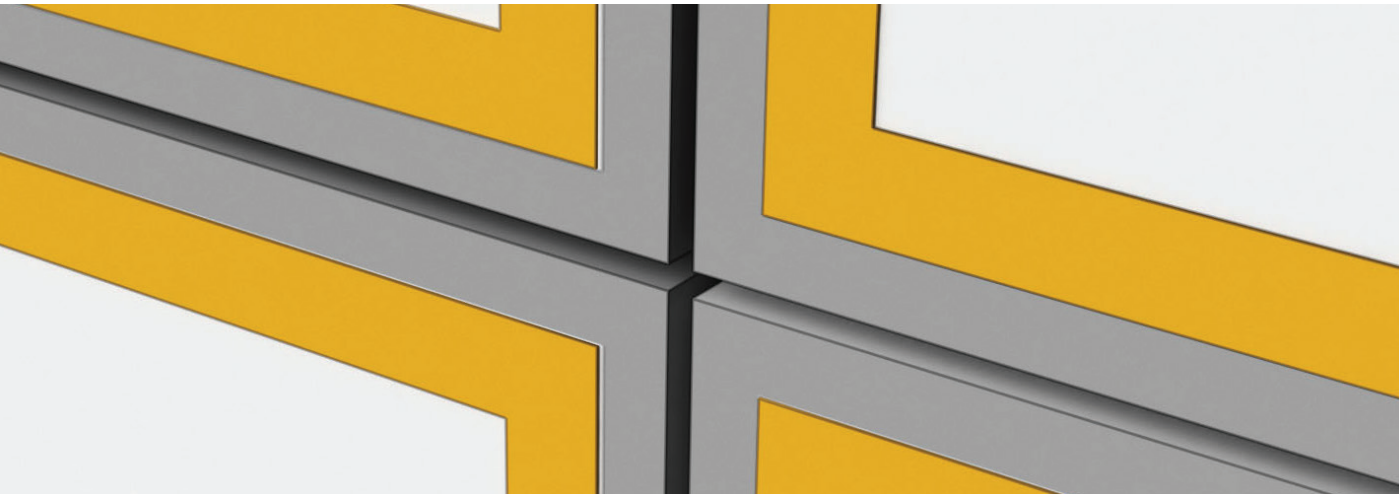


2 Prepare Surface

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Spalling, rust and all coatings on metal must be removed by sandblasting or grinding.

At the time of gluing, the bonding surfaces must be clean, free of oil and grease, dry and free of substances that could prevent adhesion.



3 Mask Edges

Mask the outer edges of the bonding surface then apply Elastatec primer.

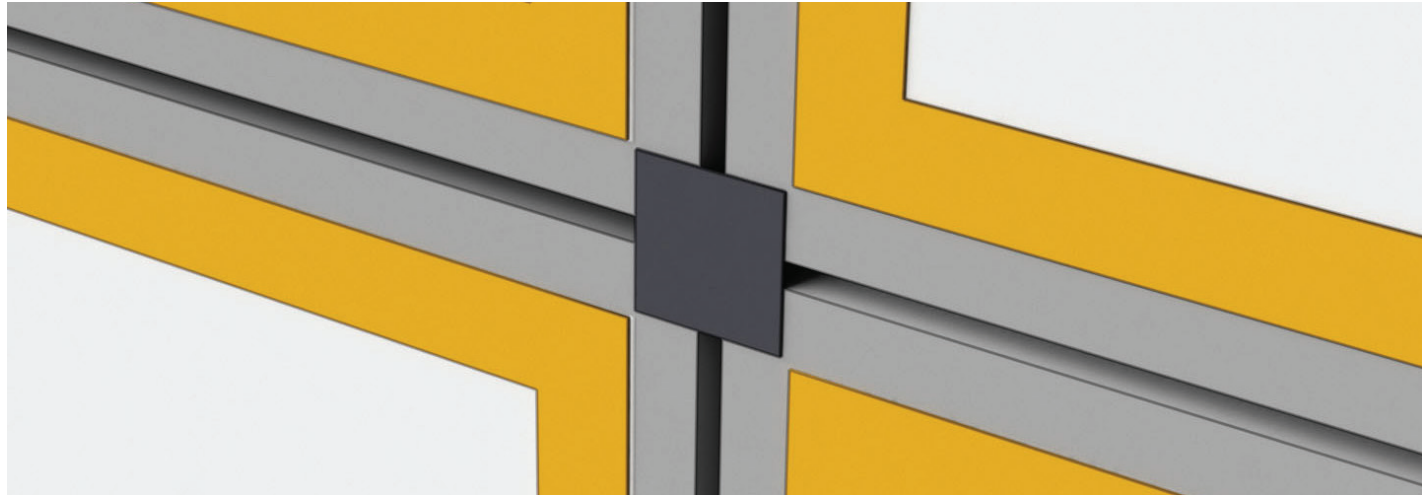
Elastatec B1 Primer is designed for porous surfaces.

