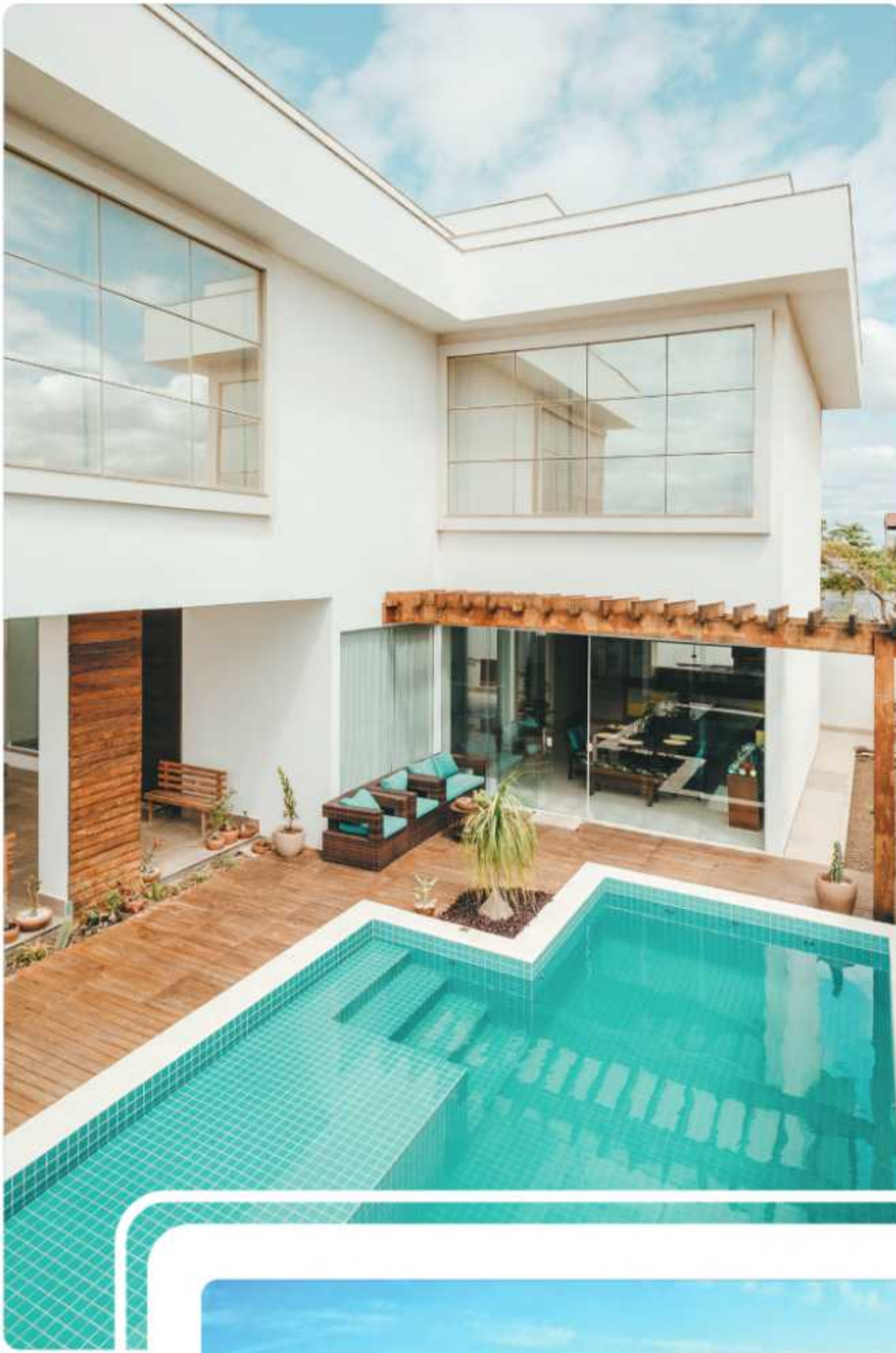




Waterproofing Systems



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Who we are

ACC Construction Chemicals is founded in 2012. Our Headquarters and Factory is located in Borg El Arab City, Egypt. Since its inception, ACC focuses on developing, manufacturing and marketing innovative Construction Chemicals and Specialty Mortars.

With the growing demand of the construction industry in Egypt, ACC Continues to grow.

We continue building on the knowledge and relationship within the company and outside.

ACC obtains its reputation for quality and reliability where it counts – jobsite after jobsite.

Construction industry requires the right product, for the right application, for the right conditions, at the right time. This is where ACC comes in.

We work closely with architects, consultants and contractors from specification support on design stage right through to job-site support during the construction stage.

This leads us to specify suitable products / systems that match projects' requirements. In addition, ensuring that our technology plays its part in successful project completion.

All ACC products are produced according to the most accurate manufacturing procedures.



Waterproofing systems

Waterproofing is considered very important to increase structure durability. Rapid deterioration of concrete structure leads to expensive maintenance cost and reduced life expectancy.

ACC competence in the waterproofing field is backed by many years of experience. We have the technical knowledge to provide the right waterproofing solutions. Its unrivalled track record is backed by product range renowned for quality and durability.

ACC waterproofing product range offers waterproofing solutions for most below and above ground structures, in positive as well as in negative water pressure situations. It is used to waterproof basements, water retaining structures, water treatments plants, concrete roofs, service tunnels and much more. Elastomeric coatings are used where dynamic movement causes waterproofing problems.



ACC waterproofing membranes have demonstrated their properties in external testing by independent institutes.



MaxProof® 400

MaxProof 400 is a powder waterproofing admixture for concrete and cement-based mortars. It blocks the pores in the concrete and the mortars. So, it stops water absorption and prevents the passage of water and moisture. MaxProof 400 provides permanent waterproofing for the hardened concrete.

