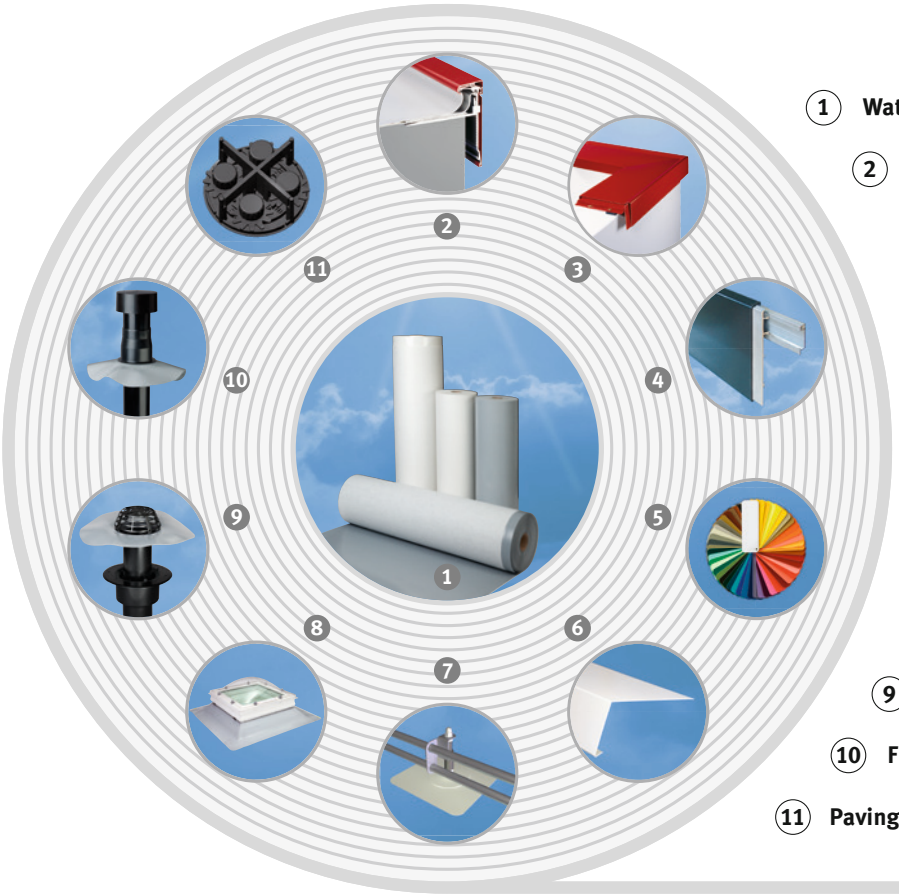
alwitra
DIE DACHMARKE

EVALASTIC® Waterproofing Membranes

The unique homogeneous weldable EPDM waterproofing membrane.

The alwitra waterproofing system

EVALASTIC® waterproofing membranes are part of the proven alwitra waterproofing system. This system comprises:



1. Waterproofing membranes
2. Roof edge trim profiles incl. colour coating
3. Wall capping profiles incl. colour coating
4. Wall flashing profiles incl. colour coating
5. Colour coating
6. Coated metal sheets
7. Snow guard profiles
8. Daylight systems
9. Rainwater outlets
10. Flat roof vents
11. Paving slab supports

alwitra was the first enterprise of the industry to introduce relevant Environmental Product Declarations of the Institute Construction and Environment (Institut Bauen und Umwelt e. V. - IBU) for the EVALON® and EVALASTIC® waterproofing membranes.

For certifications according to DGNB, LEED or BREEAM alwitra provides appropriate product fact sheets.

Perfect solutions for flat roofs

Content

alwitra is the expert when it comes to waterproofing flat and low sloped roofs. With a system of integrated components and many years of experience and know-how, we are offering perfect solutions for new build and roof refurbishment.

Flat roof expertise is also demonstrated in the way in which alwitra cares about its clients. One of the industry's largest teams of expert consultants always keeps in personal touch with clients on site. Working together, individual flat roof solutions are developed to ensure long lasting performance.

Positive proof: alwitra EVALASTIC® waterproofing membranes

A superior EPDM waterproofing membrane with optimum properties, combining more than 55 years of competence and flat roof experience. Worldwide, more than 180 million square metres of flat roofs have now been effectively and reliably covered with alwitra waterproofing membranes. This area increases by several million square metres every year.