Elastatec S2 Primer is used for non-porous substrates.

4 Apply Tape

Apply a patch of builders tape across the junction as shown.

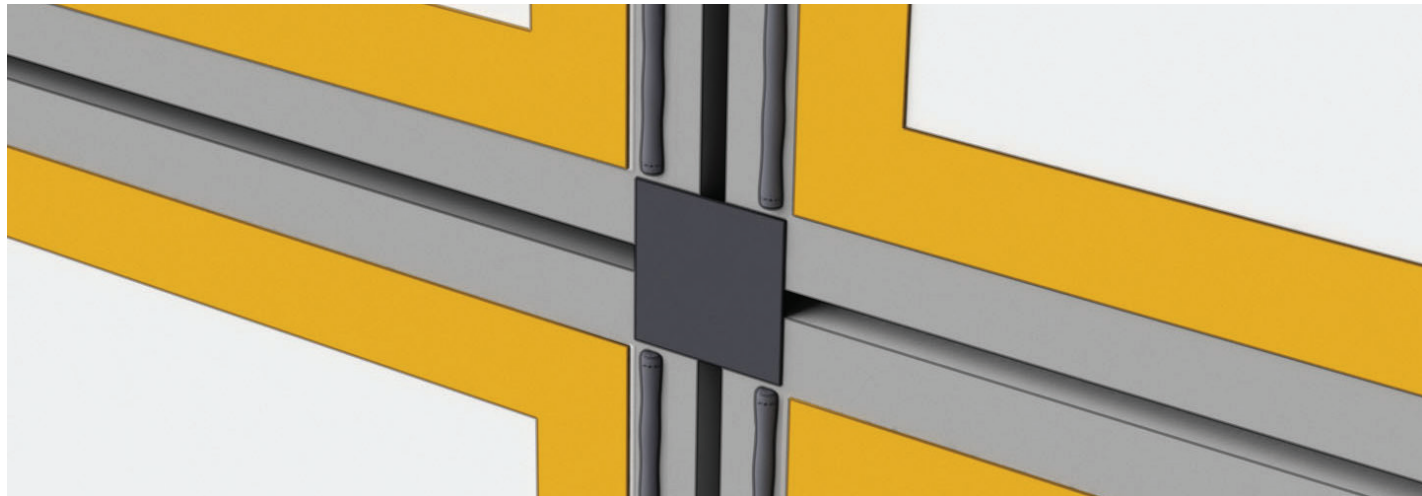
This will prevent adhesive entering the gap.

