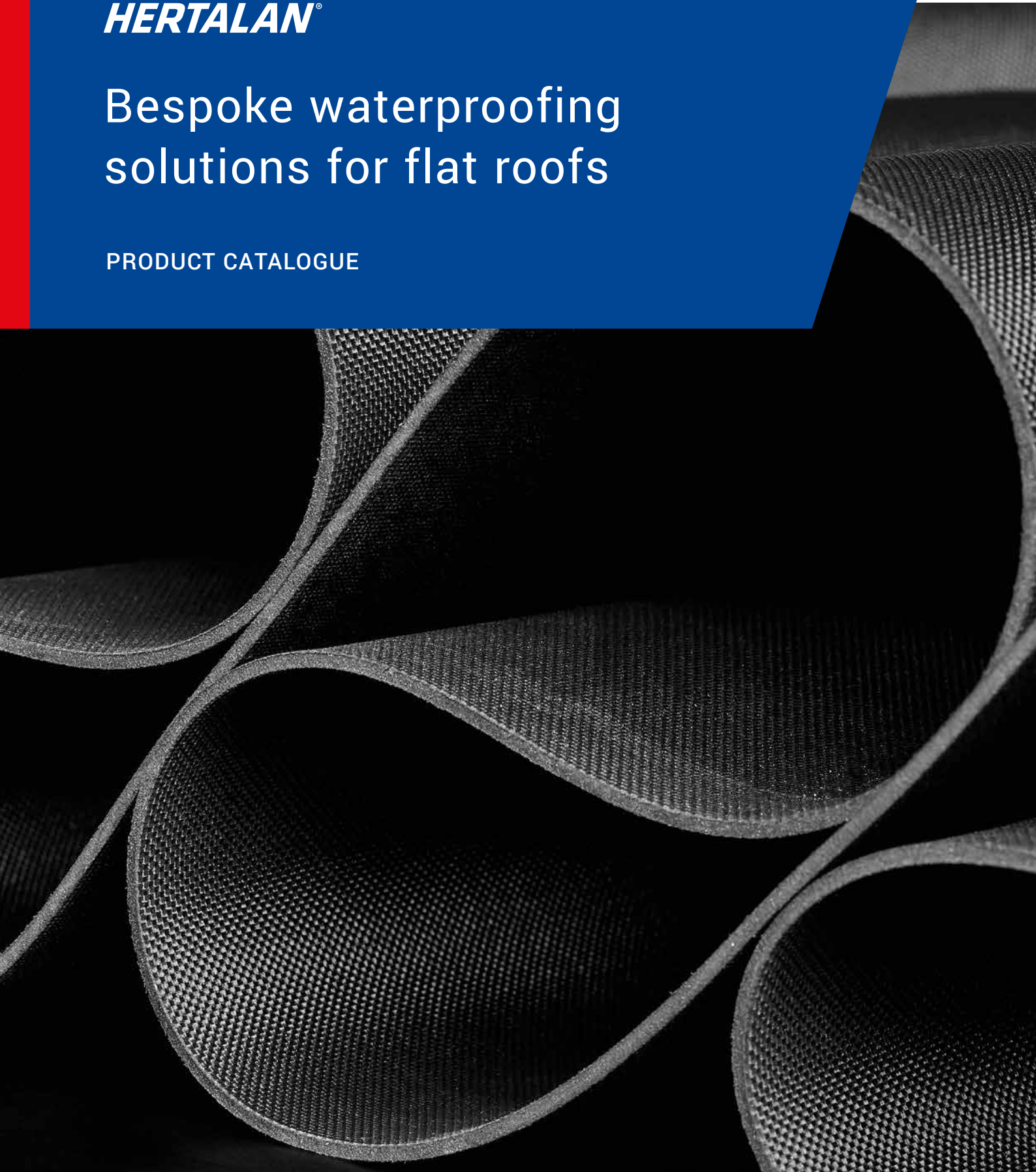


***HERTALAN***<sup>®</sup>

# Bespoke waterproofing solutions for flat roofs

PRODUCT CATALOGUE



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“For over 50 years, HERTALAN® has been Europe’s leading manufacturer of EPDM waterproofing membranes. Our products are made with the highest quality materials and craftsmanship, and they are backed by our unmatched support. If you’re looking for waterproofing solutions for flat roofs and facades that you can trust, look no further than HERTALAN®.”



**Allen Coldrake**

Director of Sales and Technical Roofing

The sophisticated EPDM systems from HERTALAN® make the permanent waterproofing of flat roofs, façades and buildings with EPDM easier than ever before. Whether in the form of EPDM sheets, membranes or strips – with HERTALAN® we offer the right solution for roofing and facade application.

**HERTALAN® EASY COVER sheets combine the outstanding material properties of EPDM with custom-made solutions.**

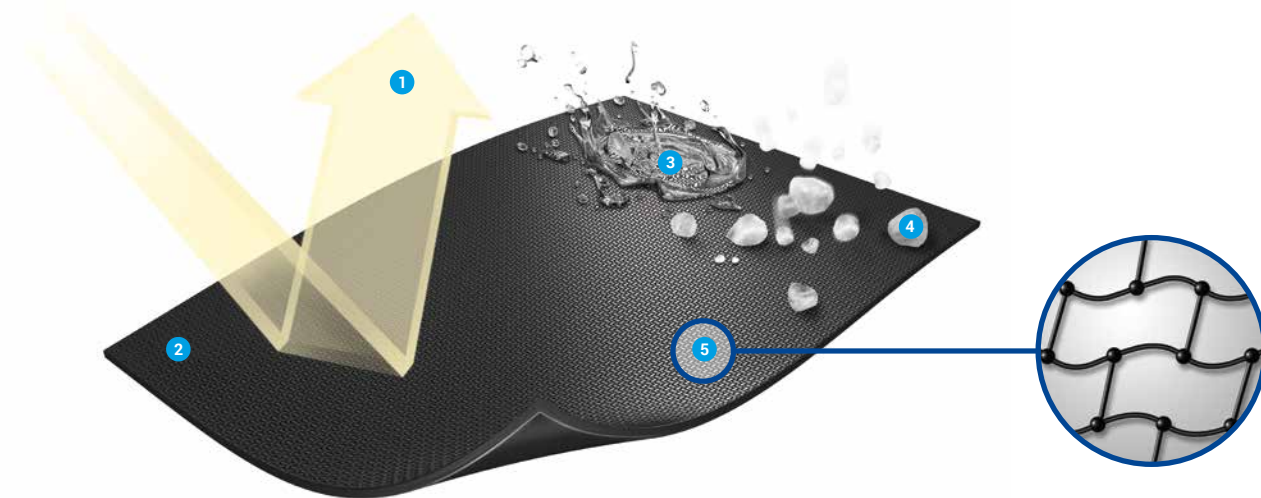
Due to EPDM’s unique material properties, it is unbeatable in terms of flexibility and durability. The South German Plastics Centre (SKZ) in Würzburg, which has tested our HERTALAN® EPDM membranes in a long-term study, has acknowledged that the material has a service life of more than 50 years. Due to its long-lasting durability, the synthetic rubber has a positive environmental impact and can be recycled in an eco-friendly manner too. The fact that EPDM membranes can be applied without any need for naked flames provides additional work safety.

# Waterproofing solutions with EPDM

## Why use EPDM?

A waterproofing system such as used on flat roofs has to endure a lot. Above all, moisture, thermal and mechanical stresses (wind, sun, cold, precipitation and so on) lead to serious material demands and quickly age many waterproofing systems. It's no wonder that the procedure for producing EPDM (ethylene propylene diene monomer rubber) received a Nobel prize.

Due to its molecular structure, EPDM has outstanding material properties:



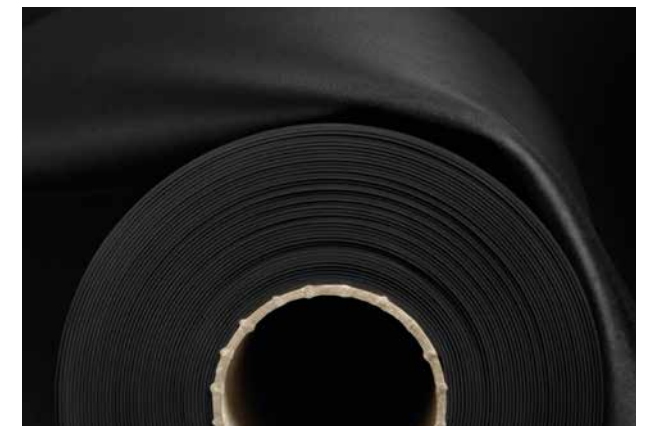
- 1 **Permanently resistant to**
  - UV radiation
  - Ozone radiation
- 2 **EPDM**
- 3 **Extremely resistant to a wide range of chemicals**

- 4 **Excellent resistance to ageing and weather, especially:**
  - Rain
  - Hail, ice, snow
  - High and low temperatures

- 5 **Fully cross-linked molecular structure**
  - Permanently elastic and highly flexible
  - Elongation at tear of up to 600 %
  - Flexible in cold weather down to -40 °C
  - Virtually shrink free
  - Bitumen resistant
  - Halogen and softener free

## HERTALAN® – our EPDM waterproofing system

We have developed our sophisticated HERTALAN® EPDM systems for the special challenges and reliable protection of flat roofs and building waterproofing, for both refurb and new builds. As the first European manufacturer of EPDM waterproofing membranes and sheets, we have been supplying outstanding and long-lasting quality since the 1960's.



HERTALAN® is a plasticiser free material that is permanently resistant to UV rays, ozone and other natural atmospheric influences and is also extremely elastic within the temperature range of -45°C to +120°C. Thanks to its outstanding elasticity of up to 500%, it can be put to flexible use in various waterproofing situations. HERTALAN® withstands all tensile stresses that a flat roof is exposed to during the course of its normal life cycle. These unique material properties of EPDM mean that HERTALAN® has an especially long service life. The South German Plastics Centre (SKZ) in Würzburg, which has tested our EPDM membranes in a long-term study, has acknowledged that HERTALAN® EPDM systems have a service life of more than 50 years.

In addition, the sustainability of HERTALAN® has been certified by the Dutch certification institute NIBE (Institute for Building Biology and Ecology) by way of a DUBO certificate and an environmental product declaration (EPD).

Our intelligent HERTALAN® EPDM systems make permanent flat roof and building waterproofing with EPDM easier than ever before. While the HERTALAN® EASY COVER sheet system, which is readymade in the factory, guarantees quick and easy application in a single work step, the HERTALAN® EASY WELD roofing membrane system enables safe processing without any risk of fire thanks to hot-air welding.



# Good reasons to choose HERTALAN®

## 50 years of practical experience on the roof



In the middle of the 1960's, we became the first European manufacturer of EPDM waterproofing membrane – firing the starting shot for the HERTALAN® brand. Since then, we have been pouring all of our experience and our passion for EPDM into the development, manufacture and application of sustainable waterproofing systems. We can look back on more than 50 years of tried and tested quality. Today, CARLISLE® CM Europe is Europe's market leader in the field of EPDM waterproofing solutions.

## Flameless application



Product application without any need for naked flames is a requirement we have taken into consideration in our application techniques. The HERTALAN® seam joining method is implemented using hot-air technology and an EW joining edge that is ready-made in the factory. An emerging welding bead indicates an ideal and permanently safe seam connection. Alternatively, seams can also be adhered together.

## Waterproofing concepts far beyond the flat roof



In addition to flat roof waterproofing, we offer you airtight and waterproof solutions for façades and buildings.

The following products are also used for this purpose: HERTALAN® EASY STICK GS, HERTALED® and HERTALAN® EPDM strips.

## Ecologically safe



HERTALAN® has an extremely high level of chemical resistance and is permanently resistant to bird droppings, numerous chemical emissions and other aggressive environmental influences. HERTALAN® is a pure EPDM and does not contain any hazardous additives such as heavy metals, halogens or highly volatile plasticisers.

## Sustainability and certification



The sustainability of HERTALAN® has been certified by the Dutch certification institute NIBE (Institute for Building Biology and Ecology) by way of a DUBO certificate and an environmental product declaration (EPD).

The South German Plastics Centre (SKZ) has also acknowledged that our HERTALAN® EPDM systems have a service life of more than 50 years.



# Good reasons to choose our HERTALAN® EASY COVER sheet system

Custom made sheets – thanks to the hot bonding process



Hot bonding is a process where EPDM membranes are homogeneously connected to one another to form large size sheets by means of vulcanisation. A high pressure, time and precisely preset temperature ensure that a completely leak-tight connection is created.

Factory conditions and continuous quality control in our production plant guarantee a consistent high level of quality.

A high level of safety thanks to custom made sheets



HERTALAN® EASY COVER is a custom made solution for your flat roof. Permanently leak-tight waterproofing solutions can be made quickly, easily and safely with these EPDM sheets. Also, the number of seam connections to be created manually on the construction site and thus the risk of leaks is reduced to an absolute minimum. This means that large-size EPDM sheets can be produced as a result, which in turn translates into a quick application process with optimised progress on the construction site. A roof that has practically been sealed in the factory is delivered.

Rapid protection against moisture



Roofs can be sealed quickly and easily in a single work step using HERTALAN® EASY COVER. Even in changeable weather conditions, it is hugely advantageous to use HERTALAN® sheets. Repeated surface drying operations are no longer necessary when using an EPDM sheet.

Straight from the roll



Our distributors stock various standard widths of HERTALAN® sheets for quick and safe waterproofing of flat roofs.

