



# SIKA KIMIA SDN BHD

PRESENTATION TO PAM NORTHERN CHAPTER  
27 OCTOBER 2018

PREPARED: PHILIPPE STOLL

TOPIC: WET ROOM SYSTEMS

# WHAT WE DO

## BUILDING TRUST

Sika is a company active in the field of specialty chemicals, Sika has a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing, and protecting in the building sector and motor vehicle industry.



### SIKA AT A GLANCE

18,000+	TEAM MEMBERS
100+	COUNTRIES
200+	FACTORIES WORLDWIDE
9	NEW FACTORIES IN 2017
74	NEW PATENTS IN 2017
7	ACQUISITIONS IN 2017
6.25 BN CHF	NET SALES IN 2017

### WE ARE THERE

Our products might not always be visible but the results they achieve are clear to see.

# WORLDWIDE MARKET PRESENCE

Sika is active in more than 100 countries on all continents. The focus will remain on establishing and expanding a direct presence in growth markets. Sika plans to raise the number of national subsidiaries to 105 by 2020. Currently we are especially expanding our presence in Africa, where we have opened 5 national subsidiaries and 6 factories since 2015.



# WHAT WE DO

## BUILDING TRUST



## OUR STRATEGY

The Sika growth strategy ensures long-term success and profitable growth. Focused investments in novel technologies, in the expansion of its local presence in the emerging markets, but also in leveraged market access through acquisitions, will secure future growth capacity. The company values, defined in Sika's Values and Principles, are the foundation of sustained success.

## MORE THAN 100 YEARS OF EXPERTISE

Our reputation for quality and reliability is illustrated through a comprehensive portfolio of technologies and solutions.

Whether we are waterproofing your basement or your roof, sealing your skyscraper or your car, or working with you on your house or your multi-story building, you will see why we are renowned for Building Trust.

**BUILDING TRUST**



# BUILDING TRUST SINCE 1910

SIKA PROVIDES WATERPROOFING SOLUTIONS FOR MORE THAN

**100 YEARS**

THE FIRST PRODUCT – SIKA®-1 – IS STILL ON THE MARKET

MORE THAN

**30%**

INTERIOR NOISE REDUCTION IN VEHICLES THANKS TO SIKA'S ACOUSTIC SOLUTIONS

EVERY YEAR SIKA SUPPLIES ENOUGH ROOF MEMBRANES TO COVER THE

**WHOLE OF MANHATTAN**

SIKA'S CLEANROOM FLOORING SYSTEMS RELEASE

**1,000 TIMES LESS EMISSIONS**

THAN STANDARD LOW VOC SYSTEMS

USING SIKA'S LONG-LASTING WINDOW INSTALLATION SEALANTS, MORE THAN

**1 MILLION**

WINDOW FRAMES ARE SEALED EACH YEAR, HELPING TO SAVE MORE THAN

**10,000**

TANKER LOADS OF HEATING OIL OVER THEIR COMPLETE LIFETIME

THANKS TO SIKA'S RANGE OF WATER REDUCERS OVER

**25,000 MILLION LITERS OF WATER**

ARE SAVED ANNUALLY IN CONCRETE PRODUCTION

IN OVER 80 COUNTRIES, MORE THAN

**10,000 ROOFING CONTRACTORS**

ARE TRAINED AND CERTIFIED BY SIKA

WITH MORE THAN

**100 AWARDS**

IN 18 YEARS, SIKA IS THE COMPANY WITH THE MOST CONCRETE REPAIR PROJECTS AWARDED WORLDWIDE

**50%**

OF ALL CARS PRODUCED WORLDWIDE USE SIKA PRODUCTS

BUILDING TRUST





# BUILDING TRUST SINCE 1910

**FLOORING**



**SEALING & BONDING**



**ROOFING**



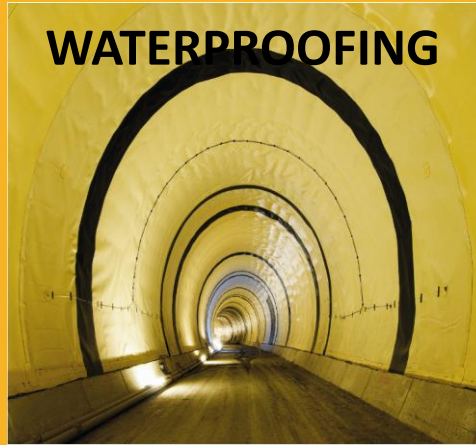
**INDUSTRY**



**CONCRETE**



**WATERPROOFING**



**REFURBISHMENT**



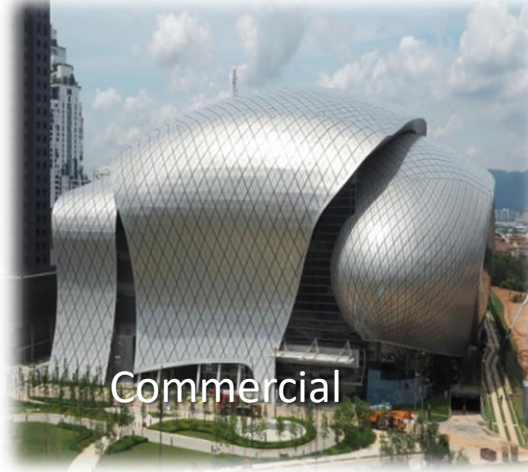
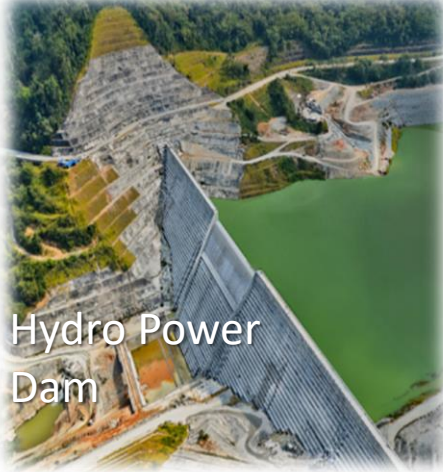
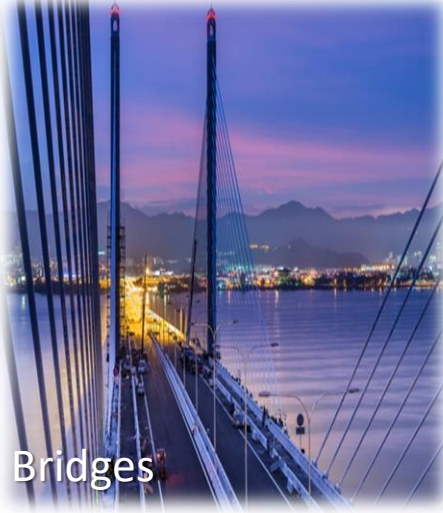
**ACTIVE IN  
SEVEN  
MARKETS**

**BUILDING TRUST**





# SIKA IS MALAYSIA LEADING BUILDING MATERIALS COMPANY



# SIKA IN MALAYSIA - FACTORY & SALES OFFICE







# WET ROOM SYSTEM

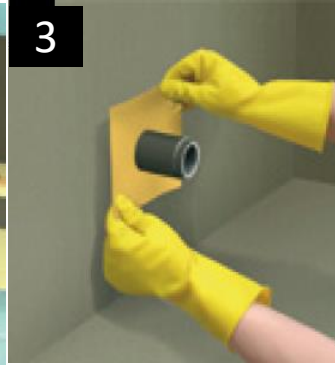
# SUMMARY STEPS



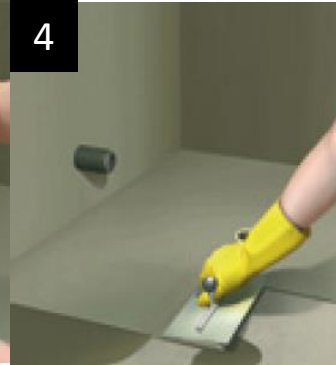
1  
Surface preparation  
And/or screeding