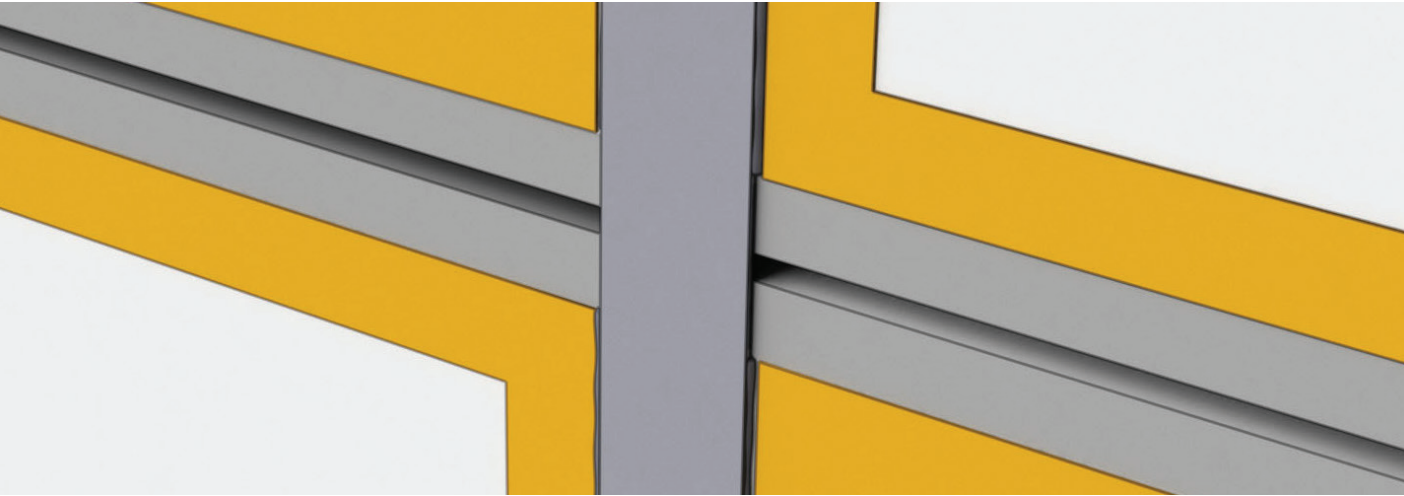


5 Apply Adhesive

For gaps up to 100mm wide apply a seam of Elastatec TK 51 adhesive to the primed surfaces either side of the gap.

For gaps >100mm wide apply a seam of Elastatec TC 30S adhesive to the primed surfaces either side of the gap.





6 Apply Elastatec Tape

Carefully apply Elastatec tape ensuring that it is affixed centrally between the taped surfaces



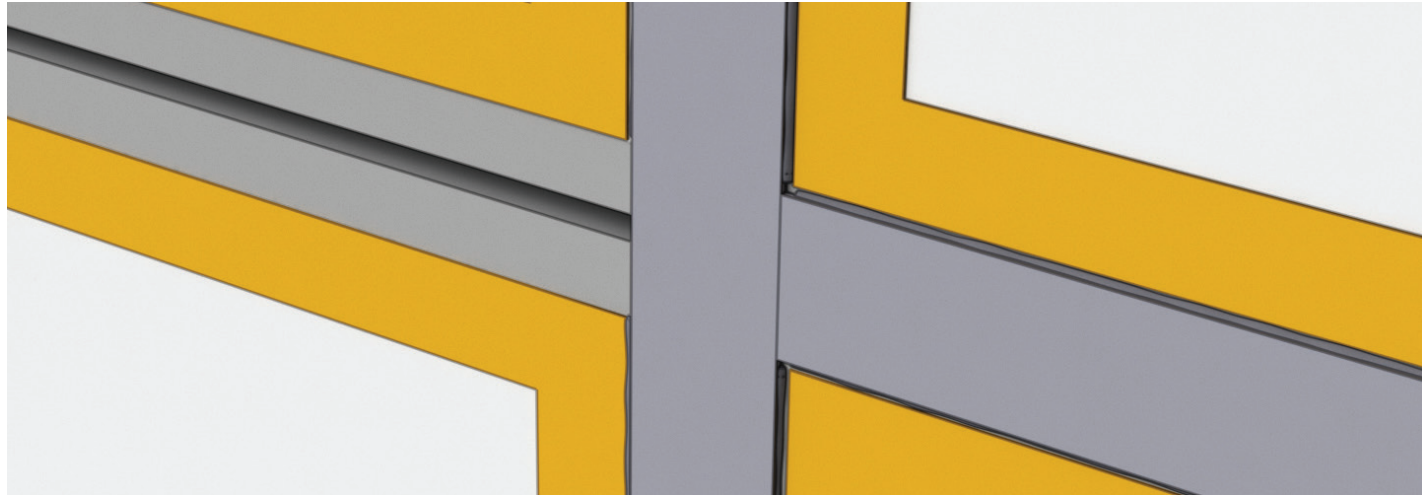
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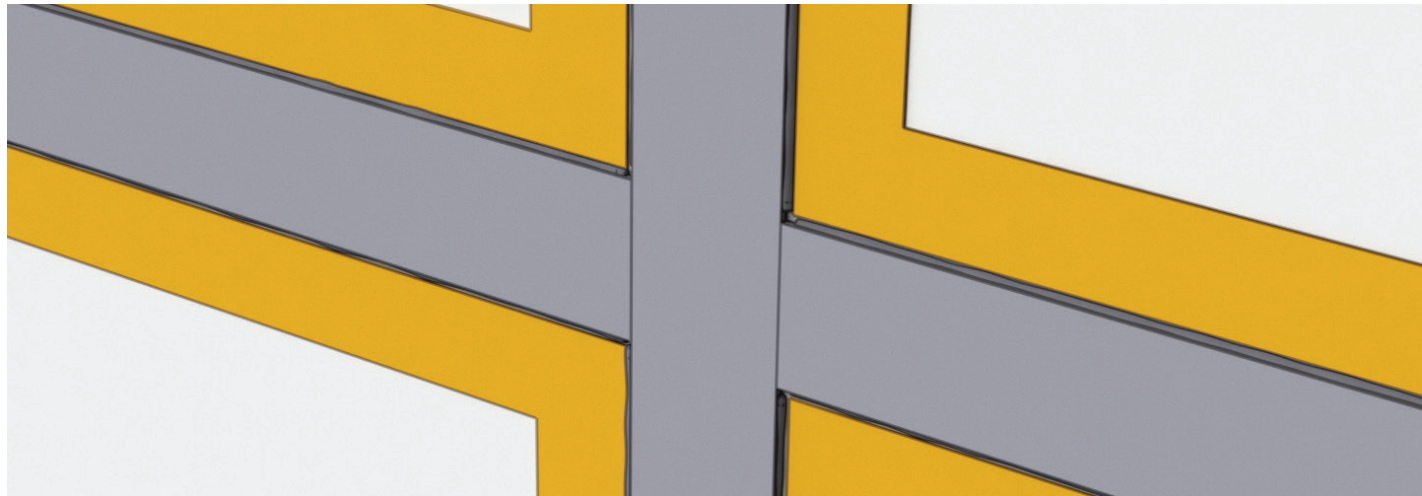
8 Apply Elastatec Tape

