



APPLICATION MANUAL

SikaProof[®] A+

BUILDING TRUST
CONSTRUIRE LA CONFIANCE





The information contained herein and any other advice are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. The information only applies to the application(s) and product(s) expressly referred to herein and is based on laboratory tests which do not replace practical tests. In case of changes in the parameters of the application, such as changes in substrates etc., or in case of a different application, consult Sika's Technical Service prior to using Sika products. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: www.sika.ca.

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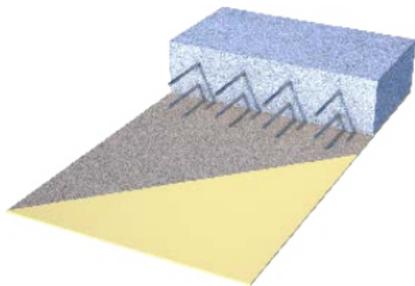
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GENERAL INFORMATION

WHAT IS SikaProof® A+

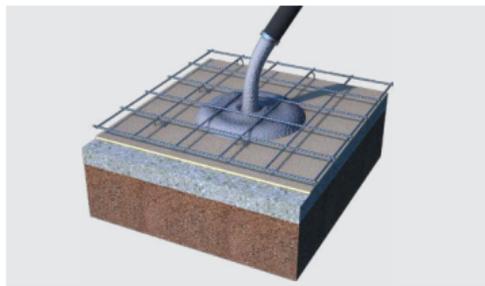


High flexible FPO membrane

- High crack-bridging capability
- SikaProof® A+ 12: 1.75 mm total thickness
- SikaProof® A+ 08: 1.35 mm total thickness

Unique hybrid technology

- Polymer-modified cementitious bonding layer



Pre-applied fully bonded waterproofing system

- No lateral water migration
- Mechanical bond to structure due to coarse structure
- Adhesive bond to structure due to cement content and special polymer



Sealing and bonding

- Single tapes solution
- Easy, fast and safe installation
- Simple application for detailing (pipe penetration, pile heads, etc.)

GENERAL INFORMATION

THE PRODUCTS

SAP No.	Product	Packaging	Size	Unit	Quantity/Unit	Packaging Units
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SYSTEM COMPONENTS

571641	SikaProof® A+ 12	roll	2.00 x 20 m	m ²	40 m ²	Single roll
571640	SikaProof® A+ 12	roll	1.00 x 20 m	m ²	20 m ²	Single roll
640220	SikaProof® A+ 08	roll	2.00 x 25 m	m ²	50 m ²	Single roll
640222	SikaProof® A+ 08	roll	1.00 x 25 m	m ²	25 m ²	Single roll
571628	SikaProof® Tape A+	roll	0.15 x 25 m	m	25 m	2 Rolls / box
577412	SikaProof® Sandwich Tape	roll	0.05 x 25 m	m	25 m	5 Rolls / box

ACCESSORIES

457589	SikaProof® Patch-200 B	roll	0.20 x 20 m	m	20 m	2 Rolls / box
424701	SikaProof® FixTape-50	roll	0.05 x 20 m	m	20 m	5 Rolls / box

GENERAL INFORMATION

APPLICATION TOOLS



- Metal straight edge for cutting
- Clean, dry cloth
- Marking pen
- Tape measure
- Small pressure roller
- Membrane cutter
- Staple gun

GENERAL INFORMATION

SEALING AND BONDING OF MEMBRANE JOINTS



- All overlaps are sealed and bonded with either the SikaProof® Tape A+ or the SikaProof® Sandwich Tape
- The minimum overlap is 5 cm



The SikaProof® Tape A+ is used for:

- As inside tape for jointing of overlaps
- Detailing (e.g. pipe penetrations, pile heads, inside & outside corner)



The SikaProof® Sandwich Tape is used for:

- Jointing of overlaps, especially for wall application with double-sided formwork

GENERAL INFORMATION

SUBSTRATE PREPARATION



Substrates for installation:

- Sufficient stability
- Avoid movement

Suitable substrates:

