

Topic 6 WATERPROOFING

Part 1: What is waterproofing?

Waterproofing is being done to prevent the building from a potential damage caused by water or moisture. It provides longer life and a comfortable and safe environment to the building.

Water ingress into the buildings reduces their load-bearing capacity by causing corrosion of the reinforcement and/or the cement. Besides, making its way into the building, water poses a risk for the development of microorganisms (e.g., mould, mildew).

Waterproofing is being done by applying waterproof materials to parts of the building structure such as foundations, roofs, etc.

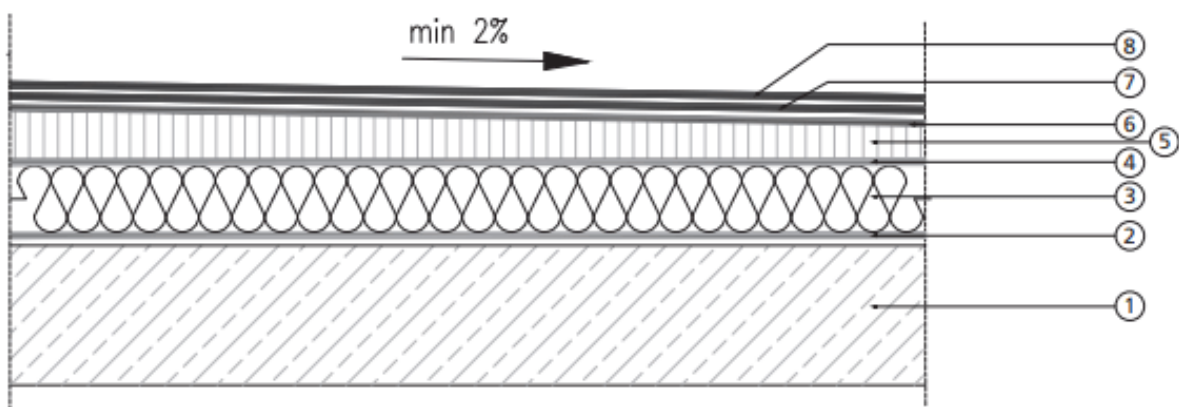


Figure 1. Detail of a brand-new waterproofing and thermal insulation application to a single (warm) flat roof

1. Reinforced concrete slab
2. Vapour barrier
3. New thermal insulation layer (board thickness according to calculations)
4. Polyethylene foil
5. Cement / concrete slope plaster
6. Bitumen primer
7. Waterproof bituminous membrane (1st layer, no paving coat)
8. Waterproof bituminous membrane (2nd layer, with mineral paving coat or no paving coat in case there is solid protection, warm roof covering or 'green' roof)