2  
Edge treatment



3  
Penetrations



4  
Waterproofing  
1<sup>st</sup> Layer



5  
Waterproofing  
2<sup>nd</sup> Layer



6  
Tile Adhesive



7  
Tile Grout



8  
Clean Tiles



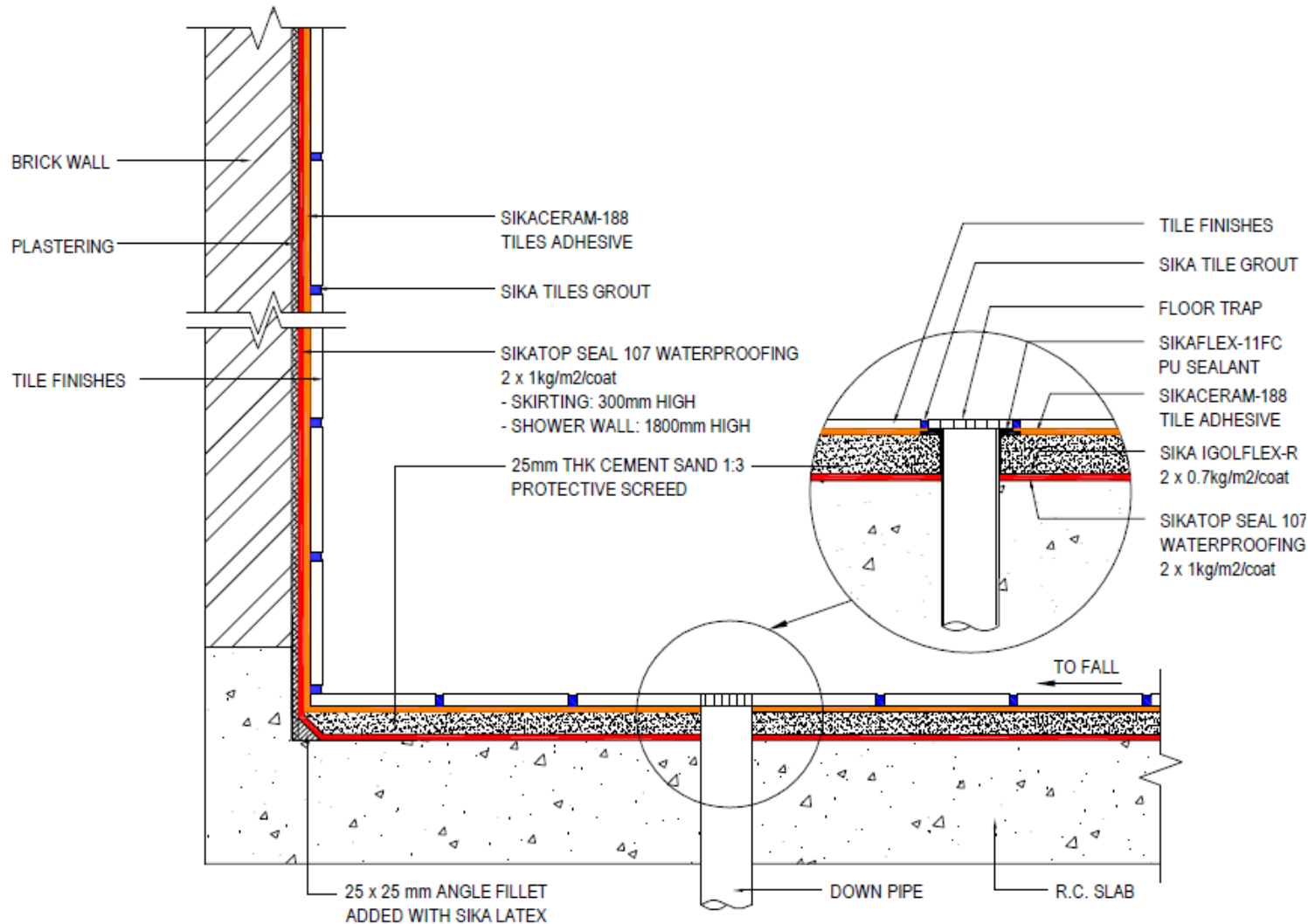
9  
Sealant



10  
Sealant  
smoothing

# SIKA TOPSEAL 107/109MY

## WET ROOM (BRICK WALL)





# STEP 1

## SCREEDING AND/OR SUBSTRATE REPAIR



# MARKET PRACTICES & APPLICATION

## FLOOR SCREED



**Floor screed** is a cementitious material made from a 1:3-6 ratio of cement to sand. It applied onto either a solid concrete **floor** slab or onto a precast concrete **floor**.

- A thick coat mortar of floor screed on concrete floors.
- Provide a good level surface.
- Minimize from shrinkage and cracks.
- Hard and able to withstand local impact and abrasion.
- Provide suitable surface to proceed tiling works.

# SITE MIXED VS PRE-BAGGED



Type of site practice	Site-mixed	Pre-bagged
<b>Market Popularity</b>	Popular in Malaysia market	Popular in Singapore market
<b>Mixing ratio (Cement : sand)</b>	1 : 6 Less cement content	1 : 3-4 More cement content
<b>Quality &amp; homogenous</b>	Very inconsistent in quality and mixed inhomogeneous	Consistent in quality and mixed more homogeneous
<b>Materials wastage</b>	Very high	Very low
<b>Costing</b>	Lower	Slightly higher

# PRODUCT RANGE

## SIKA FLOOR SCREED



### Sikafloor-137 Screed

- Suitable for all new and old concrete substrates such as housing estate void deck floors, heavy industrial floors or any other concrete substrates deemed necessary.
- Suitable bedding to receiving tiles under both internal and external conditions.
- Recommended thickness: 10-50 mm

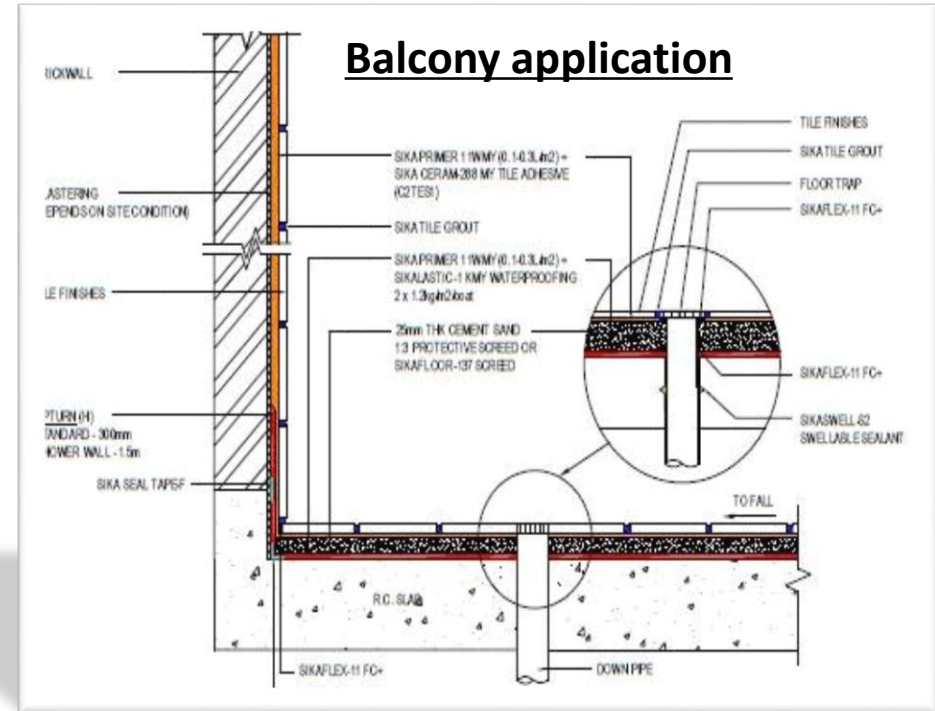
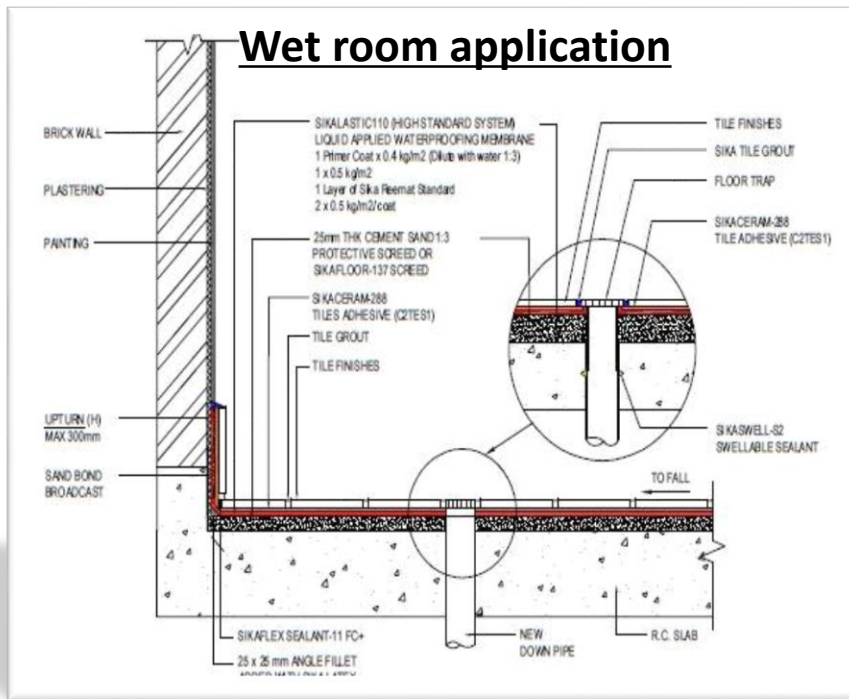


### Sikacrete floor Level

- Sikacrete® Floor Level is a 1-part, polymer modified, pumpable self levelling high performance cementitious underlayment for the levelling and smoothing of interior floors prior to the application of the final floor finish such as ceramic tiles, carpets, parquet / wood floors, vinyl, etc
- Recommended thickness 3-20mm

# SITE APPLICATIONS

## SIKAFLOOR-137 SCREED



Sikafloor®-137 Screed is suitable for all new and old concrete substrates such as housing estate void deck floors, heavy industrial floors or any other concrete substrates deemed necessary. It also provides suitable bedding to receiving tiles under both internal and external conditions.

