



SIKA AT WORK

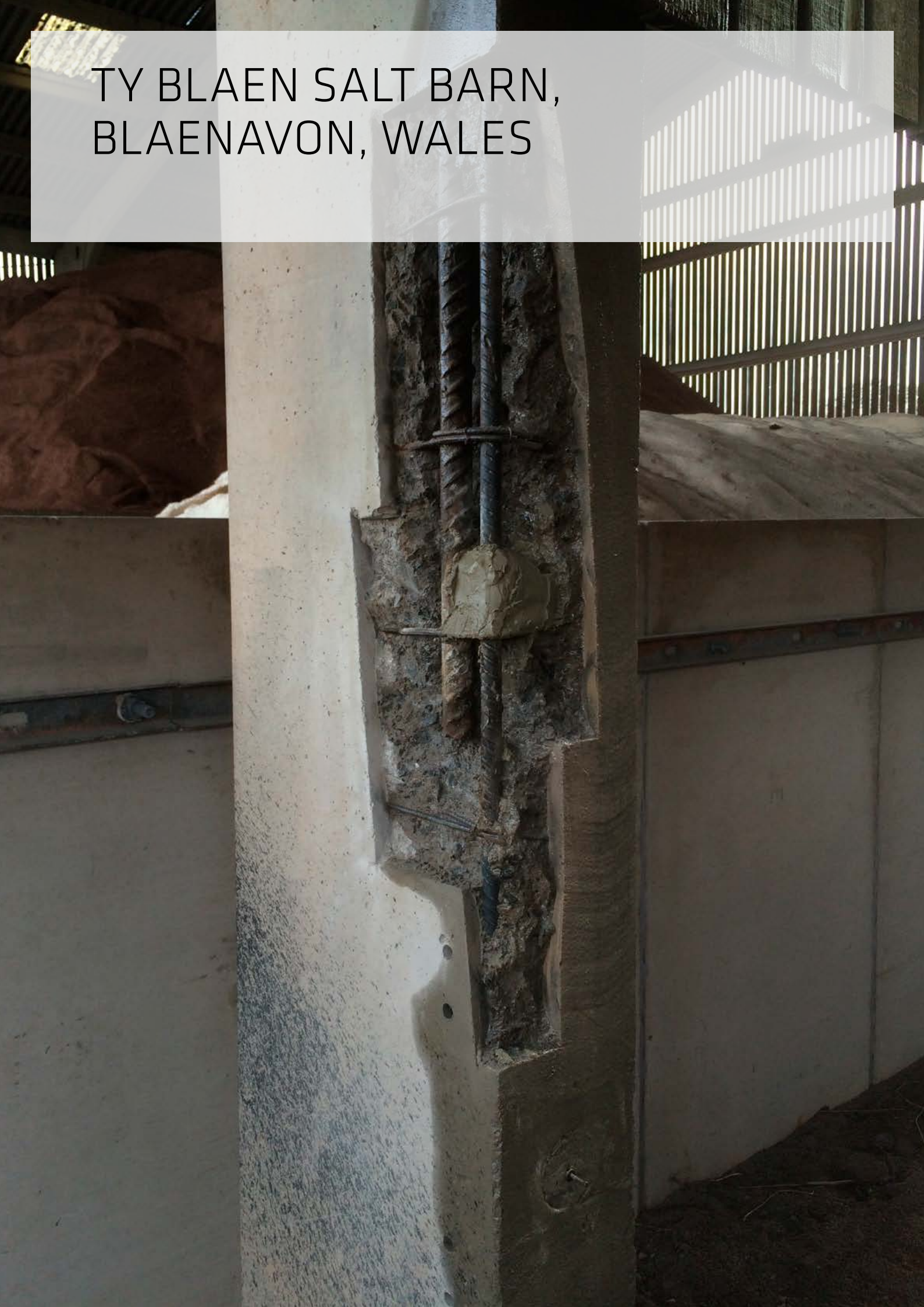
TY BLAEN SALT BARN, BLAENAVON, WALES

REFURBISHMENT: Sika® MonoTop®, Sikagard®, Sika® Galvashield® and Sika® Ferrogard®

BUILDING TRUST



TY BLAEN SALT BARN,
BLAENAVON, WALES



SIKA CONCRETE REPAIR SYSTEM ENSURES TOWN'S VITAL SALT SUPPLIES REMAIN WEATHERPROOF.

A high-performance, concrete repair and [Total Corrosion Management](#) (TCM) system supplied by global building product manufacturer, [Sika](#), was specified to restore, protect and extend the life of buildings used for the vital purpose of storing grit and salt designed to deice roads around south Wales.

The salt barns, located at Ty Blaen in New Inn, Pontypool and Gillchrist Thomas Industrial Estate, Blaenavon were in a poor state of disrepair with deep cracks and spalling appearing in the buildings' concrete walls, leading to a serious risk of corrosion throughout the structure. Urgent action was required to strip and reinstate areas of concrete showing signs of chloride contamination to ensure the barns were renovated before the onset of winter in order to fully-protect salt and grit supplies from the elements.



TY BLAEN SALT BARN BLAENAVON, WALES



With timescales a priority for Torfaen County Council Property Management, the project's client, main contractor GKR Maintenance and Building Co required a proven concrete repair and protection system that was quick and easy to apply, reduced long-term risk of potential corrosion and complied with British and European Standard BSEN1504. [Sika's concrete repair](#), TCM and protective coating systems proved the ideal fit.

The salt barns consist of two concrete-framed buildings which were built 30 years ago. In preparation for refurbishment works carried out by sub-contractors Onsite Specialist Maintenance, defective elements within the concrete walls were removed. After preparation of the exposed reinforcement, this was coated with [Sika® Monotop®-610](#), a high-performance, cementitious steel reinforcement protective coating and bonding primer. [Sika® Monotop®-615](#), ideal for delaminated, weak, damaged and deteriorated concrete, provided the replacement mortar. In areas of the building where free chloride concentrations were 1% or below the level of the reinforcement bar, products from Sika's [TCM](#) portfolio were utilised.

[Sika® FerroGard®-903+](#), a surface applied multi-functional liquid corrosion inhibitor was used. Once applied to a concrete surface the liquid migrates to the reinforcement through the concrete and forms a protective layer which suppresses existing and prevents further corrosion activity.

In addition, [Sika® Galvashield® galvanic](#), sacrificial anodes were installed to prevent the formation of new corrosion sites (incipient anodes) adjacent to the refurbished concrete. This simple, innovative anode system involves a small, circular shaped cementitious shell encasing a zinc core which is quickly and easily fastened to exposed steel reinforcement. Once installed, the anode's zinc core corrodes sacrificially to the surrounding rebar therefore protecting the rebar.

[Sikagard®-550 W Elastic](#) provided a final, crack-bridging protective coating to the buildings to offer an effective, aesthetic, weatherproof finish.

Torfaen Council's Property Officer said: "The buildings were in urgent need of repair, so time was of the essence. We needed a suitably rapid concrete repair system without losing anything in terms of performance."

Sika's durable, easy-to-apply concrete repair system together with its TCM and protective coating systems have ensured Torfaen County Council is fully-prepared for the worst the weather has to offer in the coming months. Sika proved just the job and has ensured the barn was refurbished in good time providing a suitable corrosion management system to ensure the buildings will be in vital service for many years to come.

For further information call 0800 112 3863.