



General purpose

**SMART SEALING & BONDING SOLUTIONS
FOR THE PROFESSIONAL**





BOSTIK, SMART ADHESIVES

The new logo and the new house style with the characteristic green gecko is more than just a visual appearance. “Smart Adhesives” is a reflection of our positioning with regard to the development of smart and innovative sealing and bonding solutions that are safe, flexible and efficient.

We develop innovative sealing and bonding solutions that, whatever is constructed, connected or built, are smarter and can adjust better to the forces and challenges in our daily life.

THE GECKO - INSPIRING ADHESION

For centuries, scientists have been inspired by geckos because of their unique bonding mechanism. They can stick to almost any surface, can climb super-fast against smooth polished glass and can easily carry their entire body weight with just one toe.

The Bostik gecko is flexible, easy to adapt to environments, is open to new situations and is courageous. It symbolizes Bostik’s smart and innovative sealing and bonding solutions for the challenges which today’s market faces.

1. Introduction

Over 130 Years of Innovation

Bostik is the world’s preferred adhesive brand. Since 1889, Bostik has registered and marketed more than 9,000 patents. Innovation is in our DNA. Innovations covering everything from advanced aerospace adhesives to Blu-Tack for the consumer market.

Smart Adhesives

At Bostik, we imagine a wide range of product systems and solutions that make our world safer, more flexible, efficient and responsive to the dynamic challenges of our environment. As the technological demands of the building and construction and manufacturing industries have grown, we have followed pace, developing innovative adhesives to make whatever is assembled or constructed smarter and more adaptive to our customers’ needs.

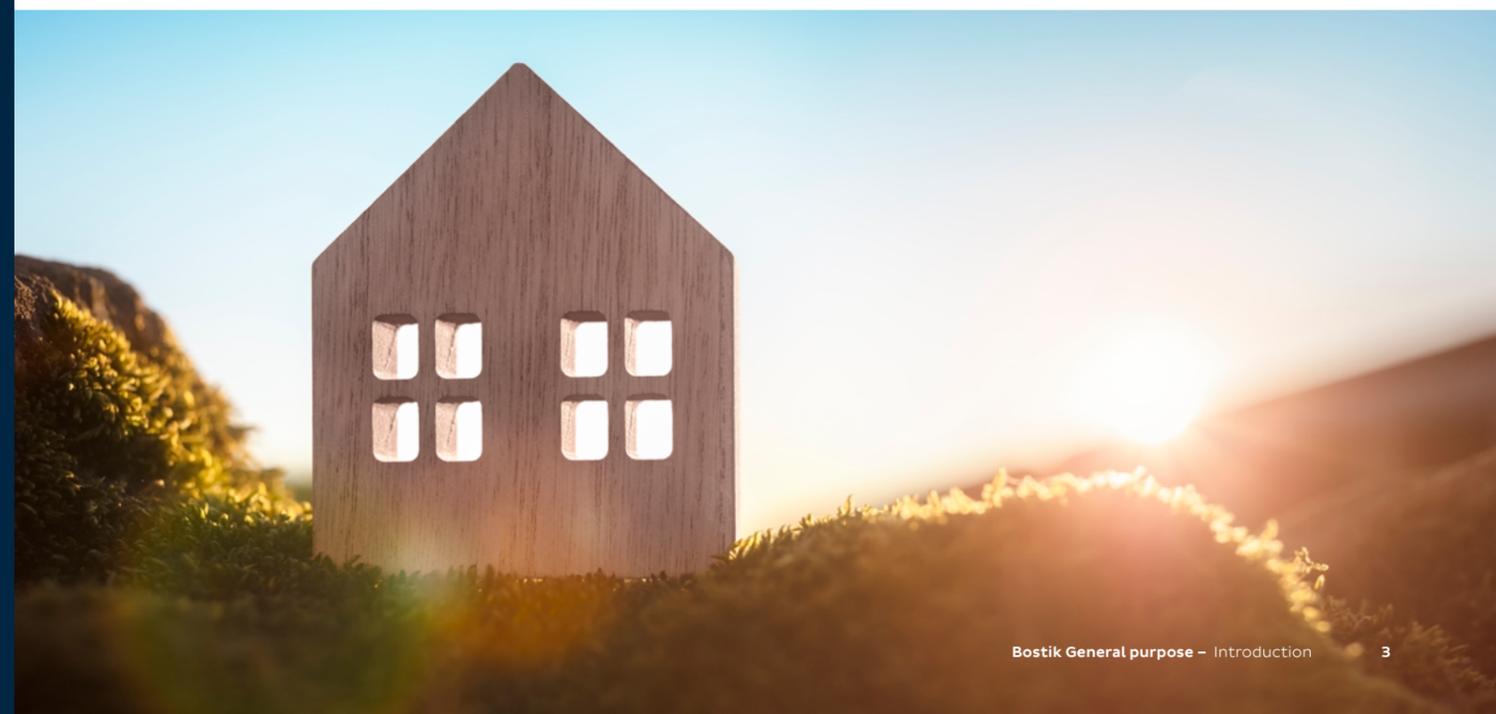
Extreme flexible and durable Solutions

We’ve been innovating in the field of elastic bonding for decades, pioneering flexible adhesives for industrial and construction markets. These sophisticated

solutions possess superior durability, withstanding consistent and intense levels of contraction, elongation, and energy-absorption. Our unique elastic bonding technology is present in a diverse range of Bostik products for professionals and consumers as well as manufacturers.

Bonding dissimilar materials

The elastomeric backbone also provides flexibility, which becomes a critical requirement when bonding dissimilar materials. Substrate combinations like glass to metal, or wood to concrete tend to deform differentially when subjected to changes in temperature and humidity. Here, elastic bonds accommodate the relative deformation of the substrates without creating any stress that damages the assembly of the bonded materials. This ability to deform reversibly under applied loads also makes elastic bonds suitable as sealant materials. As well as exhibiting excellent aging properties, elastic bonds are notable for their efficiency.





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2. Bostik smart products

Bostik Smart Adhesives

Bostik has been active in the global market for more than 130 years. Because Bostik markets its products through three Strategic Global Business Units, many products, innovations and patents are not known to everyone.

Bostik's Global Business Unit Non-Woven was the first one, already in 1975 who developed successfully the first elastic attachment adhesive for diapers ever made. Bostik is a leading supplier to the manufacturers of baby care, feminine care and adult incontinence products.

Bostik's Global Business Unit Industry Adhesives entered in the early 50's the aerospace, appliance, automotive, assembly industries with our high-end adhesive solutions. Fact is that Bostik manufacture so many solutions for our strategic partners that you will almost certainly find or encounter an object that contains our adhesives every day.

