







Hidden Talents

HANNO products are usually invisible and work in the background, yet still always impress with maximum function. This brochure gives you an insight into successfully completed projects and references with HANNO joint sealing products – for the safe implementation of your building projects.

Tradition meets technical innovative power 125 years of company history have made our company a reliable partner for our customers. As early as 1950, we started to manufacture new polyurethane flexible foams. In the mid-60s, successful development began with impregnated joint sealing tapes. The Hannoband® brand has been a byword for so-called compression tapes in the sealing industry for decades. Synthetic soft foams with self-adhesive technology have found their way into a wide range of applications in various industries and have cemented

our name as a specialist for sealing and damping.

An agile and highly trained application technology, our own research & development and benchmarking of our products and performance values are the basic framework of our innovations and product variations. Significant innovations are provided with industrial property rights both nationally and internationally. Our objective for you, our customer, is a competitive price-performance ratio for modern, qualitative products with added value for your own applications.

Place your trust in us – we will fulfil your orders in accordance with our high standard of quality and technology. Count on us for success and partnership.

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Helmholtz Grammar School

Use of the Hanno® pre-wall installation system in the construction of a new school building

The city of Bonn invested 6.8 million euros into the construction of the new three-storey building. First, the installation of the windows in the reveal was planned and executed.

For thermal optimisation to avoid thermal bridges and to improve the incidence of light, it makes sense to install windows in the insulation level, which is why this type of installation was subsequently chosen.

The Hanno® pre-wall installation system is an optimised, time-saving and reliable pre-wall installation system for this project. The Hanno® pre-wall installation system also meets the requirements for thermal optimisation as well as improving sound insulation.

- A safe, leak-proof and easy-to-use pre-wall mounting system
- Thermal optimisation
- Improved sound insulation





Location: Bonn

Client: City of Bonn

Execution: Roßtäuscher GmbH, Diez

Provision of materials: Heinz Heller GmbH, Wenden-Hünsborn

Construction period: 2013 - 2015

Useful area: 1900 m²

Sealing type, measure: pre-wall installation of the existing windows into the insulation level

Sealing products: Hanno® pre-wall installation frame

Altona Residential Building



New construction of student apartments with windows in the insulation level

With eleven different universities in Hamburg, it is particularly difficult for students to find accommodation for the duration of their studies. The new construction of 57 student flats subsidised by IFB Hamburg will create attractive living space for students.

By using the pre-drilled Hanno® pre-wall mounting brackets with 160 mm projection, a possibility for a quick and safe installation of the windows in the insulation level was found here. In addition, there are advantages such as thermal optimisation and improved sound insulation compared to conventional systems for load transfer (e. g. brackets). Thanks to the use of the top product Hannoband®-3E BG1 for sealing the window connection joint and the support provided by the HANNO application technology, the high-quality installation of the windows could be guaranteed.



Sealing products: Hannoband®-3E BG1, Hanno® pre-wall mounting bracket

- Time-saving concept for installing the windows in the insulation level and sealing the window connection joint
- Window projection up to 160 mm

Building in Walldorf



New construction of a residential and commercial building in a central location of Walldorf

Pre-drilled Hanno® pre-wall mounting frames with 85 mm projection were used here for quick and safe installation of the windows in the insulation level. These also offer advantages such as thermal optimisation, improved sound insulation and load transfer. Compared to conventional installation with brackets, etc., this saves the installer time and protects against consequential damage. There is also the advantage of a subsequent, almost damage-free replacement of the windows.

By using the top product Hannoband®-3E BG1 to seal the connection joint with the aid of the HANNO application technology, it was possible to guarantee permanent drying of the connection joint due to the moisture-variable behaviour of the tapes.

- Window installation in the insulation layer
- Sealing of the connection joints

Project type: Residential and commercial building

Execution: Bechthold GmbH & Co. KG, Kronau

Start of construction: 2019

Sealing type: Window joint sealing

Material supply: Nüßing GmbH, Siegen subsidiary

Quantity: approx. 480 m

Sealing products: Hanno® pre-wall installation frames and Hannoband®-3E BG1



Jacob Burckhardt Building

Sealing of window and façade joints with Hannoband®-BG1 and Hanno®-FI flashing tape

The Jacob Burckhardt House was built as part of the Euroville development strategy, which aims to develop the area around Basel's SBB railway station into a service centre. It is an ensemble of six buildings in total. Its uses range from individual and open-plan offices to training rooms, laboratories and small lecture halls.

Inside, the façade consists of pressed aluminium profiles reinforced with wood and covers an area of 20 000 m². The curtain wall façade was created using specially prefabricated elements from approx. 1.50 m wide to approx. 3 m wide.

Of course, special attention had to be paid here to the durable and driving rain-proof execution of the connection joints. For sealing the window and façade joints, tried-and-tested Hannoband®-BG1 and Hanno®-FI flashing tape were used.

- Durable and driving rain-proof execution of the connection joints of the curtain wall façade
- Creation of the airtight inner level

Location: Basel (Switzerland)

Client: I.B.O. Immobiliengesellschaft, Basel

Architect: Architektengemeinschaft Zwimpfer Partner AG
und Jakob Steib Architekten AG, Basel

Construction period: 2004 – 2008

Sealing type: façade and window connection joints

Sealing products: Hannoband®-BG1 and Hanno®-FI flashing tape





Cool63

Residential and commercial centre in the heart of Rotterdam receives "BREEAM Excellent" for sustainability

Planning and realising a new building in the centre of the metropolis of Rotterdam was always going to be a special challenge. In addition, the building of the former Slavenburgbank was integrated into the new building. With its location on the Coolzingel, Cool63 makes a significant contribution towards the design of the cityscape.

With Hannoband®-BG1, the requirements for sealing the curtain wall could be met. Even after 15 years of outdoor weathering, it demonstrably fulfils its function as a driving rain-proof layer, which is why this joint sealing tape with its outstanding properties was chosen.

Durable and driving rain-proof sealing of the curtain wall

Location: Rotterdam (Netherlands)

Architect: Zonneveld ingenieurs®

Execution: Vorsselmanns nv (Belgium)

Material supply: RESTO bouwspecialiteiten nv.

Completion: 2015

Sealing type: Façade joint sealing

Quantity: 1000 m

Sealing products: Weather protection layer (exterior): Hannoband®-BG1

Photo: © Sarna Granol AG

Hahne's Building

Renovation of the "Hahne's" department store in the heart of Newark

Built at the beginning of the 20th century, the "Hahne's" department store has been the place to be in Newark for shopping for almost a century. After standing empty for almost 30 years, the decision was made in early 2014 to renovate and repurpose the department store.

