INNOTEC

Only Quality has a future

FACADE PANEL BONDING

PROJECT BONDING SYSTEM

Your partner in high-end project solutions.

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FACADE PANEL BONDING

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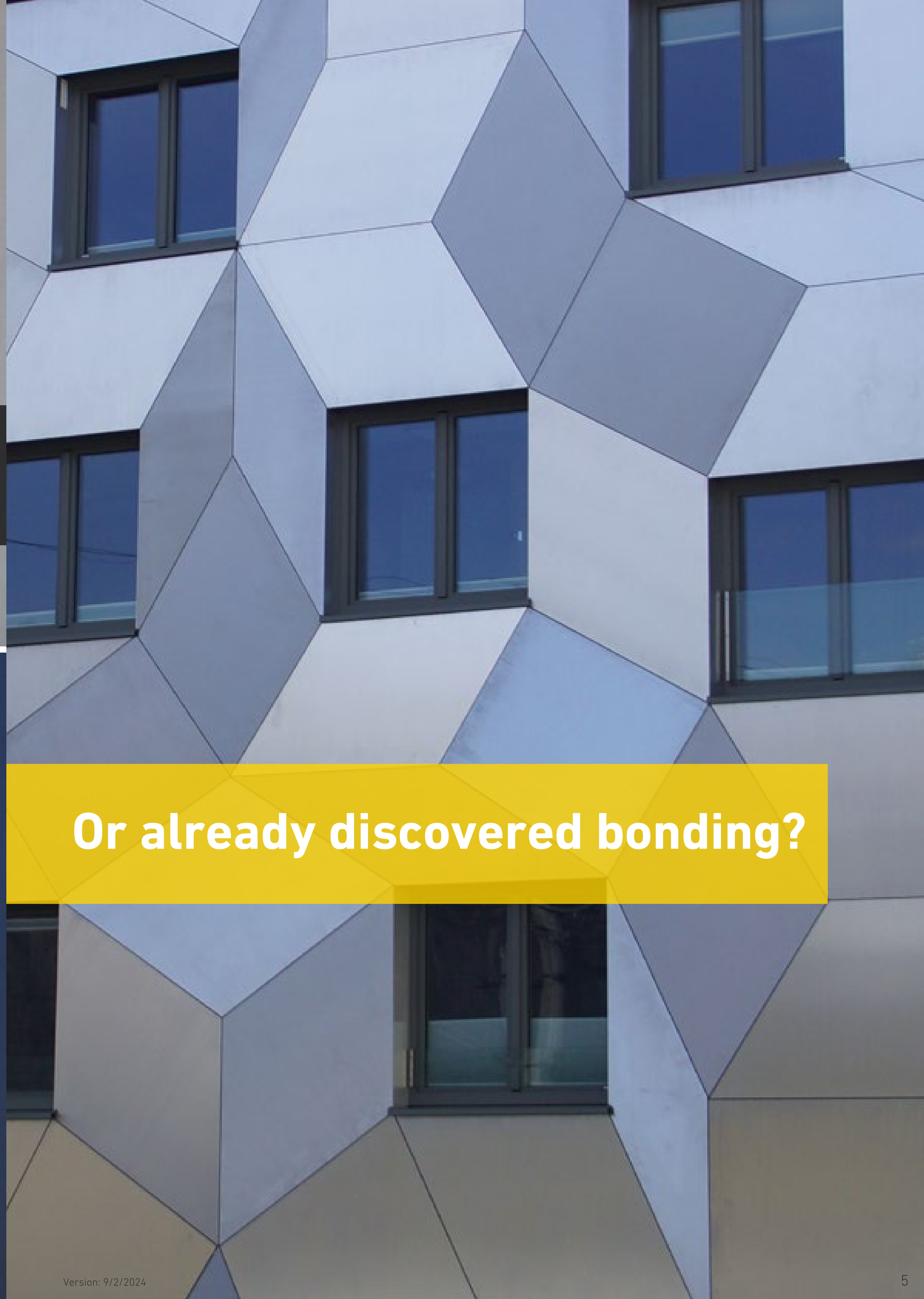
Still using screws?



Or already discovered bonding?

Version: 9/2/2024

Facade cladding is at its best when the method of fixing to the substructure is invisible. For this reason, various invisible methods of fixing have been developed including, among others, bonding. In architecture, this is a favourite method in designing a facade.
(ÖFHF - Klebetechnik, Seite: 3, Stand: 2015-07-15)

The Innotec Project System is a high-end, easy to use, guaranteed bonding system, approved by the German Institute for Structural Engineering (DIBt), and certified by KOMO® for exceptionally economical bonding of facade cladding on aluminium and wooden substructures in the following sectors and areas of application:

» Domestic and industrial buildings
» New buildings and renovations
» Interior and exterior finishing
» Metal cladding
» Facades, roof elements and balcony floors
» Panels in lifts, bathrooms, kitchens and sanitary areas
» Metal and facade construction

CHARACTERISTICS

» Guaranteed bonding system, approved by the German Institute for Structural Engineering (DIBt), certified by KOMO®
» Expected durability at least 40 years by Bouwcentrum Technologie Nederland
» Excellent results in fire protection tests according to pre-standard ÖNORM B3800 (Part 5) by the IBS (Institute for Fire Protection Technology and Security Research) in Linz
» Member of various trade and industry associations for ventilated facade systems (ÖFHF, SFHF, Gebäudehülle Schweiz, VLK)
» Professional advice, supervision and support on site
» Time saving compared to conventional fixing methods
» Economical, easy and rapid installation
» Weathering and ageing resistant bonding
» Self-supporting fixing method
» Uniform stress distribution
» Freedom in design for creative facade design
» Easy-to-maintain facades
» No surface damage by drilling, screws or rivets...
» Compatible with polystyrene foam – suitable for uneven surfaces
» No surface preparation such as sanding required (depending on the selected panel type)

CHOOSING INNOTEC MEANS...

CHOOSING EXPERIENCE!

Innotec has more than 30 years' experience as a partner in facade panel bonding. Since starting, several million square metres of vastly differing materials have been bonded without problems all over Europe. Our staff thus command wide-ranging experience and knowledge.

CHOOSING RELIABILITY!

The Innotec Project System was tested using the carousel test 'climate wall' (see pp. 22 and 23), whereby the service life of successfully tested facades was evaluated as at least 40 years. Innotec products are continuously monitored through internal and external audits. Together with our training programme, on-site support at start-up, and interim & final inspections, this ensures that you can always rely on an end result of the highest achievable quality.

CHOOSING QUALITY!

From the beginning, Innotec set itself the goal to supply only the highest possible quality; this pursuit has remained the same to this day. For this reason, Project System products, as with all Innotec products, always meet the highest possible quality standards.

CHOOSING SUPPORT!

Training and certification are two main pillars of professional results. Innotec will train you to expert level and certify you as a recognized installer. In addition, we offer support at the start of work and also when you install your first panels, so that you will not be faced with any surprises.

CHOOSING SECURITY!

The Innotec Project System has been examined and assessed by many varied institutes, such as SHR, KOMO, Bouwcentrum NL, IBS, IFBT, MFPA Leipzig, TÜV Rheinland and DIBt. In addition, precursory bonding tests are carried out on every Innotec project. Innotec thereby works closely with the most reputable facade panel producers.

CHOOSING A PROFESSIONAL PARTNER!

Extensive experience, high quality, security, training and support, reliability, guaranteed delivery, active in 35 countries, as much for the small professional as for OEM manufacturers... this makes us a professional partner for all your (facade panel bonding) projects!