Thomas Phillips, Melle, Germany

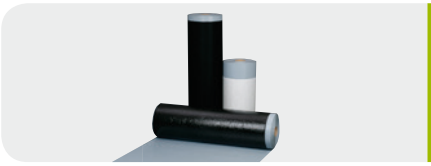
Rhein-Waal-University, Kleve, Germany

Justus-Liebig-University, Gießen, Germany

Top quality - ensured by national and international testing as well as in-house and external control

• Staatliche Materialprüfungsanstalt (MPA), Darmstadt	- external quality control - Certificate of conformity according to DIN EN 13956 and DIN EN 13967
• DEKRA Certification GmbH, Stuttgart	Comprehensive external quality control of the product system
• Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen Leipzig mbH (MFPA Leipzig GmbH), Germany • Warringtonfire Gent (Belgium) • Materialprüfungsanstalt Universität Stuttgart, (MPA Stuttgart)	Certificate (AbP) according to DIN 4102-7 (Resistance to flying sparks and radiant heat) as well as DIN V ENV 1187 resp. DIN CEN/TS 1187, testing method 1 (exposure to external fire) with classification according to DIN EN 13501-5 resp. AbP Tests according to DIN 4102-1 (building material class B2) and DIN EN ISO 11925-2 with classification according to DIN EN 13501-1 (class E)
• Environmental Product Declaration	EPD's for various application methods and material thicknesses according to ISO 14025 and EN 15804 corresponding to the guidelines of the Institute Construction and Environment (IBU)
• Forschungsanstalt, Fachgebiet Landschaftsbau, Geisenheim	Testing according to FLL 99 (root/rhizome penetration resistance)
• Union Belge pour l'agrément technique dans la construction (UBAtc), Brüssel (B)	ATG approval according to UEAtc Technical Guide for waterproofing systems made of EPDM
• SGS Intron Certificatie B.V. Culemborg (NL)	KOMO attest-met-productcertificaat according to BRL 1511 deel 1 + deel 4
• Groupe Qualiconsult, Vélizy-Villacoublay (F)	Cahier des Clauses Techniques (CCT)

DAS WORMSER Theatre, cultural and conference centre, Worms, Germany



EVALASTIC® waterproofing membranes

The unique homogeneous weldable EPDM waterproofing membrane.

Limited availability of natural resources requires the building industry to rethink the selection and use of materials. Innovative product development, as with EVALASTIC® waterproofing membranes, has proven that advanced building materials can offer both ecologically and economically sound solutions.

Stonehenge Visitor Centre, Salisbury, England

Rhein-Waal-University, Kleve, Germany

Environmental Awareness starts at the Top

Certificate No. 1343 - CPR - K1562/03.14

EVALASTIC® waterproofing membranes are high-quality EPDM membranes according to DIN 18531-2 (respectively DIN 20000-201) and DIN 18195-2 (respectively DIN V 20000-202) for single-ply waterproofing of all kinds of flat roof construction and application methods including the waterproofing of foundations.

Product and system audits are carried out according to the requirements of the European standards DIN EN 13956 and DIN EN 13967 and provide the basis for the entitlement to CE marking.

Increasingly, ecologically-conscious building owners and architects are unwilling to compromise when specifying for new build and refurbishment works. They demand a superior waterproofing that also represents state-of-the-art technology of synthetic and rubber materials from an ecological point of view.

alwitra offers such an environmentally friendly roof waterproofing: EVALASTIC®. EVALASTIC® is an outstanding waterproofing membrane with a record of practical experience of more than 35 years. The EPDM base polymer of EVALASTIC® has proven its suitability for building and construction purposes over decades, providing high resistance to chemicals, ideal low temperature flexibility and outstanding weathering resistance.

The thermoplastic elastomers in the material guarantee this excellent longterm performance even under severe weather conditions.

In addition to ecological production and long-term reliability, the ease of installation is another major benefit of this environmentally friendly alternative.

EVALASTIC® waterproofing membranes are homogeneously hot air welded and sealed under site conditions. Due to the elastic characteristics of the EPDM material, the membranes resist extreme variations of temperature without any damage: the service temperature ranges from -40 °C up to +100 °C.