Features and benefits

- Does not rely on film formation. It becomes a permanent part of the concrete/mortar and will not deteriorate or evaporate.
- Fast dispersing during mixing with good distribution throughout the mix.
- Chloride free. Does not affect setting time, strengths or corrode steel reinforcement.
- Breathable

Fields of applications

- Basements and foundations.
- Potable water and waste water treatment plants.
- Swimming pools and water tanks.
- Facades, external walls.
- Wet areas such as showers, bathrooms, toilets, kitchens, balconies and roofs.



MaxProof® 405

MaxProof 405 is a liquid waterproofing admixture for concrete and cement-based mortars. It blocks the pores in the concrete and the mortars. So, it stops water absorption and prevents the passage of water and moisture. MaxProof 405 provides permanent waterproofing for the hardened concrete.

Features and benefits

- Does not rely on film formation. It becomes a permanent part of the concrete/mortar and will not deteriorate or evaporate.
- Fast dispersing during mixing with good distribution throughout the mix.
- Chloride free. Does not affect setting time, strengths or corrode steel reinforcement.
- Breathable

Fields of applications

- Basements and foundations.
- Potable water and waste water treatment plants.
- Swimming pools and water tanks.
- Facades, external walls.
- Wet areas such as showers, bathrooms, toilets, kitchens, balconies and roofs.

MaxProof® 425

MaxProof 425 is a brown/black bituminous emulsion compound. It is used as a cold applied primer, damp proofing and protective coating for concrete and masonry. MaxProof 425 can be easily applied by stiff brush. After drying, it gives a tough, black seamless, flexible membrane with excellent adhesion to concrete, steel, wooden surfaces and cement-based substrates.

Features and benefits

- Cold applied. Economical & easy to use.
- Can be applied to damp substrates.
- Good bond to concrete, masonry, steel and wood.
- Water-based. Contains no solvents
- Prevents the absorption of salts in groundwater from penetration into reinforced concrete structures which can cause concrete deterioration.

Fields of applications

- General waterproofing applications for concrete, steel and wooden surfaces.
- As a protective coating for concrete structures against aggressive soil salts and contaminated ground water.
- As a vapor barrier on concrete and masonry walls prior to cladding.
- As a primer for bituminous waterproofing membranes.
- When mixed with sand & cement, it produces a waterproofing mortar.
- As a curing compound on freshly poured concrete.



MaxProof® 440

MaxProof 440 is a cement-based, crystalline, in-depth penetration waterproofing system for concrete and cement-based substrates. It forms insoluble crystalline complexes into capillaries which ensures permeant waterproofing solution to water leakage in concrete structures and cement-based substrates. MaxProof 440 is equally effective against positive and negative water pressure and prevents further passage of water.

MaxProof 440 is cement-based powder. It can be mixed with water to a slurry consistency and applied as a surface applied coating on concrete and cement-based substrates. It can be used as a dry shake on fresh concrete and horizontal construction joints

Features and benefits

- Does not rely on film formation. Forms an integral waterproofing system and will not delaminate, peel off or wear away.
- Permanently active. Crystalline formation will be re-activated by contact with water.
- Non-toxic. Suitable for use in contact with potable water.
- Can be applied to damp substrates.

Fields of applications

- Water retaining structures such as: water tanks, swimming pools, potable water and waste water treatment plants and sea water channels.
- Water excluding structures such as: basements, tunnels, bridge decks and sea defense walls.
- Foundations, retaining walls and backfilled elements.
- Horizontal construction joints.

Technical data

MaxProof 440 resists up to 3 bar water pressure.

Packaging

MaxProof 440 is available in 25 kg bags.



MaxProof® 444

MaxProof 444 is a two component, cement-based, acrylic polymer modified waterproof coating for concrete, masonry and cement-based substrates. When mixed, it forms a slurry which can easily be brush or spray applied in an application thickness of approx. 2 mm in 2 layers. It can be used above and below ground level.

Features and benefits

- High bond strength to most common construction materials.
- Provides semi-flexible, durable waterproof coating.
- Allows the passage of water vapour through the structure. Concrete will still be able to "breathe".
- Resist occasional foot traffic.
- Non-toxic.
- Can be applied to 24 hour-old concrete.

Fields of applications

- Wet areas such as showers, bathrooms, toilets, kitchens and balconies.
- Foundations & retaining walls protection.
- Even out variations in concrete surfaces.
- Protects reinforced concrete from carbonation and chloride attack.

Technical data

Water permeability (CRD C48): MaxProof 444 resists up to 2 bar water pressure.

Packaging

MaxProof 444 is available in 20 kg double pack (15 kg/bag powder + 5 kg/jerrycan liquid).



MaxProof® 450

MaxProof 450 is a two component, cement-based, acrylic polymer modified waterproofing coat for concrete and masonry. When mixed, it forms a slurry which can easily be brush or spray applied in an application thickness of approx. 2 mm in 2 layers. It cures to give an flexible membrane. MaxProof 450 can be used above and below ground level.

Features and benefits

- Non-toxic. Suitable for use in contact with potable water.
- Forms a flexible, durable, hardwearing, seamless, waterproof coating.
- Remain flexible when submerged in water.
- Can be applied to damp substrates.
- Breathable.
- Excellent bond to porous and non-porous surfaces.
- Resist occasional foot traffic.

Fields of applications

- Water retaining structures such as: water tanks, swimming pools, potable water and waste water treatment plants and sea water channels.
- Foundations and retaining walls.
- Wet areas such as showers, bathrooms, toilets, kitchens, balconies and roofs.
- As a protection coat for reinforced concrete elements against carbonation and chloride attack.