- 1) Indoor and outdoor floor application
- 2) Wet room application
- 3) Balcony application



# CHARACTERISTIC & ADVANTAGES

## SIKAFLOOR-137 SCREED

- Time-saving: easy to apply.
- Can be used for internal and external applications
- Good compressive strength.
- Consistent quality.
- Convenient in handling, mixing and application.
- Less storage area required.
- Weather resistant and durable.
- Thickness may be varied to minimize wastage & optimize cost
- Minimized cracking when applied at correct thickness & properly cured.
- Non-combustible

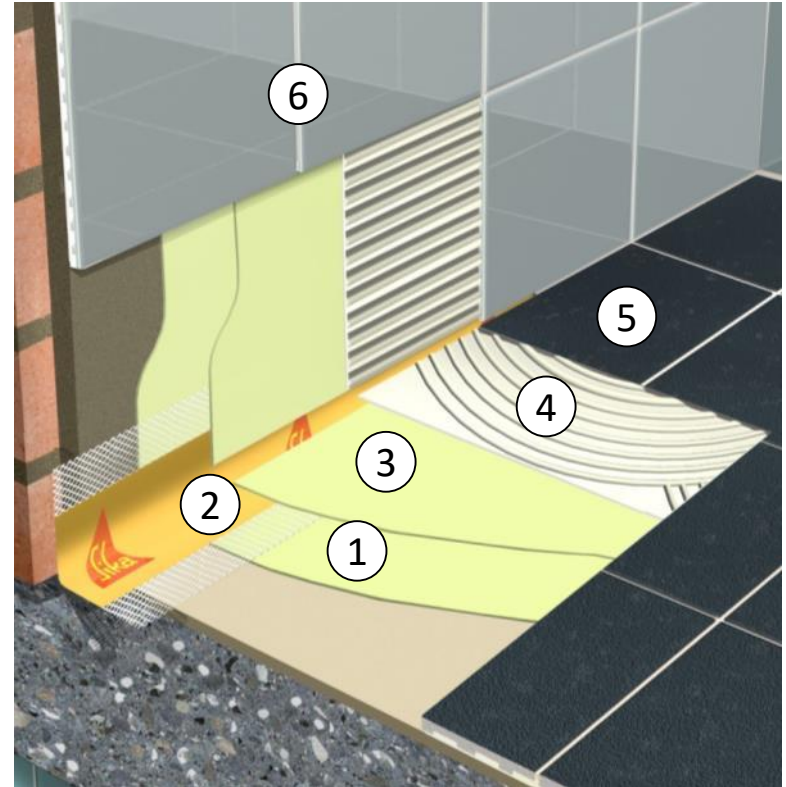


## STEP 2/3

# EDGE AND JOINT TREATMENT, AND PENETRATIONS

# EDGE DETAIL

1. First coat of Sikalastic-1 KMY
2. Sika Seal Tape F
3. Second coat of Sikalastic-1 KMY
4. SikaCeram-288
5. Tiles
6. Sika Tile Grout white
7. Silicone sealant (not shown)



# WET ROOM SYSTEM



Leveling plaster/screed to fall  
+  
**SikaTop Seal 107/109 MY** – Cementitious  
waterproofing coating  
+  
**Sika Seal Tape F** –  
Waterproof joint tape  
+  
**SikaCeram 188/288MY** –  
C2TE/ C2TE S1 Adhesive

**BUILDING TRUST**





# STEP 4 & 5

## WATERPROOFING

# PERFORMANCE STANDARDS

- Generally, there are no harmonized and comprehensive standards and requirements for waterproofing mortars
- There are local standards and test methods
- Additionally, waterproofing mortars can act as concrete protection coating
- Example of performance standards in Europe (often referred to globally):

	Scope	Mandatory in Europe
<b>EN 14891</b>	Waterproofing beneath external tile installations and in swimming pools	yes, since 01.03.2014
<b>EN 1504-2</b>	Concrete protection	yes, if stated as protective coating

# WATERPROOFING MORTARS

## KEY CHARACTERISTICS

Waterproofing Mortars offer unique features:



**RIDIG OR FLEXIBLE BEHAVIOUR**



**1- AND 2- COMPONENT PRODUCTS**



**CRACK-BRIDGING ABILITY**

# USE FOR WATERPROOFING

## EN 14891

### ■ **Definition:**

*Liquid-applied water impermeable products for use beneath ceramic tiling bonded with adhesives – Requirements, test methods, evaluation of conformity, classification and designation.*

### ■ **Scope:**

“... applies to all liquid-applied water impermeable products, based on polymer modified cementitious mortars, dispersions and reaction resin coatings, used beneath ceramic tiling, for external tile installations on walls and floors and in swimming pools.”

### ■ **Classification (e.g. for waterproofing mortars):**

- **CM** cementitious liquid-applied water impermeable products
- **O1** with improved crack bridging ability at low temperature (-5° C)
- **O2** with improved crack bridging ability at low temperature (-20° C)
- **P** resistant to contact with chlorinated water (i.e. for use in swimming pools)

### ■ **CE marking possible** (Compliance with EU legislation of a product)



# USE FOR WATERPROOFING

## EN 14891 – PRODUCT REQUIREMENTS

1 a FUNDAMENTAL CHARACTERISTICS		
Characteristic	Requirement	Test method
Initial tensile adhesion strength	$\geq 0,5 \text{ N/mm}^2$	A.6.2
Tensile adhesion strength after water contact	$\geq 0,5 \text{ N/mm}^2$	A.6.3 or A.6.4
Tensile adhesion strength after heat ageing	$\geq 0,5 \text{ N/mm}^2$	A.6.5
Tensile adhesion strength after freeze-thaw cycles	$\geq 0,5 \text{ N/mm}^2$	A.6.6
Tensile adhesion strength after contact with lime water	$\geq 0,5 \text{ N/mm}^2$	A.6.9
Waterproofing	No penetration and $\leq 20 \text{ g weight gain}$	A.7
Crack bridging ability under standard conditions	$\geq 0,75 \text{ mm}$	A.8.2
1 b OPTIONAL CHARACTERISTICS		
Characteristic	Requirement	Test method
Tensile adhesion strength after contact with chlorinated water	$\geq 0,5 \text{ N/mm}^2$	A.6.7 or A.6.8
Crack bridging ability at low temperature (- 5°C)	$\geq 0,75 \text{ mm}$	A.8.3
Crack bridging ability at very low temperature (- 20°C)	$\geq 0,75 \text{ mm}$	A.8.3

**Note:** Tensile adhesion strength tests are performed in combination with tile adhesive and tile

# SIKATOP® SEAL-107

## CEMENTITIOUS WATERPROOFING AND CONCRETE PROTECTION SLURRY



### IDEAL FOR

- Interior waterproofing of concrete, cementitious rendering, brickwork, etc.
- Waterproofing beneath tiling
- Basement walls, ponds, wet rooms, retaining walls, bridges, facades, balconies and terraces, etc.
- Universal waterproofing applications

### ADVANTAGES

- Waterproofing and concrete protection with ONE product
- Easy to apply by brush, trowel or spray
- Sealing static hairline cracks in concrete structures
- Protects concrete against carbonation
- Fulfills EN 1504-2 (method 1.3,2.2 and 8.2)

# NEW FEATURE

## SIKA TOPSEAL 107 - RED



- Sika TopSeal 107-RED
- Pigmented Part B in RED
- Objective:
- Differentiation and Quality assurance and control at site
- New USP for Spec. Selling



