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Den Braven is a specialized manufacturer of high quality sealants, adhesives, pu foams and technical aerosols

Den Braven is a multinational company with about 1.100 enthusiastic employees, spread over 8 production facilities and 25 sales and distribution offices. In addition, we reach near global coverage via a worldwide network of distribution points.

From the outset of the start of the company 1974, Den Braven has specialized in the production of high quality ISO certified sealants, adhesives, foams and technical aerosols for use in the construction industry as well as for a variety of industrial applications. Having experienced strong growth, the company has established itself as market leader in numerous countries.

# Den Braven products can be divided into the following technologies:

- Acrylic Sealants & Adhesives
- Silicones
- Hybrid Sealants & Adhesives
- PU Sealants & Adhesives
- Polyurethane Foams
- Technical Aerosols



Den Braven has developed for you a digital tool that offers the possibility to choose in a few clicks the most ideal product for your application.

This tool is based on your situation. By answering simple questions, by clicking buttons, Den Braven provides the solution, including additional products and proper application tips. The product displayed gives the best results for your application. Navigate easily through the tool. Choose the alternative result and you will find a product that has a slightly lower performance.

Find the tool at denbraven.com under the button "BY APPLICATION" or scan with your smart phone or tablet the qr-code.



# **Sustainable Air Tight Building Solutions**

Complete tested and approved portfolio for low energy and passive housing



The concept
Sustainable Air Tight
Building Solutions
of Den Braven is
combined with
sustainability



### **Sustainable Air Tight Building Solutions**

The Den Braven products in this segment prevents undesirable air flow and make them controllable. The concept provides a barrier against irritating cold (and vapour-containing) air to free access a comfortable building or dwelling. It also forms an obstruction to loose precious warm air to the atmosphere outside.

Many of the Den Braven products are tested "best in class" for heavy driving rain resistance, thermal insulating and/or air tightness.

The concept Sustainable Air Tight Building Solutions of Den Braven is combined with sustainability. This term "Sustainable" refers not only to the way of building, but highlights also the image of the products itself and the company.

If a product is part of this concept, this will be mentioned at the product page in this catalogue.

for this market segment, to make your life more safe.



Zwaluw FireProtect® is a complete, fully certified and approved range of passive fire products used in expansion and connection joints, openings and penetrations between fire compartments.

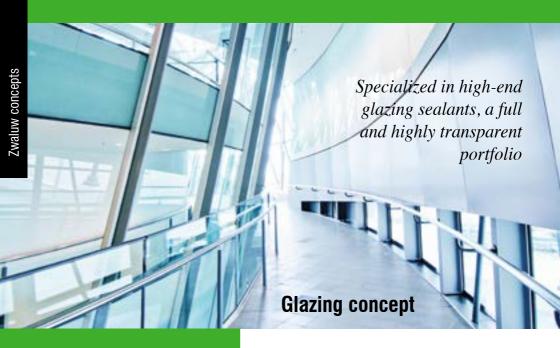
### Passive fire protection

- Saves lives
- Reduces damage to the construction
- Minimize business losses
- Protects the structure of the building so it remains accessible after the fire

Because passive fire protection is becoming increasingly important in new construction and renovation, Den Braven strongly believes in this segment and offers over engineered products with certification for this market segment, to make your life more save.

With a vast experience in the fields of solutions for linear joints (EN 1366-4) and for surface penetrations (EN 1366-3), we proudly present our full product range.

If a product is part of this concept, this will be mentioned at the product page in this catalogue.



If a product is part of this concept, this will be mentioned at the product page in this catalogue. Nowadays, applications of glass in constructions are highly varied. A world without glass as a building material is no longer imaginable. An average house has a glass surface area of 15-20 m<sup>2</sup>. Apart from windows and doors, glass is also used in bathrooms, kitchens, staircases and even as façade cladding. As glass is widely used, it will often have to be bonded or sealed.

Compared to other building materials, the expansion coefficient of glass is limited. This makes it necessary to use a high-performance elastic product to guarantee a long service life once connected to other building materials. Whether it be insulation glass, anti-burglary glass, safety glass, fire-resistant glass, coated glass or monument glass, Den Braven offers a high-performance sealant and adhesive product range for every glass type and application.

All of the Den Braven glazing sealants have the necessary CE marking (EN 15651-2). During the development of these products Den Braven actively collected market feedback. The end-users consider the application of the product priority number one, whereas the client believes that durability and quality are the key starting points.



Den Braven is the recognized worldwide specialist in sealants (caulks) and fillers which will be overpainted. In The Netherlands it is common practice to overpaint sealed joints and repairs in mineral and wooden surfaces. Therefore, we developed dedicated product solutions and technology with excellent tolerance with paint.

### UCA® technology

Products with excellent overpainting can be recognized by our UCA® logo. Den Braven shares this knowledge with paint partners all over the world for several years already. Our dedicated painters range contains products with superior crack resistance, quick overpainting, fast rain resistance, no bleeding, good curing combined with excellent flexibility and application properties.

If a product is part of this concept, this will be mentioned at the product page in this catalogue.





If a product is part of this concept, this will be mentioned at the product page in this catalogue.

One of the most common and well-known applications of a (silicone) joint sealant is undoubtedly in your bathroom and kitchen. In recent years' bathrooms and kitchens have become more luxurious. More and more money and time is spent to create a "wet" area that ticks all the boxes of the consumer's needs, demands and requirements.

Classic sanitary materials, such as ceramics, enamel and glass are being replaced by materials such as natural stone, stainless steel and plastics such as polyester and PMMA (Poly Methyl Meth Acrylic). In order to ensure an optimum adhesion and to achieve a durable and sustainable seal on these "new" materials, also "new" joint sealants are required. Based on this trend Den Braven sees a movement from the more traditional acetoxy silicone joint sealants towards neutral curing mechanisms.

To avoid staining on natural stone surfaces Den Braven offers specially developed products for bonding and sealing these types of materials. Products suitable for use on natural stone are Zwaluw Silicone-NM, a non-staining flexible and durable joint sealant and Zwaluw Hybrifix® 302, a non-staining flexible and durable adhesive.

Also a trend nowadays is the choice of colours of building and construction materials. Therefore, Den Braven is following this trend by offering a high-end durable silicone. Den Braven Silicone-COLOURS can be produced in any colour and is stocked in 31 standard colours. The high-end sanitary joint sealants of Den Braven are developed to function as durable and long-lasting joint sealants that will prevent mould growth in bathrooms and kitchens.



High quality interior finishes determine to a large extent our living comfort and could provide a substantial capital gain when you sell your house.

A simple example of an interior finish would be the joint sealing of plinths, staircases, window frames, panelling and trims. Also the bonding of ornaments, mirrors, trims, panelling, etc. in Den Braven's opinion adds to the finishing and furnishing of a house and building. When paint is applied without adequate preparation work such as putties and sealants the results can be disappointing. Compatibility between the different products is very important to get the optimum result.

Not every sealant is compatible with paint and there is a high diversity of paint types. Each paint system does have its own characteristics and can cause in combination with the interaction of sealants problems (esthetical) like cracking (crazing), discoloration of the paint itself or even a delay of curing. The right choice of sealant and paint combination is critical.

An extensive high quality portfolio for finishing your entire interior is available at Den Braven. The availability of these quality sealants, adhesives and putties is focused on you achieving the best results with the most convenient method.

If a product is part of this concept, this will be mentioned at the product page in this catalogue.





Acrylate sealants originally were used of for their ability to be overpainted. Whilst this is impossible for silicone sealants, the results on acrylic can be called reasonably good to very good.

At Den Braven we have many years of experience in producing high-quality acrylic sealants that provide the best solutions in practice. We have managed to develop ourselves into an international specialist with customers in the global paint industry. Den Braven 's international R&D centres keep close track of the developments in the market and work closely with several paint producers. This strategic partnership allows Den Braven to develop the best possible products. As for example, Den Braven provides the solution for the most common problems when overpainting sealants -, paint cracking and bleeding or migration.

UCA®-Technology is a registered brand of Den Braven that refers to these sealants that are compatible with paint and prevents paint cracking and bleeding. Den Braven 's UCA®-Technology is unique in the market for our proven products. UCA® stands for Unique Compatibility Additives.

Den Braven sealants with the UCA®-logo offer the best possible compatibility between sealants and paint due to selected raw materials, specialised additives and dedicated R&D and testing facilities.

### **Content Acrylics**

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Certification EN 15651-1: F-EXT-INT 7.5P

**DoP Number** 11001101-1001

Elasticity 7.5%

### **Zwaluw Acryl Anti-Crack**

Unique acrylic sealant which prevents paint problems

#### **Benefits**

- Paintable with water based and synthetic paints
- Reduces craze cracking and discoloration of the paint
- Perfect adhesion without use of a primer on most, even slightly damp substrates
- In- and outside\* applicable
- Nearly non smelling
- Easy to apply and clean
- · Non corrosive towards metals

### **Application areas**

Zwaluw Acryl Anti-Crack has been specially developed for sealing connection joints between stairs, walls, ceilings, skirting boards, windowsills, wooden and metal window frames, concrete and brickwork and or filling cracks, screw- and nail holes in walls and ceilings of wood, plastering, gypsum, brickwork, concrete etc.

#### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after production date, stored in a dry place.

\* Exterior applications only in good dry weather conditions for at least 5 hours after application. This product is part of the segment Interior Finish and Paints & Coatings



### **Zwaluw Acryl Clear WT**

Crystal clear paintable water based acrylic sealant

#### **Benefits**

- Crystal clear (white during application)
- Paintable with water based and synthetic paints
- Perfect adhesion without use of a primer on most, even slightly damp substrates
- · Nearly non smelling
- Easy to apply and clean
- Non corrosive towards metals

### **Application areas**

Zwaluw Acryl Clear WT has been specially developed for sealing connection joints between stairs, walls, ceilings, skirting boards and windowsills. For interior use.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Interior Finish and Paints & Coatings



Certification EN 15651-1: F-INT

**DoP Number** 11001151-1001





### **Zwaluw Acryl Ducting Seal**

High quality sealant for ducting applications

#### **Benefits**

- Tested and approved according DIN EN ISO 846
- Specific for ducting
- Sanitary version
- · Paintable with water based and synthetic paints
- Perfect adhesion without use of a primer on most, even slightly damp substrates
- · Nearly non smelling
- Easy to apply and clean
- · Non corrosive towards metals
- · Can be applied with brush

### **Application areas**

Zwaluw Acryl Ducting Seal has been specially developed for sealing connection joints of all heating, ventilation and air conditioning ducts.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after production date, stored in a dry place.

This product is part of the segment Heating, Ventilation and Air Conditioning

Certification DIN EN ISO 846

Elasticity



### Zwaluw Acryl Exterior+

High quality acrylic sealant for interior and exterior use

### **Benefits**

- Fast rain resistant after application
- In- and outside applicable
- High elongation at break and high movement accommodation
- · Paintable with water based and synthetic paints
- Perfect adhesion without use of a primer on most, even slightly damp substrates
- Nearly non smelling
- Easy to apply and clean
- Non corrosive towards metals
- Excellent tooling properties

### **Application areas**

Zwaluw Acryl Exterior + has been specially developed for connection joints between windowsills, stairs, ceilings, walls, metal sheets, skirting boards, aerated concrete, plaster board, limestone, wooden and metal window frames, concrete and brickwork. For interior and exterior use. As the sealant is early rain resistant after application there are less application limitations because of weather conditions.

### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after production date, stored in a dry place.

This product is part of the segment Façade and Paints & Coatings



Certifications EN 15651-1: F-EXT-INT 12.5P Emicode EC1 Plus

**DoP Number** 11001081-1001

Elasticit





Certification EN 15651-1: F-EXT-INT 12.5P

**DoP Number** 11001061-1003

Elasticity 12.5%

### **Zwaluw Acryl-LM**

High quality dispersion based acrylic sealant

#### **Benefits**

- · Low modulus
- High movement capability
- Paintable with water based and synthetic paints
- Perfect adhesion without use of a primer on most, even slightly damp substrates
- In- and outside\* applicable
- · Nearly non smelling
- · Easy to apply and clean
- Non corrosive towards metals

### **Application areas**

Zwaluw Acryl-LM has been developed for sealing connection joints between stairs, walls, ceilings, skirting boards, windowsills, wooden and metal window frames, concrete and brickwork.

### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after production date, stored in a dry place.

\* Exterior applications only in good dry weather conditions for at least 5 hours after application. This product is part of the segment Interior Finish



### **Zwaluw Acryl-W**

High quality water based acrylic sealant

#### **Benefits**

- Excellent price/quality relation
- Paintable with water based and synthetic paints
- Perfect adhesion without use of a primer on most, even slightly damp substrates
- In- and outside\* applicable
- Nearly non smelling
- · Easy to apply and clean
- Non corrosive towards metals

### **Application areas**

Zwaluw Acryl-W has been developed for sealing connection joints between stairs, walls, ceilings, skirting boards, windowsills, wooden and metal window frames, concrete and brickwork.

### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after production date, stored in a dry place.