Even smaller roof areas such as garages, car ports, porches and so on can be extensively waterproofed in one piece without any long lead times. The EPDM sheets are cut off straight from the roll. The relevant system accessories such as adhesives, moulded parts, etc., form part of the overall package and are also available.

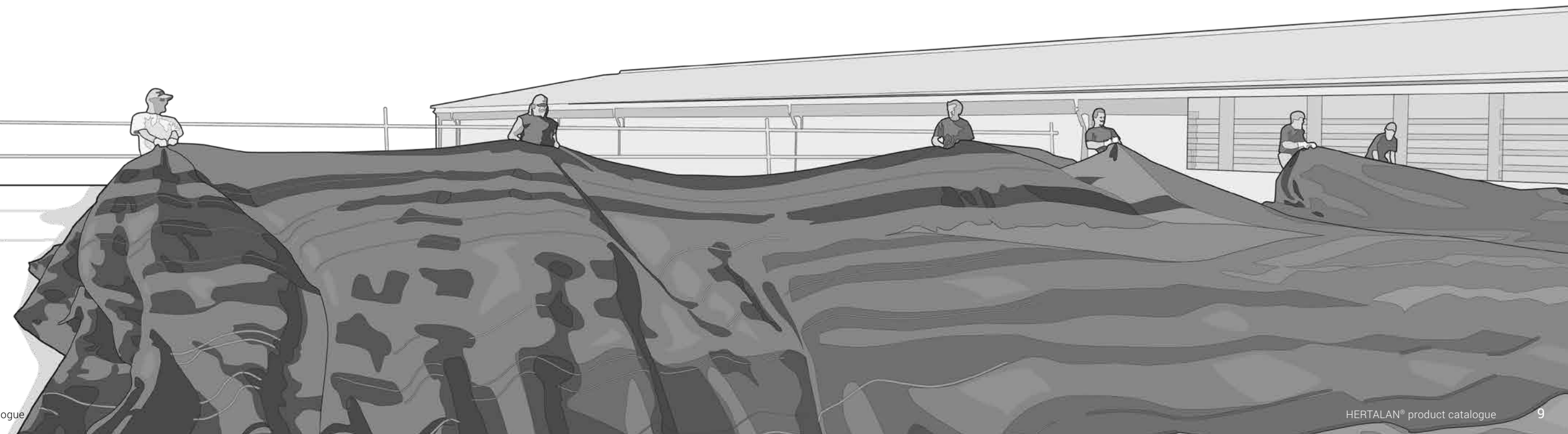
CARLISLE® Services



With CARLISLE® SERVICES, we offer installing contractors the ideal addition to our HERTALAN® distribution stock. Sheets are produced as desired and delivered to the dealer's premises or even straight to the construction site along with the suitable accessories. Any requests received at short notice and that are not in stock can be processed quickly. The application installing contractor simply places an order with their dealer, who passes it on to CARLISLE® SERVICES. CARLISLE® SERVICES provides complete support until delivery. The procedure is still the same as before, only the installation time is significantly shortened.

A quick manufacture means our customers can even benefit from their roof being covered with a ready made sheet at a short notice. The potential sheet sizes are 8.2 to 11.2 m wide and up to 30 m long in the material thicknesses of 1.2 to 1.5 mm. Special lengths of up to 45 metres are also possible. A delivery can be made to the construction site.

Custom-made solutions can also be offered in other areas in addition to sheets for flat roofs. This includes lining containers with EPDM inlays, for example.





# HERTALAN® – our expertise for your property

## Public buildings



- Service life of more than 50 years
- UV resistant and weather proof
- Environmentally friendly and certified durability

## Residential construction



- Including garages and balconies
- Ozone and UV resistant
- Cost effective and fast installation

## Building waterproofing



- Simple application on almost any substrate
- Can be applied on complex components
- Available in several widths
- Waterproof and airtight solutions

## Green roof



- For extensive and intensive green vegetation systems
- Proof from the FLL [Research Society for Landscape Development and Landscaping] available
- Few on site seams underneath the green vegetation

## Biogas plants / Fire Fighting Water Tank

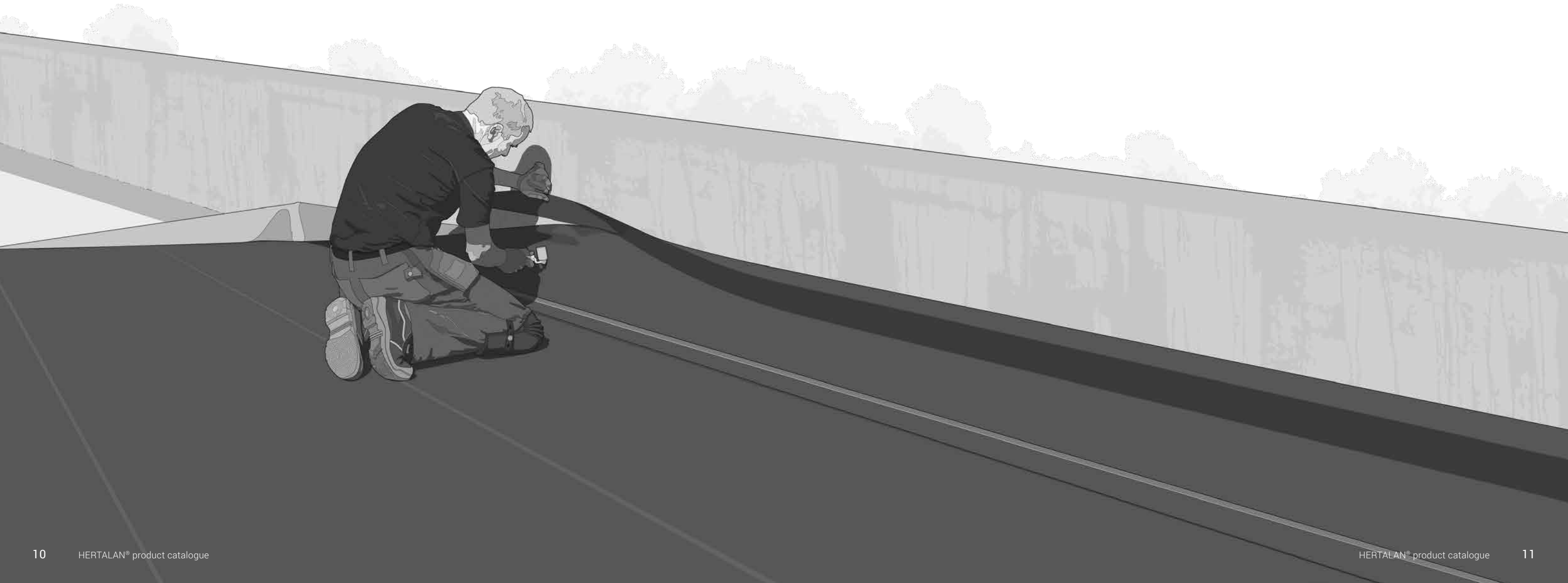


- Acid and alkali-resistant
- Permanently elastic from -45°C to + 120°C
- Application without any need for naked flames

## CARLISLE® induction fixing system



- No penetration of the roof waterproofing solution
- Even wind load distribution
- Up to 30% fewer fixing elements



## Overview of HERTALAN® products

HERTALAN® EPDM systems provide sustainable, waterproof solutions for the specific challenges of flat roof and building waterproofing, both on new builds and refurbishments.

### ✔ Unique properties

HERTALAN® EPDM solutions include waterproofing systems with unique USPs, have a very long service life, require hardly any maintenance, are FLL-tested and are naturally ozone and UV resistant. The product is very environmentally friendly and offers a substantial return on investment.

### ✔ Quality aspects

- Service life of more than 50 years (SKZ study)
- Environmentally friendly and recyclable
- Suitable for a wide variety of roof systems
- Highly resistant to a multitude of chemicals
- Komo, BBA, DIN, FLL and Dubokeur certification
- Outstanding weatherability
- Root resistant according to the FLL
- Compatible with bitumen
- Swift application with prefabricated sheets
- Ozone and UV resistant
- Permanently elastic from -45 °C to +120 °C
- Application without any need for naked flames
- Resistant to flying sparks and radiating heat (rigid roofing) for a multitude of roof structures



# Overview of HERTALAN® products

## HERTALAN® EASYCOVER

### EPDM sheet system

EPDM membranes are vulcanised with one another during the hot bonding process to produce HERTALAN® EASY COVER. This bonding is considered the safest seam joint in the flat roof segment. Because the bonding is of such a high quality, the Flat Roof Guidelines only require a seam width of 2.5 cm, which is impermissible with any other material.

Since the EPDM sheets are delivered to the construction site in a pre-assembled state, they can be applied on site in virtually a single work step. As the number of seams to be created manually decreases, so too does the risk of leaks and the work effort required on the roof. HERTALAN® EASY COVER is applied without any need for naked flames and is FLL tested and resistant to roots and UV rays. The system is suitable for any flat roof, regardless of whether it is loose-laid and ballasted, mechanically fixed or subjected to partial or full surface bonding.



## HERTALAN® EPDM STRIPS

### EPDM strips

With HERTALAN® EPDM strips, we have developed a system that offers protection against moisture and can be used to waterproof any building.

Hollow wall structures, doors and window frames can be quickly and efficiently protected against moisture penetration using this system.

With HERTALAN® EPDM strips, you can benefit from quality, flexibility and comfort. Thanks to the special adhesive systems and the EPDM lining's textured surfaces, you can work on practically any substrate and create almost any connection. These properties make HERTALAN® EPDM strips the best solution for applications in hollow walls, around window frames and on curtain wall façades.



## HERTALAN® EASYSTICK GS

### EPDM special solution

HERTALAN® EASY STICK GS are self-adhesive, reinforced EPDM strips that are particularly suitable for waterproofing façade penetrations such as windows and doors. The underside consists of a high quality butyl layer with a separating film that is cut into the middle. The strip is available in standard widths of 100 up to a maximum of 1000 mm and in a length of 20 m.

Due to its total thickness of 1.3 mm, the material can be very well adapted to the geometry of the different components.

HERTALAN® EASY STICK GS can also be used as a moisture barrier according to DIN EN 13967. The EPDM strip can be used even at low outside temperatures. A primer should also be used on absorbent substrates.



## HERTALED®

### EPDM building waterproofing

HERTALED® EPDM lead substitute is the ecological alternative to lead and conventional lead substitutes.

HERTALED® is made of EPDM strips that are reinforced with expanded metal to create a permanently workable material.

It can be adapted to and worked onto almost any shape and is particularly suitable for fixing on surfaces with a hollow interior.





# Application options with HERTALAN®

With the HERTALAN® products, we have a wide range of EPDM systems that we can use to offer you customised waterproofing solutions for your flat roof.

## Loose laying with ballast

The loose-laying layers are secured in place by means of an appropriate ballasting solution, such as gravel with a grain size of 16 / 32. Ballasting for flat roofs is determined according to DIN EN 1991-1-4. The roof structure's load-bearing capacity must naturally be taken into consideration according to the loads to be transferred. We also offer the suitable protective fleeces to create a separating layer between the ballast and the waterproofing system.

### Product selection:

HERTALAN® EASY COVER

### Required EPDM adhesive systems:

- Bonding of joints and junctions, as well as roof edge fixing with HERTALAN® KS 205 or HERTALAN® KS 137 contact adhesive
- Seam bonded with additional HERTALAN® EASY WELD cover strip, welded using hot air. Alternatively, seams can be bonded with HERTALAN® KS 137 contact adhesive in combination with HERTALAN® KS 96 adhesive.

## Mechanical fixation

The EPDM is secured in place by means of mechanically fixing using screws and fastening plates. There are different systems for this purpose. The required fixing elements for flat roofs are calculated according to DIN EN 1991-1-4.

### Product selection:

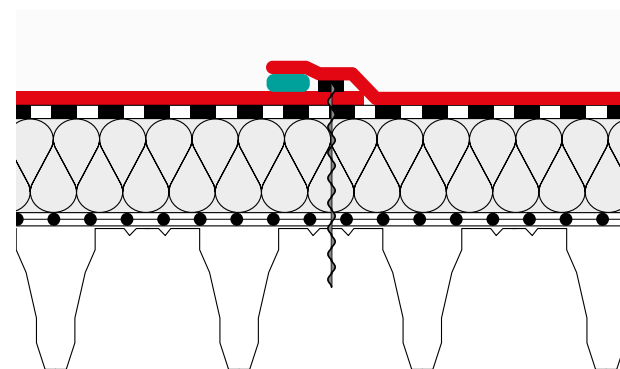
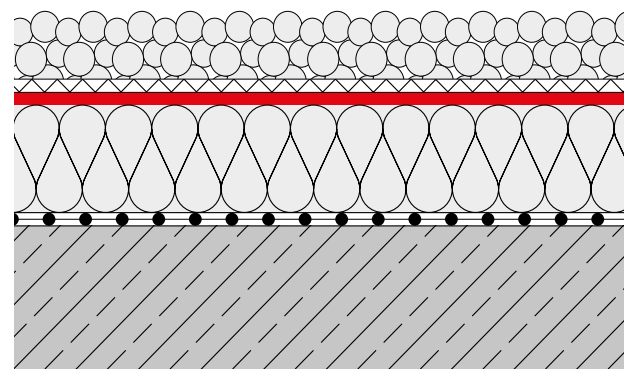
HERTALAN® EASY COVER

### Required EPDM adhesive systems:

- Bonding of joints and junctions, as well as roof edge fixing with HERTALAN® KS 205 or HERTALAN® KS 137 contact adhesive.
- Seam bonding by means of hot air welding, with or without HERTALAN® EASY WELD cover strip depending on the product type. Alternatively, seams can be bonded with HERTALAN® KS 137 contact adhesive in combination with HERTALAN® KS 96 adhesive.

