# tr///

# Building Contractors Ltd

# CASE STUDY 00007 - The Range, Aylesbury

Commercial Roof & Cladding Refurbishment

# CASE STUDY

CDSG01/0001

Date of Project: July - September 2020

#### Project Location:

The Range, Broadfields Retail Park, Aylesbury, HP19 8BU

 Project Type: Commercial Roof & Cladding Refurbishment.

 Contract Type: Sub-Contractor

Contract Value: £200,000.00





# The Range, Aylesbury

Commercial Roof & Cladding Refurbishment

Tritec Building contractors where awarded with the following works:

- 4065 m2 of liquid coatings Applied to the metal composite roof including corrosion treatments.
- 375 m2 of roof lights replaced A total of 44 No. GRP roof lights replaced with new supasafe sheets.
- 1507 m2 of cladding refurbishment Mansard cladding, soffits and gutter fascia's all coated.
- 470 m of gutters refurbished A total of 8 No. gutters refurbished with new liquid coatings.

Tritec Building Contractors are experienced refurbishment contractors that provide efficient services to extend the lifespan of commercial building fabrics.

## Roof Sheet Refurbishment - Giromax Girosil RC Liquid Coating System

The existing metal pitched roof was aging with signs of corrosion throughout, Giromax was specified to extend the life cycle of the roof sheets and associated flashings and trims for a minimum guaranteed period of 20 years.



The metal pitch roof was heavily soiled due to little or no maintenance over the years, the original factory applied applied coated had started to fail with loose and flaking coatings throughout, with corrosion to the panel profiles and cut edges of the ridge, hip flashing and soaker sheets.

Some areas of the panels had also corroded leaving spot corrosion in the substrate, some of the roof fixings had become loose and other contractors had carried our historical patch repairs throughout.

There was various debris located all over the roof from animal activity such as small animal bones, bird nests and droppings present.

There was not evidence of regular maintenance to the building, which was previously occupied by Homebase. The store was live with staff and customer activity everyday of the week.



The preparations to the roof started with a jet clean to remove all debris and loose coatings, once the roof was clean and clear we began to treat the corrosion. The corrosion treatments included mechanically abrading the substrate to remove the surface corrosion and any gingering.

We the primed the areas, filled any holes and tightened the roof fixings, with all fixing heads being primed and encapsulated with Giromax Girosil® SE sealant.

The application of Giromax Girosil® SE was applied to all lap joints to seal and prevent any surface water being transferred under the sheets via capillary action, preventing any potential corrosion at the sheet laps, this treatment was also applied to the cut ends of all flashings to the roof detail.

A coat of Giromax Girosil® RC coating was then applied via ro Airless spray system to the total roof area encapsulating the roof sheets and extending the life span for an additional 20 years, this was complete with a manufacturer's product guarantee.

#### Gutter Refurbishment - Installation & Cleaning

The gutters systems servicing the main roof and mansard were nearing the serviceable life, lack of maintenance throughout the yards had allowed accelerated corrosion within the gutters, however if caught in time the Giromax Girosil® RC-G system can extend the life cycle for at least 15 years and at a much more economical cost than replacing.



This building had 2 sets of gutters, with larger box gutters serving the main roof area and smaller perimeter gutters serving the mansard, all gutters had a fair amount of debris and leaking joints.

All commercial gutters are designed with a flow rate to deal with the flow of water efficiently, when gutter channels and outlets are blocked it means that during heavy rainfall the gutter channels will be overwhelmed, overfill and potentially find it way into the building by rising up over the upstands under any closures and down into voids which are not designed to take water.

Heavy debris can also enter the outlets, block and congest the downpipes causing unseen issues that can be costly to rectify.

It is important that regular maintenance is planned and undertaken annually to prevent unnecessary and excessive remedial costs.



All silt and organic debris where removed from the gutter and paced in waste bags before being removed from the roof area and placed in the site skip.