Hannoband®-BG1 was chosen for the driving rainproof sealing between the historic clinker façade and the steel windows. With its optimal adaptation to even slightly uneven substrates, Hannoband®-BG1 is a solution that also meets all requirements in the long term.

Thanks to its good heat and sound insulating properties and the permanent resilience of Hannoband®-HBD, this product from the HANNO family offers the required properties for the "Hahne's Building".

- Driving rain-proof and weather-resistant solution for external sealing
- Sound- and heat-insulating sealing of the middle level



Location: Newark, New Jersey (USA)

Client: L+M Development Partners

Architect & construction management: Turner Construction

Execution: JAJ Construction

Construction period: 2015 - 2017

Useful area: 41,000 m²

Sealing type: Window connection joint sealing

Sealing products: Weather protection level (exterior): Hannoband®-BG1; functional level: Hannoband®-HBD



Actelion Business Center

HANNO supplies the external sealing of the connection joint in a remarkable architectural project

The new building of the bio-pharmaceutical company Actelion Ltd. in Allschwil, designed by the renowned architects Herzog & de Meuron, offers space for more than 350 employees and stands out positively from the neighbouring buildings with its structure of stacked room beams.

For the new construction of the business centre, Sarna Granol AG from Sarnen used the high-quality Hannoband®-BG1 to seal the connection joints. We see the fact that sealing tapes of the HANNO brand were chosen for such an ambitious project as a sign of our quality. High-quality sealing of the weather protection level of the steel structure in combination with the triple insulating glass used and the highquality composite thermal insulation system

Location: Allschwil (Switzerland)

Architect & construction management: Herzog & de Meuron Architekten, Basel

Execution: Sarna-Granol AG, Sarnen (Switzerland)

Material supply: Hanno (Switzerland) AG, Sissach

Construction period: 2009 - 2010

Sealing type: Façade joint and ETICS sealing

Sealing products: Weather protection layer (exterior):

Photo: © Sarna Granol AG



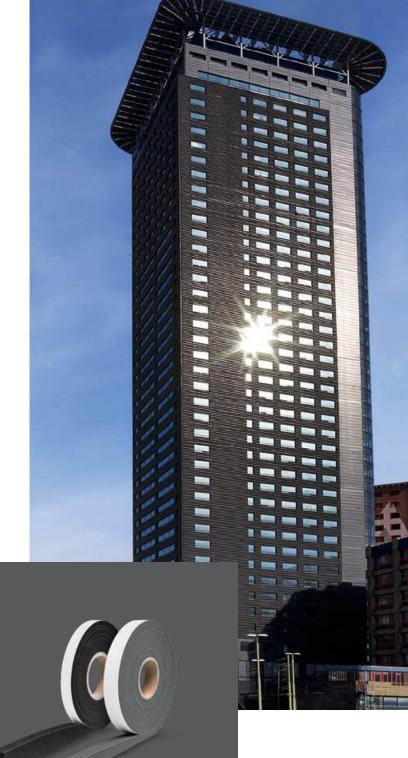
"Het Strijkijzer" High-Rise

Sealing of "Het Strijkijzer" high-rise (The Hague)

The "Het Strijkijzer" in The Hague (Netherlands) is a residential and office building over 130 m high with 351 units. "Het Strijkijzer" is currently the second tallest building in The Hague, making it one of the tallest in Europe. In 2007, "Het Strijkijzer" received the golden Emporis Skyscraper Award, beating 634 other buildings worldwide.

Due to the high stress on the exposed window joint, the choice fell on the proven Hannoband®-BG1. With its proof of functionality in an outdoor weathering test lasting more than 15 years and its compliance with the latest standards and requirements as well as the tests according to DIN 18542, the company is on the safe side here. Hannoband®-BG1, which is suitable for both window joints and masonry/ façade seals, once again impressively demonstrates its performance capability in this high project with its enormous wind loads.

- Strong wind and driving rain loads due to the height
- Proof of durability even over a long period of time



Location: The Hague (Netherlands)

Architect: Paul Bontenbal – AAARCHITECTEN

Execution: C. VORSSELMANS NV (Belgium)

Material supply: RESTO bouwspecialiteiten nv.

Construction period: 2005 - 2007

Useful area: 30 450 m²

Sealing type: Window connection joint sealing

Sealing products: Weather protection layer (exterior):

Hannoband®-BG1



VW Commercial Vehicles

VW Commercial Vehicles Hanover seals joints with Hannoband®

Part of the façade of the administration building was renovated to improve energy efficiency. In the course of this, a new external thermal insulation composite system was installed, which was also faced with clinker brick slips.

In order to achieve the best possible result in terms of visual aspects, HANNO adapted the colouring of Hannoband®-BG1 especially for this project. After consultation and a sample installation by HANNO, the decision was made in favour of the matching light grey Hannoband®-BG1, also because of its proven durability.

- Permanent sealing of the directly weathered joint against driving rain
- Colour matching of the tape to the grout colour of the brick slips

Location: Hanover

Execution: GEBOtherm GmbH, Hildesheim

Material supply: Werkzeuge Dietrich GmbH & Co. KG, Burgdorf

Sealing type: Façade sealing of the ETICS system

Sealing products: Weather protection layer (exterior): Hannoband®-BG1







Frey Holiday Home on Lake Como

Sealing of a holiday home in prefabricated timber construction with many HANNO products

The holiday home interprets the rustico architecture of typical regional farmhouses. Traditional in architectural style, modern in technology and equipment, the hillside house with a view of Lake Como combines a Mediterranean ambience with a high level of living comfort.

The owner chose SchwörerHaus as a reliable building partner with experience in Italy. In the construction of this exclusive property in modern prefabricated timber construction, acoustic sound insulation products from HANNO were used in addition to the tried-and-tested sealing and multifunctional strips.

The implementation presents itself as a successful ensemble on the steep slope: the materiality of the retaining walls is repeated in the façades made of local quarry stone, sand-coloured plaster components reinforce the Mediterranean appearance.

