

45
YEARS
PRODUCTION



HIGH-PERFORMING AND LONG-LASTING:
ISO³-FACADE SEALING SYSTEM

ISO
CHEMIE



FACADE JOINTS ARE SUBJECT TO **EXTREME DEMANDS!**

Reliable and permanent sealing of building joints is a vital part of the planning of any building. To prevent the joints in exterior walls from becoming weak points in the building fabric, attention must be paid to functional and reliable joint sealing at the planning stage. Particularly in the field of facades, joint construction is subject to extreme weather conditions and high physical stresses. Therefore it is vitally important to use a sealing material which guarantees permanent functionality. Heat, cold, rain, sun, wind and movement of building components are factors of influence which must be taken serious and which require the use of special jointing materials.

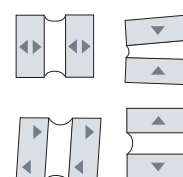


PHYSICAL STRESSES

- material expansion / compression
- component movements
- shearing forces
- settling

STRESSES DUE TO WEATHER

- rain
- wind
- UV radiation
- thermal stresses



PROFESSIONAL SEALING FOR FACADE JOINTS

ISO³-FACADE SEALING SYSTEM

Our ISO³-FACADE SEALING SYSTEM offers you a range of system products for flexible use in different versions and dimensions, every single one of which has been designed to meet the special demands made on a professional facade seal.



- ✓ PRACTICAL SEALING SOLUTIONS ALL FROM A SINGLE SOURCE
- ✓ LARGE VARIETY OF PRODUCTS DESIGNED TO MATCH
- ✓ THE RIGHT VERSION OR SIZE FOR EVERY INSTALLATION REQUIREMENT
- ✓ HIGH MATERIAL DURABILITY
- ✓ CONSTANT, DIN-CONFORM QUALITY REGULARLY TESTED BY EXTERNAL INSTITUTES



- ISO-BLOCO 600 „PREMIUM EDITION“
- ISO-BLOCO 600 „COLOUR EDITION“
- ISO-BLOCO 300 „PREMIUM EDITION“
- ISO-BLOCO XTHERM
- ISO-BUTYL ALU TAPE
- ISO-BUTYL SELF-ADHESIVE TAPE
- ISO-BUTYL FLEECE TAPE
- ISO-CONNECT EPDM SEALING COLLAR
- ISO-CONNECT INSIDE EPDM
- ISO-CONNECT KSKSEAL
- ISO-CONNECT OUTSIDE EPDM
- ISO-CONNECT VARIO XD
- ISO-TOP BLUE PRIMER
- ISO-TOP FACADE SEAL
- ISO-TOP FLEX-ADHESIVE HP, PA & XP
- ISO-TOP CONSTRUCTION SHEETS WF3
- ISO-TOP KSKSEAL PRIMER
- ISO-TOP SPRAY PRIMER
- ISO-ZELL PE-CORD