Cleaner
Multisol Project

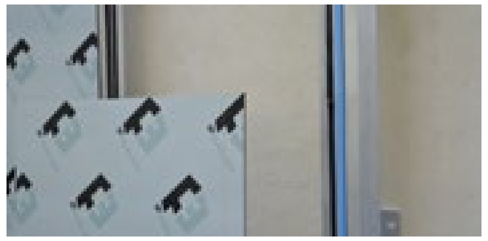
Art. no. 04.0151.9999.PR — 1 litre can

Multisol Project is a professional degreaser for the safe degreasing of metal substrates and facade panels prior to bonding, sealing or any other processing. It rapidly and efficiently removes adhesive and sealant residues, oil, grease, dirt and silicone.

1 litre covers c. 100 linear metres

» Ideal for removing remnants of adhesive, sealant and chewing gum
» High dissolving capacity (also for tar splashes, tree resin, wax residues)
» Rapid and residue-free evaporation
» In no way attacks lacquer, glass, aluminium, rubber or most plastics
» Cleans and degreases the substrate prior to bonding and sealing work
» Very easy to use





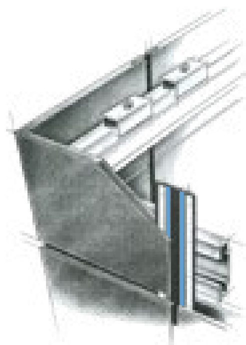
Double-sided tape (aluminium substructures)
Fixation Tape 2100

Art. no. 05.2336.0000 — 3.2 mm thick — 15 m roll

Fixation Tape 2100 is a supporting tape for bonding facade panels to aluminium substructures until Adheseal Project has cured sufficiently and has reached its full adhesive strength.

For aluminium substructures - covers 15 linear metres

» Ensures ideal thickness of the adhesive layer
» Permanently elastic
» Elongation at break: 125%
» Repeated repositioning possible (within 5 minutes)
» Absorbs almost no moisture
» High initial adhesion



SYSTEM COMPONENTS

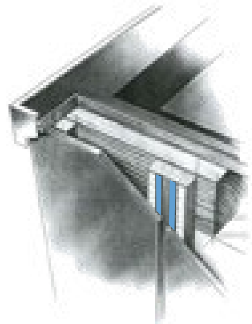


Double-sided tape
Fixation Tape 1000

Art. no. 51000208 — 3.2 mm thick — 25 m roll

Fixation Tape 1000 is a supporting tape for bonding facade panels until Adheseal Project has cured sufficiently and has reached its full adhesive strength.

1 roll covers 25 linear metres



» High initial adhesion
» Perfect fixing
» Absorbs almost no moisture
» Does not attack subsurface or materials
» Ensures ideal thickness of the adhesive layer
» Excellent pressure resistance

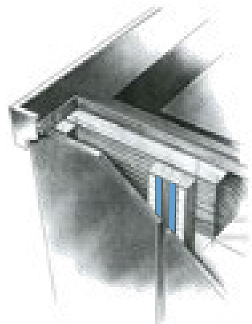


Double-sided tape
Fixation Tape Project

Art. no. 05.2337.5020.PR — 3 mm thick — 25 m roll

Fixation Tape Project is a supporting tape for bonding facade panels until Adheseal Project has cured sufficiently and has reached its full adhesive strength.

1 roll covers 25 linear metres



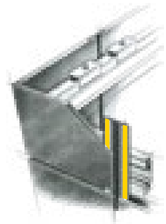
» High initial adhesion
» Perfect fixing
» Absorbs almost no moisture
» Does not attack subsurface or materials
» Ensures ideal thickness of the adhesive layer
» Excellent pressure resistance
» Elongation at break: 230%

Adhesive
Adheseal Project

Art. no. 01.2423.0000.PR	black (0000)	290 ml cartridge
Art. no. 01.2426.0000.PR	black (0000)	600 ml foil pack

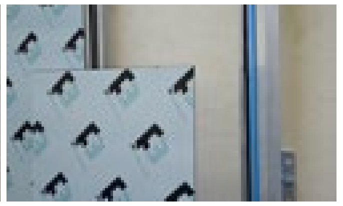
Black mounting adhesive for panels and substructures, with or without primer (see release tables).

Good for 7.5 or 15 linear metres, depending on package size and applied with an 8x8 nozzle



- » Temperature resistance: -40°C to +90°C
- » Very high adhesive power (26 kg/cm^2)
- » Extremely high elongation at break (400 %)
- » Very good UV-resistance
- » Solvent- and isocyanate-free
- » Perfect adhesion even to complex materials





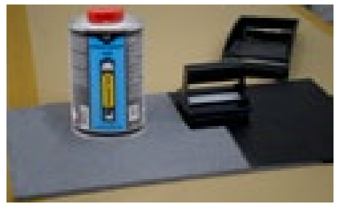
Impregnation & Primer (black)
Imprisol Project

Art. no. 02.0423.0000.PR	1 litre can

Imprisol Project is a protective and impregnating product for wooden substructures that also serves as a primer for facade panels and as an adhesion promoter for Innotec Adheseal Project.

Innotec Adheseal Project can be applied after as little as 10 minutes or up to 20 days without renewed primer activation.

- » Covers c. 100 linear metres (at an application width of 10 cm)
- » Further information: see Innotec Project System Installation Instructions


Cleaning wipes
Multi Wipes

Art. no. 04.1304.9999	30 x 40 cm	400 pcs box
Art. no. 04.1305.9999	33 x 30 cm	90 pcs box
Art. no. 51000207	30 x 40 cm	400 pcs bucket
Art. no. 50000678	30 x 40 cm	400 pcs refill

Multi Wipes are quality wipes made of 50% high-quality viscose and 50% high-quality polyester. This material and its open structure give the wipes a very strong dirt-absorbing capacity and thereby a very good cleaning effect when cleaning facade panels and substructures.

- » Huge dirt-absorbing capacity
- » Universally applicable
- » Always close to hand in the convenient packaging

Compressed air gun
Air Sealant Applicator

Art. no. 90.0928.9999	600 ml	1-piece packaging
Art. no. 90.0926.9999	400 ml	1-piece packaging
Art. no. 90.0925.9999	300 ml	1-piece packaging

The Air Sealant Applicator ensures accurate pressure transmission via telescope control.

Bag gun
Multi Gun

Art. no. 90.0947.9999	600 ml	1-piece packaging
Art. no. 90.0949.9999	400 ml	1-piece packaging

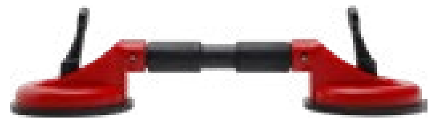
The Multi Gun is used for problem-free processing of high-quality adhesives in foil packs and cartridges.

Cartridge gun
Easy Grip Gun

Art. no. 90.0931.9999	1-piece packaging

The Easy Grip Gun is used for problem-free processing of high-quality adhesives in cartridges up to 310 ml.

Mounting aid
Windscreen Lifter



Art. no. 90.4304.9999	1-piece packaging

Mounting aid with 2 flexibly attached suction cups for the best possible adhesion.

Panel removal toolkit
Glass Tool Set

Art. no. 90.0920.9999	4-piece set

Set of handy tools consisting of 1 roll of cutting wire (twisted), 1 piercing tool and 2 handles.

Innogrip

Art. no. 90.4108.9999	1-piece packaging

Aid for quick and professional priming of the most common surfaces.

Innopad

Art. no. 90.4109.9999	6-piece packaging

Carefully selected exchangeable pad that, in combination with the Innotec primers, gives a perfect professional result.

CALCULATION / MATERIAL REQUIREMENT

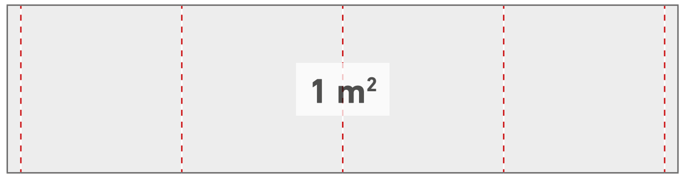
The 3 examples given below each show a panel of 1 m². However, due to the various height-width relationships the number of linear metres covered with the bonding adhesive differ.

