

Application Profile

Project: Protection coating of OSB-panels, "Euro Cube"
Project supervisor: Hercules GmbH, Villach (A)
Applicator(s): Fastsetpowerunits, Landskron (A)

Polyurea System applied: PV42D, PolyVers Int.
Substrate/Area: OSB-panels, 550m²
Date: May - July 2008

Description:

A private owner wanted to attach his penthouse with an additional living-room, build out as a cube. The involved architect choiced out a fabrication with external coated OSB-panels, which were assambled on place together.

The OSB-panels were pre-fabricated in a wood-company, were we could prepare (priming with epoxy-based primer with mixed-in quarzsand, lightly grinded afterwards) and coat the panels also (thickness of around 2 mm):



The system PV42D, an aliphatic polyurea, was choiced out because of its high abrasion resistance, color stability, resistance to thermal shocks and seamless waterproofing ability. The ready coated panels were lifted than by a crane on place in the centre of the city Villach (A):



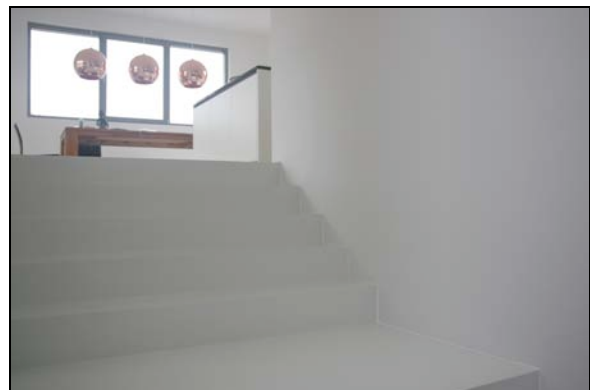
After assembling the panels together, we have had to overspray the whole cube, because of closing joints and repair damages, which were caused by transportation and lifting.

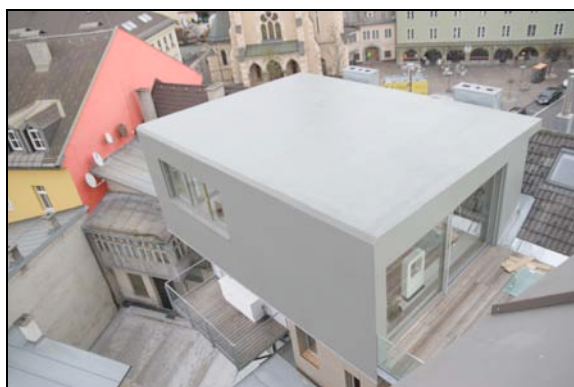
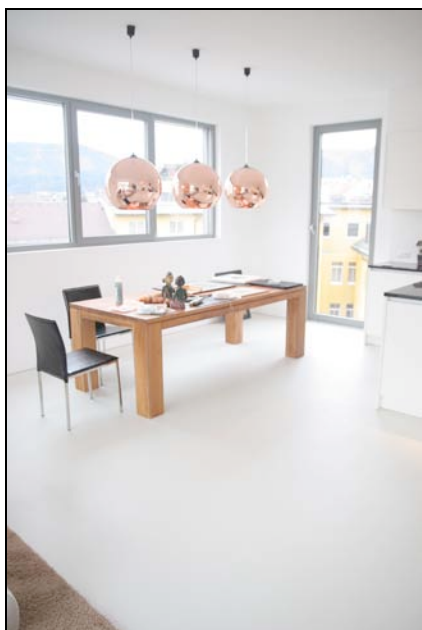
As spray-equipment there were used a GAMA G-250H Professional with around 63 meters of hose, as spraygun the BD-gun from Pentech US (different mixing-modules and PCD's):





After completing the outside coating-works, the inside floors were covered with PV425, a polyaspartic Polyurea, by hand-application:





The "cube" has still passed the first winter 2008/09 with heavy snowfalls and extremely minus-temperatures, there are no problems, no leakages, no blisters or other failures in the protection membrane.

This project is a very good example of a new process of modular construction using aliphatic polyurea as a protective membrane and architectural UV stable coating.