# illbruck making it perfect.

#### **Description**

SP510 is a one component, non-sagging sealant based on hybrid polymers.

#### **Colours**

White, anthracite, black and grey.

#### **Packaging**

310 ml cartridge (12 per carton), 400 ml sausage (20 per carton), 600 ml sausage (20 per carton)

#### **Technical Information**

Property	Test Method	Result	
Classification	EN 15651	EN 15651-1 F-EXT-INT-CC class 20LM	
Specific Gravity	DIN 52451-A	1.55	
Resistance to Flow	EN ISO 7390 20 mm profile	Non-sagging	
Skin Formation Time	23°C; 50% RH	~. 45 min.	
Curing Speed		~ 2.5 mm/1st day	
Change in Volume	DIN EN ISO 10563	~ 3%	
Modulus at 100% Elongation	DIN EN ISO 8339 Method B	~ 0.5 N/mm²	
Modulus at 60% Elongation	ISO 11600	~ 0.3 N/mm	
Tensile Strength	DIN 53504 S2	~ 1.3 N/mm²	
Elongation at Break	DIN 53504 S2	~ 500%	
Shore A hardness	DIN 53505	~ 30	
Application Temperature		+5°C to +40°C	
ServiceTemperature		-40°C to +90°C	
Storage	Store in shaded dry conditions between +5°C and +25°C.		
Shelf Life	12 months when stored as recommended in original unopened containers.		

#### **Emission Certificates**

Regulation or Protocol	Result	Comment
French VOC regulation	Class A+	SP510 fulfils class A+ according to the French VOC regulation of March and April 2011 (DEVL 1101903D and DEVL1104875A).
EMICODE	EC 1 Plus	SP510 fulfills the requirements of class EC 1 PLUS according to EMICODE (October 2017).
Indoor Air Comfort®	Pass	SP510 passes the requirements of Indoor Air Comfort 6.0 of February 2017.
Indoor Air Comfort GOLD®		SP510 passes the requirements of Indoor Air Comfort Gold 6.0 of February 2017.
BREEAM International	Compliant	SP510 is compliant with BREEAM International according to GN22 v2.3 (March 2018) (BREEAM Recognised Schemes for VOC Emissions from Building Products).
BREEAM NOR	Pass	SP510 passes the requirement of BREEAM-NOR New Construction v1.1 (May 2017).
LEED v4	Compliant	SP510 is compliant with LEED v4.



## **SP510**

## Low Mod Construction Sealant & Adhesive



### Usage / Purpose

SP510 is a low modulus sealant & adhesive, which is low slump even in warmer temperatures. It is an excellent adhesive and has superb application properties. It cures with air humidity, to form a tack-free surface and provides good resistance to light, ageing and weathering. SP510 is suitable for long term elastic sealing of window and door perimeter joints and movement joints between construction components. It can be used for indoor\* and outdoor applications. It is compatible with metals and most construction materials. \*excluding bathrooms/sanitary areas

#### **Key Benefits**

- Easy to tool
- Good grab properties
- Excellent adhesive
- Free from isocyanates, silicone & solvents
- · Low slump
- Can be painted over





## Low Mod Construction Sealant & Adhesive

#### **Necessary Tools**

 Use a good quality sealant gun. Smoothing tools (e.g. AA311), smoothing agent (eg AA301).

#### **Protective Equipment**

Use in well ventilated conditions and ensure all recommended protective equipment is worn during handling & use of this product. For full recommendation, refer to safety data sheet.

#### **Joint Design Considerations**

- Joint design to be in accordance with BS 6093.
- For the purposes of joint width calculation to ISO 11600, the maximum movement capability of SP510 is 20%.
- Minimum joint width should normally not be less than 5 mm.
- Typical maximum joint width of 30 mm, however, for all large joints (greater than 30 mm), please contactTremco CPG to discuss project specifics.
- Width to depth ratio should typically be 2:1.
- Minimum width to depth ratio should typically be 1:1.
   Please note MAF is reduced at smaller width to depth ratios.
- The minimum contact area with any substrate (including for fillet joints) should be determined by the quality of the bond. If in doubt please contact Tremco CPG.
- PE backing rod should be used in all movement joint applications.