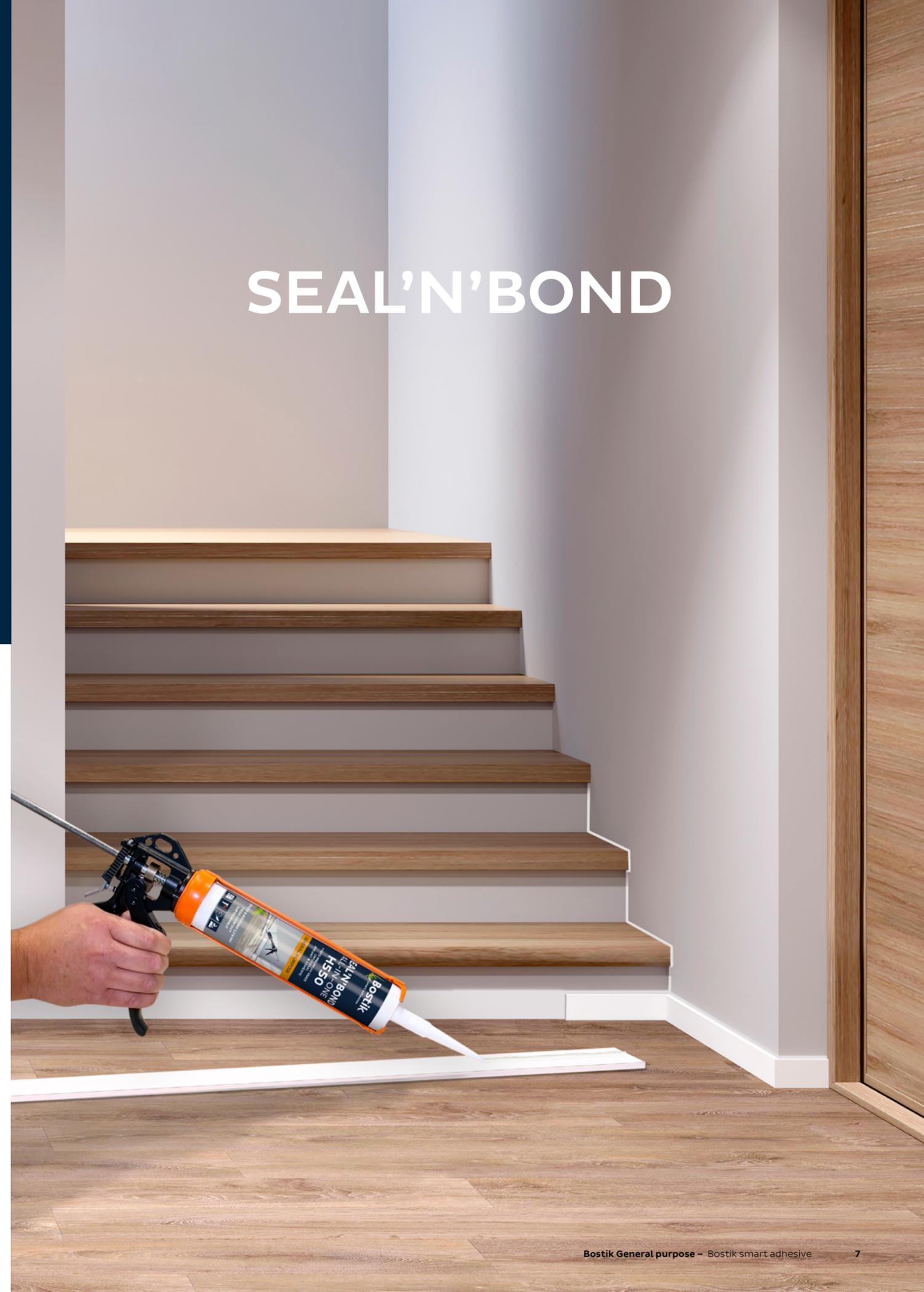
We are here to support you in your daily work. We do that via Bostik's Global Business Unit Consumer & Construction.

Did you know that Bostik Consumer & Construction developed and launched already back in 1922 an innovative and environmental friendly wallpaper adhesive made out of potato starch? It was a German invention and was brought to the market under the brand Quelyd®.

The original brand was Quellhyd. 'Quellen' in the German language means water source. The extension 'hyd', has been reduced from hydrophobicity, meaning 'attracted to water'. The brand Quelyd® Launched an environmentally friendly breakthrough innovative adhesives which had to be diluted with water.

Bostik also developed and launched more than 20 years ago the one and only original high tack instant grab adhesive. Still till today unsurpassed. Apply, Stick and Done! Even heavy materials and without support. But also the new generation grab adhesives are Bostik innovations. What about an adhesive that will reach within 15 minutes a tensile strength of 75% of its final strength of 36 kg/cm²!

SEAL'N'BOND



3. What is an adhesive?

What is an adhesive?

An adhesive is a substance capable of holding materials together in a functional manner by surface attachment that resists separation. Adhesive is more a general term. Within the building and construction world, an adhesive is a flexible material that is used to bond two or more substrates together where strength is required. In technical terms an adhesive does have roughly a shore A hardness above 40 and an E-module above 0.7 N/mm².

Type of adhesives

Adhesives come in a variety of chemistry, for a multitude of applications. In general adhesives can be divided into two types; structural adhesives and non-structural adhesives.

Structural Adhesives:

Structural adhesives or load-bearing adhesives are capable of holding two or more substrates together, bearing the forces involved for the lifetime of the product. Structural adhesives often need engineering solutions, starting with the necessary design calculations, testing and precise application procedures, such as panel bonding and structural glazing.

Non-Structural Adhesives:

Non-structural adhesives bond a range of similar or dissimilar substrates wherever load-bearing strength is not required. A Non-structural adhesive is applied in a more generic type of application, where besides some general guidance on the correct procedures, no further special or restrictive measures are needed. The vast majority of non-structural adhesives are used on the construction site for adhering amongst others:

- Wide variety of building materials
- Waterproofing and other building membranes
- External Thermo Insulation Composite Systems (EPS, XPS boards)
- Decorative fittings and finishes

Non-structural adhesives are also of significant interest to the design engineer, and provide cost-effective solutions for the assembly of finished products.

Cohesion or adhesion, that's the question

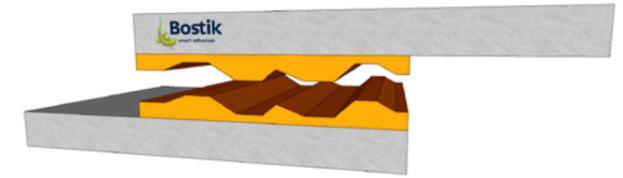
An adhesive is a substance capable of holding materials together in a functional manner by surface attachment that resists separation. More in detail, accordingly the EN923 and ASTM D907-06, 'an adhesion is defined as a non-metallic binder that acts via adhesion and cohesion'.