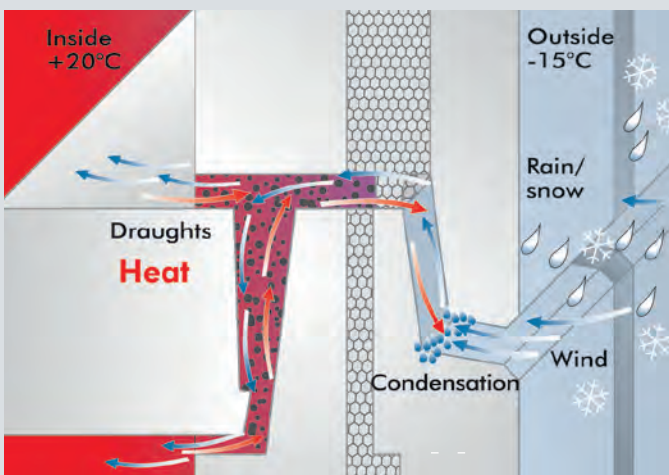
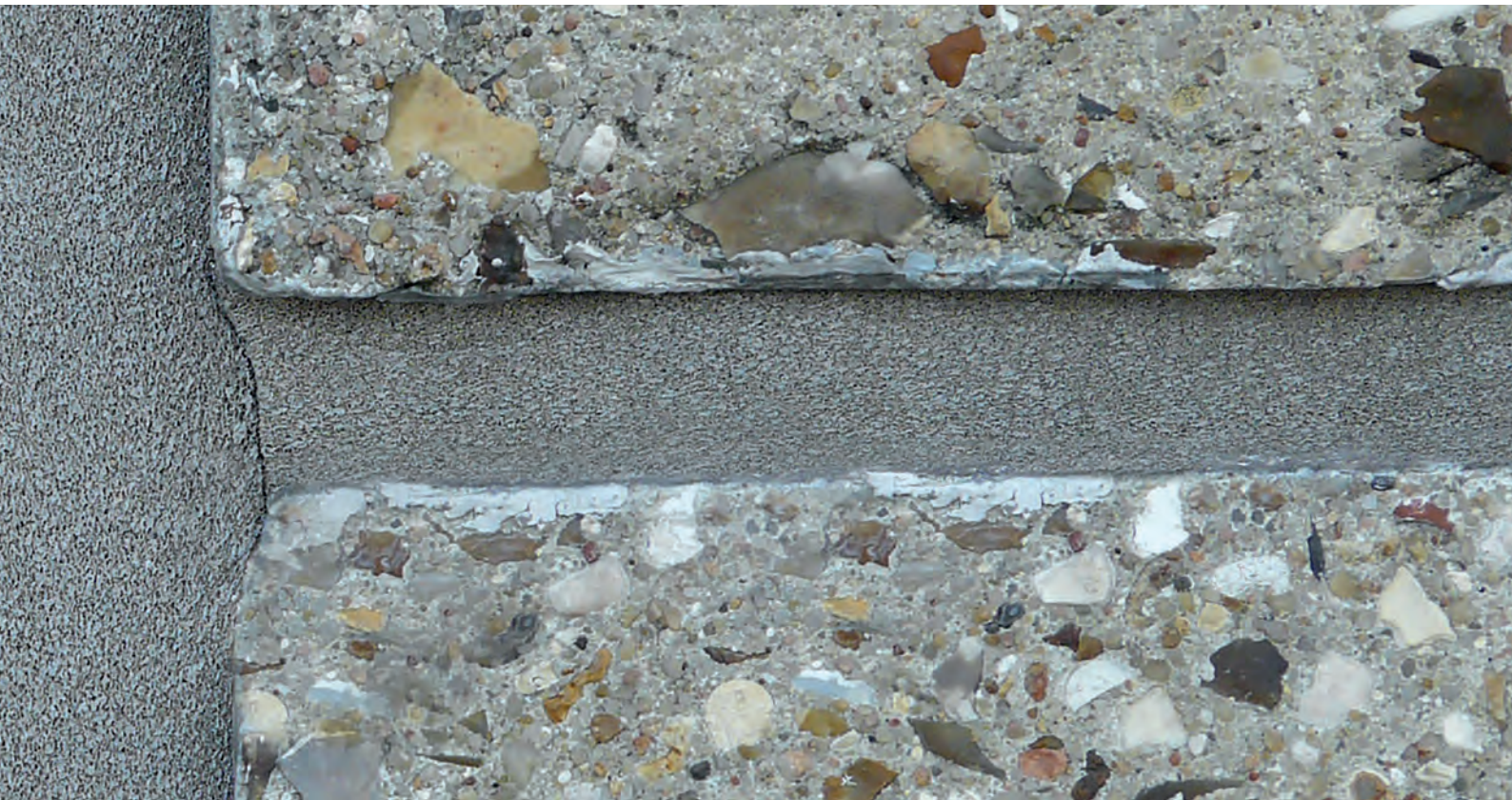
SEALING AGAINST DRIVING RAIN IN **MASONRY CONSTRUCTIONS**

Correct sealing of the joints is an essential component of a high quality facade sealing system. Designers, installers and ultimately the inhabitants of the building depend on innovative products, which make an energy-saving, reliable and durable seal possible. Whether the fabric of the building remains sealed essentially depends on the durable, air tight and rain proof sealing of the building joints. In masonry wall construction, the sealing between concrete elements is especially important.

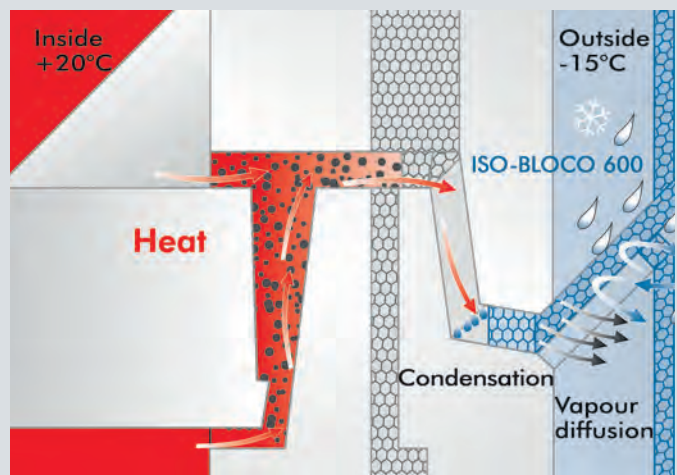
For many years, ISO-BLOCO 600 and 300 have been successfully used for the secure sealing of facade joints in both renovation and new construction projects. This pre-compressed, vapour permeable joint sealing tape ensures reliable removal

of moisture from the inside, while providing durable protection against driving rain and wind. As well as this, the tapes also have excellent thermal and acoustic insulating properties.

As energy-saving building seals ISO-BLOCO 600 and 300 comply with the increased requirements of the German Building Energy Act GEG (EnEV was valid 2020) as well as other European (including UK) building standards and regulations. Customers and installers can therefore be confident that they have a seal which complies both with the requirements and the recognized codes of practice.



Warm internal air escapes through the joints and condenses on the cold surface. This results in draughts and damage to the building.