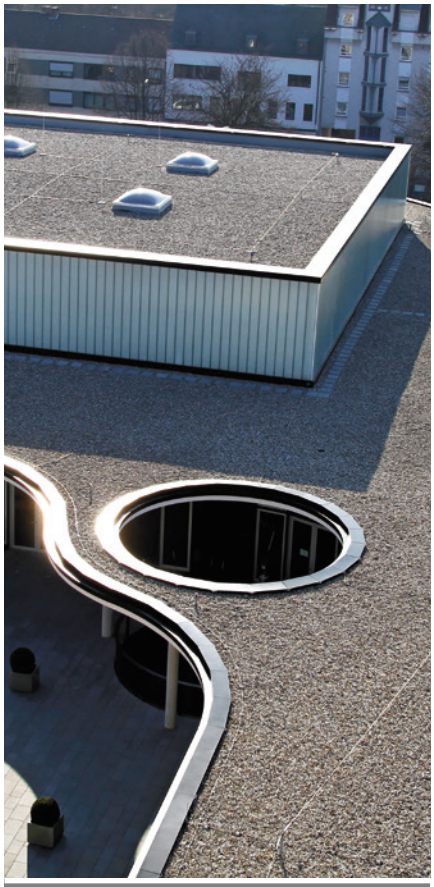
New building or refurbishment, ventilated or non-ventilated roofs, roof gardens or industrial roofs – EVALASTIC® is an ecologically sound choice for all application techniques and roof configurations. The high quality of EVALASTIC® waterproofing membranes is not compromised by internal reinforcement or lamination of layers. This premium waterproofing with homogeneous, hot air welded seams has a long service life.

The build-up and the intended use of the roof area, will determine whether EVALASTIC® V, the reinforced membrane with polyester-fleece backing, would be a more appropriate choice of membrane.

Highway service area and rest stop, Gruibingen, Germany

“Die Gläserne Manufaktur” (The Transparent Factory), Volkswagen, Dresden, Germany

Environmental Awareness starts at the Top



DAS WORMSER Theatre, cultural and conference centre, Worms, Germany

Choose EVALASTIC® today for a waterproofing system which will still be advanced tomorrow!

- high-quality EPDM membrane
- absolutely free from bitumen, plasticizers, PVC, chlorine or the like
- bitumen-compatible
- compatible with all kinds of insulation materials
- homogeneous on-site seam welding by simple and environmentally friendly hot air jointing
- outstanding resistance to chemicals and weathering
- extremely high resistance to low temperatures
- universally applicable in all climate zones
- exemplary life cycle assessment results: long service life with carefully selected resources
- can be recycled
- quality controlled product also in accordance with DIN ISO 9001
- certified product quality according to the EC-eco-audit regulation DIN ISO 14001
- Energy Management Systems: certified according to DIN ISO 50001
- Environmental Product Declaration according to the guidelines of the Institute Construction and Environment (IBU)

Casino, Bad Wiessee, Germany

Technical data

Excerpt Tests according to DIN EN 13956 and DIN EN 13967			EVALASTIC® V	EVALASTIC® VGSK
Properties	**Testing method**	**Unit**	**Result [a]**	
Visible defects	EN 1850-2		passed	
Effective thickness (e_{eff}) of the waterproofing	EN 1849-2	mm	1.2 / 1.5	1.5
Water tightness	EN 1928 method B	kPa	≥ 400	
External fire performance	ENV 1187 CEN/TS 1187		class B_{ROOF} (t1) [b] Resistant to flying sparks and radiant heat, confirmed by General Building Construction Supervision Test Certificates [b]	
Reaction to fire	EN 13501-1		class E	
Joint peel resistance	EN 12316-2	N/50 mm	≥ 150	
Joint shear resistance	EN 12317-2	N/50 mm	≥ 200 [c]	
Max. tensile force	EN 12311-2 (A)	N/50 mm	≥ 500	
Elongation at max. tensile force	EN 12311-2 (A)	%	≥ 60	
Resistance to impact load	EN 12691 (B)	mm	≥ 300	
Resistance to static load	EN 12730 (B)	kg	≥ 20	
Tear resistance (nail shank)	EN 12310-1	N	≥ 300	
	EN 12310-2	N	≥ 150	
Resistance to root penetration	EN 13948		passed [d]	
Dimensional stability	EN 1107-2	%	≤ 0.5	
Foldability at low temperatures	EN 495-5	°C	≤ -40	
Durability (UV exposure, high temperatures and water)	EN 1297	visual control	passed	
Durability of water tightness to weathering	EN 1296 EN 1928	kPa	≥ 60	
Durability of water tightness to chemicals incl. water	EN 1847 EN 1928	kPa	≥ 60	
Hail resistance	EN 13583	m/s	≥ 17	
Water vapour permeability	EN 1931	μ	approx. 100,000	
Ozone resistance	EN 1844		passed	
Bitumen compatibility	EN 1548		passed	