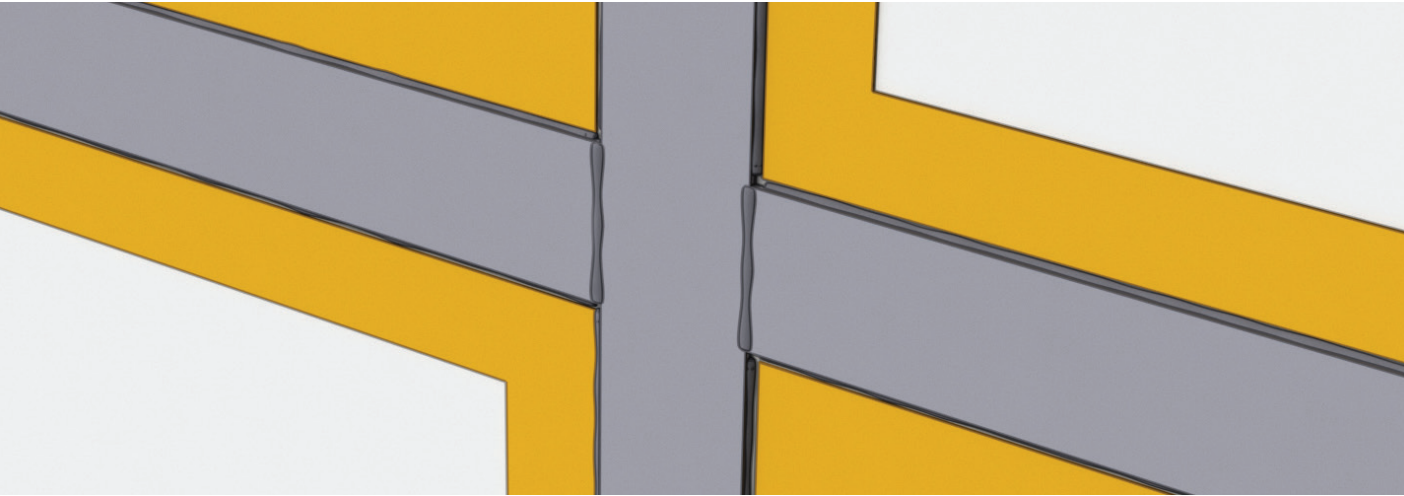
Carefully apply Elastatec tape ensuring that it is affixed centrally between the taped surfaces.



9 Repeat

Repeat this process on the remaining intersection gap.