Technical data

- Water permeability (EN 12390-8): Resists up to 3 bar water pressure.
- Bond strength to concrete (ASTM C882): $> 2.0 \text{ N/mm}^2$ after 28 days.
- Flexural strength (ASTM C348): $> 9.0 \text{ N/mm}^2$ after 28 days.
- Compressive strength (ASTM C109): $> 27 \text{ N/mm}^2$ after 28 days.

Packaging

MaxProof 450 is available in 25 kg double pack (20 kg/bag powder + 5 kg/jerrycan liquid).



MaxProof® 460



MaxProof 460 is a two component, cement-based, acrylic polymer modified waterproofing coat for concrete and masonry. When mixed, it forms a slurry which can easily be brush or spray applied in an application thickness of approx. 2 mm in 2 layers. After drying, it forms an elastomeric, durable, hardwearing, seamless waterproof coating. It can be used above and below ground level.

Features and benefits

- Non-toxic. Suitable for use in contact with potable water.
- Elastomeric and remain flexible when submerged in water.
- Simple method of treating cracks.
- Can be applied to damp substrates.
- Breathable.
- Excellent bond to many building materials.
- Resist occasional foot traffic.

Fields of applications

- Water retaining structures which may be subject to movement.
- Waterproofing of new structures where movement is expected due to drying shrinkage.
- Wet areas such as bathrooms & kitchens & Laundries and washing areas.
- Swimming pools and water tanks above and below ground.
- Basements & foundations and retaining walls.
- To provide anti-carbonation protection to reinforced concrete structures.
- Retaining water of a low pH or soft quality

Technical data

- Water permeability (EN 12390-8): Resists up to 3 bar water pressure.
- Bond strength to concrete (ASTM C882): > 2.4 N/mm² after 28 days.
- Flexural strength (ASTM C348): > 8.5 N/mm² after 28 days.
- Compressive strength (ASTM C109): > 23 N/mm² after 28 days.

Packaging

MaxProof 460 is available in 27 kg double pack (20 kg/bag powder + 7 kg/jerrycan liquid).

MaxProof® 470



MaxProof 470 is a cement-based waterproofing coating for concrete and masonry, which resists positive and negative water pressure. When mixed with water or a mixture of water and UniBond LX, it forms a slurry which can easily be brush or spray applied in two layers in a total thickness of 2 mm.

Features and benefits

- High bond strength, becomes an integral part of the substrate.
- Penetrates through the concrete substrates and blocks the pores of concrete substrates.
- Resists positive and negative water pressure.
- Water vapour permeable.
- Resists occasional foot traffic.
- Non-toxic, suitable for potable water uses as well as domestic and waste water uses.
- Can be applied to damp substrates.

Fields of applications

- Wet areas such as showers, bathrooms, toilets, kitchens and balconies.
- Swimming pools and water tanks.
- Basements, foundations & retaining walls.
- Protection of reinforced concrete elements against carbonation and chloride attack.

Technical data

- Resists up to 2 bar water pressure
- Compressive strength: > 45 N/mm² after 28 days.
- Tensile strength: > 3.5 N/mm² after 28 days.
- Bond strength: >2 N/mm² after 28 days.

Packaging

MaxProof 470 is available in 20 kg bags.

UniSeal 430

UniSeal 430 is a high quality, semi-fluid aqueous acrylic co-polymer dispersion. After drying, it gives a high-build, elastomeric, waterproofing and protective coat.

It is also used as a washable and decorative anti-carbonation coating of outstanding durability.



Features and benefits

- Forms an impermeable elastic membrane. Withstands normal movements due to expansion and shrinkage of the substrate cause by change in weather conditions.
- Excellent resistance to extreme weather conditions.
- Excellent adhesion to porous and non-porous surfaces such as metal, wood, cement-based substrates and roof tiles.
- Water-based. Environmentally friendly.
- Resist occasional foot traffic.

Fields of applications

- As a waterproofing coat for sloped roofs.
- As a protective coating for concrete substrates from carbonation attack.
- As a protective coating for sprayed polyurethane foam system for roofing heat insulation and waterproofing.

Technical data

- Elongation (ASTM D638): > 75%.
- Tensile strength (ASTM D638): > 0.5 N/mm².
- Crack bridging (ASTM C1305): up to 2 mm crack bridging capacity without reinforcement.
- CO₂ permeability (ASTM D1434): > 325 CC/m². day.

Packaging

UniSeal 430 is available in 15 kg pails.

FlexiJoint 420

FlexiJoint 420 is a two component, cement-based, acrylic polymer modified mortar. When the powder and liquid components mixed together, they form a mortar which can be applied using sealant gun or trowel. After drying, it forms an elastomeric mortar for sealing moving joints and cracks in concrete and masonry. FlexiJoint resists positive and negative water pressure. FlexiJoint allows for movement accommodation of joint up to %15 of its width.

Features and benefits

- Non-toxic. Suitable for use in contact with potable water.
- Elastomeric and remain flexible when submerged in water.
- Excellent adhesion to damp substrates.
- Excellent bond to porous and non-porous surfaces.

Fields of applications

- Sealing construction joints and cracks in concrete and masonry in water structures (e.g., water reservoirs, water treatment plants, swimming pools etc.).
- Sealing expansion joints where movement accommodation factor is $\pm$ %15.
- Sealing joints and cracks before waterproofing with MaxProof 460.
- Jointing between concrete precast panels or pipe sections.
- As a pointing mortar when flexibility is required.

Technical data

- Bond strength: $> 0.5 \text{ N/mm}^2$ after 28 days.
- Movement accommodation factor: $15 \pm \%$.
- Elongation at break: %60.
- Shore A Hardness: 35.

Packaging

FlexiJoint 420 is available in 10 kg double pack (5 kg/bag powder + 5 kg/jerrycan liquid).