- Concrete blinding with a smooth surface finish (geotextile > 300 g/m²)
- Formwork
- Rigid thermal insulation
- Plywood



Surface:

- Smooth, uniform and clean
- Free from oil, grease, dust and any other loose particles
- Large gaps and voids must be filled before the installation
- Damp or slightly wet, but no ponding water
- Substrate temperature has to be min. +5°C / max. + 60°C



GENERAL INFORMATION INSPECTION

Before Installation

- Substrate quality
- Evenness of application area
- Protection layer

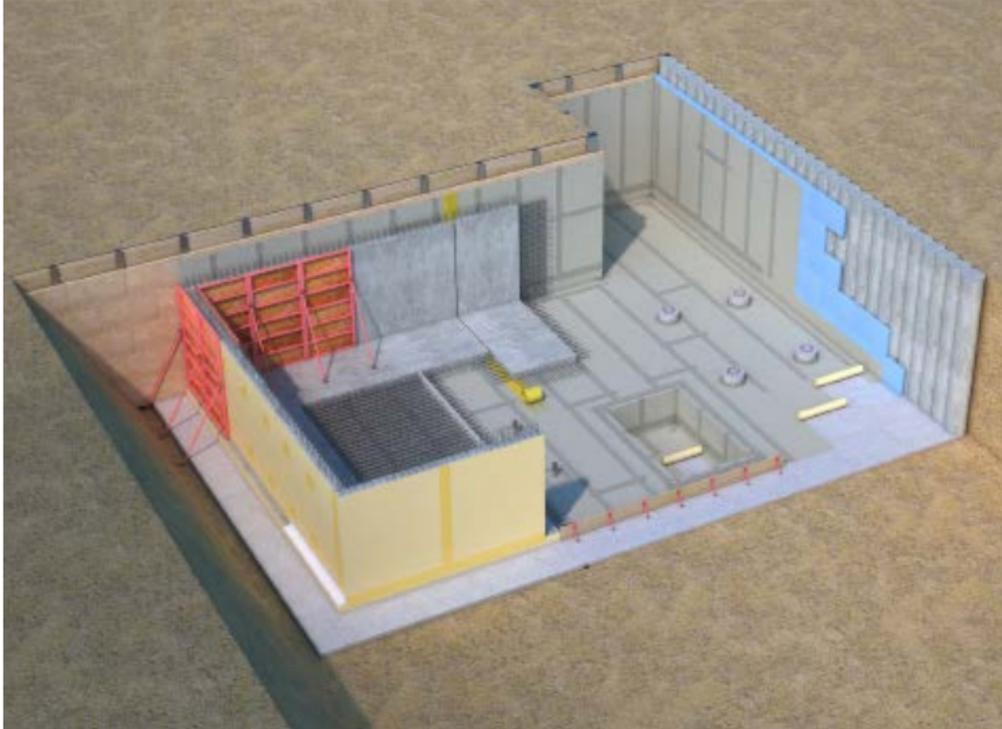
During Installation

- Execution of detailing
- Damage to the membrane
- Soiling on membrane

After Installation

- Damage to the membrane
- Soiling on membrane
- Excess material on membrane
(e.g. release liner, cut-offs, etc.)

INSTALLATION OF MEMBRANE SHEETS



- The installation of SikaProof® A+ has to be carefully performed.
- The system can be applied with the SikaProof® Tape A+ for internal jointing and detailing
- It is mandatory to comply with the **umbrella principle** when working with double-sided formwork
- The **umbrella principle** means that the in wall applications the top membrane is always on the outside when jointing with the lower membrane.
- Alternatively, SikaProof® Sandwich Tape is be used for internal jointing, especially for wall application, when working with double-sided formwork

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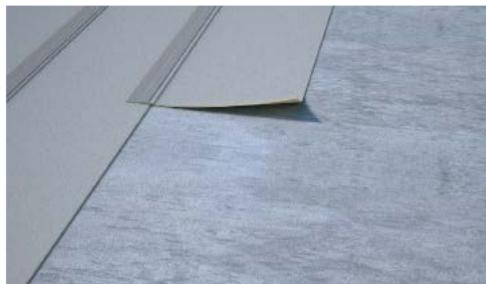