The gutters where then washed through and outlets cleared thoroughly with jets, to leave free flowing.

Once thoroughly cleaned our operatives sealed all gutter joints with Giromax Girosil® SE to ensure that they were watertight, they then primed the gutter surfaces throughout and then encapsulated the box gutters with Giromax Girosil® RC-G.

As a fully trained and approved applicator of Giromax systems, all works were signed off and supplied with a 15-year manufacturers guarantee supplied by Giromax.

The end-client now has peace of mind knowing that the gutters now have an extended life span of 15 years.

### Cladding Refurbishment - Cladding Repair & Coating

The existing cladding and soffits also had a lack of maintenance and the previously hand painted coated had started to fail and come to the end of their serviceable lifespan, with areas flaking from the mansard cladding, gutter fascia's and soffit panels. The areas where refurbished with Giromax Girocote® complete with a 10 years manufacturers guarantee.



The existing mansard cladding, associated soffit panels had all been previously painted by hand, the after-market coatings had now come to the end of their serviceable life cycle with the paint films flaking and delaminating.

The cladding, fascia's and soffits also had a thick dirt film throughout, when left uncleaned for several years these films can slowly eat away at the coatings and cause premature failure.

The store was live during the refurbishment works and co-ordination with store management was key, areas had to be cleared in advance to allow our operatives to cordon of areas to the garden center and front of the store, ensuring that there was a safe working area for our works and that the general public couldn't enter the working area.



The mansard cladding, gutter fascia's and soffits panels where all thoroughly cleaned at high pressure to ensure that any loose coatings and dirt films where removed in preparation for the application of the coatings.

Prior to the application of the coatings our operatives undertook adhesion tests throughout to ensure that the existing substrate provided a suitable base without the fear of future failure.

Our operatives then applied the Girmax Girocote® system to the areas using the airless spray method to ensure an evenly distributed paint film, constantly measuring the the coatings film thickness throughout the application.

Once completed the manufacturer issued a 10-year guarantee on the paint system.

#### **GRP Roof Lights - Installation of New**

The existing outer roof lights had been effected by UV degradation and general wear and tear, as a result they transmitted a limited mount of natural day light into the store below, new Filon Supersafe outter GRP sheets where fitted to replace the existing degraded sheets.



The existing GRP roof lights where covered by organic matter and had started to completely breakdown due to UV exposure and general weathering, the condition of the sheets stopped any type of day light transmitting into the areas below.

Not only does this reduce the light but makes the building consume more energy in lighting the warehouse during day light hours.

The GRP sheets had become completely fibrous and small holes and cracks had formed into the sheets causing water ingress on to areas below, there was also evidence of previous issues owing to various applications of sealants around the fittings and joints.

Owing to the roof works being completed above a live store and that internal obstructions limited the installation of safety netting, the outer roof lights sheets where upgraded to supasafe skins as an added fall protection measure.



Due to being a live store, the roof light replacement had to be carried out when the store was closed so that there was no members of the public or store staff present underneath the areas of work.

Our operatives carefully removed each sheet of the existing lights, cleaned the top of the inner sheet and replaced with the new supasafe GRP sheets complete with new fixings, butyl sealants and poppy red fixing heads.

The GRP roof lights fitted came complete with a 25-year life expectancy.









The Range wa











Tritec Building Contractors Ltd Unit 26 Charfleets Farm Way, Charfleets Industrial Estate Canvey Island Essex SS8 0PG

01268 698 299 info@tritec-ltd.com www.tritecbuildingcontractors.co.uk



APPROVED CONTRACTORS FOR: GIROMAX - HD SHARMANS - LIQUASIL - WESTWOOD LIQUIDS - BROMOCO - TOR COATINGS - WEATHERFOLD

SSIP

 $(\frac{2}{2})$ 

CHAS

IPAF CSCS

SSSTS & SMISTS



Constructionline P&SMA