

# Health and Safety Executive OC 417/5

Field Operations Division

To

Factory Inspectors (Construction Groups)

FCG Specialist Inspectors (Construction)

## NON-FRAGILE ROOFLIGHTS USED BY CONDOR GROUP TECHNICAL

### Introduction

1 This OC describes rooflights that can be considered to be non-fragile for the first year of their life.

### Background

2 Condor Group Technical have been investigating the use of glass fibre reinforced plastics rooflights to produce a system that can be considered to be non-fragile. To this end, a number of manufacturers' products and forms of fixing have been tested using the now standard drop test of 45 kg falling 1.2 m.

3 Tests have already been successfully carried out on the Condor underlining sheet, 0.4 mm thick steel, and this is recorded amongst other non-fragile materials in TD Minute TD3B/INF/5/89.

4 The low rooflight system to be used by Condor consists of sheet 1.2 m wide spanning 1.8 m as part of the general roof cladding. There are 2 known suppliers and the full system consists of:

(1) SAA Class 1, 5 oz Condor lining GRP rooflight;

SAB Class 3, 6 oz Condor clad 1200 GRP external rooflight;

All supplied by Martin Plastics.

or

(2) A similar profile and weight of sheets supplied by BIP Filon.

In both cases top and bottom fixings of the sheet need to be 6 in number and each side lap fixing 7 in number.

5 It will be appreciated that at a stage when only the underlining sheets are fixed, the bottom sheet of 5oz GRP cannot be considered to be non-fragile. To counter this, Condor have used an overlay to the GRP sheet. This sheet consists of a panel of galvanised steel mesh 12 SWG on a 75 mm grid fixed immediately above the lining panel. This system will also successfully withstand the drop test.

6 Condor intend that the use of either the double GRP sheets or the single GRP sheet with the galvanised steel mesh is to provide safety for their own erectors and cladders and for other employers' workers during erection and then only for the first year after completion of the roofing. Thereafter it is possible that ultra violet deterioration of the plastics material or rusting of the galvanised steel may have occurred and the rooflight is then to be treated as fragile and the necessary precautions taken.

## **Action by inspectors**

7 After the lapse of one year of life of the roofing, inspectors will need to be cautious in their approach to demanding precautions or taking further action.

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## **ASI headings**

Condor Group Technical: construction: glass reinforced plastic: roofs.