\* Exterior applications only in good dry weather conditions for at least 5 hours after application. This product is part of the segment Interior Finish and Paints & Coatings



Certification EN 15651-1: F-EXT-INT 12.5P

**DoP Number** 11001031-1001

Elasticity





Certification EN 15651-1: F-INT

DoP Number

### **Zwaluw Acryl Wet on Wet**

Instant paintable acrylic sealant

### **Benefits**

- Wet on wet paintable, shortly after application, with water based and synthetic paints
- No discoloration of the paint
- Minimal risk of craze cracking
- Perfect adhesion without use of a primer on most, even slightly damp substrates
- Nearly non smelling
- Easy to apply and clean
- Non corrosive towards metals

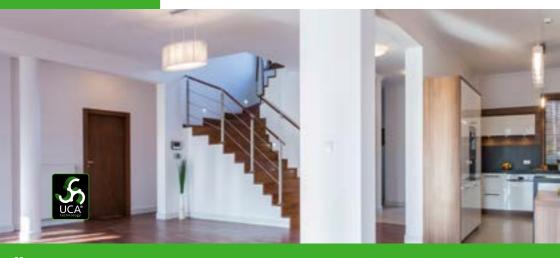
### **Application areas**

Zwaluw Acryl Wet on Wet has been specially developed for sealing connection joints between stairs, walls, ceilings, skirting boards, windowsills, wooden and metal window frames, concrete and brickwork and or filling cracks, screw- and nail holes in walls and ceilings of wood, plastering, gypsum, brickwork, concrete etc.

#### Shelf Life

in unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place

This product is part of the segment Paints & Coatings



### **Zwaluw Acryl-1001U**

High quality water based acrylic sealant

#### **Benefits**

- Paintable with water based and synthetic paints
- Perfect adhesion without use of a primer on most, even slightly damp substrates
- Versatile economic acrylic sealant
- · Nearly non smelling
- · Easy to apply and clean
- · Non corrosive towards metals

### **Application areas**

Zwaluw Acryl-1001U has been specially developed for sealing connection joints between stairs, walls, ceilings, skirting boards, windowsills, wooden and metal window frames, concrete and brickwork. For interior use.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after production date, stored in a dry place.

This product is part of the segment Interior Finish



Certifications

DoP Number 11001011-1001

Elasticity 7.5%





Certification EN 15651-1: F-EXT-INT 7.5P EN 1366-4

DoP Number

Elasticity

### **Zwaluw FP Acrylic Sealant**

Fire resistant acrylic sealant

#### **Benefits**

- Can be applied separately in joints up to 20 mm wide
- · Can be combined with FP PU Foam up to 30 mm wide
- · Reduces unwanted air flows
- · Excellent processing and easy toolability
- Joint movement up to 7.5%
- Paintable with most water and oil based paints
- Non corrosive towards metals

### **Application areas**

Zwaluw FP Acrylic Sealant has been specially developed for fire resistant sealing of joints and seams, or at certain areas where requirements for fire resistance are mandatory. Fire resistance tested according to EN 1366-4 until 120 minutes in a 20 mm wide gap. Combined with FP PU Foam up to 180 minutes in a gap of 30mm wide. Ensure that you choose the correct fire resistance for your application by consulting the classification and test reports.

#### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after production date, stored in a dry place.

This product is part of the segment Passive Fire Protection



### **Zwaluw FP Intumescent Acrylic**

Strongly intumescent fire resistant sealant

#### **Benefits**

- Fire resistant up to 2 hours
- Intumescent behaviour, closes PE, PP and PVC pipes up to Ø40mm in case of fire, preventing the need for a Fire Collar
- Offers a wide range of solutions for all occurring penetrations/recesses combined with the other products in the FP Sealing System
- Intumescent and cooling sealant which expands to 40 times its original volume in case of fire
- Thoroughly tested by the leading European test institutes (notified bodies)
- Closes recess/penetration for fire and smoke

### **Application areas**

Zwaluw FP Intumescent Acrylic has been specially developed for sealing all recesses up to 5mm, above 5mm FP Fire Board is required. The recesses filled with Zwaluw FP Intumescent Acrylic are located between the penetrating material and the surrounding construction, but also between separate cables and the cable tray itself.

#### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Passive Fire Protection



Certification





# **Zwaluw FP Intumescent Coating**

Strongly intumescent fire resistant coating

#### **Benefits**

- Fire resistant up to 2 hours
- Intumescent and cooling coating which in case of fire expands to 40 times its original volume
- Thoroughly tested by leading European test institutes (notified bodies)
- · Closes recess/penetration for fire and smoke

### **Application areas**

Zwaluw FP Intumescent Coating has been specially developed for covering rip and crosscut sides of the tailored FP Fire board. Penetrating installation material like pipes and cable trays are being covered as well. Finally, the seal and the transition to the surrounding construction are being covered for a perfect fire resistant solution.

#### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 12 months after production date, stored in a dry place.

Certification FN 1366-3

This product is part of the segment Passive Fire Protection



### **Zwaluw Joint Fix®**

High quality ready-to-use hardening joint repair filler

### **Benefits**

- Ready to use repair mortar
- · Paintable with water based and synthetic paints
- Perfect adhesion without use of a primer on most, even slightly damp substrates
- In- and outside\* applicable
- Nearly non smelling
- Easy to apply and clean
- Non corrosive towards metals

### **Application areas**

Zwaluw Joint Fix® has been specially developed for durable jointing and repairing of new and damaged joints between stone strips and brickwork. Zwaluw Joint Fix® is already weather and rain resistant a couple of hours after application. Also for connection joints between lead and brickwork.

### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 12 months after production date, stored in a dry place.





<sup>\*</sup> Exterior applications only in good dry weather conditions for at least 5 hours after application. This product is part of the segment Facade and Paints & Coatings



### **Montagefix High Grip**

Versatile fast grip dispersion based adhesive

### **Benefits**

- Fast grip
- Solvent free
- Suitable for bonding EPS and XPS
- Paintable with water based and synthetic paints
- Perfect adhesion without use of a primer on most, even slightly damp substrates
- Nearly non smelling
- Easy to apply and clean
- Non corrosive towards metals

### **Application areas**

Zwaluw Montagefix High Grip has been specially developed for bonding wood, chipboard, hardboard and uPVC on brickwork, stone or concrete. Also suitable for bonding EPS and XPS ornaments and decorative trims. For interior use.

### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Interior Finish and Sustainable Air Tight Building Solutions



### **Zwaluw Montagefix-W**

Versatile dispersion based adhesive

#### **Benefits**

- Solvent free
- Suitable for bonding EPS and XPS
- Paintable with water based and synthetic paints
- Perfect adhesion without use of a primer on most, even slightly damp substrates
- Nearly non smelling
- Easy to apply and clean
- Non corrosive towards metals

### **Application areas**

Zwaluw Montagefix-W has been specially developed for bonding wood, chipboard, hardboard and uPVC on brickwork, stone or concrete. Also suitable for bonding EPS and XPS ornaments and decorative trims. For interior use.

### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Interior Finish and Sustainable Air Tight Building Solutions







Certification EN 15651-1: F-EXT-INT 7.5P

DoP Number

Elasticity

### Zwaluw Stuc-O-Seal®

High quality water based acrylic sealant with grainy structure

#### **Benefits**

- Grainy structure, can be applied in any form with a dry brush
- Paintable with water based and synthetic paints
- Perfect adhesion without use of a primer on most, even slightly damp substrates
- In- and outside\* applicable
- Nearly non smelling
- Easy to apply and clean
- Non corrosive towards metals

### **Application areas**

Zwaluw Stuc-O-Seal® has been specially developed for filling and sealing cracks, seams and holes in stucco and plaster and on substrates like plywood, chipboard, hard and soft board, wood, (aerated) concrete, (lime) stone and gypsum.

### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after production date, stored in a dry place.

<sup>\*</sup> Exterior applications only in good dry weather conditions for at least 5 hours after application. This product is part of the segment Paints & Coatings





Basically Den Braven offers three types of fillers, polyesters, acrylics and epoxies. Each technology does have its specific application area, set of USP's and characteristics. For example the popular, environmentally friendly water-based acrylic fillers, which are mainly used indoor due to the limited water resistance. The drying/curing time is affected by the material thickness, temperature and humidity. Typically these acrylic fillers are one component ready-to-use paintable products in cartridges or pots.

Den Braven also offers 2-component polyester and epoxy fillers in cans and in convenient side-by-side cartridges, with the appearance of a standard cartridge. 2-Component products hardens by a chemical reaction and are nearly unaffected by temperature and humidity during their curing process. Due to the insensitiveness for water loads, epoxy fillers are particularly well suited for outdoor applications, such as repairs of wooden constructions, window and door frames.

Polyester fillers are available in several variants for repair jobs of metals and plastics. Den Braven also does have specific types of polyester fillers for the paint segment for quick and superficial sandable and paintable wood repairs in indoor applications.

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### **Zwaluw Houtreparatiemassa**

2-component epoxy resin based paste

### **Benefits**

- · Good flow resistance
- · Fast curing
- · Sandable and paintable
- Almost no shrinkage

### **Application areas**

Zwaluw Houtreparatiemassa has been developed for repairing defects or rotten wood constructions of both new and existing wood. Also suitable for substrates like stone and metal. Zwaluw Houtreparatiemassa has almost no shrinkage and is weather resistant.

### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 24 months after date of production, stored in a dry place.



### **Zwaluw Plasterboard-Filler**

Ultra-lightweight ready to use filler

### **Benefits**

- Ultra-lightweight
- · Nearly non-shrinking
- Paintable with water based- and synthetic paints
- Sandable after curing
- Easy to apply and clean
- Non corrosive towards metals

### **Application areas**

Zwaluw Plasterboard Filler has been especially developed for filling in one time joints and screw holes in plasterboard walls and ceilings for interior applications. Also for in one time filling, repairing and smoothening holes and cracks in concrete, plastering, brickwork and stucco layers. For optimal result to be applied without pressure.

#### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.



Certification EN 13963: 1A

**DoP Number** 18001001-1001





### **Zwaluw Polysoft Flexible**

Fast curing flexible repair filler for interior use

#### **Benefits**

- Can absorb some deformation
- Fast curing (± 15-20 minutes)
- Sandable and paintable
- Applicable with Polysoft Dosing Gun

### **Application areas**

Zwaluw Polysoft Flexible has been developed for repairing and smoothing cracks, dents, scratches and other damages in metal, concrete, stone, wood and plastics surfaces.

### Shelf Life

In unopened original packaging between  $+5^{\circ}\text{C}$  and  $+25^{\circ}\text{C}$ , shelf life till 8 months after production date, stored in a dry place.



# **Zwaluw Polysoft Professional**

Fast curing repair filler for interior use

### **Benefits**

- Fast curing (± 15-20 minutes)
- · Sandable and paintable
- · Applicable with Polysoft Dosing Gun

### **Application areas**

Zwaluw Polysoft Professioneel has been developed for repairing and smoothing cracks, dents, scratches and other damages in metal, concrete, stone, wood and plastics surfaces.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.







# **Zwaluw Repox® Fast**

Fast curing elastic wood repair

### **Benefits**

- · Ready-to-use, even without a primer
- No shrinkage
- Sandable and paintable after 1 hour
- High resistance against sagging
- Not sensitive for moisture
- Very low odour
- · Both indoor and outdoor use
- · Applicable with standard caulking gun

### **Application areas**

Zwaluw Repox® fast should be applied if there painted within 30 till 60 minutes. Zwaluw Repox® fast has been specially developed for repairing nail and screw holes, knots and tears in longitudinal direction and other defects of the wood. Suitable for all types of repairs of a minimum of 2-3 mm till 15-20 mm. Applicable to doors, window frames, stairs and (façade) sheet material such as chipboard, block board and plywood. Also good usable as repair compound for furniture mounting hinges and window and door fittings. Both outside and within applicable.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.

Elasticity 8%



## **Zwaluw Repox®**

### Elastic wood repair

### **Benefits**

- Ready-to-use, even without a primer
- No shrinkage
- High resistance against sagging
- · Not sensitive for moisture
- Very low odour
- For small and larger repairs
- Both indoor and outdoor use
- Applicable with standard caulking gun

### **Application areas**

Zwaluw Repox® has been developed for repairing defects or rotten wood constructions of both new and existing wood. Suitable for all types of repairs of minimum 10 mm up to 20 cm and volumes up to approx. 1.5 litres. Applicable to doors, window frames, stairs and (façade) sheet material such as chipboard, block board and plywood. Also good usable as repair compound for furniture mounting hinges and window and door fittings. Both outside and inside applicable.

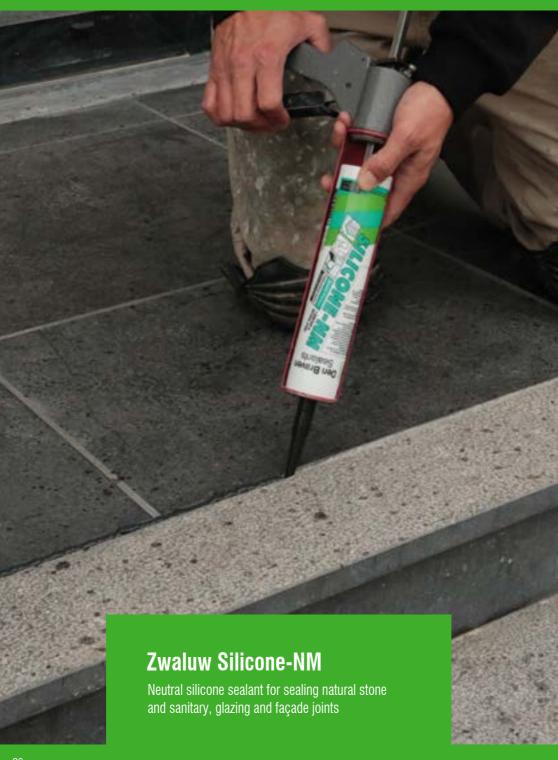
### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.