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INSTALLATION OF PERIMETER EDGES AND BASE SLAB



- Use black dotted line as auxiliary line
- Alternatively, SikaProof Sandwich Tape can be used for internal jointing in wall applications



- Smooth and clean substrate
- If necessary, use protection layer
- All overlaps have to be minimum 5.0 cm
- Use black dotted line as auxiliary line



- All T-joints must have an additional patch of tape
- All overlaps have to be minimum 5.0 cm
- Use black dotted line as auxiliary line

BASE SLAB APPLICATION

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BASE SLAB APPLICATION

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DETAILING

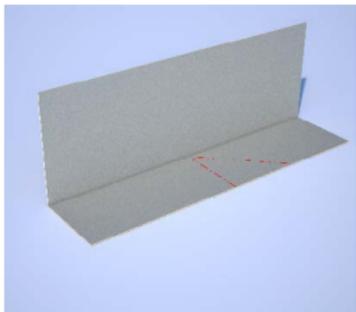
GENERAL INFORMATION



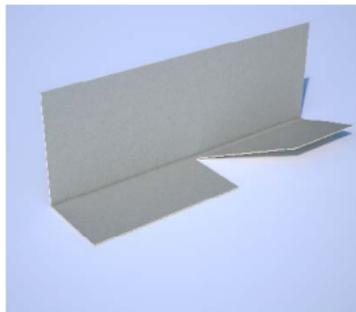
- In waterproofing membrane systems, the details are the most important part of the application.
- Generally, it is differentiated between the inside corner, outside corner, pipe penetration and pile heads.
- The proficient execution of the details is the key for a durable and reliably waterproofing system.
- The SikaProof® A+ system offers a simple and safe solution for different types of details.

DETAILING INSIDE CORNERS

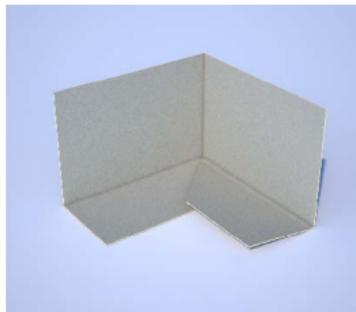
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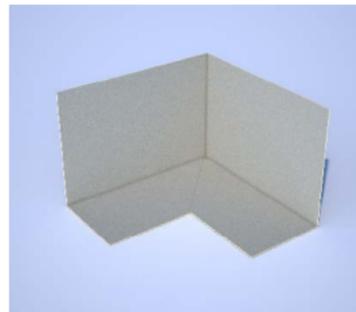
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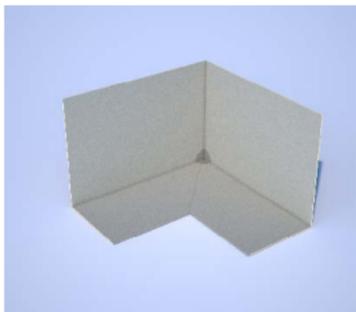
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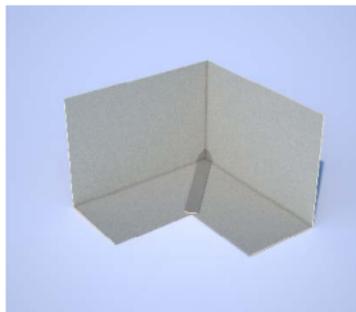
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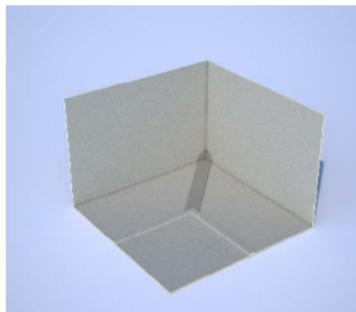
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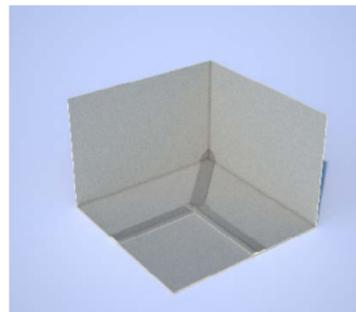
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DETAILING INSIDE CORNERS