Adhesion and cohesion are two very important properties of an adhesive. Adhesion is the adherence between the adhesive and the substrate(s). Cohesion is the adherence within the adhesive itself, the adhesive inner strength.

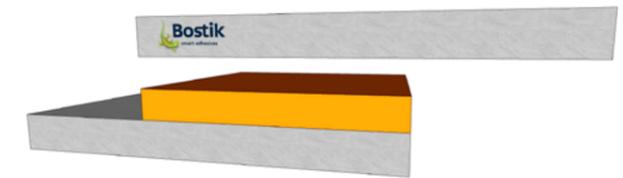
The one and only objective of an adhesive is to adhere to the adjacent materials, and withstand the internal stress caused by load, movement, humidity and temperature fluctuations.

In short, the adhesion is the adhering of materials to each other as where cohesion refers to the inner strength of a material. When the adhesive separates from the substrate, we refer to an adhesion failure. When the adhesive separates in the bulk layer of the bonding agent this is a cohesion failure.

The relationship between the forces of adhesion and those of cohesion is decisive for the strength of a bonded joint. Irrespective of how high the cohesion forces in an adhesive layer are, if there are no adhesion forces in effect, the adhesive will be incapable of fastening the two parts together.



Cohesion failure



Adhesion failure

Portfolio	Adhesive Technology	Adhesive Type	Tensile Strength	Substrates	Application	Unique feature
P350 SEAL'N'BOND CONSTRUCT	Polyurethane	Rigid	1.4 N/mm ²	Porous & Non porous	In- & outside	Sealing & Bonding
H505 SEAL'N'BOND CRYSTAL	Hybrid	Elastic	2.5 N/mm ²	Porous & Non porous	Inside	Crystal clear
H535 SEAL'N'BOND MULTI PURPOSE	Hybrid	Elastic	1.7 N/mm ²	Porous & Non porous	In- & outside	Sealing & Bonding
H550 SEAL'N'BOND ALL-IN-ONE	Hybrid	Elastic	2.0 N/mm ²	Porous & Non porous	In- & outside	Outperformer in sealing and bonding
H750 SEAL'N'BOND PREMIUM	Hybrid	Elastic	4.1 N/mm ²	Porous & Non porous	In- & outside	Outperformer in sealing and bonding

- 1 Perfect adhesion
- 2 Good adhesion, clean with BOSTIK T100 UNIVERSAL CLEANER first
- 3 Use abrasive paper and clean with BOSTIK T100 UNIVERSAL CLEANER first
- 4 Part of system/concept of Bostik

Aerated concrete	Aluminum unpainted	Aluminum painted	Aluminum powder coated	Brick	Ceramic	Concrete	Copper	Enamel	EPDM	Glass	HPL Panels	Painted iron	Powder coated iron	Lead	Mirror	Neutral Stone	Polycarbonate	Polyester	Polyethylene: EPS	Polyethylene: XPS	Porcelain	Painted stainless steel	Powder coated stainless steel	Stone	Painted wood	Powder coated wood	UPVC	Zinc
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Portfolio	Application segment																											
P350 SEAL'N'BOND CONSTRUCT	General purpose																											
H505 SEAL'N'BOND CRYSTAL	General purpose	1	2	3	1	1	1	2	2	1	1	2							2	2	3	1	1	2	2	2	2	2
H535 SEAL'N'BOND MULTI PURPOSE	General purpose	1	2	3	1	1	1	2	2	1	1	2						2		1	2	3	1	1	1	2	2	2
H550 SEAL'N'BOND ALL-IN-ONE	General purpose	1	2	3	1	1	1	2	2	1	1	2						2		1	2	3	1	1	1	2	2	2
H750 SEAL'N'BOND PREMIUM	General purpose	1	2	3	1	1	1	2	2	2	1	2				1	2		1	2	3	1	1	1	1	2	2	2

Grabs & Adhesives portfolio

Bostik has a large portfolio of dedicated adhesives available for the professional user. These adhesives are placed in the Grabs & Adhesives segment. Please consult the Grabs & Adhesives brochure for the entire product portfolio.

Other adhesives

But also in other segments Bostik offers the demanding professional a solution for all their adhesive problems. There are adhesives available in the Decoration & Paint segment, the Energy Saving & Airtight segment, the roofing segment, the Garden & Landscaping segment, the Panel & Insulation segment but also the Expanding foam segment. Please consult those brochures for more information.

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Aerated concrete
 Aluminum unpainted
 Aluminum painted
 Aluminum powder coated
 Brick
 Ceramic
 Concrete
 Copper
 Enamel
 EPDM
 Glass
 HPL Panels
 Painted iron
 Powder coated iron
 Lead
 Mirror
 Neutral Stone
 Polycarbonate
 Polyester
 Polystyrene: EPS
 Polystyrene: XPS
 Porcelain
 Painted stainless steel
 Powder coated stainless steel
 Stone
 Painted wood
 Powder coated wood
 uPVC
 Zinc