- The pre-compressed sealing and multi-functional tapes from HANNO meet all requirements for dimensional accuracy in timber construction – not only for window sealing, but also for many other connection details
- Through detailed technical pre-planning and coordination of the individual interfaces and trades, the installation of pre-compressed tapes can contribute towards a high level of airtightness in prefabricated house construction

Location: Lake Como (Italy)

Project type: Prefabricated timber house

Architect: Valentina Rossetti

Construction management & execution: SchwörerHaus KG

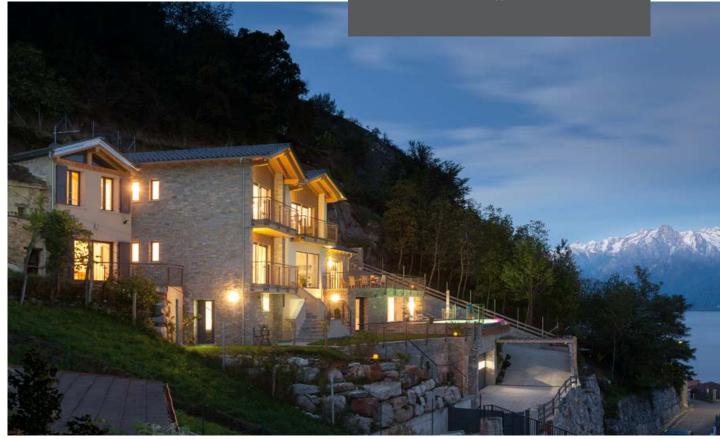
Construction period: 2011 - 2012

Sealing products:

Joint sealing: Hannoband®-BG1, -600, -HBD, -THERM and -3F UA

Acoustic insulation: Hanno® composite foam and -HW 50

Photo: © SchwörerHaus, J. Lippert



University of Mittweida

Exposed concrete joints sealed with Hannoband®-BG1-M

The most modern media centre in Europe is provided by Mittweida University of Applied Sciences. With construction costs of approximately 34 million euros and a construction period of three years, this new building is a major investment in the study location.

Hannoband®-BG1-M was chosen here because, on the one hand, it harmonises very well with the façade in terms of colour and, on the other hand, it covers the large differences in joint width (including the maximum joint width). Likewise, the strong compression of Hannoband®-BG1-M for subsequent sealing of the joint is a clear advantage for the installer.

- An optimum result with regard to the colour matching of the sealing tape and the concrete component
- Permanent protection of the window sills against water penetration from the outside for large joints



Location: Mittweida

Support: EU within the framework of the European Regional Development Fund

Client: Free State of Saxony

Architect: Georg Bumiller Gesellschaft von Architekten mbH, Berlin

Architect & construction management: ARCADIS Deutschland GmbH, Dresden

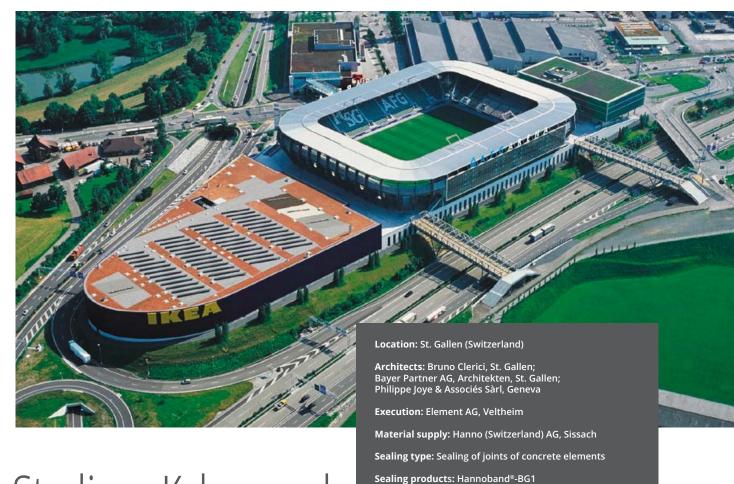
Provision of materials: Integra GmbH, Jahnsdorf

Construction period: 2011 - 2014

Sealing type: Façade joints with Hannoband®-BG1-M

Sealing products: Weather protection layer: Hannoband®-BG1-M





Stadium Kybunpark

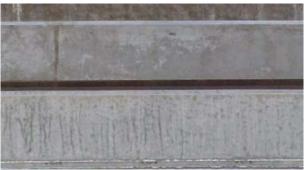
Hannoband®-BG1 seals joints of concrete parts in the new stadium in St. Gallen
After a construction period of three years, the new football stadium with the associated shopping area was opened in St. Gallen, Switzerland. On a 50 000 m² site, more than 1000 people worked on the structure, which, measured from the ground slab at the main stand, has 10 stories and seats 19 568 spectators.

For this large construction project, 83 000 m³ of concrete were used in 16 200 m² of formwork. For the horizontal joints of the concrete parts for the grandstand construction, the task was to permanently seal more than 11 000 m of joints with joint widths of up to 30 mm. Hannoband®-BG1 was used for the joints that were directly exposed to the weather.

 Ensuring permanent joint sealing of the horizontal joints of the concrete parts of the grandstand



Photos: © Stadion St. Gallen AG



"Alter Fischmarkt" (Old Fish Market)

Sealing concept of the window joint for the new construction of a high-quality apartment complex

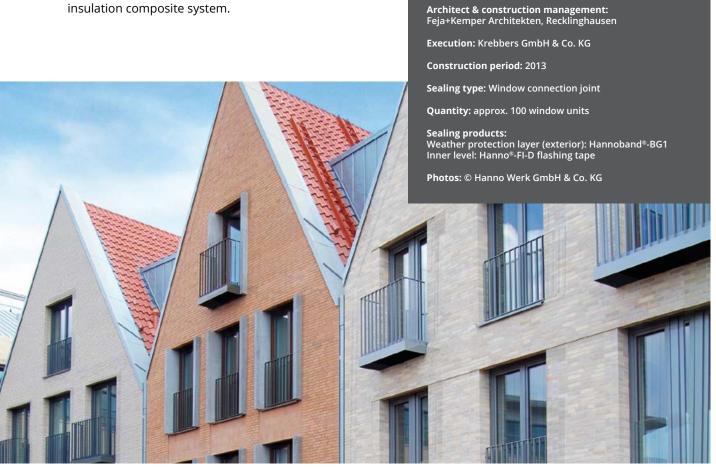
As a representative entrance to the old town of Münster, residential and commercial buildings were erected in 2013. They are not only intended to serve as exclusive residential properties, but also to increase the attractiveness of the "Alter Fischmarkt" (Old Fish Market) for tourists and customers.

Since the visible joints not only have to be sealed between the classic clinker brick – typical of Münsterland – and the window, but also between the window and the natural stone that is partly used, Hannoband®-BG1 was used for this after extensive suitability testing. This fulfils all the required conditions of the weather protection level both between the clinker brickwork and the natural stone and the wooden windows used. The inner sealing level is executed with Hanno®-FI-D flashing tape. Furthermore, Hanno®-FA-D flashing tape was used for the façades in the inner courtyard, which were designed with a thermal insulation composite system.

- Creation of a vapour-diffusion-open and driving rain-proof weather protection layer
- Creation of a vapour-diffusion-inhibiting and airtight inner layer
- Compatibility of the sealing material with the natural stone used in part for the reveals

Location: Münster

Project type: High-quality residential building





Linden Stadium

Renovation of façade joints between concrete components at the Linden Stadium
With its exposed location, the stadium on the Lindener Berg is the flagship of the traditional sports club Linden 07 e. V. Accordingly, when renovating the concrete façade and the sealant joints of the stadium, it was planned to upgrade them with an appropriate coat of paint.