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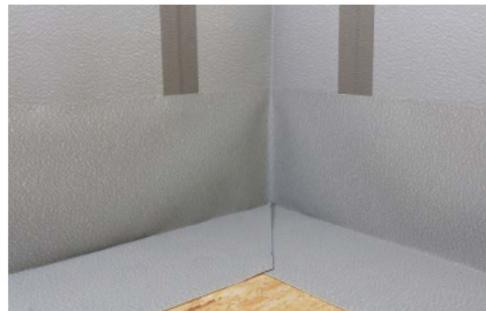
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DETAILING INSIDE CORNERS

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DETAILING INSIDE CORNERS

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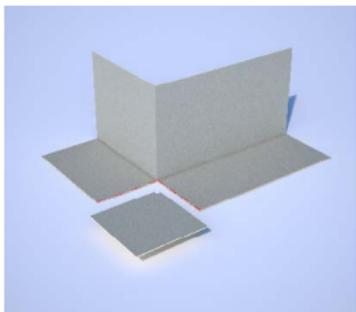
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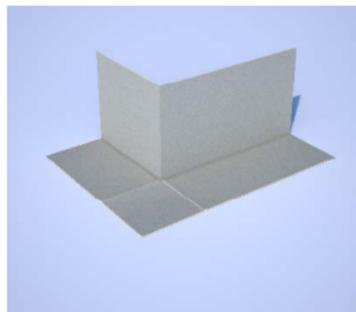
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DETAILING OUTSIDE CORNERS

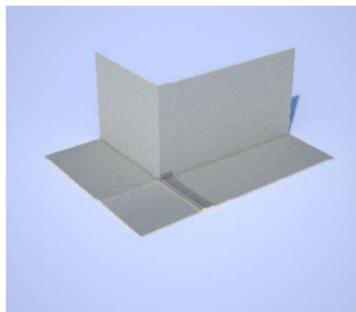
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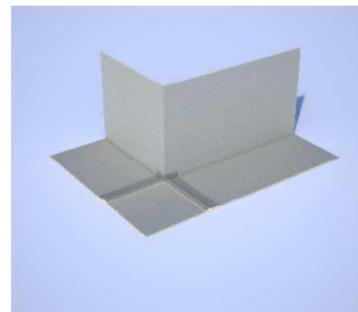
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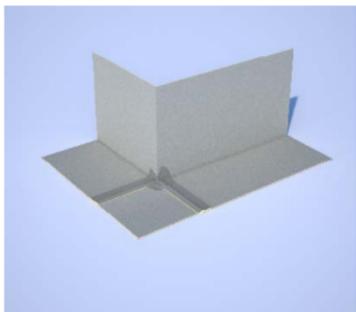
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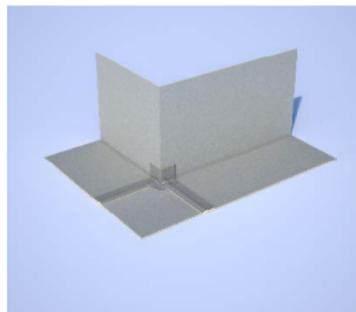
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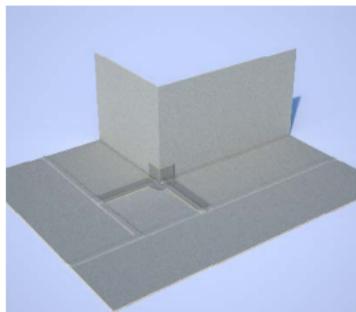
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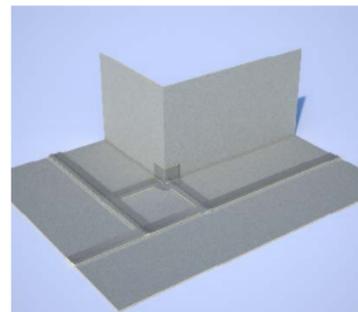
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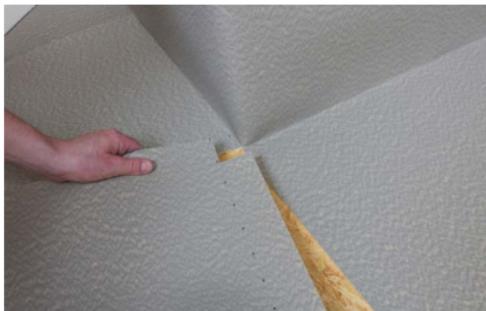
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DETAILING OUTSIDE CORNERS

