



Den Braven

# 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.

## KEY 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

## DIRECTION FOR 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)

## TECHNICAL SPECIFICATIONS

<b>100% Modulus</b>	ISO 8339	± 0,70 N/mm <sup>2</sup>
<b>Application Temperature</b>		+5°C to +40°C
<b>Base</b>		Polyurethane
<b>Curing Time</b>	@ +23°C/50% RH	3mm/24 hours
<b>Density</b>	ISO 1183-1	± 1,23 g/ml
<b>Elongation At Break</b>	ISO 8339	± 450%
<b>Flow</b>	ISO 7390	< 3mm
<b>Frost Resistance</b>		Up to -15°C
<b>Shore A Hardness</b>	ISO 868	± 45
<b>Skin Formation</b>	@ +23°C/50% RH	70 minutes
<b>Temperature Resistance</b>		-30°C to +70°C
<b>Tensile Strength</b>	ISO 8339	± 0,9 N/mm <sup>2</sup>
<b>Shrinkage</b>		<10% (ISO 10563)
<b>Shearing Strength</b>		± 1,4 N/mm <sup>2</sup> (ISO 4587)

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.

## 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.

## PACKAGING DESCRIPTION

- Sausage
- Cartridge

*For product specifications, please refer to the Product Detail Page*

## COLOUR

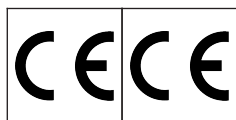
White,Black,Grey

## 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

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



## HEALTH & SAFETY

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

## WARRANTY & GUARANTEE

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

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