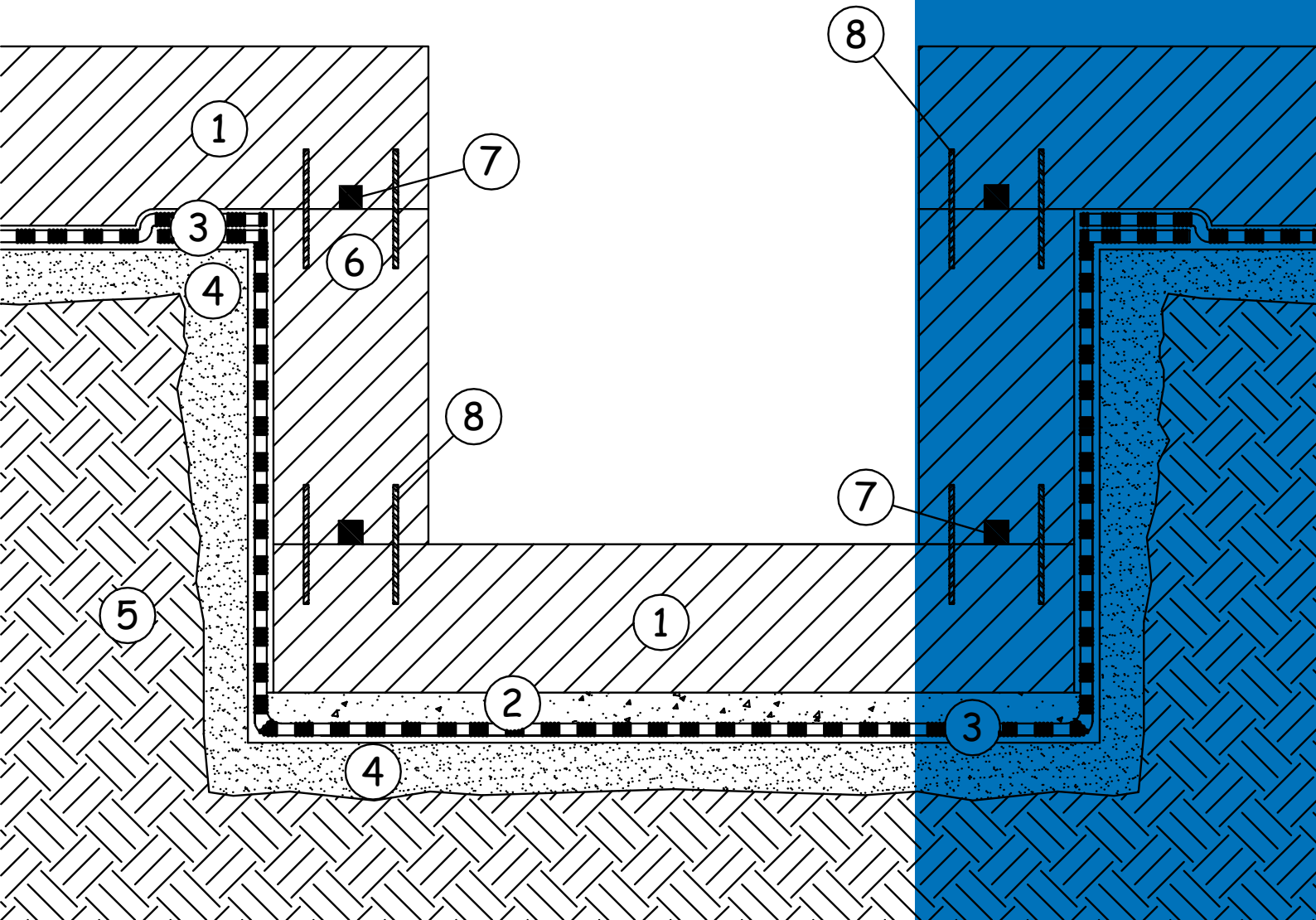




Technical design guide for **WATERPROOFING**



INTRODUCTION

MAPEI, world leader in the production of adhesives and chemical products for the building industry, has always invested considerable resources into research and development with the aim of constantly developing cutting-edge solutions to be integrated into executive projects.

And this is what convinced MAPEI to make their technological know-how available in a simple, clear and readily available format to guide their customers through the maze of their product ranges, and illustrate their characteristics, functions and application methods.

With this aim in mind, this document is intended to be a handy guide and support for designers and clients alike, to reduce problems caused by either incorrect or inaccurate technical specifications during the design phase and by errors during application or a lack of attention to detail. In fact, with their eye for detail, MAPEI clearly demonstrates their know-how by offering simple, sound technical solutions.

To make it easier to consult this manual, there are two images at the start of the document that show the various areas of intervention and an index of the details. The manual is then sub-divided into two sections. The first, indicated with a red bookmark, discusses construction details for waterproofing new buildings, while the second section, indicated with a yellow bookmark, covers repair work. At the end of the manual, there is also an overview of all the products from the range which are used.

For further information about each of the products mentioned in the technical specifications, consult the relative Technical Data Sheet on the MAPEI website www.mapei.it.

NOTE: The products presented below are those used for waterproofing new and existing constructions. For products not covered by this waterproofing range manual, please refer to the general products catalogue. The Company's Technical Services Department is at your complete disposal for further information on the characteristics and application techniques applicable to our products, and for suggestions on how to solve a wide range of technical problems, including the design of construction details.

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ATE R SQ 002

ATE R SQ 003

ATE R SQ 001

ATE R SQ 004

Technical design guide for WATERPROOFING

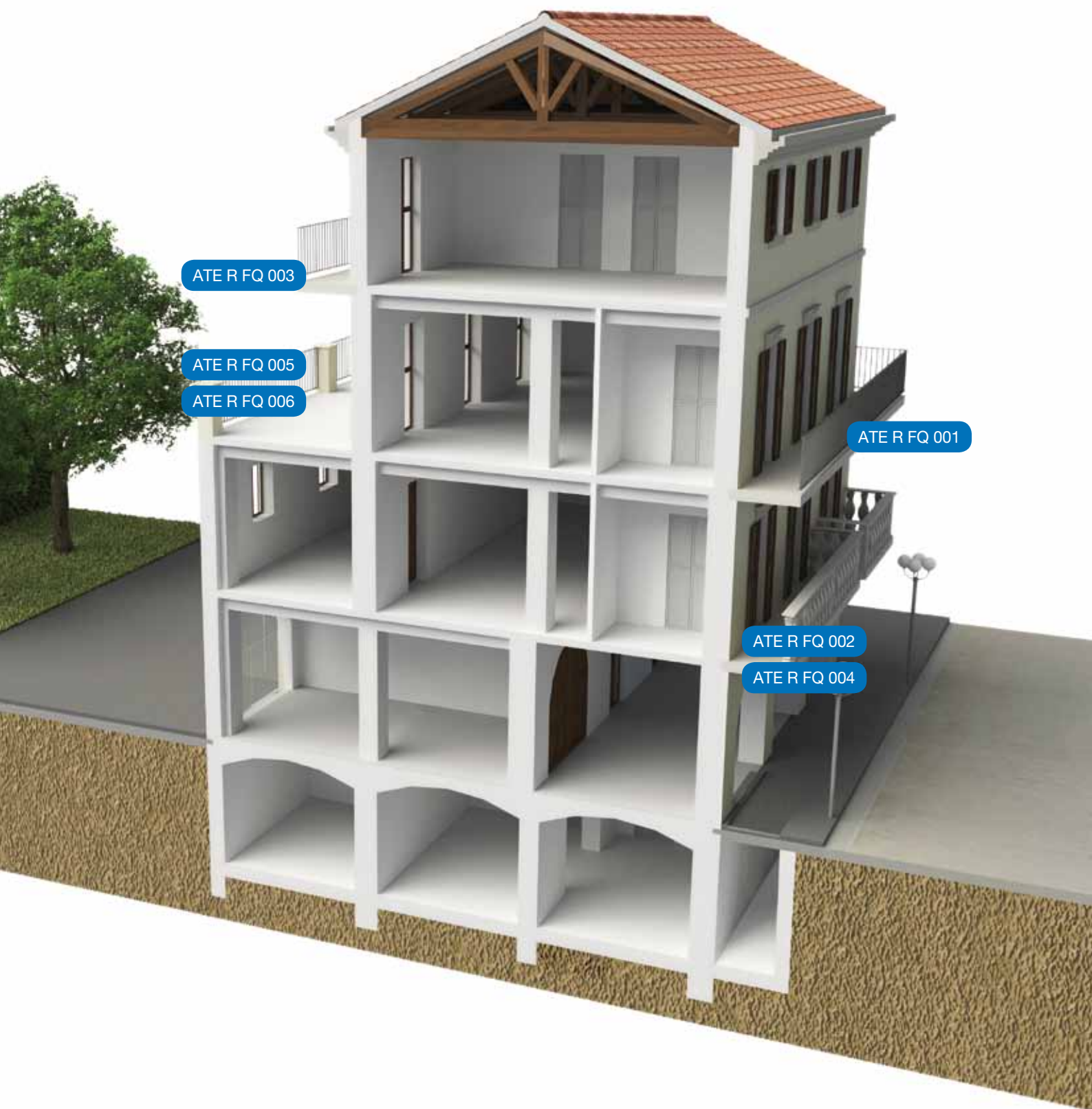
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REPAIRING

ABOVE GROUND LEVEL

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ATE R FQ 003

ATE R FQ 005

ATE R FQ 006

ATE R FQ 001

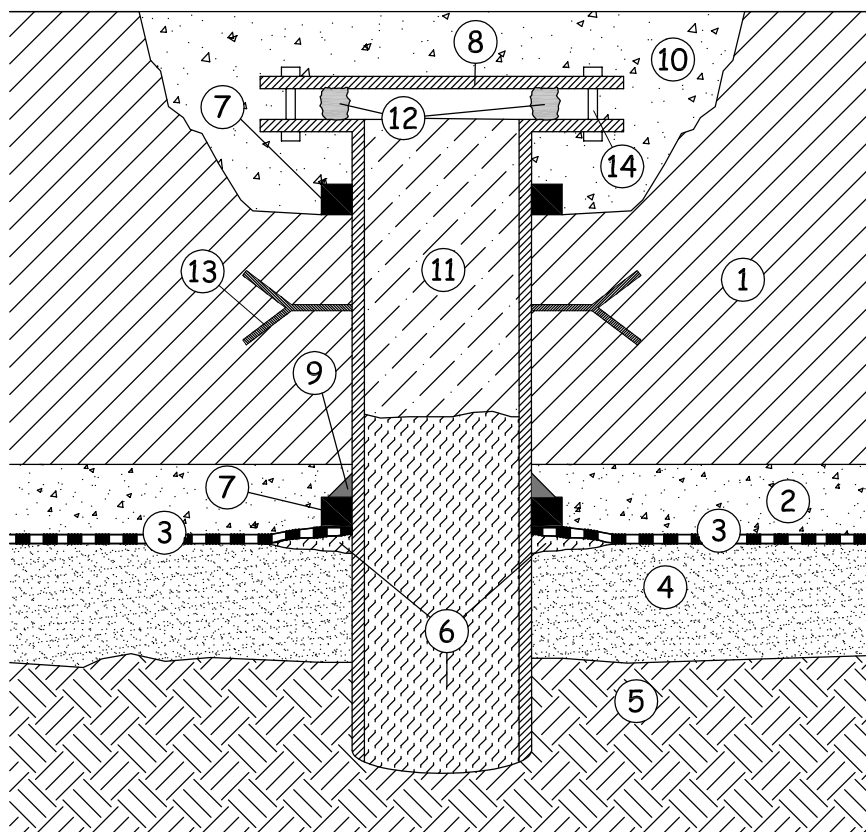
ATE R FQ 002

ATE R FQ 004

Sealing of well pumping

Code:
ATE N SQ 001

- | | | |
|--|----------------------|-------------------|
| ① Concrete slab | ⑥ MAPEPROOF SEAL | ⑪ Concrete |
| ② Concrete protective layer with resistance similar to concrete slab | ⑦ IDROSTOP B25 | ⑫ MAPEPROOF SWELL |
| ③ MAPEPROOF | ⑧ Pipe | ⑬ Metal anchoring |
| ④ Poor concrete | ⑨ MAPEPROOF MASTIC | ⑭ Bolt |
| ⑤ Soil | ⑩ MAPEGROUT COLABILE | |

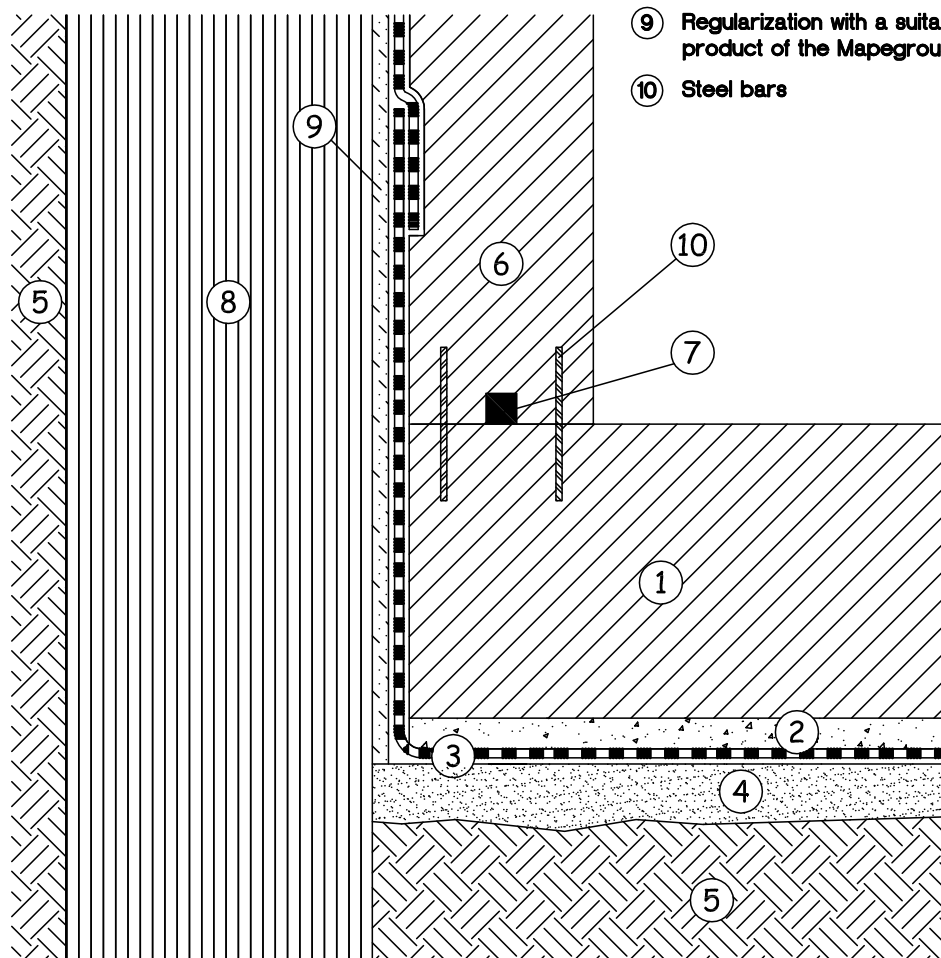


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Piles waterproofing

Code:
ATE N SQ 002

- | | |
|--|---|
| ① Concrete slab | ⑤ Soil |
| ② Concrete protective layer with resistance similar to concrete slab | ⑥ Concrete wall |
| ③ MAPEPROOF | ⑦ IDROSTOP B25 |
| ④ Poor concrete | ⑧ Piles |
| | ⑨ Regularization with a suitable product of the Mapegrout range |
| | ⑩ Steel bars |

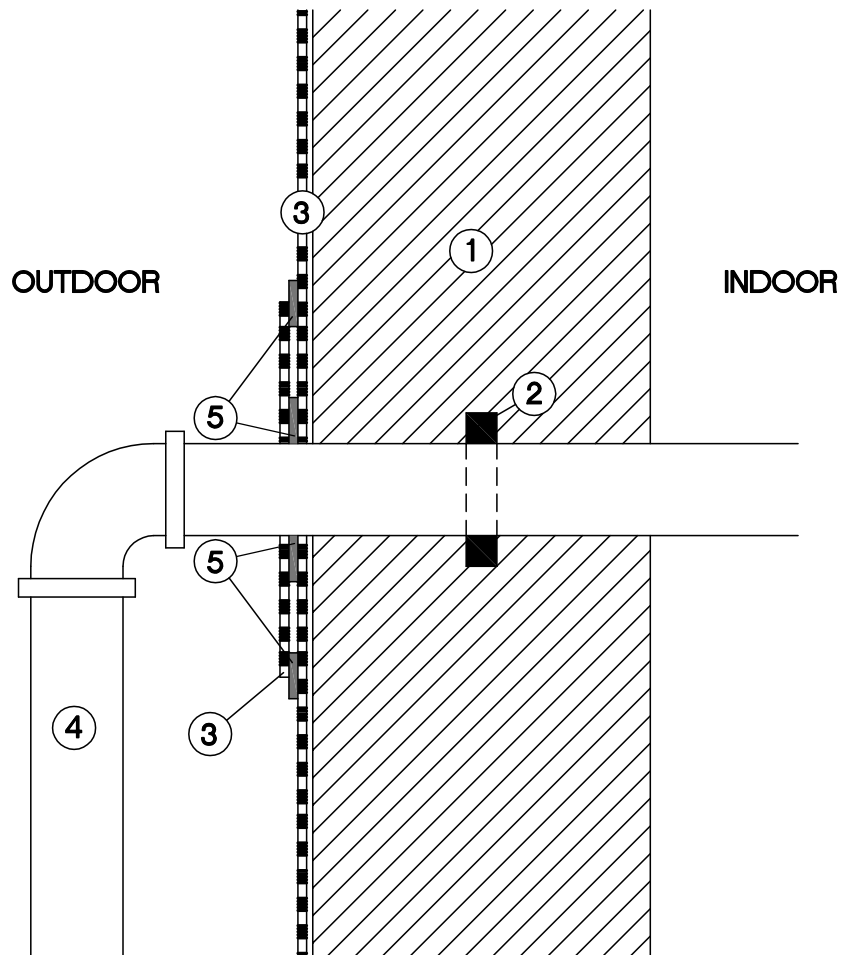


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Pipe penetration detailing

Code:
ATE N SQ 003

- ① Concrete wall
- ② IDROSTOP B25
- ③ MAPEPROOF
- ④ Pipe
- ⑤ MAPEPROOF MASTIC

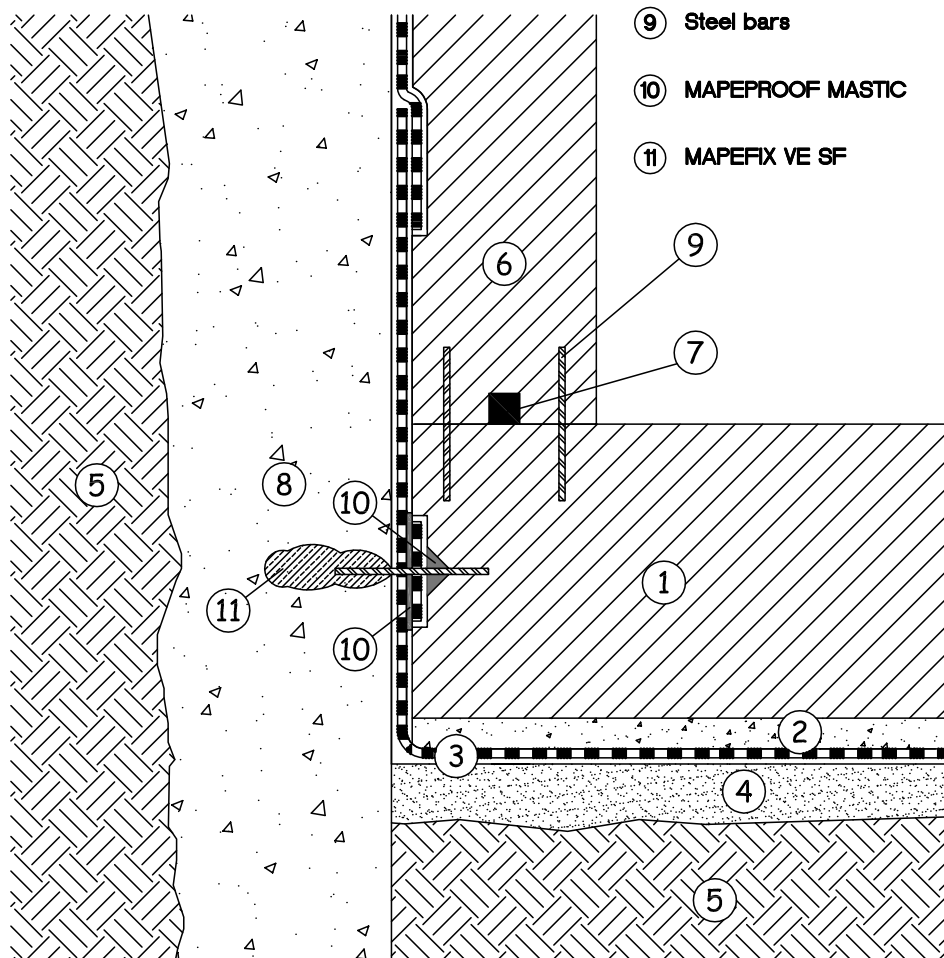


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Waterproofing concrete slab (connected with soil retaining walls) and walls

Code:
ATE N SQ 004

- | | |
|--|-----------------------|
| ① Concrete slab | ⑤ Soil |
| ② Concrete protective layer with resistance similar to concrete slab | ⑥ Concrete wall |
| ③ MAPEPROOF | ⑦ IDROSTOP B25 |
| ④ Poor concrete | ⑧ Soil retaining wall |
| | ⑨ Steel bars |
| | ⑩ MAPEPROOF MASTIC |
| | ⑪ MAPEFIX VE SF |