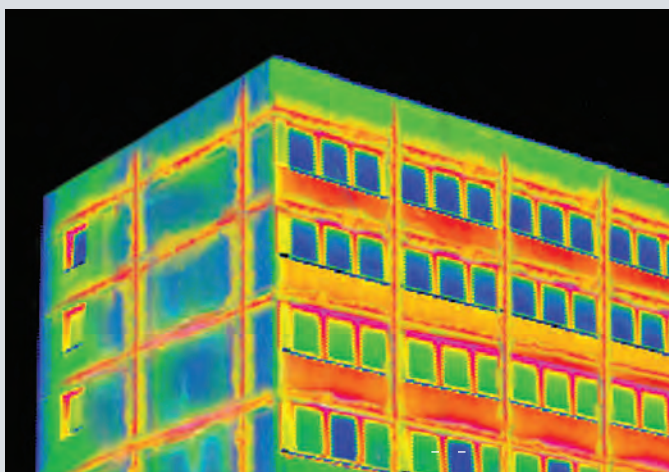
ISO-BLOCO 600 ensures sealing against wind and rain up to 600Pa and allows condensation to diffuse through the facade joint.

IMPROPER JOINT SEALING LEADS TO STRUCTURAL DAMAGE AND ENERGY LOSSES!

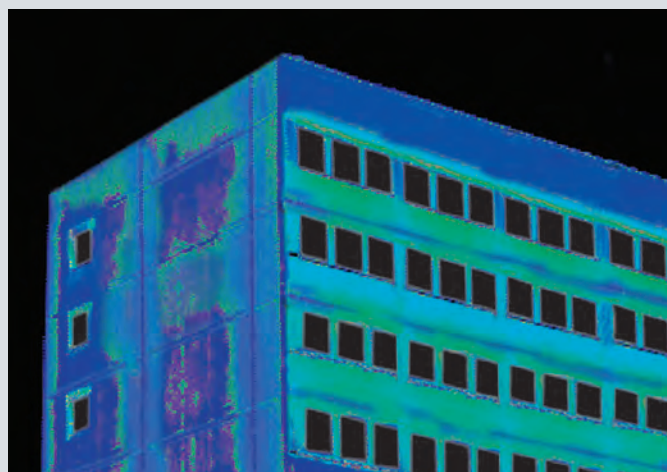
In the statistics for damage to buildings, damage due to the effects of moisture now forms the largest group. But what are the causes?

Unfortunately, in many cases the use of unsuitable joint materials as well as faulty planning and installation of the individual components is responsible for severe damage to the building. The fact that this damage not only occurs in old buildings, but also in new constructions is especially worrying.

Once the first signs of leakage appear, it is time to act. If the function of the joints is impaired, water can penetrate into the walls. The usual result is severe damage due to damp with a dangerous development of mould. As well as this, damp walls insulate considerably less than dry ones. The draughts caused by defective joints then contribute to an increase in heating costs due to unnecessary heat loss.



Thermal imaging before joint renewal



Thermal imaging after joint renewal with ISO-BLOCO 600



THE WESTIN HOTEL, LEIPZIG
**JOINT RENEWAL WITH
ISO-BLOCO 600**

THE WESTIN LEIPZIG

THE WESTIN
HOTEL

Sachsen LB



PRECAST CONCRETE UNITS: A SPECIAL CASE

JOINT RENEWAL WITH ISO-BLOCO 600

For good reasons, ISO-BLOCO 600 has been used for many years for the professional renewal of building joints. The BG 1 and BG R tape is tested according to the DIN 18542 and has all the properties which are important for an excellent, durable, physically correct energy-saving joint seal.

Because of the material structure of the vapour permeable PUR sealing tape, condensation which occurs in the joint can escape outwards in a controlled manner. In addition, ISO-BLOCO 600 has an excellent expansion capacity and guarantees the compensation of continuous movements. This prevents the formation of water droplets, which can occur with other joint materials such as fillers. As well as this, having a rain protection capability of over 600 Pa, ISO-BLOCO 600 keeps the weather proofing layer in the exterior region of the facade durable and securely intact.

All in all, ISO-BLOCO 600 is an EnEV-compliant joint seal, which protects against unpleasant draughts, moisture damage and unnecessary energy losses.