Elasticity







With hybrid sealants and adhesives Den Braven is focussing on silylated urethane and silylated polyether based products. Where silylated urethane based hybrids have been developed to extend the property range of the conventional polyurethane sealant. Silylated polyether based hybrids provides low viscosity, low glass transition temperature, flexibility over a wide temperature range, and low odour. In general hybrids are free of isocyanates, solvents and silicones

In the current days These days, polyurethane and silicone sealants are seen as the "high performance products". They deliver a significant adhesion, a good movement capability and are durable. However also these high performance products do also have their limitations and disadvantages. The hybrid sealants of Den Braven are actually the "Newest High Performance Products". Den Braven was able to develop a portfolio of hybrids and kept keep the advantages and eliminate the disadvantages of the "older high performance" products.

Den Braven 's new generation high performance sealants are hybrid based. Hybrids polymers do have a better weathering characteristics than conventional polyurethane sealants, but without the odour and paintability problems of conventional silicone sealants. Den Braven 's new generation high performance sealants provide better adhesion, abrasion resistance and low temperature extrudability than silicone sealants. Den Braven 's new generation high performance sealants are also isocvanate and solvent-free systems.

### **Content Hybrids**

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Certification EN 15651-1: F-INT ISEGA

DoP Number

### **Zwaluw Clear Fix**

High quality crystal clear hybrid adhesive

### **Benefits**

- · Universal crystal clear adhesive for interior use
- Free of isocyanates, solvents and silicones
- No shrinkage and bubble free
- Adheres perfectly without primer on most surfaces
- · Neutral curing, almost odourless
- Non corrosive towards metals
- High mechanical resistance strength and E-modulus
- Absorbs acoustic and mechanical vibrations

### **Application areas**

Zwaluw Clearfix has been specially developed as a universal construction adhesive for interior use. Suitable for applications in areas where food is being processed and/or stored.

### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Interior Finish



# **Zwaluw Crystalflex**

Super transparent hybrid adhesive

### **Benefits**

- Perfect transparency without discoloration
- Very good adhesion to most building materials, even on slightly damped surfaces
- Fast skin formation and curing
- Permanently elastic after polymerization
- No isocyanate and silicone

### **Application areas**

Zwaluw Crystalflex Supertransparent has been specially developed as a universal construction adhesive for interior use. Seals and connection requires perfect transparency. Flexible bonding and repairs on materials or transparent objects such as vivarium, terrarium, showcases, glass fixtures. flexible bonding materials subjected to vibration.

### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Interior Finish



Certification

**DoP Number** 160001041-3001



# **Zwaluw Foliefix® Spur**

### Membrane adhesive

### **Benefits**

- Instant grab
- Isocyanate and silicone free
- Flexible

### **Application areas**

Zwaluw Foliefix® SPUR is designed for the adhesion of plastic foils like PE, PVC, EPDM, DPC, aluminium foil, carton, kraft paper and non-woven to stone, concrete, plaster, metal and wood. Zwaluw Foliefix® SPUR reaches its optimal adhesion after 2 till 3 days at room temperature.

### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after date of production, stored in a dry place.

This product is part of the segment Sustainable Air Tight Building Solutions



# **Zwaluw FP Hybrid Sealant**

### Fire resistant sealant

#### **Benefits**

- Suitable for joints up to 30 mm wide
- Certified for steel/wooden frames and all metal-stud connections
- Excellent processing and easy toolability
- Joint movement up to 25%
- Paintable with most water and oil based paints
- · Resists fungus and vermin
- Good resistance to UV, water and weather
- Durable & odourless

### Application areas

Zwaluw FP® Hybrid Sealant has been specially developed for fire resistant sealing of connection and expansion joints in constructions, which in case of fire should have a certain fire resistance and prevents spreading of fire, smoke and toxic gases. Also certified for horizontal joints, connection floor/ceiling with wall, wooden and steel frames and all metal-stud applications. Fire resistance tested according to EN 1366-4 until 240 minutes in a joint of 30 mm wide. Ensure that you choose the correct fire resistance for your application by consulting the classification and test reports.

### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after production date, stored in a dry place.

This product is part of the segment Passive Fire Protection



Certification EN 15651-1: F-EXT-INT-CC 25HM EN 15651-2: G-CC 20HM FN 1366-4

**DoP Number** 55001166-200

Elasticity





# **Zwaluw High Tack**

The one and only original adhesive with extremely high initial tack

### **Benefits**

- · Extremely high initial tack
- No fixation or support needed during curing
- · High mechanical resistance, end strength and E-modulus
- Free of isocyanates, phthalates, solvents and silicones
- Permanently elastic
- No shrinkage and bubble free
- · Non corrosive towards metals
- Neutral curing, almost odourless
- Good resistance to moisture and weather
- · Adheres perfectly without primer on most, even damp, surfaces

### **Application areas**

Zwaluw High Tack has been specially developed as a universal adhesive for bonding many building materials such as: stone, concrete, mirrors, glass, plasterboard, PU, PVC, hard plastics, enamel, ceramic, copper, lead, zinc, tin, aluminium, metals, alloys, stainless steel, wood and paint systems.

### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after production date, stored in a dry place.

Certification Emicode EC1 Plus M1



# **Zwaluw Hybrifix®**

High quality universal hybrid sealant and adhesive

#### **Benefits**

- Universally bonding and sealing for interior and exterior use
- Permanently elastic
- Free of isocyanates, solvents and silicones
- No shrinkage and bubble free
- Good resistance to UV, moisture, mould and weather
- Adheres perfectly without primer on most, even damp, surfaces
- Neutral curing, almost odourless
- Non corrosive towards metals
- High mechanical resistance, end strength and E-modulus
- Absorbs acoustic and mechanical vibrations

### **Application areas**

Zwaluw Hybrifix® has been specially developed as a universal sealant for durable elastic sealing of connection 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. For sealing and bonding in cold storage cells and areas for food.

### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after production date, stored in a dry place.



#### Cartification

EN 15651-1: F-EXT-INT-CC 25HM EN 15651-3: S XS3 EN 15651-4: PW-EXT-INT-CC 25HM Emicode EC1 PlusM Emission Certificate M1

A+ (Eurofins ISO 16000)

### **DoP Number** 55001026-200

Elasticity 25%





Certification
EN 15651-1: F-EXT-INT-CC 20HM
EN 15651-3: S XS3
ISEGA
Emicode EC1 Plus

**DoP Number** 55001006-2003

Elasticity

# Zwaluw Hybrifix® 302

Plasticizer free universal hybrid sealant and adhesive for natural stone

#### **Benefits**

- Plasticizer free, no edge soiling or staining on natural stone
- · Universally bonding and sealing for interior and exterior use
- Adheres perfectly without primer on most, even damp, surfaces
- Free of isocyanates, solvents and silicones
- No shrinkage and bubble free & permanently elastic
- Good resistance to UV, moisture, mildew and weather
- · Neutral curing, almost odourless & Non corrosive towards metals
- High mechanical resistance, end strength and E-modulus
- Absorbs acoustic and mechanical vibrations

### **Application areas**

Zwaluw Hybrifix® 302 Hybrid Adhesive & Natural Stone has been specially developed as a universal plasticizer free sealant and adhesive for connection joints in building and industry. Can also be used as a 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. For sealing and bonding in cold storage cells and areas for food. Suitable for mechanically loaded expansion joints and bridging joint systems.

#### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after production date, stored in a dry place.



# Zwaluw Hybriseal® Façade

Low modulus hybrid sealant

### **Benefits**

- Perfect adhesion without primer on most, even damp, surfaces
- · Low modulus
- Neutral curing, almost odourless
- Free of isocyanates, solvents and silicones
- No shrinkage and bubble free
- Good resistance to UV, water and weather
- Permanently elastic
- High mechanical resistance

### **Application areas**

Zwaluw Hybriseal® Façade has been specially developed as a universal sealant for sealing construction and dilatation joints and joints in pedestrian walkways on most common building materials such as concrete, brickwork, painted wood, enamel, aluminium, stainless steel and a variety of plastics.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Façade



### Certification

EN 15651-1: F-EXT-INT-CC 25LM EN 15651-4: PW-EXT-INT-CC 25LM FC1 PLUS

DoP Number

Elasticity 25%





#### Certification

EN 15651-1: F-EXT-INT-CC 25HI EN 15651-2: G-CC 25HM EN 15651-3: S XS2 KOMO SKH BRI. 2801 33108/16

**DoP Number** 55001086-2001

Elasticity

# **Zwaluw Hybriseal® 2PS**

Excellently paintable hybrid sealant for glazing and façade joints

#### **Benefits**

- Excellently paintable with water based and synthetic paints
- · Universally applicable for building and glazing interior and exterior
- Free of isocyanates, solvents, phthalates and silicones
- Non corrosive towards metals
- · No shrinkage and bubble free
- Good resistance to UV, moisture, mould and weather
- Adheres perfectly without primer on most, even damp, surfaces

### **Application areas**

Zwaluw Hybriseal® 2PS has been specially developed as universal glazing sealant, complying with international glazing standards, for laminated, single, insulation, burglar-proof and self-cleaning glass. For sealing expansion, connection and perimeter joints.

#### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after production date, stored in a dry place.

This product is part of the segment Facade and Glazing



# Zwaluw Hybriseal® 306

Sprayable and brushable hybrid coating

### **Benefits**

- Only tested sprayable coating for air loss on the market
- · Extreme low air loss
- Tested till 1050 Pa
- Seamless and fast sealing of all shapes and connections
- Fast and clean processing
- · Can be modelled with a brush
- Free of isocyanate and silicones
- · Paintable, directly wet-in-wet with coating and/or paintwork
- Fast curing
- No shrinkage and bubble free
- · Permanently elastic

### **Application areas**

Zwaluw Hybriseal® 306 Coating has been specially developed as a sprayable coating for durable elastic membrane to prevent air loss in the building construction in line with the low energy and passive house standards.

### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after production date, stored in a dry place.

This product is part of the segment Sustainable Air Tight Building Solutions







### Certification EN 15651-1: F-INT-EXT-CC 20HI

EMICODE EC1 Plus ISO 11600 F20HM

**DoP Number** 55001086-2001

Elasticity 20%

# **Zwaluw Hybriseal® 500**

High modulus hybrid sealant and adhesive

#### **Benefits**

- · High modulus
- High elastic
- Solvent free

### **Application areas**

Zwaluw Hybriseal® 500 has been specially developed as a universal sealant for sealing construction and dilatation joints 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.

### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 12 months after production date, stored in a dry place.



### **Zwaluw Mirrorfix-MS**

Professional hybrid adhesive for mirrors with extremely high initial tack

### **Benefits**

- Especially for bonding mirrors
- Extremely high initial tack
- Excellent tensile strenath
- · Free of isocyanates, solvents and silicones
- Neutral curing, almost odourless

### **Application areas**

Zwaluw Mirrorfix-MS has been specially developed for bonding mirrors on substrates like wood, stone, concrete, gypsum, plasterboard, tiles, steel and aluminium. Also suitable for bonding decorative and acoustic tiles.

### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after production date, stored in a dry place.



Certification Emicode EC1 Plus M1 A+ (Eurofins ISO 16000)





# **Zwaluw Monustop®**

Durable elastic paintable hybrid putty alternative

### **Benefits**

- Excellent tooling properties in combination with Zwaluw Finisher and joint spatula
- Excellently and fast paintable with water based and synthetic paints
- Adheres perfectly without primer on most, even damp, surfaces
- · Permanently elastic
- No shrinkage and bubble free
- · High mechanical resistance
- · Free of isocyanates, solvents and silicones

### **Application areas**

Zwaluw Monustop has been specially developed for durable elastic sealing of single, insulation and monumental glass in wooden, metal and concrete frames without glazing beads.

#### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after production date, stored in a dry place.

This product is part of the segment Glazing



### **Zwaluw Panelfix®**

Extremely strong hybrid adhesive for panel bonding

### **Benefits**

- Complete system with primer, spacer tape and cleaner
- · Extremely high strength
- · Permanently elastic
- Free of isocyanates, solvents and silicones
- Fast curing
- Applicable to panels up to 2.5m<sup>2</sup>
- Building height up to 20m

### **Application areas**

Zwaluw Panelfix has been specially developed for bonding HPL and fibre cement panels for façades and walls interior and exterior. Due to the great variety of topcoats on HPL panels we advise to always test the adhesion prior to application. Apply panels onto a suitable vertical aluminium or smooth wooden raster with Zwaluw Paneltape and Zwaluw Panelfix. For more details, see Technical Bulletin Panel Bonding in the Knowledge Base on our website www.denbrayen.com.

### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after production date, stored in a dry place.

This product is part of the concept Panel Bonding







### **Zwaluw Parketfix MSPS 001**

One component floor adhesive

### **Benefits**

- Fast curing
- Permanent elasticity
- · Easy to apply
- · Excellent strength

### **Application areas**

Zwaluw Parketfix MSPS 001 is specifically designed for laying solid and engineered wood flooring (strips, long strips, planks, panels, boards) mosaic parquet, industrial parquet, wood paving (residential) as well as chipboard.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 6 months after production date, stored in a dry place.