**HERTALAN® Easy Cover can be mechanically fixed with CARLISLE® Induction System using special plates and fixing.**

More details on page 20-21



## Bonded application

Here, all the layers are bonded to one another using suitable adhesives. The substrate must be sufficiently solid and load-bearing, and it must be possible to bond the layers to one another. The required amounts of adhesive and distribution of the same are calculated according to DIN EN 1991-1-4.

### Partially bonded roof system

EPDM sheet or roofing membrane partially bonded to a suitable substrate.

### Product selection:

HERTALAN® EASY COVER

### Required EPDM adhesive systems:

- Bonding of joints and junctions, as well as roof edge fixing with HERTALAN® KS 205 or HERTALAN® KS 137 contact adhesive.
- Substrate bonding with HERTALAN® KS 143 PU adhesive
- Seam bonding with additional HERTALAN® EASY WELD cover strip, welded using hot air. Alternatively, seams can be bonded with HERTALAN® KS 217 or HERTALAN® KS 137 contact adhesive in combination with HERTALAN® KS 96 adhesive.

### Fully bonded roof system

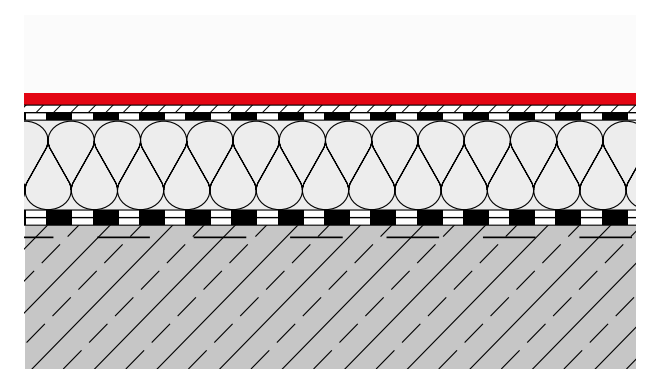
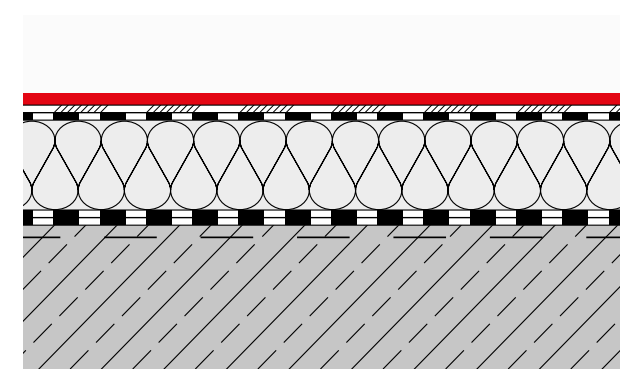
EPDM sheet or roofing membrane fully bonded to a suitable substrate.

### Product selection:

HERTALAN® EASY COVER

### Required EPDM adhesive systems:

- Bonding of joints and junctions, as well as roof edge fixing with HERTALAN® KS 205 or HERTALAN® KS 137 contact adhesive.
- Apply HERTALAN® KS 143 substrate bonding PU adhesive over the entire surface using a lambskin roller.
- Seam connection with additional HERTALAN® EASY WELD cover strip, welded on using hot air. Alternatively, seams can be bonded with HERTALAN® KS 217 or HERTALAN® KS 137 contact adhesive in combination with HERTALAN® KS 96 adhesive.



## Custom made solutions for flat roofs


### EPDM SHEET SYSTEMS

HERTALAN® EASY COVER sheets combine the outstanding material properties of EPDM with custom-made solutions. Thanks to the seam joints prefabricated in the factory, only around 5 % of the manual connections have to be made directly on the construction site. Just like a tailor-made suit. The roof waterproofing system is delivered to the construction site as a perfect-fit solution in a single piece.

## HERTALAN® EASY COVER

Individual EPDM membranes are welded to one another during the hot bonding process in the factory's prefabrication facility. The amount of seam welding on the construction site is therefore reduced to a minimum.

HERTALAN® EASY COVER can be applied easily, efficiently and without any need for naked flames, are root-resistant according to the FLL and have a service life of more than 50 years (SKZ study).

 Please refer to HERTALAN® specification guidelines or HERTALAN® installation instructions for detailed substrate requirements and installation instructions.

HERTALAN® EASY COVER			
<b>Thickness</b>	1.2 / 1.5 / 2.0 mm	<b>Mass</b>	1.23 kg/m <sup>2</sup> /mm
Standard sizes and ready-made dimensions upon request			

Properties	Tests		Target value	Result specified	
Visible defects	EN1850-2		Passed	Satisfied	
Straightness	EN1848-2	mm	≤ 30	Satisfied	
Flatness	EN1848-2	mm	≤ 10	Satisfied	
Tensile strength (L / Q)	EN 12311-2B	N/mm <sup>2</sup>	≥ 8.0	8.7 / 8.6	
Ultimate elongation (L / Q)	EN 12311-2B	%	≥ 400	530 / 480	
Tear growth resistance (L / Q)	EN 12310-2	N	≥ 25w	40 / 62	
Determination of dimensional stability (L / Q)	EN 1107-2	%	max. 0.2	0.08 / 0.05	
Joining seam's resistance to peeling	EN 12316-2	N/50mm	≥ 50	69 / 191*	
Joining seam's shearing resistance	EN 12317-2	N/50mm	≥ 200	282 / 341*	
Fire behaviour	EN 13501-1	-	Class E	Class E	
Resistance to the spread of fire	EN 13501-5	-	Passed	See AbP [General Building Supervisory Authority Test Certificate]	
Determination of resistance to static loading	EN 12730	kg	≥ 25	25	
Resistance to static loading	EN 12691	mm	≥ 300	300	
Resistant to root penetration	EN 13948	-	Passed	Satisfied	
Watertightness	EN 1928	-	Waterproof	Satisfied	
Folding in the cold	EN 495-5	°C	≤ -45	≤ -45	
UV irradiation	EN 1297/495-5		Passed	Satisfied	
Exposure to liquid chemicals	EN 1847		Passed	Satisfied	
hail resistance OF	EN 13583	hard surface	m/s	≥ 17	17
		Soft cladding	m/s	≥ 35	37
Water vapour diffusion resistance coefficient (μ value)	EN 1931		70.000	70.000	
Ozone resistance	EN 1844		No cracks	Satisfied	
Bitumen compatibility	EN 1548	-	Passed	Satisfied	

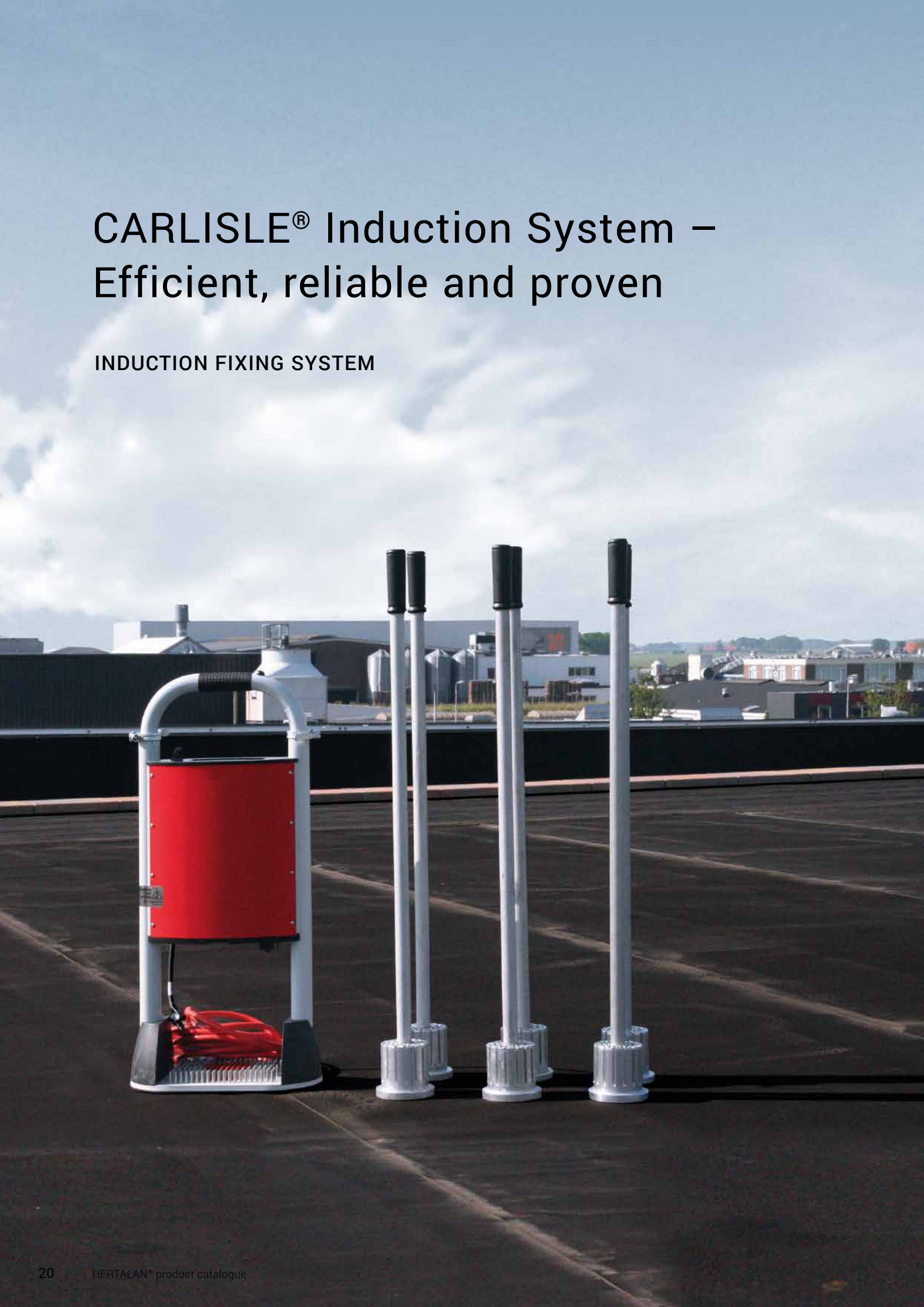
\* Values for bonded and hot bonding seams

Designation acc. to DIN SPEC 20000-201: DE / E1 EPDM BV 1.3 and 1.5 mm,  
Designation acc. to DIN SPEC 20000-202: BA / MSB Q EPDM BV 1.3 and 1.5 mm,  
CE certification acc. to DIN EN 13956 and DIN EN 13967



# CARLISLE® Induction System – Efficient, reliable and proven

## INDUCTION FIXING SYSTEM



## CARLISLE® Induction System

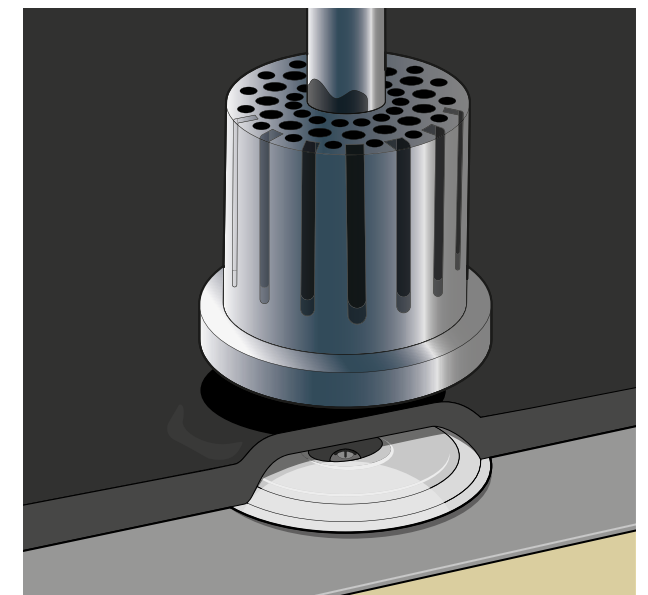
Experience the new dimension in installation with the CARLISLE® induction fixing system and our HERTALAN® EASY COVER sheets. This complete system uses induction compatible plates to fix the HERTALAN® EPDM sheet and the insulation in the supporting shell without any need to penetrate the roof waterproofing solution.

### Innovative technology

CARLISLE® is an electromagnetic induction welding technology and is used as an induction fixing system in combination with HERTALAN® EASY COVER EPDM sheets. The induction device is activated directly using the specially coated fastening plate. The coating on the fastening plates is heated to approximately 280°C and thus liquefied by means of induction. The heating process only lasts five seconds if the device is calibrated to the ambient temperature, the lining thickness and the power source.

Straight after welding, a permanent connection to the HERTALAN® EPDM sheet is created within 45 seconds due to the magnetic cooling rods applying firm pressure on previously welded fastening plates.

The plates can be loosened again at a later time using the induction device. It is therefore possible to actually re-use the sheet.



# Advantages of the CARLISLE® Induction System

## ✓ No penetration of the roof membrane

The Induction System is a penetration-free mechanical fixing solution for HERTALAN® EPDM-membranes.

## ✓ Even distribution of wind load

In contrast to traditional methods involving seam fixing, field fixing with the induction process distributes the wind load evenly over the EPDM-membranes.

## ✓ Up to 30% fewer fixing requirements

The even distribution of the wind force means that the point load per fixing requirements is less and the system can handle higher wind forces with fewer fixing requirements.