As a solution for this object, over 1000 m of Hannoband®-BG1 were processed for the large joint widths. Hannoband®-BG1 has a very high movement absorption capacity. This movement absorption is absolutely necessary for driving rain-tight sealing due to the large component movement. Furthermore, Hannoband®-BG1 represents an optimal solution for use in this project, since compatibility with the appropriate paint had to be ensured and the diffusion behaviour was not allowed to be seriously negatively influenced.

Location: Hanover

Architect: LSM Architekten, Hanover

Material supply: Werkzeuge Dietrich GmbH & Co. KG, Burgdorf

Sealing type: Concrete façade sealing

Quantity: approx. 1000 m

Sealing products: Weather protection layer (exterior):



- Permanent sealing of the large joints between the concrete components
- Compatibility with the paint intended for painting

Waldstraße District



Planning: Ingenieurbüro Dipl.-Ing. Ernst Hansen-Hagge

Execution: Fahland GmbH Bautechnik

Material supply: Jörg Northe GmbH

Construction period: May 2014 – 2015

Sealing type: Window connection joint

Quantity: 368 residential units

Sealing product: Hannoband®-3E Eco

Photos: © Hanno Werk GmbH & Co. KG



Energetic modernisation of publicly subsidised housing in Norderstedt

Extensive measures involving the provision of 8.3 million euros in this existing property benefit above all the tenants through a reduction in heating costs and an improvement in the indoor climate. Of course, the renovation of the windows and their connecting joints also contribute towards this.

By using Hannoband®-3E Eco, all three levels of the window connection joint can be reliably sealed in one product. With its driving rain tightness > 600 Pa, its low thermal conductivity and a joint permeability coefficient < 0.1 (a_n value), Hannoband®-3E Eco is a good way for the installer to seal the window connection joint in a short amount of time.

- Reliable sealing of the window connection joint
- Reduced workload due to replacement of windows in an occupied building

kühneVISION

Hannoband®-3E Eco in use for the sealing of large-format windows

With the construction of the new office building in Hamburg-Bahrenfeld, new space was created for companies in the bright and loft-like rooms of the building. By designing the façade with masonry bricks, the building adapted to the character of historic industrial buildings.

Hannoband®-3E Eco combines all three sealing levels in just one product, following the classic principle of "tighter on the inside than on the outside". As a product fully tested according to DIN 18542:2020 for stress group MF2, this multifunctional tape offers proven safety. In addition, the on-site support by HANNO's application technology contributed towards the high quality standard of the object.

- Sealing of all three levels with one product
- Easy and time-saving sealing



Location: Hamburg-Bahrenfeld

Client: Behrendt Gruppe GmbH & Co. KG

Execution: Boetker GmbH & Co. KG

Material supply: Jörg Northe GmbH

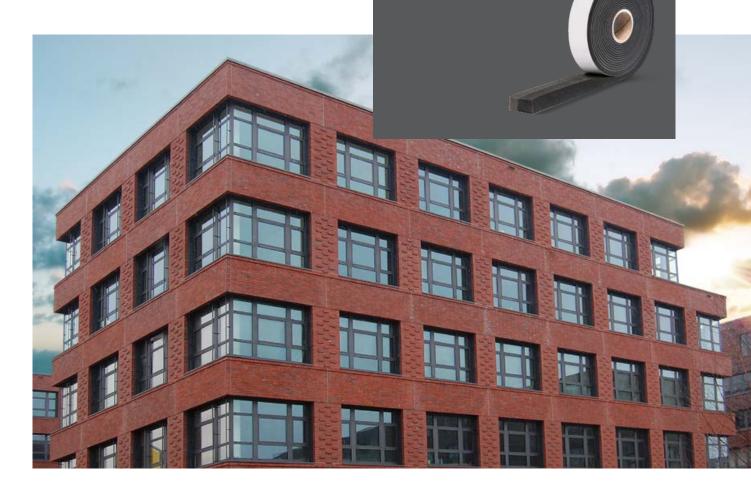
Construction period: 2014 – 2016

Useful area: 9300 m²

Sealing type: Window joint sealing

Quantity: approx. 4000 m multifunctional tape

Sealing product: Hannoband®-3E Eco



Arlington Apartments in Ottawa

Apartment building in Canada receives "Ottawa Urban Design Award 2019"

The Arlington Apartments in Ottawa, Canada, contain a total of 16 social housing units and town houses. The building includes a mix of three- and four-bedroom flats designed to passive house specifications – although they follow strict cost constraints to meet social housing specifications. The passive house standard places high demands on low energy consumption for heating and cooling, which were taken into account.

234 m of Hannoband®-3E and 63 m of Hannoband®-3E BG1 were installed.

Window joint sealing according to passive house requirements



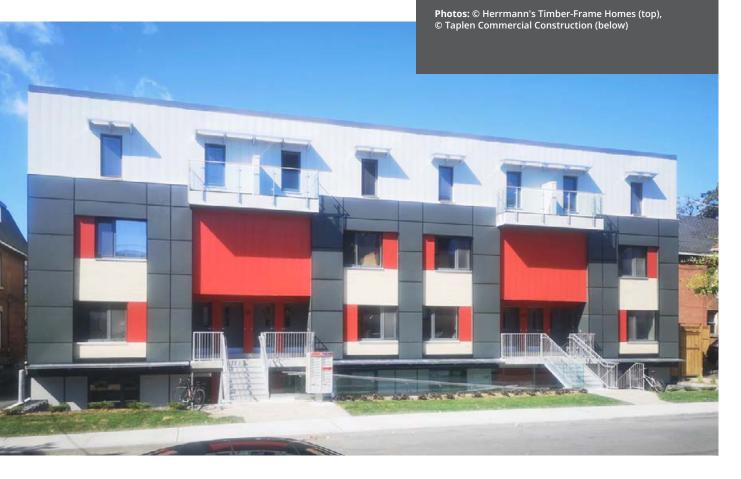
Installer: Herrmann's Timber-Frame Homes

Construction period: 20 months

Sealing type: Window connection joint

Sealing products: Hannoband®-3E and Hannoband®-3E BG1

Material supply: Herrmann's Timber-Frame Homes



Office Complex in Pennsylvania, USA



Renovation of a historic office building with a new building extension

LEED Platinum and Passive House certified office complex in Pennsylvania, USA, consisting of an 840 m² historic building that was extensively refurbished and enlarged by a new building to a total area of 3700 m². Construction began at the end of 2017 and ended in 2019.