This is always to be borne in mind when calculating the required quantity of Project products and the costs of Project materials. It's not the number of square metres that counts, but the **number of linear metres of beads covered with the bonding adhesive!**

= **linear metres of adhesive bead**

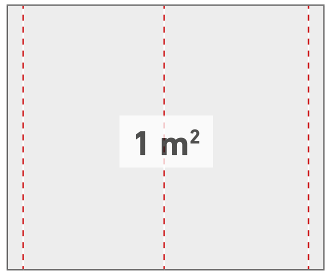
EXAMPLE 1

0.5 m height x 2.0 m width	=	1.0 m²
Number of beads required	=	5 x 0.5 m
Linear metres of adhesive bead length	**=**	**2.5 m¹**



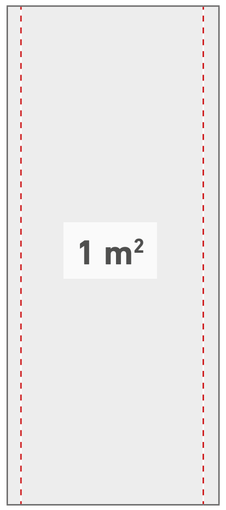
EXAMPLE 2

1.0 m height x 1.0 m width	=	1.0 m²
Number of beads required	=	3 x 1.0 m
Linear metres of adhesive bead length	**=**	**3.0 m¹**



EXAMPLE 3

2.0 m height x 0.5 m width	=	1.0 m²
Number of beads required	=	2 x 2.0 m
Linear metres of adhesive bead length	**=**	**4.0 m¹**



MATERIAL REQUIREMENT

Product	**Enough for ... m¹ adhesive bonding**
Adhesive / **Adheseal Project (black) 290 ml cartridge**	c. 7.5 m¹ (application with supplied 8x8 V-cut nozzle)
Adhesive / **Adheseal Project (black) 600 ml foil pack**	c. 15 m¹ application with supplied 8x8 V-cut nozzle)
Double-sided tape / **Fixation Tape 2100**	15 m¹
Double-sided tape / **Fixation Tape 1000**	25 m¹
Cleaner / **Multisol Project 1 litre can**	c. 100 m¹
Cleaning wipes / **Multi Wipes 400 pcs (30 x 40 cm)**	400 m¹
Cleaning wipes / **Multi Wipes 90 pcs (33 x 30 cm)**	90 m¹
Impregnator + Primer / **Imprisol Project (black) 1 litre can**	c. 100 m¹ (10 cm application width)

Following exact determination of the required number of linear metres of adhesive bead according to the above criteria, we will gladly send you a calculation of the material needed for the project as well as the material costs.

Please contact your expert project adviser for this. You will find the contact details at www.panelbonding.eu.

SUBSTRUCTURE / TYPE / CALCULATION

To obtain the optimum final result and an enduring stable adhesive bond, the work must necessarily be performed on a correctly mounted substructure.

The bond achieved by the Innotec Project System must be able to withstand the wind loads that occur in practice in accordance with the specified load requirements. In addition, the adhesive bond must also be able to absorb the shear and tensile forces as a result of the own weight as well as the thermal and/or hygric deformations of the facade panels.

The substructure (material to which the adhesive is applied) consists of untreated, planed pinewood or aluminium.

The panel-supporting framework should always be mounted vertically.

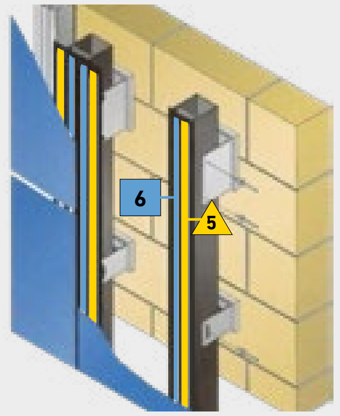
With regard to ventilation, the processing instructions of the panel supplier must always be followed carefully. Ventilation openings must be provided at the upper and lower edge of the object to allow air circulation.

The free space behind the panels must be at least 20 mm. This space must not be interrupted in any way (including by horizontally placed slats or profiles).

Panel materials are likely to expand or shrink with changing temperatures or moisture. This must be considered when dimensioning the substructure.

For a correct construction of the facade, always consult the product information and processing instructions of the supplier of panel material and supporting construction. Follow nationally applicable regulations and guidelines at all times.

ALUMINIUM SUBSTRUCTURE



5 Adhesive / **Adheseal Project**

6 Double-sided tape / **Fixation Tape**

TIP!

When a roof trim or other roof finish is used for the finishing of the roof and facade, ventilation must be guaranteed at all times. To do this, keep space between the roof edge finish and the facade panel. For the correct distance, refer to the processing instructions of the panel producer and to the national regulations.

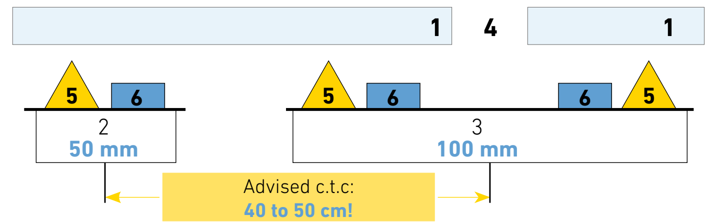
DIMENSIONING THE VERTICAL SUBSTRUCTURE

Dimensioning the vertical substructure is dependent on the facade construction. The profile thicknesses and widths result from static requirements and from the requirements of the specifications of the producer of the installed panel types.

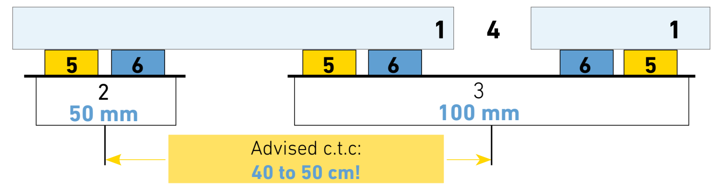
VERTICAL SUBSTRUCTURE - BONDING - FACADE PANELS

The centre-to-centre distance (c.t.c.) of the vertical substructure depends on the instructions of the panel supplier or producer.
Our advice: 40 to 50 cm

Preparation:



Ready:



LEGEND

1	Facade panel
2	Substructure 50 mm
3	Substructure 100 mm
4	Joint width
5	Adhesive / **Adheseal Project**
6	Double-sided tape / **Fixation Tape**

When applying the Adheseal Project Adhesive, a distance of **at least 5 mm** to the Fixation Tape and to the edge of the substructure must be maintained.
On the substructure (3) beneath the panel joints (4), the fixation tape (6) must be positioned on the inside of the centre line and the adhesive bead (5) on the outside.
So when applying the tape (6), make sure to always have enough space on the outside for the min. distance (2 x 5 mm) plus the adhesive bead (8 mm)!

... TAPE ON THE SUBSTRUCTURE

Fixation Tape ensures the initial bonding of the panels to the subsurface. The adhesive used later on sees to the final bonding, but the tape must be able to bear the panels for the first 24 hours and also ensures a continuous and minimum prescribed adhesive layer thickness of 3 mm.

When applying the fixation tape, care must be taken, above all, that it is applied to a clean, dry and grease-free surface. The tape is applied over the total length of the vertical substructure and parallel to the edges; the protective foil of the tape is removed only just before applying the **Adheseal Project Adhesive**!

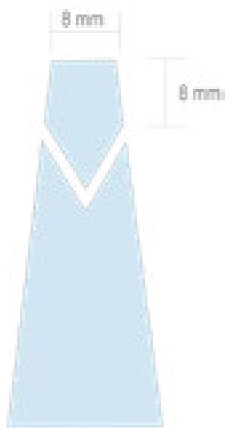
The fixation tape is always applied on the inside of the centre line and the adhesive bead on the outside.

