



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 has been specially 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.



Den Braven

Bostik Singapore
1 Science Park Road, #04-01/5 The Capricorn, 117528 Singapore
T +65 6419 9161 | E

17-05-2024
01:07:21
MDT



Den Braven

Technical Data Sheet

Zwaluw Polyflex® 452

High modulus polyurethane sealant

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)

- Grey
- Black
- White

Packaging


- 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 our websites

Warranty & Guarantee

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

Disclaimer

All information in this document and in all our other publications (including electronic ones) is based on our current knowledge and experience and is the exclusive (intellectual) property of Bostik. No part of this document may be copied, shown to third parties, reproduced, communicated to the public or used in any other way without Bostik written consent. The technical information in this document serves as an indication and is non-exhaustive. Bostik is not liable for any damage, either directly or indirectly, due to (editorial) errors, incompleteness and/or incorrectness of this document. This includes, but is not limited to, incompleteness and/or incorrectness due to technological changes or any research conducted Bostik cannot be held liable for any damage, either directly or indirectly, due to the use of the product(s) depicted in this document. The user must read and understand the information in this document and other documents relating to the products prior to the use of the product. The user is responsible for performing all the requisite tests to make sure that the product is suitable for its intended use. We have no influence in what way the product is applied and/or any circumstances relating to events occurring during storage or transport and therefore we do not accept any liability for damage whatsoever. All deliveries are made exclusively in accordance with our general terms of conditions which have been filed at the Dutch Chamber of Commerce.

Better
results
through
knowledge