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DETAILING OUTSIDE CORNERS

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DETAILING OUTSIDE CORNERS

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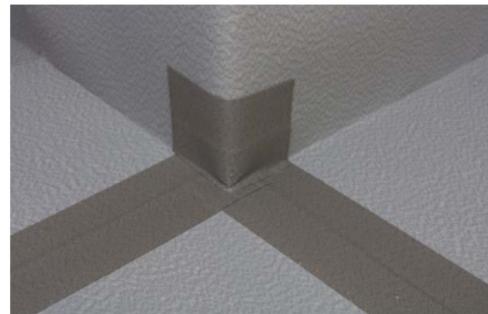
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DETAILING PIPE PENETRATION

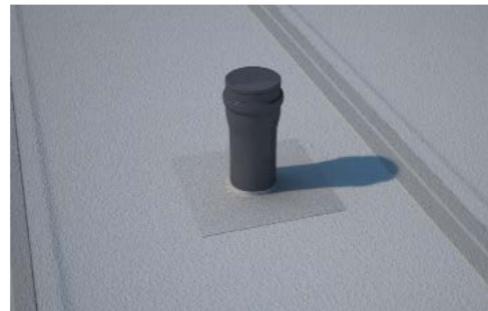
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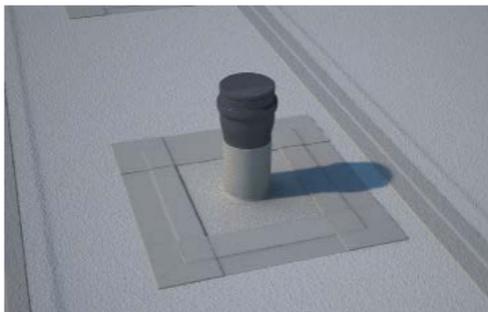
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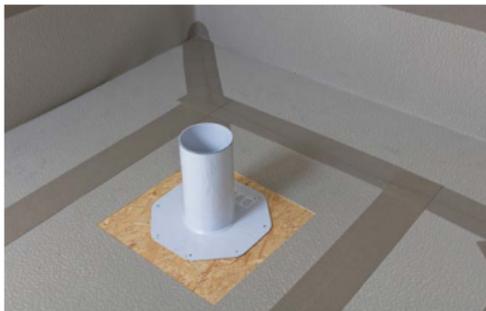
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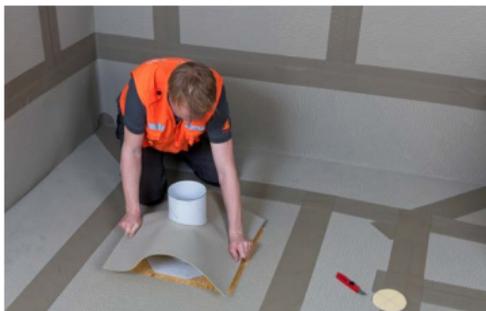
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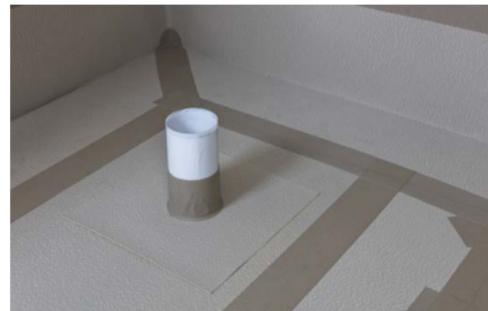
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DETAILING PILE HEAD