# SIKALASTIC®-1K MY

## ONE-COMPONENT, CRACK-BRIDGING MORTAR FOR CEMENTITIOUS WATERPROOFING



### IDEAL FOR

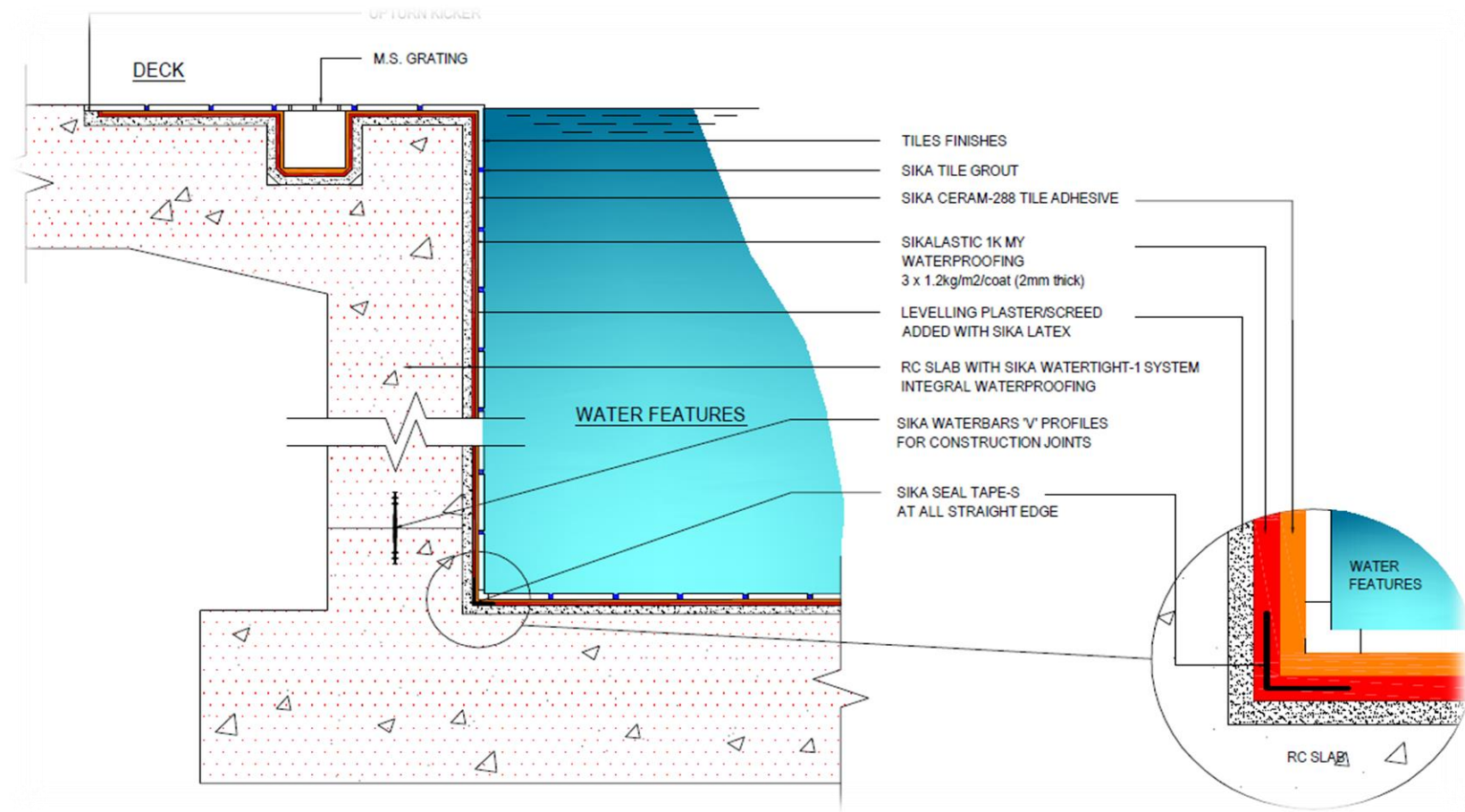
- Concrete structures, water tanks (potable water), basins, pipes, swimming pools and basement walls
- Waterproofing beneath tiling
- Outer wall surfaces buried in the ground
- Universal crack-bridging waterproofing mortar
- Precast wall, dry wall system, light weight block, acotek panel substrate

### ADVANTAGES

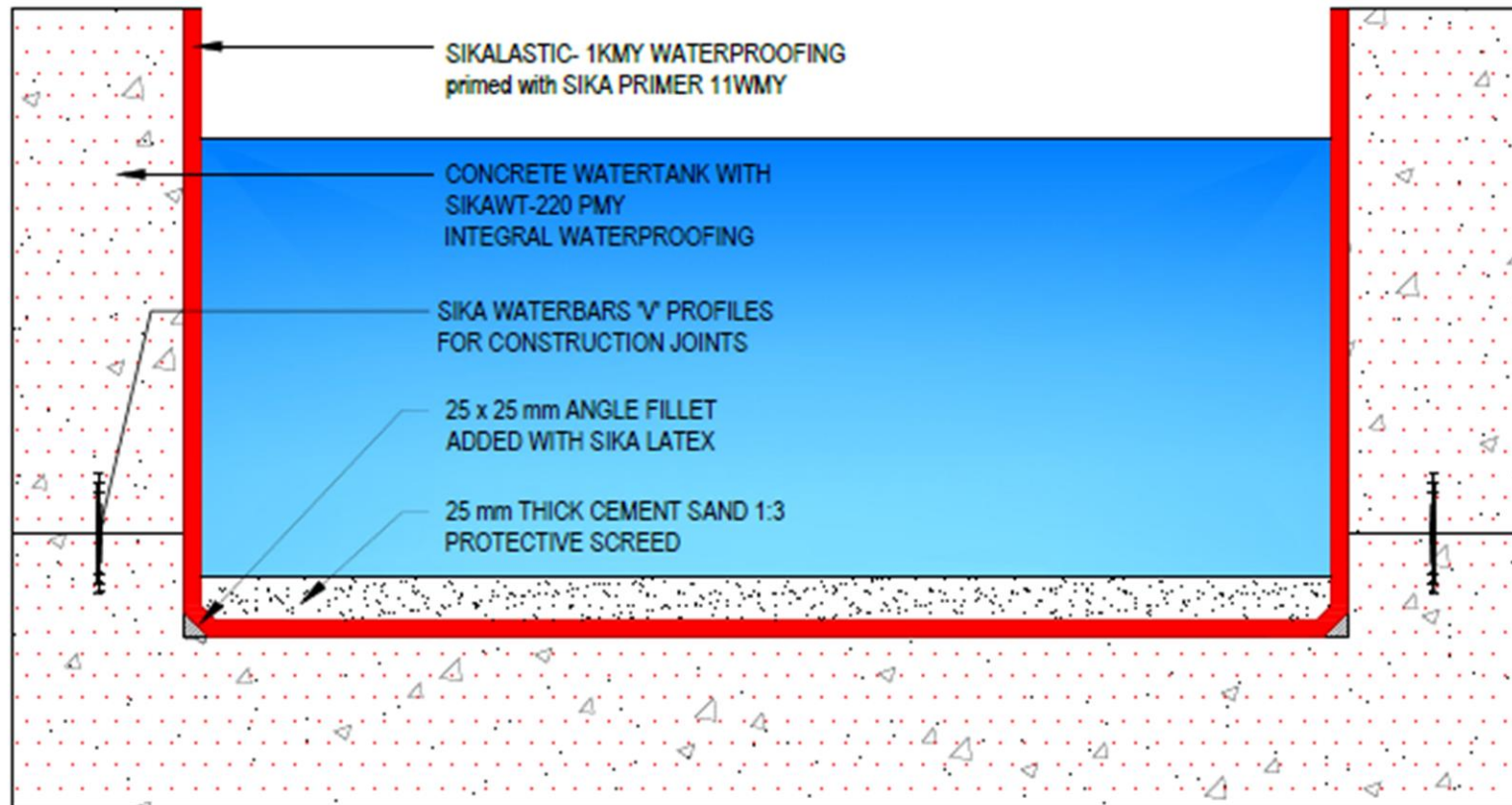
- Flexible waterproofing and concrete protection with one product
- One-component product, just add water
- Adjustable consistency, easy to apply by brush or trowel
- Singapore Green Label product
- SPAN Approval: SPAN/PPI/1683-2016 (Potable Water)
- EN14891:2017 “Liquid applied water impermeable products for use beneath ceramic tiling bonded with adhesives”

