PU 971

Polyurethane High Modulus Sealant (HM)

DESCRIPTION

Polyurethane based, single component, **high modulus (HM)** sealant and adhesive which is developed to provide **adhesion** and **sealing** in roofs, facades, sandwich panels, containers, wood, metal, composite and prefabricated structural elements.

APPLICATION AREAS

- Indoor and outdoor,
- Horizontal and vertical joint combinations and dilatation joints,
- Roof and terrace dilatations and in joints of parapet corners,
- To absorb vibrations in intersection details and joints of containers, truck cabins etc.
- Intersection details of prefabricated elements,
- Assembly and insulation of sandwich panels in roof and facades,
- Assembly and sealing of wood, metal, PVC, concrete, fiber cement board and various composite cabins, construction and container intersections.

TECHNICAL PROPERTIES

Appearance	High viscosity polyurethane sealant
Color	Pls. see the color chart
Density	1.15 ± 0.05 g/cm^3 (DIN 53479)
Surface Dry Time	70 ± 30 minutes
Application Temperature	Between +5°C and +35°C
Curing Rate	2 mm / 24 hours
Elongation at Break	> 800% (14 days) (DIN 53504)
Hardness (Shore A)	40 ± 5 (DIN 53505)
Tensile Strength	> 2 N/mm^2 (DIN 53504)
100% Modulus	> 0.50 N/mm^2 (DIN 53504)
Volume Change	~ 5%
Sagging	< 2 mm (DIN EN ISO 7390)
Service Temperature	Between -30°C and +80°C

ADVANTAGES

- Easy to apply and its surface can be smoothed.
- Has high streching properties and turns to its original form.
- Has perfect and permanent elasticity and adhesion strength.
- Has high shock absorption and high resistance to load and friction.
- Hardens with the moisture in the air.
- Can be overpainted.
- Watertight seal after curing.
- Resistant to aging.
- Thixotropic, does not sag.
- Resistant to water, salted water, weak acids and bases and waterborne cleaners.

CONSUMPTIONS

Varies depending on the joint width.

PACKAGING

280 ml aluminum cartridges
600 ml aluminum sausages

APPLICATION

PREPARATION OF THE SURFACE

- The surface must be clear of materials which prevent bonding, such as dust, oil, tar, bitumen, paint, silicone, curing agents, detergents and mold release oils.
- The surface must be non-humid, must be dry.
- Clean non-porous surfaces such as aluminum, glass and metal with an appropriate solvent such as acetone, which does not cause any stain.
- Use FIXA **Polyethylene Backer Rod** in joints to reduce the consumption of PU 971.
- Mask the application area with masking tape for a smooth appearance and to prevent the material from contaminating the surrounding areas.
- Use **Polan A Polyurethane Floor Primer** for porous and absorbent surfaces.

APPLICATION

- PU 971 is ready-to-use.
- If PU 971 is in cartridge package, cut the tip of the cartridge is cut and place the nozzle which is cut with an appropriate angle to the tip of the cartridge. Open the aluminum cover under the cartridge. Apply without leaving any air.
- If PU 971 is in sausage type package, place it in an appropriate sausage gun and apply in joints without leaving any gap.
- Following the application, smooth the surface within 5 minutes, pressing with a spatula. This will enable PU 971 to adhere stronger and provide a better appearance of the filling.
- Consider the movement ability of the material when determining the joint width. The joint width must be between 5 mm minimum and 30 mm maximum.
- Remove the masking tape after the application. Clean the uncured sealant which is spread in undesired areas with a cleaning thinner. When curing is complete, it can only be cleaned mechanically.
- It can be overpainted, however take into account possible crack formations on the paint due to the joint movements.

CAUTION

- Avoid application below +5°C and above +35°C.
- Do not use in unventilated places since it needs the humidity in the air to be cured.
- The application area must definetely be non-humid.
- Do not use in environments where the chlorine amount is high.
- In cold weather, before the application, keeping PU 971 at +20°C for a while will make the application easier.
- Do not contact PU 971 with solvent, alcohol or cleaning materials which can damage its chemical structure before it is cured.

SHELF LIFE

Expires in 12 months. Store unopened packages in a dry, non-humid and cool environment, between +5°C and +30°C protected from sun light.

HEALTH AND SAFETY

It contains isocyanate. As with all chemical products, contact with food, skin, eyes and mouth should be avoided during usage and storage. During the application, work wears, protective gloves and goggles should be used according to the work place health regulations. If swallowed by accident, consult a doctor. Swill in case of contact with skin. Long term and intensive inhaling of the solvent vapor which is released during the curing of the product can damage the respiratory system. The product should only be used in areas ventilated adequately. Avoid contact with uncured sealant for long time. Keep out of reach of children.