

CASE STUDY

Food Production Roof Refurbishment

PROJECT

Kellogg's, Wrexham

STRUCTURE

Concrete Block and Beam

CLIENT

Kellogg's

CONTRACT

MAKERS

...makes the difference



Opened in 1978 Kellogg's Wrexham was the second production facility built in the UK.

The site produces some of the UK's favourite cereals and breakfast bars and the production line operates 24/7. Leaks from the roof can cause production lines to shut down which costs Kellogg's thousands of pounds per hour. The total area is approximately 30,000m² over 16 roof areas, which all vary in difficulty. The current build up is concrete slab, bitumen VCL, 100mm Lytag screed, 10mm cementitious layer, 25mm Asphalt waterproofing layer.

Some areas have had a liquid system applied previously but this had failed due to incorrect priming and poor application. Almost every roof is suffering from large areas of blistering and de-bonding due to water trapped in the substrate.

A previous contractor had removed all of the mushroom vents as they believed they were no longer necessary. This exacerbated the issue and caused every roof to fail. The whole site is suffering with roof leaks so it was decided that Makers would refurbish the entire site over 2 phases. Phase 1 being 16,000m² addressing the worst affected areas

80% of the roof area required careful stripping down to the Lytag screed, the screed could not be disturbed due to asbestos identified in the bitumen VCL. A hybrid vented system was design and installed specifically for this project.



Before



Before

T: 0845 899 4444

E: sales@makers.biz

W: www.makers.biz

Makers, Office Building 4,
Shenstone Business Park
Lynn Lane, Shenstone, WS14 0SB

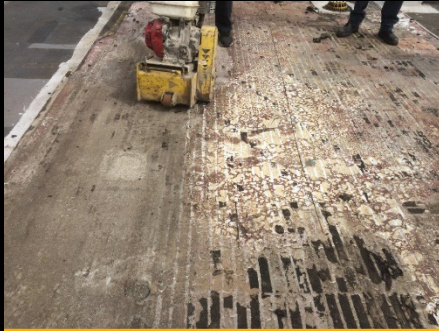
Registered in England No: 6348341 Registered Office as above.



CASE STUDY

MAKERS

...makes the difference



During



During



During

The Lytag was primed and a self-adhesive partially bonded vented bitumen layer was installed. This was then primed and Triflex ProTect and ProDetail was installed as per specification. New holes were cored and mushroom vents installed every 18m² to help remove any moisture still trapped in the slab. Colourful walkways were installed to demark routes across the roofs.

This project was the most challenging roofing project Makers have undertaken so far. Kellogg's procurement selected Makers as they believed it was too big and complicated for a standard roofing contractor. A large bulk of the work was carried out during the height of COVID-19 restrictions and due to Kellogg's being a major food manufacturer Makers operations teams were classed as key workers and given permission to travel into Wales during full lockdown. Due to transport and supply issues within the UK at the time, Makers worked closely with Triflex to secure the availability of materials locally, ensuring continual supply, supporting the challenging project schedule. The stripping element of this project was extremely difficult and time consuming. The Lytag screen had to remain in situ, it couldn't be disturbed or damaged. The main reason for this was that asbestos had been identified in the bitumen VCL below the screed. Once the areas were stripped, they had to be made watertight on the same day due to the fact that the Lytag screed could not get wet. If saturated it loses its structural integrity thus making a useless substrate. This took precise planning by the site team to ensure stripping and installation teams followed on from each other. Any areas that weren't waterproofed could cause a leak on to the production lines below, causing thousands of pounds in damages and stock loss. Weather played a huge part in this project; the site is very exposed to the quickly changing winter elements. The installation team battled storms, ice, snow and torrential rain.

Phase 1 included multiple roofs varying in different repair requirements and techniques and some requiring insulation, but all were finished in the lighter colour of Triflex ProTect for reflexing UV and reducing thermal gains.



During



During



After

T: 0845 899 4444

E: sales@makers.biz

W: www.makers.biz

Makers, Office Building 4,
Shenstone Business Park
Lynn Lane, Shenstone, WS14 0SB

Registered in England No: 6348341 Registered Office as above.