### **Zwaluw Parketfix® MSPS 005**

One component high strength floor adhesive

### **Benefits**

- One component trowable floor adhesive
- Fast curing
- Permanent elasticity
- Easy to apply
- Excellent strength
- · Easy to apply
- · Excellent strength
- · Unique packaging, 3 resealable bags in a bucket

### **Application areas**

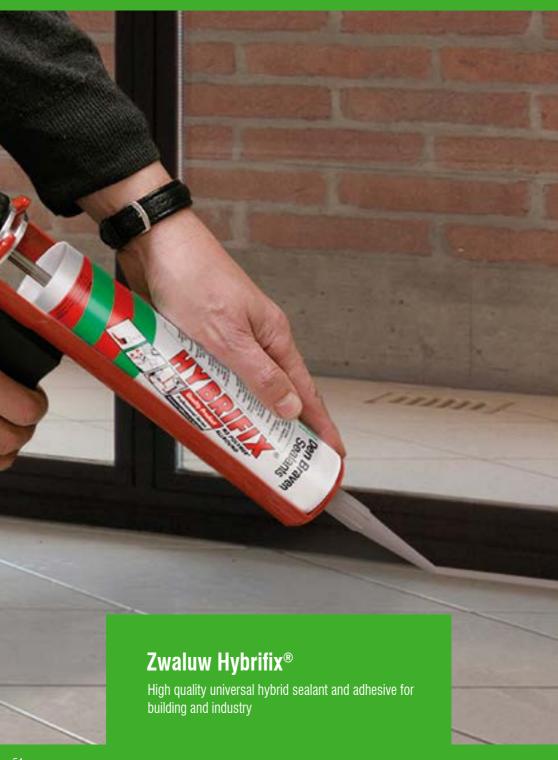
Zwaluw Parketfix MSPS 005 is specifically designed for laying solid and engineered wood flooring (strips, long strips, planks, panels, boards) mosaic parquet, industrial parquet, wood paving (residential) as well as chipboard.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 6 months after production date, stored in a dry place.









Polyurethane foam has many applications such as gap filling, thermal insulation, sound insulation, bonding and passive fire protection

Polyurethane is one of the most versatile insulating materials that we know. Polyurethane foam or PU foam has many applications such as gap filling, thermal insulation, sound insulation, bonding and passive fire protection.

Nowadays the we cannot imagine the building sector building sector cannot be imagined without this insulating material. Polyurethane foam is available in several variations, including canisters with one or two-component foam. Additionally, the foam can be applied by hand (adapter) or with a gun. Depending on the type, the foam will expand up to 30 times its original volume after application and cures under the influence of the moisture in the air.

Den Braven is an official FEICA member. As a FEICA member Den Braven as a manufacturer of OCF (One Component Foam) is obligated to test the products in accordance with the test procedures of the FEICA. These standard test methods guarantee consistency and comparability for the market. FEICA has developed 19 standard test methods (TM's) to which the FEICA members must test and communicate the performances in the technical datasheets.

### **Content PU Foams**

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### Certification

EN 1026 & EN 12114 EN 12086 Water vapour transmission EN 1609 Water vapour patial immersion ISO 717-1 Joint Sound Insulation A+ (Eurofins ISO 16000) FEICA member

### **Zwaluw Elast-O-Foam**

Airtight and flexible high insulating polyurethane foam

### **Benefits**

- Extreme low air loss, most air tight foam available on the market
- Flexible
- Tested till 1050 Pa
- Provides best sound reduction
- · High yield

### **Application areas**

Zwaluw Elast-O-Foam is specially developed for making joints airtight and thermally insulated around window frames and constructions themselves, partition walls, ceiling and floor joints, surface penetrations of pipes and tubes through walls and floors in details in Passive Housing and energy neutral buildings.

### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place. Store the canisters in an upright position.

This product is part of the segment Sustainable Air Tight Building Solutions





### **Zwaluw Green-Foam**

100% MDI free high insulating polyurethane foam

#### **Benefits**

- Tested till 1050 Pa
- Extreme low air loss, most air tight foam available on the market
- · Suitable for details in energy neutral houses
- Gloves not required

### **Application areas**

Zwaluw Green-Foam has been specially developed for airtight and thermal insulated joints around window frames and constructions themselves, partition walls, ceiling and floor joints, surface penetrations of pipes and tubes through walls and floors. In general, the foam has an excellent adhesion on concrete, brick, stone, plaster, wood, metal and many plastics like EPS and XPS, rigid PU foam and uPVC. Especially suitable for the connection between plaster blocks and sand-lime bricks. After application the foam expands low and application is also possible at low temperatures.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}\text{C}$  and  $+25^{\circ}\text{C}$ , shelf life till 9 months after production date, stored in a dry place. Store the canisters in an upright position.

This product is part of the segment Sustainable Air Tight Building Solutions



Certification
EN 1026 & EN 12114
DIN 4102-1 Reaction to fire
ISO 717-1 Joint Sound Insulation
A+ (Eurofins ISO 16000)





# Certification EN 1026 & EN 12114 DIN 18542 Air Permeability A+ (Eurofins ISO 16000) FEICA member

### **Zwaluw Flex-Foam**

Flexible high insulating polyurethane foam

#### **Benefits**

- Tested till 1050 Pa
- Extreme low air loss, most air tight foam available on the market
- · Provides best sound reduction
- High yield
- Applicable in colder climates (till -15°C)

### **Application areas**

Zwaluw Flex-Foam has been specially developed for airtight and thermal insulated joints around window frames and constructions themselves, partition walls, ceiling and floor joints, surface penetrations of pipes and tubes through walls and floors. In general, the foam has an excellent adhesion on concrete, brick, stone, plaster, wood, metal and many plastics like EPS and XPS, rigid PU foam and uPVC. Especially suitable for the connection between plaster blocks and sand-lime bricks. After application the foam expands low and application is also possible at low temperatures.

### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after production date, stored in a dry place. Store the canisters in an upright position.

This product is part of the segment Sustainable Air Tight Building Solutions



### **Zwaluw FP PU Foam**

Fire resistant polyurethane foam

#### **Benefits**

- Tested according to EN 1366-4
- Applicable in joints from 5mm to 30 mm wide
- Combined with FP Silicone Sealant applicable in joints from 5mm to 40mm wide
- Separately applied, fire resistance up to 2 hours, combined with other FP products up to 4 hours
- Fire behaviour B1
- Tack free after 8 to 12 minutes

### **Application areas**

Zwaluw FP PU-Foam has been specially developed for fire resistant sealing and filling of joints and seams in certain areas where fire resistance is required. Fire resistance tested according to EN 1366-4 until 60 minutes in a 20mm wide gap. Combined with Zwaluw FP Silicone Sealant until 180 minutes in a 40 mm wide gap. Ensure that you choose the correct fire resistance for your application by consulting the classification and test reports.

### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place. Store the canisters in an upright position.

This product is part of the segment Passive Fire Protection



Certification EN 1366-4 DIN 4102-1 Reaction to fire EN 13501-2 Classification of fire resistance A+ (Eurofins ISO 16000) FEICA member





### **Zwaluw Maxi-Gunfoam**

Professional polyurethane foam with high yield

#### **Benefits**

- High quality professional PU Foam
- High yield

### **Application areas**

Zwaluw Maxi-Gunfoam has been developed for filling joints around window frames and constructions themselves, partition walls, ceiling and floor joints, surface penetrations of pipes and tubes through walls and floors. In general, Zwaluw Maxi-Gunfoam has an excellent adhesion on concrete, brick, stone, plaster, wood, metal and many plastics like EPS and XPS, rigid PU foam and uPVC.

### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after production date, stored in a dry place. Store the canisters in an upright position.

Certification A+ (Eurofins ISO 16000) FEICA member



### **Zwaluw Maxi-Gunfoam All Seasons**

Professional all season applicable polyurethane foam

#### **Benefits**

- High quality professional PU Foam
- High vield
- Applicable in all seasons

### **Application areas**

Zwaluw Maxi-Gunfoam All Seasons has been developed for filling joints around window frames and constructions themselves, partition walls, ceiling and floor joints, surface penetrations of pipes and tubes through walls and floors. In general, Zwaluw Maxi-Gunfoam All Seasons has an excellent adhesion on concrete, brick, stone, plaster, wood, metal and many plastics like EPS and XPS, rigid PU foam and uPVC.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place. Store the canisters in an upright position.



Certification
A+ (Eurofins ISO 16000)
FEICA member







### **Zwaluw PU-Foam**

Hand held polyurethane foam

### **Benefits**

High quality professional PU Foam

### **Application areas**

Zwaluw PU-Foam has been developed for filling joints around window frames and constructions themselves, partition walls, ceiling and floor joints, surface penetrations of pipes and tubes through walls and floors. In general, Zwaluw PU-Foam has an excellent adhesion on concrete, brick, stone, plaster, wood, metal and many plastics like EPS and XPS, rigid PU foam and uPVC.

### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after production date, stored in a dry place. Store the canisters in an upright position.

Certification
A+ (Eurofins ISO 16000)
DIN 4034 Water resistance



### **Zwaluw PU-Gunfoam**

Professional polyurethane foam

#### **Benefits**

High quality professional PU Foam

### **Application areas**

Zwaluw PU-Gunfoam has been developed for filling joints around window frames and constructions themselves, partition walls, ceiling and floor joints, surface penetrations of pipes and tubes through walls and floors. In general, Zwaluw PU-Gunfoam has an excellent adhesion on concrete, brick, stone, plaster, wood, metal and many plastics like EPS and XPS, rigid PU foam and uPVC.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}\text{C}$  and  $+25^{\circ}\text{C}$ , shelf life till 18 months after production date, stored in a dry place. Store the canisters in an upright position.



# Certification DIN 12354-3 Joint Sound Insulatio A+ (Eurofins ISO 16000) Wind Load Test FEICA member





### **Zwaluw 2C-PU Foam**

### 2-component mounting and insulation foam

### **Benefits**

- Excellent adhesion on concrete, masonry, wood and many plastics
- Excellent properties for heat resistance and noise reduction
- For filling cavities with insufficient access to moisture
- Fire behaviour B2

### **Application areas**

Zwaluw Purfoam-2C B2 has been developed for filling joints between window and door frames. Due to the thermal properties and the 2-component system Zwaluw Purfoam-2C B2 can also be used for joints with insufficient moisture access. In general, Zwaluw Purfoam-2C B2 has an excellent adhesion on concrete, brick, stone, plaster, wood, metal and many plastics like EPS and XPS, rigid PU foam and uPVC.

### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place. Store the canisters in an upright position.

# Certification Dimensional stability for mounting of door frames (4 types) DIN 4102-1 Reaction to fire A+ (Eurofins ISO 16000)



### **Zwaluw 2C-PU Foam Fast**

Fast 2-component mounting and insulation foam

### **Benefits**

- Excellent adhesion on concrete, masonry, wood and many plastics
- Excellent properties for heat resistance and noise reduction
- For filling cavities with insufficient access to moisture

### **Application areas**

Zwaluw Purfoam-2C Fast has been developed for filling joints between window and door frames. Due to the thermal properties and the 2-component system Zwaluw Purfoam-2C Fast can also be used for joints with insufficient moisture access. In general, Zwaluw Purfoam-2C Fast has an excellent adhesion on concrete, brick, stone, plaster, wood, metal and many plastics like EPS and XPS, rigid PU foam and uPVC.

### Shelf I ife

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after production date, stored in a dry place. Store the canisters in an upright position.



Certification
DIN 4102-1 Reaction to fire
A+ (Eurofins ISO 16000)
FEICA member





### **Zwaluw Universal PU-Cleaner**

### Powerful PU foam cleaner

### **Benefits**

- · Fast working
- Powerful cleaner
- Easy to apply

### **Application areas**

Zwaluw Universal PU-Cleaner is developed for removing fresh polyurethane and for cleaning for polyurethane foam guns.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place. Store the canisters in an upright position.





For adhering materials in general two methods can be used. On one hand we have the mechanical fixings like screws and pop-nails. The second method is using an adhesive.

For an adhesive application, again two different types of bonding technology can be made. The craftsman and industry can choose between a hard and non-flexible adhesive and a softer more flexible type of adhesive. The world of softer more flexible adhesives has experienced a huge development in recent years. Not only growing number of volumes but also a growing variety of bonding possibilities.

In the above mentioned list Den Braven provides evident evidence that in many "fixing" applications flexible adhesives are preferable and outperform mechanical fixings. Of course adhesives can have some disadvantages compared to mechanical fixings. Den Braven will not recommend an adhesive if the surfaces are not sufficiently cleaned and/or dry. The decision to use a flexible adhesive is always means weighing up the pros and cons.

# Content PU Sealants & Adhesives

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# **Zwaluw Montagefix-PU**

1-component power polyurethane adhesive

### **Benefits**

- Strong, durable and water resistant adhesive
- Suitable for vertical application
- · Excellent adhesion without primer on most, even damp substrates

### **Application areas**

Zwaluw Montagefix-PU has been developed for bonding wood, metal, stone, concrete, plastic and isolating materials like PU foam, PS foam, rock wool and glass wool.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 9 months after production date, stored in a dry place.



# **Zwaluw Polyflex® 422**

### Polyurethane sealant

### **Benefits**

- Excellent adhesion without primer on most, even damp substrates
- · High mechanical performances
- Durable elastic
- · Paintable with water based paints

### **Applications**

Zwaluw Polyflex® 422 has been developed as a sealant for connection and expansion joints in concrete, wood, metal, aluminium and PVC frames and masonry.

### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.



Certification EN 15651-1: F-EXT-INT-CC 25HM SNJF F25E

DoP Number 17001051-3001

Elasticity





# **Zwaluw Polyflex® 442**

High modulus polyurethane sealant

#### **Benefits**

- Excellent adhesion without primer on most, even damp substrates
- High mechanical performances
- · Durable elastic
- · Paintable with water based paints

#### **Applications**

Zwaluw Polyflex® 442 has been developed as a sealant for connection and expansion joints in concrete, wood, metal, aluminium and PVC frames and masonry.

#### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.

Certification EN 15651-1: F-EXT-INT-CC 25HM

DoP Number 17001021-300

Elasticity



## **Zwaluw Polyflex® 452**

High modulus polyurethane sealant

#### **Benefits**

- High modulus
- · High mechanical performances
- Durable elastic
- Paintable with water based paints

#### **Application areas**

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.

#### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 12 months after production date, stored in a dry place.



#### Certification EN 15651-1: F-EXT-INT-CC 25HM EN 15651-4: PW-EXT-INT-CC 25HM

**DoP Number** 57001036-3001

Elasticity 25%





### **Zwaluw PU-Constructionfix D4**

1-component polyurethane adhesive

#### **Benefits**

- · Fast curing
- High tensile strength
- · In- and outside applicable
- D4 NEN-EN 204/205

#### **Application areas**

Zwaluw PU-Constructionfix D4 has been developed as a water resistant adhesive for areas which are regularly and during longer periods of time being exposed to water and condensation. Can be applied on doors and window frames and sandwich constructions.

#### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 6 months after production date, stored in a dry place.

Certification D4 NEN-EN 204/205



### **Zwaluw PU-Constructiontix SUPER**

Super-fast transparent polyurethane adhesive

#### **Benefits**

- Fast curing, excellent gap filling properties
- Water resistant (D4)
- · High tensile strength
- Suitable for bonding wood, metal, concrete, plastic and insulation material

#### **Application areas**

Zwaluw PU-Constructiontix Super has been developed for bonding wood, metal, stone, concrete, plastic and insulation materials like PU foam, PS foam, rock wool and glass wool. Suitable for exterior finger joints.

#### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.



Certification KOMO D4 NEN-EN 204/205 WATT 91





### **Zwaluw PU-Rooffix**

Roof adhesive based on liquid polyurethane

#### **Benefits**

- · Slightly foams during curing
- · Water resistant after curing
- Usage 20-30 g/m<sup>2</sup>

#### **Application areas**

Zwaluw PU-Rooffix has been developed for bonding of PS, PU, glass fibre and rock wool panels on concrete, galvanized and coated steel.

#### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 6 months after production date, stored in a dry place.



### **Zwaluw PU Stone Adhesive**

High quality ready-to-use stone adhesive

#### **Benefits**

- Quicker & cleaner application
- Stronger bond, tensile strength after one day > 7 N/mm²
- Applicable to multiple surfaces
- Simple, modern and labour friendly application
- Lower adhesive consumption due to thin bonding thickness
- · Lower weight than traditional mortars
- Lower transportation and storage costs
- Ready to use (no more mixing)

#### **Application areas**

Zwaluw PU Stone Adhesive has been specially developed for bonding non-bearing interior walls of gypsum, concrete, aerated concrete and lime stone blocks.

#### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after production date, stored in a dry place. Store the canisters in an upright position.



Certification
A+ (Eurofins ISO 16000)
FEICA member





#### Certification ETA 004:2000 A+ (Eurofins ISO 16000) FFICA member

### **Zwaluw PU Thermo-Adhesive B1**

B1 foam adhesive for external thermal insulating composite systems

#### **Benefits**

- Tested and certified by ETA 004:2000
- Fire behaviour B1 (low flammable)
- Timesaving through simple use and dosing by polyurethane foam gun
- Excellent (sound) insulating and thermal conductivity properties
- Lower weight than traditional mortars
- Lower transportation and storage costs
- Ready to use (no more mixing)

#### **Application areas**

PU Thermo-Adhesive B1 has been specially developed for highly efficient bonding and assembly of polystyrene (EPS, EPS-P, XPS etc.) rigid polyurethane foam (PUR/PIR) and mineral fibre panels to concrete, plaster and masonry, as well as for filling joints between insulation boards.

#### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place. Store the canisters in an upright position.



### **Zwaluw PU Thermo-Adhesive B3**

B3 foam adhesive for external thermal insulating composite systems

#### **Benefits**

- Timesaving through simple use and dosing by polyurethane foam gun
- Excellent (sound) insulating and thermal conductivity properties
- Lower weight than traditional mortars
- Lower transportation and storage costs
- Ready to use (no more mixing)

#### **Application areas**

PU Thermo-Adhesive B3 has been specially developed for highly efficient bonding and assembly of polystyrene (EPS, EPS-P, XPS etc.) rigid polyurethane foam (PUR/PIR) and mineral fibre panels to concrete, plaster and masonry, as well as for filling joints between insulation boards.

#### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place. Store the canisters in an upright position.











Despite the fact that each technology has its specific characteristics and can be perfectly used for certain applications, the group of silicone sealants still represents the largest volume on the market. By far the most important difference between silicone sealant and the other types of sealant is its excellent UV resistance. Additionally, silicone sealant is almost completely insensitive to temperature effects. Standard silicone sealants can withstand temperature fluctuations from,  $-40^{\circ}\text{C}$  to  $+180^{\circ}\text{C}$  without trouble any problems. The water resistance of silicone sealant is also a lot many times better than that of the products in the other product groups.

Because of these properties, silicone sealants can be widely used in construction. Examples are applications in glazing, façade construction, sanitary facilities, refrigerated showcase industry, but also if fire resistance or heat resistance is required when sealing joints. As a result, correctly applied silicone sealant can be considered the most durable seal for many joints.

The range of silicone sealants has also changed significantly in recent decades. Apart from the original acetic acid-curing silicone sealants, neutral silicone sealants have entered the market and have constantly been gaining popularity. In contrast to neutral silicone sealants, acetic acid silicone sealants have a rather narrow bonding spectrum. In addition to this, a silicone sealant containing acetic acid may cause corrosion on sensitive metal substrates.

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### **Zwaluw Aqua-Silicone**

Silicone for fresh and salt water aquaria

#### **Benefits**

- · Sealant and adhesive
- Nontoxic for fish when fully cured
- For fresh and sea water aquaria

#### **Application areas**

Zwaluw Aqua-Silicone has been specially developed for bonding and sealing full glass constructions as aquaria, terraria and showcases. The product has an excellent adhesion to glass. For selecting the glass thickness of the aquarium we refer to DIN 32622.

#### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 24 months after production date, stored in a dry place.

Elasticity



### **Zwaluw Clearsil**

Crystal clear acetoxy silicone sealant

#### **Benefits**

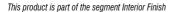
- Crystal clear
- · Adhesive and sealant
- · Good mechanical properties

#### **Application areas**

Zwaluw Clearsil has been specially developed for crystal clear bonding and sealing of full glass constructions out of single glass such as showcases, furniture and other glass decorations.

#### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.





Certification EN 15651-1: F-EXT-INT-CC EN 15651-2: G-CC

**DoP Number** 52001095-1001





#### Certification EN 15651-1: F-EXT-INT-CC 25LM

EN 15651-1: F-EXT-INT-CC 25LI EN 15651-2: G-CC 25LM EN 1366-4

DoP Number 53001236-100

Elasticity

### **Zwaluw FP Silicone Sealant**

Fire retardant silicone sealant

#### **Benefits**

- Can be applied in joints up to 30 mm wide
- In combination with Zwaluw FP PU Foam in joints up to 40 mm wide
- Excellent processing, does not slump
- Joint movement up to 25%
- Good resistance to UV, water and weather
- Resists fungus and vermin
- Airtight sealing and applicable outside

#### **Application areas**

Zwaluw FP® Silicone Sealant has been specially developed for fire resistant sealing of connection and expansion joints in constructions, and should have a certain fire resistance in case of fire. Prevents the expansion fire, smoke or toxic gases. Fire resistance tested according to EN 1366-4 up to 180 minutes in a gap of 30 mm wide. Combined with Zwaluw FP® PU Foam up to 180 minutes in a gap of 40 mm wide. Ensure that you choose the correct fire resistance for your application by consulting the classification and test reports.

#### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Passive Fire Protection



### **Zwaluw Gasket-Sealant**

Acetoxy silicone sealant with high temperature resistance

#### **Benefits**

- Temperature resistance Red 260°C till 300°C
- Temperature resistance Black 240°C till 280°C

#### **Application areas**

Zwaluw Gasket-Sealant has been specially developed as liquid gasket for sealing oven doors, hotplates, heating systems and joints where a high temperature resistance is necessary. Examples: drains, thermostats, pumps, heating pipes and low pressure engine parts.

#### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.







### Certification EN 15651-1: F-FXT-INT-CC 12

EN 15651-1: F-EXT-INT-CC 12.9 EN 15651-2: G-CC

DoP Number

Elasticity

### **Zwaluw Neutrasil-1001U**

Neutral silicone sealant for sanitary, glazing and façade joints

#### **Benefits**

- Versatile sealant
- Mould resistant
- · Good resistance to UV, water and weather

#### **Application areas**

Zwaluw Neutrasil-1001U has been specially developed for durable elastic sealing of expansion joints in concrete, brickwork, curtain wall constructions, glazing systems, kitchens, bathrooms, showers and for industrial applications.

#### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Sanitary, Facade and Glazing



### **Zwaluw Silicone-BB**

Acetoxy silicone sealant for glazing and façade joints

#### **Benefits**

- · Excellent resistance to UV, water and weather
- Perfect bonding without primer on most substrates
- · Permanently elastic

#### **Application areas**

Zwaluw Silicone-BB has been especially developed for top sealing in glazing systems and for connection joints in buildings. For use in kitchens and bathrooms Den Braven recommends Zwaluw Silicone-NO.

#### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 24 months after production date, stored in a dry place.

This product is part of the segment Façade and Glazing



Certification

EN 15651-1: F-EXT-INT-CC 20LM EN 15651-2: G-CC 20LM EN 15651-3: S XS1

DoP Number

Elasticity 20%





#### Certification

EN 15651-1: F-EXT-INT-CC 25LM EN 15651-2: G-CC 25LM ASTM C 920

**DoP Number** 53001036-1004

Elasticity 25%

### **Zwaluw Silicone-Construct**

Neutral silicone sealant for glazing and façade joints

#### **Benefits**

- · Neutral curing, almost odourless
- · Perfect bonding without primer on most substrates
- Excellent resistance to UV, water and weather
- Non corrosive towards metals
- Good adhesion to glass, painted wood, ceramic, enamelled, stainless steel and many plastics

#### **Application areas**

Zwaluw Silicone-Construction has been specially developed for durable elastic sealing of connection and expansion joints in concrete, brickwork, curtain wall constructions, glazing systems and for industrial applications.

#### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Façade and Glazing



### **Den Braven Silicone-COLOURS**

Neutral silicone sealant available in a wide range of colours

#### **Benefits**

- Wide range of standard colours
- Other colours available on order
- · Neutral curing, almost odourless
- Perfect bonding without primer on most substrates
- Excellent resistance to UV, water and weather

#### **Application areas**

Den Braven Silicone-COLOURS has been specially developed for durable elastic sealing of connection and expansion joints in concrete, brickwork, curtain wall constructions, glazing systems, constructions, kitchens, bathrooms and showers and for industrial applications.

#### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 12 months after production date, stored in a dry place.

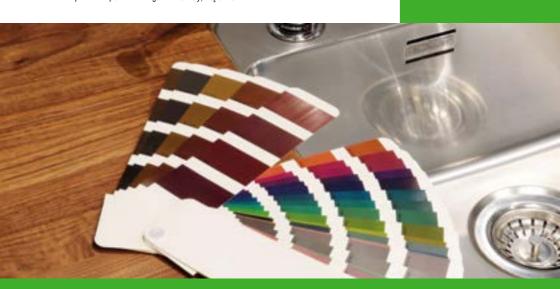
This product is part of the segment Sanitary, Façade and Interior Finish



Certification EN 15651-1: F-EXT-INT-CC 25LM EN 15651-2: G-CC 25LM EN 15651-3: S XS1

DoP Number

Elasticiteit





## **Certification**EN 15651-1: F-EXT-INT-CC 12,5E EN 15651-2: G-CC

DoP Number

Elasticity 12,5%

### **Zwaluw Silicone-GP**

General Purpose silicone sealant for glazing and façade joints

#### **Benefits**

- · Excellent resistance to UV, water and weather
- Perfect bonding without primer on most substrates
- Permanently elastic

#### **Application areas**

Zwaluw Silicone-GP has been especially developed for top sealing in glazing systems and for connection joints in buildings. For use in kitchens and bathrooms Den Braven recommends Zwaluw Silicone-NO.

#### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 24 months after production date, stored in a dry place.

This product is part of the segment Façade and Glazing





### **Zwaluw Silicone-N**

Neutral silicone sealant for glazing and façade joints

#### **Benefits**

- · Neutral curing, almost odourless
- Matt finish
- · Slow skin formation and curing
- Suitable for PMMA and PC
- · High elongation at break and movement accommodation
- · Excellent resistance to UV, water and weather

#### **Application areas**

Zwaluw Silicone-N has been specially developed for durable elastic sealing of connection and expansion joints in concrete, brickwork, curtain wall constructions and weather sealing. Suitable for sealing PMMA and PC sheet material.

#### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Façade



Certification EN 15651-1: F-EXT-INT-CC 25LM EN 15651-2: G-CC 25LM

**DoP Number** 54001046-1001

Elasticity 25%





### **Zwaluw Silicone-NA**

Low modulus neutral silicone sealant for sanitary, glazing and façade joints

#### **Benefits**

- · Compatible with polycarbonate and polymethylmethacrylaat
- Neutral curing, almost odourless
- · Perfect bonding without primer on most substrates
- · Excellent resistance to UV, water and weather

#### **Application areas**

Zwaluw Silicone-NA can be used in joints for sanitary, top sealing in glazing systems and connecting joints in buildings. Zwaluw Silicone-NA is compatible with polycarbonate and polymethylmethacrylaat.

#### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Sanitary, Façade and Glazing



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EN 15651-1: F-EXT-INT-CC 25LN EN 15651-2: G-CC 25LM EN 15651-3: S YS1

**DoP Number** 54001156-1003

Elasticity 25%





### Certification

EN 15651-1: F-EXT-INT-CC 25LM EN 15651-2: G-CC 25LM

**DoP Number** 

Elasticity

### Zwaluw Silicone-NM

Neutral silicone sealant for sealing natural stone and sanitary, glazing and façade joints

#### **Benefits**

- No edge soiling or staining on natural stone
- Neutral curing, almost odourless
- Perfect bonding without primer on most substrates
- Excellent resistance to UV, water, moisture and weather
- Mould resistant

#### **Application areas**

Zwaluw Silicone-NM has been specially developed for durable elastic sealing of connection and expansion joints in natural stone, concrete, brickwork, curtain wall constructions, glazing systems, kitchens, bathrooms, showers and for industrial applications.

#### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Sanitary and Façade



### **Zwaluw Silicone-NO**

Neutral silicone sealant for sanitary, glazing and façade joints

#### **Benefits**

- Neutral curing, almost odourless
- Perfect bonding without primer on most substrates
- · Excellent resistance to UV, water and weather
- Non corrosive towards metals
- Mould resistant
- Good adhesion to glass, painted wood, ceramic, enamelled, stainless steel and many plastics

#### **Application areas**

Zwaluw Silicone-NO has been specially developed for durable elastic sealing of connection and expansion joints in concrete, brickwork, curtain wall constructions, glazing systems, kitchens, bathrooms and showers and for industrial applications.

#### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Sanitary, Facade and Glazing



Certifications EN 15651-1: F-EXT-INT-CC 25LM EN 15651-2: G-CC 25LM EN 15651-3: S XS1 DIN 18545-E

**DoP Number** 

Elasticity





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EN 15651-1: F-EXT-INT-CC 12,50 EN 15651-2: G-CC EN 15651-3: S YS1

### **DoP Number** 52001085-1001

Elasticity

### **Zwaluw Silicone-Sanitary**

Acetoxy silicone sealant for sanitary joints

#### **Benefits**

- For use in kitchens, bathrooms and showers
- Perfect adhesion to glass, painted wood, ceramic and enamelled
- · Mould resistant
- Colourfast

#### **Application areas**

Zwaluw Silicone-Sanitary has been specially developed for durable elastic sealing of joints in kitchens, bathrooms and showers. For plastic based sanitary Zwaluw Silicone-NO is recommended.

#### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after production date, stored in a dry place.

This product is part of the segment Sanitary



### Zwaluw Silicone-1001U

Acetoxy silicone sealant for sanitary, glazing and façade joints

#### **Benefits**

- Versatile sealant
- · Permanently elastic
- Good resistance to UV, water, moisture and weather
- Mold resistant

#### **Application areas**

Zwaluw Silicone-1001U has been specially developed for top sealing in glazing systems and for connection joints in buildings, kitchens and bathrooms.

#### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after production date, stored in a dry place.

This product is part of the segment Façade and Glazing



Certifications

EN 15651-1: F-EXT-INT-CC EN 15651-2: G-CC EN 15651-3: S S1

DoP Number 52001075-100





Certifications EN 15651-1: F-EXT-INT-CC 25LN EN 15651-2: G-CC 25LM KOMO SKH BCL 2801 33142

DoP Number 53001056-1001

Elasticity

### **Zwaluw Window Seal® Plus**

Durable limited paintable neutral silicone sealant for glazing and façade joints

#### **Benefits**

- Good resistance to UV, water and weather
- Perfect bonding without primer on most substrates
- Permanently elastic

#### **Application areas**

Zwaluw Window Seal® Plus has been specially developed for top sealing in glazing systems, complying with international glazing standards, and for perimeter joints.

#### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after production date, stored in a dry place.

This product is part of the segment Glazing





A wide assortment of tapes and membranes, each with their specific function. In the tape range Den Braven offers painters and ducting tapes to high-end multi-functional compression tapes for thermal insulation and air tightness. Also specialists tape such as double sided spacer tapes for panel and mirror bonding.

In the membrane portfolio Den Braven is concentrating on energy neutral and passive house solutions. Nevertheless, a wide range of membranes/foils can be offered, such as the more simplified butyl and bituminous tapes but also the more intelligent foils for interior or exterior use that regulate the permeability of the building. For curtain walling, Den Braven is able to offer self-adhesive EPDM membranes.

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### **Zwaluw Aluband**

Self-adhesive modified bituminous flashing

#### **Benefits**

- · Good adhesion to almost all substrates
- Paintable
- Available in multiple dimensions
- UV-resistant

#### **Application areas**

Zwaluw Aluband can be used for flashing gutters, bay windows, between walls and extensions. Zwaluw Aluband has an instant bonding to many surfaces. It is easily applied in the desired shape. The foil is good weather resistant and has a high tear resistance.

#### **Shelf Life**

Storage between  $+5^{\circ}$ C and  $+25^{\circ}$ C and in shaded conditions. Shelf life of the Zwaluw Aluband is 24 months when stored as recommended in original unopened packaging.



### **Zwaluw Loodband**

Self-adhesive modified bituminous flashing

#### **Benefits**

- Good adhesion to almost all substrates
- Paintable
- Available in multiple dimensions
- UV-resistant

#### **Application areas**

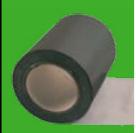
Zwaluw Loodband can be used for flashing gutters, bay windows, between walls and extensions. Zwaluw Loodband has an instant bonding to many surfaces. It is easily applied in the desired shape. The foil is good weather resistant and has a high tear resistance.

#### **Shelf Life**

Storage between +5°C and +25°C and in shaded conditions. Shelf life of the Zwaluw Loodband is 24 months when stored as recommended in original unopened packaging.







### **Zwaluw Butylband**

An airtight self-adhesive membrane

#### **Benefits**

- · Butyl based
- · Free of oil
- · Vapour and air tight
- · Both butyl and membrane are UV stable
- · Very good adhesion

#### **Application areas**

Zwaluw Butylband can be used for joints where air, water and / or vapour tight connection is desired. For joints that are subject to the building in accordance with the requirements of the passive house concept.

#### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after date of production, stored in a dry place.



### **Zwaluw Butylband fleece**

An Airtight self-adhesive fleece membrane

#### **Benefits**

- · Based on butyl, does not contain oil
- · Water- and airtight
- Fleece provides a good substrate for EIFS/ETICS

#### **Application areas**

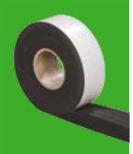
Zwaluw Butylband Fleece can be used for joints in External Thermal Insulation Compound Systems (ETICS/EIFS) where air, water and / or vapour tight connection is desired. For joints that are subject to the building in accordance with the requirements of the passive house concept.

#### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after date of production, stored in a dry place.







### **Zwaluw Compressband BG1**

Impregnated polyurethane foam joint sealing tape

#### **Benefits**

- Resistant to driving rain > 600 Pa
- Joint sound insulation RST, ω max. 59 dB
- · For heavy-duty primary and cross joints
- Thermal conductivity λ=0.0429 W/mK
- · Building materials class B1
- · Long-term weathering resistant

#### **Application areas**

Zwaluw Compress Band BG1 can be put to universal use for the sealing of joints in structural engineering. The preferential areas of use are window construction, wood construction, prefabricated construction and masonry, framework construction and concrete construction. Provides advantages when it comes to sealing connection joints and expansion joints between various building components and when sealing foils in roof extensions so that they are windproof. Especially used in interior work for the sealing of connection joints due to its good sound insulation values. Can be put to universal use and can also be inserted in existing joints due to the pre-compression. Can be used in air tight or passive house details.

#### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 18 months after date of production, stored in a dry place.





### **Zwaluw Compressband 2D**

Impregnated multifunction thermal and air tight joint-sealing tape

#### **Benefits**

- One product for airtightness and thermal insulation
- Meets requirements of BG-R
- 2 Colours for easy application (grey = inside/black = outside)
- Joint sound insulation RST, ω max. 43 dB
- Thermal conductivity λ=0.0428 W/mK
- Building materials class B2

#### **Application areas**

Zwaluw Compress Band 2D can be used in order to achieve an internal and thermal and sound-insulating sealing of the window connection joints. The most diverse joint widths and window profile thicknesses can be sealed thanks to the most diverse tape widths and tape thicknesses. Zwaluw Compress Band 2D is not designed for use in expansion joints in the facade and for sealing the outer function area.

#### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 9 months after date of production, stored in a dry place.

This product is part of the segment Sustainable Air Tight Building Solutions

Certification Emicode EC1 Plus







### **Zwaluw Compressband 3D**

Impregnated multifunction vapour variable, thermal and Airtight joint-sealing tape

#### Benefits

- One product for airtightness, thermal insulation and heavy driving rain resistant
- Meets requirements of BG-R
- Joint sound insulation RST, ω max. 57 dB
- Thermal conductivity λ=0.0428 W/mK
- Building materials class B2

#### **Application areas**

Zwaluw Compress Band 3D can be used in order to achieve an internal Airtightness (BG-R), thermal and sound-insulating and a heavy rain tightness up to 1050 Pa in accordance with EN 1027 in the connection joints of windows. The most diverse joint widths and window profile thicknesses can be sealed thanks to the most diverse tape widths and tape thicknesses.

#### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after date of production, stored in a dry place.

Certification Emicode EC1 Plus



### **Zwaluw Duct Tape**

Strong reinforced duct tape

- Strong
- Reinforced
- Wide range of applications

#### **Application areas**

Zwaluw Duct Tape can be used for many different applications.

#### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 12 months after date of production, stored in a dry place.



Professional painters tape

#### **Benefits**

- For covering and masking during paint jobs
- Available in various widths

#### **Application areas**

Zwaluw Masking Tape can be used for masking materials during painting.

#### Shelf Life

Storage between  $+5^{\circ}$ C and  $+25^{\circ}$ C and in shaded conditions. Shelf life of the Zwaluw Masking Tape is 12 months when stored as recommended in original unopened packaging









Double sided foam adhesion tape

#### **Benefits**

- · Easy installation of mirrors
- 100% compatible with silver backing of mirror

#### **Application areas**

Zwaluw Mirror Tape can be used for the installation of mirrors.

#### **Shelf Life**

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 12 months after date of production, stored in a dry place.



# **Zwaluw Paneltape**

Double sided HDPE adhesion and spacer tape for panel bonding

#### Renefits

- · Provides initial bond between panel and surface
- Correct dimension for optimum curing of the Zwaluw Paneltack
- Flexible behaviour to absorb minor irregularities in the surface

#### **Application areas**

Zwaluw Panel Tape must be used as spacer tape and inital grab adhesive in conjunction with Zwaluw Paneltack Adhesive, Zwaluw Panel Primer and Zwaluw Panel Cleaner.

#### Shelf Life

Storage between  $+5^{\circ}$ C and  $+25^{\circ}$ C and in shaded conditions. Shelf life of the Zwaluw Panel Tape is 12 months when stored as recommended in original unopened packaging.

### **Zwaluw Window Foil Interior**

An Airtight flexible interior window foil

#### **Benefits**

- Fits in Sustainable Air Tight Building Solutions portfolio
- Air tight an  $\leq 0.1$  and diffusion inhibiting sd-value approx. 55 m
- Flexible
- can be rendered/painted over on both sides
- Universally applicable for new buildings, renovations
- Self-adhesive strip with release liner for quick installation on the window frame

#### **Application areas**

Zwaluw Window Foil Interior can be used in order to achieve an Airtight connection between the window frame and the building construction. Too apply the flexible fleece fabric to the building construction Zwaluw Montage-fix-W is recommended for indoors applications and Zwaluw Foliefix®SPUR is recommended for outdoor applications. Zwaluw Window Foil Interior does have an an-value of 0,00299 m3/h.m and an sd-value of 39 m.

#### Shelf Life

Storage between +5°C and +25°C and in shaded conditions. Shelf life of the Zwaluw Window Foil Interior is 12 months when stored as recommended in original unopened packaging.

This product is part of the segment Sustainable Air Tight Building Solutions

**Certification** Emicode EC1 Plus



Certificeringen



### **Zwaluw Window Foil Exterior**

A permeable flexible exterior window foil

#### **Benefits**

- Fits in Sustainable Air Tight Building Solutions portfolio
- Flexible fleece membrane diffuse-open
- Self-adhesive strip with release liner for quick installation on the window frame
- Universally applicable for new buildings, renovations
- Can be rendered/painted over on both sides
- For driving rain tight connections ≥ 600 Pa
- Water tight (EN20811) > 200 cm
- 3 months' resistance to ultraviolet radiation

#### **Application areas**

Zwaluw Window Foil exterior can be used in order to achieve a heavy rainproof connection between the window frame and the building construction. To apply the fleece fabric to the building construction Zwaluw Foliefix® SPUR is recommended for outdoor applications. Zwaluw Window Foil Exterior does have an an-value of 0.00202 m³/h.m and an sd-value of 0.05 m.