Portfolio	Application segment	Aerated concrete	Aluminum unpainted	Aluminum painted	Aluminum powder coated	Brick	Ceramic	Concrete	Copper	Enamel	EPDM	Glass	HPL Panels	Painted iron	Powder coated iron	Lead	Mirror	Neutral Stone	Polycarbonate	Polyester	Polystyrene: EPS	Polystyrene: XPS	Porcelain	Painted stainless steel	Powder coated stainless steel	Stone	Painted wood	Powder coated wood	uPVC	Zinc
H350 SUPERGRIP MULTI PURPOSE	Grabs & Adhesives	1	2	3	1	2	2	2	2	2	2	2	2	3	2					2				2	3	1	2	2		
N305 SUPERGRIP FAST SET	Grabs & Adhesives	1				1	2	2	2	2										2			1			1	1		2	
P350 SEAL'N'BOND CONSTRUCT	Grabs & Adhesives	1	2	3	1	1	1						1	2									1			1	1		2	
H515 SUPERGRIP ALL-IN-ONE	Grabs & Adhesives	1	2	3	1	1	1		2				1	2					2			1	2	3	1	1	1	2		
P580 SUPERGRIP XTRA POWER	Grabs & Adhesives	1	2	3	1	1	1	2	2			2	1	2					2	1	1	1	2	3	1	1	1	2		
H780 SUPERGRIP INVISIBLE	Grabs & Adhesives	1	2	3	1	1	1	2	2			2	1	2					2			1	2	3	1	1	1	2		
H785 HIGH TACK	Grabs & Adhesives	1	2	3	1	1	1	2	2			2	1	2									1	2	3	1	1	1	2	
H910 SUPERGRIP FAST CURE	Grabs & Adhesives	1	2	3	1	1	1	2	2			2	1	2									1	2	3	1	1	1	2	
H920 SUPERGRIP CLEAR	Grabs & Adhesives	1	2	3	1	1	1	2	2			2	1	2									1	2	3	1	1	1	2	
H930 SUPERGRIP METALL	Grabs & Adhesives	1	2	3	1	1	1	2	2			2	1	2									1	2	3	1	1	1	2	
H960 SUPERGRIP MIRROR	Grabs & Adhesives	1				1	1	1		1																	1			
H980 HIGH TACK PREMIUM	Grabs & Adhesives	1	2	3	1	1	1	2	2			2	1	2									1	2	3	1	1	1	2	
A545 DECO ADHESIVE	Decoration & paint	1				1	1													1	1					1	1	1	1	
A630 FOIL'N'FIX INTERIOR	Energy saving & Airt.	1				1	1														1	1				1	1	1	1	
A785 HIGH GRIP DECO	Decoration & paint	1				1	1														1	1				1	1	1		
H640 FOIL'N'FIX EXTERIOR	Energy saving & Airt.	1	2	3	1	1	1	2	2			1	1	2					2	1	1	1	2	3	1	1	1	1	2	
H955 FOIL'N'FIX PREMIUM	Roofing	1				1	1			1																1	1	1	1	
H970 PANELTACK MM	Panel & insulation												4																	
H975 PANELTACK HM	Panel & insulation												4																	
P325 FOAM'N'FIX 2C B3	Expanding foam	1				1	1	1																		1	1	1		
P345 FOAM'N'FIX 2C B2	Expanding foam	1				1	1	1																		1	1	1		
P530 FOAM'N'FIX STONE B3	Garden & landsc.	1				1	1	1																		1	1	1		
P535 FOAM'N'FIX STONE PRO B3	Garden & landsc.	1				1	1	1																		1	1	1		
P555 FOAM'N'FIX TURBO B2	Expanding foam	1				1	1	1																		1	1	1		
P565 FOAM'N'FIX 2C B1	Expanding foam	1				1	1	1																		1	1	1		
P575 PANELTACK EIFS PRO B3	Panel & insulation	1				1	1	1																4	4	1	1	1		
P745 FOAM'N'FIX B2	Expanding foam	1				1	1	1																		1	1	1		
P775 PANELTACK EIFS PRO B2	Panel & insulation	1				1	1	1																4	4	1	1	1		
P975 PANELTACK EIFS PRO B1	Panel & insulation	1				1	1	1																4	4	1	1	1		
S970 PANELTACK S	Panel & insulation												4																	

Please be aware that you need to investigate with this table if your selected product will also adhere to your second substrate. Take in consideration that we have two types of wood, softwood and hardwood. Each type comes with different species with different behaviour. Please always test the adhesion upfront the application! For the concepts such as Panel & insulation and Energy Saving & Airtight, please contact your local technical sales department for a proper product or system recommendation.

4. What is a sealant?

What is a sealant?

A sealant is a soft, pliable material that is used to seal cracks or joints where structural strength is no required. In technical terms, a sealant has a Shore A hardness below 40 and an E-module maximum of 0.7N/mm².

These soft materials can accommodate building and civil engineering structure movement and assuring a durable, sustainable and above all functional tightness throughout their operational life.

Sealants need to meet market requirements depending on function and location of the joint. The following information gives more detail on the ASTM and CE Marking required by sealants for use in façade, glazing, sanitary and pedestrian walkway applications.

Hybrids

Hybrid is the fast growing elastic sealant and adhesive technology. It combines a wide adhesion spectrum, paintability, bubble-free curing and applicability to damp substrates. In addition, hybrids products contain no isocyanates.

Hybrid advantages

- Good adhesion to most substrates
- Hydrophilic; even adhesion to damp surfaces
- High mechanical resistance
- Isocyanate free
- Paintable* (Tests prior to the application is recommended for all systems)

Polyurethanes

Polyurethane is the fast growing elastic sealant technology but this technology sometimes also is suitable for bonding applications. Polyurethane sealants cure by absorbing moisture from the air. Polyurethane sealants can be used for general construction sealing and caulking in which moderate movement can be expected. Typically, one-part polyurethane sealants are capable of ±25% joint movement. Newer polyurethanes have a lower modulus properties, allowing them to seal joints with high amounts of dynamic movement.

Polyurethane advantages

- Good adhesion to most common substrates
- Good recovery
- Very good resistance to weathering
- No shrinkage
- Rapid cure in the correct environment
- Paintable (only water based and 2c paints)
- Hydrophilic



5. A combination of two worlds

Requirements

Choosing the correct sealant for a specific application can be complicated and dependent on a range of criteria. To make the correct decision we need to ask some questions:

- What type of substrate are we dealing with? (e.g. porous vs. non-porous, dark vs light coloured...?)
- What is the expected movement of the adjacent substrate?
- What is the best sealant chemistry for the application?
- What material are the adjacent substrates for a correct compatibility?
- Should it be compatible with paints and if so which paint type?
- Is substrate staining a concern?
- What are the minimum required adhesion properties?
- What is the application environment?
- Must the sealant be UV and weather resistance?
- Is the product applied outside (permeable) or at the inside (airtight)?

Other sealants

Bostik has a large portfolio of dedicated sealants available for the professional user. These sealants are divided among several segments. Bostik has sealants that are specifically developed for facade and construction. These sealants can be found in the Construction & Facade segment brochure. For connection joints in bathrooms, kitchens and other wetrooms, Bostik has a portfolio silicone sealants available in its Sanitary segment. The professional decorator and painter has a large portfolio available to choose from the Decoration & Paint segment, but also the glazier has some excellent products to choose from in the Glazing segment. Please see the brochures for the full portfolios of all individual segments.

Seal and Bond

At Bostik we understand that the one and only universal product doesn't exist. As you could have seen in the chapter 3 of this brochure, how to determine the correct product and the route to assure a perfect durable connection.

However sometimes you need similar to your adhesive job a proper sealant to finalize your project. To follow the market request, Bostik offers the SEAL'N'BOND family as the General Purpose portfolio. We believe with offering this range, to be able to have solutions to adhere as well as seal with the same product. Therefore these 5 products come with CE marking as well.

CE Classification (Europe)

In today's world, globalization and harmonization become commonly used and familiar terms. This is also true at building standards and regulations. Within Bostik we embrace this movement and strive for a globalized standard which provide transparency and simplicity in sealing and bonding.