## ✓ Efficient Installation

The fixings are positioned precisely where they are actually needed. This reduces the number of fixings, shortens the labour time and minimises error.

## ✓ Custom-made membranes

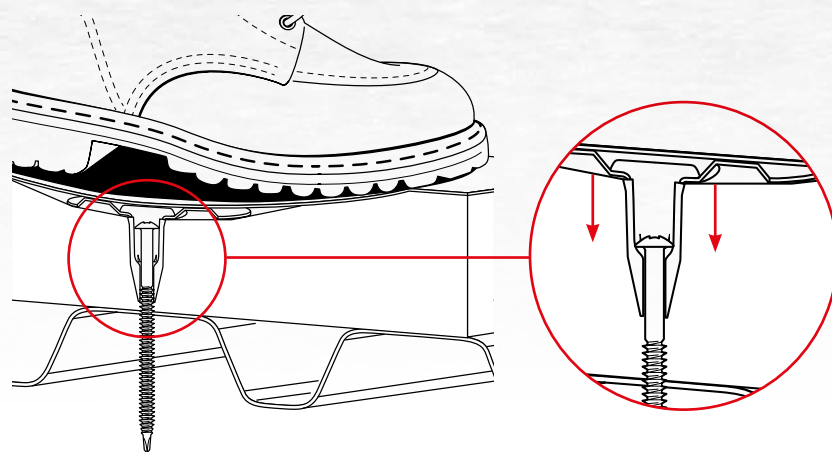
Hertalan® easy cover is an EPDM-system. It is a factory fabricated system for an efficient onsite installation. This method considerably reduces the amount of onsite seaming required on the roof, consequently leading to a rapid and safe installation.

## ✓ Fast protection from Ingress after Moisture

With HERTALAN® Easy Cover and the Induction System, you can temporarily seal your roof quickly and easily, even at the peripheries. Your roof is protected against rain and all weather types even before the induction process. Welding can be carried out even in the rain and at temperatures down to -10 °C.

## With Foot Traffic

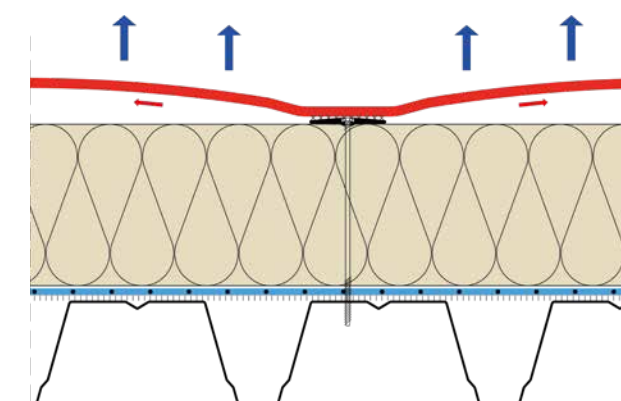
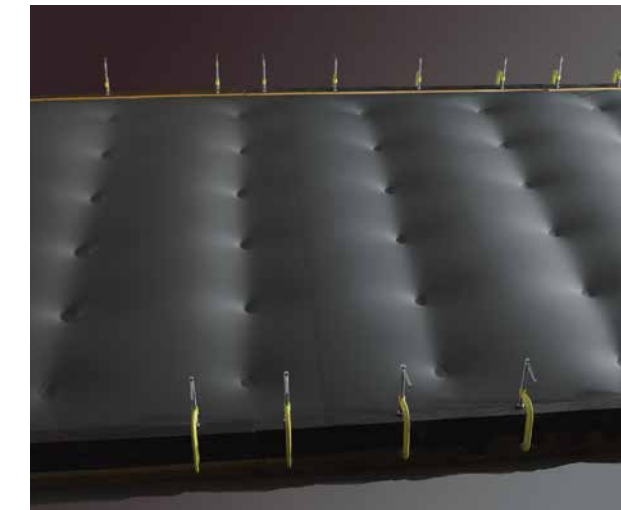
The TreadSafe® system counteracts normal loads when walked on and thereby minimises the risk of the fixing breaking through the roof sheeting.



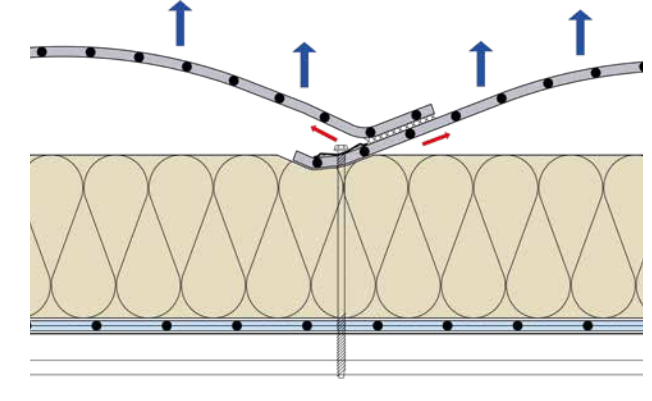
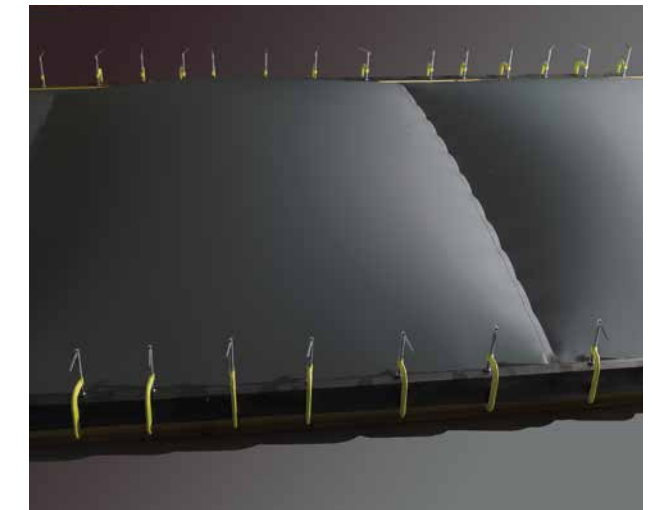
# Even distribution of wind load

In contrast to traditional methods involving seam fixing, field fixing with the induction process distributes the wind load evenly over the EPDM-membranes. This prevents any asymmetrical force impact on the fastening plates and seams.

## Field fixation



## Seam fixation



The position of the fastening plate is defined based on the wind load calculations for the property and distributed in the roof system. As a result, despite mechanical fixing, larger membranes can be used and a clear reduction achieved in the seam proportions and seam overlap compared to conventional systems fixed in place by mechanical means.

Since the fixing points are distributed like a grid across the entire roof and not just placed on the membrane joints, the wind forces are supported more evenly. As a result, the point load per fixing element is less and the system can handle higher wind forces with fewer fixing requirements.



# CARLISLE® Induction System

The CARLISLE® Induction System is made up of perfectly coordinated components: an induction welding device, specially coated fastening plates for HERTALAN® EPDM sheets and magnetic cooling elements.

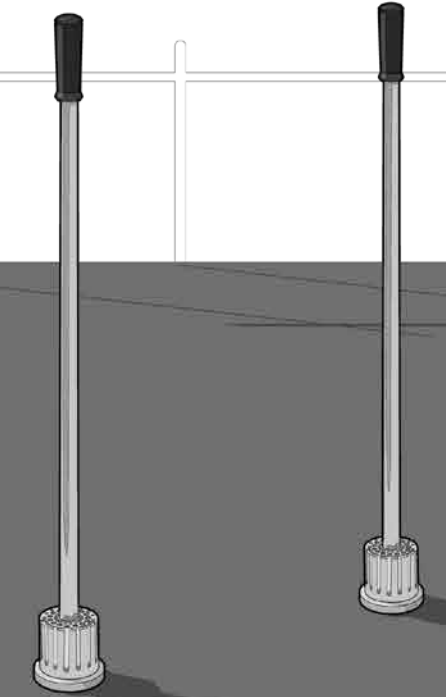


Fastening plate  
INCL. screw

Fastening plate with tube  
fastening system (treadsafe)

Protective plate for use  
on meltable substrates

Set of 6 magnetic  
cooling rods



## We support you with design and installation

- Calculation of drainage, tapered insulation and wind uplift
- Calculation and design of membranes required for the roof
- Creation of waterproofing specifications
- Training of roofing contractors in the installation of HERTALAN® EPDM membranes and the CARLISLE® Induction System in the CARLISLE® Academy and/or on the construction site
- Dimensions of membranes (for your first project or any complex installation, CARLISLE® Technical Department will assist you)




# EPDM Strips for water-tight solutions

## HERTALAN® – EPDM Strips

With HERTALAN® EPDM Strips, you can benefit from quality, flexibility and comfort. Thanks to the special adhesive systems and the EPDM membrane's textured surfaces, you can work on practically any substrate and

create almost any connection. These properties make HERTALAN® EPDM Strips the best solution for applications in the façade area such as hollow walls, around window frames and on curtain wall façades.

 Please refer to HERTALAN® specification guidelines or HERTALAN® installation instructions for detailed substrate requirements and installation instructions.

HERTALAN® EPDM Strips				
<b>Length</b>	20 m	<b>Polymer</b>	EPDM	
<b>Width</b>	100 - 1400 mm	<b>Colour</b>	Black	
<b>Thickness</b>	1.0 to 1.5 mm	<b>Mass</b>	1.23 kg/m <sup>2</sup> /mm	
Properties	Tests		Target value	Result specified
<b>Visible defects</b>	EN1850-2	-	Passed	Satisfied
<b>Straightness</b>	EN1848-2	mm	≤ 30	Satisfied
<b>Evenness</b>	EN1848-2	mm	≤ 10	Satisfied
<b>Nail tear growth resistance (L / Q)</b>	EN 12310-1*	N	> 100	120
<b>Ageing test</b>	EN 1296/ EN 1928)	-	Passed	Satisfied
<b>Joining seam's shearing resistance</b>	EN 12317-2	N/50 mm	> 200	282
<b>Fire behaviour</b>	EN 13501-1	-	Class E	Class E
<b>Determination of resistance to static loading</b>	EN 12730*	kg	≥ 25	25
<b>Determination of resistance to shock loading</b>	EN 12691*	mm	≥ 300	300
<b>Watertightness</b>	EN 1928	-	Waterproof	Satisfied
<b>Alkali test</b>	EN 1847/ EN 1928	-	Passed	Satisfied
<b>Water vapour diffusion resistance coefficient (μ value)</b>	EN 1931	-	70.000	70.000

\* Values for a thickness of 1.2 mm.

EPDM membranes are made in compliance with EN 13984, EN 13967 and DIN V 20000-202:2006-11 (code: BA / MSB EPDM BV); this applies only to thicknesses of 1.0 to 1.5 mm.

### Building and façade waterproofing

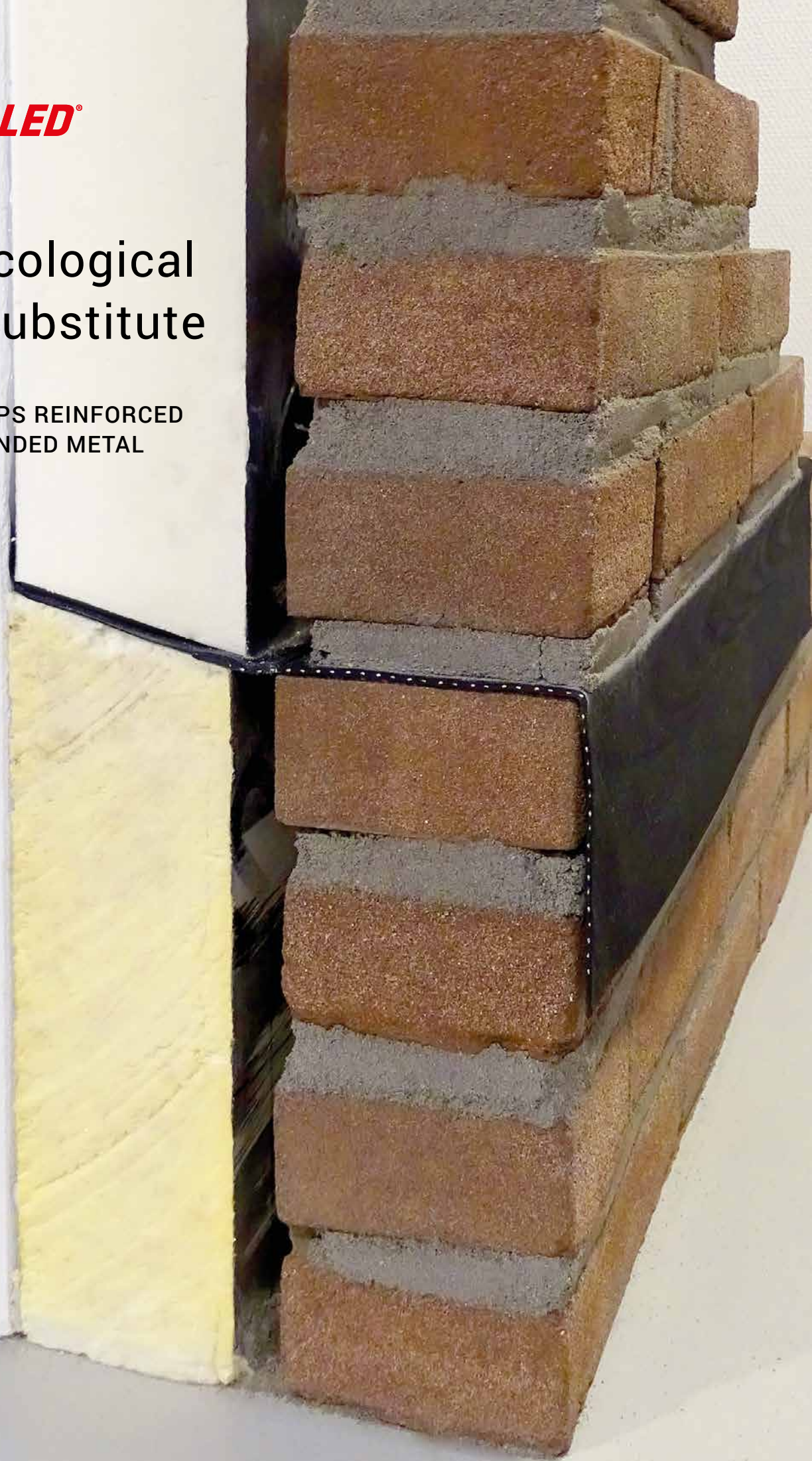
With HERTALAN® EPDM Strips, we have developed a system that offers protection against moisture and can be used to waterproof any building. Hollow wall structures, doors and window frames can be quickly and efficiently protected against moisture penetration using this system.