STRESS GROUPS ACCORDING TO DIN 18542

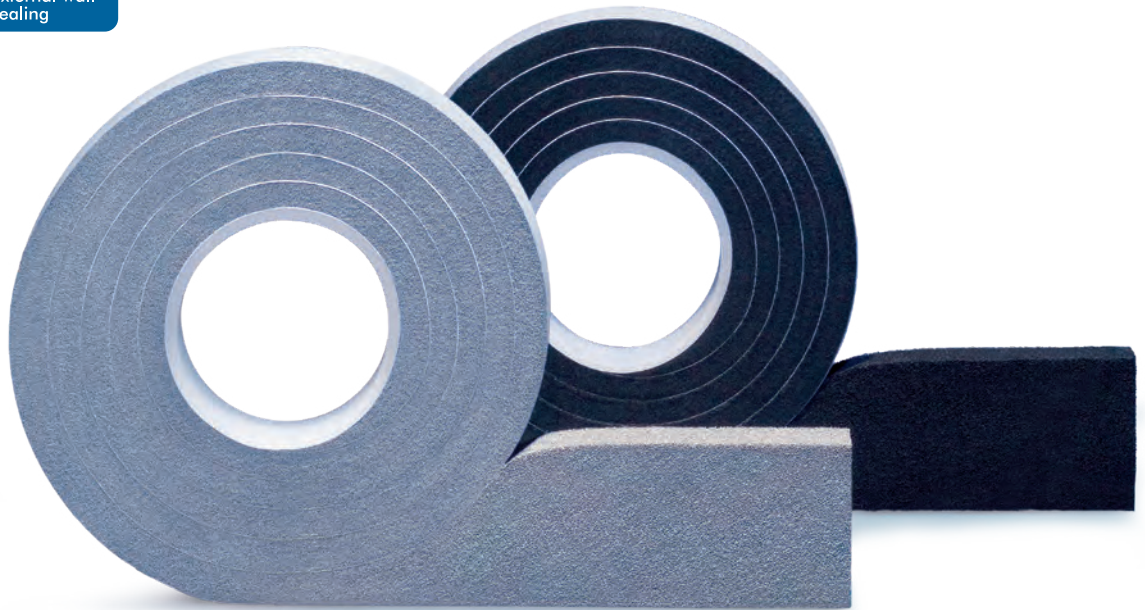
Type of stress	External use	
	BG 1	BG 2
Joint weathering	high	low
Driving rain	high	low
Condensation	low	low
Humidity	long-term	long-term
Airtightness	low	low

Stress groups

Impregnated polyurethane foam joint sealing tapes are classified into stress groups according to the type and size of stresses to which they are subjected once they are installed.

BG 1-CLASSIFICATION OF ISO-BLOCO 600

Test criterion	BG 1	ISO-BLOCO 600
Joint permeability coefficient, a-value	$a \leq 1.0 \text{ m}^3 / [\text{h} \cdot \text{m} \cdot (\text{daPa})^n]$	✓ fulfilled
Airtightness	$a \leq 1.0 \text{ m}^3 / [\text{h} \cdot \text{m} \cdot (\text{daPa})^{2/3}]$	✓ fulfilled
Driving rain impermeability of joints at Δp	$\geq 600 \text{ Pa}$	✓ fulfilled
Driving rain impermeability of joint intersections at Δp	$\geq 600 \text{ Pa}$	✓ fulfilled
Temperature stability range	-30°C to +90°C	✓ fulfilled
Resistance to light and humidity	must be ensured	✓ fulfilled
Compatibility with adjacent building materials	up to 80°C	✓ fulfilled
Vapour diffusion permeability, sd-value	$\leq 0.5 \text{ m}$	✓ fulfilled
Fire behaviour	B1	✓ fulfilled



CORRECTLY SEALING BUILDING JOINTS

ISO-BLOCO 600 PREMIUM EDITION

ISO-BLOCO 600 is a PUR sealing tape impregnated with a fire resistant polymeric dispersion. It is specially designed for joints in buildings up to 100 m high, in accordance with DIN 18055. ISO-BLOCO 600 fulfils the stringent requirements of the DIN 18542 edition 2009.

In addition to providing protection against driving rain to a minimum of 600 Pa (equivalent to wind force 11 – Violent Storm) ISO-BLOCO 600 also possesses outstanding thermal and acoustic characteristics.

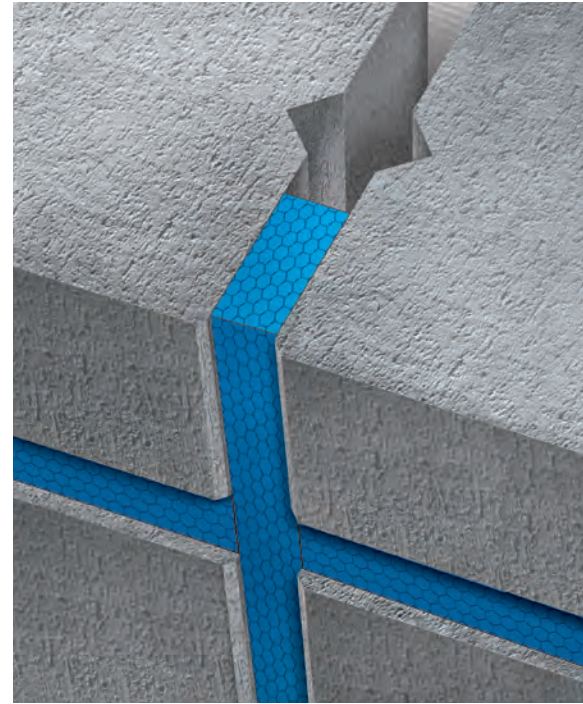
With its outstanding product features ISO-BLOCO 600 has proven itself in facade sealing with regard to weather resistance, thermal and acoustic insulation, moisture protection, fire properties, joint movement and a positive room climate.

DIMENSIONS

tape widths from: 8 – 50 mm
for joint widths from: 1 – 42 mm

Alternative dimensions available on request.





