

## **STATE OF THE ART WATERPROOFING TECHNOLOGY MAINTAIN EXISTENT CONSTRUCTIONS**

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Ambitious new constructions are being built on the green plain at preferential European places for investment. The demand to renew existing buildings with an economical and ecological approach, however, claims priority when influence of sealed landscape in agglomerations grows. As a result, the European flat roofing market changed from mainly new constructions in the beginning of the nineties to a market, which challenged builders and owners to success in renovation and reconstruction of large flat roof areas.

The exploitation and continuous change in using a building originate the first essentials for the options to renovate and maintain the existing goods. Case studies will present and discuss plastic roof waterproofing sheet systems available today depending on quality and condition of the operating building substance. Proceeding from flat roof type in operation and condition of the waterproofing, the options to install adhered systems will be shown. Fully adhered or strip wise bonded roof waterproofing sheets on thermal insulation by liquid applied cold adhesive on the provisionally waterproofed building deck present an efficient solution. In particular these systems are chosen, if the roof construction will be removed and re-installed for reasons of insufficient thermal insulation, defective adhesion of layers, or leakage of the waterproofing resulting in grave damage to the construction and/ or the structure.

Products for rapid installed waterproofing are available for flat roof, when construction and condition still meet the national regulations and the state of the art, and also economical needs. The appropriate system will be using a self-adhered plastic waterproofing sheet, which requires to maintain existing layers and permits building exploitation without interruption.

A method of renovation for corrugated asbestos cement board covering large roof areas all over Europe will be presented. This technique respects and brings the local regulations of hazardous materials on site into line with the owner's economical interest.

The comparison of self-adhesive roof waterproofing sheet systems and loosely laid installed plastic waterproofing sheet system will impart a new background to economical and ecological assessment of modernisation.