

Liquid Applied Coating Protects 28 Roofs at Housing Association

At a large housing association in Loughborough, a number of weathering problems were identified on a series of 28 flat roofs. Each of the roofs was deteriorated to varying degrees. In some areas, failing mineral felt and cracked asphalt substrate had led to water ingress. In other areas, the mortar between the parapet coping stone joints was failing, allowing water to penetrate through the brickwork below. On some of the parapets, strips of flashing tape had been installed over the coping stones joints to seal them but these had started to fail and required replacement using a more durable system.



Long-term roof protection



Removal of debris and vegetation

Application onto complex contours

The company required a robust, waterproof and weatherproof repair solution that would not only repair the damaged areas, but continue to protect the substrate against any future damage.

Following an inspection by a Belzona representative, a cold applied liquid coating for long-term roof protection, Belzona 3111 (Flexible Membrane), was specified to repair the damaged roof areas. This coating was prescribed in conjunction with Belzona 9311 (Reinforcing Sheet), a specially woven, open mesh fabric designed to give the repair added durability and strength.

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PRESS INFORMATION

Belzona 3911 (PSC Surface Conditioner), a surface conditioner designed to prepare porous surfaces prior to application of a Belzona roof protection system, was also specified for the application, while Belzona 3921 (GSC Surface Conditioner) was also chosen to prepare non-porous areas.

Simple Application Method

Firstly, all surface water, fungal growths, vegetation and loose debris were cleared away from the application area prior to conditioning with Belzona 3911 and Belzona 3921. The failed flashing strips were also removed from the roofing area.

In order to effectively deal with the preparation of the entire roof, the team was split into groups; each having a different role in the application process. For example, a pair was assigned to clearing away the debris, whilst another began to lay down a conditioning coat. If a pair completed their job, they moved onto the next stage. This method ensured the application procedure was carried out quickly and efficiently, keeping downtime to an absolute minimum.

After all the debris was cleared away, the Belzona conditioners were applied using a roller to provide a quick coverage. Once the conditioner had dried, the reinforcement sheet was laid out and coated with Belzona 3111. A soft bristled brush was used to apply this material, smooth over the system for complete wetting and to leave a finish free from stretches or creases.

For larger spaces, the 1m² rolls of reinforcement sheet were rolled out. As before, working in pairs helped to make this process more efficient. One person was in charge of setting the reinforcement sheet up, placing a thin coat of Belzona 3111 over any joints or gaps, whilst the other rolled product on the top.

Once the system was thoroughly dry, in most of the areas this took two to four hours and 24 hours in areas subjected to standing water, the second layer of Belzona 3111 was applied. This final layer is designed to achieve a smooth finish free from pinholes.

In each area, different obstacles would arise. As the application areas were part of a fully functioning building, air conditioning units, satellite dishes and pipes were all attached to the surface. In order to ensure the functionality of Belzona 3111 wasn't compromised, any equipment attached to the roof itself needed to be included in the coating.

Versatile System Provides Long-Term Roofing Protection

Due to the versatility of the Belzona roofing system, the application team were able to facilitate a series of bespoke repairs specially designed for each different application situation. The tough, flexible and elastic polymeric film tightly follows all roof contours, encapsulating and providing long-lasting protection to every area of the roof.

Microporous structure allows surface to breath

Belzona's outstanding range of polymeric repair and protection solutions for floors, walls and roofs will be showcased at the 2015 Facilities Show on the **16th-18th of June**. The event will take place at the ExCeL Exhibition Centre in London, England and Belzona will be represented by our experienced Commercial and Regional Business Managers at **stand Q1450**.

Notes to Editor:

About Belzona:

- Established in 1952, Belzona has pioneered innovative polymer technology that has revolutionised industrial repair and maintenance procedures.
- Belzona is a leading company in the design and manufacture of polymer repair composites and industrial protective coatings for the repair, protection and improvement of machinery, equipment, buildings and structures.
- At Harrogate, the full Belzona product range is manufactured to stringent quality and environmental control guidelines complying with the requirements of ISO 9001:2008 and ISO 14001:2004.
- Belzona has over 140 Distributors in more than 120 countries ensuring not only the availability of Belzona materials, but also specification support, project management, application and supervision services. Distributorships and their teams are supported by Belzona Corporate offices in Europe, North America and Asia.

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