When applying the tape, make sure there is sufficient space remaining for the minimum distance (2 x 5 mm) plus the adhesive bead (c. 8 mm)!

If joint profiles are used, the width of the joint profile must be taken into account.

The joint profile can be mounted with **Adheseal Project Adhesive**.

... ADHESIVE ON THE SUBSTRUCTURE



Adheseal Project Adhesive was developed specially for bonding facade panels. Apart from the quality of the product, also the quality of the processing has an impact on the final result which is not to be underestimated.

To apply the correct amount of adhesive the V-nozzle supplied must be used (c. 8x8 mm, see illustration). The adhesive must be applied over the whole length of the panel-supporting substructure. Before applying the adhesive, the protective foil is to be removed from the Fixation Tape.

When applying the **Adheseal Project Adhesive**, a distance of at least 5 mm to the tape and to the edge of the substructure must be respected!

Both the ambient temperature and the temperature of all materials must be **between +5°C and +35°C**! **<u>ATTENTION</u>:** The temperature of the panel material and the substructure must be at least 3°C above the current dew point at the time of installation.

... FACADE PANELS

Applying panels must be performed with the necessary precision – slight corrections are, however, possible for a short time. To simplify mounting, place the panels to be bonded with the aid of vacuum lifters on aligned mounting slats or assembly brackets and place them in the intended position in relation to the adhesive bead, so that they do not accidentally come into contact with the fixation tape. Only after precise positioning should you press the panels well with even, firm pressure until there is contact with the tape.

Please note:

The time available between applying the adhesive and applying the panel, depending on the processing temperature (skin formation), is **maximum 10 minutes!** Clean the materials and tools with **Multisol Project Cleaner** and **Multi Wipes**.

TIP!

Should **Adheseal Project Adhesive** unintentionally drip on the face of the panel, it is recommended to remove it immediately with **Multisol Project Cleaner** and a clean, dry **Multi Wipe**.

(See Required Tools, p. 11)

ALUMINIUM SUBSTRUCTURE

1

Cleaning the aluminium substructure
Clean the substructure and rub dry with **Multisol Project** and **Multi Wipes**, then let it evaporate for at least 10 minutes (the cleaner must have completely evaporated). Centre-to-centre distance: 40-50 cm.

2

Cleaning the facade panels
Clean facade panels and rub dry with **Multisol Project** and **Multi Wipes**, then allow to evaporate for at least 10 minutes (the cleaner must have completely evaporated). If necessary, pre-treat with primer.

3

Applying the tape
Apply **Fixation Tape** to the substructure (press firmly) and then remove the foil.

4

Applying the adhesive
Apply **Adheseal Project Adhesive** using the supplied V-nozzle (bead of c. 8 mm) parallel to the tape (minimum 5 mm distance between Fixation Tape and Adheseal Project Adhesive).

5

Installing the facade panel
Install the facade panel within 10 minutes of applying the adhesive (while pressing firmly).

6

Completing the assembly
Should **Adheseal Project Adhesive** unintentionally drip on the face of the panel, it is recommended to remove it immediately with **Multisol Project** and **Multi Wipes**. **Ready!**

WOODEN SUBSTRUCTURE

1

Wooden substructure (planed)
Centre-to-centre distance: 40-50 cm.

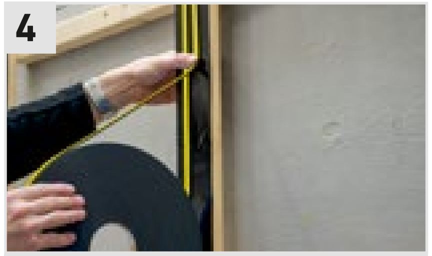
2

Applying the primer
Apply **Imprisol Project Primer** to the wooden substructure and then leave to evaporate for 10 minutes.

3

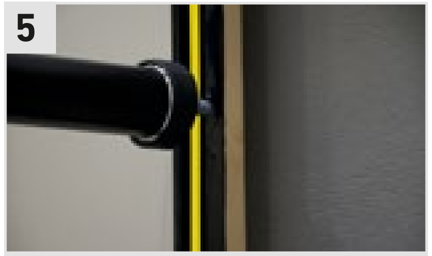
Cleaning the facade panels
Clean facade panels and rub dry with **Multisol Project** and **Multi Wipes**, then allow to evaporate for at least 10 minutes (the cleaner must have completely evaporated). If necessary, pre-treat with primer.

4



Applying the tape
Apply **Fixation Tape** to the substructure (press firmly) and then remove the foil.

5



Applying the adhesive
Apply **Adheseal Project Adhesive** using the supplied V-nozzle (bead of c. 8 mm) parallel to the tape (minimum 5 mm distance between Fixation Tape and Adheseal Project Adhesive).

6

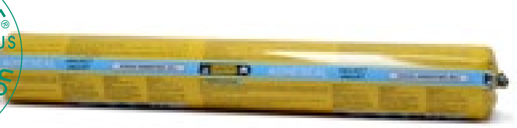
Installing the facade panel
Install the facade panel within 10 minutes of applying the adhesive (while pressing firmly). **Ready!**

Double-sided tape (aluminium)
Fixation Tape 2100 – 3.2 mm thick – 15 m roll

Base	Open-cell PU foam with acrylic adhesive layer on both sides
Density	496 kg/m^3
Hardness	31 (Shore A)
Tensile strength	0.4 N/mm^2
Elongation at break (%)	125%
Shear strength	0.28 N/mm^2
Peel strength	3.9 N/cm (180°)
Compressibility	0.21 N/mm^2 (10%)
Permanent deformation	< 5%
Water resistance	Very good. Water absorption: 0%
Processing conditions	+5°C to +50°C
Temperature resistance	-40°C to +82°C
Surface preparation	Clean, dry and grease-free
Shelf life	1 year in original, unopened packing
Batch code type	F

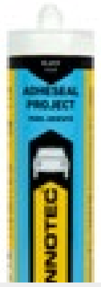
Double-sided tape
Fixation Tape 1000 – 3.2 mm thick – 25 m roll

Base	Closed-cell PE foam with acrylic adhesive layer on both sides
Tensile strength	23 (Shore A)
Elongation at break (%)	0,4 N/mm^2
Shear strength	50 N / 625 mm^2 (23°C)
Peel strength	25 N / 25 mm (23°C)
Temperature resistance	-40°C to +90°C
Water resistance	Very good. Maximum water absorption: < 1%
Processing conditions	+5°C to +35°C
Surface preparation	Clean, dry and grease-free
Shelf life	1 year in original, unopened packing
Batch code type	F



Adhesive
Adheseal Project Black (0000) – 600 ml foil pack

Base	MS polymers
Density	± 1380 kg/m^3
Consistency	Paste-like
Solvents	None
Hardness	± 55 (Shore A)
Tensile strength	± 2.60 N/mm^2 (acc. DIN 53504)
Elongation at break (%)	± 400% (acc. DIN 53504)
Modulus	± 1.5 N/mm^2 (100% break) (acc. DIN 53504)
Shear strength	1.70 N/mm^2 (acc. DIN 53283)
Elastic recovery	± 80%
Temperature resistance	-40°C to +90°C
UV resistance	Good
Water resistance	Good
Stability	Good
Processing conditions	+5°C to +35°C
Skin formation	± 10 minutes (23°C / 50% relative humidity)
Tack free	± 4 hours (23°C / 50% relative humidity)
Curing time	± 3 mm in 24 hours (23°C / 50% relative humidity)
Minimum joint width	3 mm
Maximum admissible deformation	25%
Shelf life	1 year in original, unopened packing
Particulars	After lasting exposure to water, a small percentage of the tin catalyst is set free
Batch code type	F



