



A NEW ROOF IN
3 SIMPLE STEPS

STRUCTASEAL®

THE PREMIUM CHOICE

 FAST  EASY  SAFE

Discover the 3 benefits
of STRUCTASEAL®

- ① Faster
- ② Easier
- ③ Safer

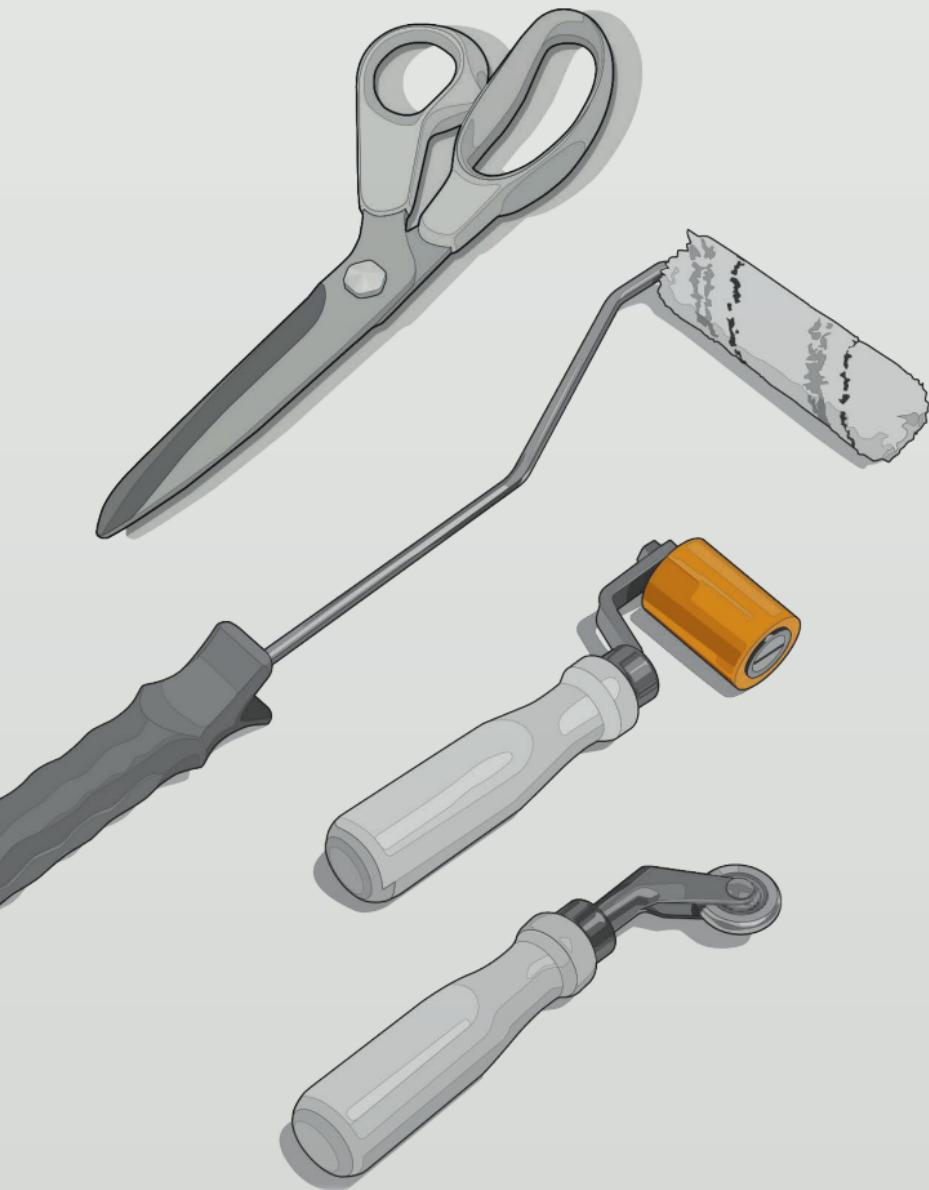
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Introduction

These installation instructions contain product technical information and are intended as a guide for the installation of our STRUCTASEAL® EPDM ROOF, FACADE AND GUTTER SYSTEMS.

The EPDM rubber membrane was developed in the 1960s to waterproof flat roofs. The areas of application have now been expanded and EPDM has been used for more than 50 years to make roofs, gutters and details waterproof and airtight. This makes the EPDM membrane a unique, multifunctional construction product, unlike other membranes.

EPDM is one of the most reliable products to choose from. And as part of Carlisle CM Europe, the STRUCTASEAL® brand is part of the European market leader in EPDM membranes.