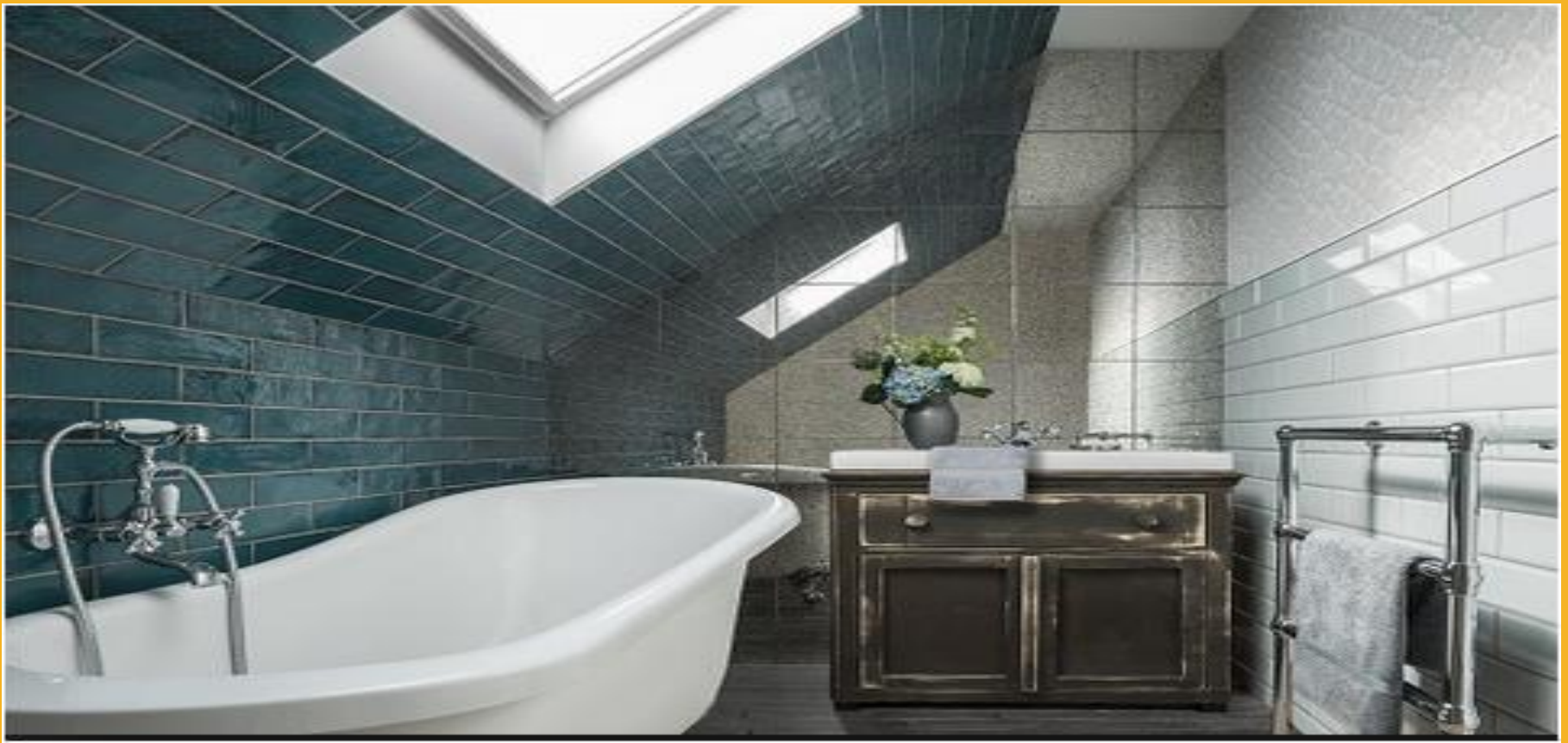


# SIKALASTIC 1K MY SWIMMING POOL/ WATER FEATURE



# SIKALASTIC IK MY WATER TANK





## STEP 6 TILING

# EN 12004 STANDARD



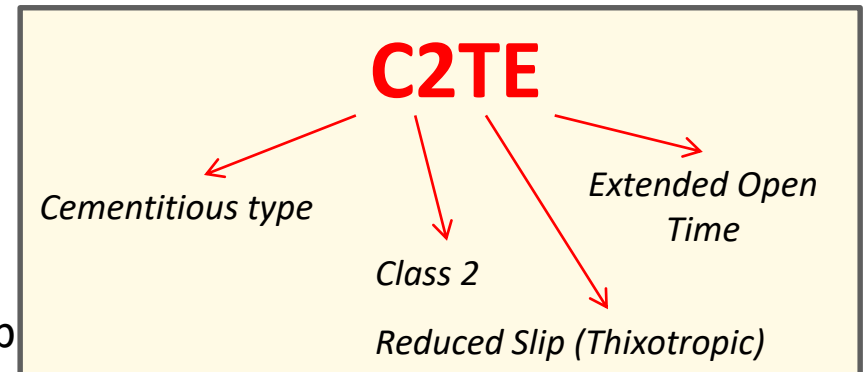
■ (Based on **BS EN 12004:2007 Adhesives for Tiles**)

## - Tensile Strength Requirements

- **C1** Normal adhesive ( $\geq 0.5 \text{ N/mm}^2$ )
- **C2** Improved adhesive ( $\geq 1.0 \text{ N/mm}^2$ )

## - Additional Characteristics

- **F** Fast setting adhesive
- **T** Adhesive with reduced slip (Thixotropic)
- **E** Adhesive with extended open time
- **S1** Deformable adhesive (Normal flexibility)
- **S2** Highly deformable adhesive (Highly flexibility)



# SIKA CERAM RANGE

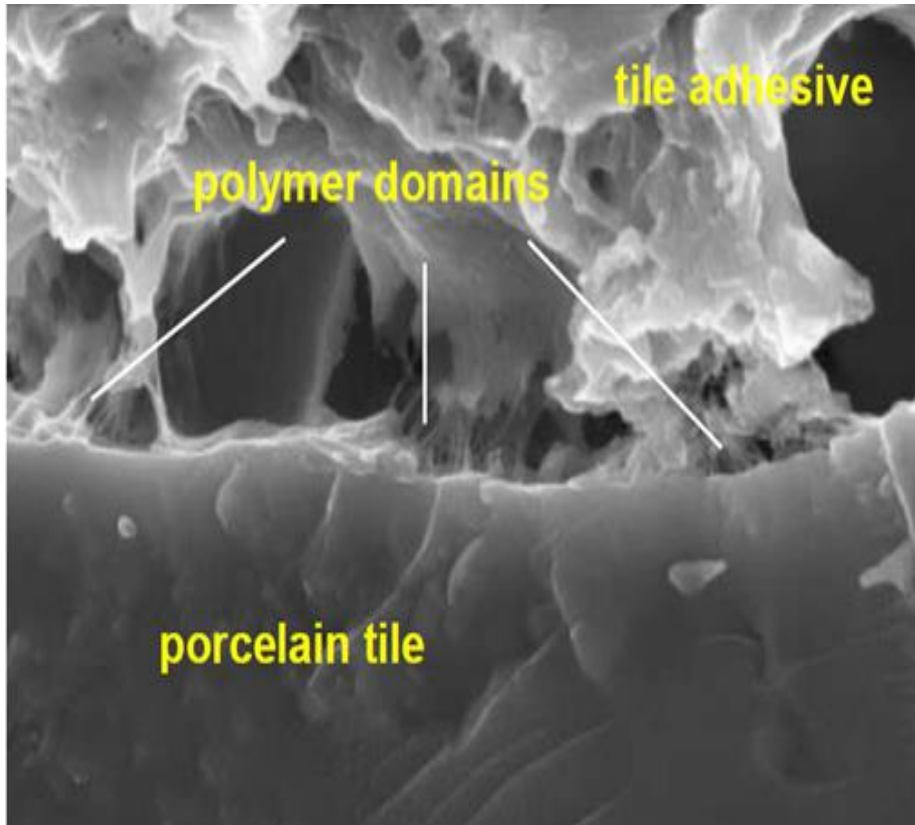




# SIKA TILE ADHESIVES

	SikaCeram-188 MY (C2TE)	SikaCeram-288 MY (C2TE S1)	Optiroc Tile Adhesive DW Set (C2TE S2)
Chemical Base	Cementitious mortar + specialised polymers		2-component system for swimming pools & water features
Tensile Adhesion Strength (BS EN 1348:2007)	$\geq 1.0 \text{ N/mm}^2$ $\geq 1.0 \text{ N/mm}^2$ $\geq 1.0 \text{ N/mm}^2$ $\geq 1.0 \text{ N/mm}^2$		$\geq 1.0 \text{ N/mm}^2$ $\geq 1.0 \text{ N/mm}^2$ $\geq 1.0 \text{ N/mm}^2$ $\geq 1.0 \text{ N/mm}^2$
Std Condition			
Heat Aging			
Water Immersion			
Freeze Thaw			
Open Time (EN 1346:1997)	$\geq 0.5 \text{ N/mm}^2$ @ 30 mins	$\geq 0.5 \text{ N/mm}^2$ @ 30 mins	$\geq 0.5 \text{ N/mm}^2$ @ 30 mins
Transverse Deformation (BS EN 12002:2008)	-	2.5mm $\leq$ S1 Class. $\leq$ 5.0mm, S1 classified	S2 Class. $\leq$ 5.0mm, S2 classified
Slip Resistance (EN 1308:1999)	$\leq 0.5\text{mm}$		$\leq 0.5\text{mm}$