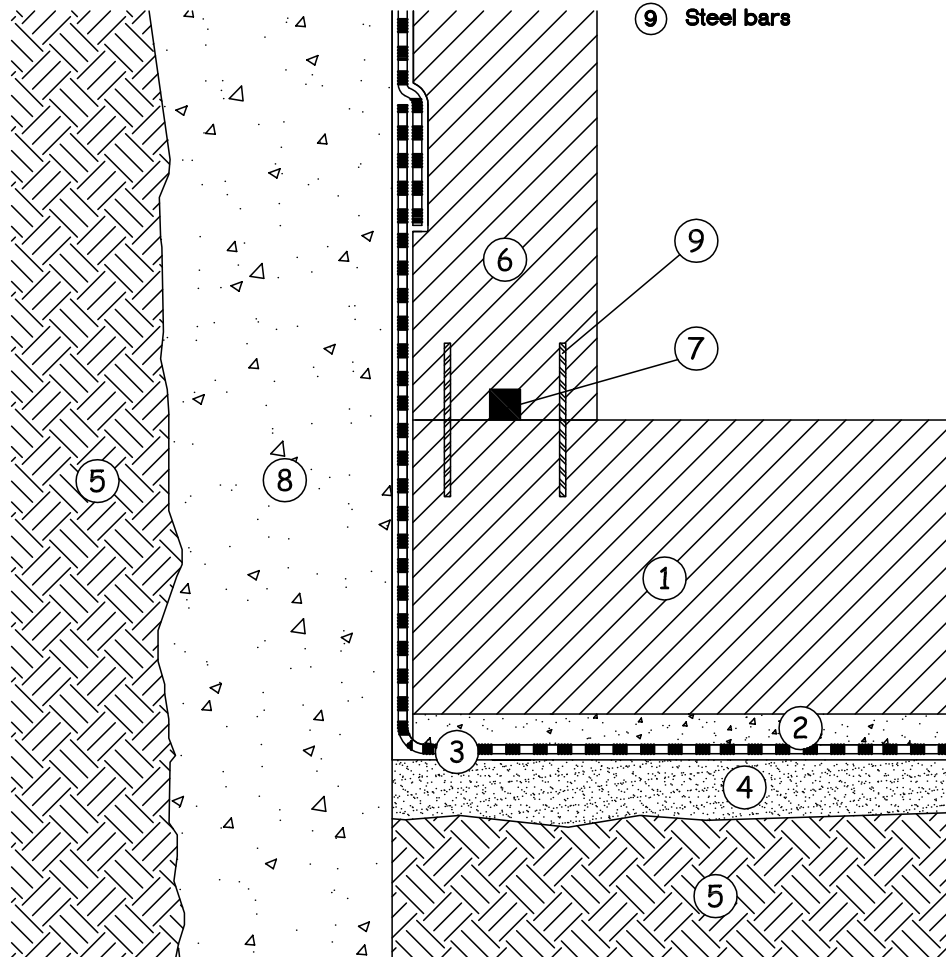


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Waterproofing concrete slab and walls

Code:
ATE N SQ 005

- | | |
|---|-----------------------|
| ① Concrete slab | ⑤ Soil |
| ② Concrete protective layer with
resistance similar to concrete slab | ⑥ Concrete wall |
| ③ MAPEPROOF | ⑦ IDROSTOP B25 |
| ④ Poor concrete | ⑧ Soil retaining wall |
| | ⑨ Steel bars |

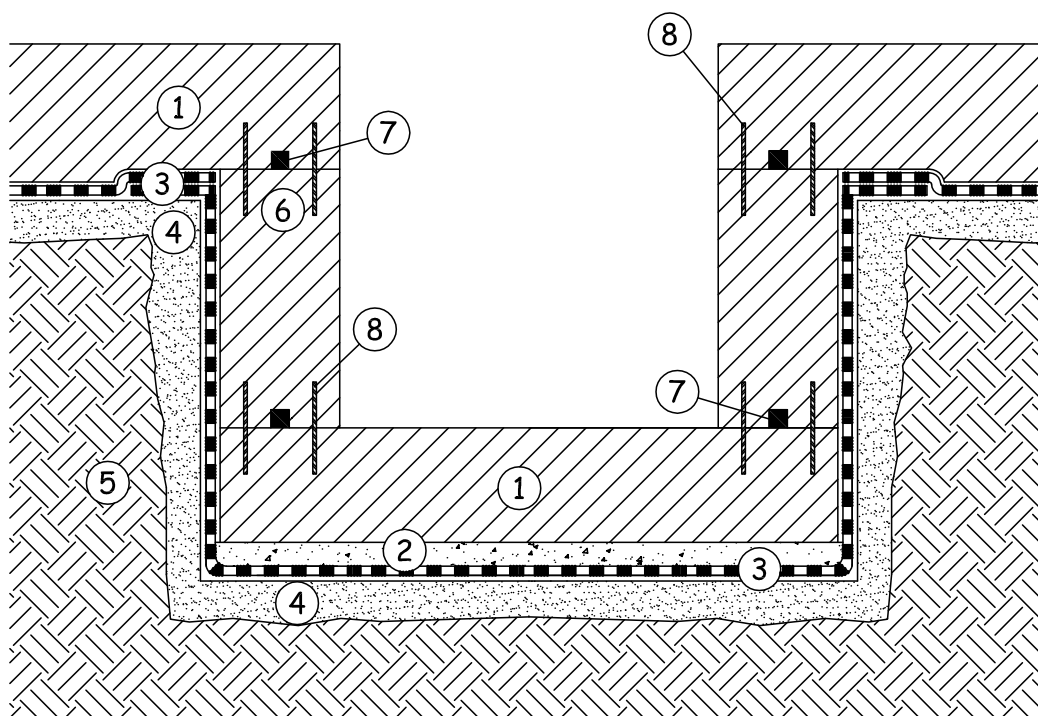


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Elevator shaft

Code:
ATE N SQ 006

- | | |
|--|-----------------|
| ① Concrete slab | ⑤ Soil |
| ② Concrete protective layer with resistance similar to concrete slab | ⑥ Concrete wall |
| ③ MAPEPROOF | ⑦ IDROSTOP B25 |
| ④ Poor concrete | ⑧ Steel bars |

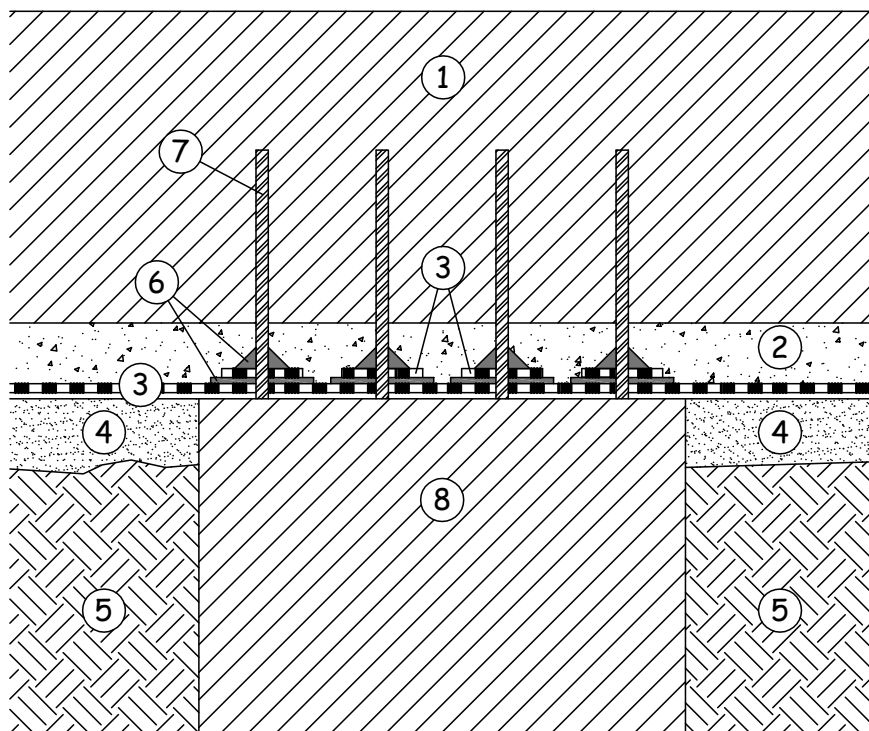


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

**Foundation piles -
solution 1**

Code:
ATE N SQ 007

- | | |
|--|--------------------|
| ① Concrete slab | ⑤ Soil |
| ② Concrete protective layer with resistance similar to concrete slab | ⑥ MAPEPROOF MASTIC |
| ③ MAPEPROOF | ⑦ Steel bars |
| ④ Poor concrete | ⑧ Foundation piles |

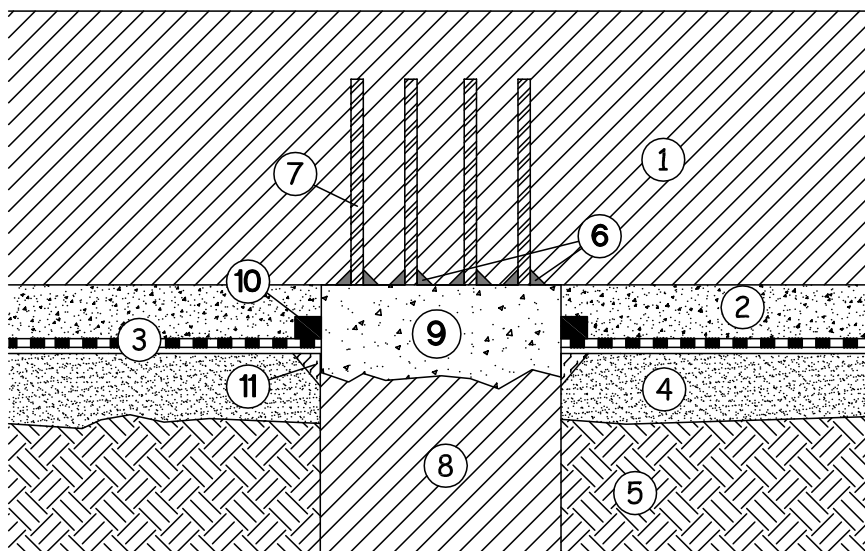


**NEW CONSTRUCTIONS
BELOW GROUND LEVEL**

Foundation piles - solution 2

Code:
ATE N SQ 008

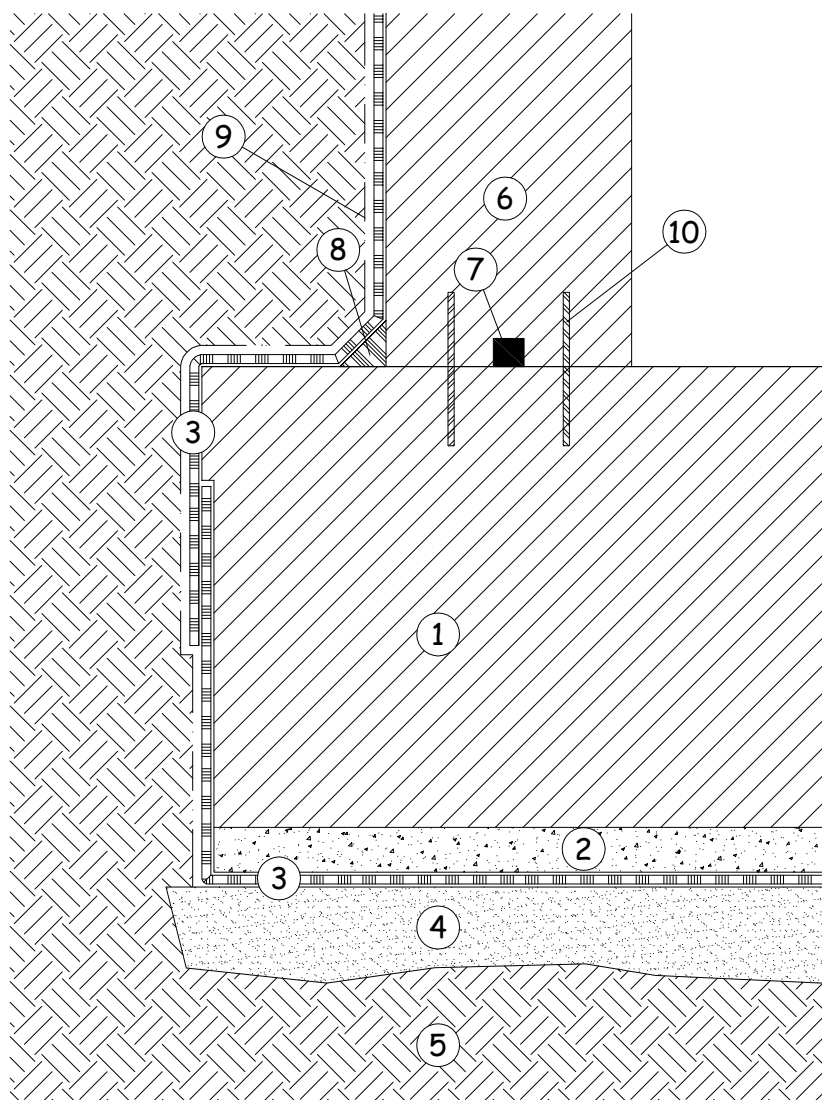
- | | |
|---|--|
| ① Concrete slab | ⑦ Reinforcing rods |
| ② Concrete protective layer
with resistance similar to concrete slab | ⑧ Foundation piles |
| ③ MAPEPROOF | ⑨ MAPEGROUT HI-FLOW +
0.25 % MAPECURE SRA |
| ④ Poor concrete | ⑩ IDROSTOP B25 |
| ⑤ Soil | ⑪ MAPEPROOF SEAL |
| ⑥ MAPEPROOF MASTIC | |



NEW CONSTRUCTIONS
BELOW GROUND LEVEL

MAPEPROOF post-casting

Code:
ATE N SQ 009

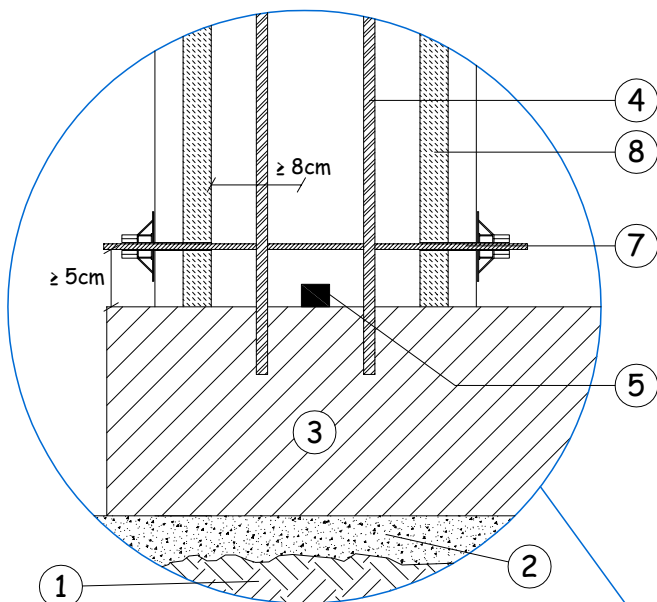


- ① Concrete slab
- ② Concrete protective layer with resistance similar to concrete slab
- ③ MAPEPROOF
- ④ Floor concrete
- ⑤ Soil
- ⑥ Concrete wall
- ⑦ IDROSTOP B25
- ⑧ Connection made with MAPEGROUT or PLANITOP
- ⑨ Protection layer
- ⑩ Reinforcing rods

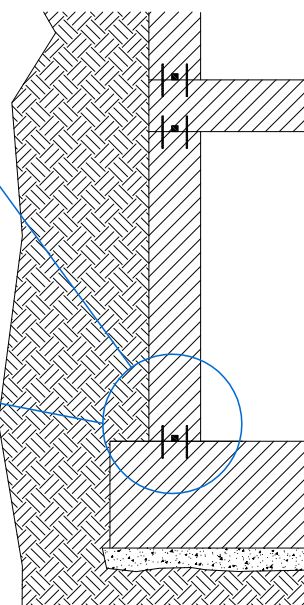
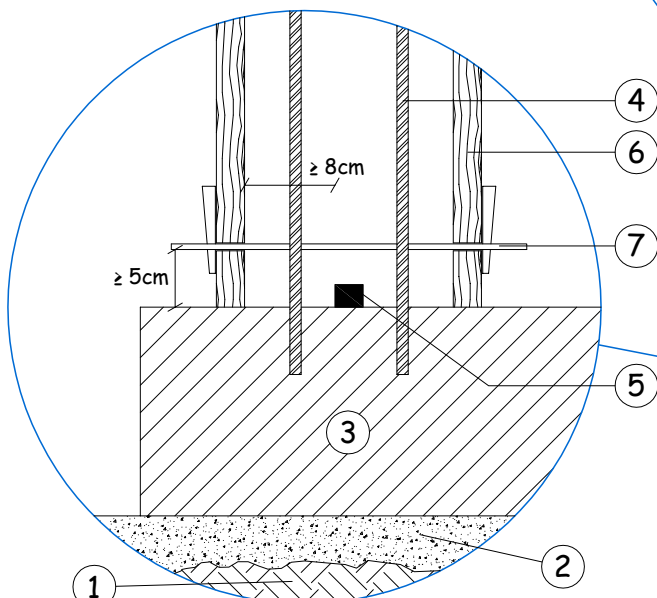
NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Construction joint

Code:
ATE N SQ 010



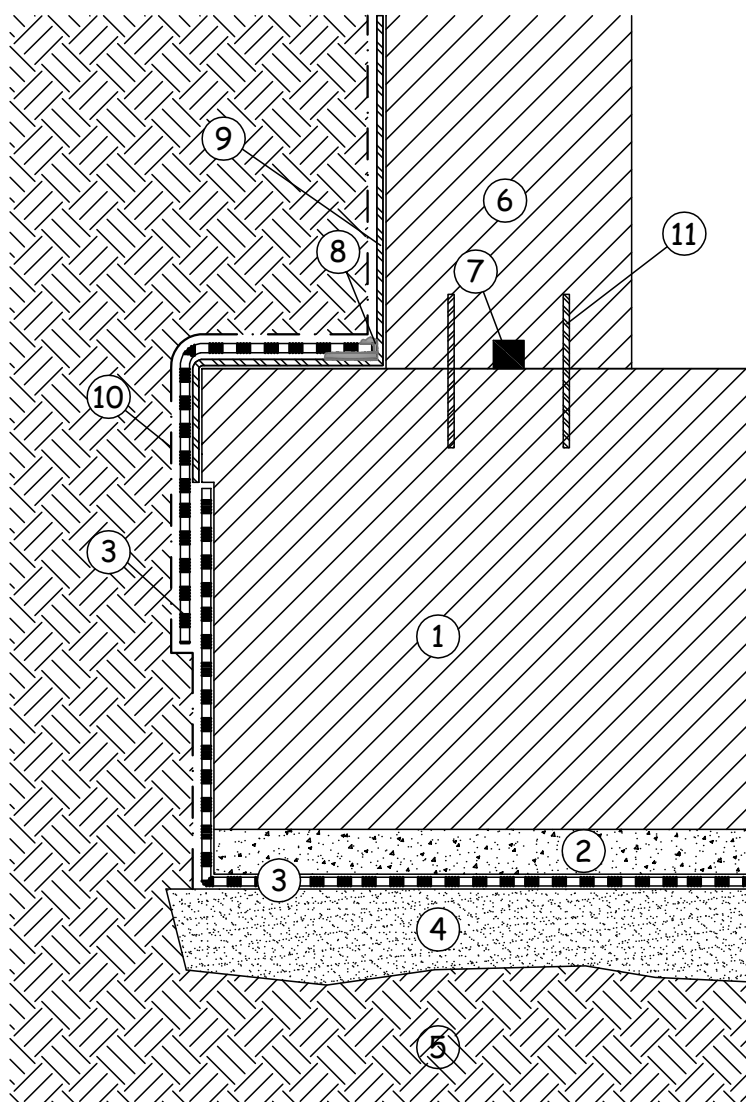
- ① Soil
- ② Floor concrete
- ③ Concrete slab
- ④ Reinforcing rods
- ⑤ IDROSTOP B25
- ⑥ Formwork
- ⑦ Space bars
- ⑧ Metal framework



NEW CONSTRUCTIONS
BELOW GROUND LEVEL

MAPEPROOF on slab and MAP. FOUNDATION on wall

Code:
ATE N SQ 011



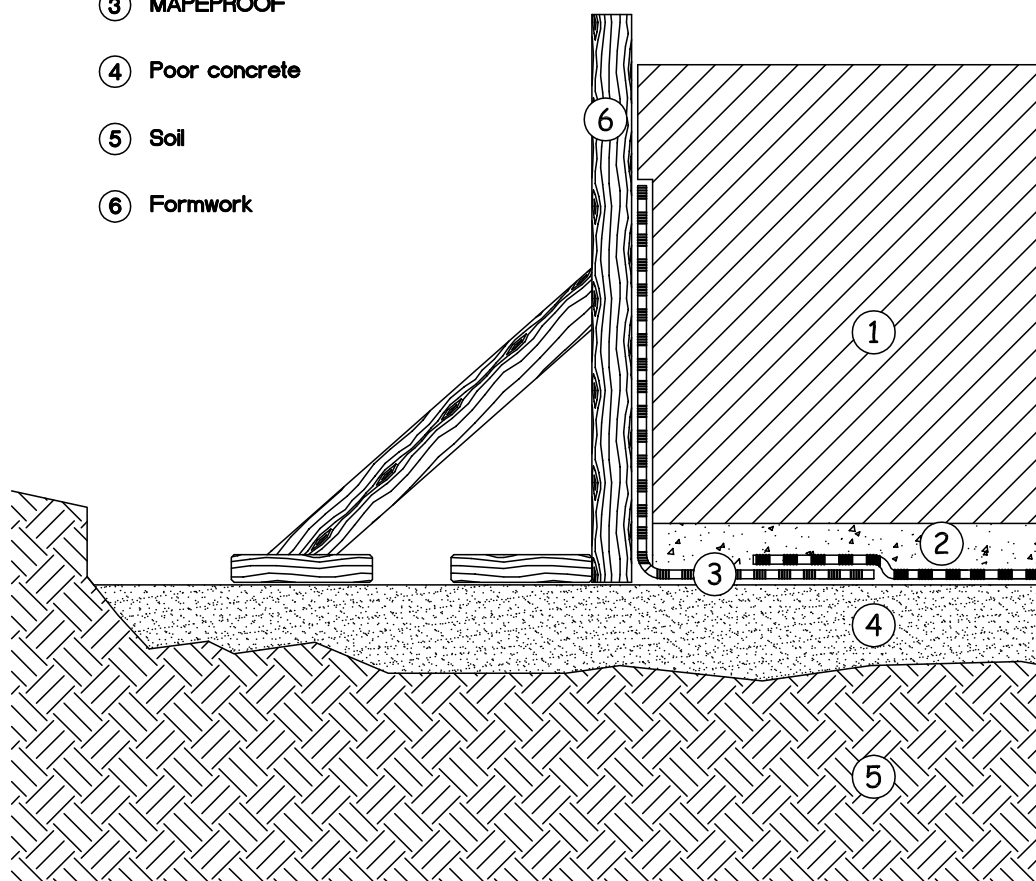
- ① Concrete slab
- ② Concrete protective layer with resistance similar to concrete slab
- ③ MAPEPROOF
- ④ Poor concrete
- ⑤ Soil
- ⑥ Concrete wall
- ⑦ IDROSTOP B25
- ⑧ MAPEPROOF MASTIC
- ⑨ MAPELASTIC FOUNDATION
- ⑩ Protection layer
- ⑪ Steel bars

NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Slab cast with formworks

Code:
ATE N SQ 012

- ① Concrete slab
- ② Concrete protective layer with resistance similar to concrete slab
- ③ MAPEPROOF
- ④ Poor concrete
- ⑤ Soil
- ⑥ Formwork

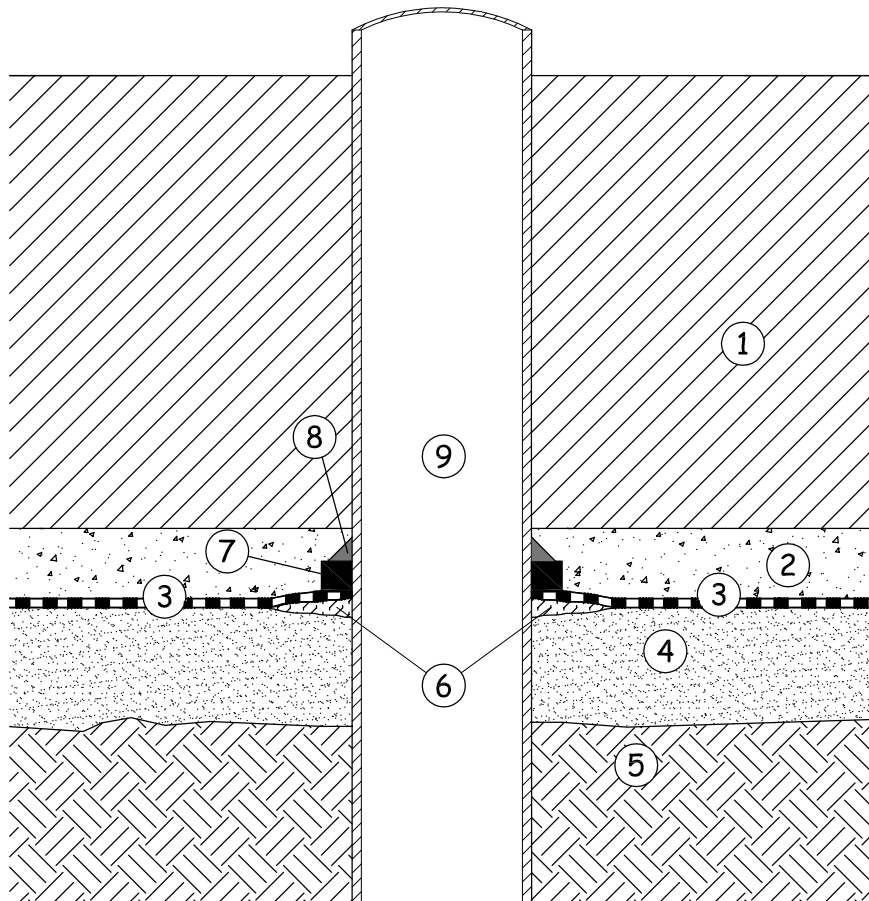


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Sealing of penetration pipe

Code:
ATE N SQ 013

- | | |
|--|--------------------|
| ① Concrete slab | ⑥ MAPEPROOF SEAL |
| ② Concrete protective layer with resistance similar to concrete slab | ⑦ IDROSTOP B25 |
| ③ MAPEPROOF | ⑧ MAPEPROOF MASTIC |
| ④ Poor concrete | ⑨ Pipe |
| ⑤ Soil | |

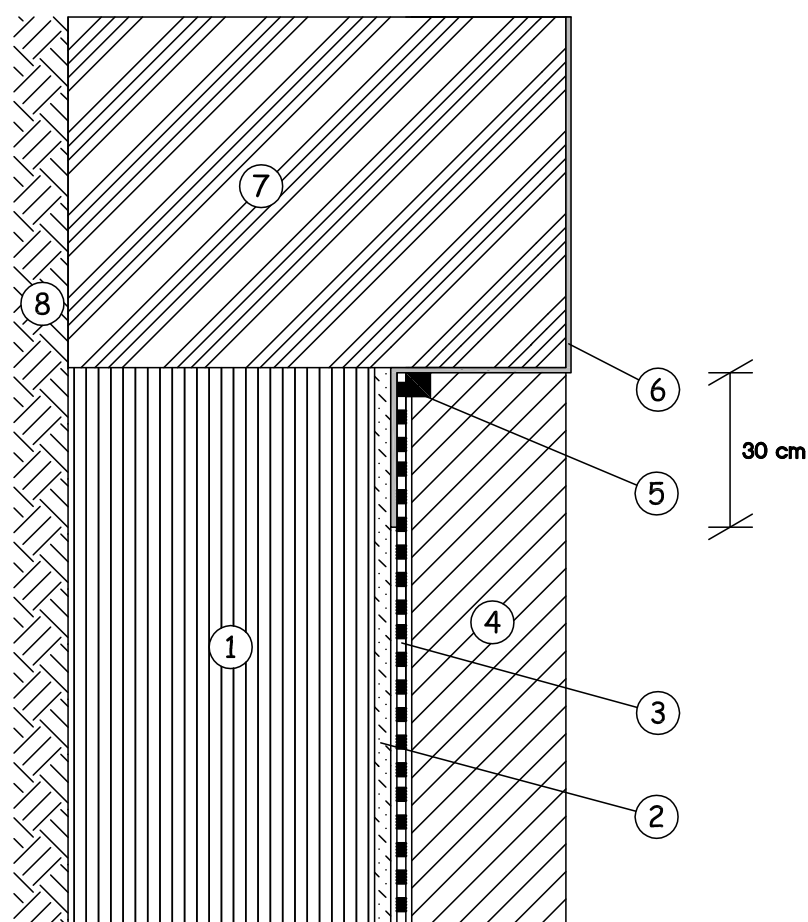


BELOW GROUND LEVEL
NEW CONSTRUCTIONS

Piles waterproofing: top beam detail

Code:
ATE N SQ 014

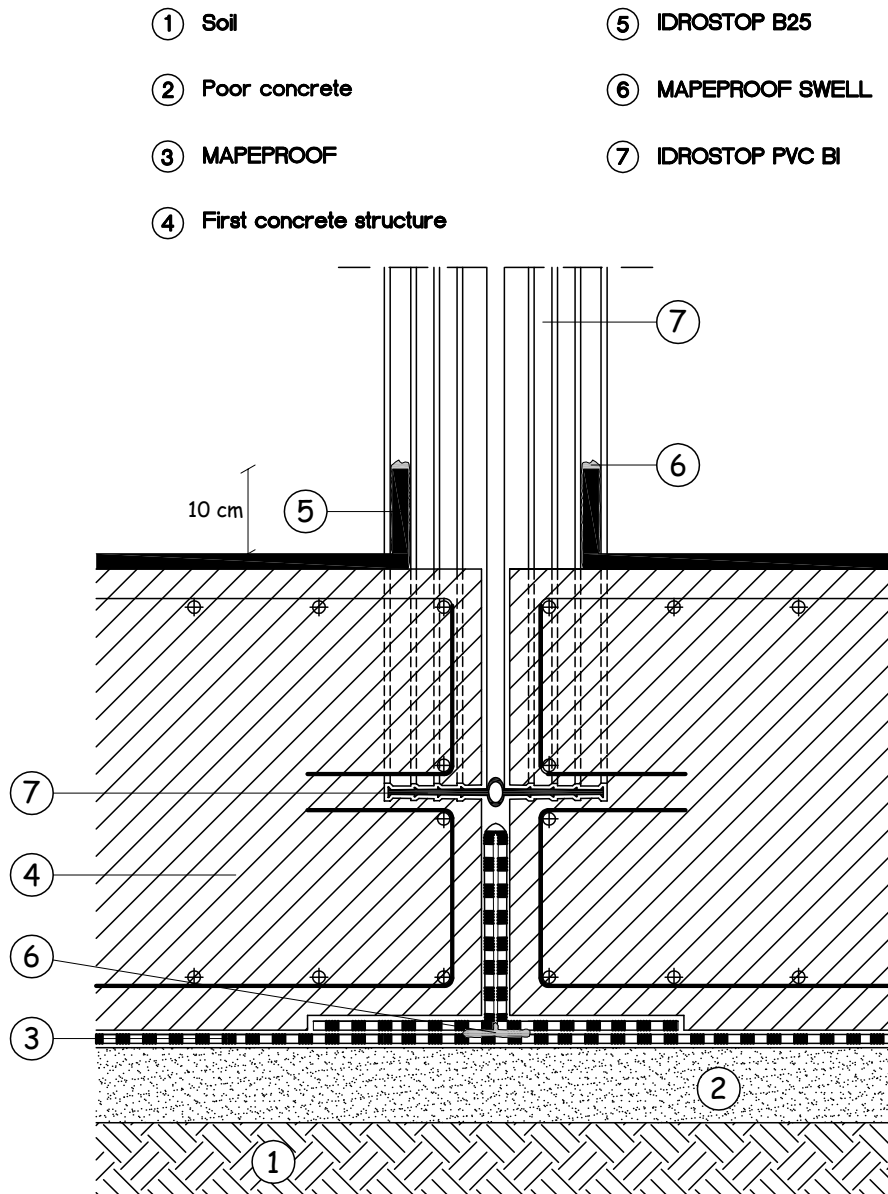
- | | |
|---|-------------------------|
| ① Piles | ⑤ IDROSTOP B25 |
| ② Regularization with a suitable product of the Mapegrout range | ⑥ MAPELASTIC FOUNDATION |
| ③ MAPEPROOF | ⑦ Top beam |
| ④ Concrete wall | ⑧ Soil |



NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Connection between IDROSTOP B25 and IDROSTOP PVC BI

Code:
ATE N SQ 015

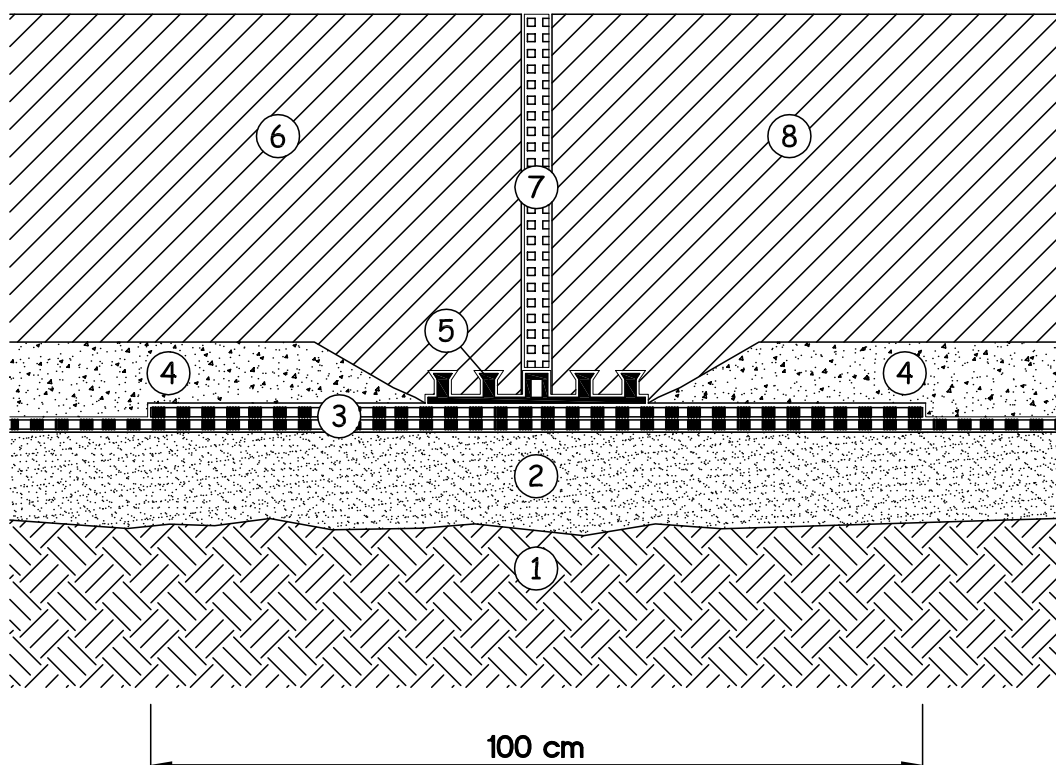


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Structural joint waterproofed with IDROSTOP PVC BE

Code:
ATE N SQ 016

- | | |
|---|-----------------------------|
| ① Soil | ⑤ IDROSTOP PVC BE |
| ② Poor concrete | ⑥ First concrete structure |
| ③ MAPEPROOF | ⑦ Separating element |
| ④ Concrete protective layer with
resistance similar to concrete slab | ⑧ Second concrete structure |

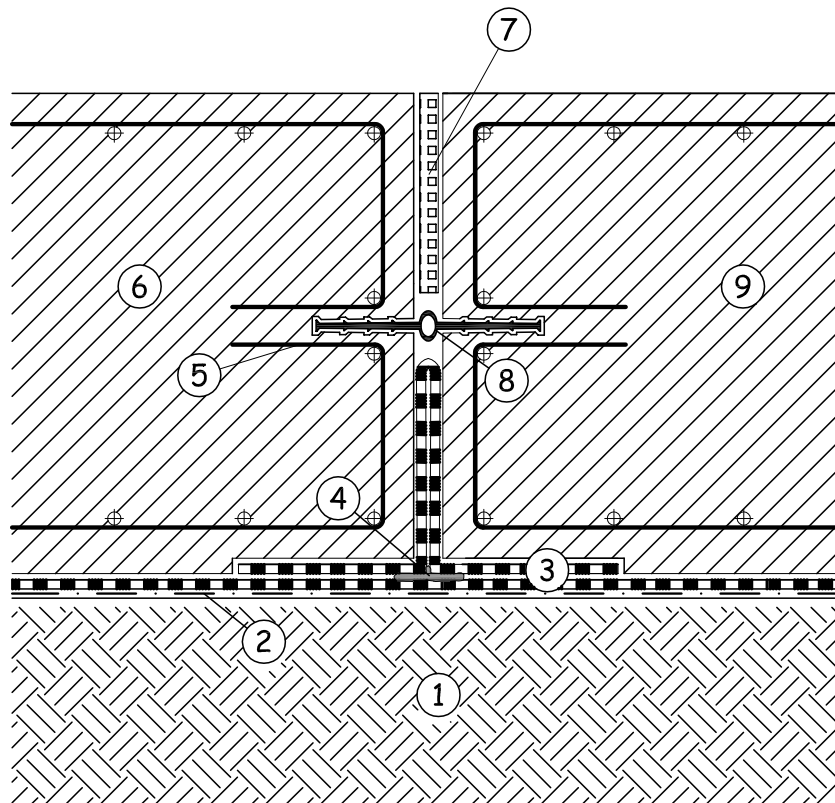


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Structural joint waterproofed with IDROSTOP PVC BI

Code:
ATE N SQ 017

- | | |
|---|-----------------------------|
| ① Soil | ⑥ First concrete structure |
| ② Non-woven fabric $\geq 250 \text{ g/m}^2$ | ⑦ Separating element |
| ③ MAPEPROOF | ⑧ Idrostop PVC BI |
| ④ MAPEPROOF MASTIC | ⑨ Second concrete structure |
| ⑤ Shaped bars | |

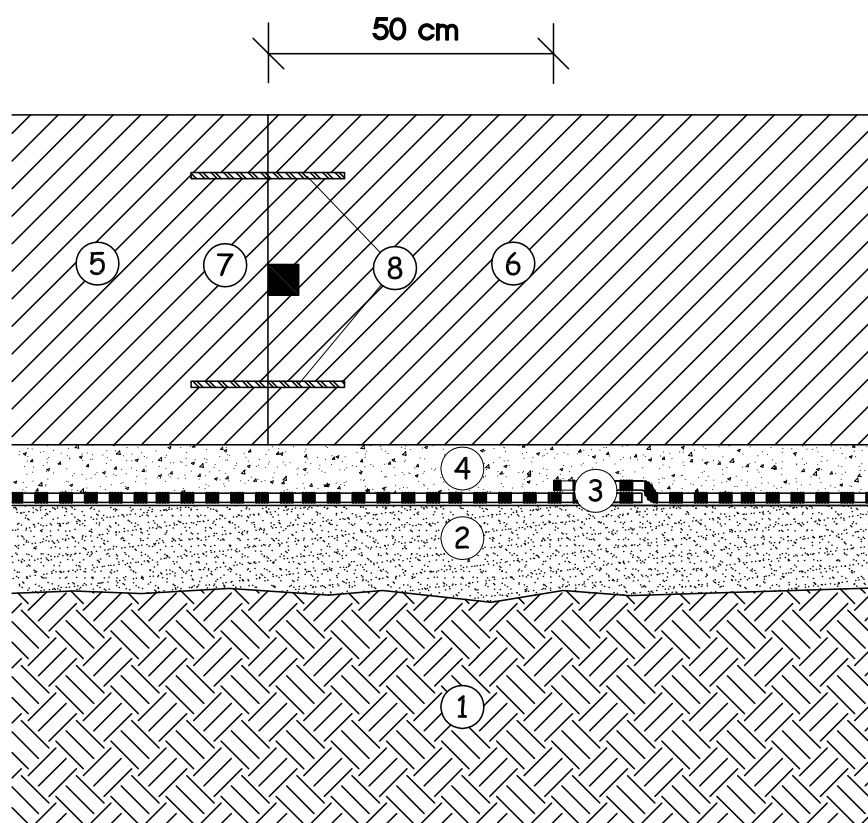


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Construction joint

Code:
ATE N SQ 018

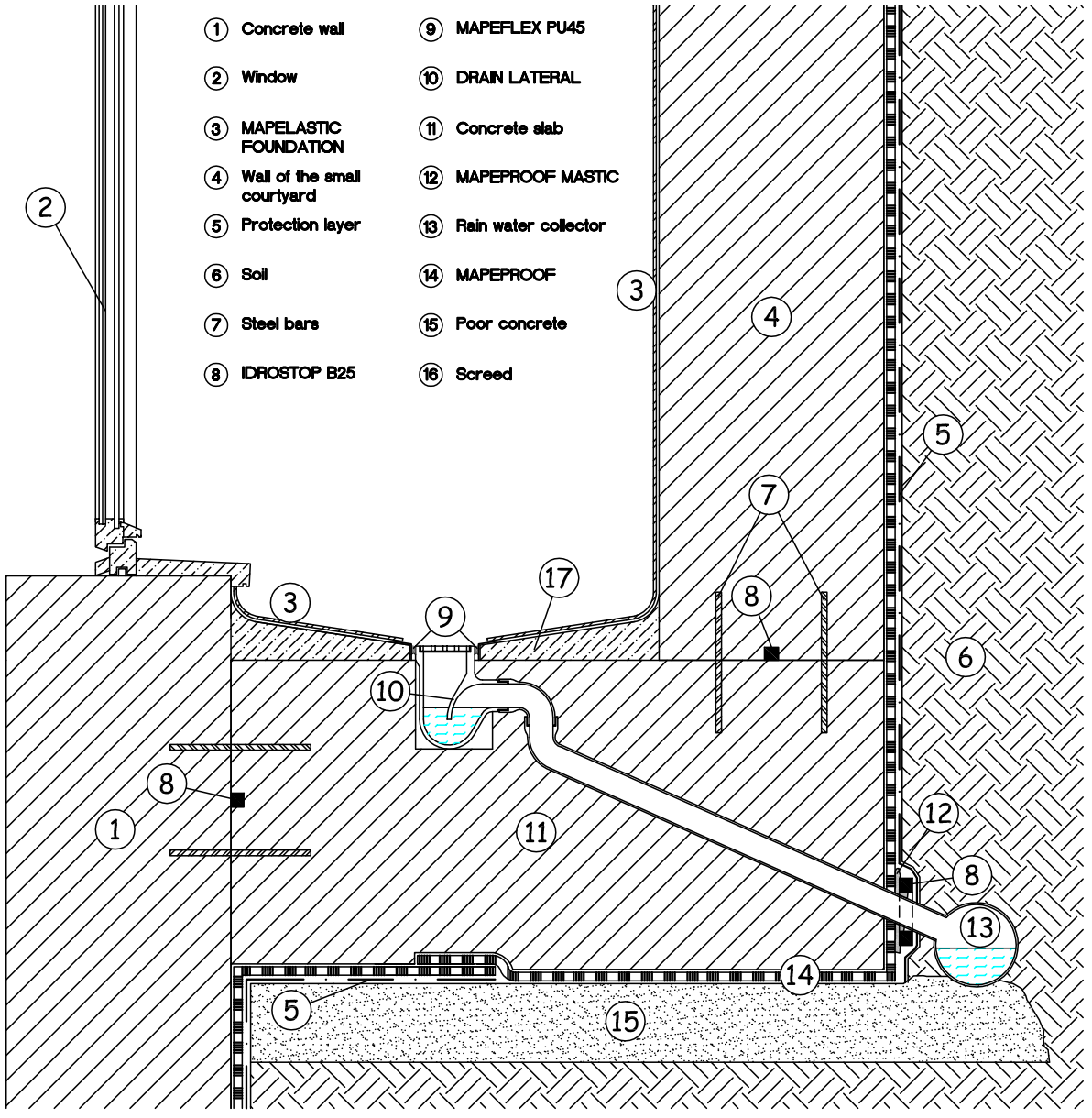
- | | |
|--|--------------------------------|
| ① Soil | ⑤ First cast of concrete slab |
| ② Poor concrete | ⑥ Second cast of concrete slab |
| ③ MAPEPROOF | ⑦ IDROSTOP B25 |
| ④ Concrete protective layer with resistance similar to concrete slab | ⑧ Steel bars |



NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Technical design guide
for WATERPROOFING