With HERTALAN® EPDM Strips, you can benefit from quality, flexibility and comfort. Thanks to the special adhesive systems and the EPDM lining's textured surfaces, you can work on practically any substrate. These properties make HERTALAN® EPDM Strips the best solution for applications in hollow walls, around window frames and on curtain wall façades.



# The ecological lead substitute


EPDM STRIPS REINFORCED WITH EXPANDED METAL



## HERTALED® – the ecological lead substitute

HERTALED® is an ecological substitute for lead that offers all the advantages of our EPDM quality. It is a lightweight material that is delivered on 12 metre rolls so that you can cover areas quickly and thus cut labour costs. HERTALED® is made up of HERTALAN® EPDM Strips that are reinforced with expanded metal. It can

be moulded into almost any shape thanks to the expanded metal. It is used as a moisture barrier and lead substitute and consists of an aluminium insert measuring 210 mm wide or fully laminated with EPDM on both sides. The roll is 12 m long; other dimensions are available upon request.

 Please refer to HERTALAN® specification guidelines or HERTALAN® installation instructions for detailed substrate requirements and installation instructions.

HERTALED (full aluminium reinforcement)			
Length	12 m	Polymer	EPDM
Width	200 / 400 / 750 mm	Colour	Black
Thickness	2.0 mm	Mass	2.75 kg/m <sup>2</sup>

HERTALED (210 mm aluminium reinforcement)			
Length	12 m	Polymer	EPDM
Width	450 - 650 mm	Colour	Black
Thickness	2.0 mm	Mass	1.8 / 1.5 kg/m <sup>2</sup>

Properties	Tests		Target value	Result specified
Visible defects	EN1850-2	-	Passed	Satisfied
Straightness	EN1848-2	mm	≤ 30	Satisfied
Evenness	EN1848-2	mm	≤ 10	Satisfied
Nail tear growth resistance (L / Q)	EN 12310-1*	N	≥ 50	70
Ageing test	EN 1296/ EN 1928)	-	Passed	Satisfied
Joining seam's shearing resistance	EN 12317-2	N/50 mm	> 200	282
Fire behaviour	EN 13501-1	-	Class E	Class E
Folding in the cold	EN 495-5	°C	≥ -45	≥ -45
Watertightness	EN 1928	-	Waterproof	Satisfied
Alkali test	EN 1847/ EN 1928	-	Passed	Satisfied
Water vapour diffusion resistance coefficient	EN 1931	-	70.000	70.000

\* Value of the EPDM lining



## The easy-to-use, waterproofing solution

### SELF-ADHESIVE EPDM STRIPS



HERTALAN® EASY STICK GS are self-adhesive, reinforced EPDM Strips that are particularly suitable for waterproofing façade penetrations such as windows and doors.

## HERTALAN® EASY STICK GS – EPDM Strips

HERTALAN® EASY STICK GS is an EPDM waterproofing membrane according to EN 13967 / EN 13984 with a glass fabric and butyl rubber self-adhesive layer on the underside.

⚠ Please refer to HERTALAN® specification guidelines or HERTALAN® installation instructions for detailed substrate requirements and installation instructions.

HERTALAN® EASY STICK GS			
Length	20 m	Polymer	EPDM
Width	0.25 / 0.50 / 0.75 / 1.0 m	Colour	Black
Thickness	1.3 mm	Mass	1.4 kg/m <sup>2</sup>

Properties	Tests		Target value	Result specified
Visible defects	EN 1850-2	-	Passed	Satisfied
Straightness	EN 1848-2	mm	≤ 30	Satisfied
Tensile strength (L / Q)	EN 12311-2	N / mm	≥ 6	7
Ultimate elongation (L / Q)	EN 12311-2	%	≥ 400	450
Tear growth resistance (L / Q)	EN 12310-1	N	≥ 50	65
Joining seam's shearing resistance	EN 12317-2	N/50 mm	≥ 200	250
Fire behaviour	EN 13501-1	-	Class E	Class E
Determination of resistance to shock loading	EN 12691	mm		NPD
Watertightness	EN 1928	-	Waterproof	Satisfied
Water vapour diffusion resistance coefficient	EN 1931			NPD
Durability of water vapour permeability against ageing	EN 1296 / EN 1931			NPD
Exposure to liquid chemicals	EN 1847 / EN 12311-2	-	Passed	Satisfied

### Roof gutters

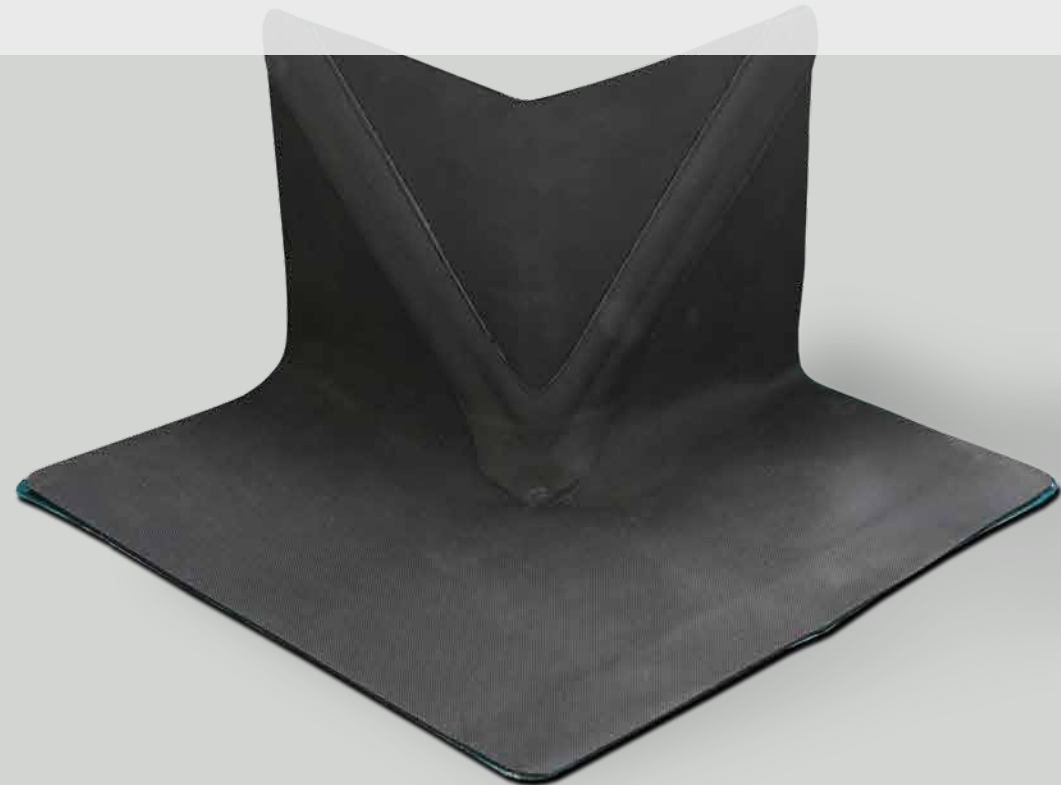
HERTALAN® EASY STICK GS is excellently suited to lining roof gutters in refurbishment and new build projects. HERTALAN® EASY STICK GS is easy to use during subsequent waterproofing of zinc roof gutters. Once the substrate has been cleaned, HERTALAN® EASY STICK GS can be bonded on directly with HERTALAN® contact adhesive. Prefabricated rainwater pipes and corners ensure a quick and easy application process.

In new build projects, nowadays often the quality of the building material is sacrificed, resulting in cold zinc gutters causing condensation. This significantly shortens the durability of trough and valley gutters. HERTALAN® EASY STICK GS offers a solution for this purpose. The gutters are fully lined with HERTALAN® EASY STICK GS. This means that a longer service life is achieved for the gutters. Your structure is given a visually appealing touch when this product is used in conjunction with a zinc cornice cover.



## HERTALAN® accessories

HERTALAN® offers a wide range of accessories and adhesives, where all the components are optimally coordinated to one another. With our extensive range, we offer you the perfect solution to overcome an extremely wide range of challenges encountered in roof waterproofing.



# HERTALAN® drainage options

FOR EVERY FLAT ROOF



## Stainless steel accessories – as durable as our roofing membranes

Whether they're used in new build or refurbishment projects – the HERTALAN® stainless steel accessories are suitable for any application and cut an impressive figure due to quick and safe installation.

Heavy and once-in-a-lifetime rainstorms are continually increasing due to climate change. This is why drainage elements are some of the most important system add-ons. Roof penetrations are the most critical parts of a flat roof; indeed, they are essential. Accordingly, the demands on drainage systems and roof penetrations are particularly high. In our HERTALAN® drainage accessories, we can provide the perfect addition to our range of extremely durable roof-sealing systems. All of the components are ideally tailored to each other.



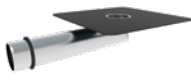
HERTALAN® drainage accessories consist of versatile corrosion and acid-resistant stainless steel elements. These already have factory-fitted EPDM sleeves made from self-adhesive HERTALAN®. This makes a water-tight connection to the surface sealing particularly quick and easy. The range includes the right element for every drainage situation.

### An overview of the benefits:

- Safe installation with no fire risk, thanks to hot-air welding
- Simple installation without special tools
- A service life of decades
- Stainless steel is not sensitive to acids or cold, and is extremely heat resistant
- Safe, complete solution
- TÜV tested
- Fire protection acc. to DIN 18234









## Stainless steel accessories

Overflow drains				
Description		Structure	External Ø	Other parameters
1. CCM overflow drain, vertical, one piece		Extension element with level base plate and factory connection sleeve, retaining element and 3 retaining rings.	110 mm	Length of extension element: 400 or 600 mm
2. CCM overflow drain, angled		Horizontally angled run-off connector with level base plate and factory connection sleeve, retaining element and 3 retaining rings. Arrangement for lateral continuation within the thermal insulation and through the wall / parapet.	110 mm	Length of run-off connector: 730 mm
Drainage elements				
Description		Structure	External Ø	Other parameters
3. CCM roof drain, vertical, two piece, with sleeve		Thermally-insulated base element with level base plate, extension element with level base plate and factory connection sleeve and universal leaf catcher.	75, 110, 125, 160mm	Length of base element: 280 mm
4. CCM renovation drain / one piece extension element		Extension element with level base plate and factory connection sleeve; leaf catcher itemised separately.	50, 63, 75, 90, 110, 125, 145, 160 mm	Length of extension element: 400 or 600 mm
5. CCM roof drain, angled, with sleeve		Roof drain with level base plate and factory connection sleeve; arrangement for lateral continuation within the thermal insulation and universal leaf catcher.	50, 63, 75, 90, 110 mm	Length of run-off connector: 460 mm



# Stainless steel accessories

Drainage elements				
Description	Structure	External Ø	Other parameters	
<b>6. CCM parapet drain</b> 	Parapet drain with level base plate and factory connection sleeve; arrangement for lateral continuation within the thermal insulation layer and through the wall / parapet; leaf catcher M.	110 mm		
<b>7. CCM parapet drain, with angled base plate</b> 	Horizontal run-off connector with angled base plate and factory connection sleeve. The run-off connector is run on the top edge of the roof seal directly through the wall / parapet.	50, 75, 110 mm	Length of run-off connector: 400 or 600 mm	
<b>8. CCM leaf catcher</b> 8.1 Universal  8.2 M  8.3 Horizontal 		50-160 mm		

Vent pipes				
Description	Structure	External Ø	Other parameters	
<b>9. CCM vent pipe</b> 	Vent pipe with level base plate and factory connection sleeve.	90, 110 mm		

# Stainless steel accessories – Product codes

Item	Description	§ In mm	Length in mm		Product code (for length)	
			400 mm	600 mm	400 mm	600 mm
1.	Ccm overflow drain, vertical, one piece	110	400	600	65003029	65003030
Item	Description	§ In mm	Length in mm		Product code	
2.	Ccm overflow drain, angled	110	730		65003031	
Item	Description	§ In mm	Length in mm		Product code	
3.	Ccm roof drain, vertical, Two piece, with sleeve	75	280		65003016	
		110	280		65003017	
		125	280		65003018	
		160	280		65003019	
Item	Description	§ In mm	Length in mm		Product code (for length)	
4.	Ccm renovation drain/one piece Extension element, with sleeve	50	400	600	65002989	65002993
		63	400	600	65002994	65002995
		75	400	600	65002996	65002997
		90	400	600	65002998	65002999
		110	400	600	65003000	65003001
		125	400	600	65003002	65003003
		145	400	600	65003004	65003005
		160	400	600	65003006	65003007
Item	Description	§ In mm	Length in mm		Product code	
5.	Ccm roof drain, angled, with sleeve	50			65003023	
		63			65003024	
		75			65003025	
		90			65003026	
		110			65003027	
Item	Description	§ In mm	Length in mm		Product code	
6.	Ccm parapet drain	110			65003028	
Item	Description	§ In mm	Length in mm		Product code (for length)	
7.	Ccm parapet drain, with angled base plate	50	400	600	65003008	65003009
		75	400	600	65003010	65003011
		90	400	600	65003012	65003013
		110	400	600	65003014	65003015
Item	Description	§ In mm	Length in mm		Product code	
8.	8.1 Ccm leaf catcher universal	50 - 160			65003033	
	8.2 Ccm leaf catcher m	50 - 160			65003032	
	8.3 Ccm leaf catcher horizontal	50 - 160			65003034	
Item	Description	§ In mm	Length in mm		Product code	
9.	Ccm vent pipe	40			65003035	
		63			65003036	
		75			65003037	
		90			65003038	

## Flat roof drains

### HERTALAN® flat roof drains

HERTALAN® flat roof drains compliment our HERTALAN® roof systems and thus offer the reliability of optimum compatibility with all HERTALAN® products.