The challenge was to harmoniously integrate the new building into the predominantly residential neighbourhood. This was achieved by integrating a glass façade for the upper floors to visually conceal this part of the building somewhat. Hannoband®-3E was used for the joint sealing in the renovated old building, which was processed for the installation of the passive house-certified windows in the historical look.

 Joint sealing of the passive house-certified windows in the renovated historic old building **Project type:** Renovation and new construction

Architect: Murray Associates Architects, P. C.

Material supply: World Class Supply, Delaware

Construction period: 2017–2019

Sealing type: Window joint sealing

Quantity: approx. 450 m

Sealing products: Hannoband®-3E

Photos: © Don Pearse Photographers, Inc.



Schüchtermann Clinic

Sealing of the window connection joint in the interior of the heart centre

As one of the largest heart centres in Germany, the Schüchtermann-Klinik in Bad Rothenfelde attached great importance to the selection of suitable building materials when renovating the rehabilitation building. Immunocompromised patients in particular must not be exposed to any additional stress from emissions from building materials after a heart transplant.

The Hanno®-DUO Easy 240 flashing tape provides an optimal solution to the challenge of creating the lowest possible emission environment for the rehabilitation measures. It has been tested by GEV according to the highest level, EMICODE® EC1PLUS. Furthermore, Hanno®-FA-D flashing tape was used to seal the weather protection level.

- Sealing concept for the inner level with a very low-emission building material
- Sealing of the weather protection level against driving rain and open to diffusion







White Max

Düsseldorf's highest residential building sealed with Hanno®-DUO Easy 240 flashing tape

The "White Max" is an older building which was converted into a modern residential building. A total of 305 residential units and 3 commercial spaces were created not far from the Rhine promenades of Düsseldorf.

The window joints were to be sealed permanently airtight with flashing tape, whereby various substrates such as concrete, brick and filler had to be considered. In cooperation with the HANNO application technology, the decision was made to use the moisture-variable film tape Hanno®-DUO Easy 240 flashing tape for interior and exterior use, which, in addition to its optimal structural-physical properties, is particularly convincing due to its very good adhesive strength on all substrates and allows work to be carried out quickly.

 Reliable full-surface self-adhesion on different substrates Location: Düsseldorf

Client: Ferox Projektentwicklung GmbH & Co. KG

Architect & construction management: Turner Construction

Material supply: Nögel Montagetechnik Vertriebsgesellschaft mbH

Construction period: 2013 - 2014

Quantity: 5000 m

Sealing type: Window connection joint sealing

Sealing products: Weather protection level: Hanno®-DUO Easy 240 flashing tape Inner level: Hanno®-DUO Easy 240 flashing tape

Photo: © Ferox



Hochstiftsweg Residential Complex



Sealing concept for the window connection joint of a residential complex in Munich

Designing rental and owner-occupied housing as centrally as possible in Munich is a major challenge. As a district of Munich, Bogenhausen with its peripheral location is a premium address for the construction of new top-quality residential complexes.

The special feature of this project is the bonding of the Hanno®-FI-OBK flashing tape with butyl strips on the inside of the room. Here, the bonding was guided from the joint insulation area to the window with the self-adhesive strip. This type of foil guidance meant that the reveal was not glued and therefore did not have to be plastered. The joint was covered with narrow strips. The weather protection level was sealed with Hanno®-FA-D flashing tape.

Location: Munich

Execution: H.O. Schlüter GmbH, Lübz

Completion: 2012

Sealing type: Window connection joint between PVC windows and an ETICS

Quantity: Three residential complexes with a total of approx. 450 window units

Sealing products: Weather protection layer (exterior): Hanno®-FA-D flashing tape. Inner level: Hanno®-FI-OBK flashing tape with butyl strip (concealed with visible strip).

- Sealing concept of the inner level without applying a foil in the reveal area
- Creation of a vapour-diffusion-open, driving rain-proof weather protection level that can be plastered over

Residential Building Jarrestraße

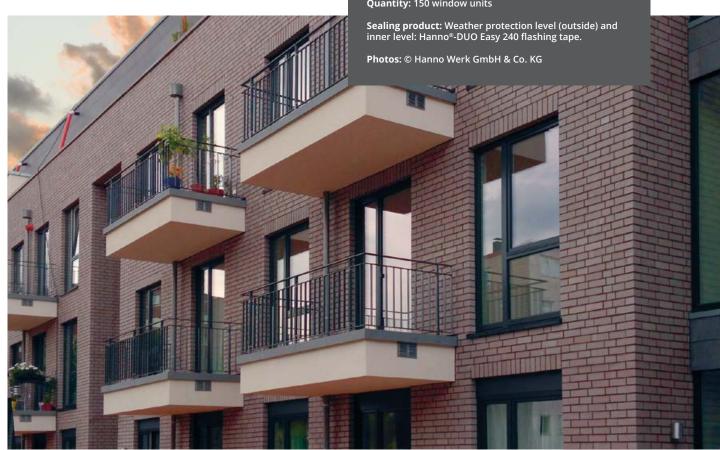
Sealing the window connection joint with Hanno®-DUO Easy 240 flashing tape at the construction of the Jarrestraße residential complex in Hamburg

The project is a new building on the old laundry site in Hamburg on Jarrestraße. The special feature of the building, which is situated in a prominent location in Hamburg Winterhude directly on the Osterbek canal, is that the soil and groundwater here were contaminated by the old laundry and had to be completely removed.

Here, the use of the sustainable and EMICODE® EC1PLUS-tested Hanno®-DUO Easy 240 flashing tape fits perfectly into the overall concept. In addition, the KfW70 energy-efficient building standard sets the benchmark high when it comes to energy efficiency.

Use of the lowest possible emission building materials





NSI Educational Centre Lecture Hall

Sealing of the window connection joint of an auditorium building with windows in the insulation level

A new building complex was added to the existing building in 2012 for the expansion of the NSI Educational Centre in Hanover.

The extension to the existing building was a concrete construction with a thermal insulation composite system. The window elements are almost completely set into the insulation level. In order to guarantee an optimal connection of the weather protection level, the Hanno®-FA-D flashing tape outer sealing foil was led from the masonry to the frame front with a width of 150 – 200 mm. Hanno®-FI-D flashing tape was used for the inner level.

 Preparation of a sealing concept for the connection of the windows in the insulation level



Location: Hanover

Client: Niedersächsisches Studieninstitut für kommunale Verwaltung e. V., Hanover

Architect: Kellner Schleich Wunderling Architekten + Stadtplaner GmbH

Execution: Krebbers GmbH & Co. KG

Construction period: 2012

Sealing type: Window connection joint sealing

Sealing products:

Weather protection levels (exterior): Hanno®-FA-D flashing tape Inner level: Hanno®-FI-D flashing tape



Eckernförderstraße Residential Complex



SAGA GWG modernises high-rise buildings among others with Hanno®-DUO Easy 240 flashing tape

In Hamburg, SAGA GWG, which has set itself the goal of promoting sustainable urban development, is refurbishing a large number of its existing properties, of which the high-rise buildings on Eckernförderstraße are one of the most interesting.