# SIKA TILE ADHESIVES



**SikaCeram** is improved with **specialised polymers** to improve various properties of the adhesive.

- Stronger adhesion
- Improved flexibility
- Better workability

# SIKA TILE ADHESIVES SELECTION

## Tile Adhesive : SikaCeram Products Selection Guideline



Product Range		SikaCeram-288 MY	SikaCeram-188 MY (Grey)	SikaCeram-206 ECO	SikaCeram-128 MY	SikaCeram-100 MY	SikaCeram-88	Optiroc Tile Adhesive DW Set	Optiroc Marble Bond
Classification /Tensile Adhesion	C1 >0.5 Mpa	✗	✗	✗	✗	✓	✗	✗	✗
	C2 >1.0 Mpa	✓	✓	✓	✓	✗	✗	✓	✓
Slip Resistance	T	✓	✓	✗	✗	✗	✗	✓	✗
Extended Open Time	E @ 30mins	✓	✓	✓	✓	✓	✗	✓	✗
Deformation	S1 (2.5mm≤S1≤5.0mm)	✓	✗	✗	✗	✗	✗	✗	✗
	S2 (≥5.00mm)	✗	✗	✗	✗	✗	✗	✓	✗
Component	No.	1	1	1	1	1	1	2	1
Type of tiles	Ceramic	✓	✓	✓	✓	✓	✓	✓	✓
	Porcelain & Homogenous (normal size)	✓	✓	✓	✓	✓	✗	✓	✓
	Porcelain & Homogenous (large size)	✓	✓	✓	✗	✗	✗	✓	✗
	Marble & Stone (Dark)	✓	✓	✓	✗	✗	✗	✓	✓
	Marble & Stone (Bright)	✗	✗	✗	✗	✗	✗	✗	✓
	Mosaic	✓	✓	✓	✓	✓	✗	✓	✓
Applications	Floor	✓	✓	✓	✓	✓	✓	✓	✓
	Wall	✓	✓	✓	✓	✓	✓	✓	✓
	Interior	✓	✓	✓	✓	✓	✓	✓	✓
	Exterior	✓	✓	✓	✗	✗	✗	✓	✓
	Tiling on tile (floor)	✓	✓	✓	✗	✗	✗	✓	✗
	Large size tile for floor (>60cm x 60cm)	✓	✗	✗	✗	✗	✗	✓	✗
	Large size tile for wall (>30cm x 60cm)	✓	✓	✓	✗	✗	✗	✓	✗
	Swimming pool	✗	✗	✗	✗	✗	✗	✓	✗
	Light weight block	✓	✓	✓	✗	✗	✗	✓	✓
	Drywall	✓	✓	✓	✗	✗	✗	✓	✓
Specification to BS EN 12004		C2TE S1	C2TE	C2E	C2E	C1E	-	C2TE S2	C2

# SIKA TILE ADHESIVES

## SIKA SUPPORT

### PULL OFF TESTS

- Sika's Technical Service Team visits project site to conduct pull-off tests
- 50x50 mm tiles adhered to substrate at site
- Pull-off test done at 7, 14 & 28 days



# SIKA TILE ADHESIVES

## SIKA SUPPORT



### BANDAR SIERRA 16 & 12 BY AIMA CONSTRUCTION SDN BHD – PULL OFF TEST

DATE: 16/03/16 (7DAYS) - PLASTER  
23/03/16 (14DAYS) - PLASTER  
06/04/16 (28DAYS) – PLASTER

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###### 3.2 Pull-off test

##### 4.0 RESULTS

##### 5.0 CONCLUSIONS

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#### 4.0 RESULTS

##### 7 days

Project Melawati Mall by Tall Innovation Sdn Bhd  
Product SikaCeram®-100 MY  
Date 19/01/16, 7 Days  
Equipment and Serial Number Proceq Dyna Pull-Off Tester, DY-216 (S/N 411-10-001)  
Dolly Size (Nominal) 50mm in diameter

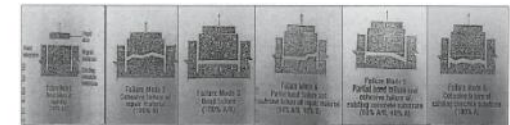
No	Substrate	Tile Size (mm)	Reading (kN)	Pull-off Stress (N/mm <sup>2</sup> )	Failure Mode	Remarks
1	Plaster	59 x 60	3.76	1.06	FM1	Homogeneous Granite
2	Plaster	59 x 60	3.79	1.07	FM1/FM3	
3	Plaster	59 x 60	6.20	1.75	FM3	

Average pull-off stress: 1.29 N/mm<sup>2</sup>

Project Melawati Mall by Tall Innovation Sdn Bhd  
Product SikaCeram®-188 MY  
Date 19/01/16, 7 Days  
Equipment and Serial Number Proceq Dyna Pull-Off Tester, DY-216 (S/N 411-10-001)  
Dolly Size (Nominal) 50mm in diameter

No	Substrate	Tile Size (mm)	Reading (kN)	Pull-off Stress (N/mm <sup>2</sup> )	Failure Mode	Remarks
1	Plaster	59 x 60	4.29	1.21	FM1	Homogeneous Granite
2	Plaster	60 x 60	4.56	1.27	FM1	
3	Plaster	59 x 60	5.03	1.42	FM1	

Average pull-off stress: 1.30 N/mm<sup>2</sup>



#### 5.0 CONCLUSION

On 28 days, the average results show that SikaCeram 288MY meets the required pull-off strength of 1.0N/mm<sup>2</sup>. The failure mode was mostly due to the cohesion failure of the substrate.

Report by:  
Elyse Teoh  
Product Specialist Engineer – Mortar Products

Legal Note: The information, and, in particular, the recommendations relating to the application and use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products under specific circumstances. It is recommended that the user should consult the Sika technical data sheet for the product in question. The information, and, in particular, the recommendations, are given in good faith based on Sika's current knowledge and experience of the products under specific circumstances. It is recommended that the user should consult the Sika technical data sheet for the product in question. The information, and, in particular, the recommendations, are given in good faith based on Sika's current knowledge and experience of the products under specific circumstances. It is recommended that the user should consult the Sika technical data sheet for the product in question.

10/10



## PULL OFF TESTS

- Test report to analyse *pull-off strength & failure modes*

BUILDING TRUST





# STEP 7 TILE GROUT



# PLEASE ADD ONE SLIDE ON TILE GROUT OPTIROC

## IDEAL FOR

Waterproofing beneath tiling

## ADVANTAGES

Waterproofing and concrete protection with ONE product

Sealing static hairline cracks in concrete structures

Fulfills EN 1504-2 (method 1.3,2.2 and 8.2)

