**Project Profile** Marks & Spencers Retail Store The Gyle Shopping Centre Edinburgh



## Roof Repair and Replacement: How to Re-Roof a Building whilst In Use



This is Edinburgh's largest Marks & Spencers retail store, at The Gyle shopping centre, built in 1993.

In 2010-2011 the metal composite roof of the 106,000 sq ft retail unit rapidly developed leaks and the owners were facing months of disruption and lost revenue whilst vital re-roofing was carried out.

It is possible to re-roof a building whilst trading normally, saving a retailer hundreds of thousands of pounds in lost business and Customer disruption, but the project needs to be carefully co-ordinated.

## What to Consider when Re-Roofing

Here are some points to consider when looking at re-roofing a building in use:

- 1. In order to avoid noise disturbance, choose a bonded roofing material rather than mechanical fixing. At the M&S Gyle project, Graham Roofing (Scotland) Ltd used SIG Armourplan PSG120 bonded with SIG IKOpro PU Hi-Performance Adhesive.
- Re-roofing is also a good opportunity to increase the insulation u-values of a roof, upgrading the specification and thereby mitigating future running costs. It is also essential to carry out a survey of all interfaces to ensure that any additional insulation thickness maintains compliance with minimum upstand requirements to meet the Building Regulations.
- 3. The greatest risk to the success of your project is poor communication, so ensure that a competent and insured Designer Manager manages and takes responsibility for the reroofing. At M&S Gyle, SIG Design and Technology provided detailed design and Design management, giving expert and PI Insured design services, project co-ordination, Site Inspection and full system guarantees.
- 4. Contractors must not disturb customer access to the facility, so it is essential to ensure that all products can be delivered to site and onto the roof discreetly. In the case of M&S Gyle, all

major deliveries took place out of hours, and products were hoisted onto the roof from isolated loading areas rather than public areas.

5. Ensure the quality of the finished roof by using a fully qualified and approved contractor. In this case Graham Roofing (Scotland) Ltd, a DATAC approved contractor with experienced, trained operatives, producing a high performance replacement roof with a full 15 year system warranty.



Here are the steps SIG Design & Technology took at M&S Gyle to ensure a successful project. This service is provided at no cost to the client:

- Inspect the roof substrate to ensure it can take any additional load;
- Carry out a full survey of all interfaces to determine the viability of additional insulation within minimum upstand limits and other building constraints;
- Check current U-values, calculate designed u-values and carry out a condensation risk analysis;
- Carry out wind uplift calculations;
- Produce detailed drawings of all proposed interfaces;
- Prepare and issue a J42 specification for the roof;
- Develop a sequence of working and have agree operational methods with the DATAC approved contractor;
- Stress the importance of 'night seals' between new work and old work;
- Provide on-site support throughout the project.

## Aerial image of The Gyle Shopping Centre by Colin Anderson (Creative Commons License)

Copyright © 2013 SIG Design & Technology, All rights reserved. <u>Visit our website www.singleply.co.uk</u> <u>Follow on Twitter</u> <u>Visit us on Linkedin</u> <u>Visit our Technical Blog</u>

Our mailing address is: SIG Design & Technology Mannheim House Gelders Hall Road Shepshed, Leicestershire LE12 9NH United Kingdom