HWA's round, HDPE pipe, 600 mm long									
Dimensions (mm)	40	50	63	75*	90*	110	125	140	160
EPDM flange, round without EW joining edge	Ø 300 mm				Ø 400 mm				
EPDM flange, square with EW joining edge	200 x 200 mm				300 x 300 mm				
Capacity (l / s) acc. to EN 1253 (incl. gravel trap)				4.7	4.5	6.0	9.5	10.5	

\* Diameters of 75 and 90 mm are also available as a 45° variant.

The diameters 75, 90, 110, 125 and 160 mm are tested according to EN 1253.

HWA's emergency overflow, HDPE square, 600 mm long		
Dimensions	60 x 80**	60 x 100**
Flange dimensions without EW joining edge	300 x 300 mm	300 x 300 mm
Flange dimensions with EW joining edge	300 x 300 mm	300 x 300 mm

\*\* A 45° and a 90° variant are available for both variants.

### HERTALAN® gravel guard

The HERTALAN® gravel guard according to EN 1253 forms part of the tested drainage system according to EN 1253, round (diameter: 75, 90, 110, 125 and 160 mm).

### Round and emergency overflows

The connection to the HERTALAN® flat roof system depends on how our flat roof drains (round / square) are used. The connection or joint to the flat roof waterproofing solution (HERTALAN® EASY COVER / EASY WELD) is made by means of bonding with HERTALAN® KS 137 / KS 96 or hot-air technology (EW joining edge) according to the application instructions and with reference to the valid technical regulations.



### Universal HERTALAN® gravel guard

System accessories for HERTALAN® flat roof drains measuring 75 – 160 mm.





# Accessoires

## Pre Formed Accessories

### HERTALAN® pre formed corners

HERTALAN® pre formed accessories are complimentary to the HERTALAN® roof systems and thus offer guaranteed optimum compatibility with other HERTALAN® products.

Dimensions	
Internal corner (90°)	100 x 100 x 100 mm
	200 x 200 x 300 mm
External corner (90°)	100 x 100 x 100 mm
	300 x 300 x 150 mm
Skylight corner (45°)	180 x 150 x 150 mm

The standard dimensions are also available with an EASY WELD joining edge on the underside. Different dimensions and shapes can be custom-made upon request.

### Application

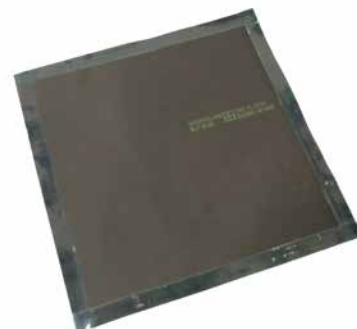
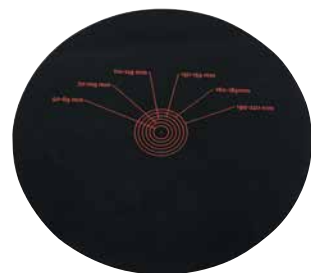
Depending on the HERTALAN® roof system, HERTALAN® pre formed accessories are attached by means of hot-air welding or adhesion.

If the detail can no longer be processed with a pre formed accessory, HERTALAN® EASY WELD cover strip or HERTALAN® FLASH WELD can be used depending on the HERTALAN® roof system.

### HERTALAN® sleeves

HERTALAN® sleeves are coordinated to the HERTALAN® roof systems and thus offer guaranteed optimum compatibility with other HERTALAN® products.

Dimensions	
Sleeve (round)	500 mm
Sleeve with EW joining edge	450 x 450 mm
Sleeve with EW joining edge	700 x 700 mm
Custom-made skylight sleeve with EW joining edge	Upon request



## HERTALAN® pipe sleeves

HERTALAN® pipe sleeves compliment the HERTALAN® roof systems and thus offer guaranteed optimum compatibility with other HERTALAN® products.

Dimensions	
0 - 50 mm, 150 mm tall	300 x 300 mm
20 - 75 mm, 300 mm tall	300 x 300 mm
70 - 125 mm, 300 mm tall	300 x 300 mm
120 - 180 mm, 300 mm tall	400 x 400 mm

### Application

Depending on the selected roof system, the HERTALAN® roof penetration is adhered or affixed to the HERTALAN® roof waterproofing solution with hot air.



## HERTALAN® FLASHWELD

HERTALAN® FLASH WELD is a plastically ductile, unvulcanised strip material. The underside is equipped with a weldable HERTALAN® EASY WELD TPE layer. It is used to create "difficult" details on a HERTALAN® roof. The strip can simply be moulded into shape and then welded onto the substrate.

HERTALAN® FLASHWELD			
Polymer	EPDM / TPE	Thickness	1,6 mm
Colour	Black / green	Width	180 mm
		Length	5 m



## HERTALAN® FLASHWELD finished parts

The pre-cut HERTALAN® FLASH WELD parts are the perfect solution for corner areas where no prefabricated corners can be used. Because the unvulcanised material can be deformed under the influence of heat, all corner shapes can be created.

HERTALAN® FLASH WELD finished parts	
Dimensions of "tongue, oval"	350 x 170 mm
Dimensions of "circle with groove"	Ø 170 mm



## HERTALAN® FLASHING

HERTALAN® FLASHING is a non-vulcanised chloroprene rubber lining that is deformable. This lining is used to create "difficult" details on a HERTALAN® roof. This lining can be simply moulded into shape using hot air and then bonded using HERTALAN® KS 137.

HERTALAN® FLASHING			
Polymer	CR	Thickness	1,6 mm
Colour	Black / green	Width	300 mm
		Length	5 m
Properties	Tests		Specification
Tensile strength (l / w)	EN12311-2B	≥ 8,0	8,7 / 8,6
Elongation at break (l / w)	EN12311-2B	≥ 400	530 / 480

### Application

Cut a piece of HERTALAN® FLASHING to the right size to waterproof the detail on the HERTALAN® roof. Apply HERTALAN® KS 137 to the underside of the piece of HERTALAN® FLASHING and to the roof area. The contact adhesive must evaporate for 5 – 15 minutes, before HERTALAN® FLASHING is applied. Heat the HERTALAN® FLASHING with a hot-air gun during the application process and shape it so that it fits well. Under no circumstances should you heat it up directly on the HERTALAN® KS 137. The HERTALAN® FLASHING must be rolled out firmly with a silicone pressure roller. Also see the HERTALAN® KS 137 product specification. Finally, apply a bead of HERTALAN® KS 96 along the outside of the HERTALAN® FLASHING. Then carefully wipe off excess.

### Shelf life and storage

HERTALAN® FLASHING can be stored for three months at a temperature of 0°C to 8°C (in the refrigerator).

### Vulcanisation

HERTALAN® FLASHING vulcanises slowly within six to 12 months, depending on the ambient temperature.

### Hazardous substances

This product contains > 5% – < 10% lead tetroxide (CAS no. 1314-41-6), which is included in the list of substances of very high concern (SVHC). You will find further information at: <http://echa.europa.eu>.



## HERTALAN® EASY WELD cover strips

HERTALAN® EASY WELD cover strips consist of an EPDM top layer and a factory applied coating that is weldable on the underside (EW / hot-air technology). It is used for joining the seams of HERTALAN® EASY WELD transverse joints and HERTALAN® EASY COVER sheets.



HERTALAN® seam tape			
Thickness	1,7 mm	Length	20 m
Thickness of the EW coating	0,5 mm	Width	12, 18 and 36 cm

Properties	Tests		Target value	Result specified
MiFi value of the welding layer	ISO133 2,16 kg / 190°C	dg/min		19
Tensile strength (L / Q)	EN12311-2B	N/mm²	≥ 8,0	8,7 / 8,6
Ultimate elongation (L / Q)	EN12311-2B	%	≥ 400	530 / 480
Tear growth resistance (L / Q)	EN12310-2	N	≥ 25	40 / 62
Determination of dimensional stability (L / Q)	EN1107-2	%	max. 0,2	0,08 / 0,05
Joining seam's resistance to peeling	EN12316-2	N/50 mm	≥ 80	169
Joining seam's shearing resistance	EN12317-2	N/50 mm		318
Behaviour in the event of exposure to fire from the outside	EN13501-5	-	Passed	NPD
Determination of resistance to static loading	EN12730	kg	≥ 25	25
Determination of resistance to shock loading	EN12691	mm	≥ 300	300
Resistant to root penetration (FLL)	EN13948	-	Root-resistant	Root-resistant
Bitumen compatibility	EN1548		Passed	Satisfied

## HERTALAN® EASY WELD cover welding rope:

3 mm thick HERTALAN® EASY WELD cord as a supplementary product for T-joint development. It is available in a 5 m or 10 m roll.



## HERTALAN® EASY WELD cover strip:

Auxiliary product for welding HERTALAN® EASY WELD with an automatic welder..



# HERTALAN® adhesives

HERTALAN® provides a supplementary package of adhesives and sealants for optimum application of our EPDM roof systems. Our EPDM adhesives and sealants were developed specifically for the application of HERTALAN® EPDM waterproofing membranes and sheets. We guarantee that you will benefit from the decades of reliability our products are famous for. Our EPDM adhesives can be applied to many substrates and to every roof structure.



# Adhesive Sealant

## MS POLYMER BASED SINGLE COMPONENT

HERTALAN® KS 96 is specifically developed for the bonding of HERTALAN® EPDM rubber waterproofing solutions on vertical and horizontal substrates and for the additional waterproofing of bonded seams in the edge area.

### Properties

HERTALAN® KS 96 demonstrates very strong adhesion properties – both between the various EPDM linings and when used for bonding on the aforementioned substrates. The bond is elastic and waterproof. HERTALAN® KS 96 is applied on one side. Once it is completely cured, a temperature resistance of -40 °C to +100 °C is achieved.

### Application

HERTALAN® KS 96 is ready for use and must not be thinned or mixed with external materials. It must be applied in dry weather conditions and at a temperature of at least +5 °C. Both the material and the substrate must be dry, free from frost and clean.



# HERTALAN® KS 96

An overlap should measure at least 50 mm. Otherwise, the overlap depends on the application. Apply HERTALAN® KS 96 on one side in two lines measuring at least 7 mm in diameter – do not spread out.

In the case of adhered seams (HERTALAN® KS 137), at the edge a 20 mm wide zone is sealed with HERTALAN® KS 96 (cartridge or foil). To this end, the adhesive is applied and then rolled onto the seam with a silicone pressure roller. Care must be taken here to ensure that the escaping bead of adhesive is approximately 1 mm wide.

### Substrates

HERTALAN® KS 96 is specifically developed for bonding on vertical and horizontal substrates such as wood, concrete, metals, brickwork, EPDM, etc. Substrates must be even, dry, free from frost, clean and free from grease. It is not possible to perform bonding directly on EPS and PVC.

### Coverage rate

Foil 600 ml of HERTALAN® KS 96, coverage approx. 15 lm (with a round diameter of min. 7 mm). Cartridge with 290 ml of KS 96, coverage approx. 7 lm (with a round diameter of min. 7 mm).

### Cleaning

The application devices should be cleaned with white spirit straight away if they are dirty.

### Usage time

The open time (pot life) depends on the relevant outdoor temperatures. Generally speaking, do not apply any more adhesive than can be worked within five minutes. This means that the open time is shortened significantly at higher temperatures.

### Curing

Approx. 2 mm / 24 hours. After a few days (> 20 days), depending on the relevant outdoor temperatures, optimum bonding and heat resistance with respect to the mechanical stresses to be expected is achieved. However, leak tightness is guaranteed straight after application.

Technical data	
Product type	HERTALAN® KS 96 is a high-quality, single-component, MS polymer-based adhesive and sealant
Colour	Black
Smell	Odourless
Shrinkage	None
Density (20°C)	1.415 kg/m³
Curing (in 24 hours)	2 mm (in 24 hours)
Elongation at break	300% (DIN 53504)
Shelf life	12 months, when stored in its original packaging in a cool and dry place

Delivery unit	
Container	Potential seam joint
Foil 600 ml	Up to 15 lm
Cartridge 290 ml	Up to 7 lm



Please observe the instructions on our EC safety data sheets and the safety instructions on our container labels for handling our products.



