

Cl/SfB	Yt4
CAW P22	
Uniclass L675:P99	

Description

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

Colours

White, brown, ivory, 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/mm ²
Modulus at 60% Elongation	ISO 11600	~ 0.3 N/mm
Tensile Strength	DIN 53504 S2	~ 1.3 N/mm ²
Elongation at Break	DIN 53504 S2	~ 500%
Shore A hardness	DIN 53505	~ 30
Application Temperature		+5°C to +40°C
Service Temperature		-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 fulfills 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 contact tremco illbruck 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 illbruck.
- 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 dry.
- 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

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	+
Copper	
Brass	
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.
 Reference numbers (e.g. AT111) show the type of illbruck primer required to improve adhesion.

Primers & Cleaners Coverage

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

	Maximum lm	Minimum lm
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.

When bonding to copper or brass, please consult tremco illbruck technical services for priming details.

Health & Safety Precautions

Safety data sheet must be read and understood before use.

Technical Service

tremco illbruck 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 +44 (0)1942 251400.

Guarantee / Warranty

tremco illbruck products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with tremco

illbruck written instructions and (b) in any application recommended by tremco illbruck, 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 illbruck Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.



tremco illbruck Limited
 Coupland Road, Hindley Green
 WN2 4HT Wigan
 United Kingdom
 T: +44 (0)1942 251400
 F: +44 (0)1942 251410

info.uk@tremco-illbruck.com
 www.tremco-illbruck.co.uk