The façade and windows of the 19-storey main building and its 8-storey annexes have been renovated and renewed. A challenge for the window manufacturer SOLARLUX and the HANNO application technology was the aluminium window elements, which were mounted on the existing balcony parapet to increase the living space. Here, the demands on the sealing, especially on the bonding of the flashing tapes and the fire protection of the joint insulation were very high, but could be optimally solved in cooperation with the HANNO application technology. The selected Hanno®-DUO Easy 240 flashing tape is also a strong solution in the area of high-rise building renovation.

 Connection of the window joint to the existing balcony balustrade

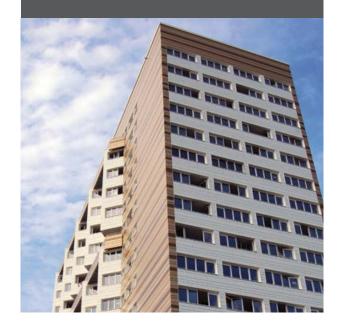
Location: Hamburg

Execution: SOLARLUX Aluminium Systeme GmbH, Bissendorf

Material supply: Nögel Montagetechnik Vertriebsgesellschaft mbH

Construction period: 2013 – 2014

Sealing products: Weather protection levels (exterior): Hanno®-DUO Easy 240 flashing tape Inner level: Hanno®-DUO Easy 240 flashing tape



B. Braun Melsungen AG

Hanno®-flashing tapes in use in a new factory building

At the headquarters of the medical technology manufacturer B. Braun Melsungen AG, a new factory for dialysis machines and infusion pumps as well as a training centre were built in the Pfieffewiesen industrial estate. The total investment volume for this property was around 82 million euros.

The high-quality metal-wood windows of the innovative Integral System Module A-Ci in Oregon wood type were manufactured with Hanno®-FI-D or FA-D flashing tape for the internal and external sealing. Thanks to the many years of experience of the fitters from Krebbers GmbH & Co. KG from Krefeld and the high-quality products, a very good seal could be achieved.

- Creation of a vapour-diffusion-open, driving rain-proof weather protection level that can be plastered over
- Creation of a vapour-diffusion-inhibiting and airtight inner layer
- Requirements on the ductility of the sealing material due to the component movement of the metal-wood window



Le Belvédère



Hannoband®-3E IDA and Hannoband®-BG1 used in a representative passive house project in Canada

The Le Belvédère building in Wakefield near Ottawa in Quebec (Canada) was the largest passive house building in North America at the time. Le Belvédère can be booked for events for up to 200 people and is a popular location for weddings due to its exposed location directly on the mountainside with a view over the Gatineau Mountains.

High-quality wood-aluminium windows were installed in the property. Due to the size of the elements and the weight, not only the requirements for the high thermal insulation standard, but also the statics and the fastening of the windows were demanding. This was implemented without any problems. With a high-quality seal using Hannoband®-3E IDA in combination with directly weathered Hannoband®-BG1, the required high-quality seal was met.

 Sealing of the window connection joint in accordance with the passive house standard Location: Wakefield, Quebec (Canada)

Execution: Hermann's Timber-Frame Homes, Curran (Canada)

Sealing type: Sealing of the window connection joint between wood-aluminium windows and the timber construction

Quantity: approx. 500 m

Sealing products: Weather protection layer (exterior): Hannoband®-BG1. Functional and internal level: Hannoband®-3E IDA.



Construction Project "Eidelstedt 74"

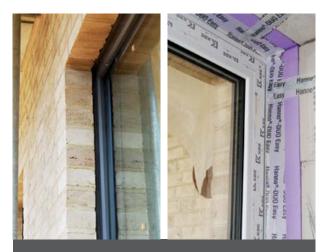
2500 windows sealed with the Hanno®-3E joint sealing system

An ambitious large-scale project with a model character: since 2017, a completely new neighbourhood has been under construction at Hörgensweg in the Hamburg district of Eidelstedt – with the aim of creating affordable housing for refugees and socially disadvantaged people. Around 860 flats, a park, social facilities and daycare centres have been built there by the end of 2019.

Three levels - protection in the system

Reliable and quick-to-use products are required in all construction phases. Here, the Hanno®-3E joint sealing system ensures energy-efficient and long-lasting sealed vinyl windows. By using the system components for all levels, a functional guarantee of 15 years is achieved – for permanently energy-efficient living.

 A total of around 30 000 metres of material ensure long-term joint quality in the eight building complexes.



Location: Hörgensweg, Hamburg Eidelstedt

Specialist tradesman: H.O. Schlüter GmbH, Lübz

Construction period: 2017 – 2019

Sealing type: Window sealing

Quantity: approx. 30 000 m

Sealing products: Weather protection layer (exterior): Hannoband®-BG1. Functional level: Hanno®-assembly gun foam. Inner level: Hanno®-DUO EASY 240+ flashing tape.





Garage Menke

Safe sealing with HANNO in hall construction

In hall construction, it is important to realise an optimal sealing of the façade elements and the connection joints of doors and gates. For the new construction of the large-capacity garage for Menke, Hannoband®-BG1 was used among others.

With its excellent properties for durable and weather-resistant sealing, Hannoband®-BG1 is the first choice.



HADI Warehouse

New construction of storage space for horticultural supplies

For the site of HADI GmbH Süd, E.L.F and Burgey Bau have built a new hall for the storage of goods for commercial horticulture. This includes machines, packaging and supplies for the trade as well as seeds for vegetable cultivation.

The Hannoband®-3E BG1 and Hannoband®-BG1 multifunctional tapes and the fully self-adhesive Hanno® DUO Easy 240 flashing tape were chosen to seal the window connection joint. The panel façade was sealed with Hannoband®-BG1 joint sealing tape, which still meets the driving rain resistance of 600 Pa even after 15 years of outdoor weathering.