QUALITY CHARACTERISTICS

- complies with the DIN 18542 BG 1 / BG R
- reliability through a wider joint application range
- seals against driving rain, draught, wind and splash
- vapour diffusion permeable, high drying effect promotes a healthy room climate
- permanently elastic with long term life expectancy
- thermal and acoustic insulation
- can be painted over with standard emulsion paints
- constant, DIN-conform quality regularly tested by external institutes
- complies with the GEG requirements
- applications in all construction areas and building types are possible
- CE-certified (ETA-07/0072)
- supervised by ift Rosenheim





JOINT SEALING IN COLOUR

ISO-BLOCO 600 COLOUR EDITION

Elastic joint sealing tapes for facades need not be boring. There is the ISO-BLOCO 600 „COLOUR EDITION“ range of colours! This opens up whole new possibilities for joint sealing – without having to forgo the tried and tested advantages of pre-compressed joint sealing tapes.

The use of colour can produce striking effects for the design of facades. Visual emphasis of the joints can be just as effective as blending their colour to match the surrounding walls. With ISO-BLOCO 600 „COLOUR EDITION“, the colour schemes for building facades are only limited by your imagination.

Our classic joint sealing strips, tested according to the current 2009 version of DIN 18542, are available in a wide range of colours. Because of this, users can eliminate a costly stage in the processing of coloured joint fillings. The visible joint surface of the ISO-BLOCO 600 „COLOUR EDITION“ is pre-coloured, eliminating the need for tedious painting.

DIMENSIONS

tape widths from: 8 – 50 mm

for joint widths from: 1 – 42 mm

Alternative dimensions available on request.



A MINIMUM OF 600 PA SEALING PERFORMANCE

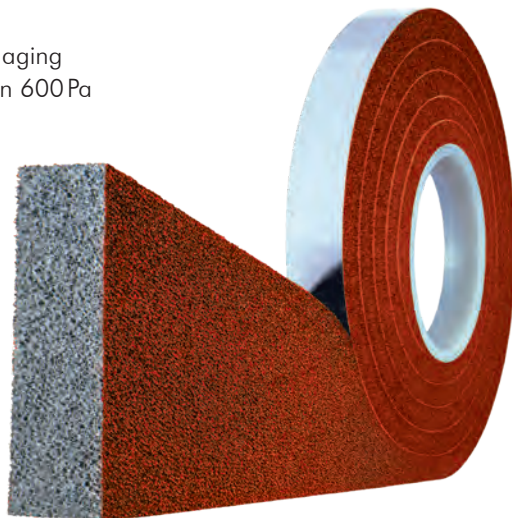
• driving rain impermeable joint width

Area of applica-tion	joint width in mm*																																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42							
/ 1 – 2	•	•																																															
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/ 2 – 6		•	•	•	•	•																																											
/ 4 – 9				•	•	•	•	•	•	•																																							
/ 5 – 12					•	•	•	•	•	•	•	•	•																																				
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/ 9 – 20									•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
/ 11 – 25											•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
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* Movement of the components and temporary changes in length of the existing joints must be taken into account when determining suitable tape dimensions.

QUALITY CHARACTERISTICS

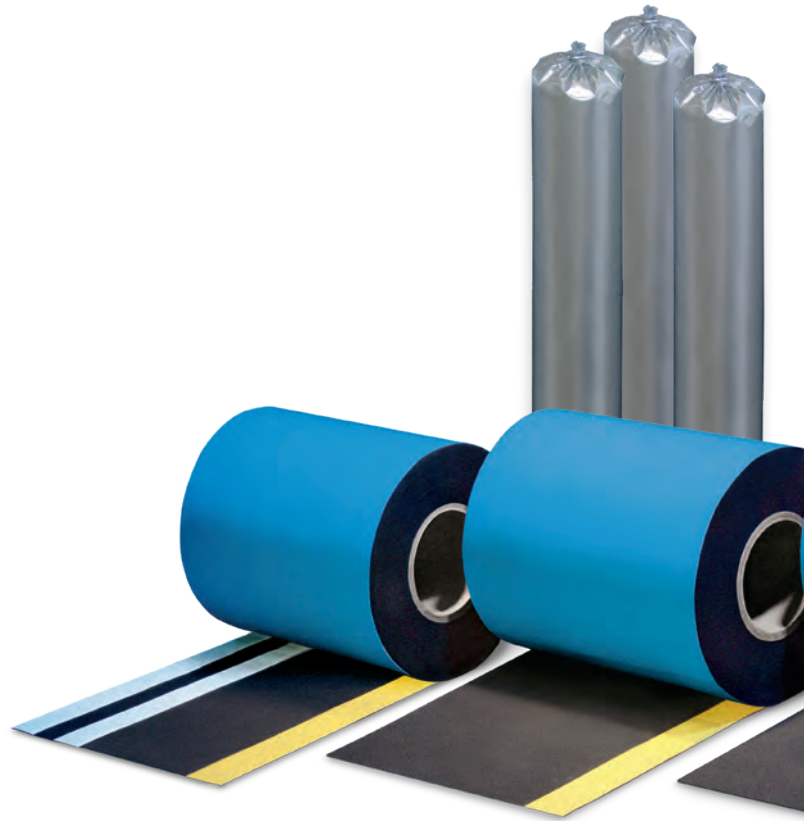
- complies with the DIN 18542 BG 1
- available in many different colours
- suitable for connecting joints in facades, walls and windows
- permanently elastic with long term life expectancy
- security due to wide range of joint applications
- vapour diffusion permeable
- excellent resistance to weathering and aging
- resistant to driving rain up to more than 600Pa
- high adhesive strength for fitting
- acoustic and thermal insulating



