



**SikaProof® A+**  
**PRE-APPLIED FULLY BONDED WATERPROOFING**

05.11.2020, CPE NITHARSAN KUGADAS  
SIKA SERVICES AG / CTM WATERPROOFING

**BUILDING TRUST**



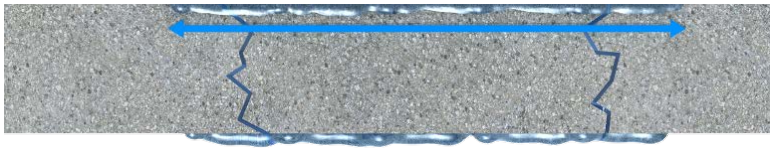
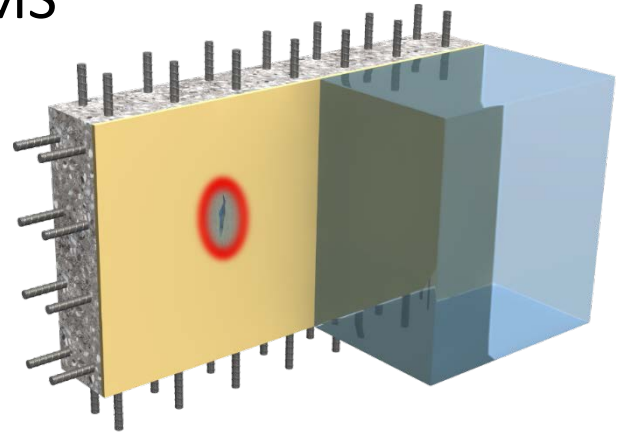
# WHY WATERPROOFING OF BASEMENT?

- Commercial use of below ground area
- Residential use of below ground area
- Longevity of concrete structure
- Reduction of lifecycle costs
- Reduction of repair costs



# THE SOLUTION: FULLY BONDED SYSTEMS

- No lateral water migration
- Reduced risk of damage to concrete
- Repairs only in confined small area



# SikaProof® A+ SIKA INNOVATION



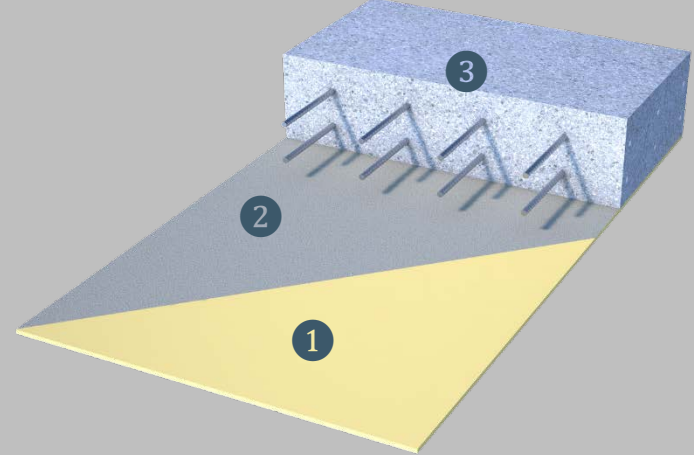
Membrane:

SikaProof® A+ 12 / SikaProof® A+ 08

Inside Tape:

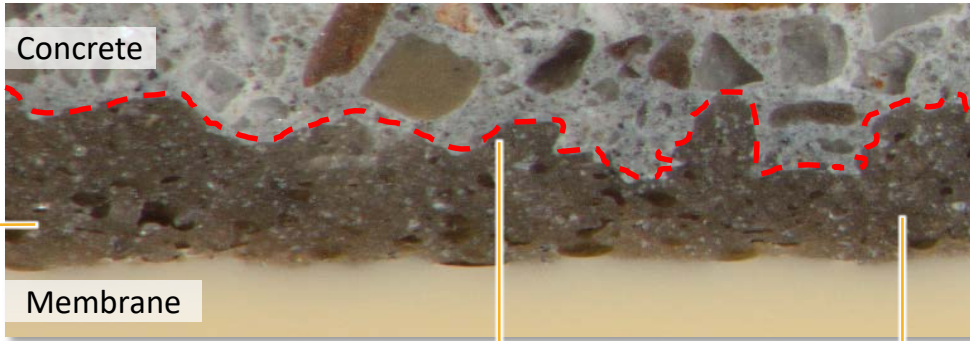
SikaProof® Tape A+ / SikaProof® Sandwich Tape

