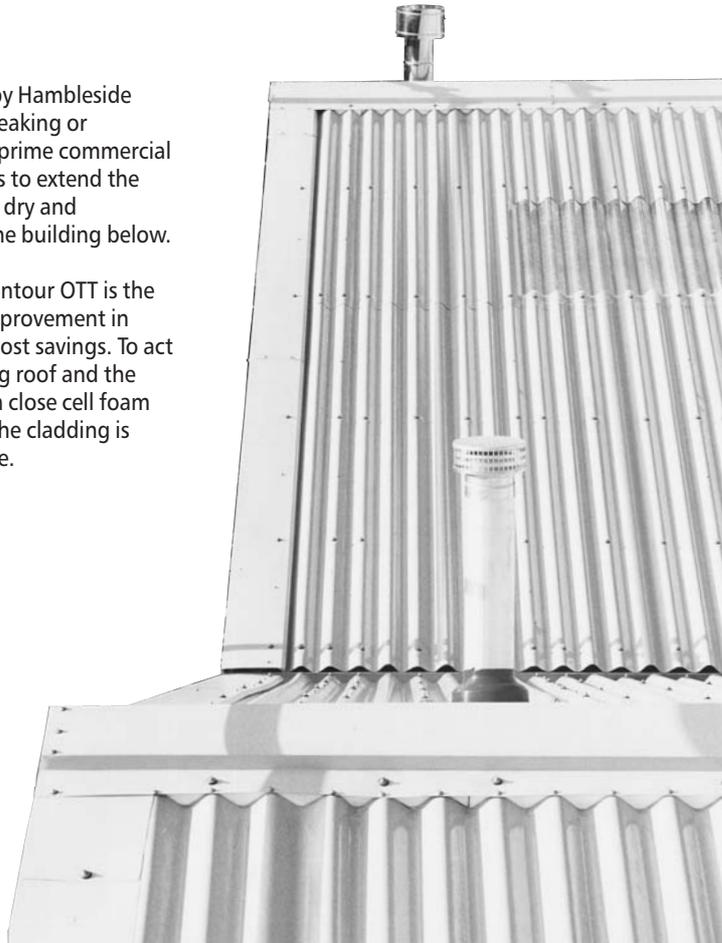


Contour OTT OverRoofing

Contour OTT has been developed by Hambleside Danelaw to provide a solution for leaking or damaged corrugated roofing. The prime commercial objective, in these circumstances, is to extend the life of the roof and create a secure, dry and comfortable environment within the building below.

One of the major advantages of Contour OTT is the ability it provides for a dramatic improvement in insulation with the resultant heat cost savings. To act as an interface between the existing roof and the Contour OTT system a 30 to 50 mm close cell foam insulation layer profiled to match the cladding is positioned over the full roof surface.



OTT OverRoofing

In areas where rooflights form part of the structure these are replaced with either StepSafe or Contour rooflights, either in single skin, built-up systems or factory assembled insulated rooflights (FAIRS).

When installed, the system, coupled with new rooflights, creates a modern energy efficient workplace from quite mature buildings.

Once the foam insulation has been put in place, the cladding sheets are step-positioned and fixed to the roof purlin without disturbing any of the existing fixings. The self tapping steel fixers have rubber washers to prevent the bolt heads from penetrating the sheet when tightening and assisting to alleviate wind stress loading. Our sales office can advise on the choice of insulation materials available.

When the cladding is complete pre-formed trims are fixed to seal the ridges and gables. Close cell foam insulation in fills are used to form a weather resistant seal.

Our standard range of GRP Contour cladding panels provides the basis for the system and the technical specification is as detailed on page 5.2.

Ridge sections and edge trims are manufactured in either GRP or aluminium according to specification.

As an alternative to fully insulating the roof surface, special spacer units are available which are produced in a high density polyethylene foam core material with drainage features built in to permit the flow of any dampness to the gutters and downpipes.

Contour OTT sheet thickness is nominal 1 mm with two weight options: 1.83 kg/m² and 2.44 kg/m² and the sheets are supplied in lengths to meet customer specification, however, it is recommended that they should not be greater than 10 metres long, due to possible handling and transport difficulties.

Contour OTT is guaranteed to have a service life of 25 years when used in Northern European Union Countries, provided it was correctly stored, handled, installed and maintained in accordance with the instructions contained within this manual. See page 1.7 for full guarantee terms and conditions.

Contour OTT – General Information

Planning permission for Contour OTT in the majority of cases may not be required, but it can arise if the choice of roof colour varies from the original.