COLOUR RANGE

-  **E01 BLUE**
-  **C01 GREEN**
-  **YELLOW**
-  **B02 SAND**
-  **D01 BROWN**
-  **G01 BRICK RED**

(Special colours on request)



STRETCHABLE SEALING STRIP FOR INTERIOR USE ISO-CONNECT INSIDE EPDM

ISO-CONNECT INSIDE EPDM is a highly vapour diffusion impermeable butyl rubber foil for the sealing of window, door and facade connections on the interior. Due to the high stretchability of the elastic material, the sealing strip is able to compensate joint movements long-term. The foil's outstanding feature is its extreme flexibility and high mechanical stability and tear-resistance. ISO-CONNECT INSIDE EPDM is used as a versatile and proven sealing foil for metal, window and facade constructions. Where old buildings are refurbished, the sealing strip is required for connections to patios, mechanical attachment with aluminium strips and the sealing of door thresholds. The foil is available with and without self-adhesive pre-assembled strips for custom installation.

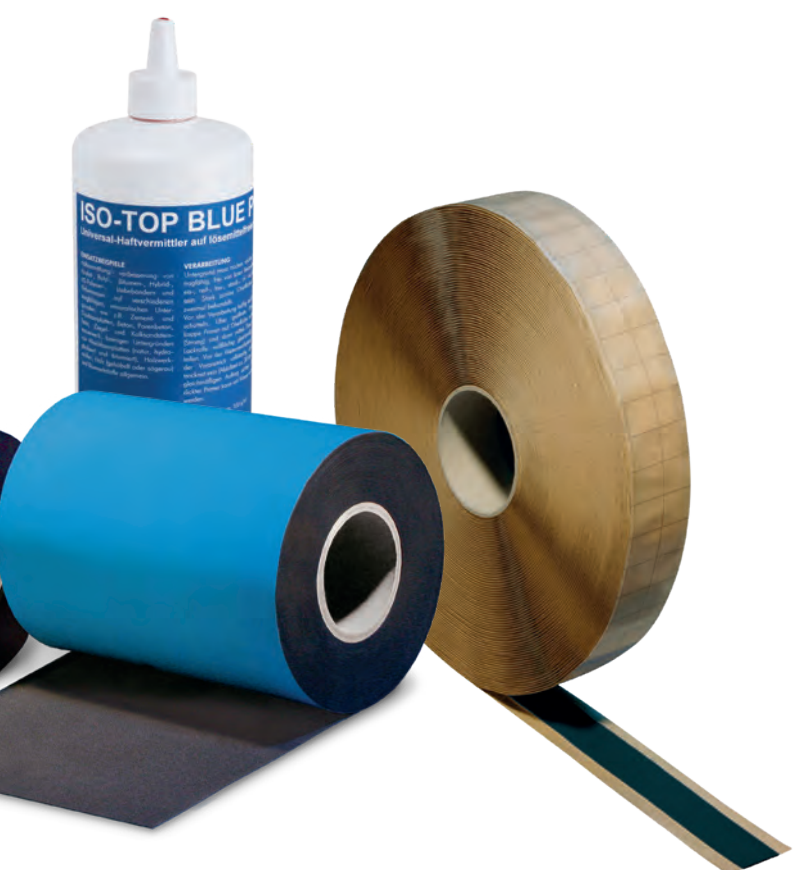
QUALITY CHARACTERISTICS

- high mechanical stability and tear-resistance
- permanent interior seal
- high stretchability – compensates joint movements
- sd-value over 240 m
- suitable for the sealing of facade structures
- extremely temperature and weather resistant

DIMENSIONS

joint widths from: 100 – 500 mm

Alternative dimensions available on request.



SUPPLEMENTARY PRODUCTS:

As an alternative to the self-adhesive versions, the sealing strips can be securely attached to the substrate using ISO-TOP FLEX-ADHESIVE XP or ISO-BUTYL tapes. ISO-TOP BLUE PRIMER is also available for pre-treating porous and absorbent substrates.

WEATHERPROOF SEALING STRIP FOR EXTERIOR USE ISO-CONNECT OUTSIDE EPDM

ISO-CONNECT OUTSIDE EPDM is an elastomer sealing foil for the external sealing of window and door elements in facade constructions according to DIN 18531 and DIN 18533. Its special breathable membrane guarantees high resistance to the influences of the weather despite favourable diffusion properties. The sealing strip's outstanding feature is its extreme flexibility and high mechanical stability and tear-resistance. ISO-CONNECT OUTSIDE EPDM has been designed for the external sealing of bottom joints on doors and floor-length windows to the perimeter area and is also ideal for the external sealing of construction elements in the facade area. The foil is always used wherever special loads occur. With a thickness of ≥ 1.1 mm it complies with the DIN-requirements.