[a] Minimum requirements without specified tolerances
[b] Valid for the respective tested build-up
[c] Or tear outside the joint
[d] The test according to the "FLL method for the examination of the root resistance of membranes and coatings for green roofs" was successfully passed already in 1999.

The results contained in this document are taken from tests and comply with the current standards as of 01/2020.
Normal tolerances apply.

Product Range

	EVALASTIC® V with polyester fleece backing	EVALASTIC® VGSK with glass/polyester fleece backing and self-adhesive coating
Effective thickness of waterproofing layer (mm)	1.2 / 1.5	1.5
Membrane widths (m) - with welding edge on one side - with welding edge on both sides	1.05 / 1.55 1.09 / 1.59	1.05
Tape widths (cm)	54 / 79	
Standard lengths (m)	25	
Special lenghts	on request	
Standard colour	light grey	
Special colours	on request	

Accessories:

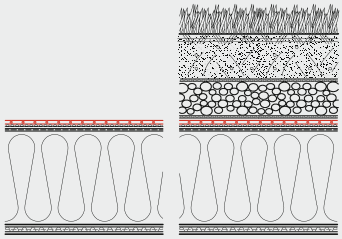
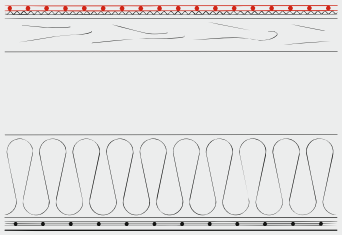
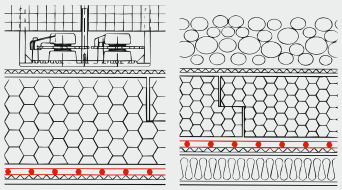
EVALASTIC® unbacked tape widths - Thickness (mm) - Width (cm)	1.5 16 / 20 / 25 / 33 / 50 / 66 / 75 / 105 / 155	
EVALASTIC® preformed details - Internal / External corners - Flanges [1] - Lightning conductor and cable penetrations	• • •	
EVALASTIC® VSKA tapes with self-adhesive underside coating **Length (m)** **Widths (cm)** - with welding edge on one side - with welding edge on both sides	25 33 / 43 66 / 86	
EVALASTIC® coated metal sheets, light grey - Nominal thickness (mm) - Length / width (m)	1.2 2.00 / 1.00	
Adhesives - alwitra L 40 - alwitra PUR D	• •	
alwitra primer SK **alwitra primer SK-L**	•[2] •[2]	•[2, 3] •[2, 3]