#### Shelf Life

Storage between +5°C and +25°C and in shaded conditions. Shelf life of the Zwaluw Window Foil Exterior is 12 months when stored as recommended in original unopened packaging.

This product is part of the segment Sustainable Air Tight Building Solutions



# **Zwaluw Superior Air Tight Foil**

Easy applicable air tight and permeable foil

#### **Benefits**

- Fits in Sustainable Air Tight Building Solutions portfolio
- Applicable without primer
- Resistance against stagnant water
- Air-tight an  $\leq 0.1 \text{ m}^3$
- · Tested for driving rain tight connections till 1.050 Pa
- Diffusion-open
- Universally applicable for new buildings, renovations
- Extreme high adhesion strength on alkaline, timber and metal surfaces

#### **Application areas**

Zwaluw Superior Air Tight Foil can be used for joints where air, water and/ or vapour tight connections are desired. For joints that are subject to the building in accordance with the requirements of the passive house concept. Product is air tight but yet permeable and thus will not cause moulding.

#### **Shelf Life**

Storage between +5°C and +25°C and in shaded conditions. Shelf life of the Zwaluw Superior Air Tight Foil is 12 months when stored as recommended in original unopened packaging.

This product is part of the segment Sustainable Air Tight Building Solutions









The structure of this catalogue is one that is following our technologies. Den Braven is producing, within these technologies a wide range of products. However, some are technology wise a smaller part of our technology playing field that we combine them in the so called category various products.

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# **Zwaluw Butylene-X**

One component durable mastic based on polybutene and vegetable oils

#### **Benefits**

- · Can be painted
- · Forms only a skin
- For repairing "old" butylene joints

#### **Application areas**

Zwaluw Butylene-X has been developed for sealing joints that are subject to low movement and no mechanical exposure. As a bedding compound in single glazing inside.

#### **Shelf Life**



### **Zwaluw Elast-O-Rub®**

A versatile non filled sealant

#### **Benefits**

- Adheres on most, even damp, surfaces
- · Paintable with most water based and synthetic paints

#### **Application areas**

Zwaluw Elast-O-Rub® has been developed for temporary repairs of joints and cracks between stone, concrete and metal. Also suitable to repair leaks in gutters and other waterproofing.

#### **Shelf Life**







### Zwaluw Fire Sealant 1200°C®

Ready to use fire cement

#### **Benefits**

- Resistant to high temperatures up to 1200°C
- · Bonding and joining temperature resistant stones

#### **Application areas**

Zwaluw Fire Sealant 1200°C® has been developed for sealing joints in heaters, open fire places and ovens. Zwaluw Fire Sealant 1200°C® is a hardening, non-elastic product suitable for applications where no movement occurs.

#### Shelf Life



### **Zwaluw Fix-O-Chem**

2 Component tension free chemical anchoring styrene free

#### **Benefits**

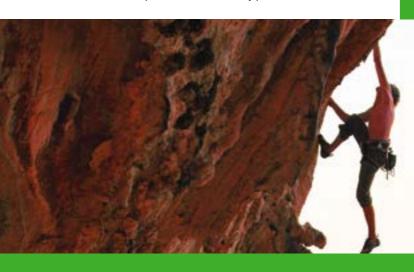
- Stvrene free
- · Quick processing and ready to use
- Quick curing and extreme strong final result
- For massive and hollow surfaces
- · 2-components in 1 cartridge
- No special caulking gun required
- For rods M8 till M24
- Applicable in alkaline environments
- Applicable till +5°C
- · Tension-free mounting

#### **Application areas**

Zwaluw Fix-O-Chem has been specially developed for heavy-duty chemical anchoring of threaded rods, bolts and screws into both solid based as well as hollow substrates as concrete, aerated concrete, lightweight concrete, masonry and stone used in indoor and outdoor applications, vertically and horizontally. Zwaluw Fix-O-Chem can be used throughout the entire recommended period of use simply by replacing the application nozzle and securely closing the cartridge cover.

#### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after date of production, stored in a dry place.







# **Zwaluw FP Fire Board**

Fire retardant sealing board

#### **Benefits**

- Fire resistance up to 2 hours
- Shape of the FP Fire Board can easily be adapted to the penetration/ recess
- Offers a wide range of solutions for all occurring recesses combined with other products of the FP Sealing System
- Both sides equipped with intumescent and cooling coating
- Thoroughly tested by leading European test institutes (notified bodies)
- · Closes recess for fire and smoke

#### **Application areas**

Zwaluw FP Fire Board is used to fill all recesses bigger than 5mm, and can be applied in solid walls and composite walls.

Certification



# **Zwaluw FP Pipe Collar**

#### Intumescent Fire Collar

#### **Benefits**

- Fire resistance up to 2 hours
- · Only 34mm high
- No space needed between pipe and construction
- Is mounted on the compartment wall/ceiling
- Available in most common sizes 40 to 250 mm
- Thoroughly tested by leading European test institutes (notified bodies)
- Closes penetration for fire and smoke

#### **Application areas**

The pipe collar is placed and anchored around the pipe. In case of a ceiling or floor penetration one FP Pipe Collar at the lower side is sufficient. In case of a wall penetration a fire collar on both sides is required. The FP Pipe Collar prevents heat, smoke and fire to spread to the next compartment.





Certification EN 1366-3





# **Zwaluw FP Pipe Collar Brackets**

Brackets for FP Pipe Collar

#### **Benefits**

- Enlarges the field of application of the FP Pipe Collar, when recesses are bio
- Connects perfectly to the size of the FP Pipe Collar, ensuring solid fixing
- Supplied in complete sets of 4 pieces

#### **Application areas**

When the recess around the pipe is too big to use the holes in the FP Pipe collar itself.

Certification EN 1366-3



# **Zwaluw FP Pipe Wrap**

Intumescent fire wrap

#### **Benefits**

- Fire resistance up to 2 hours
- · Optimal for use in composite walls
- Only one wrap needed for a wall construction
- · Is placed in the compartment wall/ceiling/floor
- Available in the most occurring sizes 50 to 160 mm
- Thoroughly tested by leading European test institutes (notified bodies)
- Closes penetration for fire and smoke

#### **Application areas**

The FP Pipe Wrap is placed in a recess in the construction, where the space between the FP Pipe Wrap and the construction is smaller than 10 mm.



Certificatio EN 1366-3







# Zwaluw FP Sealing Sticker FireProtect® assortiment

Sticker to identify recess or penetration

#### **Benefits**

- Clear identification of the recess
- Professional finishing

#### **Application areas**

The FP Sealing Sticker is used to identify all sealed recesses and penetrations.

Certification





### **Zwaluw FP Wall outlet**

Fire resistant inlay for electric wall outlets

#### **Benefits**

- Fire retardant up to 2 hours
- Applicable for existing and new sockets
- · Can be used in massive and composite walls

#### **Application areas**

In case of fire the switching material will melt, followed by the socket. This offers an opening for the fire to spread inside the wall or to the next compartment. Whet the wall socket is equipped with an FP Wall Outlet, it will expand in case of fire, closing the opening for smoke and fire, preserving the fire retardant property of the wall. The FP Wall outlet is easy to install and can be applied in existing and new sockets.

This product is part of the segment Passive Fire Protection



Certification EN 1366-3





# **Zwaluw Mirrorfix-SBR**

SBR construction adhesive

#### **Benefits**

- Free of toluene
- Suitable for many substrates

#### **Application areas**

Zwaluw Mirrorfix-SBR has been developed for bonding mirrors on substrates like wood, stone, concrete, gypsum, plasterboard, tiles, steel and aluminium. Also suitable for bonding decorative and acoustic tiles of EPS, XPS and rigid PU foam.

#### **Shelf Life**



# **Zwaluw Montagefix-N**

Versatile fast setting adhesive

#### **Benefits**

- Suitable for porous and non-porous substrates
- · Adheres on most building materials

#### **Application areas**

Zwaluw Montagefix-N has been developed for bonding of skirting boards, panels, chipboard, uPVC, all kinds of wood, metal and ceramic on masonry, concrete and stone.

#### **Shelf Life**







# **Zwaluw Montagefix-SBR**

Versatile solvent based adhesive

#### Benefits

- · Versatile fast curing contact adhesive
- Free of toluene
- Suitable for FPS and XPS
- Suitable for porous and non-porous substrates
- Adheres on most building materials

#### **Application areas**

Zwaluw Montagefix-SBR has been developed for bonding of skirting boards, panels, chipboard, uPVC, all kinds of wood, metal and ceramic on masonry, concrete and stone.

#### Shelf Life

In unopened original packaging between +5°C and +25°C, shelf life till 12 months after date of production, stored in a dry place.



# **Zwaluw Roofplast®**

A one component bituminous sealant

#### **Benefits**

- Can be used on damp surfaces
- · Cures to a plastic sealant

#### **Application areas**

Zwaluw Roofplast® has been developed for weatherproof sealing of connections and sealing around pipes. The adhesion of shingles, for carrying out emergency repairs on roofs, gutters, chimney's etc.

#### Shelf Life







# **Zwaluw Super Adhesive**

Fast super glue

#### **Benefits**

- Cures in seconds
- · For bonding rubber, glass, metal and plastic

#### **Application areas**

Zwaluw Super Adhesive has been developed for bonding among others rubber rings, glass, metals and plastics at for example modelling, jewellery and ornaments. Also for bonding rubber profiles in glazing systems.

#### Shelf Life



# **Zwaluw Tixoplast®**

A one component bituminous sealant

#### **Benefits**

- · Can be used on damp surfaces
- Applicable in joints, cracks and blisters on roofs and in gutters

#### **Application areas**

Zwaluw Tixoplast® has been developed as an adhesive for bituminous roofing and isolation panels (not of polystyrene), as weatherproof sealing of joints, eaves, gutters, skylights, chimneys, etc. Zwaluw Tixoplast® can also be used as sealing for leaks, emergency repairs even with rainy weather, filling of cracks, joints and blisters on roofs and gutters in roofing, zinc and to adhere shingles on sloped roofs.

#### **Shelf Life**

Storage between  $+5^{\circ}$ C and  $+25^{\circ}$ C and in shaded conditions. Shelf life of the Zwaluw Tixoplast\* is 9 months when stored as recommended in original unopened packaging.







# **Zwaluw Woodfix D3**

### Dispersion wood glue

#### **Benefits**

- Water resistant (D3)
- · White during application, transparent when fully cured

#### **Application areas**

Zwaluw Woodfix D3 has been developed as a wood adhesive for interior and exterior applications in areas which are not being exposed to direct weather conditions.

#### **Shelf Life**



# **Zwaluw Woodsealer**

Protective coating for plywood

#### **Benefits**

- Applicable on rip and cross-cut sides and full surfaces of wood
- · Ready to use
- Paintable with water based and synthetic paints
- · Nearly non smelling
- · Easy to apply and clean
- Non corrosive towards metals

#### **Application areas**

Zwaluw Woodsealer has been specially developed as a durable protective coating for rip and cross-cut sides and full surfaces of plywood and laminated wooden sheet material. Especially suitable to preserve spruce, meranti, merbau and laminated wooden sheet material (triplex, multiplex). Zwaluw Woodsealer is a SHR certified coating.

#### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 18 months after production date, stored in a dry place.



**Certificatio**r SKH







For an optimum long lasting result all products need a correct preparation, application and finishing. Den Braven does have a wide range of complementary products to clear, tool and pre-treat all types of surfaces.

# Content cleaners, primers, tools & accessories

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# **Zwaluw Cleaner**

Cleaner for non-porous surfaces

#### **Benefits**

- · Degreasing and cleaning
- Suitable for glass, plastics, metal, powder-coated aluminium and ceramics

#### **Application areas**

Cleaner has been developed for decreasing and cleaning of substrates from glass, plastics, metals, powder coated aluminium and ceramics Removing traces of grease and mild surface contaminants. Degreasing and cleaning of paint systems, which can influence the adhesion of the sealant.

#### **Shelf Life**



# **Zwaluw Universal Cleaning Wipes**

Convenient highly effective cleaning wipes

#### **Benefits**

- Versatile
- Packaged in convenient dispenser

#### **Application areas**

Zwaluw Universal Cleaning Wipes will clean hands, tools and surfaces:

- Sealants & Adhesives: Uncured sealants, epoxy stains, spray glue and rubber cement.
- Polyurethane foam: Uncured.
- Grease: Oil, lubricants, ink, dirt, grass stains, petroleum based products.
- Paint: Acrylic, oil and water based paints. Effective up to 24 hours after the paint has dried.
- General cleaning: Will refresh and clean old paint and sealants.
- Ideal for stain removal from most working tops.

#### Shelf Life

Storage between  $+5^{\circ}$ C and  $+25^{\circ}$ C and in shaded conditions. Shelf life of the Zwaluw Universal Cleaning Wipes is 36 months when stored as recommended in original unopened packaging.







# **Zwaluw Panelcleaner®**

Cleaner for panel bonding

#### **Benefits**

· Part of Zwaluw Paneltack system

#### **Application areas**

Zwaluw Panelcleaner® has been developed for degreasing and cleaning of panels and aluminium supports, their where Zwaluw Panel Fix® will be applied.

#### **Shelf Life**



### **Zwaluw B&B Primer Universal**

Adhesion promotor for butyl and bituminous membranes

#### **Benefits**

- Fast Drying
- Ideal in combination with Zwaluw Butylband, Zwaluw Butylband Fleece and Zwaluw Lood & Aluband

#### **Application areas**

Zwaluw B&B Primer Universal has been developed to secure an optimum adhesion and to prevent moisture intrusion from the construction. For the application of the butyl and bituminous membranes of Den Braven such as Zwaluw Butylband and Zwaluw Butylband Fleece.