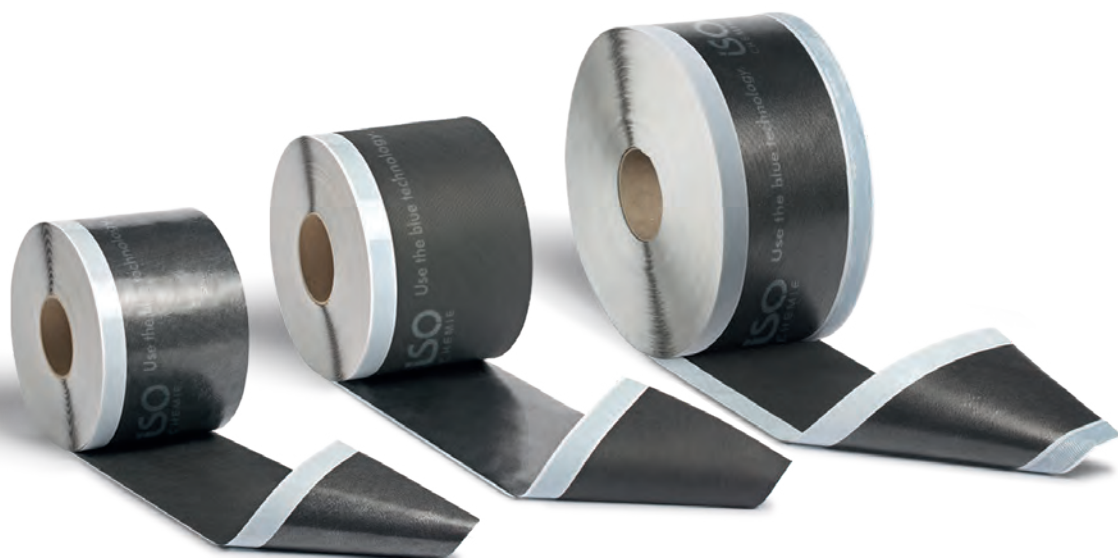
QUALITY CHARACTERISTICS

- high mechanical stability and tear-resistance
- permanent exterior seal
- high stretchability – compensates joint movements
- extremely temperature and weather resistant
- approved for threshold sealing in accordance with DIN 18531 and DIN 18533
- for seals in steel facade structures
- bitumen compatible

DIMENSIONS

joint widths from: 100 – 500 mm

Alternative dimensions available on request.



UNIVERSAL STRIP FOR INSIDE AND OUT ISO-CONNECT VARIO XD

ISO-CONNECT VARIO XD is a special foil that reacts to different seasonal temperature gradients by variably adapting its sd-value. The humidity regulating connection foil is equally suited to sealing internal and external joints; as weather protection in outdoor applications and, for indoor use, as an air tight layer to separate the room and outdoor climates. ISO-CONNECT VARIO XD offers particularly high tear resistance and can remain exposed to UV for up to one year. With its excellent durability and long-lasting outdoor weathering resistance, this plastic nonwoven foil is ideal as a reliable seal for window and door elements in metal, window and facade constructions, particularly where joints remain exposed to the weather for long periods during the building phase.

QUALITY CHARACTERISTICS

- only one product for internal and external sealing
- high drying effect in the joint thanks to humidity-regulating functional mechanism (variable sd-value)
- resistant to driving rain up to more than 1,050 Pa
- high tear resistance
- up to 1 year UV light stability in any weather conditions
- special fleece surface, easy to plaster and glue over
- with self-adhesive strips for efficient application
- complies with the requirements of the Building Energy Act, the recommendations of the RAL „installation guide“ and the UK Building Regulations

DIMENSIONS

joint widths from: 70 – 600 mm
(depending on the finish)

SUPPLEMENTARY PRODUCT:

The plain foil finish can be attached with ISO-TOP FLEX-ADHESIVE, creating a wind tight and air tight seal.





FLEXIBLE STRIP FOR PERIMETER SEALING ISO-CONNECT KSKSEAL

ISO-CONNECT KSKSEAL is an all-over self-adhesive, flexible sealing membrane made of polymer-modified bitumen with a flexible yet tear proof HDPE foil and is used for the external sealing of window and door elements in facade constructions. ISO-CONNECT KSKSEAL protects components in contact with the ground permanently against non-pressurised water (DIN 18533) for sealing thresholds, ground moisture and non-accumulating seepage water. The transition to further bituminous sealing in the perimeter area is thus possible conforming to material requirements.

DIMENSIONS

joint widths from: 100 – 350mm

QUALITY CHARACTERISTICS

- can be installed all year round
- no hard-drying necessary
- immediately resistant to water and driving rain
- no waiting times
- flexible, resilient and crack-covering
- highly resistant to all aggressive substances which naturally occur in soil
- perforated release paper for easier fitting



SUPPLEMENTARY PRODUCT:

Substrates must be pretreated with our high quality ISO-TOP KSKSEAL PRIMER to promote adhesion.



illustration purposes only

GUN APPLIED SEALANT FOR EXTERNAL USE ISO-TOP FACADE SEAL

ISO-TOP FACADE SEAL is an almost odourless gun applied hybrid polymer sealant. Its colour fastness and high resistance to both weather and UV light make it ideal for sealing external building movement joints.

In addition to being free of solvents, isocyanate and silicone, ISO-TOP FACADE SEAL's particularly beneficial properties include bonding without primer even on slightly moist surfaces, curing blister-free and being very easy to paint over with water-based paints as per DIN 52542.