[1] For alwitra flat roof outlets and vents

[2] Primer for EVALASTIC® VSKA tapes

[3] Primer for various substrates, e.g. bituminous sheets

EVALASTIC® waterproofing membranes

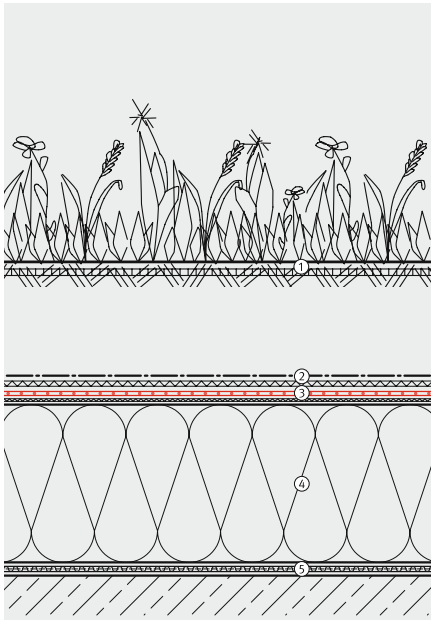
Application Examples	WATERPROOFING MEMBRANES loose laid with ballast	WATERPROOFING MEMBRANES mechanically fastened	WATERPROOFING MEMBRANES bonded
	gravel, roof garden, concrete paving slabs	in the seam overlap	with cold or hot-melt adhesives
non ventilated roofs (warm deck roofs) 	**EVALASTIC® V** depending on the purpose and the condition, especially roughness of the substrate	**EVALASTIC® V** depending on the building material class of the insulation material and on the approved roof build-up	**EVALASTIC® V** **EVALASTIC® VGSK** on thermal insulation materials with backing or fire protection layer, depending on the approved roof build-up directly on the bituminous waterproofing to be refurbished or self-adhesive EVALASTIC® VGSK directly bonded on unbacked rigid EPS foam boards
ventilated (two layer) roofs (cold deck roofs) 	**EVALASTIC® V** depending on the condition, especially roughness of the substrate	**EVALASTIC® V** depending on the building material class of the upper layer and on the approved roof build-up	**EVALASTIC® V** **EVALASTIC® VGSK** on a non-combustible upper layer or fire protection layer, depending on the approved roof build-up
inverted roofs / DUO roofs 	**EVALASTIC® V** depending on the condition, especially roughness of the substrate		

Defra, Department for Environment, London, England

Volkswagen Autostadt (Car City), Wolfsburg, Germany

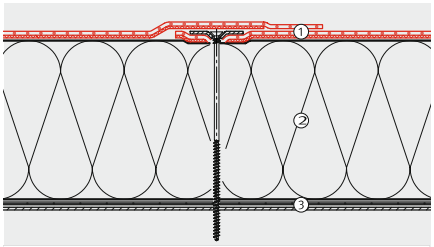
EVALASTIC® waterproofing membranes

Green roof build-up



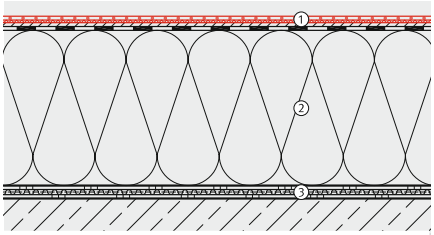
① Vegetation/substrate/filter/ drainage layer
② Protection layer
③ Waterproofing membrane EVALASTIC® V
④ Thermal insulation
⑤ Vapour barrier

Mechanically fastened roof build-up



① Waterproofing membrane EVALASTIC® V
② Thermal insulation
③ Vapour barrier

Bonded roof build-up



① EVALASTIC® V waterproofing membrane
② Thermal insulation, backed
③ Vapour barrier

- with excellent characteristics
- perfectly suitable for mechanical fastening
- ideal for application with alwitra adhesives
- with an integrated cushioning layer (polyester fleece backing), ideal for refurbishment
- provide an economic solution for loose laying with ballast
- Combined waterproofing and root penetration protection for green roofs
- Efficient application and welding
- Reliable flashing technique

The EVALASTIC® seam joint

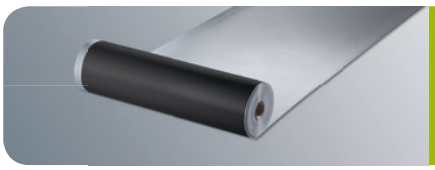
Our contribution for a good climate on the building site.

Roofers enjoy using EVALASTIC®. Hardly surprising, as the simple EVALASTIC® jointing procedure means installation is just as quick and efficient as with most other synthetic single ply membranes.

The inherent properties of this thermoplastic elastomer ensure full and homogeneous welding capability, not only in the seam area, but over the whole membrane.

With standard hot air welding machines, the welding of seams is both simple and effective.

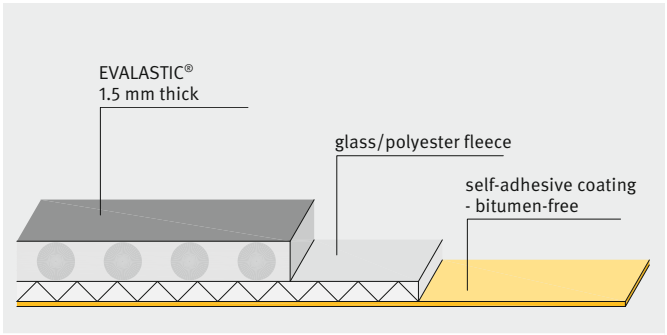
Even homogeneous and reliable waterproofing of complex flashing details is achieved on site. Roof penetrations, corners and complicated flashing details can be produced on site – fast and precisely without the need for preformed parts. For this purpose, EVALASTIC® tapes are simply shaped and homogeneously welded using hot air.