One of the most familiar, and for Europe mandatory standards in the sealant industry is the CE Classification, or also known as the standard EN 15651. This norm is divided into 4 categories:

- EN 15651-1 Sealants for Facade
- EN 15651-2 Sealants for Glazing
- EN 15651-3 Sealants for Sanitary
- EN 15651-4 Sealants for Pedestrian Walkways

Please see the chapter Harmonized Building Standards in this brochure for detailed information about the CE classification.

Using a general purpose product as sealant

Joint movement, caused by thermal expansion and contraction, can be determined by a coefficient of linear expansion formula. The coefficient of expansion is simply defined as the amount a given material increases or decreases in size with temperature changes. The composition of building materials, their length, and the temperature gradient (or rate of change) all determine the degree of expansion and contraction. The amount of expected movement in a substrate is one of the factors that determines which sealant should be used on a specific job. In other words, which sealant will be most compatible with the degree of movement and the substrate used.

Expansion

Coefficient of expansion is simply defined as the amount a given material increases and decreases in size with temperature changes. The difference in the coefficient of expansion between different building materials must be considered when determining which sealant should be used.

For example, the most popular metal used in store-fronts and curtain walls is aluminium. Aluminium expands 2.5 times more than glass under the same conditions. Looking at the expansion table, it is evident that when using aluminium the best sealant choice must: - Remain elastic when extended - Adhere to the glass and substrate - Return to its original shape

Coefficient of expansion The coefficient of linear thermal expansion is the change, per unit of length, for each degree of temperature. This ratio (of expansion or contraction per degree of temperature change compared to the length of the material before the temperature change) is a constant for each particular material and is expressed as a decimal or a fraction. The following values are expressed in a rate of expansion per linear meter and over a 100°C temperature change:

Material	Linear thermal expansion coefficient per °C	Linear thermal expansion of 1 meter material at a temperature difference of 100°C
Marble	5 x 10 ⁻⁶	0,5 mm
Wood	5 x 10 ⁻⁶	0,5 mm
Brick	7 x 10 ⁻⁶	0,7 mm
Glass	8 x 10 ⁻⁶	0,8 mm
Stone	8 x 10 ⁻⁶	0,8 mm
Concrete	12 x 10 ⁻⁶	1,2 mm
Aerated concrete	12 x 10 ⁻⁶	1,2 mm
Limestone	12 x 10 ⁻⁶	1,2 mm
Steel	24 x 10 ⁻⁶	2,4 mm
Aluminum	30 x 10 ⁻⁶	3,0 mm
Polyester	80 x 10 ⁻⁶	8,0 mm
PVC	80 x 10 ⁻⁶	8,0 mm
PMMA	80 x 10 ⁻⁶	8,0 mm
Polycarbonate	80 x 10 ⁻⁶	8,0 mm

How to calculate Based on a concrete slab of 5 meters length, the maximum temperature of which is + 30°C , with a minimum of - 10°C. The difference in temperature is 40°C.

The formula how to calculate the movement is:

→ **Mt = CTE * ΔT * Length**

Mt: movement in mm
 CTE: coefficient thermal expansion in mm/ mtr/1°C
 ΔT: temperature difference in °C
 Length: length of element in mm

In this example:
 → Mt = 12 x 10⁻⁶ * 40 * 5.000
 → Mt = 2.4 mm movement

How to apply sealants

Once the forecasted movement (Mt) of the elements has been calculated, we need to determine the minimum required joint width to accommodate the movement capability of the applied sealant. If we recommend a low modulus sealant with a movement capability for the façade (F-EXT-INT-CC-25LM) of 25% the minimum required joint width can be calculated as follow:

- (100/25) x 2,4 mm = 9,6 mm
- Rounded up till 10 mm

The correct width and depth of the joint are important. The depth depends on the width and is calculated by using the formula below.

- joint depth = (joint width/3) + 6 mm

So with a joint width of 10 mm the right joint depth is: (10/3) + 6 mm = 10 mm

To apply the sealant with the correct depth, a backer rod is used. Backer rods are used to control the depth of sealant, to provide backing for the sealant during application and to prevent triple bonding. Materials used as backer rods should be weaker than the sealant itself and not obstruct the movement capability of the sealant, whilst compressing or expanding. Most suitable backer rods are:

- BOSTIK PU Backer rod (open cells)
- BOSTIK PE Backer rod (closed cells)

Recommended by Bostik is to select a backer rod with a diameter of 150% of the joint width.

Joint movement, caused by thermal expansion and contraction, can be determined by a coefficient of linear expansion formula. The coefficient of expansion is simply defined as the amount a given material increases or decreases in size with temperature changes. The composition of building materials, their length, and the temperature gradient (or rate of change) all determine the degree of expansion and contraction. The amount of expected movement in a substrate is one of the factors that determines which sealant should be used on a specific job. In other words, which sealant will be most compatible with the degree of movement and the substrate used.



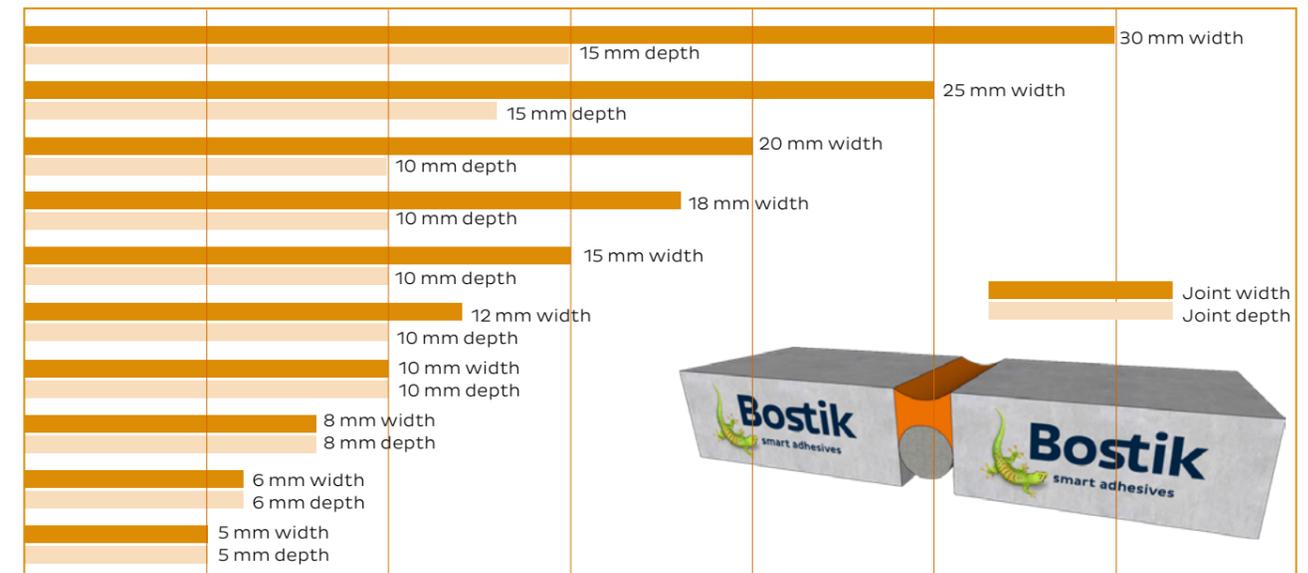
Example 1: Standard correctly applied flexible and elastic joint sealant on a backer rod with the correct installation depth and width.