QUALITY CHARACTERISTICS

- can be processed from 0°C
- permanently flexible after curing
- complies with ISO 11600 F-25LM (maximum total deformation 25%)
- for versatile use on many standard construction surfaces
- can be painted over well (with water-based paints)
- also bonds to slightly moist surface
- free of solvents, isocyanate and silicone
- non-corrosive
- leaves no stains on porous surfaces such as natural stone, dressed stone, marble and granite

ACCESSORIES:

The ISO-TOP PRESSFIX aluminium sealant gun makes using ISO-TOP FACADE SEAL a simple and straight-forward process.





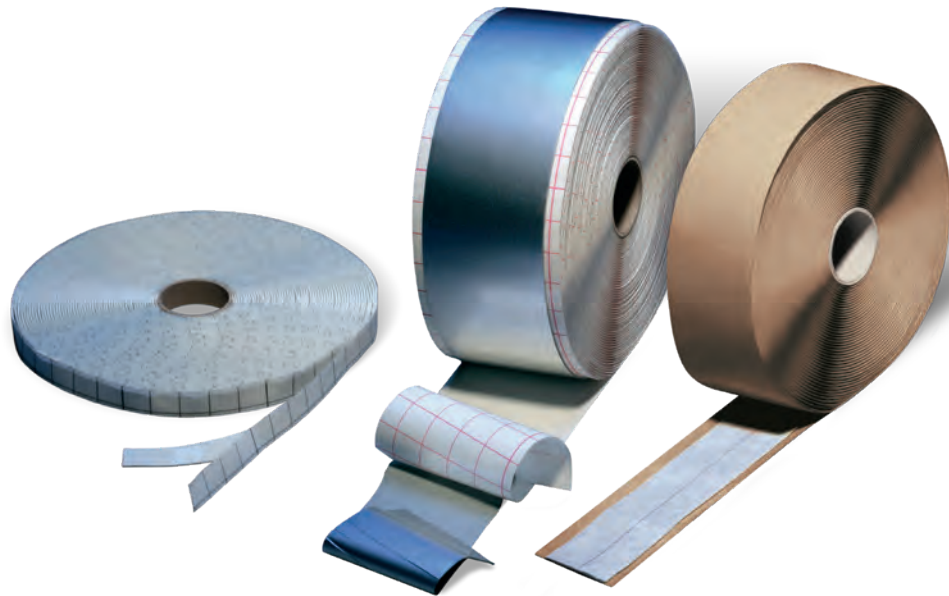
ROUND PROFILE SEAL FOR BACKFILLING ISO-ZELL PE-CORD

ISO-ZELL PE-CORD is a round seal, which fulfils the requirements of the DIN 18540 for backfill material on expanding joints. It consists of closed cellular polyethylene foam and is suitable for sealing against drafts and heat loss. ISO-ZELL PE-CORD provides a reliable backfill on building joints and is characterised through its excellent compatibility with all standard sealing materials. Used as a backing support for sealants, 3-sided adhesion can be effectively eliminated. Due to its water resistant surface ISO-ZELL PE-CORD can be used in both interior and exterior areas as backfill material.

QUALITY CHARACTERISTICS

- fulfils the requirements of the DIN 18540 for backfill material on expanding joints
- suitable for damp joints
- water and moisture resistant
- also suitable with porous materials
- minimises the joint depth and eliminates the 3-sided adhesion as backing support for sealants
- compatible with all standard sealants (silicon, acryl etc.)
- elastic, flexible
- free from softeners
- ageing resistant





PRO FOR SPECIAL SOLUTIONS

ISO-BUTYL

ISO-BUTYL are self-adhesive, volume-stable butyl tapes based on butyl rubber, which are available either as double-sided self-adhesive tapes, with tear proof aluminium lamination or with synthetic fleece lamination. Due to their outstanding adhesion, the water-repellent ISO-BUTYL sealing tapes are suitable for the reliable and lasting sealing of joints, cracks, seams and overlapping in the entire facade construction area.

ISO-BUTYL FLEECE TAPE is suitable for sealing of wall-, roof-, parapets- and connecting-constructions.

ISO-BUTYL ALU TAPE is ideal for sealing connections and joints in window and facade constructions (where a gas and diffusion-proof seal is necessary).

QUALITY CHARACTERISTICS

- water-repellent
- does not cause corrosion
- solvent-free
- bitumen-free and bitumen-compatible
- resistant to aging, weathering and UV
- constant volume
- functions immediately
- permanent adhesion
- simple to use
- complies with IVD instruction leaflet No. 5

MODERN SEALING TECHNOLOGY – **ESSENTIAL ON THE CONSTRUCTION SITE!**

The technical requirements for energy-efficient and long-term building seals are increasing all the time. Thanks to the product solutions of our innovative sealing systems, you can fully meet the demands of the latest standards and requirements – as regular checks by independent institutions prove. At the same time, our quality products make a major contribution to a healthy internal climate and improved building energy balance. And that's not all by a long way ...

Find out more about our wide range of sealing solutions at

www.iso-chemie.com

Use the blue technology.



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