# STEP 9/10 SEALANT

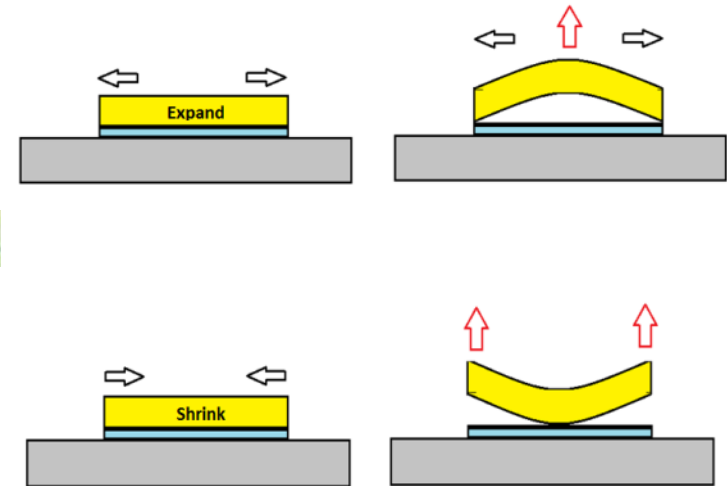


# STRESSES – WHERE DO THEY COME FROM?

**Moisture  
Absorption**

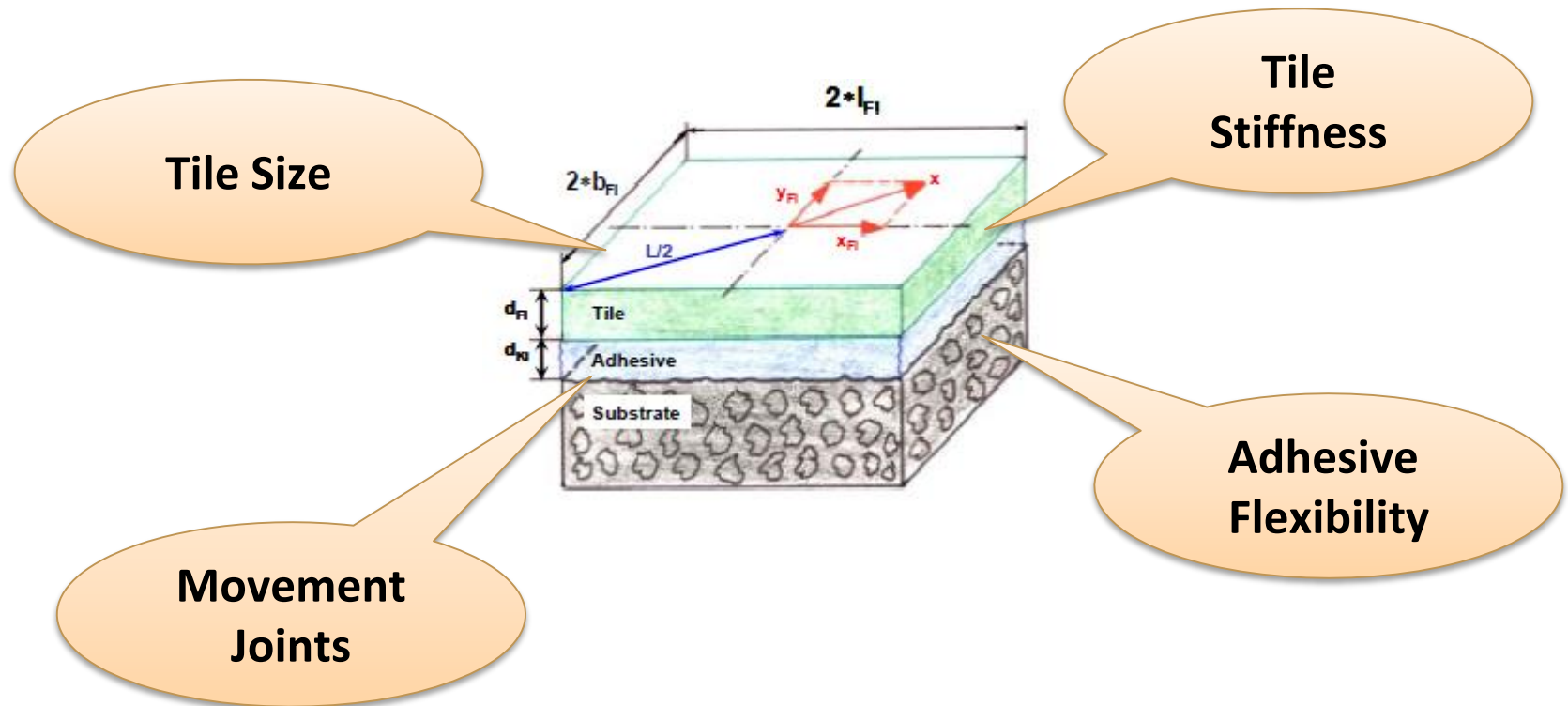
**Thermal  
Expansion**

**Substrate  
Shrinkage**



# UNDERSTANDING STRESSES

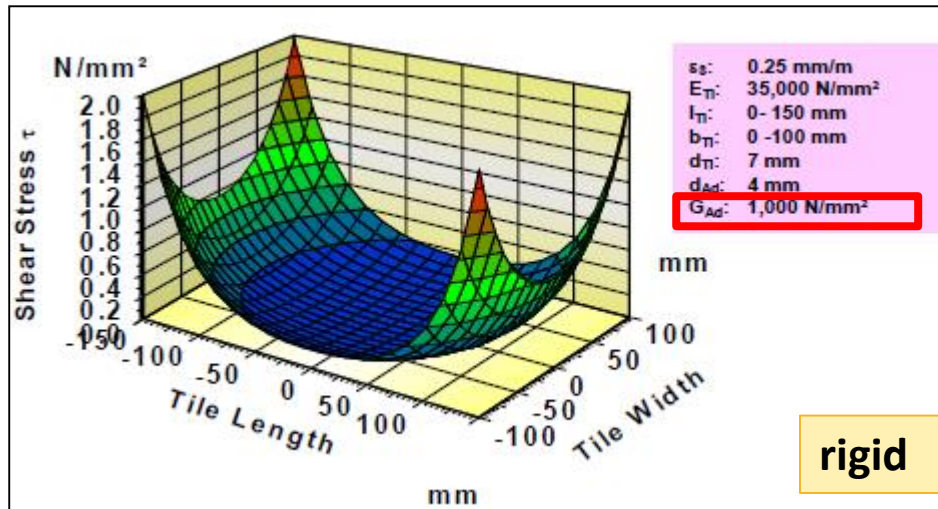
## WHAT AFFECTS THEM?



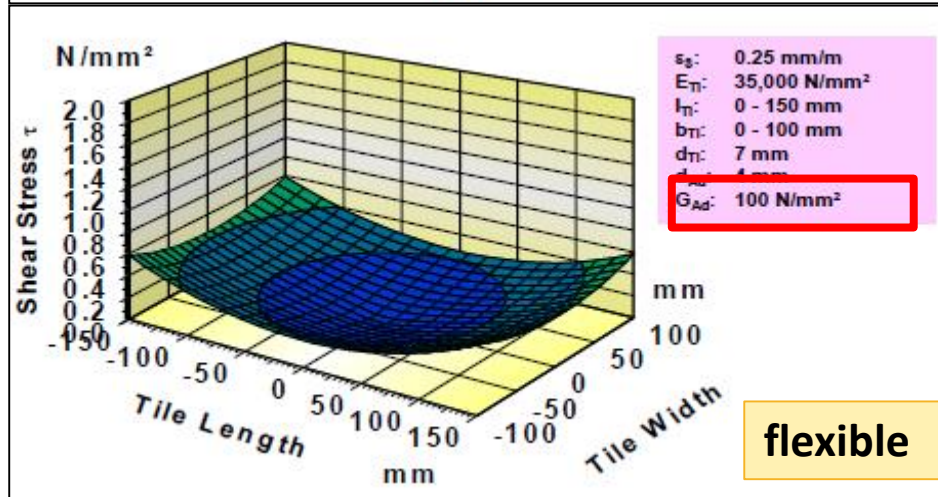


# UNDERSTANDING STRESSES

## WHAT AFFECTS THEM?



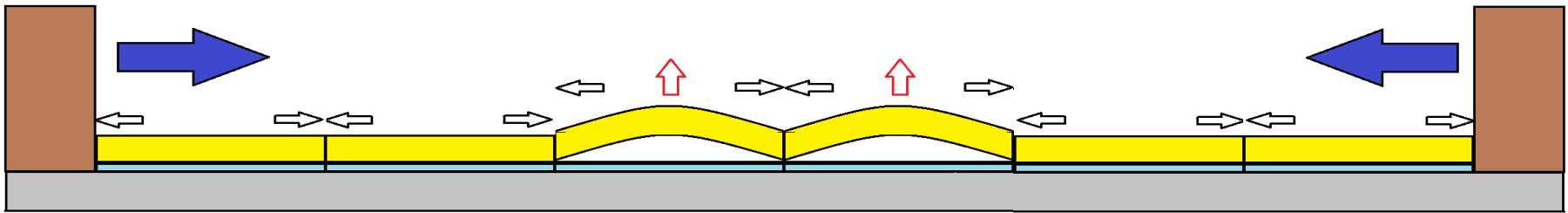
**Larger tiles** have higher stress, and the most critical areas are the corners of the tiles.



**Flexible adhesives** are able to relieve the stresses at the tile-adhesive layer.

# WHY DO TILES POP OFF?

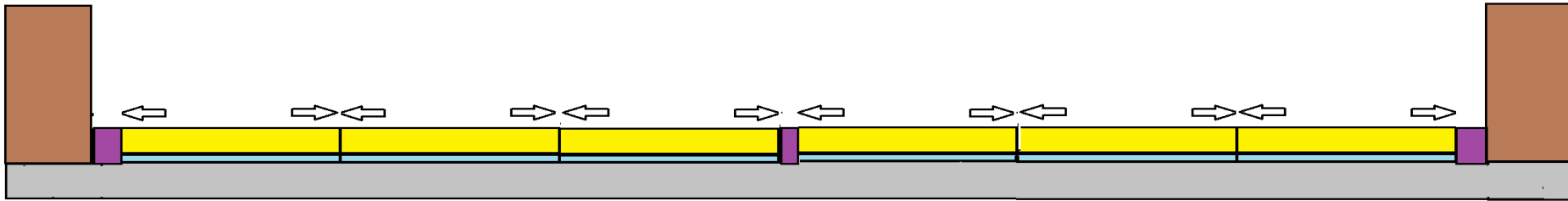
## NEWTON'S 3<sup>RD</sup> LAW



**For every action, there is an equal and opposite reaction**

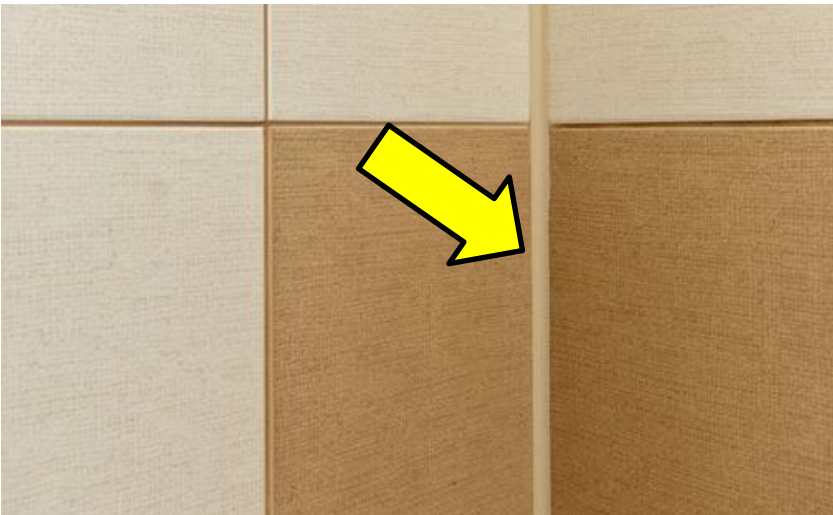
# WHY DO TILES POP OFF?