Location: Hettenleidelheim

Client: Menke Immobilien GmbH & Co. KG

Architect: E.L.F Hallen- und Maschinenbau GmbH

Construction management:

Superstructure: E.L.F Hallen- und Maschinenbau GmbH

Substructure: Burgey Bau GmbH

Execution: E.L.F Hallen- und Maschinenbau GmbH

Useful area: 2436 m²

Sealing product: Hannoband®-BG1

Photos: © Hanno Werk GmbH & Co. KG

Location: Hochdorf-Assenheim

Client: HADI Handelsgesellschaft für Gartenbaubedarf

Architect: Dipl.-Ing. Andreas Kiefer

Construction management: Superstructure: E.L.F Hallen- und Maschinenbau GmbH Substructure: Burgey Bau GmbH

Execution: E.L.F Hallen- und Maschinenbau GmbH

Sealing products:

1. Hannoband®-3E BG1, Hannoband®-BG1, Hanno®-DUO Easy 240 flashing tape

2. Hannoband®-BG1



Ani Villas Dickwella Hotel

Sealing of the window connection joint in a luxury resort in Sri Lanka

With its resorts, Ani Villas offers a holiday experience in a class of its own. In addition to the absolutely high-quality service, the demands on the living experience itself are of course of the highest priority. In order to do justice to this, high-quality building materials were used here.

With Hannoband®-3E, the requirements for this project were met. Thanks to its heat-insulating properties and air-tightness, there is no loss of comfort for the guests via the window joint. The good sound insulation of Hannoband®-3E is also an advantage here.



Schenefelder Holt High-Rise

Core refurbishment of a residential building with window replacement in Schenefeld

The area of refurbishment has become increasingly important in recent years. Since a modernisation of the windows often takes place in an occupied property, it must be carried out as quickly as possible with a minimum of effort and pollution.

Through the support of the HANNO application technology, it could be clarified that the building ground was not suitable for sealing without further work. In this case, use was made of a smooth coat, which is an option for improving the substrate in DIN 4108-7. This allowed the bonding of Hanno®-FI-D and FA-D flashing tapes without any problems.

Location: Dickwella (Sri Lanka)

Client: Ani Villas Resorts

Architect & construction management: Reda Amalou, AW2 Paris, France

Execution: Salasi Lanka (Pvt) Ltd, Colombo, Sri Lanka

Material supply: Prieur Dichtstoffe, Lübeck

Sealing type: Window connection joint between wooden windows and wooden studwork

Quantity: approx. 2750 m

Sealing products: Hannoband®-3E

Photo: © Ani Villas Resorts

Location: Hamburg

Architect: nps tchoban voss GmbH & Co. KG, Hamburg

Execution: Moba FENSTER + TÜREN GmbH, Lübeck

Material supply: Prieur Dichtstoffe, Lübeck

Construction period: 2012

Quantity: approx. 400 window units

Sealing type: Window connection joint

Sealing products: Weather protection level (exterior): Hanno®-FA-D flashing tape. Inner level: Hanno®-FI-D flashing tape.



QBUS

Office building with passive house technologies in Saarbücken sealed with the Hanno®-3E joint sealing system

In the construction of a new office building near the railway station in Saarbrücken, passive house technologies were consistently planned and used. This technology was naturally continued in the area of the windows.

With the Hanno®-3E joint sealing system, which is suitable for passive houses, this could be implemented very well. Hanno®-FI-D and FA-D flashing tapes were used, and Hanno®-PUR foam was used to insulate the functional level.

Mönchengladbach Tax Office

In the new building of the Mönchengladbach tax office, the window joints were sealed with Hanno®-FI-D flashing tape

For the new building of the tax office in the immediate vicinity of the stadium of Borussia VfL 1900 Mönchengladbach, which cost around 17 million euros, the right product was sought for airtight sealing.

The Hanno®-FI-D flashing tape used has been tried and tested for years for airtight connections in window installations. In addition to its airtightness when properly bonded to the masonry and its B2 building material class, the tape's ability to be plastered over on both sides is a quality feature. These are all reasons why Hanno®-FI-D flashing tape was also used in this project.



Location: Mönchengladbach

Architect: pbs architekten Planungsgesellschaft mbH, Aachen

Execution: Rolladen Müllers GmbH & Co. KG, Mönchengladbach

Material supply: Werkzeuge Dietrich GmbH & Co. KG, Burgdorf

Construction period: 2007 – 2008

Quantity: approx. 450 window units

Sealing products: Interior levels: Hanno®-FI-D flashing tape



Augsburg Residential Park

Creation of new living space with the help of HANNO

As one of the fastest growing cities in Germany, Augsburg is in need of creating new living space. This project, with its monolithic masonry with external thermal insulation composite system and windows flush with the masonry, was made for the use of one of our multifunctional tapes. Here, the choice fell on sealing with Hannoband®-3E.

In this case, the windows were fixed with standard frame screws, which were screwed through the tape after pre-drilling.



Warsaw Sewage Treatment

Joints at the Warsaw sewage treatment plant sealed with Hannoband®-BG1

Hannoband®-BG1 can not only be used to seal joints in standard applications in building construction, but the quality of this premium product is also evident in special applications.

At a sewage treatment plant in Warsaw, a seal against odour was to be achieved. Six primary sedimentation tanks with a diameter of 50 m were sealed with Hannoband®-BG1. The installation was carried out as pre-assembly at TSCHUDA Engineering GmbH in Graz. The entire system used, including the Hannoband®, was tested in advance by the Materials Testing Institute of the University of Stuttgart (MPA Stuttgart, Otto-Graf-Institut (FMPA)).



Location: Warsaw (Poland)

Execution: TSCHUDA Engineering GmbH, Graz (Austria)

Material supply: Hanno Werk GmbH & Co. KG,
Himberg (Austria)

Quantity: approx. 12 000 m

Sealing products: Hannoband®-BG1

Photo: © TSCHUDA Engineering GmbH



Herten Town Hall

The complete renovation of the town hall in Herten (NRW) including windows and window connection joints

In the course of extensive renovation measures of the town hall in Herten (NRW), the windows including the window connection joints were renewed.

After removing the old windows, the weather protection level was sealed against a natural stone stop using Hannoband®-BG1, which is compatible with the adjacent natural stone. The insulation of the functional level was carried out with Hanno®-PUR foam, while the air tightness on the inside of the window was achieved with Hanno®-FI-D flashing tape. This design in the Hanno®-3E joint sealing system has been tried and tested for years.



Fredericia Bungalows

18 bungalows in Fredericia (Denmark) sealed with Hannoband®-F600

This reference concerns 18 bungalow buildings in Fredericia, Denmark, where the window connection joints were sealed with Hannoband® over a decade ago. The bungalows were built in a typical Danish way with clinker brickwork. In this construction method, the windows are placed between the clinker bricks.

The exposed joints with Hannoband®-F600 in this older project are still UV-resistant and driving rain-proof after more than a decade and do not require regular maintenance/replacement compared to other sealants. Even with the exposed location at Danish coastal resorts, the joints are still permanently tight.

