



Den Braven

Technical Data Sheet

Zwaluw Polyflex® 452

High modulus polyurethane sealant



Product Description

Zwaluw Polyflex® 452 is a professional high quality sealant based on polyurethane technology which cures by reacting to moisture to form a durable elastic rubber.

Benefits

- High modulus
- High mechanical performances
- Permanently elastic
- Paintable with water based paints

Applications

Zwaluw Polyflex® 452 was specifically developed as a universal sealant for durable elastic sealing connection and dilatation joints, and joints in pedestrian walkways in building and industry. Universal construction adhesive for bonding many building materials such as: stone, concrete, glass, plasterboard, PU, PVC, hard plastics, enamel, ceramic, copper, lead, zinc, aluminium, metals, alloys, stainless steel, wood and paint systems.

Directions Of Use

A joint with the correct dimensions is able to absorb movements between building materials. The joint depth should always be in the correct relationship of the joint width. A general rule is the ratio of joint depth to the width of the joint with a joint width up to 10 mm is 1:1, with a minimum of 5 mm in width and depth. For joints wider than 10 mm, the depth is the width divided by 3 plus 6 mm. For more

information see the Technical Bulletin Joint Dimensions in the Knowledge Base on our website www.denbraven.com.

Additional information

100 % modulus	ISO 8339	± 0,70 N/mm ²
Application temperature		+5°C to +40°C
Base		Polyurethane
Curing time	@ +23°C/50% RH	± 3mm/24 hours
Density	ISO 1183-1	± 1,23 g/ml
Elongation at break	ISO 8339	± 450%
Flow	ISO 7390	< 3mm
Frost resistance during transportation		Up to -15°C
Shearing strength	ISO 4587	± 1,4 N/mm ²
Shorea hardness	ISO 868	± 45
Shrinkage	ISO 10563	<10%
Skin formation	@ +23°C/50% RH	70 minutes
Temperature resistance		-30°C to +70°C

These are typical values

Limitations

- Not suitable for PE, PP, PC, PMMA, PTFE, soft plastics, neoprene and bituminous substrates
- Not suitable in combination with chlorides (pools)
- Slight yellowing may occur when white sealant is exposed to ultraviolet rays

Surface Preparations and Finishing

Application temperature +5°C to +40°C (applies to environment and substrates). All substrates must be solid, clean, dry, and free from grease and dust. Clean substrates with Zwaluw Cleaner. Zwaluw Polyflex® 452 adheres perfectly without the use of primer to most non porous substrates. Porous substrates to be pre-treated with Zwaluw Primer Universal. Always test adhesion prior to application. Use Zwaluw Finisher to smooth the joint.



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Paintability

Zwaluw Polyflex® 452 is perfectly paintable with water based and most 2 component paints. Synthetic paints can dry slower. We recommend testing compatibility with paint prior to application. If Zwaluw Polyflex® 452 is being painted over (not necessary), we recommend slightly sanding the sealant and the junction surfaces prior to use with Scotch-Brite. For the best results, we recommend painting within a few days after application.

Cleaning

Uncured material and tools can be cleaned by using Zwaluw Cleaner. Cured material can only be mechanically removed. Hands can be cleaned with Zwaluw Wipes.

Colour(s)

- Black
- White

Packaging


- Cartridge
- Sausage

For product specifications, please refer to the Product Detail Page

Shelf Life

If kept stored in a cool, dry place, in unopened original packaging, between +5°C and +25°C, shelf life is up to 12 months from production date.

Certifications

	A+ (Eurofins ISO 16000) NF P 85-610
	EN 15651-1: F-EXT-INT-CC 25HM EN 15651-4: PW-EXT-INT-CC 20HM

Health & Safety

Product Safety Data Sheet must be read and understood before use. These are available on request and via the Den Braven websites.

Warranty & Guarantee

Den Braven warrants that its product complies, within its shelf life, to its specification.

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knowledge