#### **Surface Preparation**

- Always carry out a test to confirm compatibility prior to use.
- Surfaces must be clean, free from grease and must be stable and drv.
- For non-porous substrates use cleaner AT200, do preliminary test.
- Use a brush to remove loose particles from joints.
- For plastics and powder coatings, clean with AT115 and conduct preliminary tests to confirm compatibility.

#### **Priming**

 SP510 has excellent primer-less adhesion to many typical construction materials but some substrates may require a primer – see primer table for details.

#### **Priming Table**

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Bricks, Concrete & Stone			
Concrete	+, AT140		
Brick	AT140		
Metals			
Aluminium	+		
Aluminium Anodised	+		
Aluminium Powder Coating	Test every case, AT150, AT160		
Hot Dipped Galvanised Steel	+		
Stainless Steel	+		
Iron	+, AT150		
Glass			
Glass	+		
Plastics			
ABS	AT150		
GRP Polyester	+		
Polyamide	+		
Polypropylene	AT150		
Polystyrene	+		
Sanitary Acrylic Coloured	+		
Acrylic Glass PMMA	+, AT150		
PVC Rigid	+, AT150, AT160 (tests recommended)		
PVC Soft Sheet/Film	+, AT150		
Tiles	·		
Tiles Reverse Side	AT140		
+ = good adhesion can normally be expected without primer. +, tests have shown that sometimes, but not always, primer is needed.  Where there is no result listed according to substrate please contact technical department.			

## **Primers & Cleaners Coverage**

required to improve adhesion.

Coverage below is based on a 500 ml tin applied to a 10 mm deep joint and applied to one side only.

Reference numbers (e.g. AT111) show the type of illbruck primer

	Maximum Im	Minimum Im				
Primer: Non-porous substrates						
AT105	1,147 1,037					
AT120	958	867				
AT150	1,498	1,356				
AT160	1,381	1,249				
Primer: Porous substrates						
AT101	484	291				
AT140	907	544				
Cleaner						
AT115	547	495				
AT200	164	148				

## Low Mod Construction Sealant & Adhesive



#### **Joint Backing**

Polyethylene (PE) backing rod, (e.g. PR102) is recommended beneath the joint to ensure the sealant is only bonded to two surfaces

#### **Application**

- Use a good quality sealant gun to expel the sealant consistently. Cut cartridge nozzle to desired aperture.
- Apply between +5°C and +50°C. All beads should be tooled after application to ensure firm, full contact with the joint faces using smoothing tools (e.g. AA311), and smoothing agent (e.g. AA301)

#### Cleaning

Fresh, uncured sealant can be removed with AT115. Ensure surface is solvent resistant before cleaning. Cured sealant can only be removed mechanically.

#### Coverage

Joint dimensions width x depth (mm)	Approximate metres per 310 ml cartridge	Approximate metres per 400 ml sausage	Approximate metres per 600 ml sausage
5 x 5	12.4	16	24
8 x 6	6.4	8.3	12.5
10 x 8	3.8	5	7.5
15 x 10	2	2.7	4.0
20 x 12	1.2	1.7	2.5
25 x 15	0.8	1.1	1.6
30 x 15	0.6	0.9	1.3

#### **Please Note**

If used on natural stone, staining of the edges cannot be excluded. Application to the reverse sides of mirrors, plastics sensitive to stress cracking and pro-longed exposure to standing water is not recommended. Oil, tar, or bitumen containing substrates as well as materials based on natural rubber, chloroprene or EPDM are not suitable. Overpainting is possible but compatibility with paint should be checked prior to use.

#### **Health & Safety Precautions**

Safety data sheet must be read and understood before use.

#### **Technical Service**

Tremco CPG UK Limited has a team of experienced Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Services on 01942 251400.

#### **Guarantee / Warranty**

Tremco CPG UK Limited products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG UK Limited written instructions and (b) in any application recommended by Tremco CPG UK Limited, but which is proved to be defective, will be replaced free of charge.

No liability can be accepted for the information provided in this leaflet although it is published in good faith and believed to be correct.

Tremco CPG UK Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.



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