PRE-Applied, SikaProof® A+



1. Highly flexible FPO membrane
2. Unique, patented hybrid bonding layer
3. Structural concrete

# SikaProof® A+ TECHNOLOGY



Concrete

Membrane

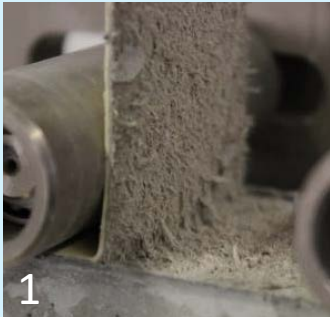
Concrete

Hybrid Bonding Layer

TPO Waterproofing Layer

## adhesive

Special TPO Polymer with adhesive properties



1

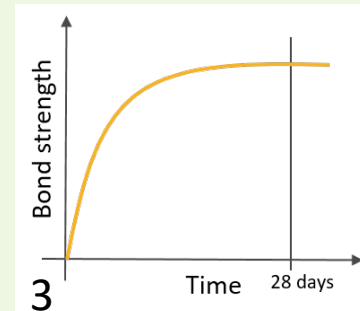
Large bonding surface due to coarse structure



2

## mechanical

Bond strength development



3

# SikaProof® A+ KEY CHARACTERISTICS

Characteristics	SikaProof® A+
Dual bond formation	Hybrid bonding layer offers a dual bond with an mechanical and adhesive bond formation
Resistance to lateral water migration	7 bar (70 m) according to ASTM D5385 Modified
Exposure prior to concreting	90 days
Robustness	High resistance against soiling
Jointing	The seams in the SikaProof® A+ system can be taped or thermally jointed.
Highly flexible TPO membrane	TPO membrane have high flexibility with high crack bridging capability
Complete prefabrication	Industrially prefabricated with defined quality control in production
System compatibility	Can be combined with other Sika waterproofing systems

# SikaProof® A+ APPROVALS / CERTIFICATES

## Approvals / Certificates:

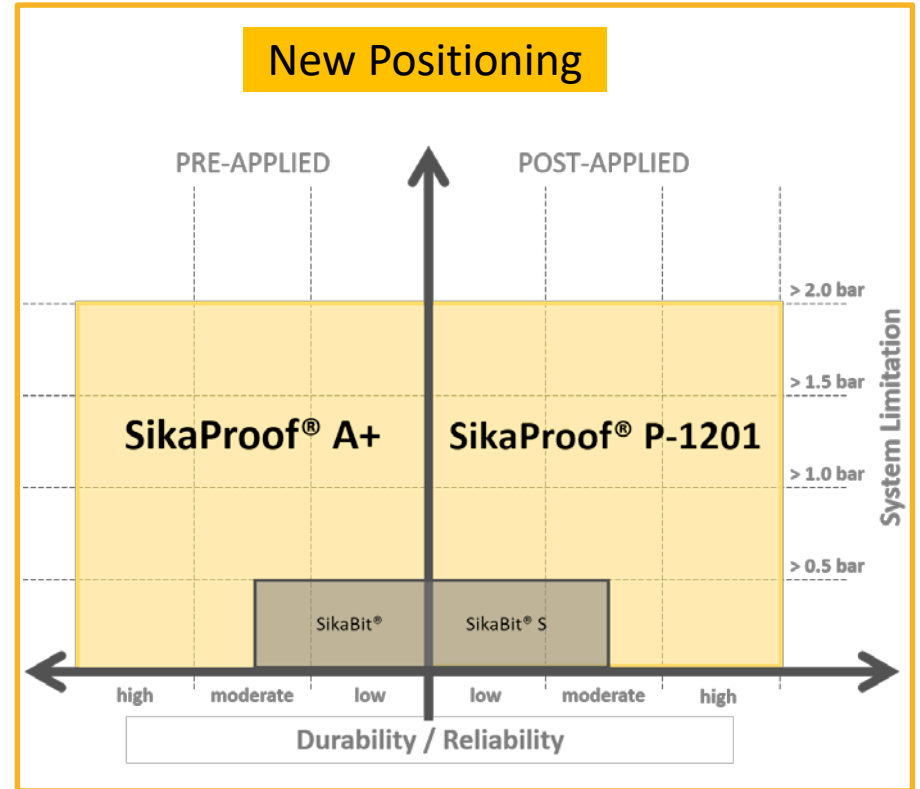
- German function test for resistance to lateral water migration: Certified by external laboratory
- German Approval: «allgemeine bauaufsichtliche Prüfzeugnis» - **abP**
- Radon permeability: Tested by external laboratory
- CO<sub>2</sub> permeability: Tested by external laboratory
- Methane gas permeability: Tested by external laboratory
- ASTM D5385 Modified: Passed, external testing
- Ongoing certificates: BBA (GBR), CDC (FRA)