MaxPlug 410

MaxPlug 410 is a fast setting plugging mortar to stop active leaks in concrete and masonry. It stops active running water under pressure through joints, cracks and holes.

It can also be used to waterproof the weakest point in water structure (e.g., the joint between the floor slab and the wall).

Features and benefits

- The material slightly expands during hardening, ensuring a permanent seal.
- Chloride-free, will not promote corrosion of reinforcement.
- Approved for contact with drinking water.
- Mechanical characteristics similar to concrete.
- Effectively blocks water, no injection procedures required.
- Can be overcoated after just 20 minutes with consequent MaxProof waterproofing coat.

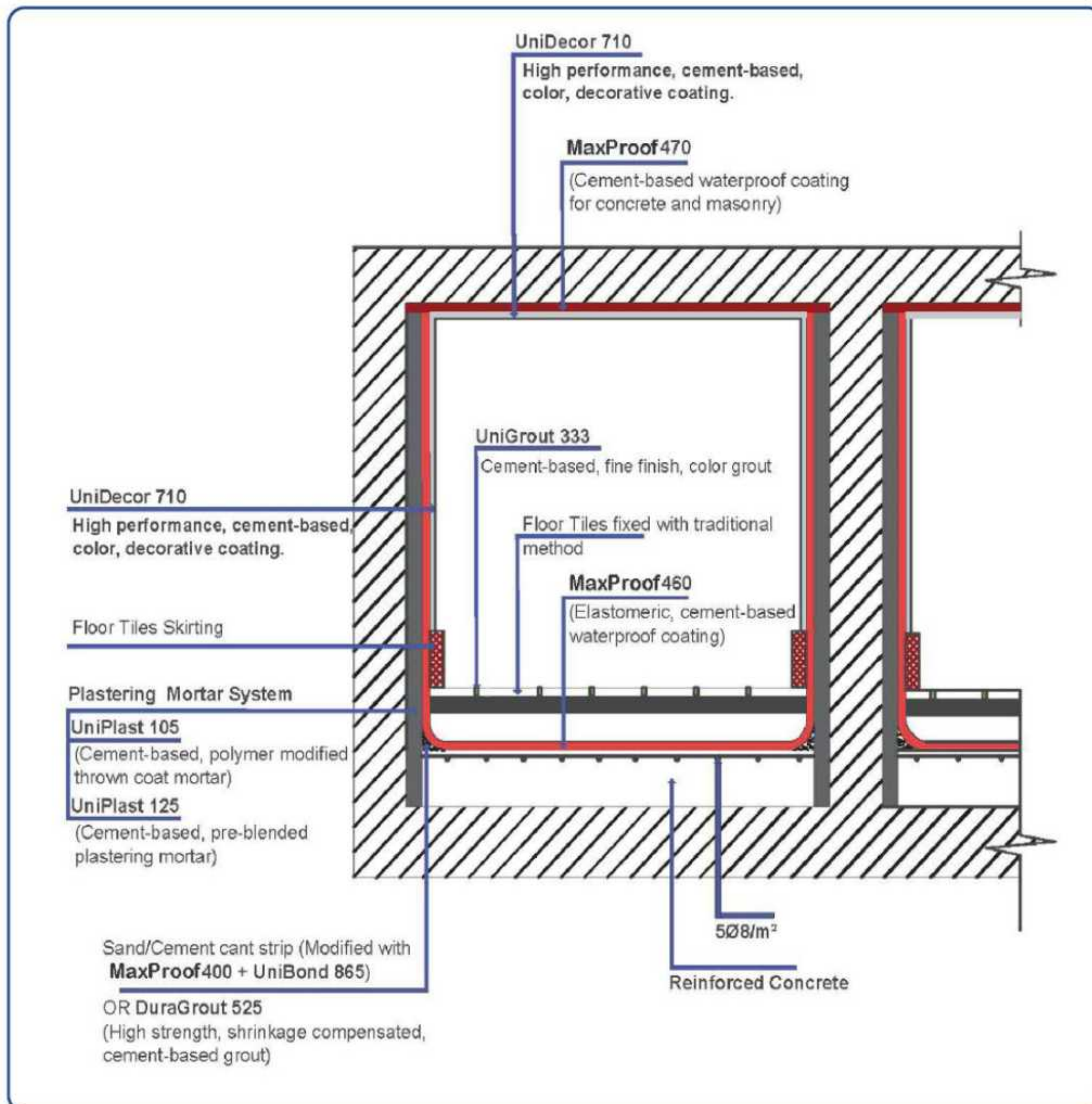
Packaging

MaxPlug 410 is available in 5 kg packs.

