



# 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](http://www.denbraven.com).

#### Additional information

100 % modulus	ISO 8339	± 0,70 N/mm2
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/mm2
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)

- White
- Black

#### Packaging


- Sausage
- Cartridge

*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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