alwitra

DIE DACHMARKE

EVALASTIC®

Roofing and Water-proofing Membranes

EVALASTIC®

The well-proven, ecological alternative.

Quality at the highest level

▲ Expo 2000 Pavilion, Germany

▲ Expo 2000 Pavilion, Germany

▲ Zoo Wuppertal, Germany

▲ The “Autostadt”, Wolfsburg, Germany

EVALASTIC® Project International (sample)

Project	Location	Size
Searle Phamaceutical	Newcastle, England	3,000 m²
Samworth Academy	Leicester, England	4,000 m²
Grand Opera House	Belfast, Northern Ireland	1,000 m²
Cockenzie Primary School	Scotland	1,000 m²
Peckham Academy	London, England	4,000 m²
DaimlerChrysler AG, Logistics Centre	Reutlingen, Germany	30,000 m²
Thomas Philipps GmbH, Logistics Centre	Melle-Westerhausen, Germany	50,000 m²
Kober AL-KO GmbH	Kötz, Germany	38,200 m²
DaimlerChrysler AG	Wörth, Germany	33,000 m²
Expo 2000, Pavilion 13	Hanover, Germany	25,000 m²
Volkswagen AG, Pressing Plant	Emden, Germany	26,000 m²
Orafol, Klebetechnik GmbH	Oranienburg, Germany	10,000 m²
VDO Schindling AG	Babenhausen, Germany	12,000 m²
European University	Bressanone, Italy	10,000 m²
Electricity Production Unit ENEL	Milano-Turbigo, Italy	4,500 m²
Euroforum, Offices and Hotel Building	Luxemburg	7,000 m²
TARKETT-Sommer Factory Wiltz	Luxemburg	11,000 m²
SOLUTIA	Louvain la Neuve, Belgium	10,000 m²
TROPICANA (Pepsi-Cola)	Zeebrugge, Belgium	4,200 m²
Searle Continental Pharma	Louvain la neuve, Belgium	3,600 m²
ESSENT	Maasbracht, Holland	4,000 m²
Komdragmet, Administration and Sales Center	Jakutsk, Russia	4,300 m²
JM AB Företagshuset	Gustavsberg, Sweden	3,800 m²

▲ Defra, Department for Environment

▲ Coliseum, London

▲ Gießen University, Germany

▲ “The Transparent Factory”, Germany

▲ The “Autostadt”, Wolfsburg, Germany

▲ Opera House, Belfast, Northern Ireland

alwitra EVALASTIC® is part of the proven alwitra product system.

This system also comprises:

roofing and waterproofing membranes (synthetic and elastomeric membranes) - roof edge trims - wall cappings - wall flashing profiles - synthetic coatings - coated steel sheets - rooflights (smoke venting systems) - rainwater outlets - flat roof vents - paving slab supports

EVALASTIC® roofing and waterproofing membranes

The sophisticated EPDM alternative with CE marking

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

EVALASTIC®

EVALASTIC® V

▲ Baden-Baden Hospital, Germany

▲ Kindergarden, Kappel, Germany

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

• Staatliche Materialprüfungsanstalt (MPA), Darmstadt, Germany	- external quality control - Certificate of conformity according to DIN EN 13956 and DIN EN 13967
• TÜV Rheinland Group, Cologne, Germany	Comprehensive external quality control of the product system
• Forschungs- und Materialprüfungsanstalt (FMPA) Baden-Württemberg, Stuttgart, Germany • Gesellschaft für Materialforschung und Prüfanstalt für das Bauwesen (MFPA), Leipzig, Germany • Materialprüfungsamt Nordrhein-Westfalen (MPA NRW), Dortmund, Germany • Warringtonfiregent NV, Testing Institute, Ghent University, Ghent, Belgium	Tests with General Building Construction Supervision Test Certificate (AbP) according to DIN 4102-7 (Resistance to flying sparks and radiant heat) as well as DIN EN V1187-1 (external fire load) with classification according to DIN EN ISO 13501-5 (class E) Tests according to DIN 4102-2 (building material class B2) and DIN EN ISO 11925-2 with classification according to DIN EN 13501-1
• Forschungsanstalt, Fachgebiet Landschaftsbau, Geisenheim, Germany	Testing according to FLL 99 (root/rhizome penetration resistance)
• Union Belge pour l'agrément technique dans la construction (UBAtc), Brussels, Belgium	ATG approval according to UEAtc Technical Guide for waterproofing systems made of EPDM
• IKOB-BKB BV, Houten, Netherlands	KOMO attest-met-productcertificaat according to BRL 1511 deel 1