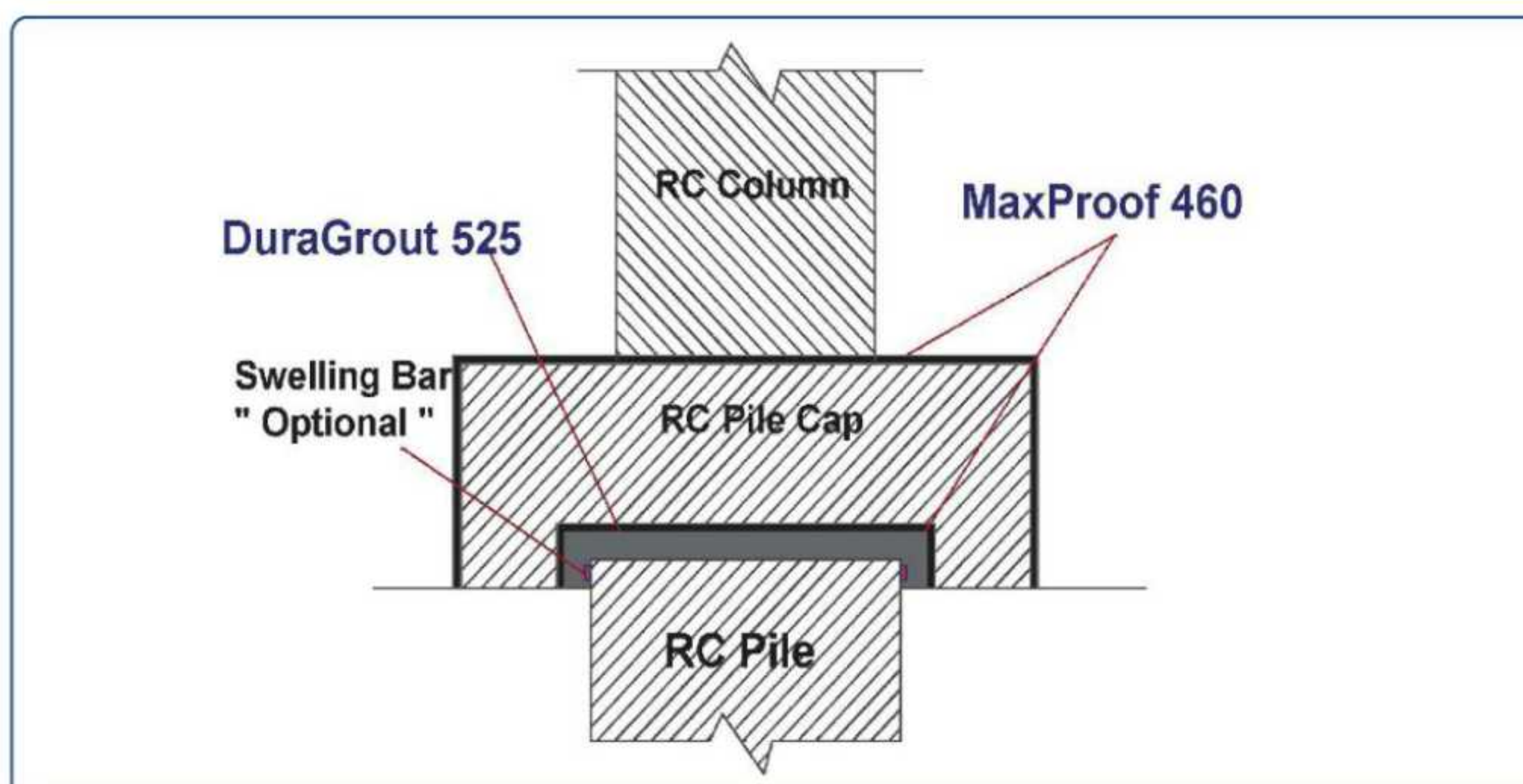


ACC Waterproofing Details

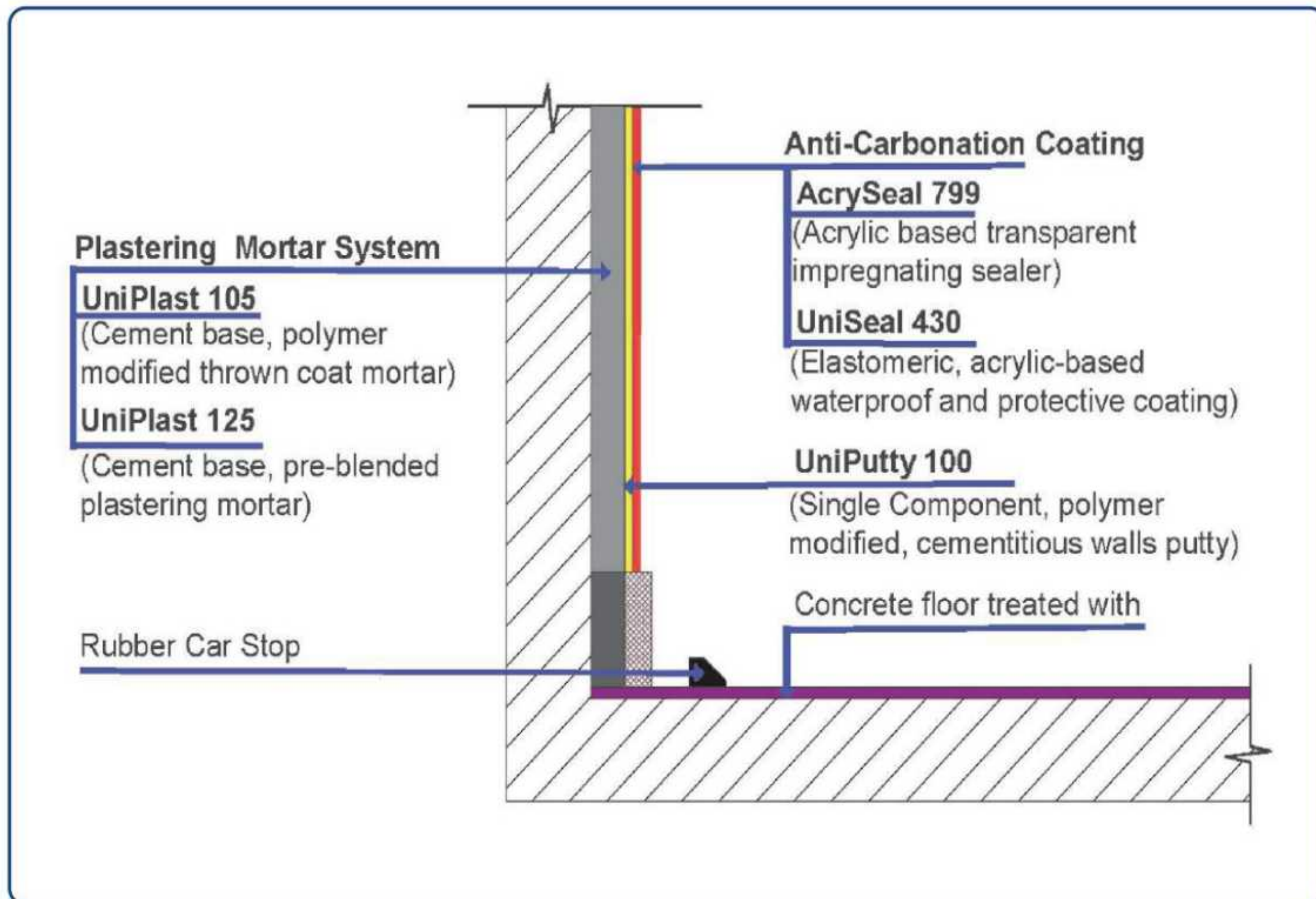
ACC Basement waterproofing System



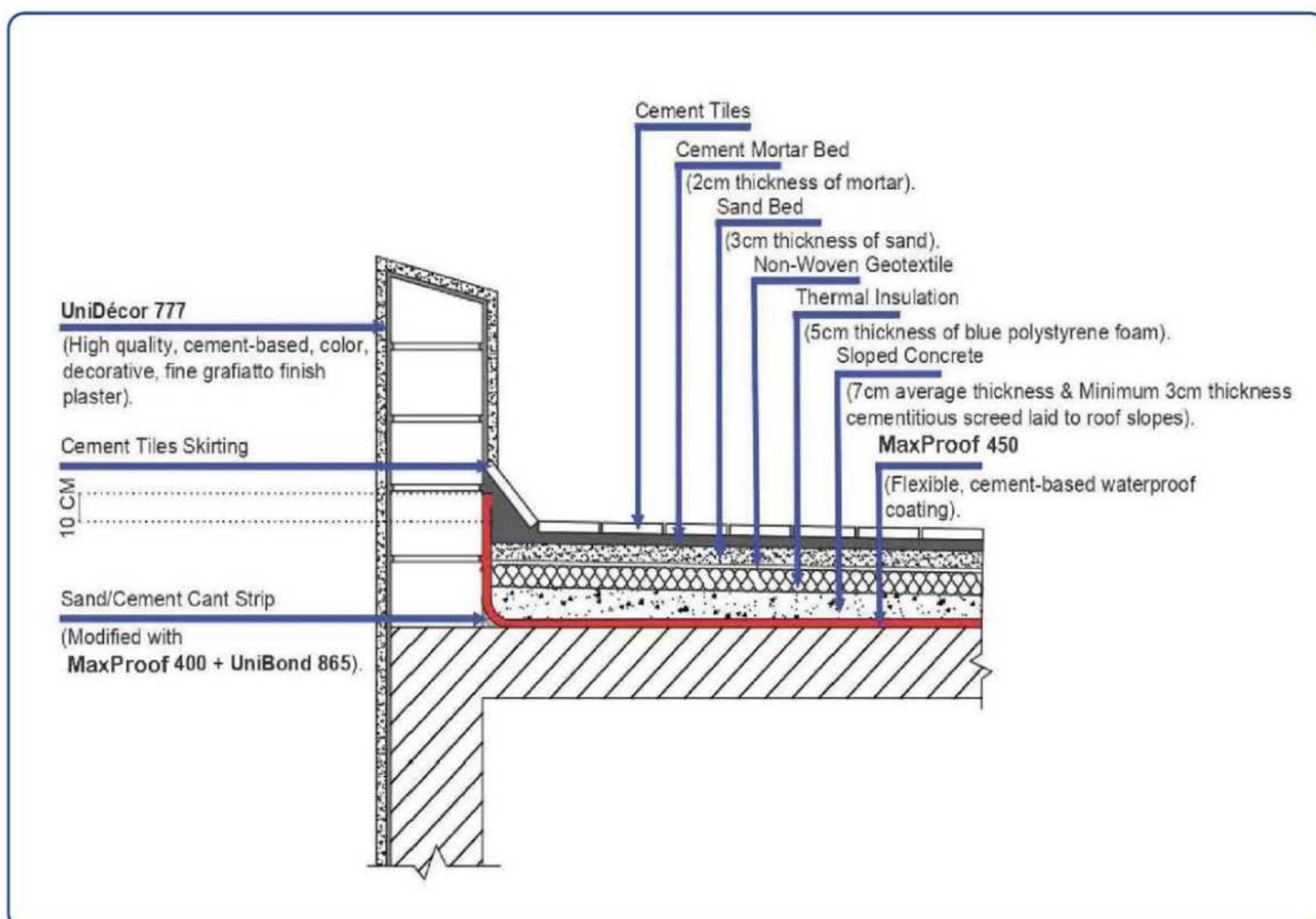
ACC Pile cap waterproofing



