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SOFLAMM® POLYMER BITUMEN WATERPROOFING MEMBRANES





SINGLE-LAYER INSTALLATION

ISOFLAMM[®] PS 5's exceptional durability and robustness have made it the only one of its kind in Austria to qualify for OIB (BTZ-0016) approval for all categories K1-K3 of Austrian standards ÖNORM B 3691.

TTO TO T

FAST & SAFE

ISOFLAMM[®] PS 5 has more polymer bitumen compound on the bottom side of the membrane, ensuring a quick, secure installation that reduces costs.

DIMENSIONALLY STABLE & ROBUST

ISOFLAMM[®] PS 5 is doubly reinforced, dimensionally stable and can be installed on the roof without shrinking. A 33-year-old ISOFLAMM[®] PS 5 extension piece has successfully passed the real ice ball hail test.



DURABLE, ROBUST & UNIVERSAL

TRULY UV-RESISTANT

ISOFLAMM® PS 5 is extremely UV-resistant and does not require slate finish protection, which makes it the ideal solution for roofs exposed to natural weathering.

TRULY VERSATILE

Better cold flexibility and higher heat resistance than standard membranes. With their incomparable plasticity range and doubly-reinforced, ISOFLAMM[®] membranes can be used in a variety of applications and are the ideal product for all types of waterproofing.



Standard heat stability requirements for elastomeric and plastomeric bitumen membranes



For almost 60 years – quality for generations

ISOFLAMM[®] stands for 60 years of tried-and-tested waterproofing membranes. More than 30 million m² of flat roofs covering industrial, commercial and residential buildings, their terraces, perimeter insulations and bridges, parking decks and other seals are a testament to the quality of ISOFLAMM[®].

ISOFLAMM[®] was first developed 60 years ago following the breakthrough Austrian innovation of industrially synthesising high-quality polymers with bitumen. The novel, innovative roof membrane emerging from this process reversed a trend in the Austrian waterproofing market: a top-quality product that perfectly matched Slavonia's philosophy, which has been synonymous with enduring wood quality and quality value for many generations since 1893.

PRODUCT & TECHNOLOGY

The exceptional durability and robustness of ISOFLAMM[®] owes to its meticulous production process: First, the combination of distilled special bitumen and selected polypropylene resins produces an elastoplastic compound. It is then reinforced with two layers of polyester fleece and backed with special glass-fibre fleece, ensuring excellent dimensional stability in the finished ISOFLAMM[®] waterproofing membrane. The double inserts completely eliminate the usual shrinking of synthetic polyester fleece typically used for singly-reinforced roofing membranes.

Because the reinforcing inserts are in the upper third of the roofing sheet, there is more polymer bitumen compound on the underside of the membrane, which makes installation safer.



The two reinforcing inserts are impregnated, then coated.



A sealing that delivers on its promise

ISOFLAMM[®] has a plasticity range (-15 °C to +150 °C) that exceeds ÖNORM B 3660 specifications for elastomeric bitumen membranes by 50 °C (!) – an important quality feature that determines the temperature range between heat resistance and cold flexibility (see diagram on page 3). This makes ISOFLAMM[®] universally applicable, durable and particularly UV-resistant.

ISOFLAMM[®] is ideally suited for the waterproofing of exposed flat roofs. It does not require a slate finish for its UV protection.

ISOFLAMM[®] holds – in vertical applications, heavily inclined flat roof constructions such as shed roofs or attic and rooflight dome connections. There is no slippage, even in strong sunlight, when installed to professional standards.

Thanks to its excellent temperature resistance and double reinforcement, mastic asphalt (220 °C) can be applied directly to ISOFLAMM[®] Ponti GA 5 when sealing bridges, parking decks and underground garages.

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ISOFLAMM[®]

As good as new after 30 years





Externally-insulated roof system

Simple and quick to construct, a non-ventilated roof is the preferred roof structure for flat roofs covering industrial halls, warehouses and business enterprises. Common flat roof solutions such as trapezoidal sheeting, hollow-core slab, solid ceilings, etc. create a supporting deck (continuous slope of ≥ 2 %), which is sealed with a bituminous vapour barrier, on top of which the thermal insulation in the form of EPS, PIR or mineral wool is laid. The next step is sealing. In a two-layer installation, the seal consists of a first layer of ISOFLAMM® E-KV, P-KV or KSU and then ISOFLAMM[®] Polyester Spezial 5 mm as the top layer. In accordance with BTZ-0016, ISOFLAMM[®] PS 5 can also be laid as a single layer (except on green roofs). The roof structure must be mechanically secured against wind suction unless ballast such as gravel is used.

ISOFLAMM[®] Polyester Spezial's longterm UV-resistance ensures a particularly long service life, easy maintenance and statically optimised construction.

Saw-tooth roof – slant 45 °, direct sunlight

APPLICATION & INSTALLATION



Inverted Roof

The inverted roof is a non-ventilated, insulated roof construction in which the waterproofing is installed directly on the concrete substrate. A layer of thermal insulation suited to inverted roofs is laid over the waterproofing and provided with ballast/surface protection. This type of roof can be constructed with a single layer of ISOFLAMM® PS 5. The surface of the cast-in-place concrete roof must be sufficiently smooth and even to ensure that the waterproofing is bonded in a stable position. The same is true of pre-fabricated concrete roofs or elements with seams and butt joints, in which case protective strips should be applied.