Product range

	EVALASTIC® roofing and waterproofing membranes homogeneous waterproofing membrane, without backing	**EVALASTIC® V roofing and waterproofing membranes** homogeneous waterproofing membrane, with polyester fleece backing
Thickness excluding backing (mm)	1.2/1.5	1.2/1.5
Membrane widths (m)	1.05/1.55	1.05/1.09[1]/1.55
Cut widths (cm)	10/16/20/25/33/ 50/66/75	54/79
Standard lengths (m)	25	25
Specified lengths	on request	on request
Standard colour	light grey	light grey
Special colours [2]	on request	on request
EVALASTIC® preformed details		
• Internal corners	•	•
• External corners	•	•
• Flashing collar [3]	•	•
• Round disc [4]		•
EVALASTIC®-SKA flashing membrane **with self-adhesive coating on underside**		
• Length (m)	25	25
• Widths (m)	75[1], 42/33	75[1], 42/33
EVALASTIC® coated steel sheet, light grey		
• Nominal thickness (mm)	1.2	1.2
• Length / width (m)	2.00 / 1.00	2.00 / 1.00
Adhesives		
• alwitra-PUR D		•
• alwitra-L 40		•

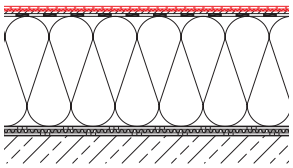
[1] with double selvedge [2] e. g. black
[3] for alwitra flat roof outlets and vents
[4] for covering fastening elements outside the seam area

EVALASTIC® V roofing and waterproofing membranes

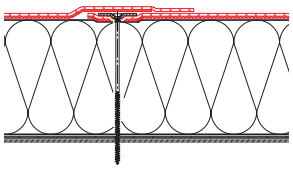
with excellent characteristics,

- are perfectly suitable for mechanical fastening
- are ideal for application with alwitra adhesives
- come with an integrated cushioning layer (polyester fleece backing)
- ideal for refurbishment

Bonded roof build-up



Mechanically fastened roof build-up

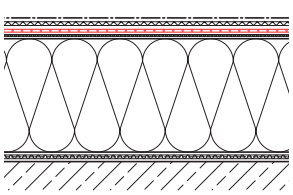


Unbacked EVALASTIC® roofing and waterproofing membranes

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

Green roof build-up

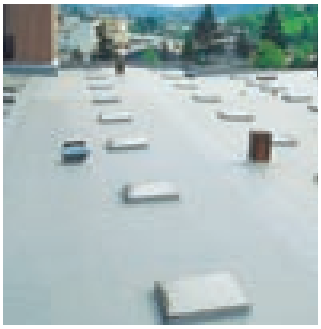


The EVALASTIC® seam joint

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® flashing membranes are simply shaped and homogeneously welded using hot air.