# SikaProof® A+ POSITIONING

Simplified product portfolio

- Clear product positioning
- One product each for pre- and post-applied use
- One system limitation (tested system solution)

The SikaProof® A+ system is tested up to 5 bar (50 m) and approved with a safety factor of 2.5 for the use of up to 2 bar (20 m).





# SikaProof® A+ APPLICATION

## GENERAL METHOD:

### SikaProof® Tape A+



SikaProof® A+ 08 / 12

SikaProof® A+ 08 / 12

- For all joints and for patch repairs
- Ideal for fast installation
- Easy detailing



# SikaProof® A+ APPLICATION

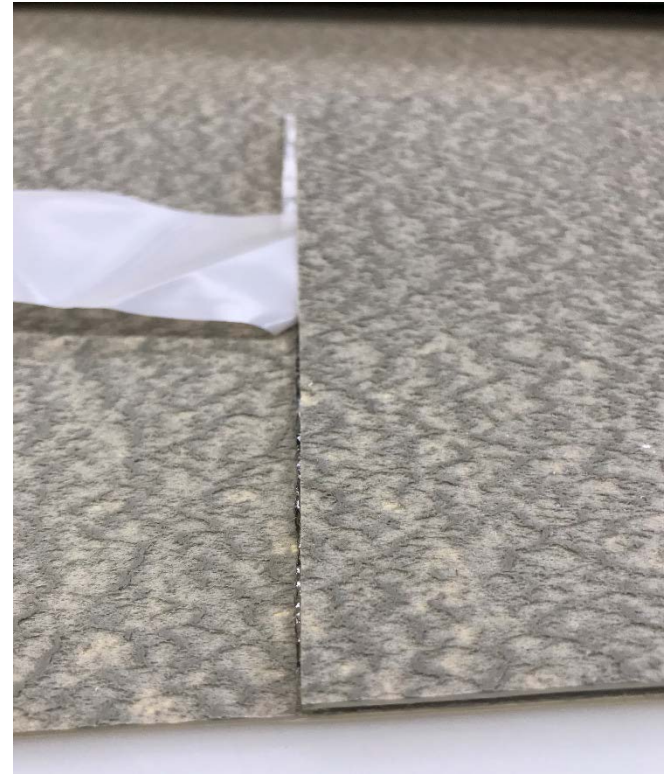
## ALTERNATIVE METHOD:

### SikaProof® Sandwich Tape

SikaProof® A+ 08 / 12

SikaProof® A+ 08 / 12

- Double-sided self adhesive tape
- Easy will application
- Ideal for double-sided formwork
- Usable to fix waterbars on membrane



# SikaProof® A+ APPLICATION

## ALTERNATIVE METHOD:

### Thermal Jointing

SikaProof® A+ 12

SikaProof® A+ 12

- Hand and machine thermal jointing
- No tapes necessary
- Homogenous jointing



# APPLICATION NEW SYSTEM VS. CONVENTIONAL SYSTEM

SikaProof A+ System  
18 min

Conventional System  
28 min

10 m x 10 m (100 m<sup>2</sup>)

10 m x 10 m (100 m<sup>2</sup>)

✓ **30 % faster** than conventional systems!