The clean and dust-free concrete surface must first be primed with ISOFLAMM[®] BIT F rapid or ISOFLAMM[®] BIT F.

For further information, see ISOFLAMM[®] installation instructions for the respective product.



Renovation with ISOFLAMM®

ISOFLAMM[®] PS 5 is universally applicable in various types of flat roof renovations. Old bitumen roofs can be partially or completely torched over with ISOFLAMM[®] after cleaning and removing wrinkles, bubbles, unevenness etc., and after testing wind suction resistance. This can extend the service life of existing roof waterproofing in the long term.

Whether it's a non-ventilated roof or a duo roof – thermal insulation can be added for thermal improvement before or after installing the roof sealing, once all aspects of building physics have been taken into account.

Doubly-reinforced ISOFLAMM[®] membranes are also suitable for the renovation of roofs with synthetic membranes made of PVC, FPO, EPDM etc. ISOFLAMM[®] can be installed over a mechanically secured separating layer (e.g. ISOFLAMM[®] BI-TU-BASE-ROLL) after preparing the existing roof surface. While existing gravel can be reused, the advantages of a naturally weathered roof with ISOFLAMM[®] speak for themselves.

Slavonia's technical team has decades of experience in seal renovation. More than 50 % of the structures on our reference list are renovation projects with ISOFLAMM[®] Polyester Spezial.

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Fast and secure installation in all areas

Polymer bitumen membranes are installed by thermally heating the underside of the membrane with a gas torch or using a hot-air welding unit so as to homogeneously bond longitudinal and transverse seams.

Doubly-reinforced ISOFLAMM[®] membranes have a thicker layer of polymer bitumen on the underside, ensuring a secure fit. There is more sealing compound on hand during installation as ISOFLAMM[®] reinforcement is always positioned in the top third of the membrane. Because of this, ISOFLAMM[®] can be used to do detailed work on connections and attic seals, rooflight domes, drains and gullies, etc. much more accurately, making it more stable in the long term.

QUALITY WITHOUT COMPROMISE

ISOFLAMM[®] APP/IPP modified bitumen waterproofing membranes are available in the following high-quality application types (including optional insurance coverage):

ISOFLAMM[®] PS 4 and 5 mm

UV-resistant and dimensionally stable premium waterproofing membrane, doubly reinforced for new buildings and renovations. Can also be installed as a single layer (5 mm) to professional standards, on account of its high quality.

ISOFLAMM[®] Exstrong wf 5 mm

High-quality binder-impregnated polymer waterproofing membrane, doubly reinforced for extensive and intensive green roof construction to professional standards. Its long-term UV resistance enables the proper weatherproofing of vertical bondings, connections and attic seals. ISOFLAMM[®] Exstrong wf 5 mm is also free of chemical root barriers.

ISOFLAMM[®] Ponti GA 5 mm

Doubly reinforced with a high softening point and excellent crack-bridging ability at -20 °C, ISOFLAMM[®] Ponti GA 5 mm has been a top choice for the single layer waterproofing of parking decks, bridges and car-friendly roof areas for more than 30 years. The low-viscosity epoxy resin ISOFLAMM[®] porfil.[®] BIT can be used as a primer on thoroughly cleaned concrete surfaces subject to both high and below-freezing temperatures. The ISOFLAMM[®] porfil.[®] BIT-primed surface can be seald by torching with ISOFLAMM[®] Ponti GA 5 mm after approx. two hours (at normal outside temperatures).

Installation options

ISOFLAMM[®] waterproofing membranes can be loose laid, partially or fully torched, or cold bonded with a homogeneously welded minimum overlap of ≥ 10 cm on all sides, depending on the particular requirements. Mechanically installed membranes should have an overlap width of ≥ 12 cm.

Other ISOFLAMM® Products – standard membranes

Elastomer- and plastomer waterproofing membranes with synthetic fleece, glass-fibre, glass fleece or aluminium inserts as well as root protection. Self-adhesive membranes, ISOFLAMM[®] BITU-BASE-ROLL separating layer, odourless polymer bitumen-based liquid waterproofing (BITUFLEX[®]), epoxy resin (ISOFLAMM[®] porfil.[®] BIT), primers (ISOFLAMM[®] BIT "f", and BIT "f" rapid) and installation accessories.

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ISOFLAMM[®]

A WATERTIGHT ROOF TO LAST FOR DECADES

Any user of any building hopes for a watertight roof that will last a long time, whether it's for their home, office or commercial space. ISOFLAMM® provides for the high quality to ensure that they are no disappointments.

Better quality for better security: a roof waterproofing system with ISOFLAMM® PS 5 that takes building physics into account, is built to professional standards and following our installation instructions can qualify for optional 10-year insurance coverage (conditions apply) through Generali Insurance Inc. The insurance policy covers any damage resulting from leaks related to defects in ISOFLAMM® PS 5 material and/or handling.

DECADES OF SATISFACTION

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Your ISOFLAMM® adviser and sales partner

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