Over the years, it has become clear that our knowledge and experience plays an increasingly important role and that this insight can add a lot of value in design and installation in projects of varied sizes. Our materials are not only used by specialist roofing contractors, but also by the general contractors and installers in construction.

STRUCTASEAL® EPDM seals are often composite products. In addition to the EPDM, suitable adhesives and sealants are also necessary. For a long lasting performance always use adhesives and sealants that are compatible and form part of the STRUCTASEAL® EPDM. The systems are tested in our own R&D department in Kampen (NL) or by independent bodies.

STRUCTASEAL® offers EPDM as a membrane, roll, self-adhesive and in the form of multiple accessories and attachments. The membrane systems are suitable for all types of traditional roofs: loose with ballast, fully and partially glued, mechanically attached and green roofs. They have been Brouf (T1) tested and thus comply with the NEN6063 in the system.

These handling instructions replace all previous editions and are adapted to the current state of the art technologies.

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The 3 benefits of STRUCTASEAL®



Faster

A huge advantage of working with EPDM membranes is that it is faster. The roof surface is covered in one go. So no extra seam connections.



Easier

EPDM membranes are easy to apply. After correct positioning, roll out, unfold and ensure that all eaves are covered.



Safer

Working with EPDM is working without any naked flames. No open flame and therefore no danger of fire on the roof. In short: a safe system.

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General requirements and instructions



General handling instructions for the handling of STRUCTASEAL® EPDM roof and gutter systems. These must be observed to get a perfect watertight and windproof result:

- All approved professional standards must be followed. The latest versions always apply to standards, regulations and guidelines.
- The technical guidelines are supplemented with the additional requirements in accordance with the applicable rules and regulations of the manufacturer.
- Regardless of which size STRUCTASEAL® EPDM roof system is used, a proper ridge and eave fixation must always be applied along all eaves and upstands. Eaves and upstands must always be closed in a windproof manner.

- STRUCTASEAL® adhesive systems are part of the STRUCTASEAL® EPDM roof systems. These are applied without open flame at a minimum ambient and material temperature 5°C.
- Different parts of the STRUCTASEAL® systems are fully compatible with each other. As a result, only the adhesives and sealants recommended by STRUCTASEAL® may be used. Using non STRUCTASEAL adhesives and sealants will void the warranty.
- Every substructure on which a STRUCTASEAL® EPDM roof system is installed must be firm, flat, dry and clean and free from oil, grease and sharp protrusions.
- It is important that when installing a STRUCTASEAL® EPDM roof system to only work with suitable and clean products and tools.

! You should also take extra account of the instructions on the packaging of our adhesives, sealants and accessories.

Only 3 steps to a new roof with STRUCTASEAL®.



Step 1

Get started with EPDM membrane

Unpack EPDM membrane



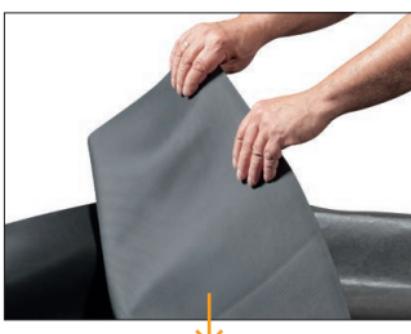
Unpack EPDM membrane

When working with an EPDM membrane always use the scissors and never a (snap-off) knife.



Roll out

Substrate must be dry, clean and free of grease. Then position the roller well over the eaves, press the EPDM into the edge. Do this on the other side after unrolling.



Unfold

Unfold the EPDM membrane completely and lay it well over the eaves and press it into the edge.



Fold back

From the edge (transition from deck to upstand), place a marking line 15 cm from this edge on the plane. Fold the sides back to this line. Do this on all sides.

Step 2

Get started with EPDM adhesive



Surface bonding on suitable insulation and wood: Sealing adhesive PU based

Fold the membrane back to the middle of the roof surface. Apply the adhesive in groove form within the marking. Apply these grooves 5 cm c.t.c. with a Ø 7mm. In total 250 gram per/m².



Surface bonding on wood: Water based adhesive

Fold the membrane back to the middle of the roof surface. Apply adhesive within the marking and roll out completely with a fine roller. Do not apply more than what can be applied in 5 min.



Edge and upstand bonding: Spraybond contact adhesive

Spray the eave of the roof up to the marking on both sides, both recessed EPDM and the substrate (insulation and/or wood).