Small courtyard Code:
ATE N SQ 019

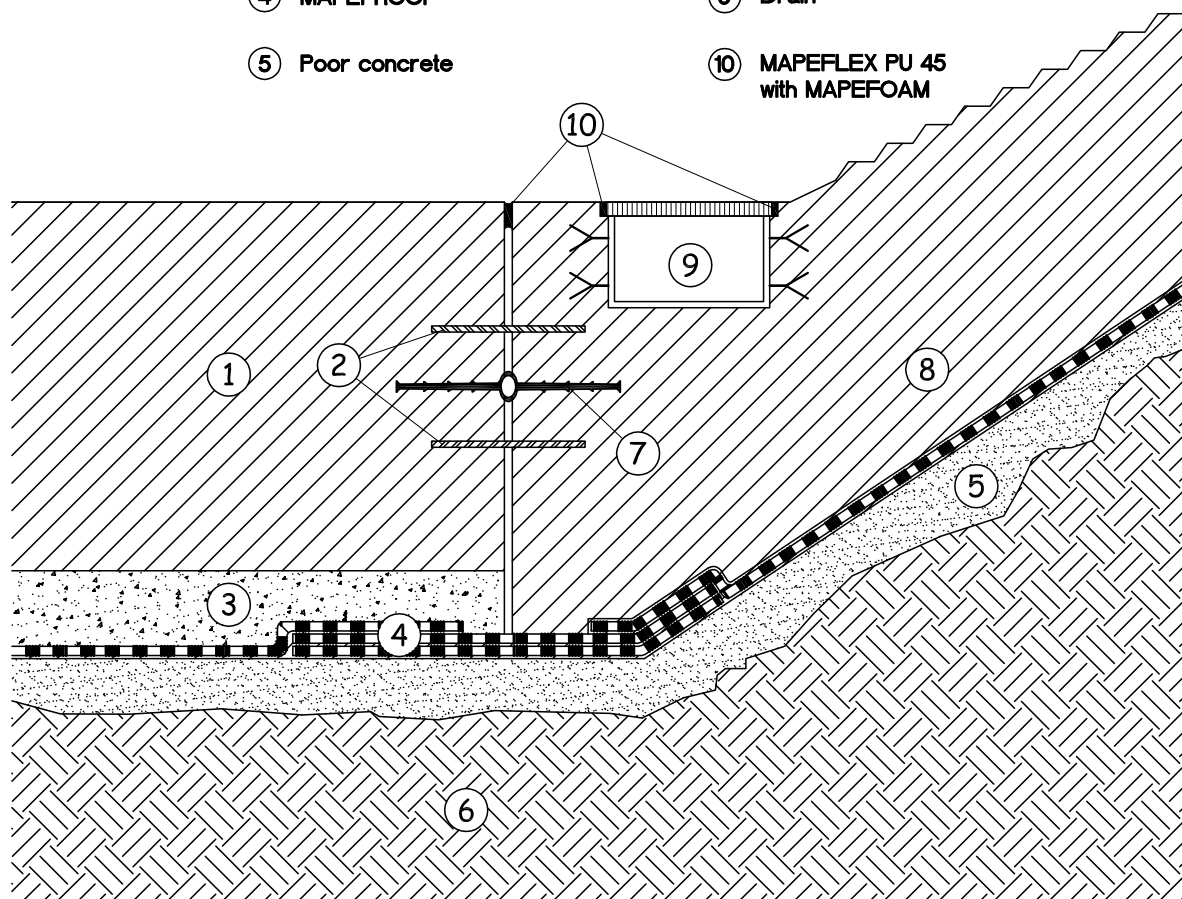


**NEW CONSTRUCTIONS
BELOW GROUND LEVEL**

Car parks ramp

Code:
ATE N SQ 020

- | | |
|--|--------------------------------|
| ① Concrete slab | ⑥ Soil |
| ② Steel bars | ⑦ IDROSTOP PVC BI |
| ③ Concrete protection layer with resistance similar to concrete slab | ⑧ Ramp |
| ④ MAPEPROOF | ⑨ Drain |
| ⑤ Poor concrete | ⑩ MAPEFLEX PU 45 with MAPEFOAM |

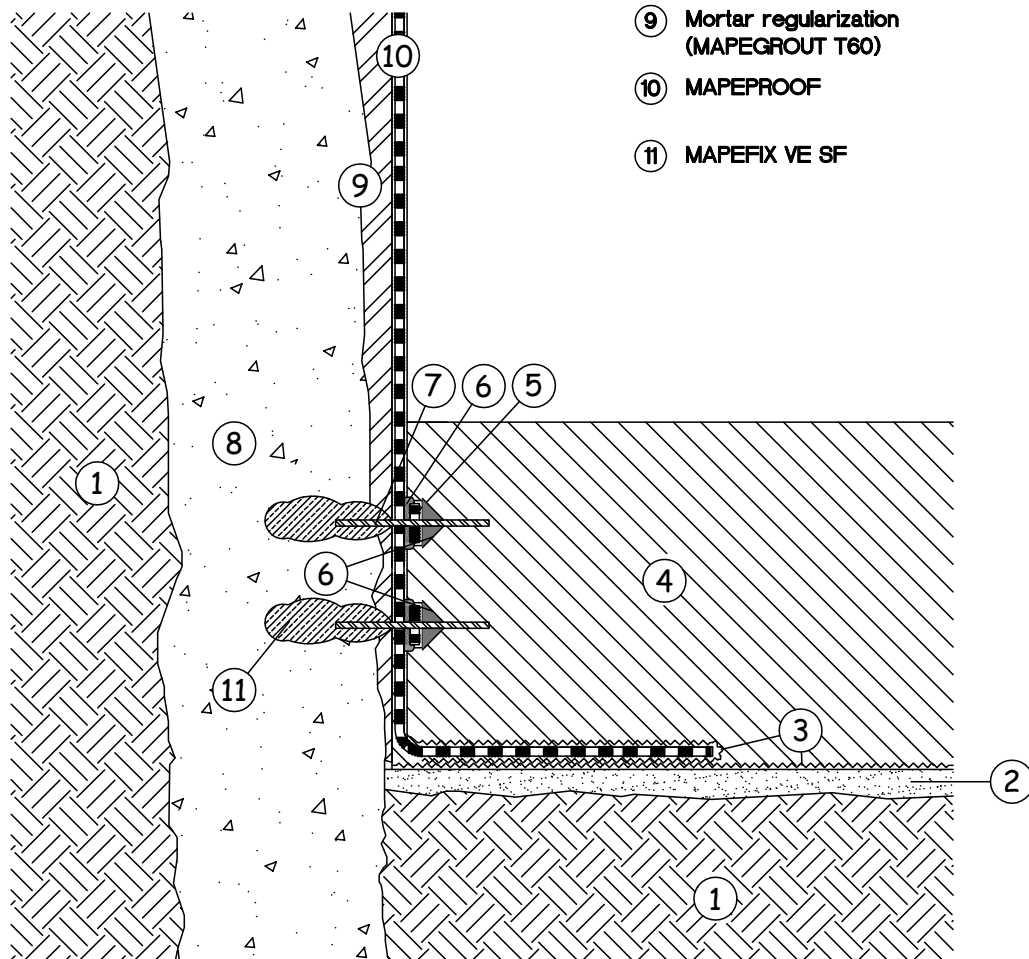


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Waterproofed intermediate floor - Topdown construction

Code:
ATE N SQ 021

- ① Soil
- ② Floor concrete
- ③ PE layer
- ④ Intermediate floor
- ⑤ Patch of MAPEPROOF
- ⑥ MAPEPROOF MASTIC
- ⑦ Steel bars
- ⑧ Retaining wall
- ⑨ Mortar regularization (MAPEGROUT T60)
- ⑩ MAPEPROOF
- ⑪ MAPEFIX VE SF

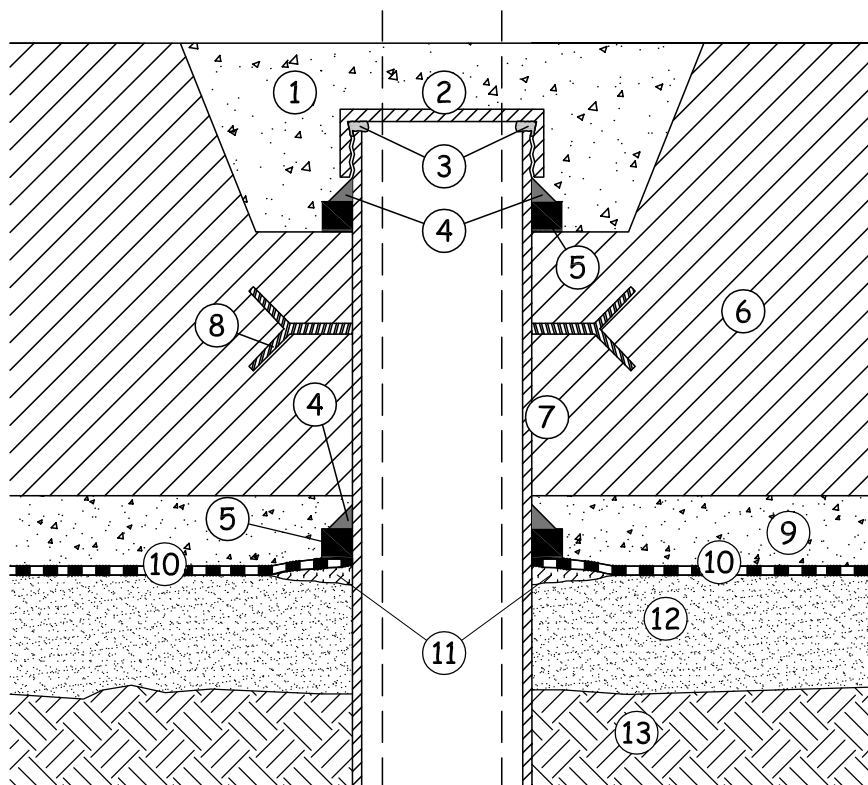


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Wellpoint sealing

Code:
ATE N SQ 022

- | | |
|----------------------|--|
| ① MAPEGROUT COLABILE | ⑧ Metal anchoring |
| ② Steel cap | ⑨ Concrete protective layer with resistance similar to concrete slab |
| ③ MAPEPROOF SWELL | ⑩ MAPEPROOF |
| ④ MAPEPROOF MASTIC | ⑪ MAPEPROOF SEAL |
| ⑤ IDROSTOP B25 | ⑫ Poor concrete |
| ⑥ Concrete slab | ⑬ Soil |
| ⑦ Pipe | |

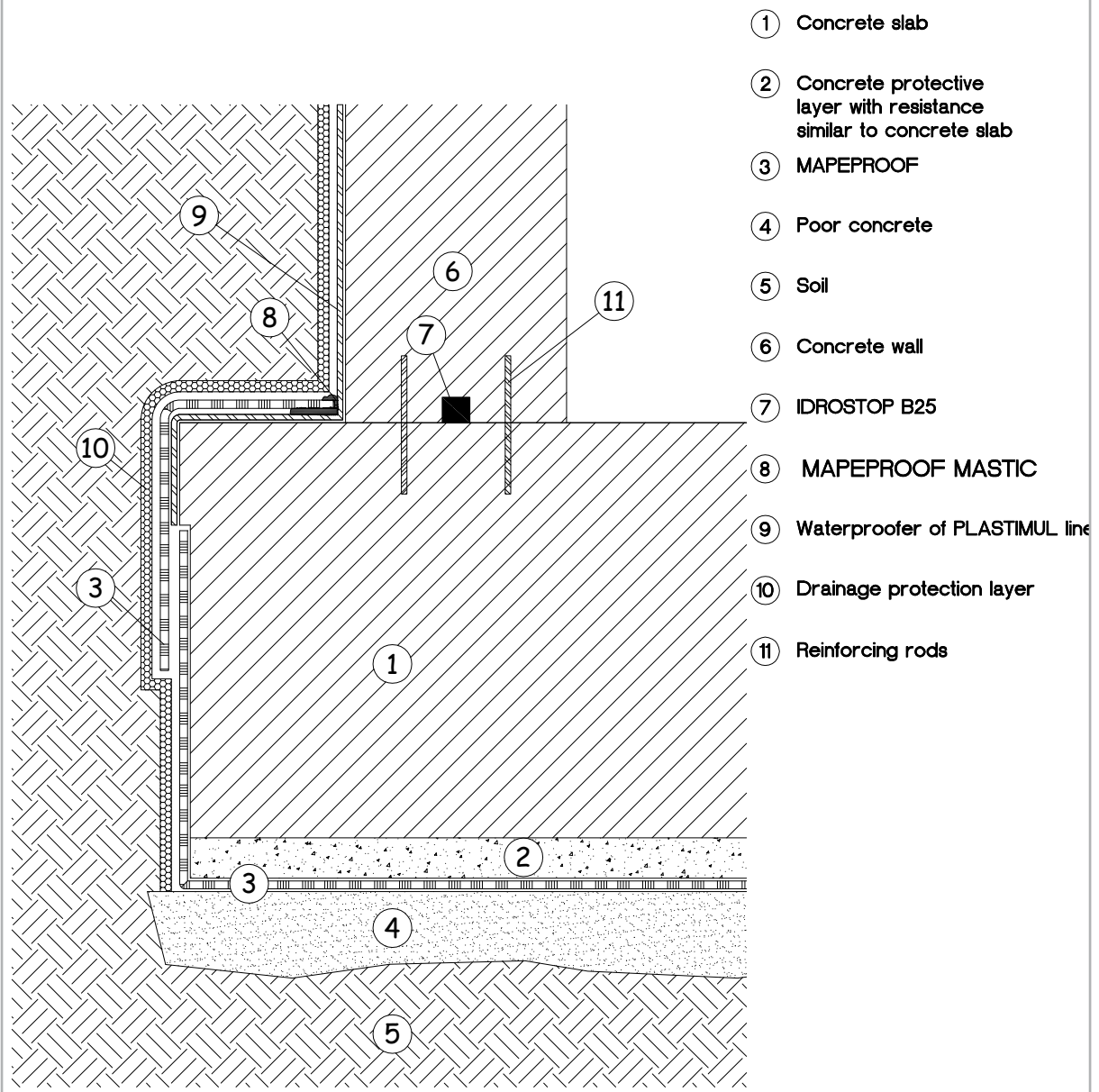


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

**Technical design guide
for WATERPROOFING**

**MAPEPROOF on slab and
PLASTIMUL on wall**

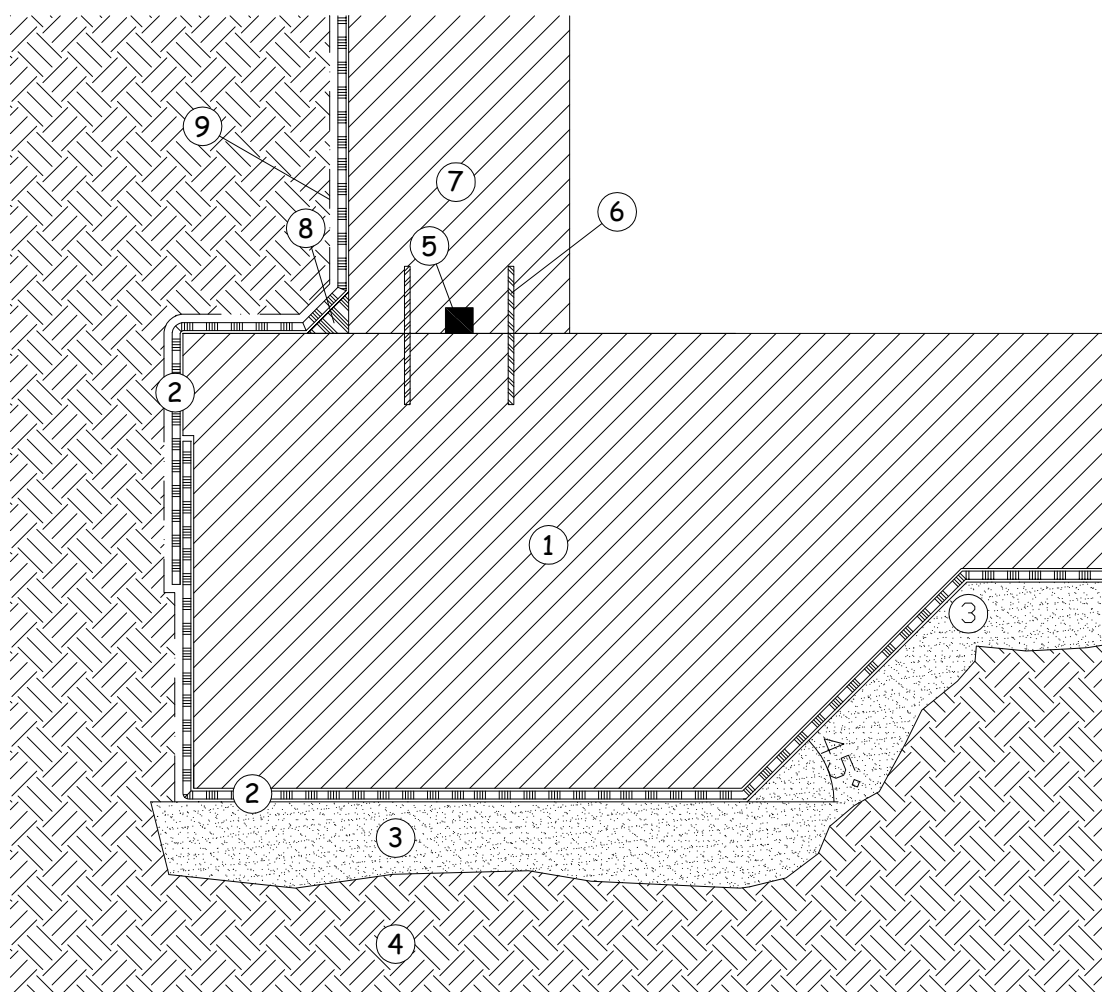
**Code:
ATE N SQ 023**



**NEW CONSTRUCTIONS
BELOW GROUND LEVEL**

MAPEPROOF - inverted beamCode:
ATE N SQ 024

- | | | |
|-----------------|----------------|--|
| ① Inverted beam | ④ Soil | ⑦ Concrete wall |
| ② MAPEPROOF | ⑤ IDROSTOP B25 | ⑧ Connection made with MAPEGROUT or PLANITOP |
| ③ Poor concrete | ⑥ Steel bars | ⑨ Protection layer |

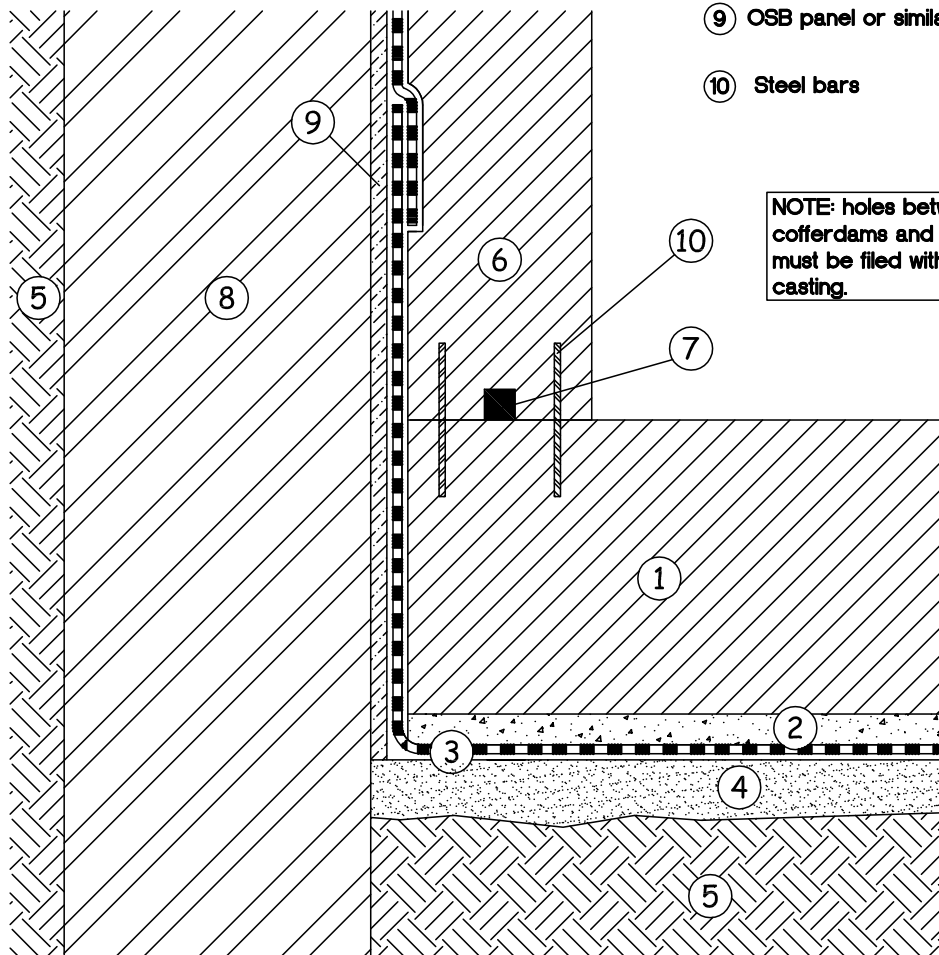


**NEW CONSTRUCTIONS
BELOW GROUND LEVEL**

Waterproofing on cofferdams - by using OSB panels

Code:
ATE N SQ 025

- | | |
|--|------------------------|
| ① Concrete slab | ⑤ Soil |
| ② Concrete protective layer with resistance similar to concrete slab | ⑥ Concrete wall |
| ③ MAPEPROOF | ⑦ IDROSTOP B25 |
| ④ Poor concrete | ⑧ Cofferdams |
| | ⑨ OSB panel or similar |
| | ⑩ Steel bars |