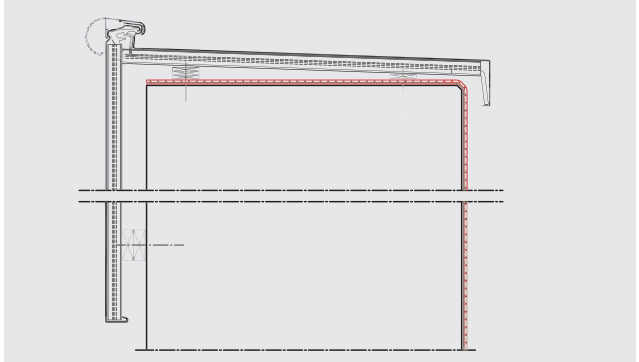


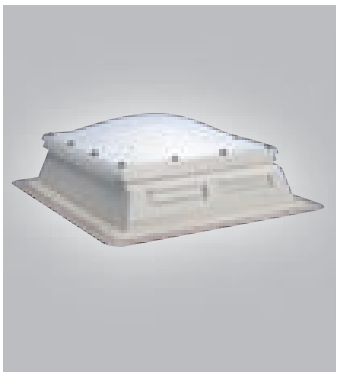
▲ alwitra rooflights

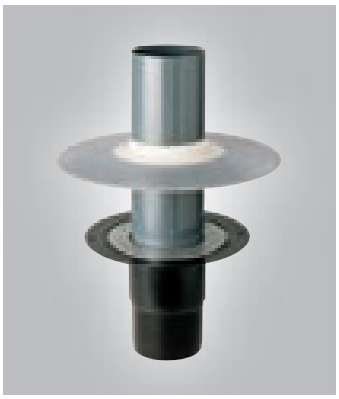
▲ alwitra system profiles

EVALASTIC® roofing membranes can be professionally connected to all built-in details of the alwitra roofing system, e.g. rainwater outlets, rooflights or roof vents. alwitra's universally proven and accepted system profiles are equally suitable when aesthetically pleasing roof perimeters are required. Special EVALASTIC® coated steel sheets, EVALASTIC®-SKA selfadhesive flashing membranes, preformed corners and adhesives complete the system.

alwitra system profiles - for an aesthetically pleasing solution for durable roof perimeters of highest quality.







A complete system from one source: the alwitra roofing system comprises perfectly matching roofing components.

Environmental Awareness starts at the Top

CE marking 1343 - BPR - 06-1431

EVALASTIC® roofing and waterproofing membranes are high-quality EPDM membranes according to DIN 18531-2 and DIN 18195-2 for single-ply roofing 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 roofing membrane with a record of practical experience of more than 20 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® roofing and 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 -30°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® roofing and 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.

▲ Thomas Philipps, Melle, Germany

▲ Essent, Maasbracht, Netherlands

▲ Solutia, Belgium

Choose EVALASTIC® today for a roofing 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

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DIE DACHMARKE

Technical data

Excerpt **Tests according to DIN EN 13956 and DIN EN 13967**			**EVALASTIC®** unbacked	**EVALASTIC® V** with polyester fleece backing
Properties	**Testing method**	**Unit**	**Result** [a]	**Result** [a]
Visible defects	EN 1850-2		passed	
Effective thickness (e_{eff}) of the waterproofing	EN 1849-2	mm	1.2/1.5	
Water tightness	EN 1928 method B	kPa	≥ 400	
External fire performance	ENV 1187		class B_{roof}(t1) Resistant to flying sparks and radiant heat, confirmed by General Building Construction Supervision Test Certificates	
Reaction to fire	EN 13501-1: 2002		class E	
Joint peel resistance	EN 12316-2	N/50mm	≥ 80	
Joint shear resistance	EN 12317-2	N/50mm	≥ 200 [b]	
Tensile strength Max. tensile force	EN 12311-2	N/mm² N/50mm	≥ 5	≥ 500
Elongation at break Elongation at max. tensile force	EN 12311-2	% %	≥ 300	≥ 50
Resistance to impact load	EN 12691 method B	mm	≥ 300	≥ 300
Resistance to static load	EN 12730 method B	kg	≥ 20	≥ 20
Tear resistance (nail shank)	EN 12310-1 EN 12310-2	N N	≥ 80 ≥ 35	≥ 80 ≥ 80
Resistance to root penetration	prEN 13948		passed	passed [c]
Dimensional stability	EN 1107-2	%	≤ 2	≤ 0.5
Foldability at low temperatures	EN 495-5	°C	≤ - 35	
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 16583	m/s	KLF	≥ 17
Water vapour permeability	EN 1931	μ	60,000	
Ozone resistance	EN 1844		passed	
Bitumen compatibility	prEN 1548		passed	

[a] Minimum requirements without specified tolerances
[b] or tear outside the joint
[c] Waterproofing and welding technique identical with EVALASTIC®, unbacked
KLF = no results, membrane will be applied under ballast only (e. g. gravel, slabs, vegetation)

The results contained in this document are taken from tests and comply with the current standards as of 01/07. Normal tolerances apply.
alwitra reserves the right to improve their products at any time without prior notice.

01/07

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