

PREHYDRATION OF BENTOSHIELD® MAX IN CONTAMINATED CONDITIONS

Project name: Ayse Hanım Waterside Residence / 2009

Location: Paşabahçe in İstanbul

Type of given service: waterproofing of below grade areas by supplying and installing of BentoShield Max.

Total installed amount: 1.500 m²

Project Definition: It is an outstanding privately owned property in front of the Bosphorus, Marmara Sea.

Because the property is directly contact with water, the surrounding application environment was consisting high amount of salt.

Substrate Preparation:

In both flat and vertical surfaces BentoShield MAX was applied on heat isolation material. Consequently, before BentoShield MAX application, subsurface was properly prepared and it was very smooth for appreciate application.

BentoShield MAX Application:

BentoShield® MAX application first started from detailed area such as elevator pit then continued along to vertical surfaces; then finally completed the horizontal surfaces. All BentoShield rolls laid on the substrate with overlaps of 15 cm.

BS Granules 500 g/m placed in between the overlaps of adjacent rolls and also along the intersections and corners to reinforce the waterproofing performance of BentoShield MAX in critical areas.



Marmara Sea is in the background



BS Granules sprinkled in overlaps of the elevator pit





BentoShield roll should extend the wall at least 30cm.



Two blue dashed lines assist the applicator for proper overlapping distance.

In vertical application, BentoShield MAX is just nailed to the surface. During the installation, as an ancillary waterproofing element, WaterStop BS also placed in the middle of the walls on the cold joints.

Although BentoShield MAX is prehydrated during manufacturing process to enhance the waterproofing behavior when meets with water on site for the first time, Geomas suggest to prehydrate the material if there exist salt in the environment.

As a result, after the BentoShield MAX installation completed those steps followed:

- Both vertical and horizontal BentoShield MAX application is prehydrated with clean water.
- After prehydration process, a thin and protective Polyethylene film is covered on BentoShield MAX.
- Without a need of waiting period, reinforcing bars are placed and concrete is poured.



Before placing the bars and pouring the concrete, BentoShield is prehydrated.



Reinforcing bars are directly placed on BentoShield MAX.