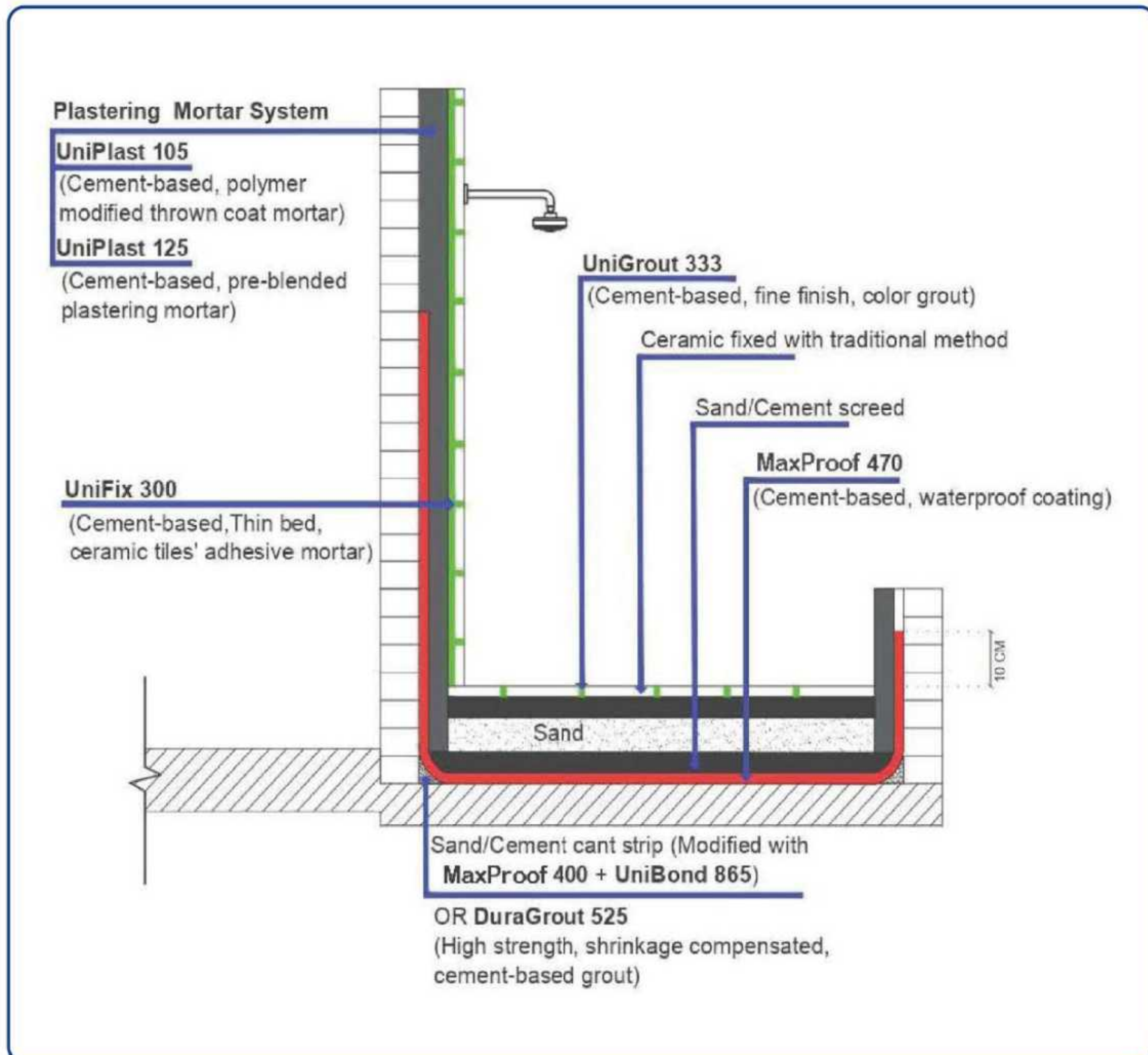
ACC Car park waterproofing System



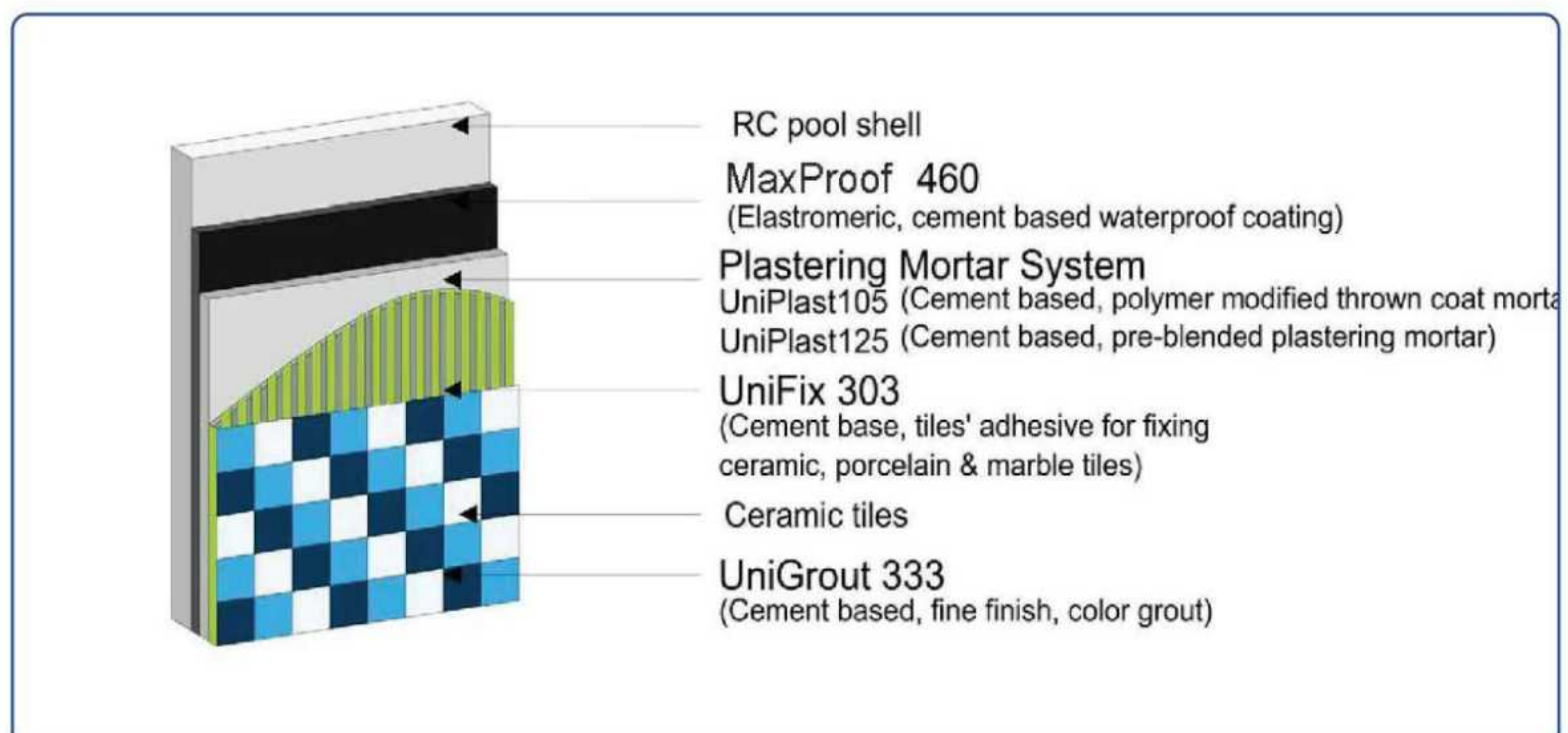
ACC Roof waterproofing System



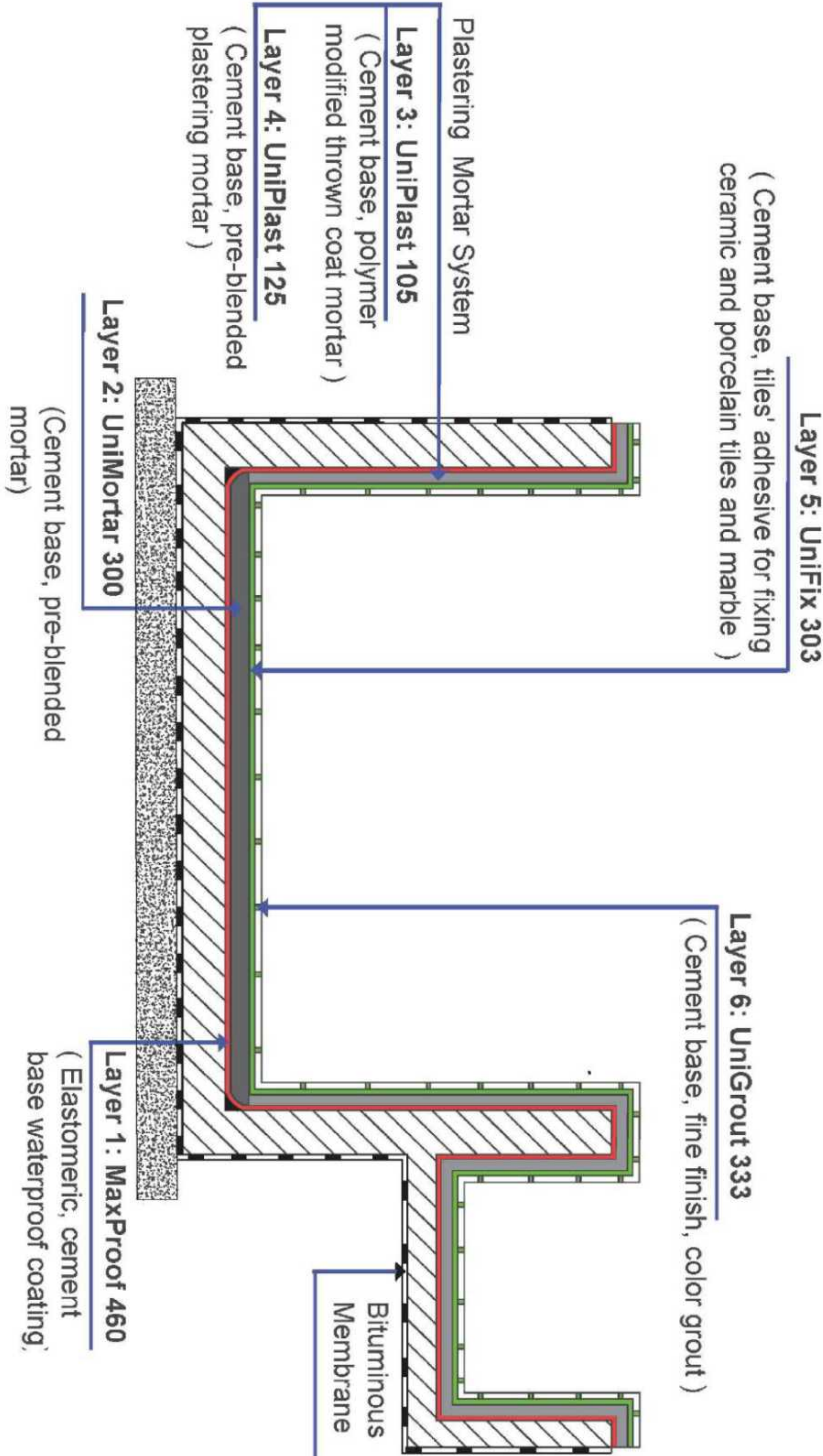
ACC Wet area waterproofing System



ACC Swimming Pool waterproofing System



ACC Swimming Pool waterproofing System 2



Products

ACC manufactures wide range of construction chemicals & Speciality Mortars products which includes:

Waterproofing

1

Flooring

2

Tile Adhesives & Grouts

3

Concrete Repair

4

Non-Shrink Grouts

5

Bonding Agents

6

Exterior Façade Coatings

7

Premixed Fairing Coats, Renders & Mortars

8

Putties (Stucco)

9

Searlers & Emulsion Paints

10

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