# SIKAPROOF® A+ APPLICATION

## Advantages:

- **30% faster** application
- **Easy detailing, less risk**
- **2.5 % more membrane** per role (2 m)
- **High robustness** against soiling
- **Versatile application** with *SikaProof® Tape A+* and *SikaProof® Sandwich Tape*

## SikaProof A+ System



# SikaProof® A+ COMPARISON

	Conventional System	SikaProof A+ System
Dual Bond	x	✓
SWISS Engineering	x	✓
Thermal Jointing	x	✓
Versatile application	x	✓
90 days exposure	x	✓
Robustness	✓	✓
Resistance to soiling	✓	✓
Resistance to lateral water migration	✓	✓

# SikaProof® A+ WHERE TO USE?



New Basements – Vertical Excavation



Existing Basements – Box in Box



New Basements – Open Excavation

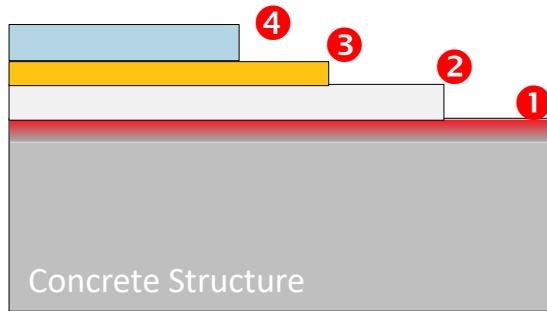


Precast Concrete Structures

# SIKAPROOF P-1201 SYSTEM

## POST- / IN-SITU ADHERED WATERPROOFING

### SYSTEM BUILD-UP



- 1) **Concrete** prepared surface
- 2) Leveling Layer / Adhesive: **SikaProof Adhesive-01 A/B**, 2K PU
- 3) Membrane: **SikaProof P-1201**
- 4) **Protection layer**, e.g. Sikaplan Protection Sheet or equal



# SIKAPROOF P-1201 SYSTEM

## GENERAL METHOD



1) Mixing of 2K PU adhesive



2) Apply adhesive with trowels



3) Apply membrane in wet adhesive bed



4) Press the membrane firmly

# SikaProof® A+ PROJECT DESIGN

Key points of project design:

- Type of excavation and substrates
- Construction method
- Maximum water head
- Type and degree of any chemical attack
- Climate and environment during **construction** and **service time** (life expectancy)
- Minimum thickness of the structure
- Concrete type and consistency



# SikaProof® A+ SYSTEM COMPONENTS & ACCESSORIES



- 571641 – SikaProof® A+ 12 (2 m x 20 m)
- 571640 – SikaProof® A+ 12 (1 m x 20 m)
- 640220 – SikaProof® A+ 08 (2 m x 25 m)
- 640222 – SikaProof® A+ 08 (1 m x 25 m)



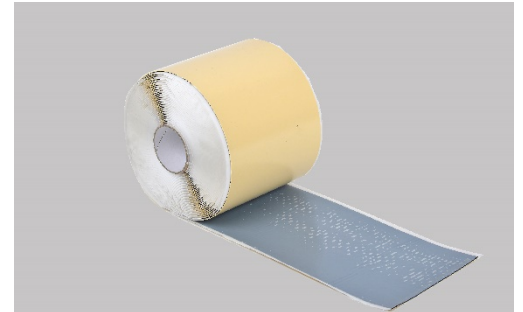
571628 – SikaProof® Tape A+



424701 – SikaProof® FixTape-50



577412 – SikaProof® Sandwich Tape



457589 – SikaProof® Patch-200 B

# SikaProof® A+ COMPLEMENTARY PRODUCTS



Sikadur Combiflex® SG System



SikaSwell®



SikaFuko®



Sika Waterbar®

# SikaProof® A+ TECHNICAL DOCUMENTS



## Technical Documents

- PDS
- Method Statement
- Application Manual
- Approvals / Certificates
- DoP CE Marking according to EN 13967