Adhesive
Adheseal Project Black (0000) – 290 ml cartridge

Base	MS polymers
Density	± 1380 kg/m^3
Consistency	Paste-like
Solvents	None
Hardness	± 55 (Shore A)
Tensile strength	± 2.60 N/mm^2 (acc. DIN 53504)
Elongation at break (%)	± 400% (acc. DIN 53504)
Modulus	± 1.5 N/mm^2 (100% break) (acc. DIN 53504)
Shear strength	1.70 N/mm^2 (acc. DIN 53283)
Elastic recovery	± 80%
Temperature resistance	-40°C to +90°C
UV resistance	Good
Water resistance	Good
Stability	Good
Processing conditions	+5°C to +35°C
Skin formation	± 10 minutes (23°C / 50% relative humidity)
Tack free	± 4 hours (23°C / 50% relative humidity)
Curing time	± 3 mm in 24 hours (23°C / 50% relative humidity)
Minimum joint width	3 mm
Maximum admissible deformation	25%
Shelf life	1 year in original, unopened packing
Particulars	After lasting exposure to water, a small percentage of the tin catalyst is set free
Batch code type	F

Double-sided tape
Fixation Tape Project – 3 mm thick – 25 m roll

Base	Closed-cell PE foam with acrylic adhesive layer on both sides
Density	70 kg/m^3
Hardness	17 (Shore A)
Tensile strength	0,3 N/mm^2
Elongation at break (%)	230%
Shear strength	25 N / 625 mm^2
Peel strength	12 N / 25 mm (180°)
Compressibility	0,025 N/mm^2 (10%) and 0,035 N/mm^2 (30%)
Permanent deformation	7% (of the original measuring)
Temperature resistance	-40°C to +80°C
Water resistance	Good. Maximum water absorption: 2%
Processing conditions	+5°C to +35°C
Surface preparation	Clean, dry and grease-free
Shelf life	1 year in original, unopened packing
Batch code type	F

Cleaner
Multisol Project – 1 l

Base	Mixture of alcohols, aromatic and aliphatic hydrocarbons
Density	± 760 kg/m^3
Consistency	Fluid
Viscosity	± 2 mPa.s
Solvents	Mixture of alcohols, aromatic and aliphatic hydrocarbons
Flash point	13°C
Evaporation residue	None, the product will evaporate completely
Processing conditions	+5°C to +35°C
Shelf life	2 years in original, unopened packaging
Batch code type	F

Impregnation & primer (black)
Imprisol Project – 1 l can

Base	Polyurethane
Density	± 1020 kg/m^3
Consistency	Fluid
Viscosity	± 150 mPa.s (at 25°C)
Solvents	Mixture of aliphatic solvents
Flash point	2°C
Temperature resistance	-30°C to +70°C
Humidity resistance	Good. Protects against moisture penetration
Solids content	± 45%
Processing conditions	+5°C to +35°C
Open time	Maximum 20 days
Drying time	10 minutes (20°C / 65% relative humidity)
Shelf life	1 year in original, unopened packing
Batch code type	F

Cleaning wipes
Multi Wipes – bucket with 400 wipes (30 cm x 40 cm)
Multi Wipes – refill with 400 wipes (30 cm x 40 cm)
Multi Wipes – box with 400 wipes (30 cm x 40 cm)
Multi Wipes – box with 90 wipes (33 cm x 30 cm)

Base	50% viscose - 50% polyester
Density	± 40 g/m^2
Water absorption	< 2 seconds (ERT10.1-72)
Shelf life	Unlimited in original, unopened packaging

IMPORTANT NOTE

Innotec guarantees that, until their expiry date, all products retain the technical characteristics mentioned in the technical data sheets.

Product users should consult the latest technical data sheets on the website www.innotec.eu or request them directly from us. Our current general terms and conditions apply.

SAFETY REGULATIONS

Physical, safety-related, toxicological and ecological data on handling, storing and disposing of chemicals can be found in the current substance-specific safety data sheet and in the safety information on the label.

The most up-to-date safety data sheets are available on our website www.innotec.eu or can be requested directly from Innotec.

Authorized substrates and facade panels						Preparation requirements (observe installation instructions)			
				Autorization					
Brand name	Type			Number	Date	Clean with	Sand	Prime with	Remarks
Wooden substructures									
Diverse	Sproce wood - planet (CE-C18 EN14081)			2100-20	01/2019	-	-	Imprisol	
	nach ÖNORM B 4100			19-02273	09/2019	-	-	Imprisol	
Aluminium substructures									
Aloy / Aluminium	Gross EN-AW6060 / EN-AW6061			Z10.8-483	01/2019	Multisol	Sanding Fleece	*	
E	EN-AW5005-H24			Z10.8-483	01/2019	Multisol	Sanding Fleece	*	
Allface	ENAW6060 - E6/C35 Black Anodized			TF18197	06/2018	Multisol	Sanding Fleece	-	
Allouis Perwein	T-Profile EN-AW6060			18-017930	10/2018	Multisol	Sanding Fleece	-	
HPL Panels									
Abet Laminatie	MEG Exterior Standard. Naturel	RS: standard		21000/21	10/2018	Multisol	-	-	only RS: Standard !
Cellon	Bruag AG	RS: standard		22-05074	04/2022	Multisol	-	-	
Crown Lam	Ecxterior Compact	FS+RS		23-05422	03/2023	Multisol	P120	-	or use Seal Guard
Egger	Kompaktplatte (U732/H1180/F319/U705)	FS+RS		21-04341	04/2021	Multisol	-	-	
Fundermax	Exterior F-Qulitat	FS+RS		Z10.8-483	01/2019	Multisol	-	-	
	Max Exterior NT / NG	FS+RS		21-04967	12/2021	Multisol	-	-	
	Funderplan - Biofaser	RS:		19-02493	09/2019	Multisol	-	-	
Greenlam	Exterior Compact	RS:		23-05456	03/2023	Multisol	-	-	
Kronospan	Krono-Art	RS:		Z10,8-483	05/2023	Multisol	-	Imprisol	
	Krono-Tiles	RS:		23-05596	032023	Multisol	-	-	
Pfleiderer	Duropal Xterioir Comp.	FS - RS:		Z10,3-483	05/2023	Multisol	-	-	
Plastica	Massief	FS+RS			01/2019	Multisol	-	-	
Resopal	Resoplan	FS+RS		21-04162	04/2021	Multisol	P120	-	
Senova	Senoplan Exterior	FS+RS	0101	21-04612	06/2021	Multisol	P120	-	
	Senoplan Exterior Plus	FS+RS	K244	21-04612	06/2012	Multisol	-	-	
Trespa	Meteon (FR)	RS: Neutral		Z10.8-483	01/2019	Multisol	-	-	only RS: Neutral !
Tripalco	Crownlam	RS:		23-05422	03/2023	Multisol	P120	-	
Lignum	Echtholz fineer	FS+RS		18-01823	12/2018	Multisol	-	-	
Aluminium Composite Panels									
3A comp.	Alucobond A2	RS: Blanc		Z10.8-483	01/2019	Multisol	Sanding Fleece	-	
	Alucobond Plus	RS:Blanc		Z10.8-483	01/2019	Multisol	Sanding Fleece	-	
Alpolic	FR / A2 ACM405 (EN-AW3005-H14)	RS: Primer Polyester grey		Z10,3-483	05/2023	Multisol	P120	-	
Alucoil	Larson PE	RS:		21000/21	10/2019	Multisol	-	-	
	Larson FR	RS:Blanc		Z10,3-483	09/2022	Multisol	P120	-	
	Larson FR	RS:Primer		Z10,3-483	09/2022	Multisol	-	-	
Amari	Aluminium Verbund (Holzdekor)	RS:Primer		23-05698	6/2023	Multisol	-	-	
Editechnica	Soll - Minus	RS:		19-02370	09/2019	Multisol	-	-	
MAAS	Planbond ACM405 (EN-AW3005-H14)	RS: Primer Polyester grey		Z10,3-483	05/2023	Multisol	P120	-	
Novelis	FF2 (FF2,5 + FF3)	RS: Neutral		Z10.8-483	01/2019	Multisol	-	-	
Plastica	Alucopal	RS: Neutral		20-03272	03/2020	Multisol	-	-	
Prefa	Prefabond FR / A2 ACM405 (EN-AW3005-H14)	RS: Primer Polyester grey		Z10,3-483	05/2023	Multisol	P120	-	
Rheinzink	Prisma	FS+RS		21-04459	05/2021	Multisol	-	-	
	Artcolor	FS+RS		21-04459	06?2021	Multisol	P120	-	
Stackbond	FR / A2	RS: Primer Grey		23-05650	05/2023	Multisol	-	Seal Guard	
VM-Zinc	Pigmento (Vorbewittertes Titan-Zink)	VS:		22-05372	10/2022	Multisol	-	-	