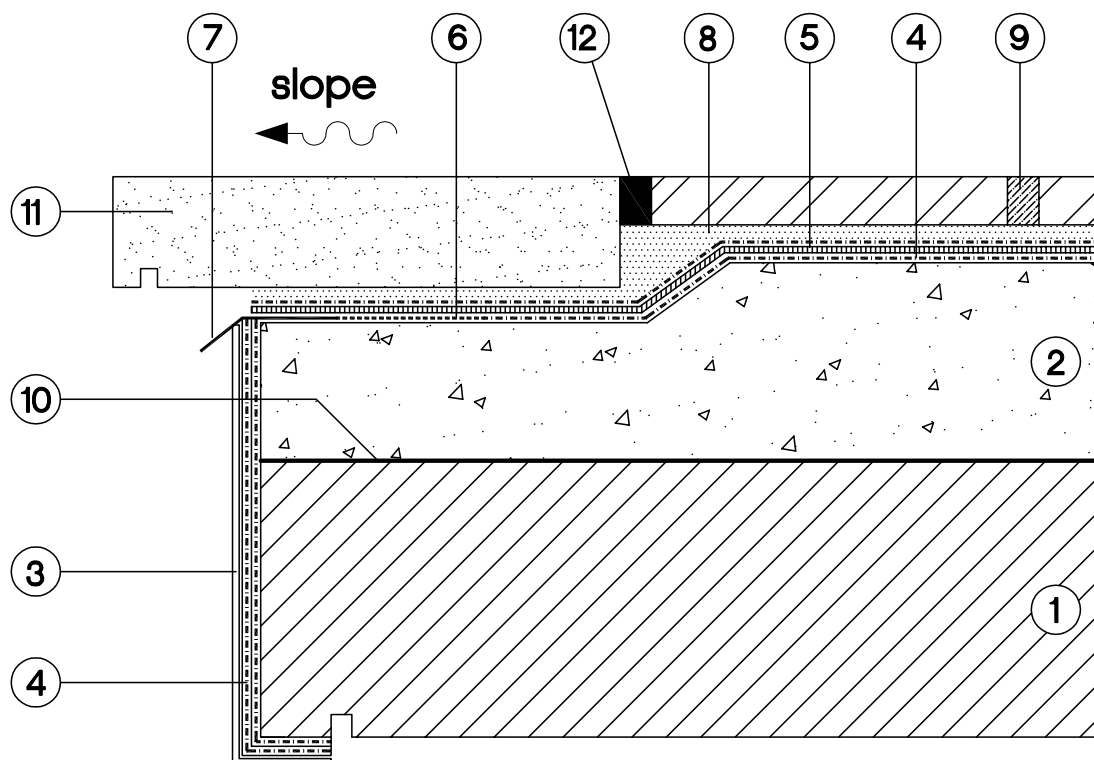


NEW CONSTRUCTIONS
BELOW GROUND LEVEL

Front edge of a balcony - marble sill

Code:
ATE N FQ 001

- | | |
|--|---|
| ① Overhanging floor slab | ⑦ Copper plate with bended edges |
| ② TOPCEM PRONTO (sloping screed) | ⑧ KERAFLEX MAXI S1 (cementitious adhesive) |
| ③ ELASTOCOLOR PAINT | ⑨ Balcony flooring grouted with ULTRACOLOR PLUS |
| ④ MAPELASTIC | ⑩ Bonding slurry (PLANICRETE+TOPCEM+water) |
| ⑤ MAPENET 150 (glass fibre mesh) | ⑪ Marble sill |
| ⑥ ADESILEX PG4 (surface dusted with quartz sand) | ⑫ MAPESIL LM |

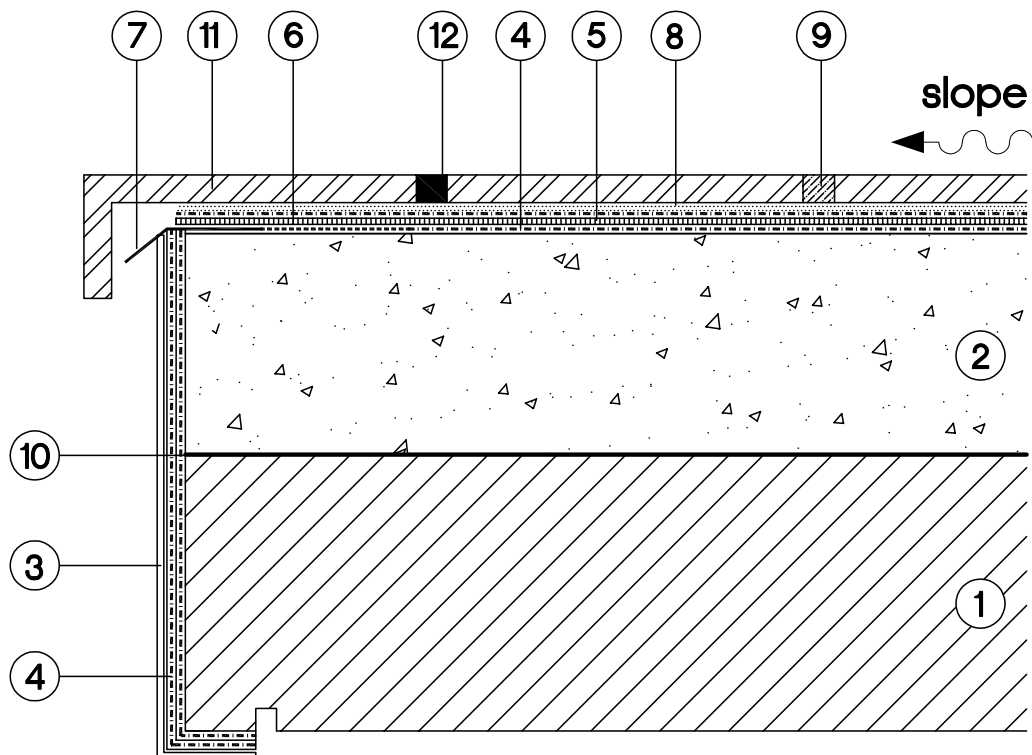


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Front edge of a balcony - ceramic sill

Code:
ATE N FQ 002

- ① Overhanging floor slab
- ② TOPCEM PRONTO (sloping screed)
- ③ ELASTOCOLOR PAINT
- ④ MAPELASTIC
- ⑤ MAPENET 150 (glass fibre mesh)
- ⑥ ADESILEX PG4 (surface dusted with quartz sand)
- ⑦ Copper plate with bended edges
- ⑧ KERAFLEX MAXI S1 (cementitious adhesive)
- ⑨ Balcony flooring grouted with ULTRACOLOR PLUS
- ⑩ Bonding slurry (PLANICRETE+TOPCEM+water)
- ⑪ Ceramic sill
- ⑫ MAPESIL AC e PRIMER FD

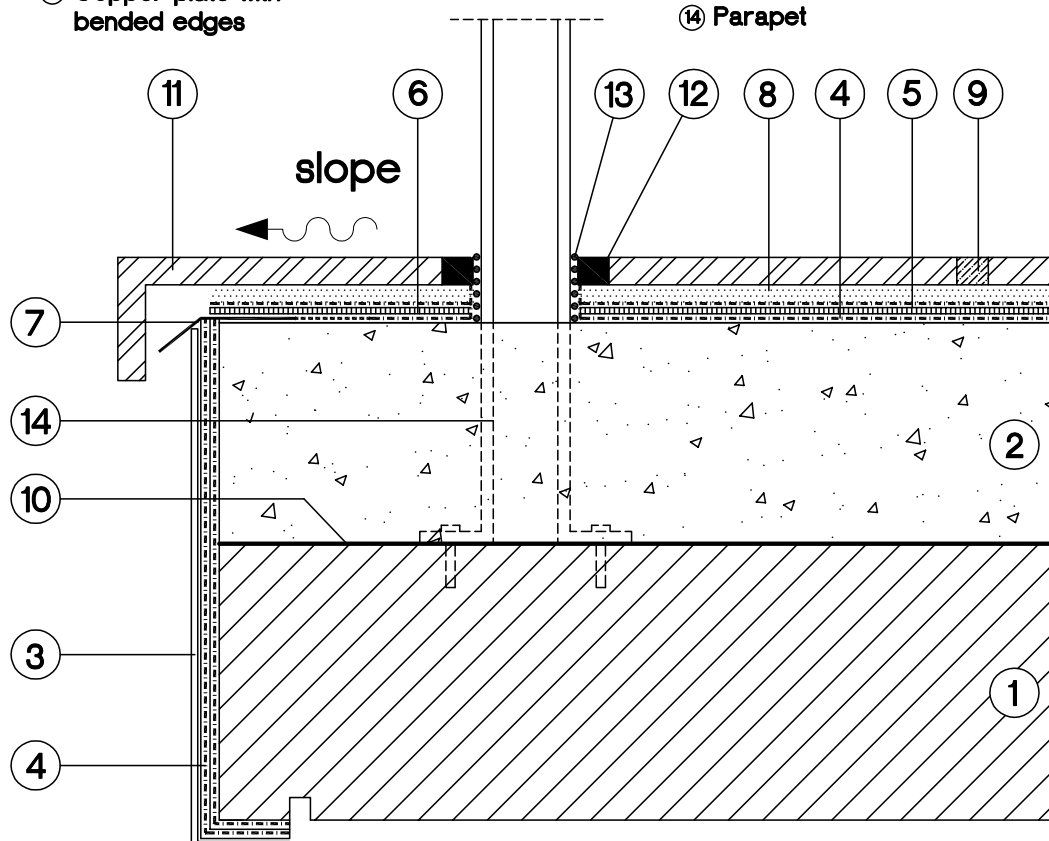


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Front edge of a balcony - parapet on floor slab

Code:
ATE N FQ 003

- | | |
|---|--|
| ① Overhanging floor slab | ⑧ KERAFLEX MAXI S1 |
| ② TOPCEM PRONTO
(sloping screed) | ⑨ Balcony flooring grouted with
ULTRACOLOR PLUS |
| ③ ELASTOCOLOR PAINT | ⑩ Bonding slurry
(PLANICRETE+TOPCEM+water) |
| ④ MAPELASTIC | ⑪ Pre-formed ceramic sill |
| ⑤ MAPENET 150 | ⑫ MAPEFLEX PU 45 |
| ⑥ ADESILEX PG4
(surface dusted with quartz sand) | ⑬ EPORIP
(surface dusted with quartz sand) |
| ⑦ Copper plate with
bended edges | ⑭ Parapet |

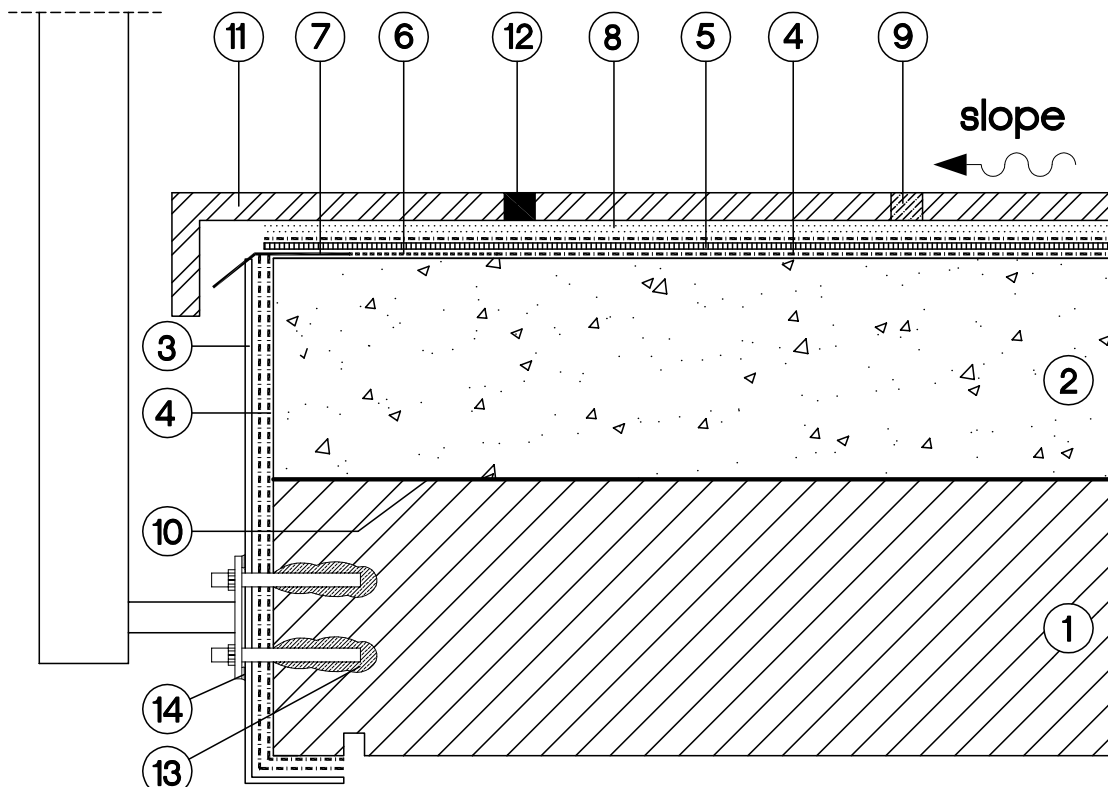


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Front edge of a balcony - parapet

Code:
ATE N FQ 004

- | | |
|---|--|
| ① Overhanging floor slab | ⑨ Balcony flooring grouted with
ULTRACOLOR PLUS |
| ② TOPCEM PRONTO
(sloping screed) | ⑩ Bonding slurry
(PLANICRETE+TOPCEM+water) |
| ③ ELASTOCOLOR PAINT | ⑪ Pre-formed ceramic sill |
| ④ MAPELASTIC | ⑫ MAPESIL AC |
| ⑤ MAPENET 150 | ⑬ MAPEFIX VE SF |
| ⑥ ADESILEX PG4
(surface dusted with quartz sand) | ⑭ MAPEFLEX PU 45 |
| ⑦ Copper plate with
bended edges | |
| ⑧ KERAFLEX MAXI S1 | |

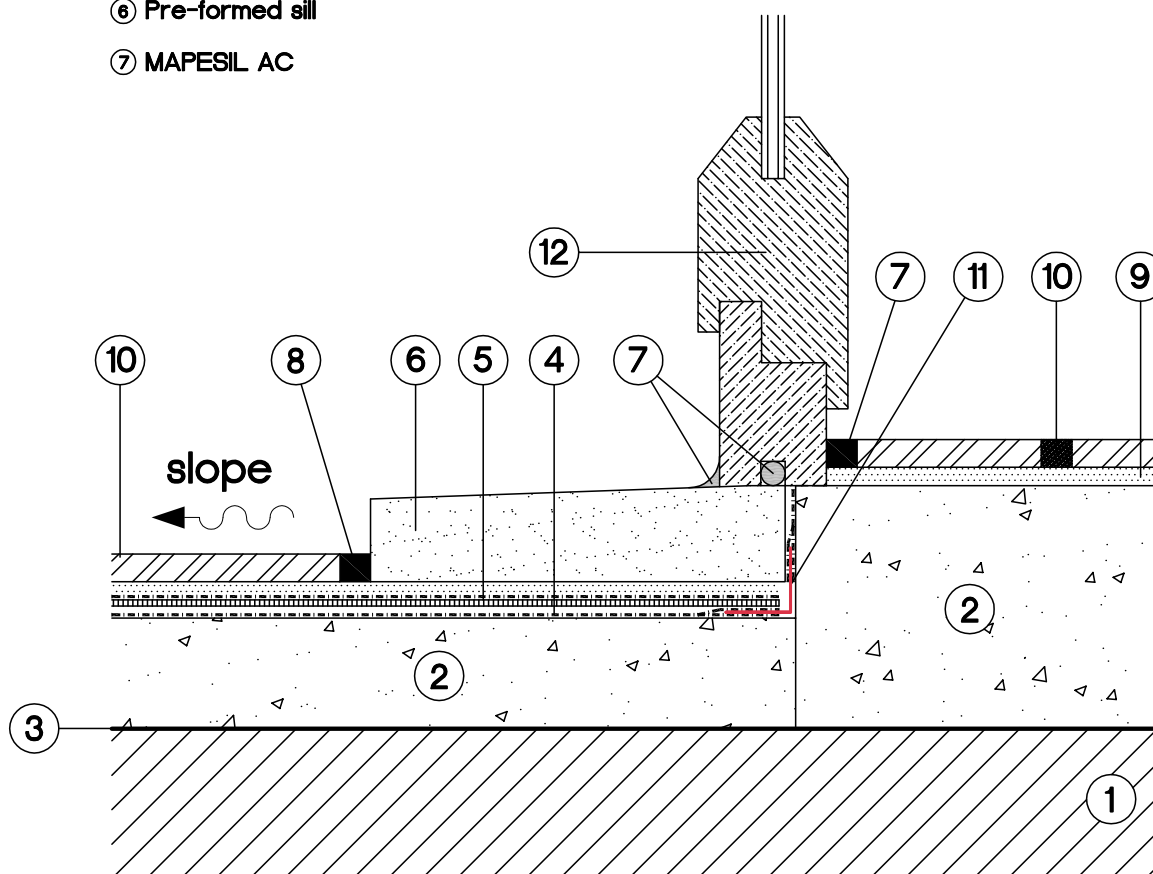


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Balcony sill sill - frame

Code:
ATE N FQ 005

- | | |
|---|------------------------|
| ① Overhanging floor slab | ⑧ MAPESIL LM |
| ② TOPCEM PRONTO
(sloping screed) | ⑨ KERAFLEX MAXI S1 |
| ③ Bonding slurry
(PLANICRETE+TOPCEM+water) | ⑩ ULTRACOLOR PLUS |
| ④ MAPELASTIC SMART | ⑪ Strip of MAPETEX SEL |
| ⑤ MAPETEX SEL | ⑫ Frame |
| ⑥ Pre-formed sill | ⑬ Flooring |
| ⑦ MAPESIL AC | |

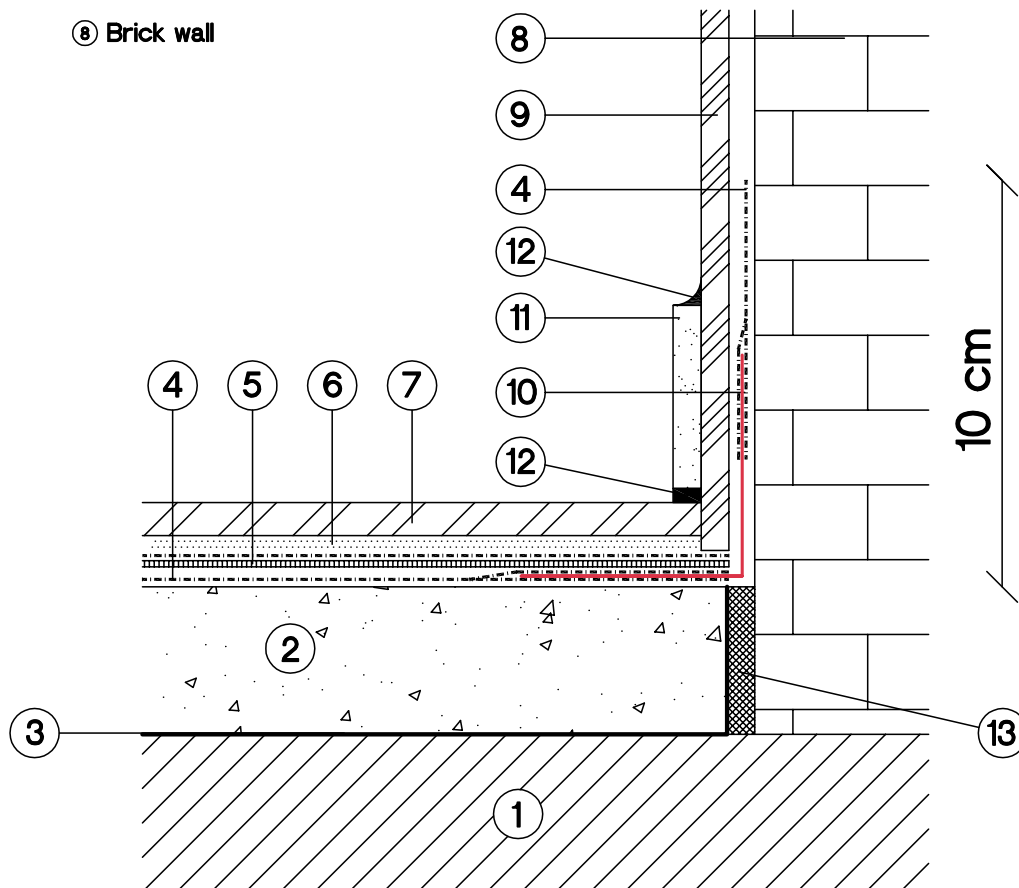


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Floor - wall fillet

Code:
ATE N FQ 006

- | | |
|--------------------------|-------------------------|
| ① Overhanging floor slab | ⑨ Render |
| ② TOPCEM PRONTO | ⑩ MAPEBAND |
| ③ PE sheet | ⑪ Skirting |
| ④ MAPELASTIC | ⑫ MAPESIL AC |
| ⑤ MAPENET 150 | ⑬ Compressible material |
| ⑥ ELASTORAPID | |
| ⑦ Ceramic flooring | |
| ⑧ Brick wall | |

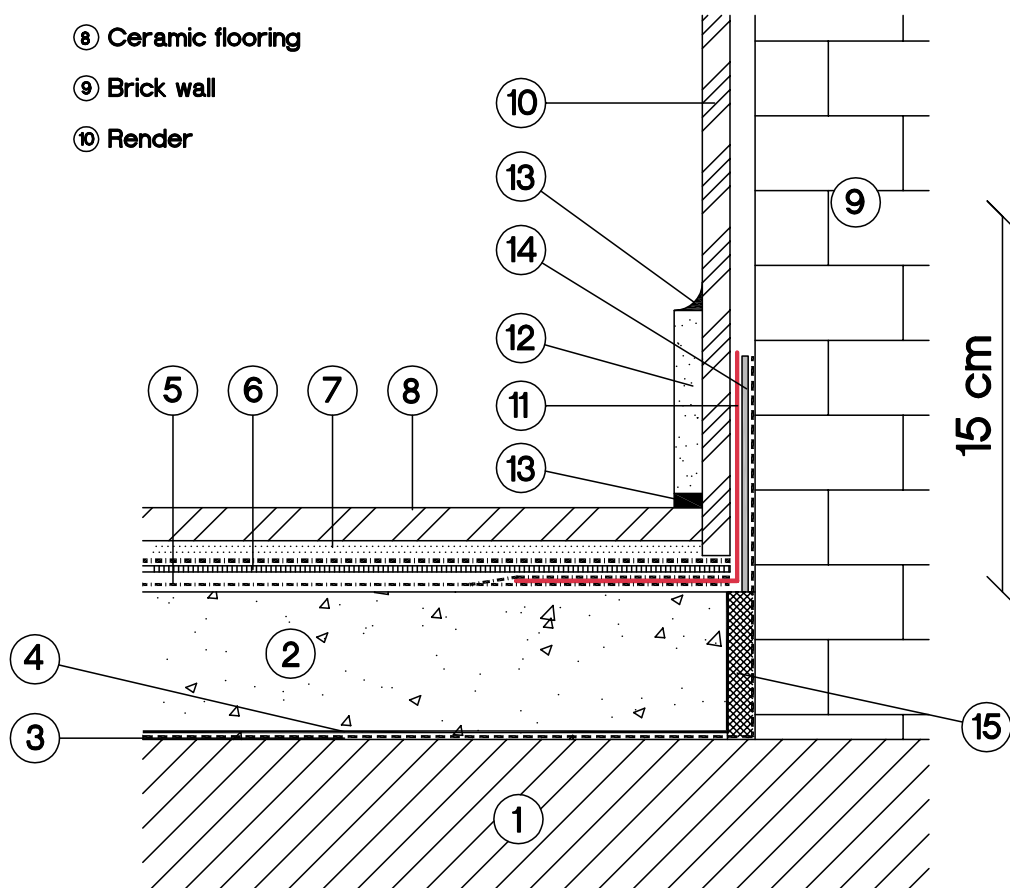


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Floor - bituminous fillet

Code:
ATE N FQ 007

- | | |
|--------------------------|-------------------------|
| ① Overhanging floor slab | ⑪ MAPEBAND |
| ② TOPCEM PRONTO | ⑫ Skirting |
| ③ Bituminous sheet | ⑬ MAPESIL AC |
| ④ PE sheet | ⑭ MAPEFLEX BLACKFILL |
| ⑤ MAPELASTIC | ⑮ Compressible material |
| ⑥ MAPENET 150 | |
| ⑦ ELASTORAPID | |
| ⑧ Ceramic flooring | |
| ⑨ Brick wall | |
| ⑩ Render | |