# SikaProof® A+ SUPPORTING DOCUMENTS



## Marketing Package

- Brochure
- Specification
- Flyer
- BIM Object



## REFERENCES

BUILDING TRUST

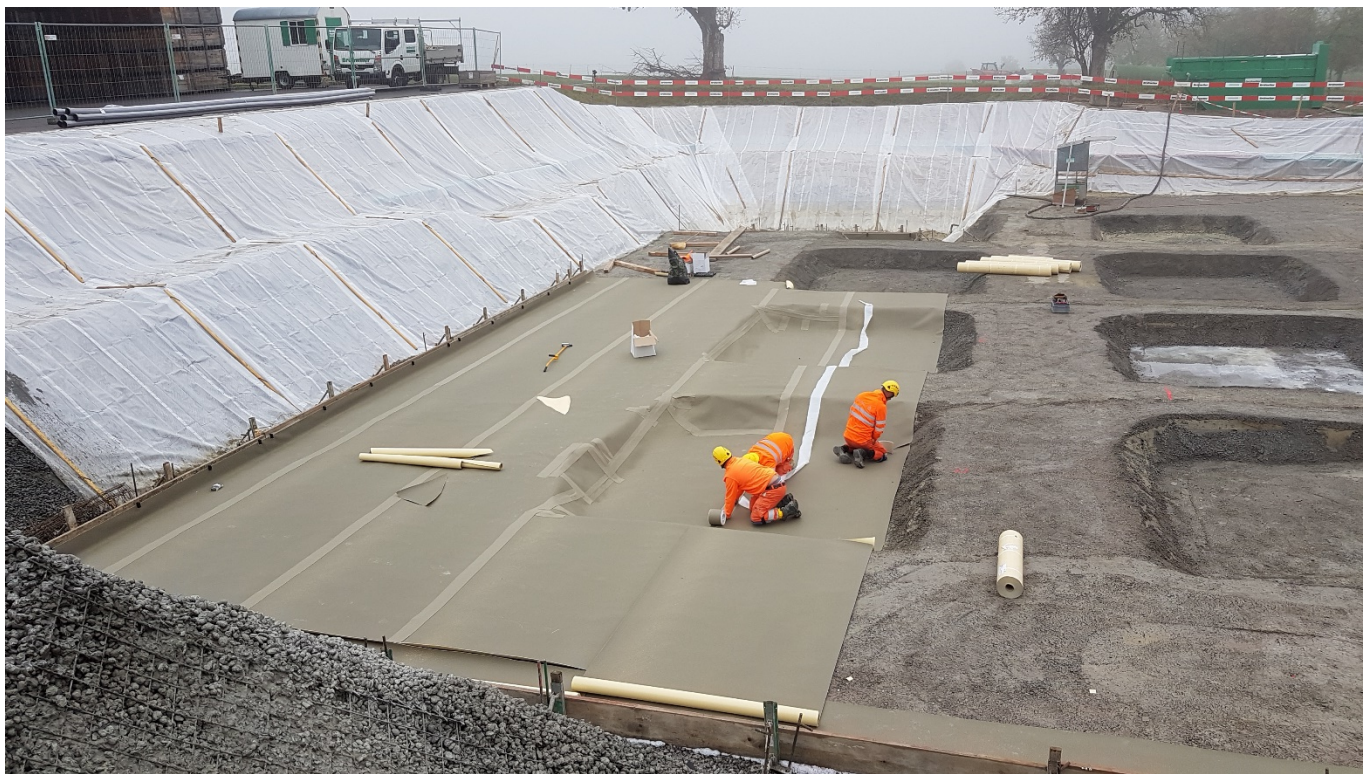


# OBERUZWIL, SWITZERLAND

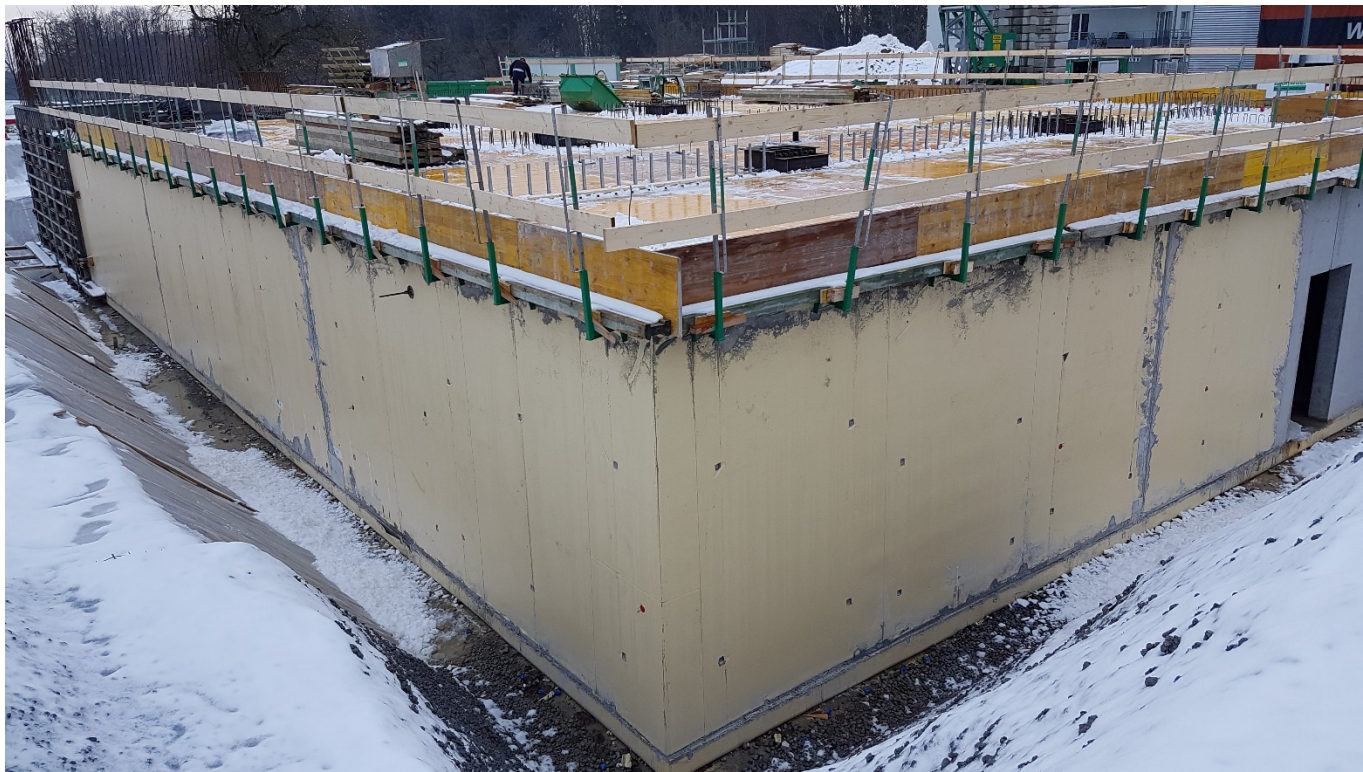