Structural surveys may not be needed unless the supporting structure of the existing roof is unsound.

Contour OTT does not use on site adhesive resins or top coats, it is mechanically fixed into position and it is not reliant upon dry weather conditions for its installation.

The GRP sheeting is impervious to water and its structural loading when wet is only minimally effected.

As the overall roof thickness is increased by the thickness of the chosen insulation specification, existing gutters should require no realignment.

A full range of pigment based colours is available. Please contact our sales office with particular details.

Surface protection is provided by Melinex 389 with enhanced UV protection as used on many other roofing and cladding products manufactured by Hambleside Danelaw.

It is recommended that property insurers be consulted before the installation of Contour over roofing systems to make sure the proposed roofing meets with their approval. In the majority of cases, Contour over roofing will comply with standards, which may be higher than required by Statute.

Fire Resistance

Contour over roofing GRP sheeting is normally supplied in a SAB Class 3 grade. SAA 0, SAA 1 grades are also available.

Please see the section in this guide for inspection and maintenance procedures for Contour OTT, pages 10.1 and 10.2.

Contour OTT – The Installation Process

The original roof surface must be cleaned and all debris, organic growth and other alien material removed. Care should be exercised to ensure that the surface of the existing roof is not damaged, although Contour over roofing can be used to cover or conceal damaged or moderately holed sections of the roof.

Any rooflights which need replacing should be installed at this stage. We recommend that all rooflights should be replaced as part of the overall roof refurbishment to ensure the highest standards of safety. In addition if it is decided not to replace existing rooflights, then care should be taken to ensure that they will still meet the current statutory building regulations, which will apply to the building after the Contour OTT sheeting has been fixed in place.

All existing fixing bolts must be cropped back to just above the nut, making sure that the bolt head does not protrude above the high density foam filler section when the roofing is assembled.

The purlins should then be located and the high density foam fillers fixed in place. At this stage the insulation material, if specified, should be positioned in accordance with the manufacturers instructions. Ensure the depth of the insulation does not exceed that of the foam fillers. Place and fix the Contour OTT sheeting over the original roof and fasten by means of fixings applied through the GRP sheet, the spacers and original roof covering into the purlins.

Contour OTT – Fixings

The recommended fixings are a SCF3 fastener or its equivalent for metal thickness up to 3 mm and not less than 1.5 mm. For thickness up to 12 mm, a SCF12 fastener or its equivalent is recommended. These fixings will allow for expansion of the profile sheeting by enlarging the hole through the asbestos as it is drilled.

It is important when installing the fixings that they are not over tightened and it is recommended that a torque wrench be used to apply the manufacturers specified torque setting.

Contour OTT – Sealing

Apply a pre-formed cross linked type Butyl sealing strip to end laps, side laps and stitch side laps at centres not greater than 300 mm with a 6 mm x 25 mm Tec High Torque Stitcher with a 16 mm sealing washer. Using a polyethylene pre-formed spacer section, seal the sheets at the eaves but allow for drainage of any condensation into the gutter.

Contour OTT – Ridge Sections

Fix in place and seal the ridge as necessary using a pre-formed polyethylene spacer section.

Contour OTT – Safety

It is essential that the Contour OTT sheeting is not used as a walkway, safety platforms must always be used and attention is drawn to the Health and Safety Guide published by HMSO "Safety in Roof Work" (HSG 33). GRP sheets have varying degrees of non fragility classification, depending upon their specification.

Further information and advice may be obtained from our sales office.

Asbestos and Contour OTT

During 1999 new regulations were introduced covering the installation and removal of Asbestos. Strict controls were imposed and effectively the sale and installation of new asbestos was banned. Not only does this apply to new product but also to used asbestos. However, where asbestos has been already installed within a property it may be removed and re-installed but only within that same property.

The Health and Safety guidelines for working with asbestos provide full information and the Company recommends that the HSE documents HSE 189/2 "Working with Asbestos Cement" is obtained by anyone considering repairing or replacing asbestos substances.

In general the guidelines recommend that:

- Asbestos should not be abraded due to resulting release of asbestos dust.
- Consideration is given to over sheeting any damaged area rather than to risk repairing or removing the asbestos itself, thus restricting the release of asbestos dust. For this application Contour OTT can provide a solution.
- If it is necessary to remove asbestos sheeting then water applied to the asbestos product prior to its removal to dampen the surface will help reduce dust release.
- Care should be taken to avoid dropping the removed sheets, and waste chutes should not be used.
- Once removed, sheets should be placed in a covered skip and not be broken.
- Disposal of asbestos must be carried out by the specifically licensed authorities.