10 Apply Adhesive

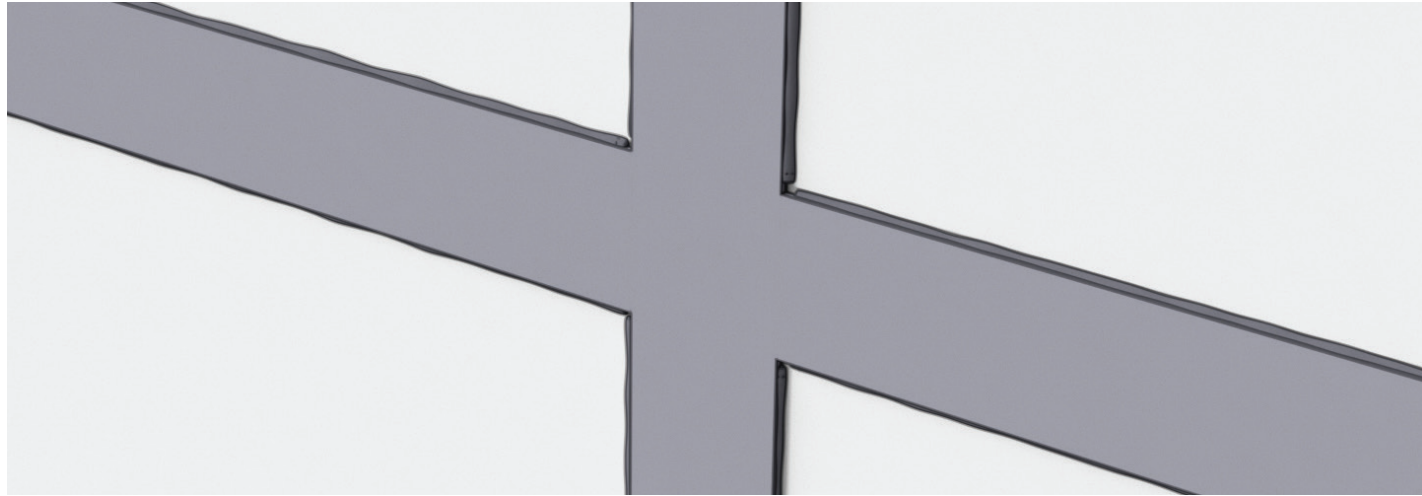
Apply adhesive to the bond line intersections



11 Smooth Intersection Seam

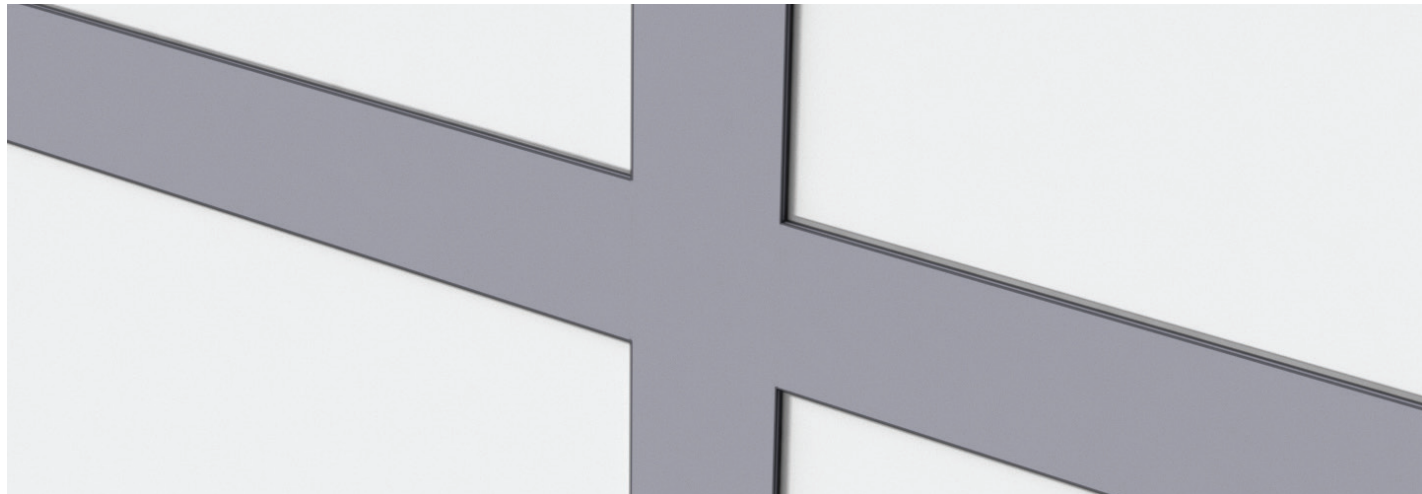
Smooth visible bond seam by hand or with a brush and neutral soap solution.

12 Remove Masking Tape



13 Smooth Bond Seam

Smooth visible bond seam by hand or with a soft brush and neutral soap solution.



14 Application Complete