# Surface adhesive

**READY TO USE, SINGLE COMPONENT  
PU ADHESIVE WITH ORGANIC SOLVENTS**

HERTALAN® KS 143 is a ready to use, single component PU adhesive with organic solvents which was specifically developed for bonding the HERTALAN® EPDM membranes and sheets to substrates in the surface area.

## Application

HERTALAN® KS 143 is ready for use. Do not thin or mix with external materials. HERTALAN® KS 143 should be applied in a longitudinal direction in adhesive strips that are at least 8 mm in diameter, whereby the surface area is at least 50 %. The product is applied in dry weather conditions and at an ambient temperature of at least +5 °C. Both the material and the substrate must be smooth, dry, clean and free from frost. Let the adhesive surfaces air-dry for min. 5 and max. 20 minutes before laying the EPDM sheets/membranes, so as to prevent subsequent bubble formation.



# HERTALAN® KS 143 – the surface adhesive

## Substrates

Heavy / lightweight concrete, non-sanded bitumen roofing membranes, bituminously laminated insulation materials, wood, etc. Substrates must be smooth, clean, dry and free from oil / grease. The substrate must be free from sharp objects such as sharp stones, glass, etc. Such objects must be removed in any case. It is not possible to perform bonding directly on polystyrene foam or soft PVC!

## Coverage rate

Coverage is approx. 225 g/m<sup>2</sup> with one-sided application (and a surface area of approx. 50 %). Care must be taken to ensure a sufficient applied quantity when bonding on absorbent substrates.

## Coverage

The devices can be cleaned with white spirit as long as the adhesive has not cured yet. Afterwards, the adhesive can only be removed mechanically.

## Usage time

The open working time very much depends on the relevant outdoor temperatures. Generally speaking, do not apply any more adhesive than can be worked within 5 – 20 minutes. The working time can be shortened significantly at higher temperatures.

## Curing

Dependent on the relevant outdoor temperature and humidity. The maximum frictional connection (curing) is achieved after approximately 48 hours. Once the product is completely cured, a temperature resistance of approx. -40 °C to +80 °C is achieved.

Technical data	
Product type	Moisture-responsive adhesive with a polyurethane base
Colour	Golden yellow
Viscosity	5.000 ± 1.500 mPas
Flash point	< 0°C (closed cup)
Density (20°C)	1.003 ± 10 kg/m <sup>3</sup>
Solids content	82 ± 2%
Shelf life	12 months, when stored unopened in its original packaging in a cool and dry place

Delivery unit	
Container	Coverage per m <sup>2</sup>
Canister, 2 kg	250 g
Canister, 6 kg	250 g



**Please observe the instructions on our EC safety data sheets and the safety instructions on our container labels for handling our products.**

## The water based surface adhesive

READY TO USE SOLVENT FREE ADHESIVE FOR BONDING ON TIMBER, TIMBER BASED MATERIALS AND CONCRETE.

HERTALAN<sup>®</sup> KS 217 is a ready to use, water based adhesive which has been specifically developed for bonding the HERTALAN<sup>®</sup> EPDM waterproofing membranes on timber, timber materials and concrete.

### Application

HERTALAN<sup>®</sup> KS 217 is ready to use. Do not thin or mix with external materials. HERTALAN<sup>®</sup> KS 217 must be applied over the entire surface.

The product should be installed in dry weather conditions and at an ambient temperature of at least +5°C. Both the material and the substrate must be even, dry, clean and free from frost. The HERTALAN<sup>®</sup> EPDM waterproofing membranes should be laid straight after the adhesive has been applied.



## HERTALAN<sup>®</sup> KS 217 the water based surface adhesive

### Substrates

Timber, timber materials and concrete. Please consult our Technical Department with regard to applications on other substrates.

### Coverage rate

Depending on the substrate, the coverage is approx. 250 g/m<sup>2</sup> when adhesive is applied on one side.

### Cleaning

The tools can be cleaned with water as long as the adhesive is not cured. Afterwards, the adhesive can only be removed mechanically.

### Application time

The open application time depends on the outdoor temperature and ranges between 30 minutes at an outdoor temperature of approx. 5 °C and 10 minutes at an outdoor temperature of approx. 30 °C. The open application time can vary accordingly depending on air humidity and sunlight

### Temperature resistance

Once the product is completely cured, a temperature resistance of approx. -40 °C to +80 °C is achieved.

### Area of use

The HERTALAN<sup>®</sup> EPDM waterproofing membrane can be bonded without any need for additional measures up to a building height of 8 m. The KS 205 or KS 137 contact adhesives should also to be used in the edge area. Please contact the Technical Department for further questions.

Technical data	
Product type	Water-based plastic dispersion
Colour	White
Viscosity (20°C)	17.000 ± 5.000 mPas
Flash point	-
Density (20°C)	995 ± 10 kg/m <sup>3</sup>
Solids content	68 ± 2%
Shelf life	12 months, when stored unopened in its original packaging in a cool and dry place at a temperature of between +5 °C and +25 °C

Delivery unit	
Container	Coverage per m <sup>2</sup>
Bucket 5 kg	approx. 250 g/m <sup>2</sup>
Bucket 18 kg	approx. 250 g/m <sup>2</sup>



Please observe the instructions on our EC safety data sheets and the safety instructions on our container labels for handling our products.



# Contact adhesive

**READY TO USE**

HERTALAN<sup>®</sup> KS 137 is a ready to use contact adhesive for HERTALAN<sup>®</sup> EPDM membrane and sheet seam connections and for surface bonding on dry, smooth and clean substrates (wood, concrete, metals such as aluminium, steel, zinc plate, etc.), preferably in the area of joints and junctions.

## Properties

HERTALAN<sup>®</sup> KS 137 demonstrates very strong adhesion properties – both between the various HERTALAN<sup>®</sup> EPDM layers and when used for bonding on various substrates. The adhesive connection is elastic and waterproof. HERTALAN<sup>®</sup> KS 137 is always applied on both sides. Once it is completely cured, heat resistance of approx. -40 °C to +80 °C is achieved.

## Application

General:  
HERTALAN<sup>®</sup> KS 137 is ready for use and must not be thinned or mixed with external materials. It must be applied in dry weather conditions and at an ambient temperature of at least +5 °C. Both the EPDM material and the substrate must be dry and clean.



# HERTALAN<sup>®</sup> KS 137 – contact adhesive

## Seam connections:

The seam overlap should be at least 100 mm (80 mm HERTALAN<sup>®</sup> KS 137 and 20 mm HERTALAN<sup>®</sup> KS 96). HERTALAN<sup>®</sup> KS 137 is applied on both sides with a width of 80 mm using a brush / paint roller so as to provide good coverage. The adhesive consumption is approx. 50 g/m. After an open time of approx. 5 – 15 minutes, carefully close the seam connections without creating any air bubbles and firmly compress with a silicone roller. The outer, adhesive-free seam edge is sealed with HERTALAN<sup>®</sup> KS 96 and compressed with a silicone roller. The adhesive connection can be fully loaded after approximately 12 hours. A maximum adhesive force and heat resistance is achieved after approx. one week.

## Surface bonding:

Here, too, it must be ensured that the substrate is clean and dry and cannot be attacked by the solvent. The adhesive is always applied on both sides. Care must be taken to ensure a sufficient applied quantity on absorbent substrates. The adhesive is applied on both sides with a wide brush so as to provide good coverage. After an open time (5 – 15 minutes), the waterproofing membrane is firmly rolled onto the substrate in a pressurised state to prevent air bubbles from forming.

## Substrates

Heavy / lightweight concrete, non-sanded bitumen roofing membranes, bituminously laminated insulation materials, wood, etc. Substrates must be smooth, clean, dry and free from oil / grease. The substrate must be free from sharp objects such as sharp stones, glass, etc. Such objects must be removed in any case. It is not possible to perform bonding directly on polystyrene foam or soft PVC!

## Coverage rate

Depending on the substrate, the coverage is approx. 500 g/m<sup>2</sup> when adhesive is applied on both sides.

## Cleaning

Devices can be cleaned with white spirit.

## Usage time

The open time very much depends on the relevant outdoor temperatures. Generally speaking, it is approximately 5 – 15 minutes. This means that the open time can be shortened significantly at higher temperatures.

## Curing

The connection can be loaded approximately 12 hours after bonding. Maximum bonding and heat resistance is achieved after approximately one week.

Please contact the Technical Department for further questions

Technical data	
<b>Product type</b>	Adhesive with a synthetic rubber and synthetic resin base, dissolved in combustible and organic solvents
<b>Colour</b>	Black
<b>Smell</b>	Organic solvents
<b>Viscosity (20°C)</b>	3.500 ± 500 mPas
<b>Density (20°C)</b>	860 ± 10 kg/m <sup>3</sup>
<b>Solids content</b>	45 ± 2%
<b>Dry film</b>	Elastic, waterproof
<b>Shelf life</b>	12 months, when stored unopened in its original packaging in a cool and dry place

Delivery unit	
Container	Coverage per m <sup>2</sup>
Can, 2 kg	500 g
Bucket, 6 kg	500 g



Please observe the instructions on our EC safety data sheets and the safety instructions on our container labels for handling our products.

# Contact adhesive

## PRESURRISED AND SPRAYABLE

HERTALAN<sup>®</sup> KS 205 is a solvent based, sprayable contact adhesive with a synthetic rubber and synthetic resin base. The adhesive is applied on both sides and is used on horizontal and vertical substrates.

### Application

The product is applied in a closed airless spraying system. Bonding should take place max. 5 – 15 minutes after adhesive has been applied on both sides (depending on the weather and the temperature). Carefully lay the HERTALAN<sup>®</sup> sheet or membrane in the adhesive zone without creating any creases or air bubbles, then firmly compress with a silicone roller. The ambient temperature is min. + 5 °C.

### Substrates

Heavy / lightweight concrete, non-sanded bitumen roofing membranes, bituminously laminated insulation materials, wood, etc. Substrates must be smooth, clean, dry and free from oil / grease. The substrate must be free from sharp objects such as sharp stones, glass, etc. Such objects must be removed in any case. It is not possible to perform bonding directly on polystyrene foam or soft PVC; carry out your own tests if necessary!

### Coverage rate

Depending on the substrate, the coverage is approx. 300 g/m<sup>2</sup> (0.35 l/m<sup>2</sup>) when adhesive is applied on both sides.

### Cleaning

Application devices can be cleaned with white spirit.

### Usage time

The open setting time very much depends on the relevant outdoor temperatures. Do not apply any more product than can be worked within 5 – 15 minutes. This means that the open time can be shortened significantly at higher temperatures.

### Curing

The maximum frictional bond is achieved after approximately 48 hours depending on the outdoor temperatures and humidity.

# HERTALAN<sup>®</sup> KS 205 – container variants



Please observe the instructions on our EC safety data sheets and the safety instructions on our container labels for handling our products.

## KS 205 – Aerosol can

Spray can for use on small and hard-to-reach surfaces.



## KS 205 – Spraying canister

The spraying device for fast and efficient bonding.



Technical data	
Product type	Sprayable contact adhesive, solvent-based
Consistency	Liquid
Colour	Yellowish
Flash point	< 0°C
Mixable with water	No
Shelf life	12 months, when stored unopened in its original packaging in a cool and dry place

Delivery unit	
Aerosol can	
Application	Spray
ml/container	750
Packaging unit (qty/box)	6

Delivery unit	
Pressure canister (disposable)	
Application	Spray
kg/container	14.2
Hose	
5.5 m long	
Spray gun incl. lance	
470 mm	



# HERTALAN® KS 205 – spray canister

The HERTALAN® KS 205 disposable pressure canister spraying system contains a contact adhesive for bonding HERTALAN® flat roof waterproofing solutions without using a compressor or a power supply.

## Properties

- Pressure canister 's capacity: 14.2 kg (18 litres)
- Net consumption approx. 200 g/m2 when product is applied on both sides
- Open setting time of 2 to max. 30 minutes
- Free from toluene and methylene chloride
- Pressure canister 's weight when pressurised: 19.9 kg

The priming set with the spraying device (mechanical application) consists of:

- KS 205 pressure canister (disposable)
- Connection hose
- Stainless steel spray gun including extension piece (spraying lance)
- CARLISLE® backpack for pressure canister, optional



- 1 Pressure canister spraying system with hose and spray gun
- 2 Connect the spray gun to the hose, tighten with union nut
- 3 Spray gun
- 4 Adjusting nut
- 5 Nozzle
- 6 Connection nozzle
- 7 Adjusting nut without end stop
- 8 Hose connection to canister valve
- 9 Predetermined breaking point. To be driven in to cure the product residue



## Before use

Ensure that all the parts of the pressure canister spraying system (disposable canister, connection hose, spray gun and spraying lance) are undamaged and have no defects.

Please shake or roll the pressure canister for at least 30 seconds before use.

## Set up and assembly

The screwable individual components must be connected with one another. Ensure that the union nuts are secure during this process. The adjusting nut on the spray gun must be closed.

## Instructions for use

HERTALAN® KS 205 is a contact adhesive that is applied on both sides. The adhesive can be used on both horizontal and vertical substrates. Shake or roll the pressure canister for at least 30 seconds before use to distribute the propellant gas well and to achieve a homogeneous spraying result. Hold the spray gun approx. 20 cm away from the surface to be sprayed and adjust so that an even spraying result is achieved. The adhesive is applied on both sides, namely on the substrate and on the HERTALAN® EPDM. After an open time (within 5 – 15 minutes), carefully turn the HERTALAN® EPDM membrane without creating any air bubbles (avoid tautness and folds) and firmly roll on with a silicone roller to achieve optimum adhesion.