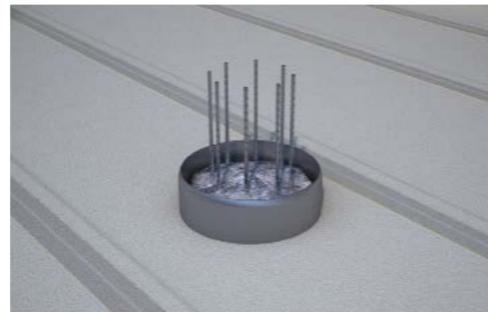
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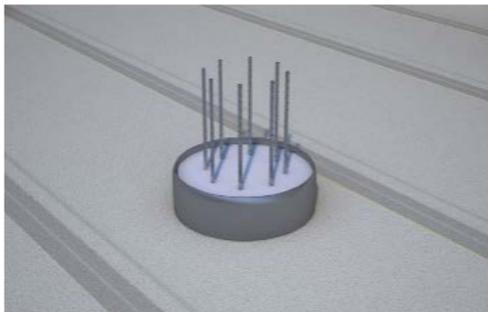
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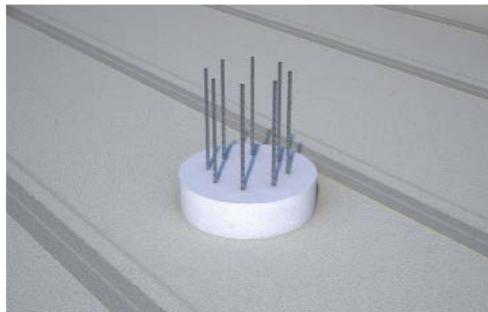
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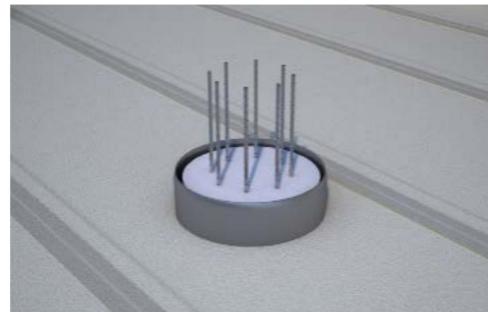
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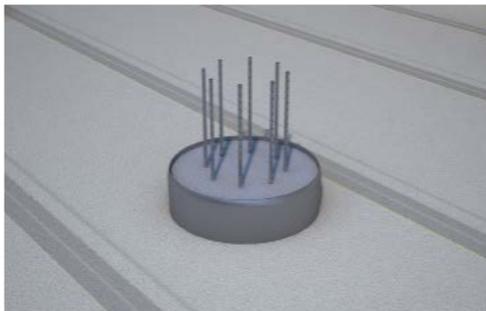
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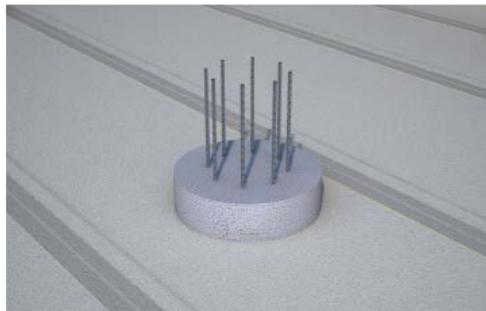
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DETAILING PILE HEAD

