



Press Release
August 6th 2018

Delta Membrane Systems solution chosen for flood resilient showcase project

Delta Membrane Systems products have been used at Edenside Barn - a real-life demonstration property in the Cumbria Flood Resilient Showcase.

The idea behind the Flood Resilient Showcase Project was to use products and materials that will try to keep water out of properties prone to flooding. In a flooding event that is less severe, those products (all of which have been tested to a high specification) are expected to reduce water ingress. It is acknowledged that when flooding is severe, these products may well be overtopped. The showcase highlights what can be done to manage the residual risk.

The Flood Resilient Showcase Project sought to adapt properties by using differing interventions to reduce the amount of damage that flood water can cause when it enters a property.

This approach will enable the property owners to #getbackinsooner.



At the core of the Flood Resilient Showcase Project is the real-life demonstration of flood installation measures at three properties in Cumbria led by Mary Dhonau, Chief Executive of the Know Your Flood Risk Campaign.

Edenside Barn is a private dwelling/barn conversion, located on idyllic farmland close to the banks of the river Eden, in the picturesque Eden Valley, Cumbria. The River Eden flows through the Eden District of Cumbria, on its way to the Solway Firth.



The North Pennines is designated as an Area of Outstanding Natural Beauty.

Edenside Barn has periodically suffered with flooding when the river Eden has burst its banks. Following the devastation of storm Desmond in 2015/2016 Edenside Barn was flooded, leaving it uninhabitable and the owners having to seek alternative accommodation.

Mary Dhonau and Adler and Allen, in conjunction with Aquobex, were project managers in this resilience showcase project. Aquobex Flood Management Solutions were appointed as consultants on the flood resilient design and inclusion of products within their range.

Following successful collaboration with Mary Dhonau on flood resilience projects and Aquobex, Delta Membrane Systems was asked to design a robust, resilient and recoverable solution incorporating their products on this project.

This project required a resilient and recoverable solution. The property is expected to experience future flooding events.



Delta's design allowed for water exclusion and water entry. The design incorporates guidance given in BS 85500:2015 Flood Resilience in Buildings, which plans for both water exclusion and water entry.

Delta Registered Installer Peter Cox volunteered his time to install Delta products on this project. Delta Registered Installers are an accredited national network of independent professional installers. They are not employed by Delta Membrane Systems but are strictly vetted and monitored by the company to assess their levels of competence and performance.

Delta's design sought to provide continuity of the internal system to the external flood barriers to create a water tight seal to the property.

Prior to application at Edenside Barn, Delta's water-based Epoxy was tested at Aquobex's testing facilities. Aquobex operates a premier test facility dedicated to PAS1188-1 and FM2510 (testing of flood protection products). It is equipped to produce the necessary conditions for static water testing, current testing and with wave-makers suitable to deliver the JONSWAP wave formations specified in the standard. Aquobex's testing facilities are utilised by BSI and the BRE for flood product testing.

The structure itself consisted of solid stone walls and concrete floor slab. The base substrate to this property was a good quality concrete floor with minimal risk of flood ingress.

The block walls and floor slab were tested for any potential leak paths. The interfaces between the wall and floor needed to offer a watertight seal to stop ingress between the slab and the wall.

The internal faces of the stone walls were coated using Polyeurea, with 2 coats of Delta's water-based Epoxy over and to the existing floor slab. Delta's water-based Epoxy worked in conjunction with the polyeurea to provide both a barrier to water entry and a non-absorbent finish.

Koster Polysil TG 500 was applied throughout as a salt inhibitor and surface hardening treatment.

Through joined up thinking and the use of combined systems this property can be insured and is now recoverable to both flood water exclusion and water entry.

Delta Membranes thanks Peter Cox for their incredible assistance in this project and dedication in product installation and application.

Ends

Delta Membrane Systems

Tel: 01992 523 523

Email: info@deltamembranes.com

Web: <http://www.deltamembranes.com>