Location: Herten

Architect and construction management: Feja+Kemper Architekten, Recklinghausen

Execution: H.O. Schlüter GmbH, Lübz

Sealing products:

Weather protection layer (exterior): Hannoband®-BG1. Functional layer: Hanno®-PUR foam Inner level: Hanno®-FI-D flashing tape

Photo: © Hanno Werk GmbH & Co. KG

Location: Fredericia (Denmark)

Execution: Fynbobyg A/S, Middelfart (Denmark)

Material supply: Dana Lim A/S, Køge (Denmark)

Quantity: approx. 300 m

Sealing products: Weather protection layer (exterior): Hannohand®-F600

Joint Sealing – With System

With the coordinated products of the Hanno®-3E joint sealing system, you fulfil all the requirements of the Buildings Energy Act (GEG) for the joint. Due to the interaction of the sealing levels, moisture that has penetrated the joint via imperfections or moisture from the construction phase can diffuse to the outside. Expensive renovation work caused by moisture damage and a loss of value of the building are prevented.



The System Components

Joint sealing tapes

HANNO offers a wide range of pre-compressed joint sealing tapes. These can be used in window construction, façade sealing or drywall construction. Special flame-retardant tapes up to fire resistance class El 120 are just as much a part of this as the well-known Hannoband®-BG1 or Hannoband®-BG1-M, which offers even more safety with its innovative foam/membrane technology.

Multifunctional tapes

"All in one" multifunctional tapes are especially well-suited for safely and quickly sealing window joints. The polyurethane soft foam material is resilient in the window joint to create a permanent seal. It can compensate for component movements for many years. HANNO membrane technology in these innovative tapes helps ensure they have an excellent barrier effect.

Flashing tapes

HANNO offers high-quality flashing tapes for RAL-conforming applications in window installation. Both the fully self-adhesive Hanno®-DUO Easy 240 flashing tape as a variable moisture solution and flashing tapes for the classic "tighter on the inside than on the outside" installation are used here.

Sealants and adhesives

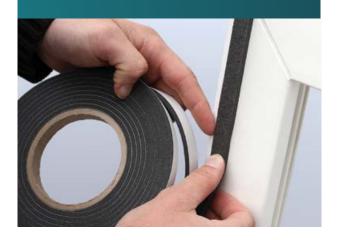
Highly effective installation adhesives, specially optimised for the various applications, are offered by HANNO for sealing joints. Construct weather-proof, quick-curing or elastic connections depending on your requirements.



Further information: www.hanno.com/3e-fugenabdichtungssystem

Advantages of the 3E system

- Resistance to driving rain ≥ 600 Pa
- Air tightness and diffusion behaviour according to DIN 4108
- Effective sound insulation in the system up to 61 dB
- Thermal insulation at passive house level
- Hanno®-3E joint sealing systems are certified by MPA BAU Hannover



Security Against Warranty Claims

What does the Energy Saving Ordinance require for windows?

Buildings must be permanently impermeable to air in accordance with the state of the art. For this, please refer to DIN 4108-7, which contains recommendations for planning and implementation as well as examples.

What is the purpose of air impermeability?

Moisture is generated in living and working spaces and strives to escape into the outside air. This process must not take place via the window connection joint, but via a controlled air exchange. If moisture-laden air penetrates the joint, condensation will damage the connection area and reduce the thermal insulation. Therefore, connection joints must be sealed sufficiently, properly and professionally.

What is the status of the technology?

The state of the art is published in the Federal Gazette. Science and practice formulate technically feasible rules. Examples of this are the VOB, RAL and DIN standards, which were previously considered the basis for the execution of work.

The legislator has made the current rules law by introducing the Buildings Energy Act (GEG). When designing the window connection joint, special emphasis is placed on avoiding thermal bridges. The principle of "tighter on the inside than on the outside" has been recognised for years. This involves sealing in several stages (three levels), taken into account in the planning, which results in a vapour pressure gradient from the inside to the outside.

Guaranteed Quality



Choose the Hanno®-3E joint sealing system to gain protection against warranty claims: when the HANNO system components are used for all layers, we offer you a property-related functional guarantee of 15 years.

Impress your customers by helping them lower their heating costs and proving long-term quality sealing. Achieve an economic advantage – the added value of a qualified installation is higher.

HANNO as one of the leading manufacturers of materials for construction joint sealing has a wide range of compressed joint sealing tapes, flashing tapes and supplementary products. HANNO thus offers solutions for almost all areas of construction joint sealing in building construction.

More than 50 years of experience and development work in the field of joint sealing tapes have produced qualities that demonstrably still prove their functional efficiency and driving rain tightness after almost 20 years of outdoor weathering. They are still far above the applicable requirements of current standards and guidelines.

New multifunctional tapes with the innovative combination of impregnated foam and moisture-variable functional membranes meet all requirements for window construction and are still sound and heat insulating. Installation is extremely simple and time-saving.

These and other properties, as well as specially matched products, allow us to provide a 15-year warranty on the tightness of joints sealed with HANNO products, provided they are installed properly.



Always Good Advice — HANNO Application Technology

HANNO does not leave you alone

You can rely on it, as the partnership with HANNO goes far beyond the mere sale of products. As a member of RAL-FDKS, HANNO will be happy to advise you on the optimal and sustainable sealing of your construction joints before the start of the project. No matter whether concrete elements, façade elements, window or door joints are to be sealed or whether a timber construction or a roof extension is to be carried out, HANNO's specialists are always at your disposal and will work with you to develop the right product concept for your building project.

Even during the execution of your construction measures, you can always fall back on HANNO's application technology for assistance with tricky situations and unforeseen problems.

Do you have a special application or any questions? Then call our technical hotline: +49 5102 7000-205

CAD/BIM data and ift assemply planner*

Via the HANNO website and the CAD and AT Manager from Heinze, you can access numerous CAD details, tender texts, detailed drawings and BIM data for the HANNO products free of charge. In addition, the assembly planner from ift Rosenheim – now customized for HANNO – supports you in the planning and implementation of your building project. You will find the corresponding links conveniently next to the respective product at **www.hanno.com**.

Training

HANNO conducts regular and extensive training courses on construction joint sealing. This familiarises your employees with the latest techniques, processing guidelines and products. In this way, HANNO helps you to protect yourself against warranty claims and to be able to offer your services according to the latest state of the art.



Hidden Talents

HANNO - The Specialist in Joint Sealing and Sound Insulation

Hanno Werk GmbH & Co. KG, headquartered in Laatzen near Hanover, Germany, has its core competences in construction joint sealing and industrial seals, technical sound insulation for the automobile and mechanical engineering industry and also in the improvement of room acoustics and sound insulation.

The product portfolio comprises the well-recognized and proven Hannoband® to seal window and façade joints, highly effective industrial stamping parts as well as effective acoustic tiles for room acoustics.



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