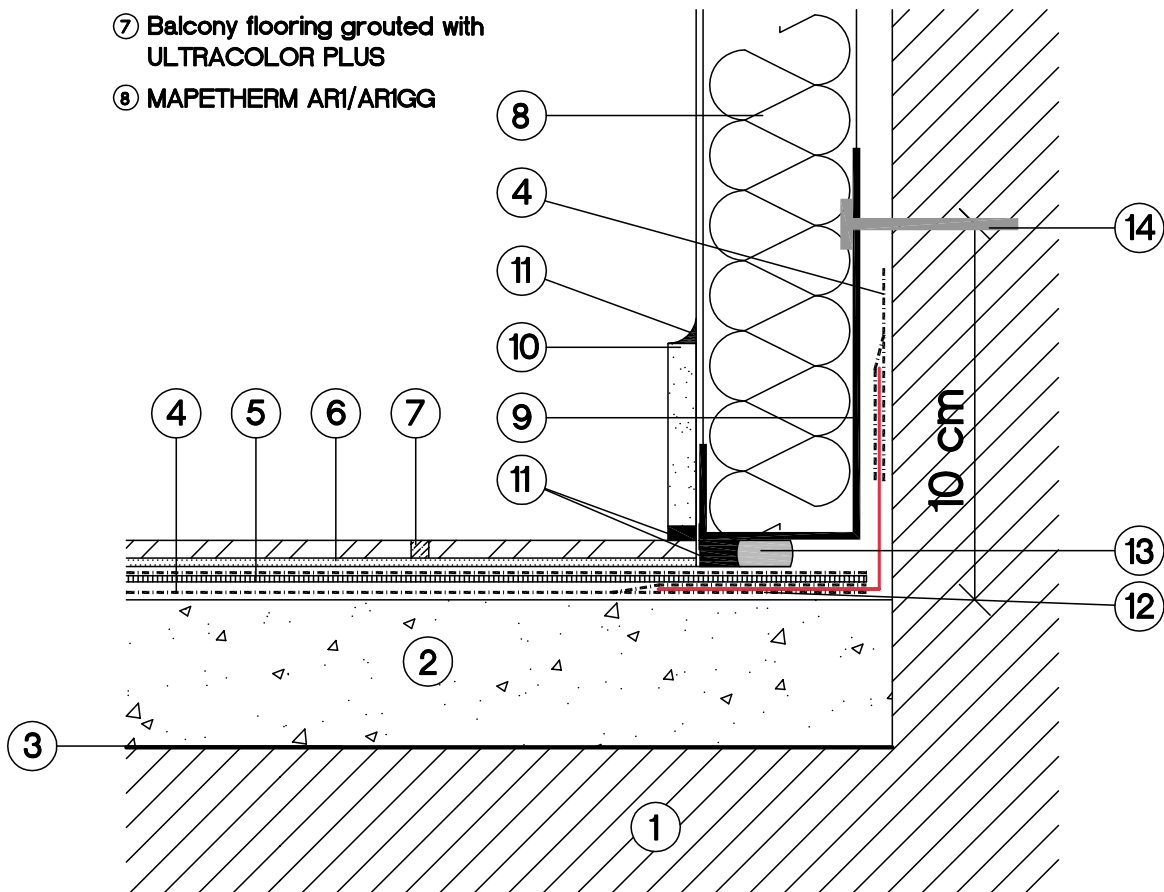


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Flooring - insulating panel

Code:
ATE N FQ 008

- | | |
|--|---------------------|
| ① Overhanging floor slab | ⑨ Metal profile |
| ② TOPCEM PRONTO | ⑩ Skirting |
| ③ Bonding slurry
(PLANICRETE+TOPCEM+water) | ⑪ MAPESIL AC |
| ④ MAPELASTIC | ⑫ MAPEBAND |
| ⑤ MAPENET 150 | ⑬ MAPEFOAM |
| ⑥ ELASTORAPID | ⑭ Mechanical fixing |
| ⑦ Balcony flooring grouted with
ULTRACOLOR PLUS | |
| ⑧ MAPETHERM AR1/ARIGG | |

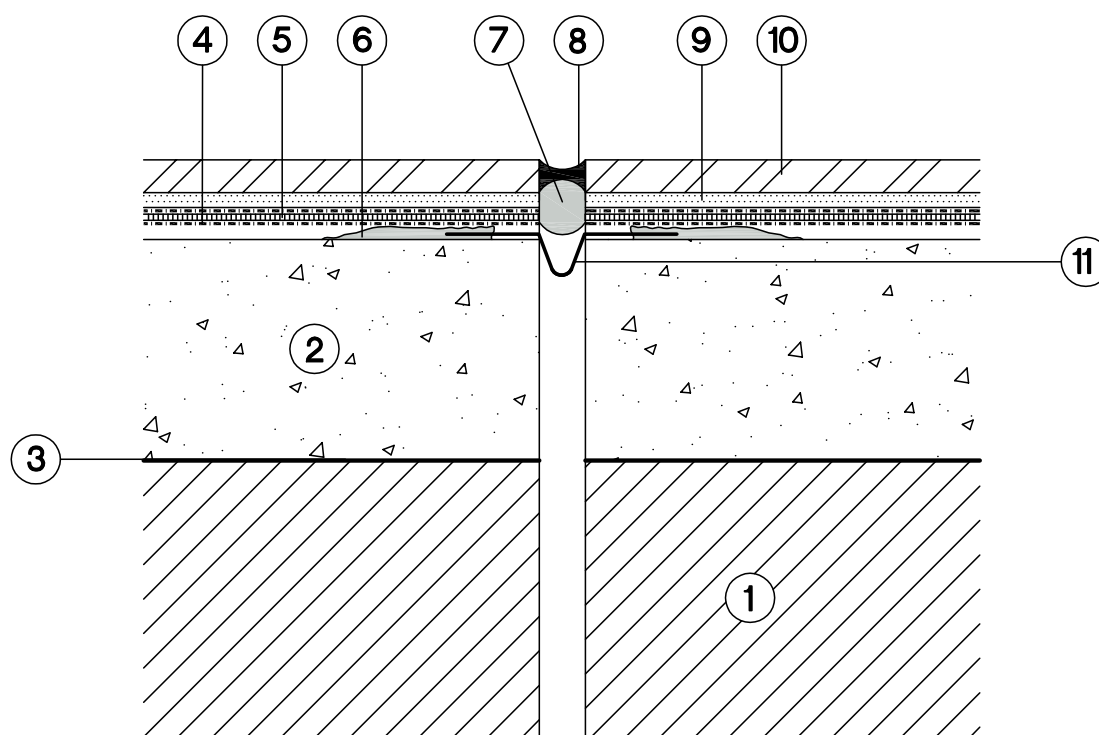


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Sealing structural joint - MAPEBAND TPE

Code:
ATE N FQ 009

- | | |
|---|---|
| ① Reinforced concrete substrate | ⑥ ADESILEX PG4
(surface dusted with quartz sand) |
| ② TOPCEM PRONTO | ⑦ MAPEFOAM |
| ③ Bonding slurry
(PLANICRETE+TOPCEM+water) | ⑧ MAPEFLEX PU45 |
| ④ MAPELASTIC | ⑨ KERAFLEX MAXI S1 |
| ⑤ MAPENET 150 | ⑩ Balcony flooring grouted with
ULTRACOLOR PLUS |
| | ⑪ MAPEBAND TPE |

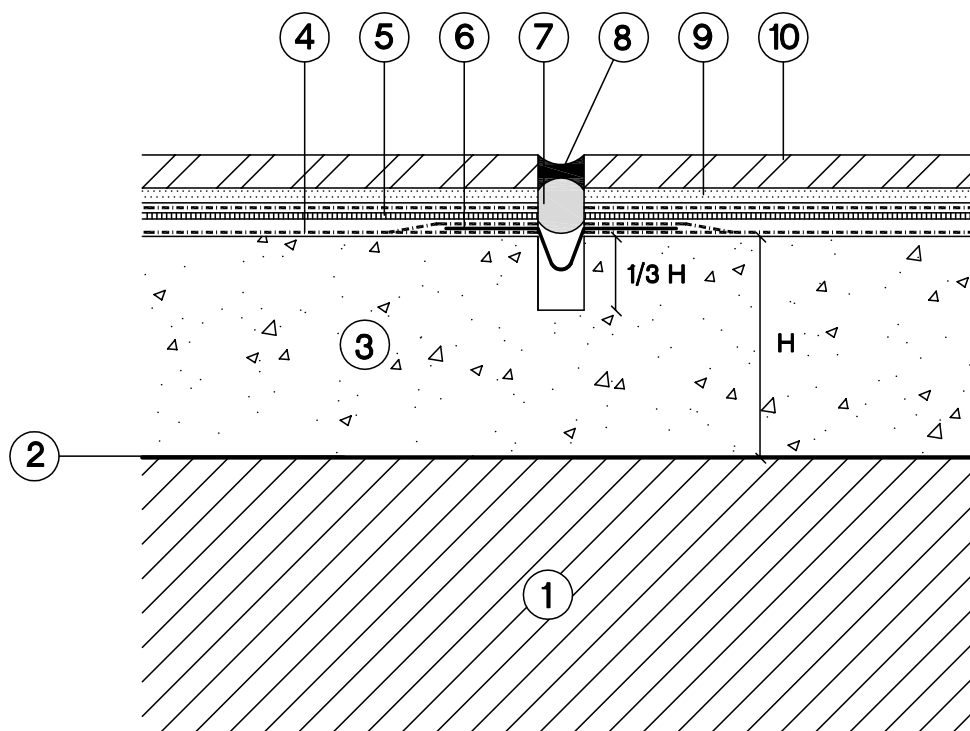


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Sealing a check joint MAPEBAND

Code:
ATE N FQ 010

- | | |
|---|--|
| ① Reinforced concrete substrate | ⑥ MAPEBAND |
| ② Bonding slurry
(PLANICRETE+TOPCEM+water) | ⑦ MAPEFOAM |
| ③ TOPCEM PRONTO | ⑧ MAPESIL AC |
| ④ MAPELASTIC | ⑨ KERAFLEX MAXI S1/ELASTORAPID |
| ⑤ MAPENET 150 | ⑩ Balcony flooring grouted with
ULTRACOLOR PLUS |

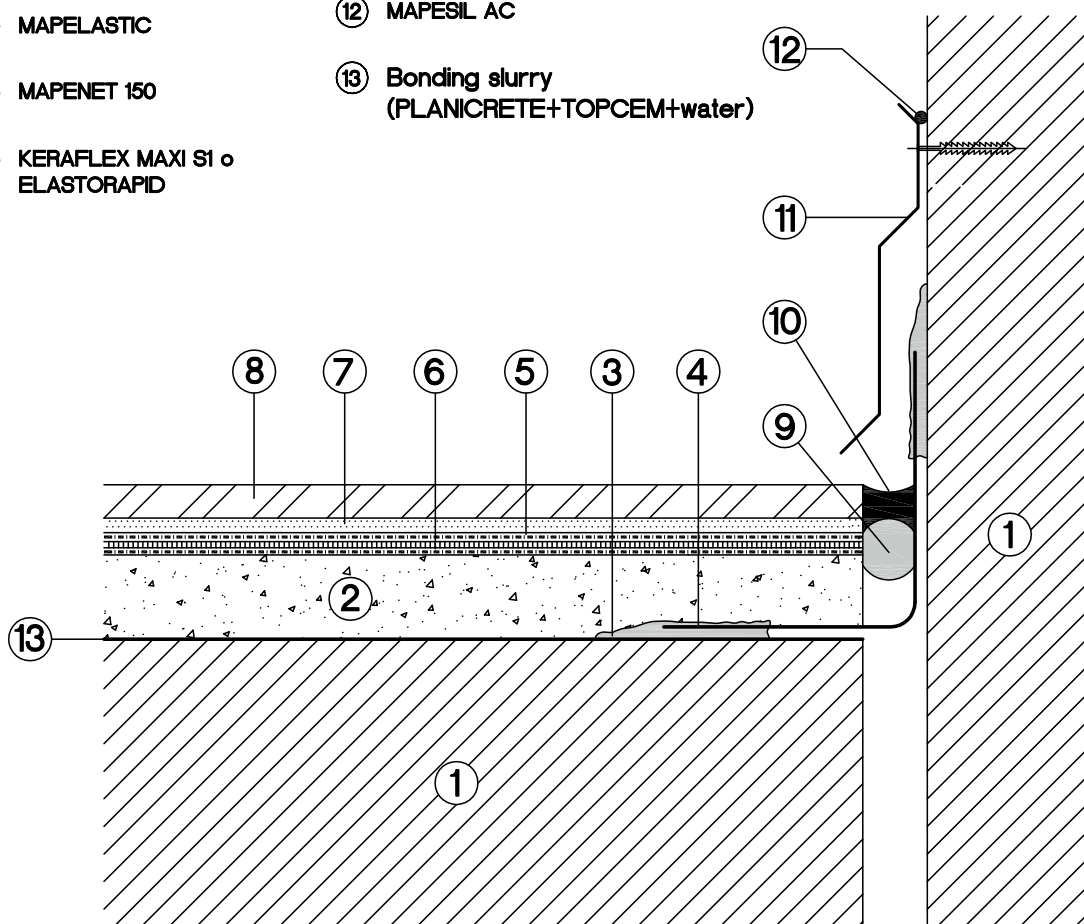


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Structural joint flooring - wall

Code:
ATE N FQ 011

- | | |
|----------------------------------|--|
| ① Reinforced concrete substrate | ⑧ Flooring |
| ② TOPCEM PRONTO | ⑨ MAPEFOAM |
| ③ ADESILEX PG4 + quartz | ⑩ MAPEFLEX PU45 |
| ④ MAPEBAND TPE | ⑪ Metal plate |
| ⑤ MAPELASTIC | ⑫ MAPESIL AC |
| ⑥ MAPENET 150 | ⑬ Bonding slurry (PLANICRETE+TOPCEM+water) |
| ⑦ KERAFLEX MAXI S1 o ELASTORAPID | |

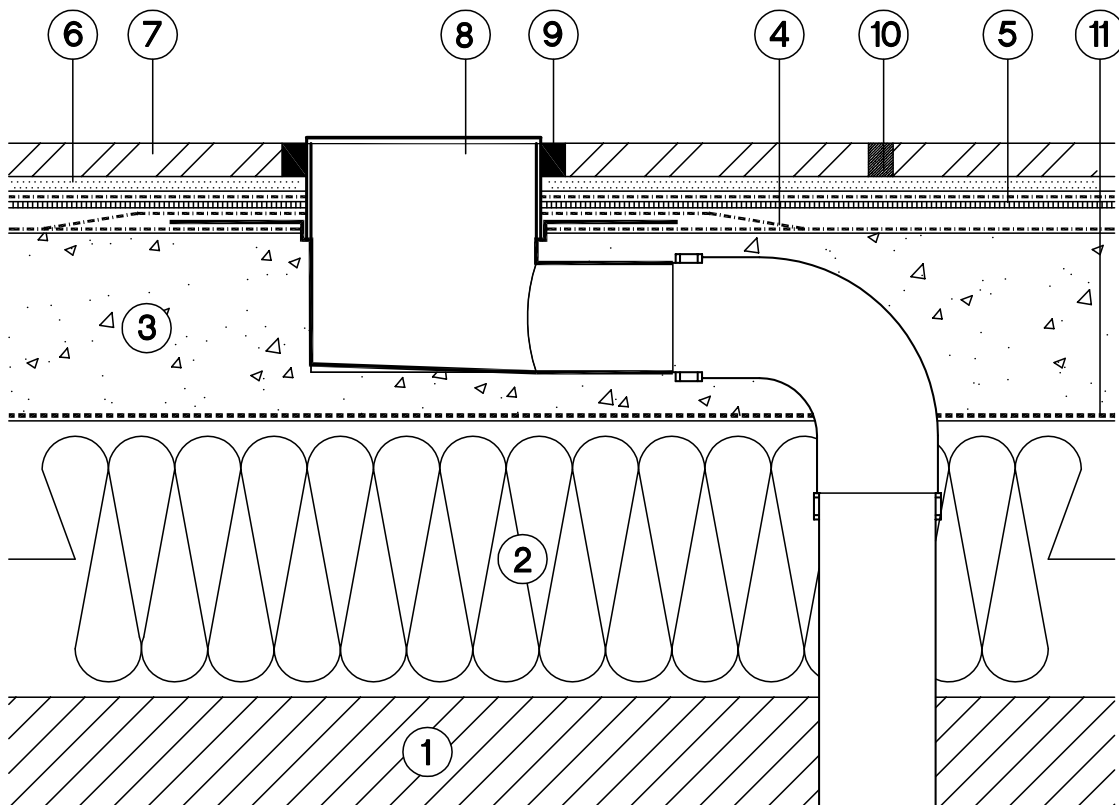


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Drain Lateral

Code:
ATE N FQ 012

- ① Reinforced concrete substrate
- ② Thermal insulation
- ③ TOPCEM PRONTO
- ④ MAPELASTIC
- ⑤ MAPENET 150
- ⑥ KERAFLEX MAXI S1/ELASTORAPID
- ⑦ Flooring
- ⑧ DRAIN LATERAL
- ⑨ MAPESIL AC
- ⑩ ULTRACOLOR PLUS
- ⑪ PE sheet

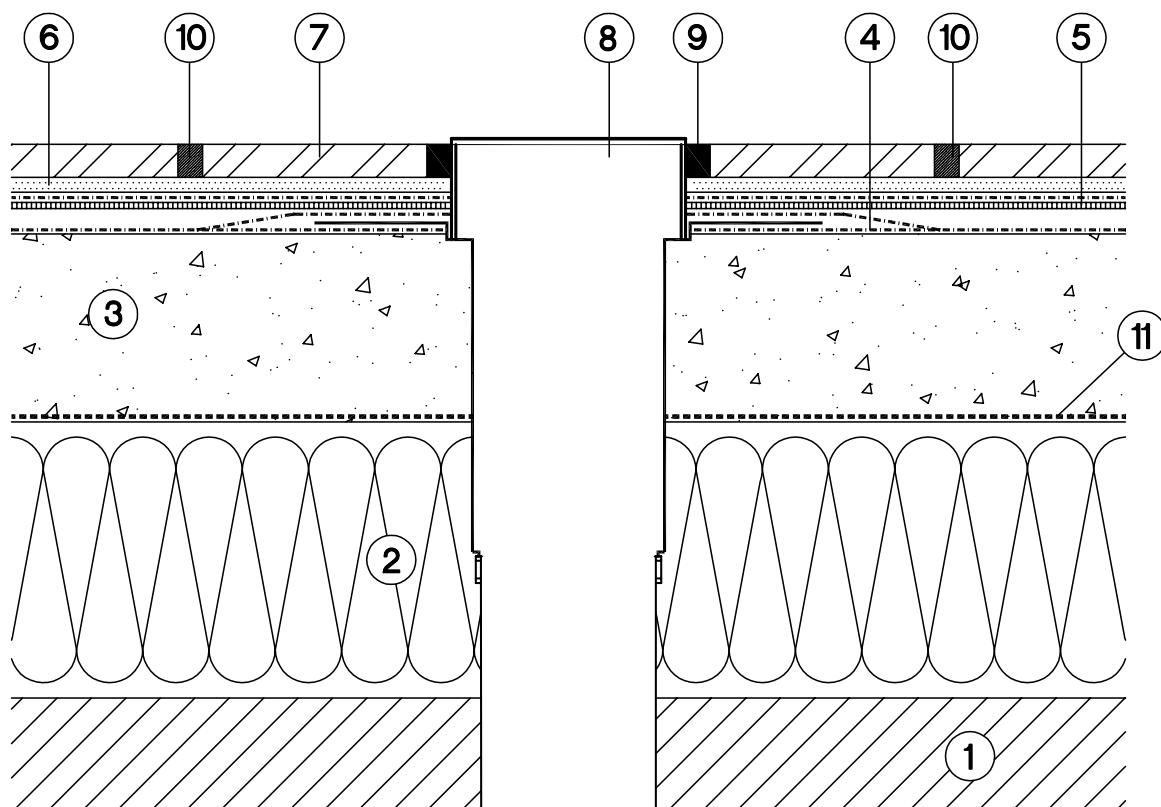


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Drain Vertical

Code:
ATE N FQ 013

- | | |
|---------------------------------|--------------------------------|
| ① Reinforced concrete substrate | ⑥ KERAFLEX MAXI S1/ELASTORAPID |
| ② Thermal insulation | ⑦ Flooring |
| ③ TOPCEM PRONTO | ⑧ DRAIN VERTICAL |
| ④ MAPELASTIC SMART | ⑨ MAPESIL AC |
| ⑤ MAPETEX SEL | ⑩ ULTRACOLOR PLUS |
| | ⑪ PE sheet |

