Case History

Injection drying provides solution for problem floor

A domestic property in Edinburgh recently had the benefit of injection drying process to restore the concrete floor slab following a serious flood.

The property was a converted steading, and according to the policyholder work began renovating it around 20 years ago.

The flooring throughout consisted of a hot laid DPC over a concrete base, a layer of Rockglass fibre over the DPC and a top concrete screed of 75mm.

The property had 1-2 inches of standing water throughout the ground floor. On our first visit Rainbow removed all floor coverings, applied anti-microbial treatments and installed initial drying equipment. Normally, drying a concrete floor is relatively straightforward.

Setting up an effective drying environment will lower the equilibrium relative humidity to the desired 75%. The concern here was the Rockglass fibre as they needed to ensure that everything above the DPC level was dry.

There was at least one large settlement crack in the floor where water had definitely ingressed and affected the Rockglass. The problem was how to dry the Rockglass fibre which was covered by 75mm of concrete?

However, the Rockglass was not the biggest concern. The property owners were elderly and had health conditions. The renovation of this property had consumed a large portion of their lives – 20 years on and they were still renovating.

For this reason, the Loss Adjusters initial plan of a major strip out would not be an option – Rainbow had to find an effective method of drying the flooring.

The Rainbow Head Office technical experts were consulted and an injection drying system was introduced. This incorporates desiccant dehumidifiers with an in-built high static pressure air mover. By attaching 25mm pipes to the air mover outlet the air movement can be 'injected' through the concrete.

Key Facts

Service

- Flood Restoration

Location

- Edinburgh

Services Employed

- Insurance Report
- Flood Restoration

6 inlet holes were then drilled through the concrete for each dehumidifier, the holes were drilled evenly over the floor area maximising the drying efficiency. In addition, a number of 'outlet' holes were drilled to allow air to escape.

The Rockglass contained so much water that it started spitting the water out in a "mini fountain" style. The water escaped at such a rate that a wet vac was used to contain it.

To monitor the drying, we drilled 10mm holes through the concrete and relative humidity sleeves were inserted.

Injection drying was considered the best solution for all parties. A major strip out would have been devastating for the owners and extremely costly for the insurance company. Using the knowledge and experience within the Rainbow network a highly satisfactory solution to a difficult situation was provided.

We Restore,
You Recover™

Rainbow International, Spectrum House, Lower Oakham Way, Oakham Business Park, Mansfield, Nottinghamshire, NG18 5BY. 24hr Helpline: 01623 422488
Email: enquiries@rainbow-int.co.uk www.rainbow-int.co.uk

RAINBOW INTERNATIONAL RESTORATION
-Part of ISS