

1.CHARACTER OF THE ISSUE - REQUIREMENTS

The waterproofing of a tiled roof, consisting of tiles secured with robust cement mortar on an inclined concrete slab, necessitates the application of a waterproofing layer between the slab and the tiles. This layer must fulfill the following criteria:

- Ensure effective waterproofing.
- Exhibit high durability and reliability over time, as any future interventions would be challenging due to its location.

3.SURFACE PREPARATION

The substrate must be dry, with a moisture content of less than 4%, and free from loose particles, dust, grease, and other contaminants. Local restorations or repairs of roof elements, such as concrete and cement mortar, should be executed using polymer-modified, fiber-reinforced PCC R3 cement mortar, specifically **PC-Conrend® HS RM**.

If any concrete cracks are present, they should be cut into a V-shape, and **PC-Crack Seal® Paste** should be applied. For structural cracks that could compromise the integrity of the overall structure, the PC-WC injection repair system should be utilized.

2.SOLUTION

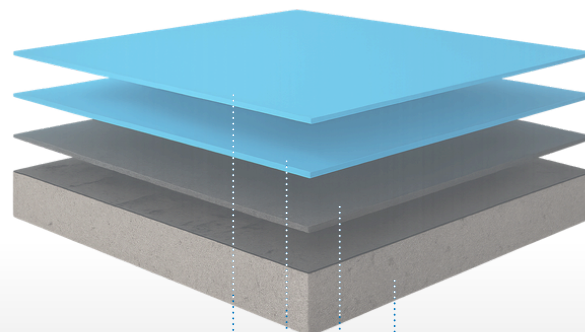
The optimal solution for ensuring a waterproof barrier beneath the tiles is to employ PC-Sealcoat® Flex. This flexible membrane effectively prevents water infiltration into the slab, offering reliable, long-term protection in areas that may prove challenging to maintain in the future.

Solution Type:

Cementitious Flexible Coating Under Tiles: **PC-Sealcoat® Flex**

Tile Adhesive: **PC-Tilefix 202**

Tile Joint Grouting: **PC-Tilefix® Grout EP**



Cementitious substrate

Adhesion promoter (according to the type of substrate)

First coat of PC-Sealcoat® Flex

Second coat of PC-Sealcoat® Flex

4. WATERPROOFING WITH PC-SEALCOAT® FLEX : A TWO-COMPONENT, FLEXIBLE SLURRY

The **PC-Sealcoat® Flex** waterproofing membrane can be directly applied to a smooth substrate without the necessity of cement mortar.

To prepare the mixture, combine 20 kg of Component B with 10 kg of Component A, stirring until a uniform consistency is achieved using a low-speed mixer, operating at approximately 300 rpm.

Apply two layers of **PC-Sealcoat® Flex** to the roof, ensuring that each layer is allowed to dry before the next application. Each layer should not exceed 1 mm in thickness, with an estimated total consumption of 1-1.5 kg/m². Additionally, reinforce intersections with **PC-Seal® Mesh** Glass Fiber Mesh immediately after the first layer, followed by the application of two to three additional layers of **PC-Sealcoat® Flex** once adequate drying has occurred.



1. Concrete surface.
2. 1st Coat of PC-Sealcoat® Flex.
3. 2nd Coat of PC-Sealcoat® Flex.
4. PC-Tilefix® 202.
5. PC-Tilefix® Grout EP .

5. FIXING CERAMIC TILES

Ceramic tiles should be adhered to the bottom and walls of the pool using one of the following tile adhesives: **PC-Tilefix® 202**.

6. TILE GROUTING

It is recommended to grout the tiles on the pool walls and floor with **PC-Tilefix® Grout EP** epoxy tile grout.