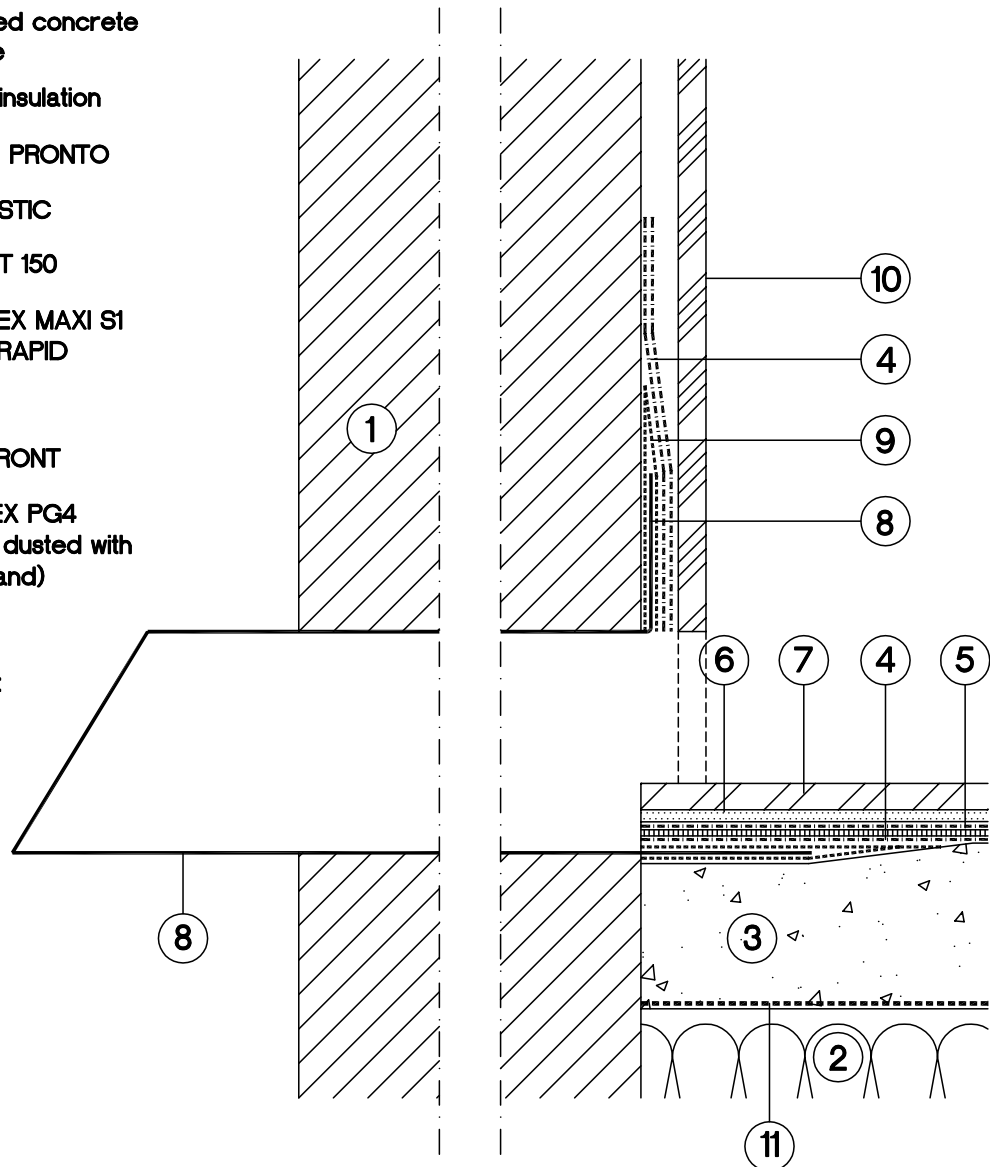


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Drain Front

Code:
ATE N FQ 014

- ① Reinforced concrete substrate
- ② Thermal insulation
- ③ TOPCEM PRONTO
- ④ MAPELASTIC
- ⑤ MAPENET 150
- ⑥ KERAFLEX MAXI S1 ELASTORAPID
- ⑦ Flooring
- ⑧ DRAIN FRONT
- ⑨ ADESILEX PG4 (surface dusted with quartz sand)
- ⑩ Render
- ⑪ PE sheet

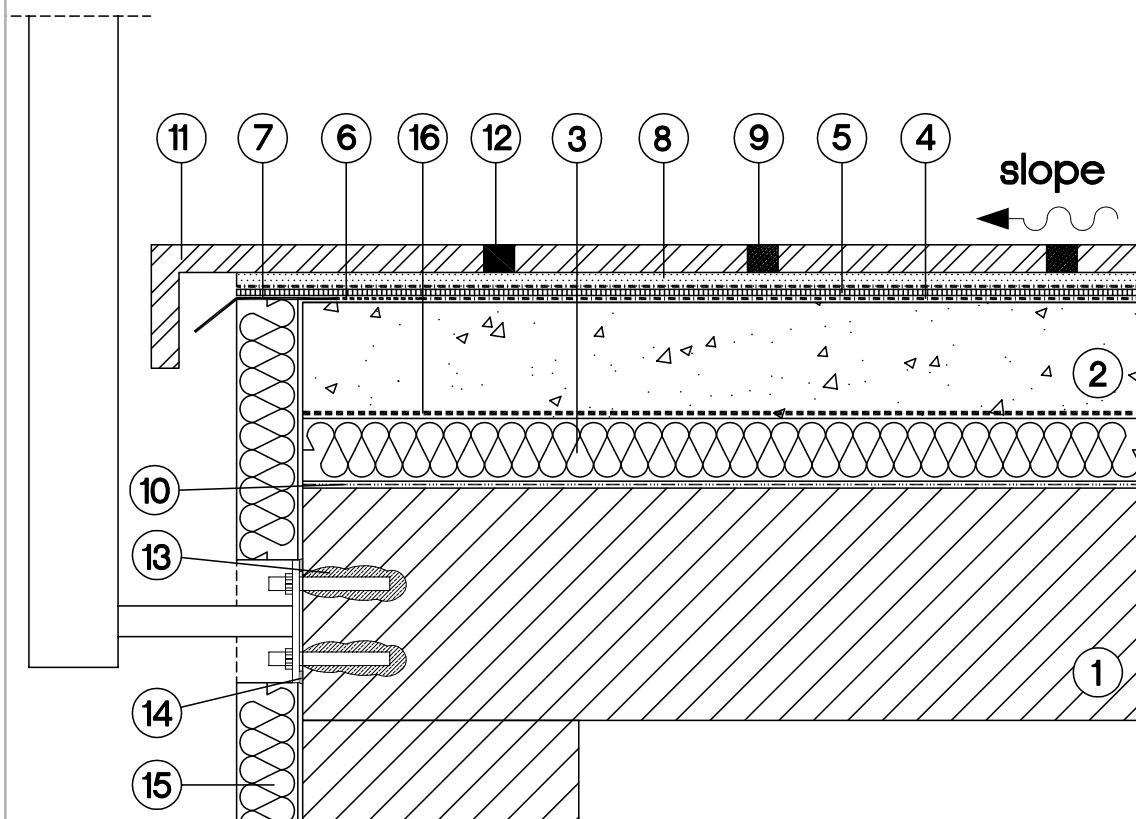


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Front edge of a balcony - thermal insulation

Code:
ATE N FQ 015

- | | |
|----------------------------------|---|
| ① Reinforced concrete substrate | ⑨ Flooring grouted with ULTRACOLOR PLUS |
| ② TOPCEM PRONTO (sloping screed) | ⑩ Vapor barrier |
| ③ Thermal insulation | ⑪ Ceramic sill |
| ④ MAPELASTIC | ⑫ MAPESIL AC |
| ⑤ MAPENET 150 | ⑬ MAPEFIX VE SF |
| ⑥ ADESILEX PG4 + quarz | ⑭ MAPEFLEX PU 45 |
| ⑦ Copper plate | ⑮ MAPETHERM SYSTEM |
| ⑧ KERAFLEX MAXI S1 | ⑯ PE sheet |

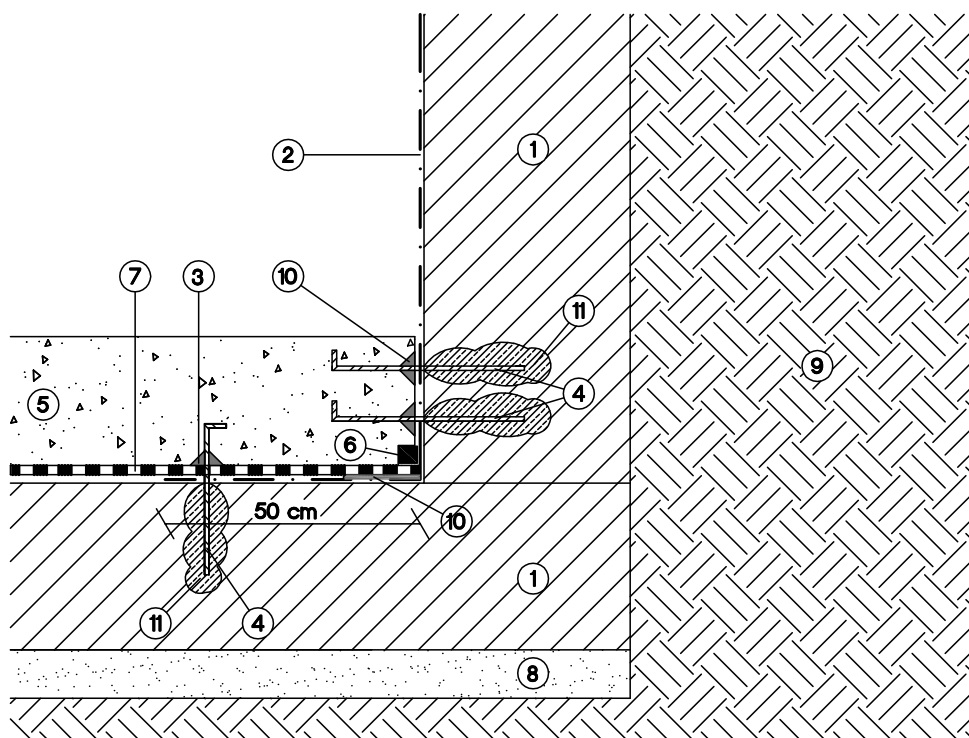


NEW CONSTRUCTIONS
ABOVE GROUND LEVEL

Internal lining
MAPEPROOF and MAP. FOUNDATION

Code:
ATE R SQ 001

- | | |
|--|-------------------------------------|
| ① Existing reinforced concrete structure | ⑥ IDROSTOP SOFT |
| ② MAPELASTIC FOUNDATION | ⑦ MAPEPROOF |
| ③ MAPEPROOF MASTIC | ⑧ Regulating layer of lean concrete |
| ④ Connectors | ⑨ Ground |
| ⑤ New reinforced concrete structure designed to withstand hydraulic pressure | ⑩ MAPEPROOF SWELL |
| | ⑪ MAPEFIX VE SF |

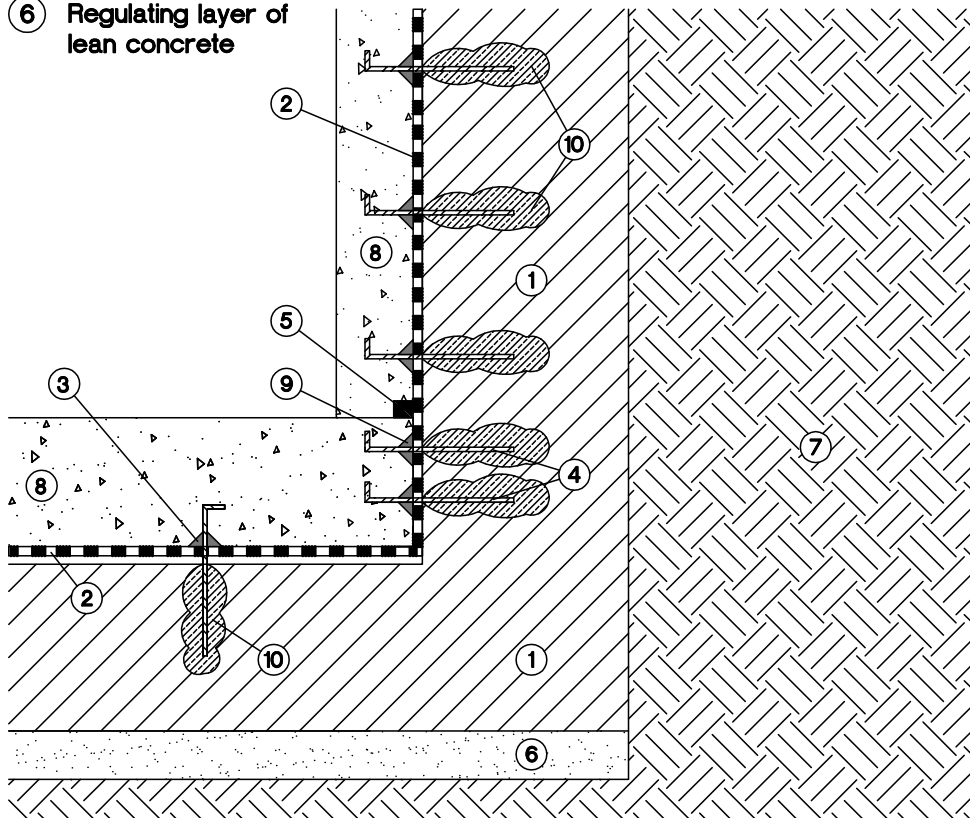


REPAIRING
BELOW GROUND LEVEL

Internal lining on a foundation slab and wall - MAPEPROOF

Code:
ATE R SQ 002

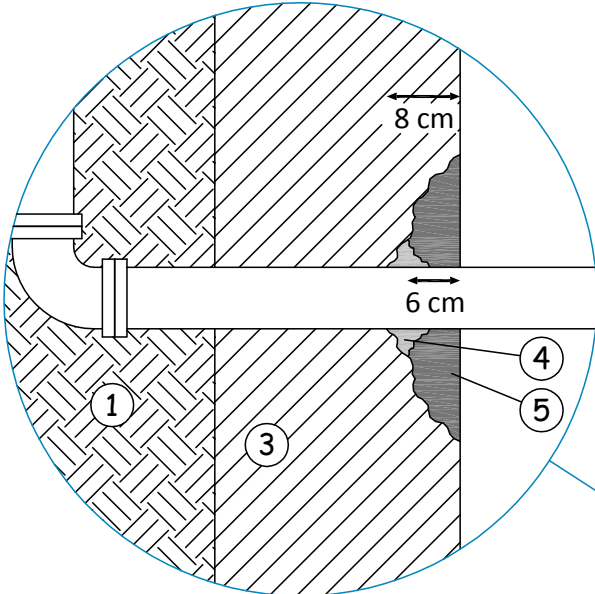
- | | |
|--|--|
| ① Existing reinforced concrete structure | ⑦ Ground |
| ② MAPEPROOF | ⑧ New reinforced concrete structure designed to withstand hydraulic pressure |
| ③ MAPEPROOF MASTIC | ⑨ MAPEPROOF SWELL |
| ④ Connectors | ⑩ MAPEFIX VE SF |
| ⑤ IDROSTOP SOFT | |
| ⑥ Regulating layer of lean concrete | |



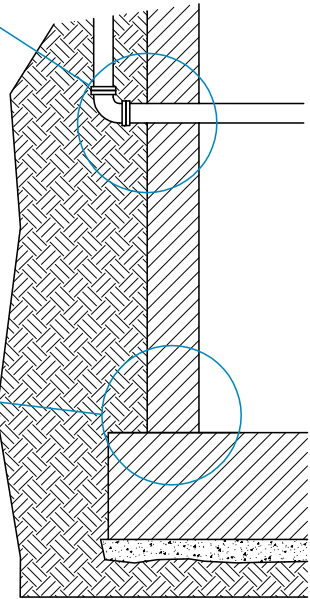
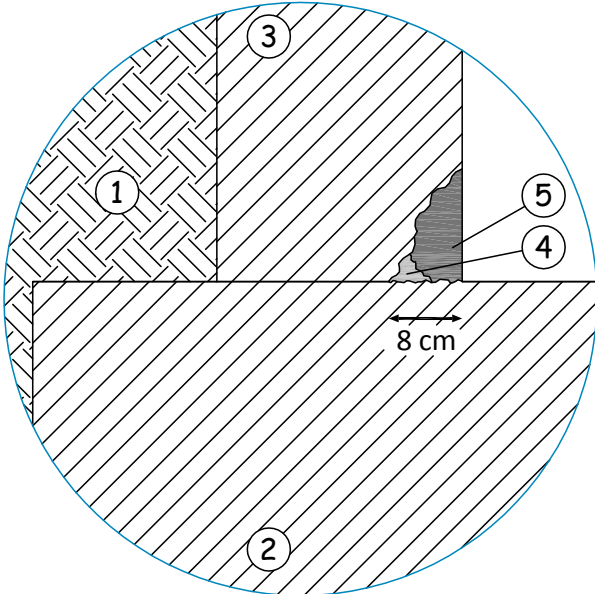
REPAIRING
BELOW GROUND LEVEL

Sealing penetrations without water in pressure

Code:
ATE R SQ 003



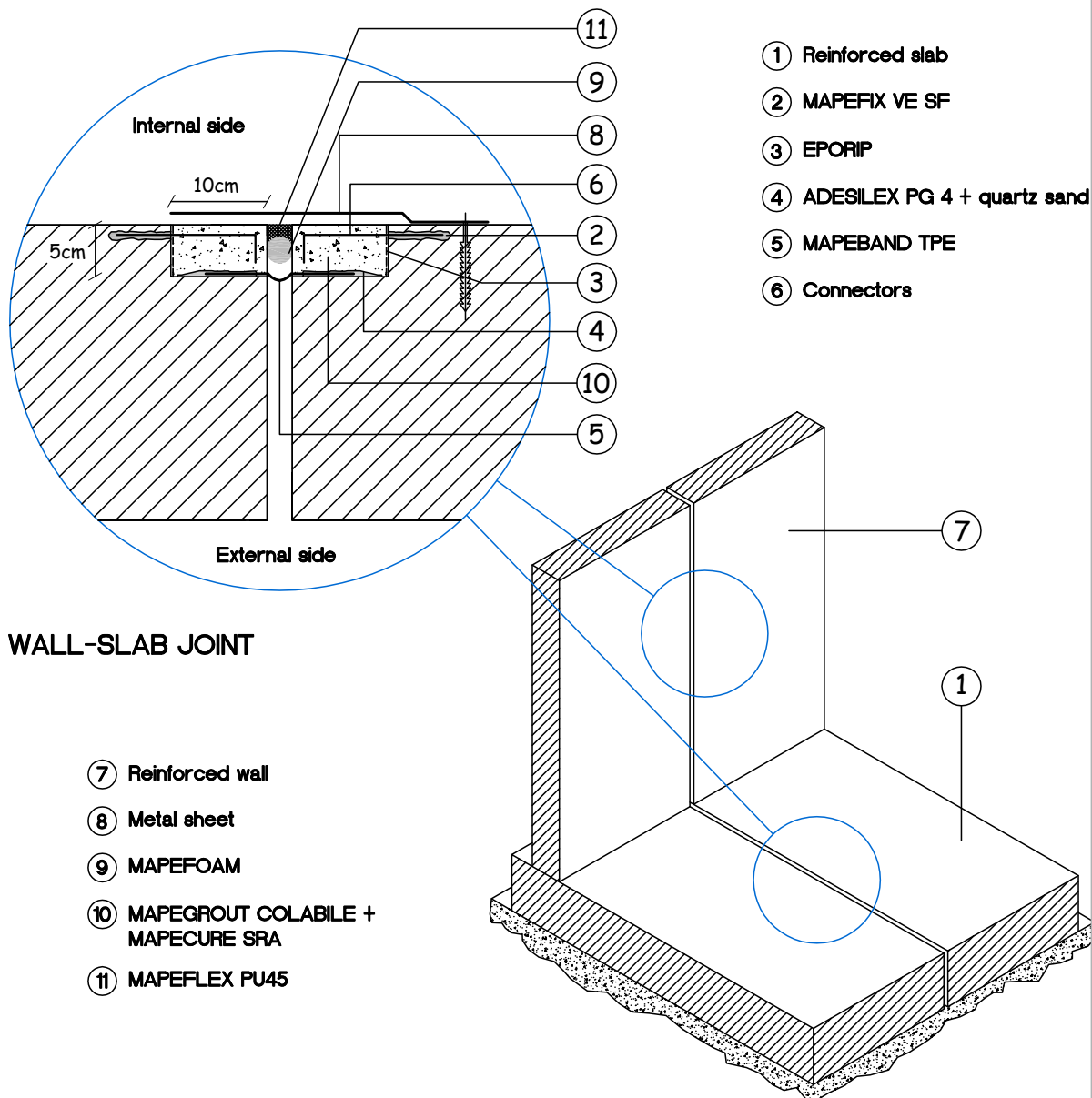
- ① Ground
- ② Reinforced slab
- ③ Reinforced wall
- ④ MAPEPROOF SWELL
- ⑤ MAPEGROUT 430/BM



REPAIRING
BELOW GROUND LEVEL

Structural joint - wall and slab

Code:
ATE R SQ 004

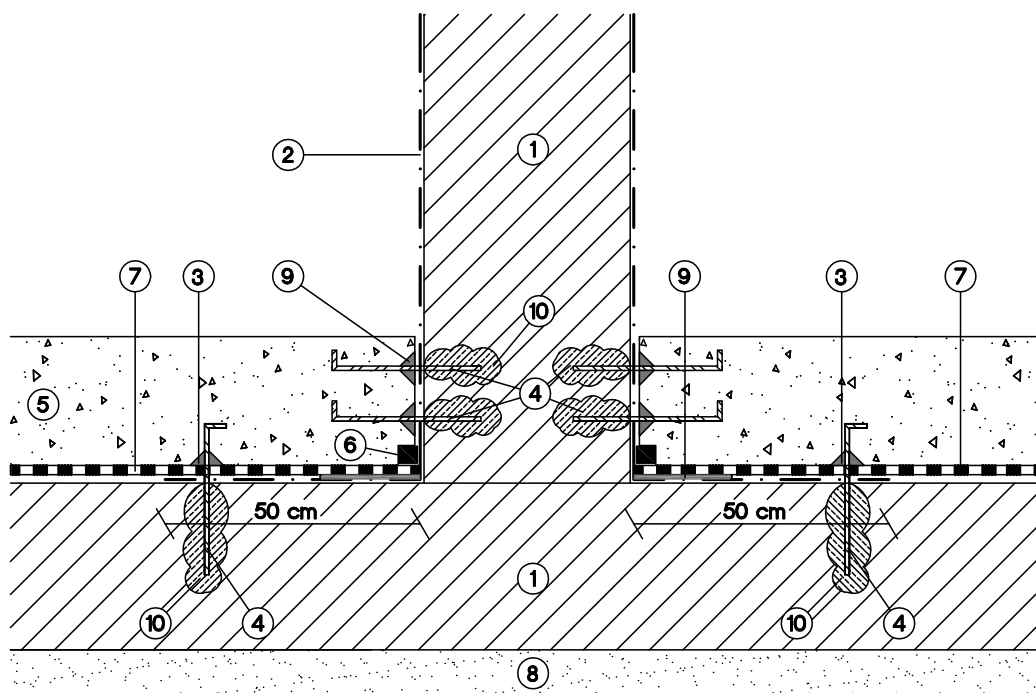


REPAIRING
BELOW GROUND LEVEL

Internal lining
MAPEPROOF and MAP. FOUNDATION

Code:
ATE R SQ 005

- | | |
|--|-------------------------------------|
| ① Existing reinforced concrete structure | ⑥ IDROSTOP SOFT |
| ② MAPELASTIC FOUNDATION | ⑦ MAPEPROOF |
| ③ MAPEPROOF MASTIC | ⑧ Regulating layer of lean concrete |
| ④ Connectors | ⑨ MAPEPROOF SWELL |
| ⑤ New reinforced concrete structure designed to withstand hydraulic pressure | ⑩ MAPEFIX VE SF |