Example 2: Expansion of the building materials due to temperature absorption. Result is that the joint in between the adjacent building materials will be 'smaller'.



Example 3: Contraction of the building materials due to temperature remittance. Result is that the joint in between of the adjacent building materials will be 'wider'.



6. Harmonized Building Standards



CE Classification (Europe)

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One of the most familiar, and for Europe mandatory standards in the sealant industry is the CE Classification, or also known as the standard EN 15651. This norm is divided into 4 categories:

- **EN 15651-1 Sealants for Facade**
- **EN 15651-2 Sealants for Glazing**
- **EN 15651-3 Sealants for Sanitary**
- **EN 15651-4 Sealants for Pedestrian Walkways**

Type testing

The objective of type testing is to determine the type of product as set out in EN 15651 and, where applicable, to define the intended use in more detail. Type testing consists of a complete series of tests that are to be executed according to the standard for a certain product type. Type testing must be executed by a notified testing laboratory. The only exception to this are Type F-INT sealants ("interior facade applications"). This is the only case in which the manufacturer carries out type testing and determines product type.

Type testing must be carried out to determine the performance of the product placed on the market according to the specifications of the applicable European harmonized product standard (i.e. EN 15651-1, EN 15651-2, EN 15651-3 or EN 15651-4).

EN 15651-1 Sealants for Facade

EN 15651-1 deals with the definition and the requirements for non-structural facade sealants. The areas in which these joint sealants are used are:

- Outside of a building
- Window and door frames, including visible faces in indoor areas

EN 15651-2 Sealants for Glazing

EN 15651-2 sets out definitions and requirements for non-structural, elastic joint sealants for sealing glazing in buildings. Included are glazing joints at an angle of 7° to the horizontal. The areas in which these joint sealants are used are:

- Glass to glass
- Glass to frames
- Glass to porous carrier materials

EN 15651-4 Sealants for Pedestrian Walkways

EN 15651-4 deals with the definition of and requirements on cold applied, non-structural, elastic sealants for movement joints in floors for interior and exterior use. Included in the scope are:

- Floor joints in pedestrian walkways
- Floor joints in surfaces with pedestrian traffic along with, e.g. trolleys, etc.
- Floor joints in public areas
- Movement joints between concrete slabs, e.g. in balconies, terraces and warehouses

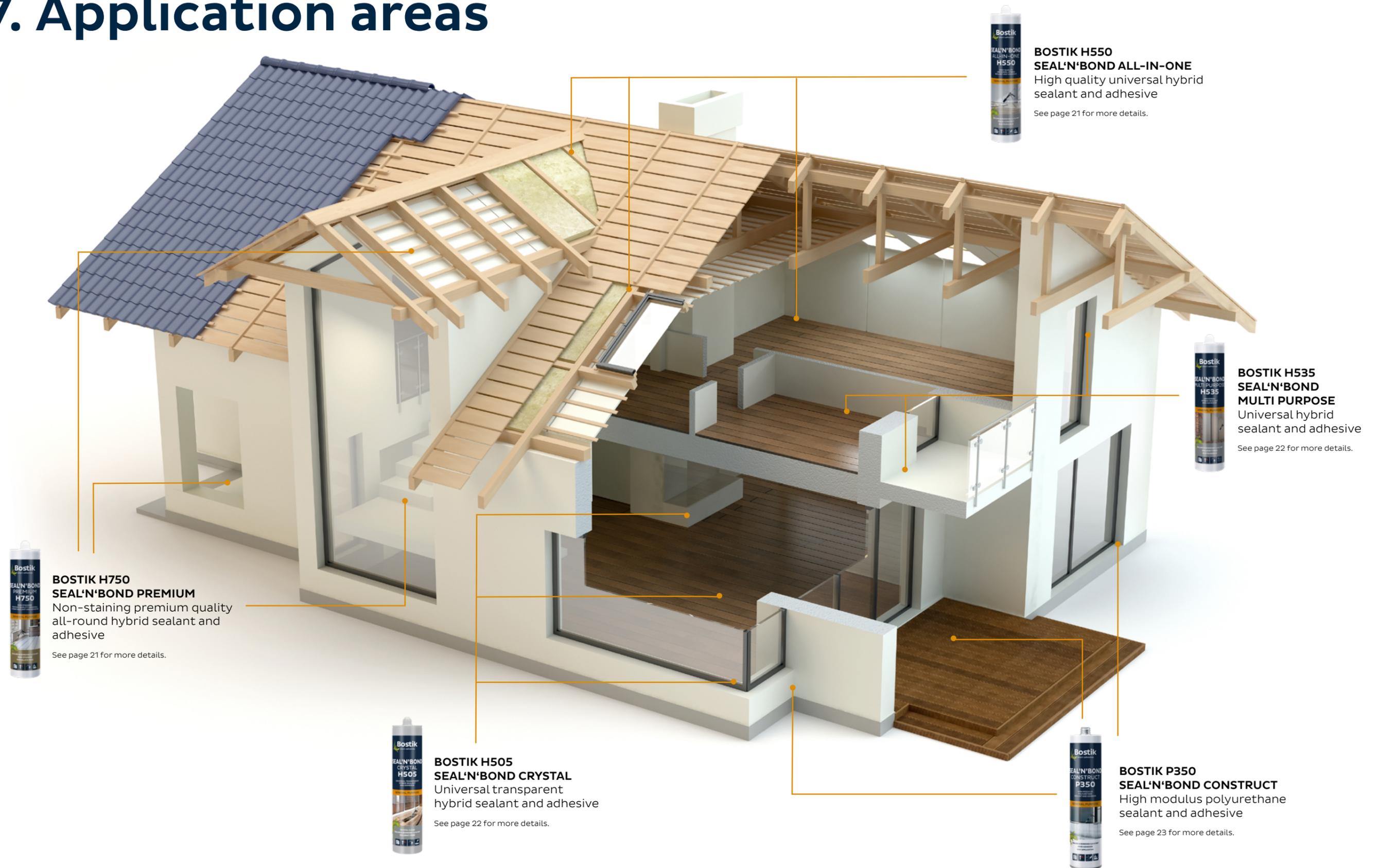
Pursuant to EN 15651, products are divided into the following product types (identification codes) (for an explanation, see table 'Sealants for facade, glazing & pedestrian walkways):