Apply the adhesive in a groove form or roll it out with a fine roller.
Drying time approx. 15 minutes
(depending on the weather).



Fold the EPDM membrane back to the mark and gently sweep it with a soft brush.



Drying time: Apply immediately



Fold back the EPDM membrane and wipe gently with a soft brush.
The edges and corners are still free of adhesive.



Drying: when the adhesive is tack dry, fold the membrane tightly into the edge from the centre of the eaves. Then first roll the EPDM into the edge with a silicone roller. Round this off on the entire side.

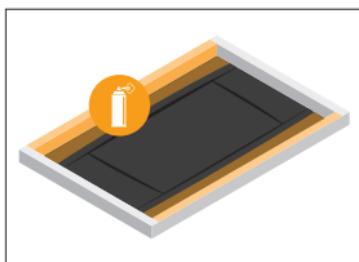


When the EPDM is folded in to the edge, fold the EPDM upwards again from the middle eave of the roof with a flat hand, over the eave of the roof. Then finish the whole side and **roll it well with a silicone roller.**

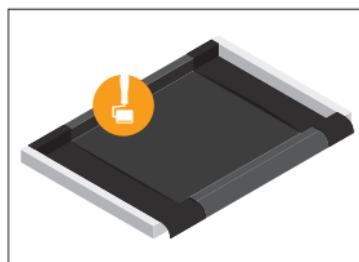
Step 3

Get started with details

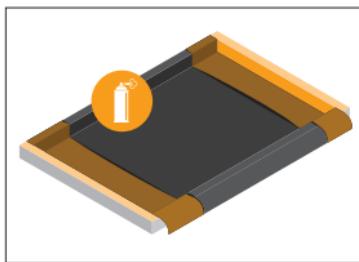
Step 2 explains how a roof eave is incorporated. In step 3 it is important to maintain a certain handling sequence.



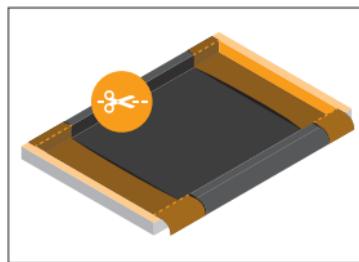
1. First of all, completely adhering the eaves on two opposite sides.



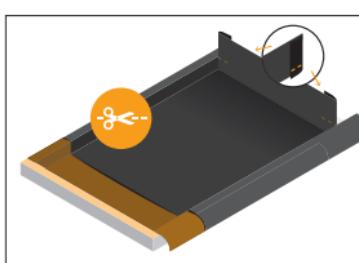
2. Work in the eave with EPDM membrane and roll well.



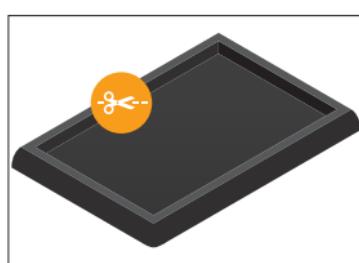
3. On the other two sides, the flat part as well as the roof eave and upstand can already be sprayed with Spraybond.



4. The EPDM membrane is now over the roof eave and can be marked (see image 1).



5. After correctly cutting the corner, the eave can be worked in (always work from the middle eave of the roof). See 3.1.



6. At lower upstands, the corner can also be folded in like a "chips bag".

3.1

Internal corners

Internal corners



1. mark the corner.



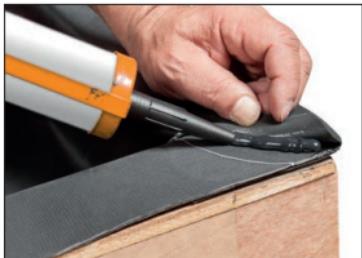
2. cut corner.



3. fold corner.



4. mark & cut.



5. round off, adhere and seal the corner.



6. remove excess sealant and finish neatly.

3.2 Rainwater drainage



Rainwater drainage



1. position and mark.



2. mark sealant line, 20 mm from the eave.



3. same on inside detail.



4. adhere inside (double-sided)
with Contact Bonding Adhesive
and allow to dry.



5. 20 mm seal, roll and finish.



6. remove groove sealant and
finish neatly.

3.3 Roof penetration



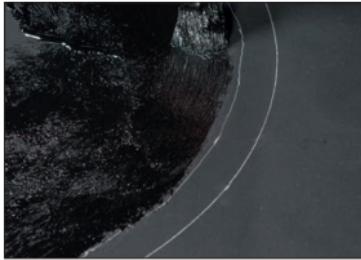
Roof penetration



1. seal the roof duct and screw it to the substrate.



