EVOLUTION TECNOPANEL 699

Elastic adhesive for panel installation with the Sigill Tecnopanel System.

DESCRIPTION

Evolution Tecnopanel 699 is a one-component elastic adhesive SiMP - Silyl Modified Polymer, designed for bonding architectural panels on substructures in ventilated or insulated facades. Cross-links under the influence of atmospheric humidity to form a high-performance, permanently flexible, ultra-low shrinkage elastic adhesive. Free of solvents and isocyanates, it has very low emissions and is completely odorless

CERTIFIED ACCORDING TO:

*ETA based on EAD 250005-00-0606 "Adhesive for wall cladding"**
EAD 090062-01-0404 (ex ETAG 034)**
EMICODE EC1PLUS Protocol
EUROFINS IAC GOLD Protocol
VOC Emission A+ Rating

*in the process of certification
** Wind and impact resistance tests on façade cladding

COMPLIES WITH:

LEED iEQc 4.1; SCAQMD Rule 1168; BAAQMD Reg 8 Rule 51
CARB VOC Regulation

AREAS OF APPLICATION

The **Evolution Tecnopanel 699** elastic adhesive is the main component of the **Sigill Tecnopanel System**, a universal mounting system for architectural panels. It provides permanent elasticity and high mechanical strength by eliminating the need for visible fasteners such as rivets and staples, offering a quick and cost-effective installation process. Suitable for various materials such as HPL, ceramics with or without reinforcing mesh, fiber cement and mineral panels in general, aluminum composite panels (ACP) or other metals (TMCP), engineered stone.

DRAFT

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SPECIAL FEATURES

- No hazard symbols on the label, solvent-free, isocyanates and odourless
- Easy to apply with excellent thixotropy without dripping and a clean detachment
- Excellent adhesion with specific pre-treatments on all commercially available panels or structures
- Excellent resistance to aging and atmospheric agents, maintaining the mechanical and elastic characteristics over time
- Neutral behaviour, does not attack the bonding surface, does not form bubbles
- Ensures uniform distribution of expansion stresses
- Reduce costs by up to 30% compared to mechanical fastening

TECHNICAL FEATURES

Appearance		Thixotropic paste
Colour		Various colors
Chemical nature		SiMP Silyl Modified Polymer
Type of polymerization		Moisture curing
Curing Through Volume *(Method NT07) (24h - 23°C and 50% R.H.)*	*mm*	Ca. 2.4
Hardness Shore A *(DIN 53505)*		Ca. 60
Density *(Method NT06) (23°C and 50% R.H.)*	*g/cm³*	Ca. 1.50
Tack free time *(Method NT17) (23°C and 50% R.H.)*	*min*	Ca. 20
Elastic modulus at 100% *(ISO 37 DIN 53504)*	*N/mm²*	Ca. 1.45
Tensile strength *(ISO 37 DIN 53504)*	*N/mm²*	Ca. 2.4
Elongation at break *(ISO 37 DIN 53504)*	*%*	Ca. 250
Application temperature	*°C*	+5 to +35
Thermal resistance	*°C*	-40 to +100

APPLICATION

In the application of the **Tecnopanel System System**, it is essential to refer to the compatible materials present in the ETA certification; nevertheless, it is advisable to carry out preliminary tests of adhesions to the substrate selected according to the cycle and pre-treatments indicated by the system.

The optimal application temperature for the substrate and adhesive is between 10°C and 25°C, however the system is applicable between 5°C and 35°C. Do not apply during rain, frost, fog, or dew hazard, as this will cause surface condensation.

This product is only suitable for experienced professional users.

Open the package, screw on the plastic spout and cut it into a triangle to obtain a minimum height of 6mm and a base of 12mm. The cutting of the spout is strongly recommended to avoid creating overpressure inside the package during extrusion, if carried out with excessive intensity (in relation to the size of the bead).

Once the package has been opened, the product can be used in a relatively short time by simply removing the reticulated mass present at the top of the spout. In the case of subsequent applications after a significant period of time (usually more than a month) it is necessary to replace the spout.

Do not apply in the presence of silicone or polyurethane sealants during the cross-linking phase, and avoid contact with solvents that have not already evaporated

For the correct application procedure of the **Tecnopanel System System**, refer to the installation guide summarized here:

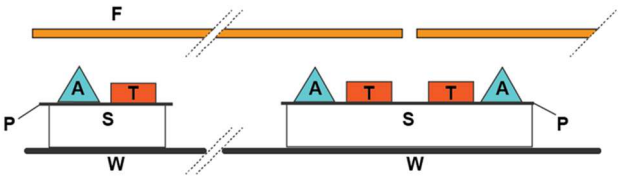
Surface preparation

Thoroughly clean the surfaces to be glued with **Tecnocleaner 400** and a cloth, apply **Tecnoprimer 160** on the surfaces where it is intended (ceramic) and **Tecnoprimer 130** on the aluminum structures. Allow each component to dry before proceeding with the adhesive, according to the timing of the data sheet.

Tape and adhesive application

Tape the substructure to facilitate the initial positioning of the panels, in the measure of two strips for each vertical upright positioned in the central part of the profile.

Apply the beads of **Evolution Tecnopanel 699** laterally and externally with respect to the double-sided adhesive, in the measure of two for each upright. The bead must have a triangular section, with a 12 mm base and a height of 6 to 8 mm. Please refer to the following picture:



W: Wall/Building Wall
S: Aluminum structure
F: Architectural façade/panel
P: Primer, applied in film
A: Adhesive, triangular base beaded 12mm height 6-8mm
T: Tape, 12mm Base Height 3mm

Positioning the panels

The positioning of the panels on the substructure must be carried out with adequate pressure on the double-sided adhesive tape on the sealing beads; This will go from triangular to rectangular shape with a base of 12 mm and a height of 3 mm as per the project specification; The panels will need to be properly spaced and aligned before adhesion.

Curing times and visual inspection

The adhesive will be completely cured in thickness from 3 to 7 days depending on environmental conditions, the initial adhesion is guaranteed by double-sided adhesive tape. Check that the panels remain stationary during the curing process and that the joints, alignment, and flatness of the bonded surfaces are not defective.

EQUIPMENT CLEANING AND PERSONAL PROTECTION

Clean the tools used with Cleaner E. When the product has not yet hardened, you can remove it from the tools using paper or a cloth. Once hardened, it can only be removed mechanically.

It is advisable to avoid contact with the skin, using protective rubber or polyethylene gloves. In case of contact with skin, wash with soap and water.

FORMATS

Description	Pieces
600 ml foilpack white color	20
600 ml foilpack gray color	20
600 ml foilpack black color	20
290 ml cartridge white color	12
290 ml cartridge gray color	12
290 ml cartridge black color	12

SHELF LIFE AND PRESERVATION

Evolution Tecnopanel 699 can be stored for 12 months in its original packaging, in a cool and dry place with a temperature between 10°C and 25°C. Keep away from sources of moisture, heat sources and direct contact with sunlight.

GENERAL INFORMATION

The information contained in this data sheet represents the maximum of our knowledge. In any case, this document cannot be considered a guarantee of use, sector of use and application of the product in accordance with the instructions provided. The success of the application is beyond our control and depends on numerous factors. We disclaim any responsibility for misuse of the product, the recommendations contained in this document should be considered general guidelines. If doubts remain, carry out preliminary tests. NPT Srl reserves the right to modify and update the technical data sheet without prior notice. Customers are kindly invited to check that they have the latest version.

ALWAYS CONSULT THE SAFETY DATA SHEET BEFORE USING THE PRODUCT