#### **Shelf Life**







### **Zwaluw Primer-PF®**

Adhesion promotor for panel bonding

#### **Benefits**

- · Adhesion promotor for Zwaluw Paneltack
- Preservation for timber framing
- · Black finish for open butt joints

#### **Application areas**

Zwaluw Primer-PF® has been developed to improve adhesion of Zwaluw Panelfix on wooden and aluminium constructions. Also to preserve wooden battens.

#### **Shelf Life**



# **Zwaluw Primer B1**

Adhesion promotor for sealants on porous substrates

#### **Benefits**

· Adhesion promotor for porous substrates

#### **Application areas**

Zwaluw Primer B1 has been developed to improve the adhesion of polyurethane, hybrids and neutral silicone on masonry, natural stone, concrete, wood and plaster.

#### **Shelf Life**







### **Zwaluw Primer S300**

Adhesion promotor for silicones and hybrids on plastics

#### **Benefits**

· Adhesion promotor for silicones and hybrids on plastic surfaces

#### **Application areas**

Zwaluw Primer S300 has been developed to improve adhesion on different kinds of plastic and coatings. Apply Zwaluw Primer S300 with a soft hair paint brush in a very thin uniform coat. The sealant has to be applied as soon as possible after the primer has dried, in order to avoid any contamination of the surface.

#### Shelf Life



### **Zwaluw Primer U12**

2K adhesion promotor for sealants on porous substrates

#### **Benefits**

- 2-part system, durable
- · Applicable even for submerged areas
- For all type of sealants

#### **Application areas**

Zwaluw Primer U12 has been developed to improve the adhesion of Zwaluw Silicone-N, Zwaluw Silicone-NO and Zwaluw Hybrid Sealants on porous surfaces. Zwaluw Primer U12 should be used in submerged (underwater and below ground) applications on porous surfaces like brick, wood and concrete.

#### Shelf Life







# **Zwaluw Mixed Finisher Spray**

Neutral Joint tooling additive

#### **Benefits**

- For the most optimum result
- Ready to use
- · Reduces risk of discolouration
- · Applicable for silicone, polyurethane and hybrid sealants

#### **Application areas**

Zwaluw Mixed Finisher has been developed for the wet tooling of sealants in joints. Before use always shake thoroughly. After application of the sealants the surface of the joints and the adjacent surfaces are moistened with Zwaluw Mixed Finisher Spray. After this the joint is tooled with a spatula or putty knife. After smoothening the joint can be finished with a Zwaluw Mixed Finisher Spray moistened finger. When used in applications which must be painted or delicate surfaces such as natural stone and glass, Den Braven recommends to rinse with clean water.

#### Shelf Life



### **Zwaluw Concentrated Finisher**

Neutral Joint tooling additive

#### **Benefits**

- For the most optimum result
- Reduces risk of discolouration
- Applicable for silicone, polyurethane and hybrid sealants

#### **Application areas**

Zwaluw Concentrated Finisher has been developed for the wet tooling of sealants in joints. Dilute the Concentrated Finisher to a solution of 1 to 3% in water (1-3 Finisher parts to 100 parts water). After application of the sealants the surface of the joints and the adjacent surfaces are moistened with Zwaluw Mixed Finisher Spray. After this the joint is tooled with a spatula or putty knife. After smoothening the joint can be finished with a Zwaluw Mixed Finisher Spray moistened finger. When used in applications which must be painted or delicate surfaces such as natural stone and glass, Den Braven recommends to rinse with clean water.

#### Shelf Life







## **Zwaluw Sili-Kill®**

Removes cured silicone residue

### **Benefits**

· Ready-to-use paste

### **Application areas**

Zwaluw Sili-Kill® has been developed to remove cured silicone residue by following the next steps. Cut the silicone sealant and remove as far as possible with a sharp knife. Before use Zwaluw Sili-Kill® must be shaken. Apply Zwaluw Sili-Kill® excessive on the cured silicone residue. After 20-30 minutes the sealant silicone residue can be easily removed with a putty knife or a wooden spatula for vulnerable substrates. If necessary, repeat the treatment. Afterwards wash with water and soap and let dry.

### **Shelf Life**

In unopened original packaging between +5°C and +25°C, shelf life till 24 months after production date, stored in a dry place.



## **Zwaluw PUR Remover**

Cured PU foams remover

### **Benefits**

Ready-to-use paste

### **Application areas**

Zwaluw PUR Remover has been developed to remove cured PU foam by following the next steps. Cut the PU foam away as far as possible with a sharp knife. Apply Zwaluw PUR Remover excessive on the cured PUR foam residue. After 30-120 minutes the sealant the softened PU foam should be removed with a plastic or a wooden spatula. Resulting slurry should be wiped off with a dry cloth. If necessary, repeat the treatment. When the PU foam is totally removed clean the substrate with a wet cloth. Rests of Zwaluw PUR Remover should not remain longer on the surfaces as necessary! Zwaluw PUR Remover is hygroscopic, so close container immediately after use. Only the water free product maintains its strength.

### Shelf Life

In unopened original packaging between  $+5^{\circ}$ C and  $+25^{\circ}$ C, shelf life till 24 months after production date, stored in a dry place.





## **Zwaluw Backer Rod PU**

Open cell backer rod foam for joints sealing

#### **Benefits**

· Avoids three-sided adhesion of sealants

### **Application areas**

Zwaluw Backer Rod PU has been developed in construction and expansion joints to achieve the right joint-dimensions and to prevent a three-sided adhesion of the sealant.

Zwaluw Backer Rod PU must be used in the construction and expansion joint to achieve the correct joint dimension and to prevent a three-sided adhesion of the sealant. The correct joint sealant depth can be calculated by using the following formulation: Joint Depth = (Joint Width divided / 3) + 6. The most suitable diameter of the Zwaluw Backer Rod PU is 50% bigger than the gap between the two building substrates. If the joint width is 20 mm the diameter of the Zwaluw Backer Rod should be Ø 30 mm.



## **Zwaluw Backer Rod PE**

Closed cell backer rod foam for joints sealing

#### **Benefits**

- · Avoids three-sided adhesion of sealants
- Applicable in heavy environmental situations

### **Application areas**

Zwaluw Backer Rod PE has been developed in construction and expansion joints to achieve the right joint-dimensions and to prevent a three-sided adhesion of the sealant.

Zwaluw Backer Rod PE must be used in the construction and expansion joint to achieve the correct joint dimension and to prevent a three-sided adhesion of the sealant. The correct joint sealant depth can be calculated by using the following formulation: Joint Depth = (Joint Width divided / 3) + 6. The most suitable diameter of the Zwaluw Backer Rod PE is 50% bigger than the gap between the two building substrates. If the joint width is 20 mm the diameter of the Zwaluw Backer Rod should be  $\emptyset$  30 mm.





# **Zwaluw Dual PU-Applicator**

**Dual Applicator for PU-adhesives** 

#### **Benefits**

- · Apply 2 adhesive beads in one go
- Save 50% of application time
- Compatible with almost every PU-Gun
- · Application width can be adjusted by cutting the applicator

### **Application areas**

Zwaluw Dual PU-Applicator is used where two parallel beads of PU (adhesive) are needed. For instance, in combination with Zwaluw PU-Stone Adhesive.



# **Zwaluw Wooden Spatulas**

Professional spatulas for tooling sealants

- Set of 9 different sizes
- For joints from 5 till 40 mm









A complete range of polyurethane guns for the polyurethane foams and caulking guns for the Den Braven sealants and adhesives.

## **Content PU Guns & Caulking Guns**

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## **Zwaluw PU Gun NBS-M Gold**

## Premium PU foam gun

### **Benefits**

- · Strong and robust
- · Easy maintenance and cleaning
- · Adjusting screw at the back controls/closes the foam yield and flow
- Parts replaceable
- Suitable for all Zwaluw PU Gunfoam's

## **Zwaluw PU Gun Uni NBS 9070**

## Premium PU foam gun

- · Strong and robust
- Lightweight
- Fully PTFE coated
- · Easy maintenance and cleaning
- Adjusting screw at the back controls/closes the foam yield and flow
- Parts replaceable
- Suitable for all Zwaluw PU Gunfoam's

# **Zwaluw PU Ultra Gun Economy**

Standard PU foam gun

### **Benefits**

- Lightweight
- · Adjusting screw at the back controls/closes the foam yield and flow
- · Suitable for all Zwaluw PU Gunfoam's

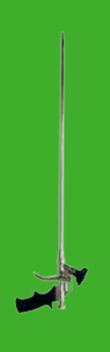


## **Zwaluw PU Gun LB-60**

PU foam gun with longer barrel

- · Standard PU Gun with 60 cm barrel
- · Adjusting screw at the back controls/closes the foam yield and flow







## **Zwaluw PU Gun LB-100**

PU foam gun with extra-long barrel

#### **Benefits**

- Standard PU Gun with 100 cm barrel
- · Adjusting screw at the back controls/closes the foam yield and flow

# **Zwaluw Electraflow Easipower 310C**

Electrical caulking gun

- Rechargeable 10.8V lithium-ion battery
- Fully charged within 30 minutes of using a universal charger
- High energy densities
- No memory loss –can be charged at any time (doesn't have to be run empty first)
- Considerably less loss of charge when not in use (charge still in place even after months of limited use)
- All applicators are supplied with ONE battery as standard; a second battery can be supplied on request at an additional cost
- · Low medium viscosity
- · Metal frame with support straps to secure cartridge in place
- Reinforced front plate for extra stability
- Maximum (no load) speed: 9mm/sec

# **Zwaluw Electraflow Easipower 600S**

## Electrical caulking gun

### **Benefits**

- Rechargeable 10.8V lithium-ion battery
- Fully charged within 30 minutes of using a universal charger
- · High energy densities
- No memory loss –can be charged at any time (doesn't have to be run empty first)
- Considerably less loss of charge when not in use (charge still in place even after months of limited use)
- All applicators are supplied with ONE battery as standard; a second battery can be supplied on request at an additional cost
- · Low medium viscosity
- Metal frame with support straps to secure cartridge in place
- Reinforced front plate for extra stability
- Maximum (no load) speed: 9mm/sec

## **Zwaluw HK40**

Half-open, very stable handgun with reinforced mechanical transmission

- Adjustable handlebar
- Equipped with automatic lock in the handle









## **Zwaluw HKS12 Metal**

## Lightweight manual caulking gun

#### **Benefits**

- · For use with low medium viscosity materials
- Powerful 12:1 trigger ratio for easy dispensing
- High quality designed with the professional in mind for a high service life
- · Epoxy coated cast aluminium handle
- · Rotating epoxy coated steel frame
- · Cradle frame supports cartridge

## **Zwaluw MK5 H310**

## Manual caulking gun

- For use with low medium viscosity materials
- Powerful 12:1 trigger ratio for easy dispensing
- Epoxy coated cast aluminium handle
- Rotating anodised aluminium barrel
- · Curved rod end (hook) for convenient tool storage
- Easily converted from sachet to cartridge or cartridge to sachet version
- High quality designed with the professional in mind for a high service

  | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High | The professional in mind for a high service | High
- Clear barrel version, accessories and spare parts available

## **Zwaluw MK5 H400**

## Manual caulking gun

### **Benefits**

- · For use with low medium viscosity materials
- Powerful 12:1 trigger ratio for easy dispensing
- Epoxy coated cast aluminium handle
- · Rotating anodised aluminium barrel
- · Easily converted from sachet to cartridge or cartridge to sachet version
- High quality designed with the professional in mind for a high service life
- Clear barrel version, accessories and spare parts available



## Zwaluw MK5 H600

## Manual caulking gun

- For use with medium high viscosity materials
- · Very powerful 18:1 trigger ratio for easy dispensing
- Easily converted from sachet to cartridge or cartridge to sachet version
- High quality designed with the professional in mind for a high service life
- Epoxy coated cast aluminium handle
- · Rotating anodised aluminium barrel
- Clear barrel version, accessories and spare parts available







## **Zwaluw MK5 P310**

## Pneumatic caulking gun

#### **Benefits**

- For use with low medium viscosity materials
- · Compact applicators ideal for tight spaces
- Fitted as standard with a 6.8bar (100psi) regulator
- Lightweight and ergonomically formed applicator which is perfectly balanced for comfort and ease of use
- Inbuilt silencer (less than 70dB)
- · Inbuilt air hose for safety

## Zwaluw MK5 P600

## Pneumatic caulking gun

- · For use with low-medium viscosity materials
- The floating cartridge /sachet plunger drive makes this a versatile tool
- Fitted as standard with a 6.8bar (100psi) regulator
- Lightweight and ergonomically formed applicator which is perfectly balanced for comfort and ease of use
- Inbuilt silencer (less than 70dB)
- · Inbuilt air hose for safety
- Glass reinforced nylon handle and anodised aluminium barrel for less weight but long life

## **Zwaluw PRO 2000**

Manual sturdy caulking gun

### **Benefits**

- All-round
- Closed construction
- · Release on pressure level





Special dosing gun for Zwaluw Polysoft range

### **Benefits**

- Applicable for Zwaluw Polysoft range
- Durable
- · Including brackets for vertical mounting

### **Application areas**

Special dosing gun for the Zwaluw Polysoft Professional and Polysoft Flexible products.



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BETTER RESULTS THROUGH KNOWLEDGE

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