## MOVEMENT JOINTS



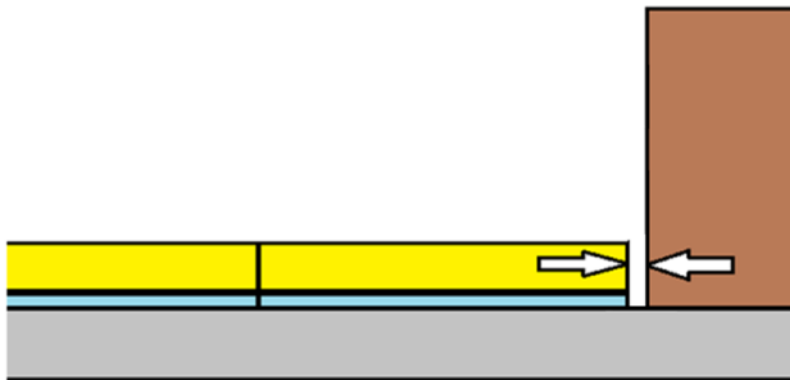
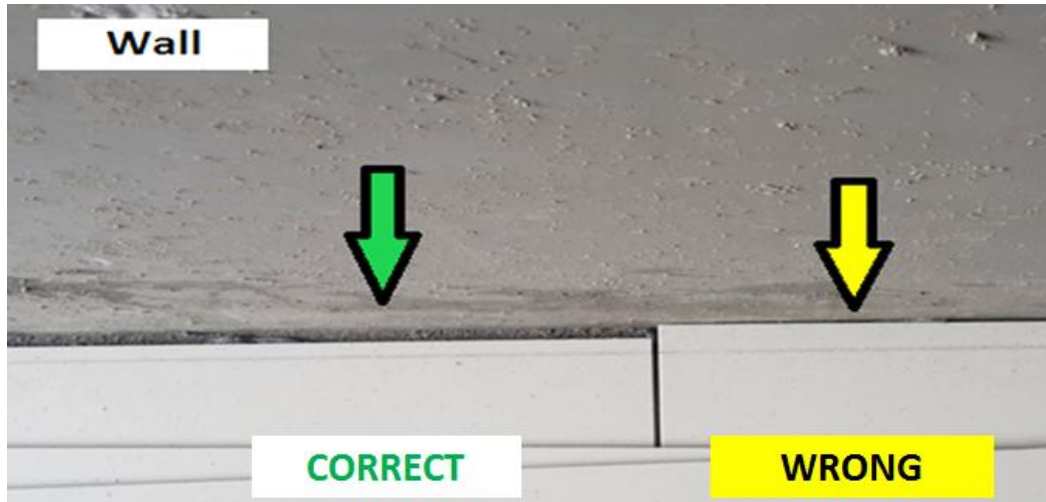
**Movement joints are necessary to prevent tiles from popping off**

# MOVEMENT JOINTS

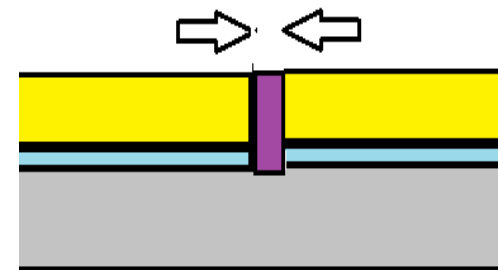


# MOVEMENT JOINTS

- Perimeter joints



- Expansion joints





# MOVEMENT JOINTS



## WHERE DO YOU NEED IT?

- At internal vertical corners
- Around the perimeter of the floor

**1 PLEASE ADD 1 SLIDE ON PU ADHESIVE**



# OUTLOOK

# SIKA SHEET MEMBRANE SYSTEM

- Fulfills the W0-I to W2-I requirements according to EN 18534
- High breaking strength
- Crack bridging
- Waterproof
- Root proof
- Relieves stress
- Watertight as sealing
- Water vapour retarding
- Decoupling
- Flexible
- Easy to apply
- Good adhesion to Sika tile adhesives
- Suitable for application on subfloor heating systems



# SIKA SHEET MEMBRANE SYSTEM THE COMPONENTS & PERFORMANCE



## Technical data

- Color: grey
- Sheet width: 1,00 m
- roll length: 30,0 m und 10,0 m
- Material thickness: appr. 0,5 mm
- mass per unit area:  
approx. 280 g/m<sup>2</sup>
- Application temperature:  
not below +5 °C
- Temperature resistance:  
-30 °C to +90 °C
- Burst pressure: 3,9 bar
- (moisture vapour resistance air equivalent) sd-value: > 96 m tested according ETAG 022
- UV-resistance: min. 500 hours



# SIKA SHEET MEMBRANE SYSTEM APPLICATION

Cut sheet membrane **SCHÖNOX AB** in lengths so as to overlap the sealing tape at the floor/wall angle by 50 mm. Apply sufficient tile adhesive **SikaCeram®-288 MY** (C2 TE S1) with notched trowel (4 mm) or in a brush consistency to the substrate. Apply only as much adhesive as can be covered before the tile adhesive is skin-forming.

Use a suitable plastic or steel trowel to smoothen the SCHÖNOX AB sheet membrane and press it firmly in place. Overlap the sections up to the black lines. Glue and seal all overlaps with suitable **Sikalastic®-1 KMY** cement based membrane



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# SIKA SHEET MEMBRANE SYSTEM APPLICATION

Cut sheet membrane **SCHÖNOX AB** in lengths so as to overlap the sealing tape at the floor/wall angle by 50 mm. Apply **SikaCeram®-288 MY** (C2 TE S1) with a suitable notch trowel (e.g 8 or 10 mm) over the cuff and continue onto the floor.

Rub the SCHÖNOX AB sheet membrane to fix and overlap the lengths at the edges.



# SIKA SHEET MEMBRANE SYSTEM

## RANGE OF APPLICATIONS

- Typical wet rooms in residential and non-residential areas (e.g. health-care)
- In swimming pools.
- On terraces and balconies
- In chemical higher loaded areas e.g. commercial kitchens.



# CRACK REPAIR MATERIAL

CRACK/ DRAIN - EPOXY



## SIKADUR-20 CRACK SEAL

2 COMPONENT EPOXY  
READY TO USE  
EASY APPLICATION  
SEMI ELASTICK  
WATERTIGHT

PACKAGING : 1 LTR SET

# CRACK REPAIR

## MATERIAL CHARACTER – LOW VISCOSITY



CAPILLARY



GRAVITY

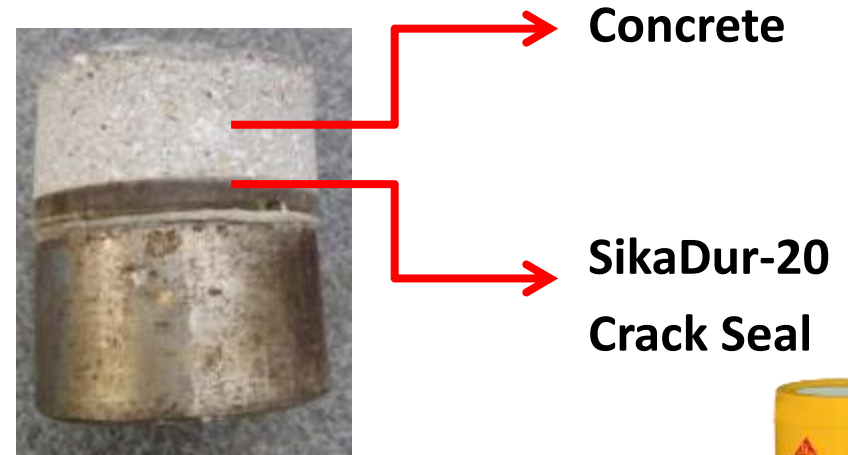
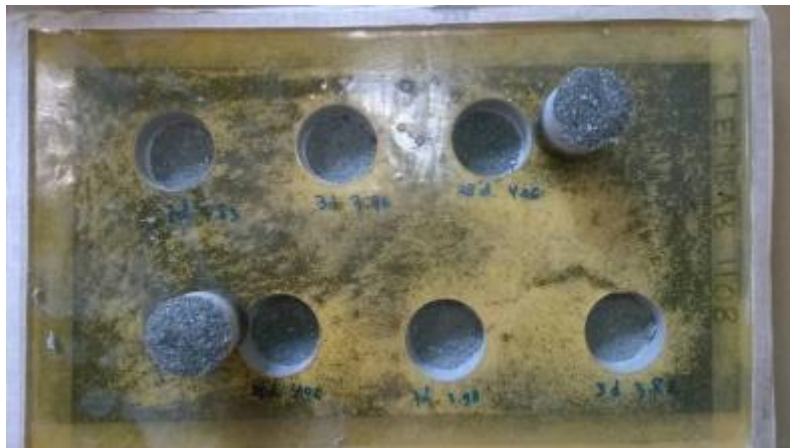
# CRACK REPAIR

## ADHESION TO SUBSTRATE

NORMAL SUBSTRATE



WET SUBSTRATE



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# CRACK REPAIR

## CONCRETE REPAIR PROCESS

### CRACK - SIKADUR-20 CRACK SEAL



# CRACK REPAIR GAP / CRACK DRAIN

## DRAIN - SIKADUR-20 CRACK SEAL



# CRACK REPAIR

## PROCESS REPAIR SLITS/GAP OF CERAMICS





THANK YOU FOR YOUR ATTENTION