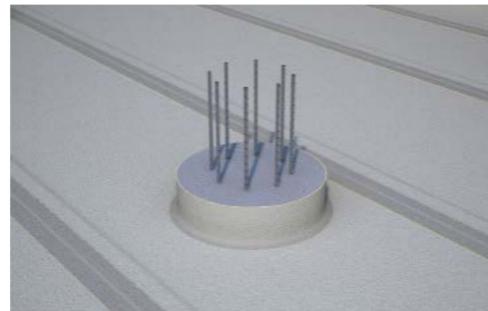
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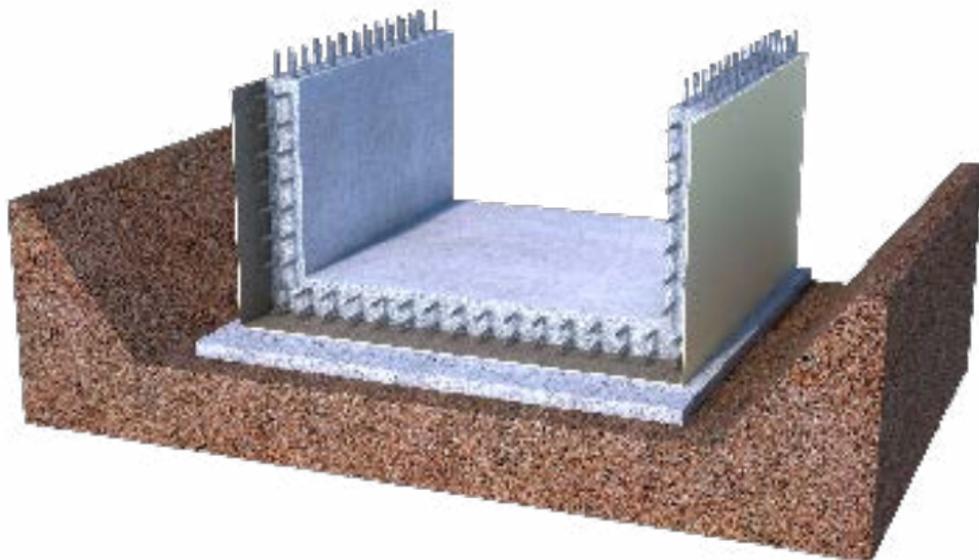


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POST INSTALLATION WORK GENERAL INFORMATION



For projects with double-sided formwork, additional sealing work has to be conducted to ensure a completely waterproofing basement structure.

Following elements have to be sealed:

- Tie-bar holes
- Expansion and Construction Joints

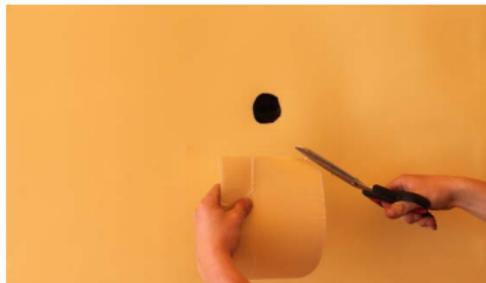
POST INSTALLATION WORK FORMWORK TIE-BARS



SikaProof® Patch-200 B



SikaProof® FixTape-50

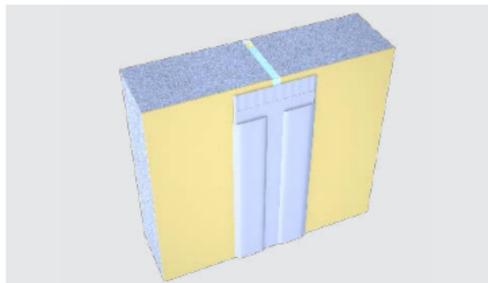


- Fill tie bar hole with SikaProof® FixTape-50
- Flame-treat the area around the hole
- Round off the edges of the patch
- Apply the patch on to the tie-bar hole



- Press the entire patch with a roller

POST INSTALLATION WORK EXPANSION AND CONSTRUCTION JOINTS



- For joints with anticipated movement, the use of Sikadur® Combiflex® SG joint sealing system is recommended.
- Prior to using Sikadur® Combiflex® SG system, the application area on the SikaProof® A+ has to be flame-treated.