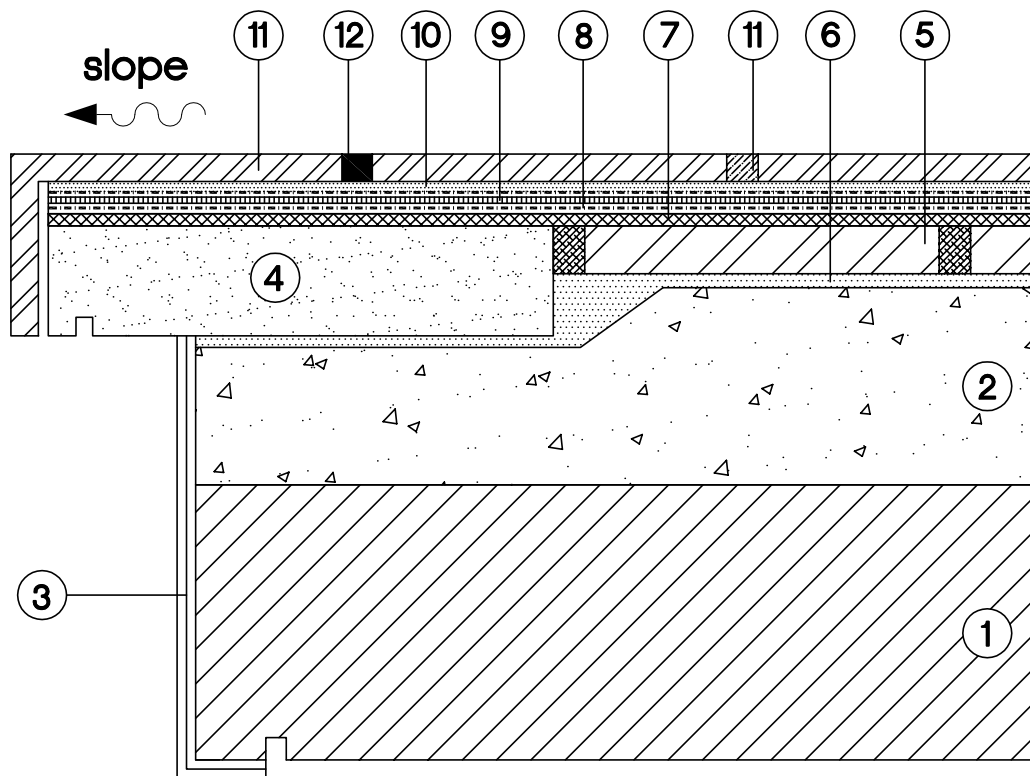


REPAIRING
BELOW GROUND LEVEL

Front edge of a balcony with sill - waterproofing on existing flooring

Code:
ATE R FQ 001

- | | |
|-------------------------------|---|
| ① Overhanging floor slab | ⑧ MAPELASTIC SMART |
| ② Existing screed | ⑨ MAPETEX SEL |
| ③ Existing render and coating | ⑩ KERAFLEX MAXI S1 (cementitious adhesive) |
| ④ Existing sill | ⑨ Balcony flooring grouted with ULTRACOLOR PLUS |
| ⑤ Existing flooring | ⑫ MAPESIL AC |
| ⑥ Existing adhesive | ⑪ Ceramic sill |
| ⑦ ADESILEX P4 | |

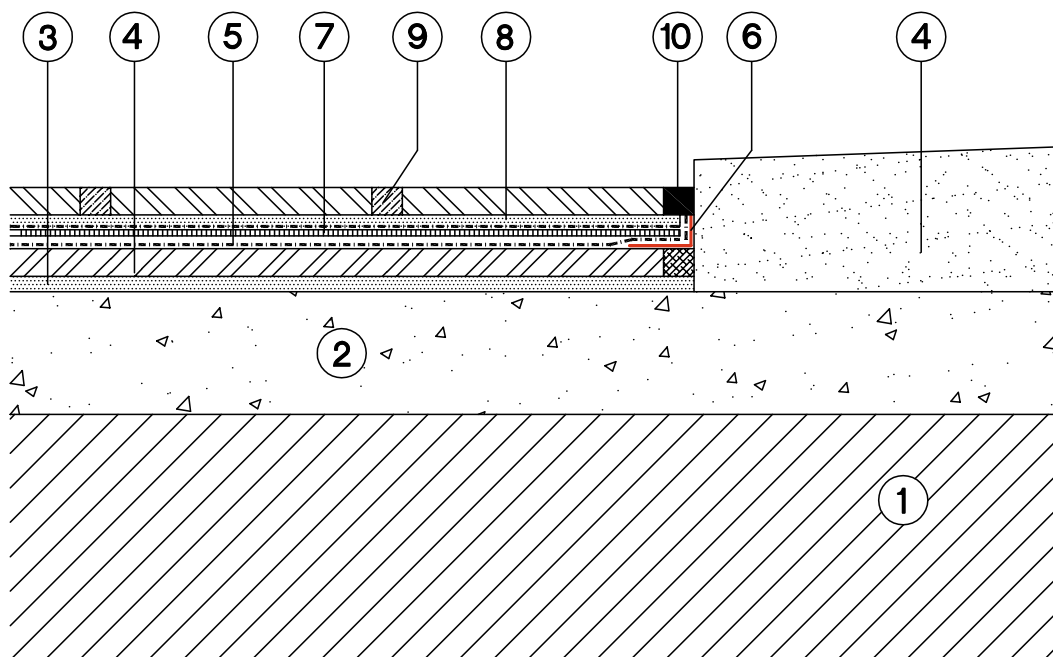


REPAIRING
ABOVE GROUND LEVEL

Junction internal sill - flooring waterproofing on existing flooring

Code:
ATE R FQ 002

- | | |
|-----------------------|--|
| ① Reinforced concrete | ⑥ Strip of MAPETEX SEL |
| ② Existing screed | ⑦ MAPETEX SEL |
| ③ Existing adhesive | ⑧ KERAFLEX MAXI S1 |
| ④ Existing flooring | ⑨ Flooring grouted with
ULTRACOLOR PLUS |
| ⑤ MAPELASTIC SMART | ⑩ MAPESIL LM |

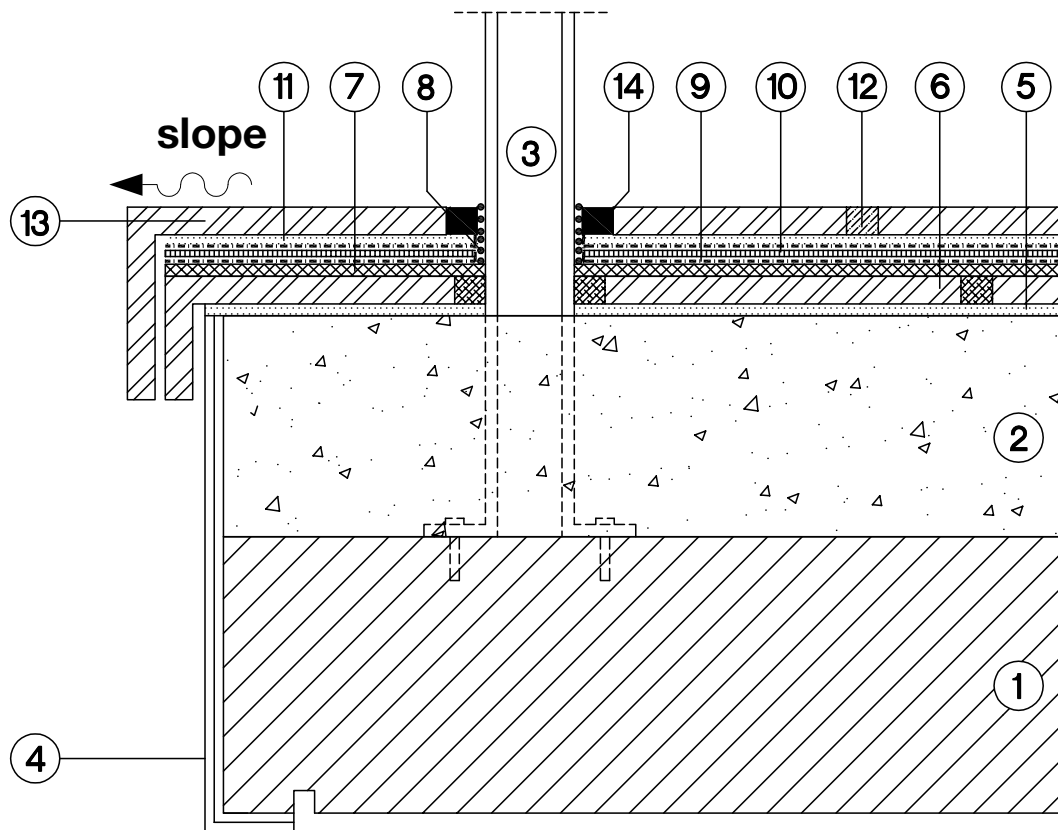


REPAIRING
ABOVE GROUND LEVEL

Front edge of a balcony - parapet waterproofing on existing flooring

Code:
ATE R FQ 003

- | | |
|-------------------------------|--|
| ① Overhanging floor slab | ⑧ EPORIP + surface dusted with quartz sand |
| ② Existing concrete | ⑨ MAPELASTIC |
| ③ Parapet | ⑩ MAPENET 150 |
| ④ Existing render and coating | ⑪ KERAFLEX MAXI S1 |
| ⑤ Existing adhesive | ⑫ Flooring grouted with ULTRACOLOR PLUS |
| ⑥ Existing flooring | ⑬ Pre-formed ceramic sill |
| ⑦ ADESILEX P4 | ⑭ MAPEFLEX PU 45 |

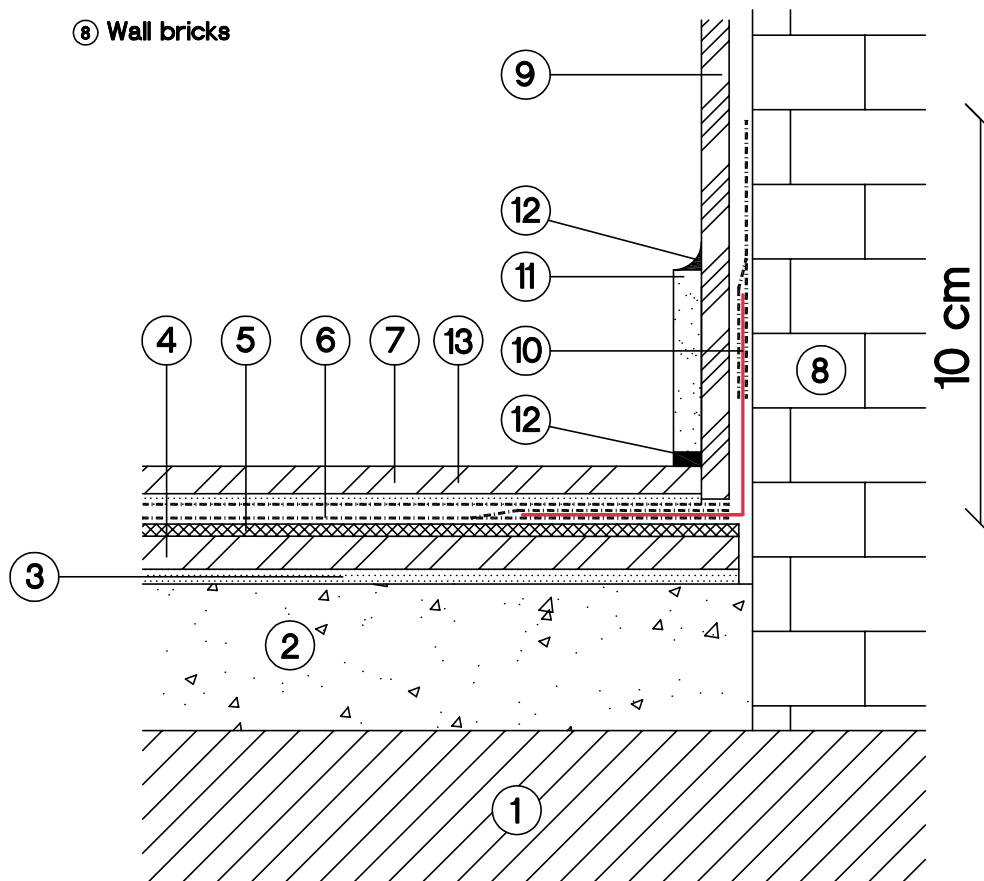


REPAIRING
ABOVE GROUND LEVEL

Junction flooring - wall waterproofing on existing flooring

Code:
ATE R FQ 004

- ① Overhanging floor slab
- ② Existing screed
- ③ Existing adhesive
- ④ Existing flooring
- ⑤ ADESILEX P4
- ⑥ MAPELASTIC AQUADEFENSE
- ⑦ KERAFLEX MAXI S1
- ⑧ Wall bricks
- ⑨ Coating
- ⑩ MAPEBAND
- ⑪ Skirting
- ⑫ MAPESIL AC
- ⑬ New flooring

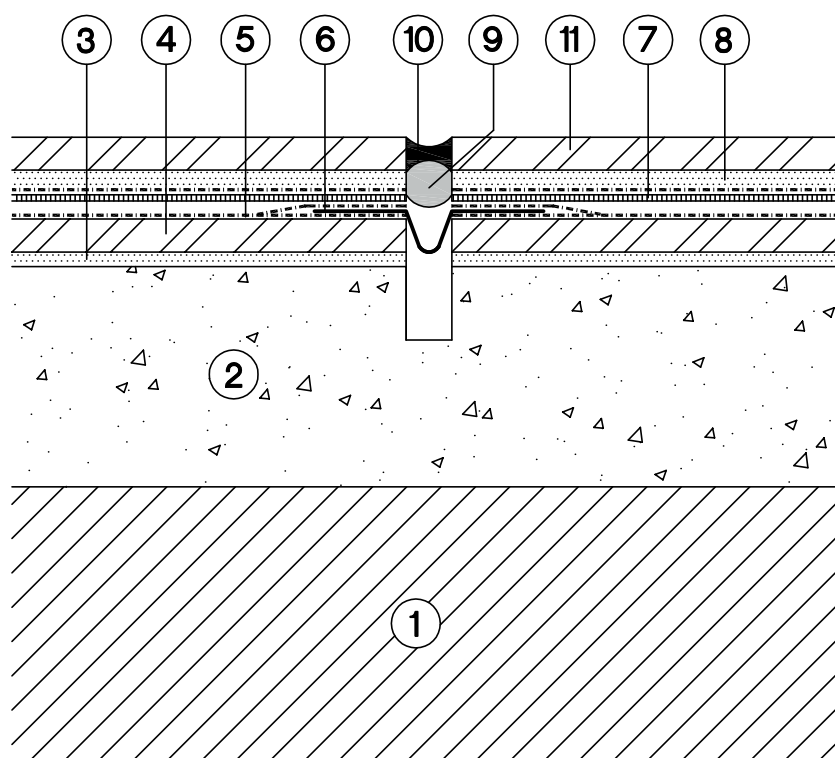


REPAIRING
ABOVE GROUND LEVEL

Check joint waterproofing on existing flooring

Code:
ATE R FQ 005

- | | |
|---------------------------------|--|
| ① Reinforced concrete substrate | ⑦ MAPETEX SEL |
| ② Existing screed | ⑧ KERAFLEX MAXI S1/ELASTORAPID |
| ③ Existing adhesive | ⑨ MAPEFOAM |
| ④ Existing flooring | ⑩ MAPESIL AC |
| ⑤ MAPELASTIC SMART | ⑪ Flooring grouted with
ULTRACOLOR PLUS |
| ⑥ MAPEBAND | |

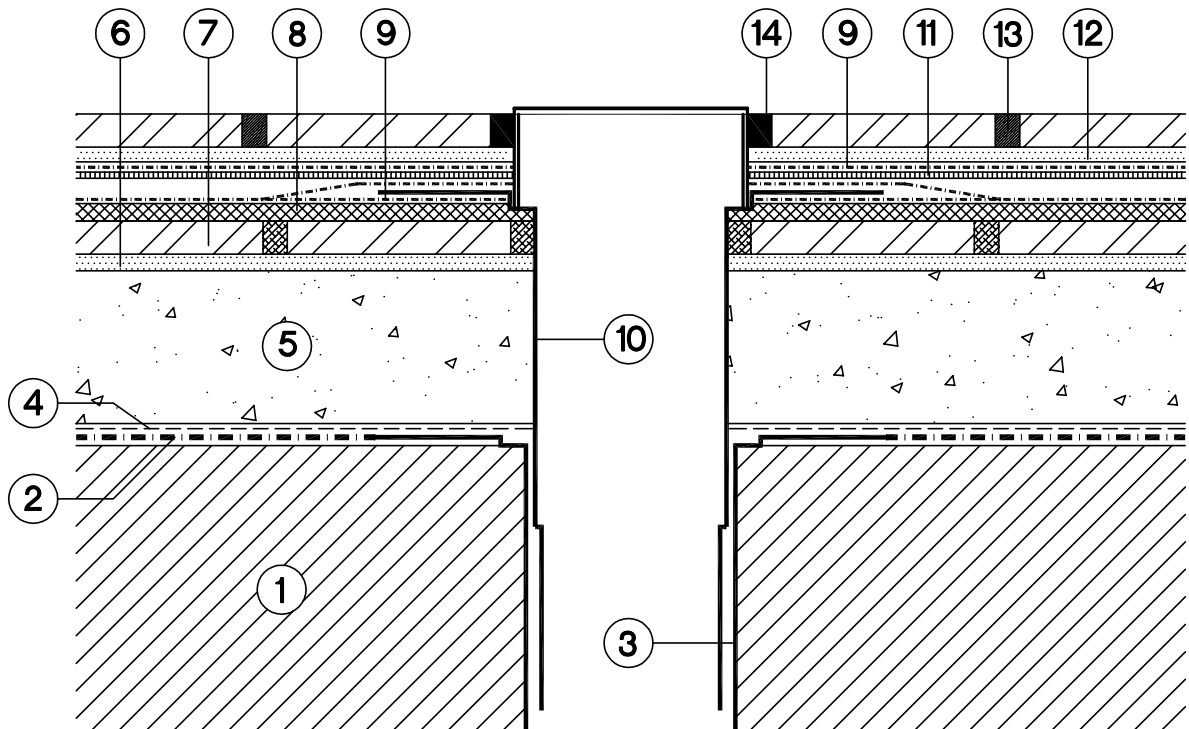


REPAIRING
ABOVE GROUND LEVEL

Drain Vertical waterproofing on existing flooring

Code:
ATE R FQ 006

- | | | |
|---------------------------------|---------------------|---|
| ① Reinforced concrete substrate | ⑥ Existing adhesive | ⑪ MAPENET 150 |
| ② Existing bituminous layer | ⑦ Existing flooring | ⑫ KERAFLEX MAXI S1 |
| ③ Existing vertical drainage | ⑧ ADESILEX P4 | ⑬ Flooring grouted with ULTRACOLOR PLUS |
| ④ PE sheet | ⑨ MAPELASTIC | ⑭ MAPESIL AC |
| ⑤ Existing screed | ⑩ DRAIN VERTICAL | |



REPAIRING
ABOVE GROUND LEVEL

BATHROOMS, DAMP ENVIRONMENTS, SWIMMING POOLS, BALCONIES and TERRACES

	Horizontal and vertical surfaces	Fillets	Joints	Cross-members	Drains
BATHROOMS and DAMP ENVIRONMENTS					
Mapelastic	●				
Mapelastic Smart	●				
Mapelastic AquaDefense	●				
Mapegum WPS	●				
Monolastic	●				
Mapeband		●	●	●	
Mapeband PE 120		●	●	●	
Drain Lateral					●
Drain Vertical					●
SWIMMING POOLS					
Mapelastic	●				
Mapelastic Smart	●				
Mapeproof Swell				●	
Mapeband		●	●		
Mapeband TPE			●		
Drain Vertical					●
BALCONIES and TERRACES					
Aquaflex Roof*	●				
Aquaflex Roof HR*	●				
Mapelastic	●				
Mapelastic Smart	●				
Mapelastic AquaDefense	●				
Monolastic	●				
Mapenet 150	●				
Mapetex Sel	●				
Mapeband		●	●		
Mapeband TPE			●		
Drain Lateral					●
Drain Vertical					●
Drain Front					●

* Exposed waterproofing layers

UNDERGROUND STRUCTURES

	Plateau	Post-cast walls	Pre-cast walls	Reinforced concrete walls with negative lift	Brick walls with negative lift	Lift shaft	Pile heads	Structural joint	Construction joint	Through bodies
UNDERGROUND STRUCTURES										
Mapeproof	●	●	●			●	●			
Mapeproof LW	●	●	●			●	●			
Mapeproof Mastic							●			●
Mapeproof Swell				●		●	●			●
Idrostop						●			●	●
Idrostop B25						●	●		●	●
Idrostop Soft						●	●		●	●
Mapeband		●							●	
Mapeband TPE								●		
Idrostop PVC BI-BE								●		
Idrosilex						●				
Idrosilex Pronto		●		●	●	●				
Mapelastic Foundation		●		●	●	●				
Lamposilex				●		●			●	●
Resfoam 1KM	●	●	●			●				
Plastimul		●								
Plastimul 1K Super Plus		●								
Plastimul 2K Plus		●								
Plastimul 2K Super		●								

● After carrying out the render with **Planitop HDM Maxi**.

TECHNICAL DESIGN GUIDE
for **WATERPROOFING**

Technical design guide for WATERPROOFING

HEAD OFFICE

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