

RECTIFICATION OF LEAKED ROOF OR BALCONY USING (WATER GUARD 491)



Summary of application

STEP 1: Assessment of area.

STEP 2: Repairing and making of chamfers.

STEP 3: Application of **Water Guard 491**.

STEP 4: Flood Test of the slab.

STEP 5: Screeding and finishing. (If Needed).

Detailed Description

A leaked roof causes a lot of distress and damage to a structure, not only does it weaken the life of the slab itself, but the leakage also damages internal paint and electrical conduiting causing a hazard within the structure.

It is essential to make repairs of the roof slab and effectively making it watertight to ensure long and durable life of the roof slab and the structure itself.

Step 1: Assessment of area.

When rectifying leakages of roofs and balconies, the assessment of the area is one of the most important steps. Identifying the sources of leakage is essential as it will help in subsequent treatment over the roof slab. Once the sources of water leakages have been identified, the next step in assessment of the roof slab is checking for the slope of the roof.

It is essential to ensure that the slope of the floor screed of the roof slab is towards a water drain point and the slopes are made in a way that during rain fall, there is no water standing over the roof screed. It is further essential to check for the chamfers on the roof.

Checking the floor screed for cracks and hollow sounds is also essential. If the floor screed has many cracks, they should be rectified using an appropriate crack filler from the **Crack Heal** range of Ressichem Products. Usually, **Crack Heal 920 2K** is a suitable crack filler. If there are hollow sounds over the slab and the screed has been deboned from the RCC slab, it is recommended to remove the old screed and relay it in a slope going towards a proper water drain. It is recommended to add **Ressi SBR 5850** and **Silmix** into the screed mix. It is recommended to add 1 Ltr of **Ressi SBR 5850** and 1 Ltr of **Silmix** into every bag of cement used for making the mix of the floor screed. If water drains are not properly laid out, it is recommended to lay the proper water drains as well.



Step 2: Repairing & making of chamfers.

If there are no chamfers on the roof slab they should be made. In case the chamfers have been damaged; they should be repaired accordingly using wither **Patch 365 Plus** or by the addition of **Ressi SBR 5850** in the cement sand mortar used to make the chamfer. It is recommended to add 1 Ltr of **Ressi SBR 5850** for every 50 KG Bag of cement used in the casting & making of the chamfer.

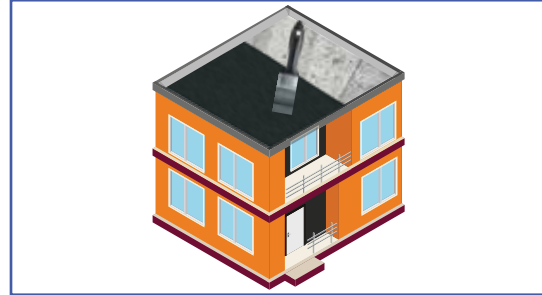


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Step 3: Application of Water Guard 491.

Once the slab of roof / balcony has been prepared, it is ready for the application of **Water Guard 491**. It is a 2 component highly flexible cementitious copolymer coating ideally designed as an excellent waterproofing coat over concrete & other cementitious surfaces to resist positive water ingress. It is essential to apply **Water Guard 491** Correctly, it is recommended to apply 2 coats of the material in right angled directions. If the first coat is applied top to bottom, the second coat should be applied in a left to right direction (Please refer product datasheet for further information).



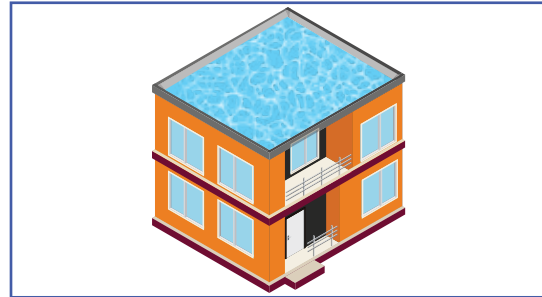
Step 4: Flood Test of the slab.

Once the coating of **Water Guard 491** has been dried, it is recommended to conduct a flood test over the roof slab by filling it with 3 to 4 inches of water for at least 48 to 72 hours. The leakage points after the flood test should be rectified using appropriate means and the flood test should be repeated until all the leakage points have been rectified.

Step 5: Screeding and finishing. (If Needed)

On a successful completion of a flood test a screed can be poured over the roof slab (if needed). The coating of **Water Guard 491** can be left exposed if there is minimum to no traffic over the screed. Since it is a rubberized film which is laid over the concrete, it can get damaged if there is heavy traffic over the roof slab.

It is recommended to use good strong mix design for the screed. It is also recommended to add **Ressi SBR 5850** along with the addition of **Silmix** within the mix of the screed. The recommended dosage of **Ressi SBR 5850** and **Silmix** is 1 Ltr each for every 50 KG Bag of cement used in the placement of floor screed over the roof and balcony slab.



It is to be strictly ensured that the screed is placed in a slope moving towards the water drainpipes of the slab. If the slopes are not properly maintained, the functioning life of the slab will be reduced drastically and will cause many issues within the lifetime of the slab.

Proper screeding in slope moving towards water drains is one of the most important elements of the waterproofing system for roofs and balconies. For larger areas proper panel grooves should be given in the screed at regular intervals to avoid cracks forming in the screed over time.

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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.