The working temperature is min. +5 °C and max. +35 °C. The pressure canister may not be exposed to direct sunlight or temperatures above +40 °C.

The disposable pressure canister is user-friendly and ready for use straight after the hose and the gun have been connected. Thanks to the closed system, curing of the adhesive is eliminated, so the system can be used several times. After use, however, the spray gun must be locked immediately. Please clean and reattach the gun's nozzle before starting further work, re-open the gun and continue. The valve on the disposable pressure canister remains open until the canister is replaced after emptying.



**Please do not unscrew the spray gun's adjusting nut entirely, because it does not have an end stop. The adhesive would spray out in an uncontrolled manner otherwise.**

### Replacing the canister

The canister must only be replaced once it has been completely emptied. The empty condition is detected by means of propellant gas audibly escaping. Once the canister valve has been closed, the connection hose is unscrewed from the container and the spray gun is opened at the same time to relieve pressure. Once the adjusting nut on the spray gun has been closed, the accessories can be connected to a new canister again.

### Disposal

The empty canister's valve is opened so that the remaining residual pressure can be released. This process should take place outdoors, because any residual adhesive can escape here. The residual pressure is completely released after at least 24 hours. Product residues can cure once a predetermined breaking point has been opened next to the valve.



**Follow your local authority guidelines for safe disposal.**

### Substrates

Concrete, aerated concrete, wood, (mineralised) bituminous roofing membranes, etc. The substrate on which the HERTALAN® KS 205 is applied must be load-bearing, clean, dry and free from grease. Uneven areas must be levelled out. HERTALAN® KS 205 is not suitable for bonding unlaminated polystyrene foam or soft PVC.

### Consumption

Depending on the evenness of the substrate and the materials to be bonded, the amount of adhesive to be applied (on both sides) is approx. 0.35 l/m<sup>2</sup>. The disposable pressure canister is sufficient for a roof area measuring approx. 50 – 552.

### Cleaning

Dirty tools can be cleaned with white spirit.

### Usage time

The usage time depends on the temperature and the humidity. Under normal circumstances, you should not apply any more adhesive than you can work in 5 – 15 minutes at most. The open time is shortened significantly at higher temperatures.

### Curing time

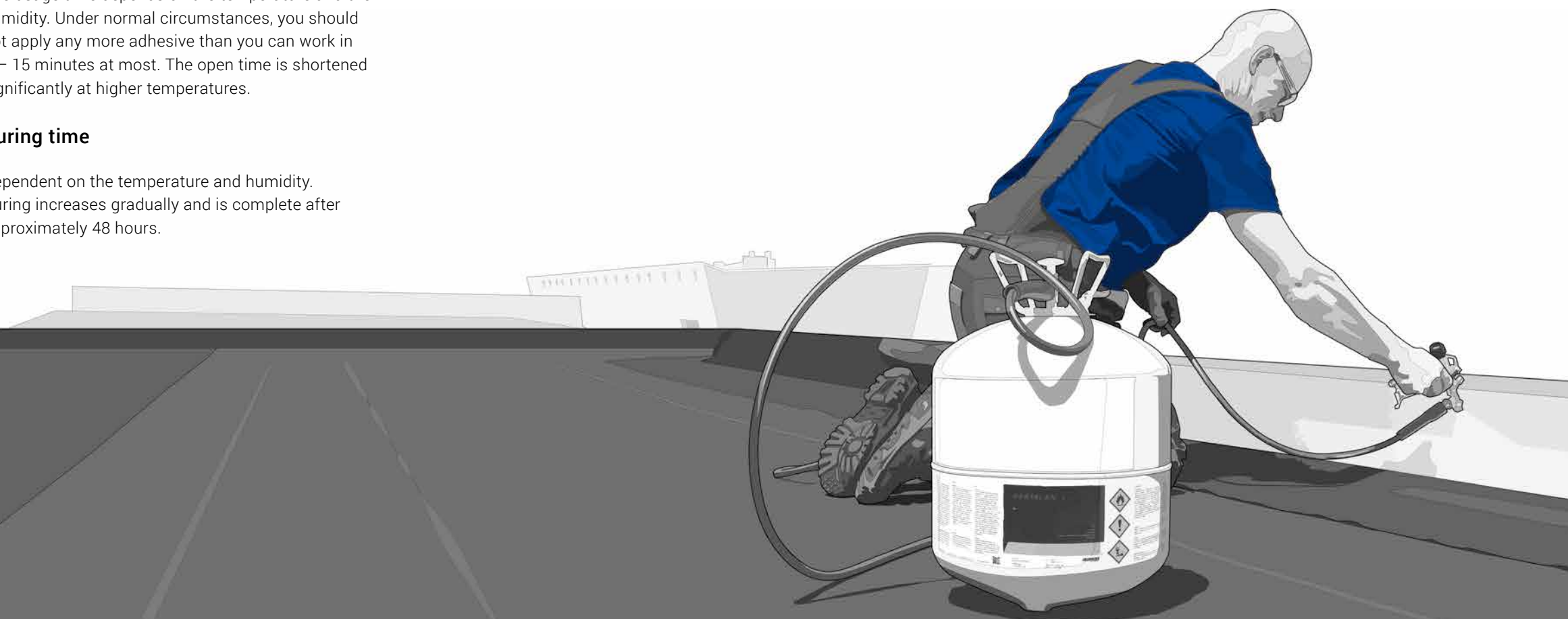
Dependent on the temperature and humidity. Curing increases gradually and is complete after approximately 48 hours.

### Advantages

- No risks in terms of durability or quality due to the tried and tested HERTALAN® KS 205 contact adhesive
- Tested contact adhesive with a high level of adhesion for HERTALAN® EPDM roof systems, tested by the BDA [Association of German Architects] and included as a system in our KOMO certificate
- Multifunctional adhesive system for various substrates. No PVC or non-laminated EPS
- Flexible in use, ready for use within a few minutes to be used according to our standard installation guidelines
- No compressor, so no power supply, only individual disposable canister
- Contents are sufficient for application on roof edges, partition walls, a dormer or a car port
- Reusable hose and gun, also available separately

### Durable and weather proof

Pressure canister spraying systems have been used in various industries – such as interior design and furniture upholstery – for many years. This system is particularly useful for bonding roof waterproofing solutions too, but use on the roof requires greater adhesion. The roof waterproofing solution is exposed to the sheer diversity of the elements over many years and you want to make sure that there is no risk in terms of durability.





## Regional roots, global network.

# CARLISLE® CM Europe

HERTALAN® is one of the innovative products brought together under the strong umbrella brand of CARLISLE® CM Europe, standing for decades of skill in EPDM sealing solutions. Quality manufactured in Germany, at home on the roofs throughout the world.

The CARLISLE® CM Europe Group brings together the decades of experience of European rubber producers under one roof. It is part of the listed US group CARLISLE® Companies Incorporated and can look back on many years of tradition.

As an established specialist in high-quality technical elastomer products for flat roofs, façades and the waterproofing of buildings, we have at the same time always looked ahead. With our 475 employees, we do what we can every day to inspire our customers – with the best products, the best advice and the best training.

We want to give our customers the knowledge they need to carry out their projects properly and thus successfully. Only a manufacturer knows its products of today and the ways they can be used in the future.

For years, we have intensively trained craftsmen so that they can achieve the very best build quality. We have significantly expanded our training capability in our CARLISLE® ACADEMY and we can offer tailor-made training to installers, retailers, architects and planners. Success starts in the CARLISLE® ACADEMY.

### Locations

#### Europe

- 1 | Hamburg | Germany**  
(European Head Office and Production)
- 2 | Waltershausen | Germany**  
(Production)
- 3 | Kaufbeuren | Germany**  
(CARLISLE® Services)
- 4 | Weesp | The Netherlands**  
(Production)
- 5 | Kampen | The Netherlands**  
(Production and Administration)
- 6 | Mansfield | Great Britain**  
(Production and Administration)
- 7 | Belper | Great Britain**  
(Production and Administration)
- 8 | Baia Mare | Romania**  
(Production)

#### America

- 9 | Scottsdale | USA**  
(Headquarters of CARLISLE® Companies Inc.)
- 10 | Carlisle | USA**  
(Division of CARLISLE® Construction Materials)

[www.ccm-europe.com](http://www.ccm-europe.com)



## Training with the CARLISLE® ACADEMY

As Europe's leading manufacturer of EPDM, each of our CARLISLE® ACADEMY training sessions provides you with sound expert knowledge and practical expertise. Our courses focus on our company's own product lines.

No matter which products, systems or solutions you are interested in – in the CARLISLE® ACADEMY you can find the right course on offer, from classic publicity training in the training centre at the CARLISLE® ACADEMY in Belper, to individual training sessions on your premises. The taught content is tailor-made to the everyday professional life of installers, retailers, architects and planners – so you can use your newly-acquired knowledge immediately.



**Basic training**

What are the benefits of EPDM and how do you install it? In our Basic Training, we give you an initial overview of our products and our company. In the practical section, you can see for yourself how easy it is to install.



**Advanced course**

Do you want to deepen your knowledge of EPDM and its possible uses? In our Advanced Course, you will learn more about our products and important standards, and can practise installation in a practical way on a model. At the end, you will receive proof of participation in the form of a certificate.



**Individual courses**

Furthermore, we can provide individual company certification, and architect and retailer seminars that are perfectly tailored to your needs and, of course, industry requirements.

More information about our training sessions can be found at [www.ccm-europe.com](http://www.ccm-europe.com)



# An overview of our services

We want you to feel secure all round with CARLISLE® CM Europe. So for us, this not only includes supplying the best products for your project but also the best possible customer service.

Our requirement for good service is that we accompany you in word and deed from the first consultation to measuring up and on-site briefings. Whether for new builds or renovations, from the roof to the waterproofing of buildings. We are even there for you after the completion of your project.

Our team of qualified and experienced employees consists of specialist advisers, application engineers, civil engineers and architects. In this way, we can always provide tailor-made services to our customers, whether they are installers, planners, architects or specialist trading partners.

## Advice and planning

- Individual consultancy appointments
- Technical advice for new builds and renovations
- Creation of renovation concepts and illustration of renovation alternatives
- Individual designs of roof structures and detailed solutions
- Tender documents
- Drafting of specifications
- CAD drawings for individual connecting areas or roof superstructures

## Calculations

- Wind load calculations
- Drainage calculations
- Cost estimates

## On-site service

- On-site personal consultation appointments
- Roof inspections and property surveys with status reports
- Roof openings in the case of renovations
- Construction supervision up to the final site inspection

## Delivery

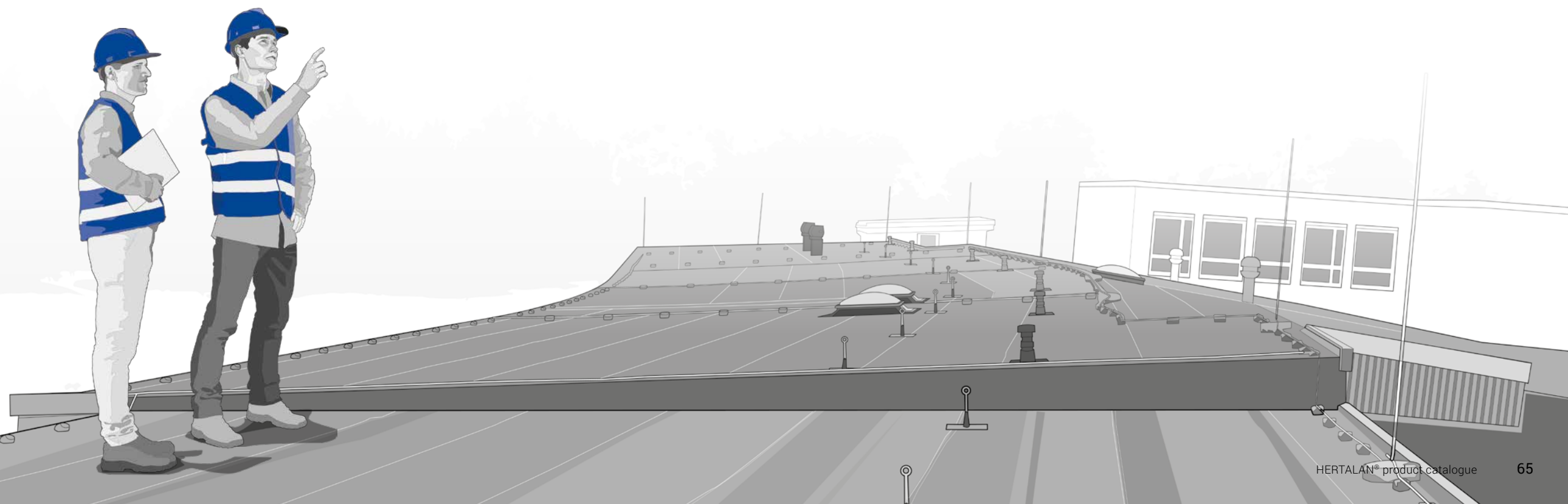
- Delivery to the location of your choice, even direct to the construction site
- Provision of unloading facilities on demand
- Free delivery may apply on certain orders, subject to Terms and Conditions.
- On-time deliveries at fixed times are possible on request

## Safety

- Production certified acc. to DIN EN ISO 9001 and DIN EN ISO 14001
- Environmental product declaration (EPD)
- Comprehensive certification and test records
- Extended tests carried out in our in-house test laboratories

## Training

- CARLISLE® ACADEMY for
- Roofers
  - Architects
  - Contractors
  - Distributors







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