- Pre-treat the concrete surface of the edge mechanically
- Clean the membrane surface
- Briefly pre-treat the membrane surface crosswise with an open torch
- Apply the Sikadur® Combiflex® SG system, according to the current Method Statement

SikaProof® A+ SYSTEM COMPONENTS & ACCESSORIES



2 m width rolls:

- 571641 - SikaProof® A+ 12 (2 x 20 m)
- 640220 - SikaProof® A+ 08 (2 x 25 m)

1 m width rolls:

- 571640 - SikaProof® A+ 12 (1 x 20 m)
- 640222 - SikaProof® A+ 08 (1 x 25 m)



571628 - SikaProof® Tape A+.



577412 - SikaProof® Sandwich Tape.



424701 - SikaProof® FixTape-50.



457589 - SikaProof® Patch-200 B.

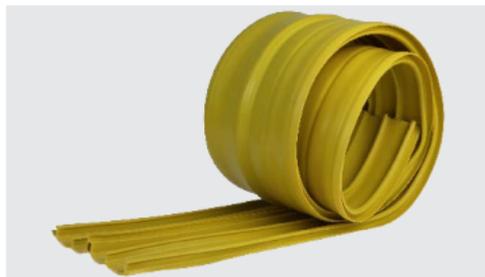
COMPLEMENTARY JOINT SEALING PRODUCTS



Sikadur® Combiflex® SG System



SikaSwell®



Sika Waterbar®



SikaFuko®

CLEANING

GENERAL INFORMATION

The SikaProof® A+ membrane has to be cleaned if it is soiled or contaminated with any other materials to ensure a full bond with fresh concrete on the entire area of the membrane.

Procedure

- Compressed air
- Controlled high-pressure water cleaner
 - Max. pressure ≤ 200 bar
 - Flat nozzles - no spirals!
 - Min. distance between the membrane surface and the jet nozzle ≥ 300 mm
 - Do not point the nozzle directly at overlap joints
 - Optimum angle for the jet $\leq 60^\circ$

Remove all:

- Liners, membrane cut-offs and other waste materials
- Clean the excess cement laitance with water immediately after concreting, when it is still in its fresh state
- Debris, dirt, dust, soil, sand, concrete/ cement residues
- Anything that could create a separation layer or cause delamination

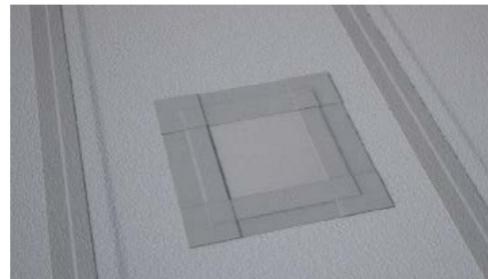
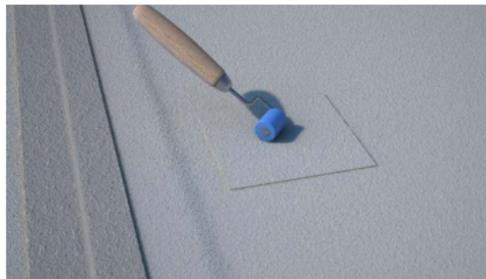


REPAIR GENERAL INFORMATION



Any membrane damage ≤ 10 mm

- Seal & bond an additional SikaProof® Tape A+ on the damaged area



Any membrane damage ≥ 10 mm

- Cover damaged area with a membrane piece.
- The membrane piece has to overlap 5 cm on all sides.
- Seal & bond the membrane piece with SikaProof® Tape A+ on all sides.

PROTECTION GENERAL INFORMATION

- Every membrane protection layer is temporary
- For concreting in stages a protection layer is required to prevent soiling on the membrane
- For duration of over 90 days between membrane installation and concreting, the SikaProof® A+ system has to be protected by UV-resistant layer.

Options for protection layers:

- Plastic film/foil (UV resistant)
- Geotextile (UV resistant)
- Other equivalent measures



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