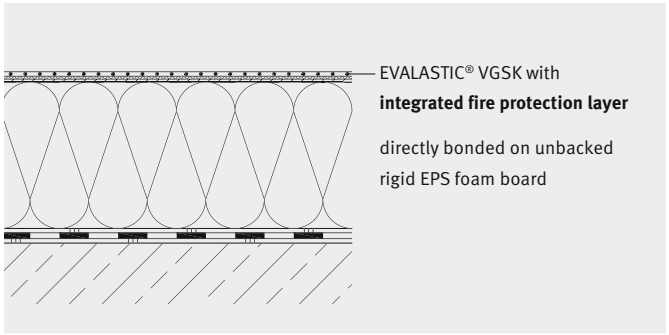
EVALASTIC® VGSK
The self-adhesive waterproofing membrane

EVALASTIC® VGSK waterproofing membranes are based on our long-term proven EVALASTIC® waterproofing membranes. Additionally, the membranes have a glass/polyester fleece backing and a synthetic adhesive compound coating. After laying, the fleece backing also reduces stress and strain on the system (vapour decompression, movement compensation, etc.). The coating is bitumen-free and solvent-free and covered with a protective film when delivered. Product and system audits are carried out according to the requirements of the European standards DIN EN 13956 and DIN EN 13967 and provid e the basis for the entitlement to CE marking.

EVALASTIC® VGSK waterproofing membranes are 25 m long, 1.05 m wide and produced with a non-coated welding edge on one side. Thus, a homogenous welding in the seam area is ensured.



alwitra EVALASTIC® VGSK



New build

Efficient application without fire hazard

EVALASTIC® VGSK can be applied on many backed insulation materials and bituminous felts - also for refurbishment. In this case, it is necessary to apply a priming coat with alwitra primer SK or SK-L before.

In combination with the self-adhesive EVALASTIC® VSKA tapes, flashings and cappings can be waterproofed economically and reliable without additional adhesives. Furthermore, the basic rules and notes contained in the installation manual for EVALASTIC® waterproofing membranes are to be observed.

Stonehenge Visitor Centre, Salisbury, England

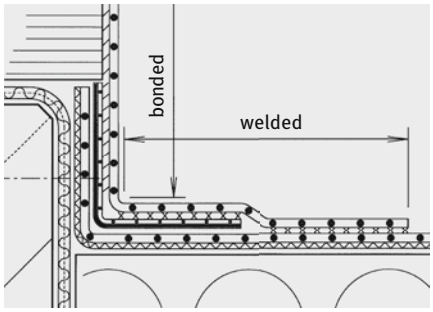
EVALASTIC® VSKA
The self-adhesive tapes

EVALASTIC® VSKA tapes are membrane tapes (thickness of waterproofing layer 1.5 mm) based on the long-term proven EVALASTIC® waterproofing membranes. Additionally, they are equipped with a polyester fleece backing and a synthetic adhesive compound coating. After laying, the fleece backing also reduces stress and strain on the system (vapour de-compression, movementcompensation, etc.). The coating is bitumen-free and solvent-free and covered with a protective foil when delivered.

Application

Adhesive-free and windproof flashing and waterproofing with EVALASTIC® waterproofing membranes. The underside coating of the EVALASTIC® VSKA tapes will adhere to various substrates at the roof perimeter and wall flashing area, e. g. timber, concrete, bituminous felt, brick work, zinc and steel sheets, aluminium, but also to various synthetic materials, e. g. rooflight kerbs made of polyester and other synthetic materials or built-in details made of polyvinyl chloride (PVC), polypropylene (PP), etc.. A priming coat with alwitra primer SK or SK-L needs to be applied before. The primer must be completely dry before applying the EVALASTIC® VSKA tapes.

Rhein-Waal-University, Kleve, Germany



EVALASTIC® VSKA tapes are produced with a non-coated welding edge on both sides or on one side. Thus, a homogeneous welding of the EVALASTIC® VSKA tapes to the roof sealing is guaranteed.