- Type F-INT
- Type F-EXT-INT
- Type F-EXT-INT-CC
- Type G
- Type G-CC
- Type S
- Type PW-INT
- Type PW-EXT-INT
- Type PW-EXT-INT-CC

In addition, EN 15651-1 and EN 15651-4 also allows a classification of joint sealants. Joint sealants are divided into the following classes:

- Class 25LM
- Class 25HM
- Class 20LM
- Class 20HM 12.5E, 12.5P and 7.5P
- Class 25LM-CC
- Class 25HM-CC
- Class 20LM-CC
- Class 20HM-CC and 12.5E-CC
- Class "only suitable for use in interior areas"

7. Application areas



**BOSTIK H550
SEAL'N'BOND ALL-IN-ONE**
High quality universal hybrid
sealant and adhesive
See page 21 for more details.



**BOSTIK H535
SEAL'N'BOND
MULTI PURPOSE**
Universal hybrid
sealant and adhesive
See page 22 for more details.



**BOSTIK H750
SEAL'N'BOND PREMIUM**
Non-staining premium quality
all-round hybrid sealant and
adhesive
See page 21 for more details.



**BOSTIK H505
SEAL'N'BOND CRYSTAL**
Universal transparent
hybrid sealant and adhesive
See page 22 for more details.



**BOSTIK P350
SEAL'N'BOND CONSTRUCT**
High modulus polyurethane
sealant and adhesive
See page 23 for more details.

8. Portfolio

BOSTIK H750 SEAL'N'BOND PREMIUM

Non-staining premium quality all-round hybrid sealant and adhesive

Product description

BOSTIK H750 SEAL'N'BOND PREMIUM is a professional non-staining all-round sealant and adhesive with high strength.

Most important characteristics

- Sustainable, phthalate free
- All-round premium sealant and adhesive
- Non-staining formulation, applicable on natural stone
- Solvent and isocyanate free
- Perfect adhesion bonding without primer on most substrates
- Permanently elastic
- Food safe contact

Certificates

- EN 15651-1: F-EXT-INT-CC 20HM
- EN 15651-2: G 20HM
- Finnish M1
- ISEGA
- A+ French VOC Regulation



Packaging	Packed per	Colour
290 ml cartridge	12 cartridges per box	white, grey and black

BOSTIK H550 SEAL'N'BOND ALL-IN-ONE

High quality universal hybrid sealant and adhesive

Product description

BOSTIK H550 SEAL'N'BOND ALL-IN-ONE is a high quality professional all-in-one hybrid sealant and adhesive with a high strength.

Most important characteristics

- Universal bonding and sealing for interior and exterior use
- Permanently elastic
- Free of isocyanates and solvents
- Adheres perfectly without primer on most, even damp, surfaces
- High mechanical resistance, end strength and E-modulus

Certificates

- Ecode EC1 Plus
- Finnish M1
- ISEGA
- LEED
- EN 15651-1: F-EXT-INT-CC 25HM
- EN 15651-3: S XS3
- EN 15651-4: PW-EXT-INT-CC 25HM
- A+ French VOC Regulation



Packaging	Packed per	Colour
290 ml cartridge	12 cartridges per box	white, grey and black





BOSTIK H535 SEAL'N'BOND MULTI-PURPOSE

Universal hybrid sealant and adhesive

Product description

BOSTIK H535 SEAL'N'BOND MULTI PURPOSE is a high quality versatile all-in-one hybrid sealant and adhesive.

Most important characteristics

- Universal bonding and sealing for interior and exterior use
- Permanently elastic
- Free of isocyanates and solvents
- Resistant to UV, moisture, mould and weather
- Adheres perfectly without primer on most, even damp, surfaces

Certificates

- Ecode EC1 Plus
- EN 15651-1: F-EXT-INT-CC 20HM
- A+ French VOC Regulation
- NF P 85-610

Packaging	Packed per	Colour
290 ml cartridge	12 cartridges per box	white and grey



BOSTIK P350 SEAL'N'BOND CONSTRUCT

High modulus polyurethane sealant and adhesive

Product description

BOSTIK P350 SEAL'N'BOND CONSTRUCT is a high quality universal polyurethane sealant and adhesive.

Most important characteristics

- Universal bonding and sealing for interior and exterior use
- Permanently elastic
- Adheres perfectly without primer on most, even damp, surfaces

Certificates

- EN 15651-1: F-EXT-INT-CC 25HM
- EN 15651-4: PW-EXT-INT-CC 20HM
- A+ French VOC Regulation
- NF P 85-610

Packaging	Packed per	Colour
300 ml alu cartridge	12 cartridges per box	white, grey and black



BOSTIK H505 SEAL'N'BOND CRYSTAL

Universal transparent hybrid sealant and adhesive

Product description

BOSTIK H505 SEAL'N'BOND CRYSTAL is a high quality professional phthalate, tin and solvent free crystal clear universal sealant and adhesive.

Most important characteristics

- Crystal clear
- Phthalate-free, tin-free and solvent free
- High UV resistance
- Multi-functional sealant and adhesive
- Suitable for internal and external use*

Certificates

- EN 15651-1: F-EXT-INT-CC 20LM
- SNJF 12,5E
- Ecode EC1 Plus
- A+ French VOC Regulation

* With prolonged exposure to UV radiation, products can discolour and become less UV stable)

Packaging	Packed per	Colour
290 ml cartridge	12 cartridges per box	transparent



9. Certifications



The new Bostik General Purpose range complies to well-known industry standard certifications. Below we highlight and explain the certification in more detail.

CE Classification (Europe)

In today's world globalization and harmonization have become common and familiar terms. This is also true at building standards and regulations. Within Bostik we embrace this movement and strive for a globalized standard which provides transparency and simplicity in sealing and bonding.

GEV-EMICODE EC1 Plus

EMICODE® is a protected product classification system and at the same time an Eco label. Installation materials, adhesives and construction materials are submitted to a strict certification procedure where the quantity of emitted volatile organic compounds (VOC) is examined. When products come with the EC1 Plus certification, they can be easily adapted in the BREAAAM and LEED schemes.

ISEGA

ISEGA is the certified body that will test for our industry 'sealants and adhesive', the (direct) contact with food. ISEGA works closely with and in alignment with the requirements of the US-American authority FDA.

M1 Certification

Various chemicals are emitted from building and interior decoration materials into indoor air. The classification presents emission requirements for the building materials, fixtures and furniture, with and without padding or textile coverings used in ordinary work spaces and residences with respect to good indoor air quality. M1 stands for low emissions.