Authorized substrates and facade panels						Preparation requirements (observe installation instructions)			
				Autorization					
Brand name	Type			Number	Date	Clean with	Sand	Prime with	Remarks
Fibre Cement Panels *									
Equitone Etex	Pictura	RS:		21000/21	10/2019	Multisol	-	Imprisol	
	Textura	RS:		21000/21	10/2019	Multisol	-	Imprisol	
Hardie Panel	James Hardie	RS: Coated		22-05077	04/2022	Multisol	-	Imprisol	
SVK	Decoboard	RS:		21000/21	10/2019	Multisol	-	Imprisol	
	Ornimat	RS:		21000/21	10/2019	Multisol	-	Imprisol	
	Colormat	RS:		21000/21	01/2020	Multisol	P80	Board Primer	
Caramic Panels / Mineral Compsosite Panels									
Agrub Buchtal		RS: no GFK		22-05453	12/2022	Multisol	Sanding Fleece	-	
Ceramic Mirage	Mirage	RS:		20-03424	05/2020	Multisol	-	Imprisol	
DEKTON	Ultracompact	RS: no GFK		21-04458	06/2021	Multisol	-	Imprisol	
	Ultracompact	RS:GFK		21000/21		Multisol	-	-	
Ergon	Cornerstone	RS: no GFK		21-0000	09/2021	Multisol	Sanding Fleece	Imprisol	
Florim Cera.	Casamood	RS: no GFK		21000/21	01/2020	Multisol	-	Imprisol	Remove GFK !!
FMG	Ariostea	RS:GFK		22-05253	10/2022	Multisol	-	-	
Fondovale	Ceramic	RS:GFK		23-05645	04/2023	Multisol	-	Seal Guard	
Grespania	Coverlam	RS:		21000/21	10/2019	Multisol	-	-	
	Coverlam	RS: no GFK		22-05458	01/2023	Multisol	-	-	
Imola	Kreamisches Fassadenpaneel	RS: no GFK		18-02076	02/2019	Multisol	-	Imprisol	
Impronta	Limestone	RS: no GFK		23-05899	10/2023	Multisol	-	-	
Inalco	Slimmker	RS:GFK		19-02308	09/2019	Multisol	-	-	
Interbau blink	Giga-line 6mm	RS: no GFK		Z10,3-483	05/2023	Multisol	P120	Imprisol	
IRIS	FMG	RS: no GFK		21-04459	03/2021	Multisol	-	Imprisol	
Kutahya	kutahya	RS: no GFK		21-04573	06/2021	Multisol	Sanding Fleece	-	
Kutzer FB	Kurtzer Feinsteinzeug	RS: no GFK		TF18044	03/2018	Multisol	-	Imprisol	
Laminam	Laminam 5	RS: no GFK		22-05512	10/2022	Multisol	Sanding Fleece	-	
Lapitec	Random Colour & Finish	RS:		19-02789	09/2019	Multisol	-	-	
Mirrage	Quarziti -Gelb	RS:		19-02522	09/2019	Multisol	-	Imprisol	
	Quarziti -Grau	RS:		19-02522	09/2019	Multisol	-	Imprisol	
Mosa	UltraGress	RS: no GFK		21-04829	11/2021	Multisol	Sanding Fleece	Imprisol	
Neolith	The Size	RS: GFK 1x1mm		21000/21	01/2020	Multisol	-	-	
Panaria	Must Zero.3 (5plus)	RS:GFK		23-05699	23-05699	Multisol	-	Imprisol	
Petrarch CEP	Composite Stone Smooth	RS:		21000/21	01/2020	Multisol	-	Imprisol	
Refin Ceramiche	Kasai	RS: no GFK		18-01821	03/2019	Multisol	-	-	
Steni	Colour	RS:		21000/21	10/2018	Multisol	-	-	
	Vision	RS:		21000/21	10/2018	Multisol	-	-	

* *All uncoated fibre cement boards listed in this table must be tested for suitability and approved by PCS Innotec prior to each project.*

Authorized substrates and facade panels						Preparation requirements (observe installation instructions)			
				Autorization					
Brand name	Type			Number	Date	Clean with	Sand	Prime with	Remarks
Others									
Novelis	FF2 / FF3	RS:Blanc		Z10.8-483	01/2020	Multisol	-	-	
Rimex	One-Tex	RS		23-05875	10/2023	Multisol	-	-	
	Satin ColorTex	RS		23-05875	10/2023	Multisol	-	-	
	GRANEX ColorTex	RS		23-05875	10/2023	Multisol	-	-	
	T22 GRANEX Onyx Black	RS		23-05875	10/2023	Multisol	-	-	
	Water Rhythm Mirror	RS		23-05875	10/2023	Multisol	-	-	
	Super Mirror	RS		23-05875	10/2023	Multisol	-	-	
	Pagoda	RS		23-05875	10/2023	Multisol	-	-	
	6WL-2R	RS		23-05875	10/2023	Multisol	-	-	
	CemoTex	RS		23-05875	10/2023	Multisol	-	-	
	T22 Mirror Nickel	RS		23-05875	10/2023	Multisol	-	-	
Rockpanel	Colors	RS:		21000/21	10/2019	Multisol	-	Imprisol	
Roofinox	Chroma, Dura, Pearl, Plusmatt, Zinnmatt	RS:		19-02480	09/2019	Multisol	-	-	
	Alpha Pulverb. Ral9016	RS:		19-02480	09/2019	Multisol	-	-	
PMMA	Materica SS Azanite	FS+RS		22-05255	09/2022	Multisol	-	Seal Guard	

FS: Front Side
RS: Rear Side
GFK: Glass fibre reinforced plastic

DISCLAIMER:
We recommend that you always check at the start of your project whether the material qualities are the same and, if possible, always have new adhesion tests carried out.
The above table supersedes all previous versions. Always consult your personal Innotec Project adviser for the most up-to-date overview. This overview has been compiled with the greatest possible care and is based on material samples obtained from the market. It should therefore be interpreted as purely "informative".

Should the type of panel you wish for not be listed, or the surface to which it is to be adhered not be suitable to the standard reverse side of the panel, please contact your personal Innotec Project adviser. You will find the contact details under www.panelbonding.eu

ACCELERATED SERVICE LIFE TESTS WITH CAROUSEL AND CLIMATE WALL

Bouw centrum Technologie

Using the “carousel test” or “climate wall” (of which a more detailed description follows), it is possible to expose a (facade) construction to a rapid succession of changing and extreme weather conditions.

This method of testing makes it possible, within a comparatively short time, to gain an impression of the stability of particular constructions against outdoor climatic conditions.

Performed at Bouwcentrum Technologie on behalf of PCS Innotec to demonstrate the durability of our Project System.

THE CAROUSEL

The carousel test is aimed at checking whether the material, or a combination of materials, is suitable for use in facade construction or as facade cladding.
Not more than 6 items for testing with dimensions of c.1.0 x 1.1 m can be mounted on a six-sided, rotating framework. Certain tools are installed in front of the facade surfaces, by which the facades can be heated, cooled and sprayed with water.