Product specifications		
Width	**Length**	**Characteristics**
86 / 66 cm	25 m	central underside coating with uncoated welding edge (approx. 12 cm) **on both sides**
43 / 33 cm	25 m	underside coating with uncoated welding edge (approx. 12 cm) **on one side**
Installation temperature		from +5 °C to +40 °C
Storage		in a dry and cool place

Supply specifications	
Product	**Supply**
EVALASTIC® VSKA tapes	membrane rolls with various widths
Colour	light grey

EVALASTIC® standing seam effect profile
Structure on your roof - as easy as this

Building owners and architects increasingly regard the roof as the fifth façade. In addition to the safe protection of the building, the appearance of the roof area is becoming more and more important.

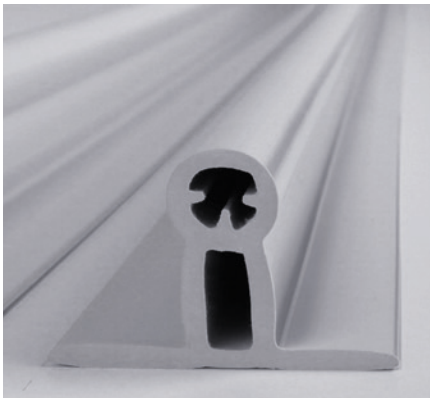
Thanks to their material characteristics, synthetic waterproofing membranes not only meet the requirements for roof aesthetics but also the requirements for reliable waterproofing over decades.

EVALASTIC® standing seam effect profiles can be laid as easily and safely as all alwitra waterproofing membranes. Both, waterproofing membrane and profile adapt to the given roof shape.

The connection of roof penetrations is particularly safe with the alwitra system components. This applies especially to retrofitting.

Roof structuring can also be carried out on roof surfaces with a low slope while other types of roof covering reach their limits here.

EVALASTIC® standing seam effect profiles can be retrofitted on request.



DRK German Red Cross Station, Wolfsburg, Germany

Hotel Garni Muttler Alpinresort & Spa, Samnaun, Switzerland

Product description: The EVALASTIC® standing seam effect profile is an extruded hollow profile.

Length: 2 m

Colour: light grey

Packing unit: 90 m/cardboard box (dowel pins for profile connection enclosed)

Installation: with hot air

Application instructions: Installation preferably from the ridge to the eaves. Profiles are normally placed on the seam, or for a narrower spacing e.g. in the membrane centre.

EVALASTIC® maintenance walkway tiles

High-quality maintenance walkway tiles for safe maintenance walkways on the roof.

In the course of an efficient use of available spatial resources, technical systems are increasingly being installed on flat roof areas. This means that production lines and other operational facilities can be optimally designed. The installation of technical systems on flat roofs also means that the areas for maintenance work and the routes to them are subject to greater stress. Therefore it is of advantage to carry out these areas as inspection and maintenance walkways. EVALASTIC® maintenance walkway tiles are used to protect the waterproofing and for the optical marking of maintenance walkways on flat roofs.

Anti-slip surfaces and higher perforation protection for the waterproofing are the requirements for materials used in these areas. The textured surface of EVALASTIC® maintenance walkway tiles provides a strong grip, even on sloped and wet areas. Moreover, the maintenance walkway tiles also provide for load distribution. Material-homogeneous welding of the protection plates with the EVALASTIC® waterproofing membranes prevents any movement of the maintenance walkway tiles even at increased wind loads. The visible delineation between waterproofing membrane and maintenance walkway tiles has a further advantage: It clearly marks the roof areas people can safely walk on.

Intended use:

EVALASTIC® maintenance walkway tiles are used to provide protection for the waterproofing and to mark the inspection and maintenance walkways on flat roofs covered with EVALASTIC®. The textured surface provides a strong grip, even on sloped and wet areas. Moreover, the maintenance walkway tiles also provide for load distribution.

Material:

Analogous to EVALASTIC® waterproofing membranes,

UV stable and weatherproof.

Product design:

Colour: dark grey; Surface: structured;

Texture height: 4 mm; Lower side: even

Dimensions:

Length x Width:	approx. 800 x 600 mm
Thickness:	approx. 8.5 mm
Weight:	approx. 6.9 kg/m² or. approx. 3.3 kg/tile

alwitra

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06/2020