A+ Certification

A+ is a compulsory French VOC emissions labelling of construction products installed indoors, based on emission testing. This regulation foresees that any covered product placed on the market has to be labelled with emission classes based on their emissions after 28 days, as tested with ISO 16000 and calculated for European reference room. The same holds true for EMICODE, GUT and Blue Angel. Also other valid information can be used as a basis for this assignment of class, such as tests based on ISO 16000, but with shorter testing duration.

Portfolio	Adhesive Technology	Emicode EC1+	M1	A+	CE EN-15651-1	CE EN-15651-2	CE EN-15651-3	CE EN-15651-4	ISEGA
P350 SEAL'N'BOND CONSTRUCT	Polyurethane	-	-	yes	yes	-	-	yes	-
H505 SEAL'N'BOND CRYSTAL	Hybrid	yes	-	yes	yes	-	-	-	-
H535 SEAL'N'BOND MULTI PURPOSE	Hybrid	yes	-	yes	yes	-	-	-	-
H550 SEAL'N'BOND ALL-IN-ONE	Hybrid	yes	yes	yes	yes	yes	yes	yes	yes
H750 SEAL'N'BOND PREMIUM	Hybrid	yes	yes	yes	yes	yes	-	-	yes

10. Explanation of the icons

The brand new packaging of the Grabs & Adhesives range comes with icons that tell something about the properties of the product. Below we explain in detail what these icons mean.



Outside & inside use

The product can be used outside and inside.



Inside use

The product can only be applied indoors.



Construction

The product can be used in general construction.



Powerful adhesion

The product is very strong and has powerful adhesion properties.



Easy application

The product is easy to apply.



No screws needed

The product makes the use of screws redundant.



Suitable for metal

The product is suitable for bonding metal elements.



Good compatibility

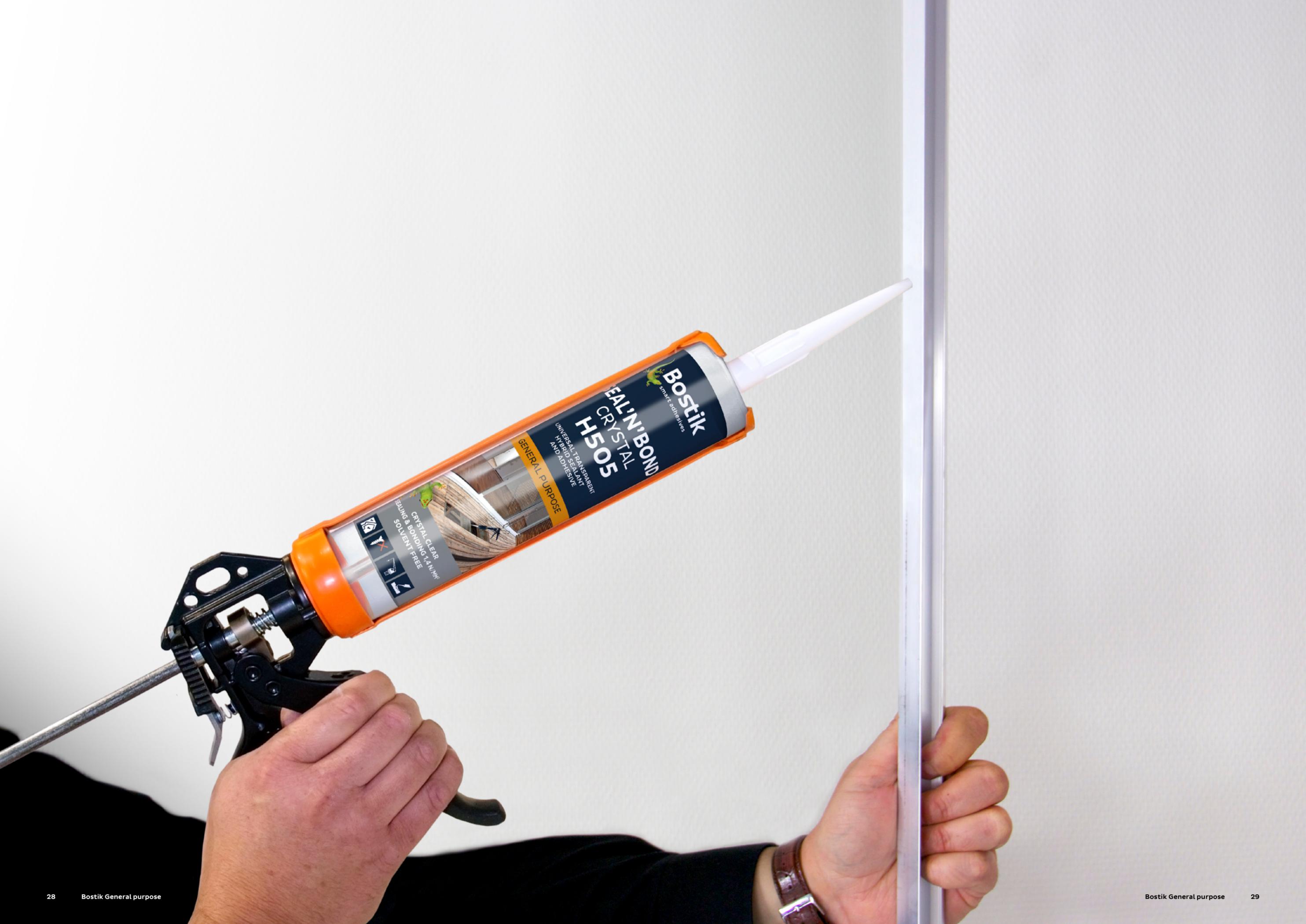
The product has a good compatibility to various building materials.



Gap filling properties

The product is suitable for filling of gaps and cracks.





11. Technical Training

Bostik professional product portfolio

The rest of the Bostik professional product portfolio you can find at bostik.com and read more about them in the product application brochures

End-users expect up-to-date knowledge and technical support from shop-employees. Bostik supports with training programs focusing on products and applications. We co-develop training programs with producers and resellers to combine the knowledge of sealants and adhesives with knowledge on dedicated Bostik products.



Better results through Knowledge

Sealing and bonding are a serious market segment which deserves a dedicated approach. Bostik constantly gathers knowledge about adhesives upstream and downstream, from chemical supplier to end-user. The collection of this knowledge is a continuous process and provides us with the latest insights.

Centre of Excellence

In our recently built Centre of Excellence we share knowledge within the Bostik group, with our customers and with end-users. We are pleased to receive our partners and end-users to provide them with the latest knowledge and new insights. This new information enables our partners to achieve higher efficiency and better results.





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