



Fix ALL Crystal

Description

Fix ALL Crystal is a high quality, crystal clear, neutral, elastic, one-component adhesive sealant based on SMX – Polymer.

Properties

- Crystal clear formulation
- Very good adhesion on many materials, even if slightly moist
- Good mechanical characteristics
- Impervious to mould, contains biocide with fungicidal action
- Suitable for sanitary applications
- Good extrudability
- Can be painted with water-based systems
- Permanently elastic after curing



Application

- All common bonding applications, both interior and exterior.
- Elastic bonding in construction and building applications.
- Sealing joints indoors.
- Invisible bonding of glass and other transparent materials in indoor applications.
- Sealing joints in sanitary rooms (bathroom) and kitchens.

Technical data

Base	SMX Hybrid Polymer	
Consistency	Stable paste	
Curing system	Moisture curing	
Specific Gravity (g/ml)	1.05	
Skin formation (minutes)	ca. 4	
Curing speed (mm/24h)	ca. 2 to 3	
Hardness (Shore A, Points)	38 ± 5	
Elongation at Break (%)	ISO 37	ca. 350
Maximum tension (N/mm ²)	ISO 37	ca. 1.80
Maximum allowed joint movement (%)	± 20	
Elasticity Modulus 100% (N/mm ²)	ISO 37	ca. 0.60
Elastic Recovery (%)	ISO 7389	> 75
Temperature Resistance (°C)	-40 to +90	
Application Temperature (°C)	+5 to +35	

Footnote: Skinning time and curing speed may vary depending on environmental factors such as temperature, moisture, and type of substrates



Fix ALL Crystal

Substrates

■ Substrate condition

The surface must be rigid, clean, dry or slightly moist, free of dust and grease.

■ Substrate preparation

Porous surfaces should be primed with Primer 150. If needed non-porous surfaces can be prepared with a Soudal Activator or Cleaner. While producing plastics very often releasing agents, processing aids and other protective agents (like protection foil) are used. These should be removed prior to bonding or sealing.

■ Substrate types

Fix ALL Crystal has a good adhesion to all usual building substrates, lacquered wood, PVC, metal, brick, concrete, etc..

Fix ALL Crystal is not suitable for PE, PP, PTFE (Teflon®), PVC, bituminous substrates, copper or copper containing materials such as bronze and brass. Bonding plastics like PMMA (e.g. Plexi® glass), polycarbonate (e.g. Makrolon® or Lexan®) in stress loaded applications can give rise to stress cracking and crazing in these substrates. The use of Fix ALL Crystal is not recommended in these applications.

Due to the wide variety of materials used in façade technology a preliminary compatibility test is necessary.

Joint Size

Minimum width for bonding: 1 mm

Minimum width for joints: 5 mm

Maximum width for bonding: 3 mm

Maximum width for joints: 10 mm

Minimum depth for joints: 5 mm

Recommendation for sealing jobs: joint width = 2 x joint depth.

Application method

■ Application method

Apply the product with a manual, pneumatic or a battery-operated caulking gun. Apply the product evenly without air inclusions into the joint. Smoothen the joint with a spatula with the help of a finishing solution. Avoid that finishing solution comes between the joint edges and sealant (to prevent adhesion loss).

Bonding: Apply the adhesive by means of a caulking gun in equal beads or dots on one of the materials that have to be bonded.

Always apply a bead on the edges of the substrates and on edges and corners of panels. Press the substrates together before skin formation and batten down with a rubber hammer. Support if needed.

■ Cleaning method

Swiftly clean with white spirit after usage to Prevent residue accumulation & maintain equipment efficacy.

■ Finishing method

Utilize soapy water to wipe away excess caulking or sealant before it dries, ensuring a polished appearance. Cured product must be removed mechanically.

■ Repair method

Repair with the same material.



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Health and Safety Recommendations

Take the usual labour hygiene into account. Consult the packaging label and safety data sheet for more information.

Dangerous. Respect the precautions for use.

Packaging/Logistics

Colour: Transparent

Packaging: 290ml Cartridge

Shelf life: 12 months from the date of production. The product must be stored in its original, undamaged, and sealed packaging under dry conditions, protected from direct sunlight, and at temperatures between +5°C and +25°C.

Standards and Certificates

- FDA Regulation code CFR 21 paragr. 177.2600 (e) for repeated use in contact with aqueous foods.
- Declaration of compliance ISEGA – Tested for use in food related areas.

Environmental Clauses

- Leed regulation: Fix ALL Crystal conforms to the requirements of LEED. Low – Emitting Materials: Adhesives and Sealants. SCAQMD rule 1168.
- Complies with USGBC LEED 2009 Credit 4.1: Low-Emitting Materials – Adhesives & Sealants concerning the VOC-content.

Remarks

- Fix ALL Crystal may be over painted with water-based paints, however due to large number of paints and varnishes available we strongly suggest a compatibility test before application.
- The drying time of alkyd resin-based paints may increase.
- Fix ALL Crystal can be applied to a wide variety of substrates. Because specific substrates such as plastics, like polycarbonate, etc., may differ from manufacturer to manufacturer, we recommend a preliminary compatibility test.
- Fix ALL Crystal is not suitable for expansion joints.
- Do not use it in applications where continuous water immersion is possible.
- Fix ALL Crystal cannot be used as a glazing sealant.
- Not suitable for bonding aquariums.
- Do not use it on natural stones like marble, granite, etc., for this application we recommend using Soudaseal 212 CS.
- The sanitary formula should not replace regular cleaning of the joint. Excessive contamination, deposits or soap residues will stimulate the development of fungi.
- A total absence of UV can cause a color change of the sealant.
- Discoloration of the product due to chemicals, high temperatures, UV-radiation may occur.
- Contact with bitumen, tar or other plasticizer releasing materials such as EPDM, neoprene, butyl, etc. is to be avoided since it can give rise to discoloration and loss of adhesion.
- When using different reactive joint sealants, the first joint sealant must be completely hardened before the next one is applied.
- Fix ALL Crystal can discolour under extreme conditions or after very long UV exposure.

This technical data sheet supersedes all earlier versions. The information provided is based on our tests and practical experience and is supplied in good faith as general guidance only, without creating any liability. Since materials, substrates, application design, and processing conditions vary widely and are outside our control, we cannot accept responsibility for the results obtained from use of this information. The user must verify suitability for the intended application through their own testing, and preliminary trials are recommended in all cases. The manufacturer reserves the right to change product specifications without prior notice.