

# WATERPROOFING SYSTEM FOR ROOFS (INDUSTRIAL CONCRETE SLABS)



## Summary of application

**STEP 1:** Casting of Roof Slab with the addition of **Water Guard Crysta Admix 103** in the concrete mix.

**NOTE:** Conduits can be covered with a cement sand mortar comprising of **Ressi SBR 5850** and **Silmix**.

**STEP 2:** Application of **Water Guard 3020N**.

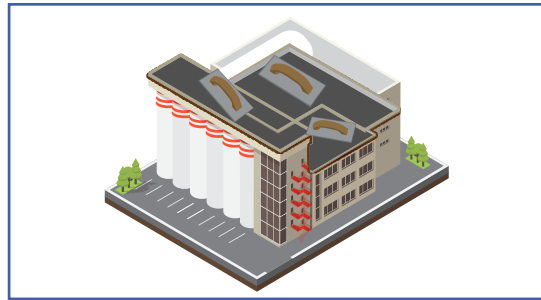
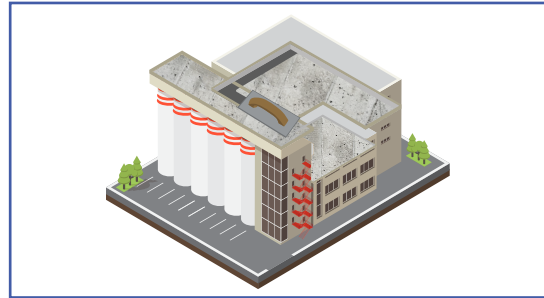
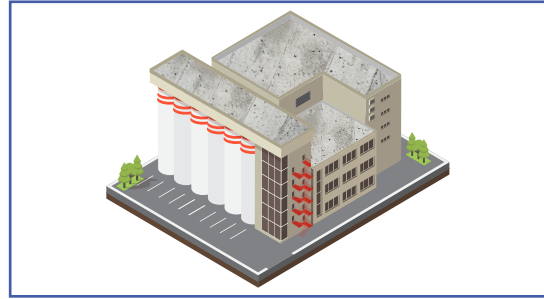
## Detailed description

Industrial waterproofing systems for roofs should be designed in a way that it should be easy to maintain and repair & should withstand various environmental & usage

impacts with the passage of time and should remain a part of the structure for its useful life. The system itself should also be easy to execute and repair.

### Step 1: Casting of slab, Utility Lines & Screed.

For Roof Slabs an appropriate internal waterproofing admixture should be used. **Water Guard Crysta Admix 103** is a recommended crystalline waterproofing admixture for the roof slab at the time of casting. All other engineering protocols should be followed for covering of utilities under the slab (if any) & the subsequent slab should be casted in slope towards the relevant water drain points. Proper chamfers between the parapet walls & screed should be maintained it is recommended that all the chamfers should be made using **Ressi SBR 5850** & **Silmix**. The dosage of each of these chemicals is 1 Ltr each with every 50 KG bag of cement used in the making of the chamfer.



### Step 2: Application of Water Guard 3020N

Over the roof slab an exposed coating of **Water Guard 3020N** is recommended. **Water Guard 3020N** is a one component, acrylic co-polymer based flexible waterproofing system ideal for use on cementitious & metal surfaces. The reason for having an exposed coating is that with regular wear & tear it is easy to maintain this coating over the industrial slab from time to time (Please refer to the product data sheet for further information). The application of **Water Guard 3020N** is recommended in at least 2 coats of application. Both the coats should be applied in opposite right-angled directions. If the first coat is applied as a top to bottom pattern the second coat is to be applied in a left to right pattern.



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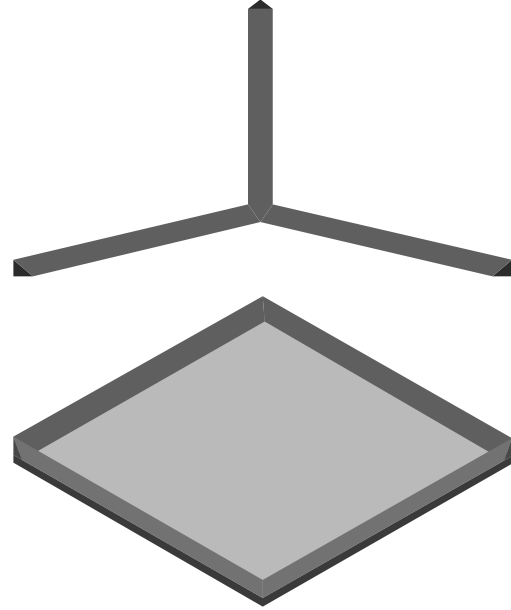
Once the coating of **Water Guard 3020N** has properly been applied, flood tests can be carried out to find various spots of leakage. Once a leak point has been identified, it should be rectified accordingly.

**Note:** For industrial applications, the coating of **Water Guard 3020N** has been left exposed. The reason being that regular maintenance of the coating can be done easily when exposed.

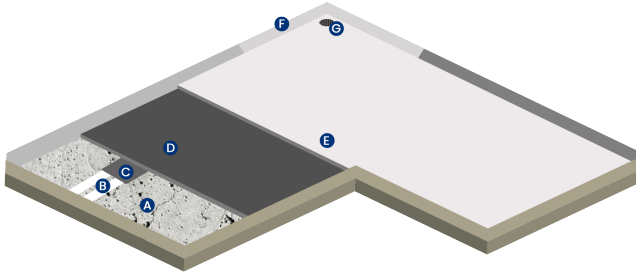
## What is a Chamfer?

Is a transitional edge between two faces of an object. Sometimes defined as a form of bevel, it is often created at a 45° angle between two adjoining right-angled faces. (Wikipedia).

In waterproofing systems, making a **chamfer** is of great significance. Water normally gets stuck in areas which have sharp corners of 90° & on several occasions the leakage of water occurs from this the sharp angle of the water retaining bodies or areas where significant waterproofing is required. To minimize the effect of this, a **chamfer** is usually created to make sure that there are no sharp angles in the structure to minimize the effect of water coming in & out of the structure.



## System Summary



### ROOFS & BALCONIES (INDUSTRIAL)

- A: Slab Pouring with Water Guard Crysta Admix 103
- B: Conduit Pipes
- C: Cement and sand mortar with Ressi SBR 5850
- D: Floor Screed with Ressi SBR 5850 and Silmix
- E: Water Guard 3020 N
- F: Chamfer with Ressi SBR 5850 and Silmix
- G: Drain Point