HEATING

A battery of heating lamps is erected at a distance of 0.80 m from the facade surface, consisting of 13 frosted surface lamps, each 250 W.

These irradiate the facade surface evenly with a quantity of energy which at our degree of latitude may be taken up by a facade surface on a sunny day.

The insolation time lasts 6.5 hours.

SPRAYING WITH WATER

By means of four nozzles (capacity 0.25 l/min) the facade surface is sprayed with mains water.

FREEZING

The cooling system placed in front of the facade can expose the facade continuously to a minimum temperature of -15 °C +/- 1.5 °C. Higher temperatures can be selected by means of a thermostat.

The relative humidity at such low temperatures is 90-95%.

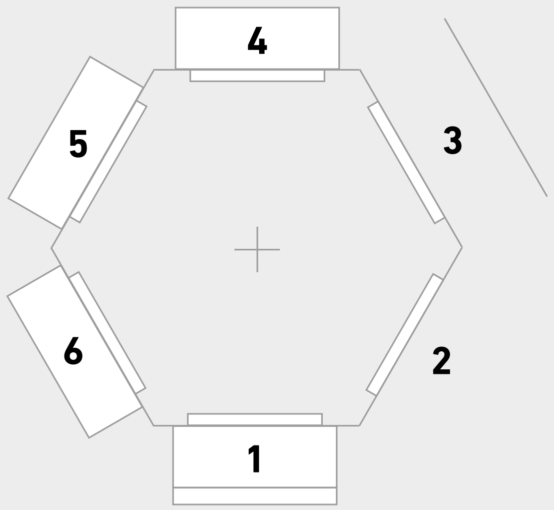
OTHER TREATMENTS

One surface of the carousel is reserved for special treatments. Normally this surface is used to cool down the test element – following insolation, in the previous position – to ambient temperature.

The set-up of the tools in front of the facades is done in such a way that, by turning the framework on which the facades are mounted, the following climatic cycle is achieved:

LEGEND

1 - Spraying, insolation
2 - Ambient temperature
3 - Insolation
4 - Spraying
5 - Freezing
6 - Freezing



The chosen cycle achieves the following:

- Following the freezing, the facade is defrosted as quickly as possible by spraying it with water (temperature shock through warming up).
- Following spraying with water, the facade is heated, as a result of which it dries. Here, any shrinkage caused by drying will show.
- Following an insolation period, rapid cooling is achieved by spraying the facade with water (temperature shock through cooling).
- After being sprayed with water, the facade is placed directly in front of the cooling system, thus creating optimal conditions for causing frost damage.

During the test, the air temperature on the rear side of the facade element (indoor climate) is conditioned to c. 20 °C.

Each step of the cycle lasts 8 hours: the test continues to run even outside normal working hours; thus, the complete sequence of a full cycle lasts 2 days.

INTERPRETATION

In the past items were tested for long periods – up to 150 cycles and even more.

In cases where damage was detected, this damage occurred even before the 75th cycle had run. Most damage occurred before the 25th cycle.

With a large degree of certainty, it may be assumed that, if no damage has occurred by the 25th cycle, then no damage is to be expected after a multiple of this number of cycles – or only to a negligible extent.

In case of doubt – damage at around the 25th cycle – the test will be continued until certainty about the damage development is obtained.

In practice, no damage has been established up till now in facades which have successfully withstood 25 cycles in the carousel. The oldest facades in practice are already over 20 years old. On the other hand, facades showing damage in practice, had already shown comparable damage in the carousel.

Thus, there are very reliable signs that the final result arising after 25 test cycles corresponds fairly precisely with the result that will finally be reached in practice.

The durability of successfully tested facades has therefore been estimated at a minimum of 40 years.

CLIMATE WALL

The “climate wall” is a large wall installation in which complete test facades of 3 m height and 6 m length can be set up for accelerated durability tests.

In the climate wall, the carousel principle is performed in reverse:

The facade to be tested is held firm and the tools set up in front of the facade move. The freezers of dimensions 2 x 6 x 1.6 m are set on rails and can be moved in a direction perpendicular to the testing wall.

The 144 insolation lamps are mounted on 9 supports which can be moved via guide rails – like a swing door: horizontal over the freezers in frost and rain, and vertical in front of the facades during the insolation periods.

The spray nozzles are mounted in a fixed position to the top of the wall. In general spraying is 15 l/min, which is approx. 2.5 l/min per linear metre of the test wall.

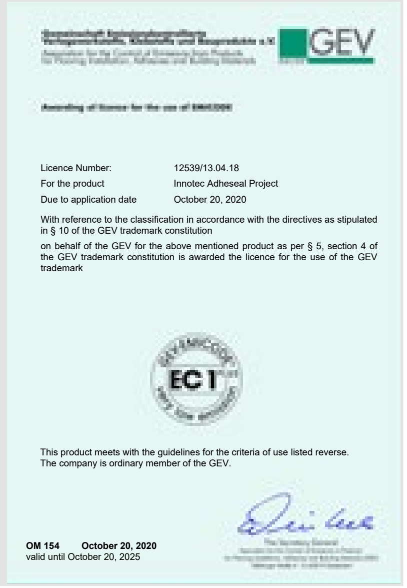
This complex set-up is especially suited for tests on constructions for which large test surfaces are necessary (e.g. facade insulation), and for tests on distortions of sections of the construction in their original size (e.g. facade cladding).

The test generally takes place in this installation with the proven carousel cycle. In this installation, however, it is possible to apply other climatic cycles.

- PB-Hoch-231579
- GEV-EMICODE EC1+ very low emission
- eco-bau certificate
- KOMO® certificate
- German building approval DIBt
- Certificate of compliance to RAL-UZ 123
- MFPA Leipzig GmbH classification report
- IBS fire safety test B3800


PB-Hoch-231579
PRÜFBERICHT
TEST REPORT

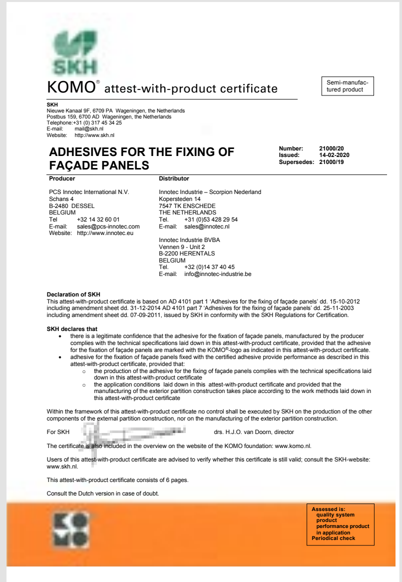
GEV-EMICODE EC1+ zeer lage emissie


Licence Number: 12539/13.04.18
For the product Innotec Adheseal Project
Due to application date October 20, 2020
With reference to the classification in accordance with the directives as stipulated in § 10 of the GEV trademark constitution
on behalf of the GEV for the above mentioned product as per § 5, section 4 of the GEV trademark constitution is awarded the licence for the use of the GEV trademark
This product meets with the guidelines for the criteria of use listed reverse.
The company is ordinary member of the GEV.
OM 154 October 20, 2020
valid until October 20, 2025

