

duretán® XP

polyurethanes

Technical Data Sheet

duretán® XP new high modulus polyurethane sealant for multiple uses and multiple substrates. Created to seal constructive joints with severe movement between concrete, stones, metals, as well as grouting, roofing sheet seals, and seals in general.

Technical information / duretán® XP (aluminum cartridge)

PROPERTIES	VALUE	TEST METHOD
Chemical base	New formulation of polyurethane	
Aspect	Paste	
Density	1.3 gr/ml	ISO 1183
Tack-free time	90 min	
Curing ratio	3 mm/day	
Application temperature	41° F to 104 °F	
Service temperature	-22 °F to 176 °F	
Hardness	Shore A 30	DIN 53505
Tensile strength	0,72 N/mm ²	DIN 530452
Elongation	>500%	ISO 8339
Movement capacity	50 %	
VOC	0.0000019 g/l	

Information obtained in laboratory tests.

Uses

duretán® XP has been formulated mainly for:

- Seals or elastic, hermetic, waterproof and durable joints between porous with porous materials, smooth with porous materials and smooth with smooth materials.
- Seals construction joints with severe movement between materials such as masonry, retaining walls and cement panels.
- Seals in walls, floors or in ceiling corners that will become curved surfaces, to prevent bacteria formation or accumulation in surgery rooms or laboratories.
- Seals in natural stones.
- Perimeter seals between aluminum and wall in high-rise buildings.
- Seals in metals, iron, aluminum sheets and multiple materials from industry and construction.
- Seals on galvanized sheet roofs and seals between metal sheets.
- Seals on wooden floors, lambrines, beams and large ceilings.

Advantages

- It does not generate bubbles like a traditional polyurethanes.
- It does not drip on vertical joints.
- Joint width up to 5cm.
- Low in isocyanates.
- Very low VOC levels.
- Complys and exceeds the requirements of standard ASTM C-920, Class 50, Type NS.
- Complys with FDA requirements.
- Does not stain natural stones.
- It can be covered with waterproofing or plaster once cured.
- Excellent adhesion to different substrates without using a primer.
- Maximum resistance to aging and weathering.
- Excellent resistance to saline moisture.
- Resists the attack of microorganisms.
- Once cured it can be in contact with drinkable water.
- Can withstand small oil and gasoline spills.



Application

The surfaces to be sealed shall be firm, dry, clean, free of dust, grease, oil, water and old sealant. Clean porous surfaces with a brush or by applying pressurized air to remove all loose particles. In the case of smooth surfaces, clean with a two-clothes technique that consists of passing a lint-free cloth impregnated with isopropyl alcohol over the surface and immediately removing all impurities with another dry and clean cloth. Place masking tape on the surfaces to delimit the area to be sealed. Introduce **duretán® xp** in the caulking gun for cartridge. Pierce the foil seal from the top of the cartridge; then place and cut the pipette at 45° calculating the width of the joint to be sealed. Pull the trigger of the gun to press the plunger and the product will flow over the joint. Apply the sealant like a cord on the surface to be sealed. Leave a section of at least 6 x 6 mm and a maximum of 5 cm. Finally, go back in the opposite direction to the application with a curved spatula so that the sealant penetrates the joint as necessary, to generate better adhesion and break the air bubbles that may be trapped during the application. Remove the masking by peeling in the opposite direction to the application with a continuous but controlled movement. The excess could be removed as soon as possible with a cloth moistened with isopropyl alcohol.

Recommendations

- Perform tests under real application conditions to ensure proper performance.
- Do not apply on wet surfaces or materials in the process of curing or setting.
- Paint it until it is completely cured.
- To form an adequate sealant joint and prevent the adhesion to a third surface, it is recommended to use a cylindrical extrusion of polyolefin SOF Rod or polyethylene HBR as a backing (see technical data sheet).
- The ratio between width and depth for joints of 6 mm and up to 10 mm wide will be 1 to 1 (width = depth). In joints larger than 10 mm and up to 25 mm, it will be 2 to 1 (depth = width/2).
- It is important to consider that this sealant is not developed to be constantly immersed in water, this will shorten its lifespan.

Maintenance

- It does not require any maintenance.
- If the seal is damaged, replace the damaged section by cleaning the surface before applying new sealant.

Precautions

- Sealant shall not be applied in completely enclosed areas; due this requires relative humidity for the curing process.
- The uncured product could cause eye and skin irritation on prolonged contact. In case of discomfort, wash with plenty of water for 15 minutes and immediately look for medical attention
- Keep out of the reach of children.

Limitations

- Do not use in glass and plastic.
- Do not use in contact with asphalt.

Presentations

Packaging and Colors

- White



Performance

A cartridge covers 7.75 m, in 6 x 6 mm joints, considering a 7% waste.

Shelf life

15 months in a fresh and dry warehouse in original packing at a temperature of 21°C and 50% relative humidity.

Technical Support

Productos Pennsylvania's Technical Support is at your service, assisting you with:

Guidance in how to apply this or any of our products.

Blueprint reviews.

Joint dimension calculus.

Compatibility and adhesion testing of our sealants with different materials.

NOTE:

Productos Pennsylvania S.A de C.V. provides technical assistance when required. Please contact our Technical Department regarding use and application of this product. It is the user's responsibility to test the product and its uses before application.

Productos Pennsylvania, S.A. de C.V.

Camino a San José 1, Fracc. San Pablo Tecnológico, C.P. 76150, Querétaro, Qro. México

* are Trademarks registered by Productos Pennsylvania S.A. de C.V.
Date of production: March 2022

the sealing expert