# OBERUZWIL, SWITZERLAND



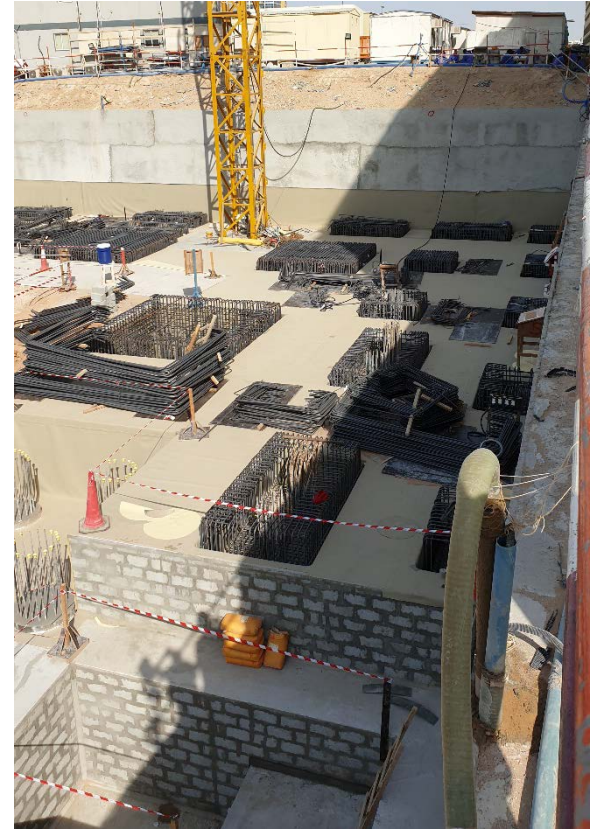
# OBERUZWIL, SWITZERLAND



# AL AIN, UNITED ARAB EMIRATES



# DUBAI, UNITED ARAB EMIRATES



# DUBAI, UNITED ARAB EMIRATES



# DOHA, QATAR



# DOHA, QATAR



# DOHA, QATAR







THANK YOU FOR YOUR ATTENTION

BUILDING TRUST