2. mark the sleeve on the substrate.



3. adhere the substrate and the bottom of the sleeve with Contact Bonding Adhesive.



4. pull sleeve over penetration (opening sleeve is 1/3 of duct diam.)



5. seal last 20 mm with MS POLYMER, roll well.



6. remove groove sealant and finish neatly.

Product and material description



With STRUCTASEAL®, we supply premium products for roofs, façades and gutters. In short, the most versatile range for the all-round craftsman. From watertight finishing of flat roofs, incorporating roof and guttering to airtight and moisture-resistant connections in façade structures and around window frames.

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EPDM ROOFING

1.1 STRUCTASEAL® EPDM ROOFING

STRUCTASEAL® EPDM ROOFING is the ideal roofing for flat roofs. The material has unique properties, an exceptionally long life, very easy to handle, requires little maintenance, is naturally root-resistant and UV-resistant.

The EPDM roofing is supplied as a membrane, which is a technique whereby the seams between the roofing membranes are connected at the factory under controlled conditions. This seals the roof in practically one go. An extra connection has to be made only for the details and possibly an overlap. This makes every roof watertight more effectively and faster, without using a gas burner.

STRUCTASEAL® EPDM ROOFING is the most ideal roofing material for sealing flat roofs quickly, efficiently and safely (without naked flame).

- Available in one piece in several sizes
- Simple and safe processing without open flame
- Lightweight
- Suitable for new construction and renovation
- Fire-resistant (Broof t1)



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EPDM ADHESIVES AND SEALANTS

1.2 STRUCTASEAL® BONDING ADHESIVE PU BASED

The BONDING ADHESIVE PU BASED is a solvent-based PU adhesive which is applied on one side on flat horizontal substrates (both wood and suitable insulation).

The STRUCTASEAL® BONDING ADHESIVE PU BASED can only be used in the middle zone of the flat roof or in a gutter construction. There are no restrictions on the height of the roof surface or gutter, but partly on the substrate. The chosen insulation layer must be suitable, normal wooden substrates are no problem. Bonding Adhesive products may not be used for sealing edge and eave zones.

- On both wooden substrate and suitable insulation
- Not for bonding edges, upstands and eaves
- No height restrictions with correct handling
- Do not apply the EPDM immediately after application,
the solvents in the adhesive must first evaporate



1.3 STRUCTASEAL® BONDING ADHESIVE WATER BASED

The BONDING ADHESIVE WB is a water-based adhesive that is applied on one side to the flat horizontal substrate. It is an adhesive connection without the use of solvents, so it does not apply to all substrates.

The STRUCTASEAL® BONDING ADHESIVE WB must have a absorbent substrate (read: wooden substrate). Because it is water-based, it is easy to use during handling and can be partly corrected after application. This water-based adhesive can only be used in the middle zone of the flat roof. There is also a limit to the height, **which is max. 3.00 metre**. In practice, this often concerns the roofs of carports, garden houses and shelters

- No solvents
- Only for bonding to wooden or absorbent substrates
- Height restriction is 3 m. from normal ground level
- Not for bonding edges, upstands and eaves



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EPDM ADHESIVES AND SEALANTS

1.4 STRUCTASEAL® SPRAYBOND

The Spraybond is a sprayable contact adhesive, available in a handy spray can. This contact adhesive is applied on both sides, to both the substrate and the underside of STRUCTASEAL® EPDM. After drying (adhesive must be „tack dry“ on both sides), the EPDM can be applied with a direct, strong connection.

- For working in edge and eave zones
- For upstands and eaves
- Not for overlap joints
(details, connection EPDM to EPDM)
- Always apply on both sides



1.5 STRUCTASEAL® MS POLYMER

A high quality sealant for sealing overlap joints or adhesion of STRUCTASEAL® EPDM on different substrates. This MS POLYMER is a real all-rounder, ensures (after curing) a strong connection and can also be used on slightly damp substrates. After complete drying, the adhesive bond can withstand temperatures ranging from approx.-40 °C tot + 80 °C.