eco-bau – Bewertungsbestätigung

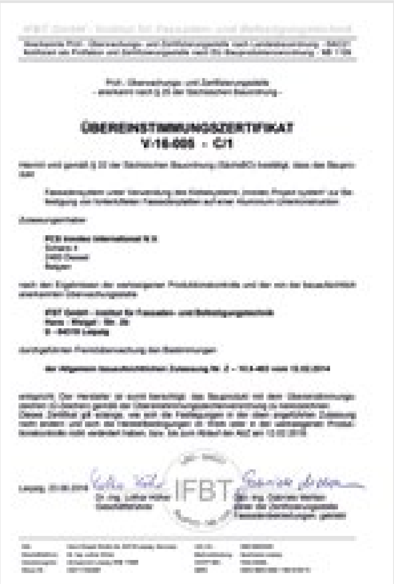

Bewertungsbestätigung

KOMO®-Certificate


KOMO® attest-with-product certificate
ADHESIVES FOR THE FIXING OF FAÇADE PANELS

German building Approval

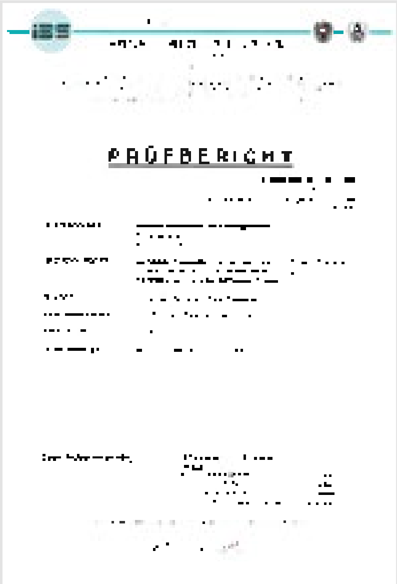
IFBT GmbH -Certificate


ÜBEREINSTIMMUNGSZERTIFIKAT

MFPA Leipzig GmbH – Classification report


MFPA Leipzig GmbH

IBS Fire Protection Test B3800


PRÜFBERICHT

Adheseal Project from **PCS Innotec International N.V.** has been extensively tested in the intended application as further described in the technical information sheet. These tests confirm that, when observing the required storage conditions, the product in unopened and original packaging can be kept for 12 months from the indicated production date and remains effective for 10 years after use within the shelf life.

Depending on the circumstances, this usability may be reduced, including, but not limited to the following situations:

- for any use that is not in accordance with the technical data sheets, safety data sheets, directions, instructions, precautions and/or logbook, such as incorrect installation, poor workmanship and engineering, and any use contrary to or not in line with the correct application purpose of the product as indicated in the documents of PCS Innotec International N.V.;
- in case of incompatibility of the product with materials and substrates;
- in the event of any movement of the structure resulting in stresses on the product exceeding the maximum levels, any accommodation for movement in the case of stretching and/or compression as stated in the technical information sheets of PCS Innotec International N.V.;
- if the product is applied after the expiration date has passed;
- in case of poor maintenance contrary to the directions, instructions, precautions of PCS Innotec International N.V. and/or the logbook;
- in case of external factors, such as, but not limited to UV radiation, chemical influences, moisture, lack of ventilation, heat, defective walls, floors, ceilings, structures, and characteristic features of the soil.

PCS Innotec International N.V. cannot take any responsibility for the results of the application of the product. In any case, the liability of PCS Innotec International N.V. with regard to the quality of the product shall be limited to the invoiced amount. PCS Innotec International N.V. cannot be held liable for any damage to the glued product or other consequential damage.

This statement is issued if, per project, the complete Bonding File with logbook or daily status reports has been received by PCS Innotec International N.V., including the complete project data.

PASSING ON KNOWLEDGE TO ENSURE A QUALITATIVE END RESULT

The people who day in, day out, work in our system, should be familiar with the technology and have exact knowledge. For this reason, we offer a comprehensive training which supplies your team with all necessary information.

ADVANTAGES FOR YOU

- **No costs**
- **Knowledge transfer of bonding technology**
- **Tips and tricks**
- **Training, support and site follow-up**
- **Correct and efficient processing**

Only quality has a future

THE TRAINING PROGRAMME

CONTENT

» Processing temperatures
» Preparation of bonding surfaces
» Applying the fixation tape
» Applying the adhesive
» Applying the cladding elements
» Completing the processing record
» Tips on processing

DATE

You can agree a date together with your personal Innotec facade bonding specialist.

Please see our website for your adviser's contact details.

THE FIRST BONDING ON THE CONSTRUCTION SITE

PCS Innotec offers you professional support when starting up and gluing the first facade panels, so that your facade project will have a high-quality end result.

PROCESSING RECORD

According to the requirements, a processing record for each facade project must be completed in full and sent to your Innotec distributor for archiving upon completion of the work.

The processing record is automatically enclosed with each project material delivery and can also be requested from your Innotec distributor.

USER TRAINING

Version: 9/2/2024

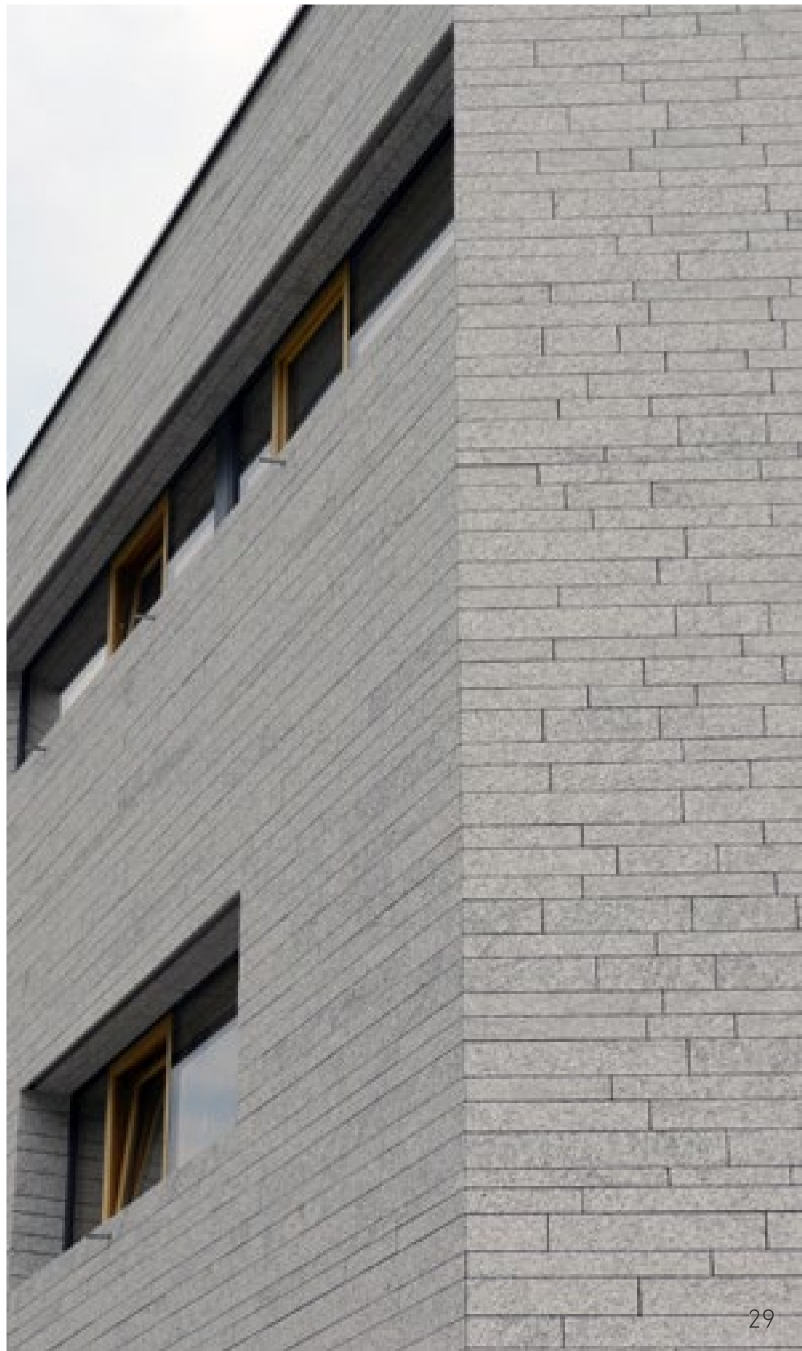


Foto by Emanuel Adensam

Version: 9/2/2024

Only Quality has a future