- Overlap and seam joints always in combination with Contact Bonding Adhesive
- Can be applied to slightly damp substrates
- Ideally suited for EPDM in vertical façade joints
- Do not apply more sealant than can be sealed in 5 minutes



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EPDM ADHESIVES AND SEALANTS

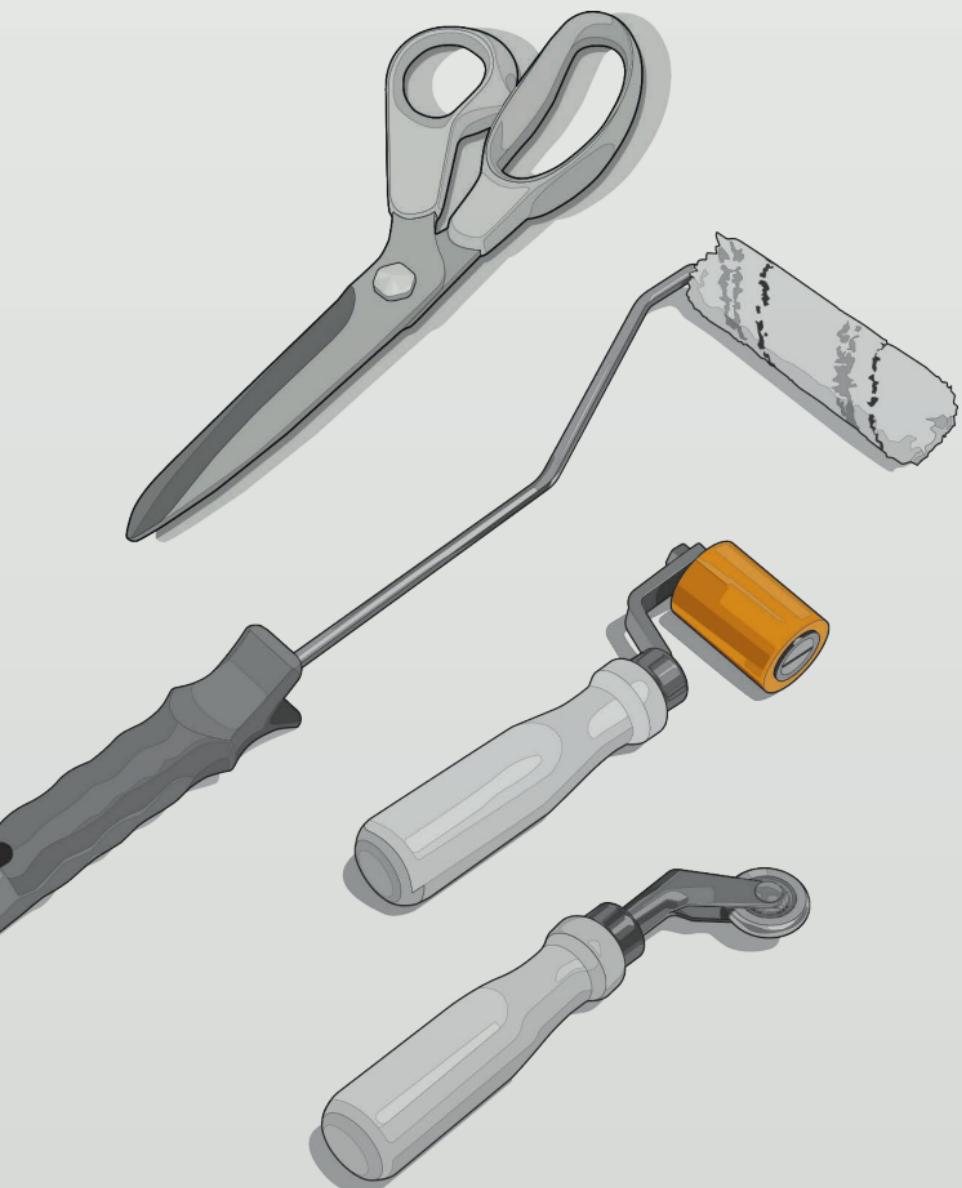
1.6 STRUCTASEAL® BONDING CONTACT ADHESVE

STRUCTASEAL® CONTACT BONDING ADHESIVE is a ready-to-use contact adhesive for overlapping adhesion of EPDM and detailing. The adhesive is applied on both sides with a stiff brush, on both the substrate and the bottom of the EPDM.

In practice, this adhesive is mainly used where the sprayable variant is not suitable (read: not allowed), which is for the overlap and seam connections. This applies to the connection of EPDM to EPDM as well as to the connection of STRUCTASEAL® detailing. The last 20 mm of a connection must always be sealed with the STRUCTASEAL® MS POLYMER (so keep it free of contact adhesive).

- Overlap and seam joints always in combination with Contact Bonding Adhesive
- Can be applied to slightly damp substrates
- Ideally suited for EPDM in vertical façade joints
- Do not apply more sealant than can be sealed in 5 minutes





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