



1000/32 PROLIGHT® ROOFING PROFILE INSTALLATION SPECIFICATION FOR 10 YEAR CLASS B NON-FRAGILITY PERIOD

Rooflight material: Prolight® extruded polycarbonate sheet.

Rooflight thickness: 1.3mm

Isolation from plastisol coating: Plastisol coating on roofing sheets is aggressive to polycarbonate. It is essential that the lapped area of metal sheet at either side of and at the lower end of the polycarbonate rooflight has an aluminium foil adhesive tape applied to completely isolate the polycarbonate from the plastisol-coated metal.

End lap sealing: one row of cross-linked butyl tape, minimum 9mm x 3mm, light in colour, preferably white, each side of the line of primary fasteners.

Side lap sealing: one row of cross-linked butyl tape, minimum 9mm x 3mm, light in colour, preferably white, along the line of secondary fasteners.

Primary fasteners: one primary fastener per valley at end laps and intermediate purlins.

Secondary fasteners: at approximately 300mm centres.

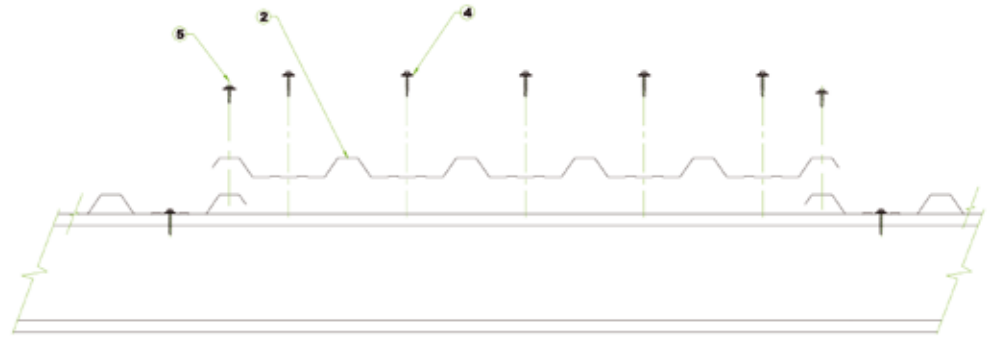
Essential requirements: In the case of polycarbonate rooflights it is essential that:

- The rooflights overlap the metal sheet profile on both sides.
- Only sealant tapes compatible with polycarbonate are used e.g. cross linked butyl.
- Holes for primary fixings are at least 100mm from ends of sheet at top end lap and bottom end lap, and are pre-drilled, minimum 10mm diameter, to provide for thermal movement.
- Holes for secondary fasteners are 10mm diameter to allow for thermal movement.
- The metal sheet upslope lapping on to the rooflight is fixed through every valley on the end lap.
- Primary fasteners have washers of minimum diameter of 26mm: secondary fasteners have washers of minimum diameter 19mm.
- Washers have bonded-on EPDM or other material compatible with polycarbonate.
- Fixings to timber purlins have the appropriate thread form and penetrate the timber no less than 45mm.
- There are no aggressive environmental conditions or chemicals where the material is used.
- Where purlin centres exceed 1800mm or are less than 1200mm guidance is obtained.
- Installation is otherwise as per supplier's general recommendations.

Where similar assurances are obtainable from all other parties whose products and functions have an influence on the rooflight installation over its service life, Prolight® to suit Duggan Profiles & Steel Service Centre Ltd 1000/32 roofing profile 1.3mm thick extruded polycarbonate rooflights with co-extruded UV protection, when correctly installed in accordance with the above fitting instructions, should remain non-fragile for 10 years, satisfying the requirements of the Health & Safety Authority "Code of Practice for Safety in Roofwork" 2005 for Class B non-fragility.

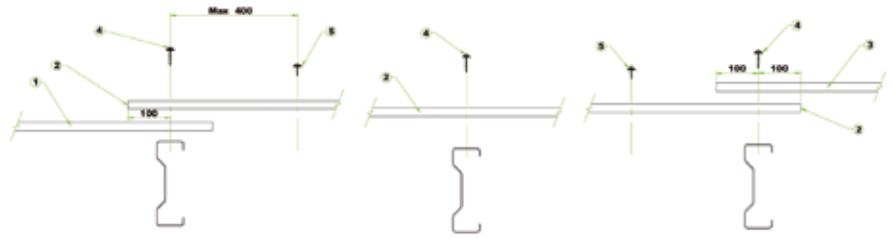
Deterioration of rooflight material may not be the most critical factor as far as the fragility of the rooflight installation is concerned. Long term performance of a roof is often determined by the durability of other components used in the installation - primary fasteners, secondary fasteners, supporting sections - by the standard of workmanship in installation, and the conditions and atmospheric environment to which all installed components are subjected during their service life.

Proclad 32/1000 Installation



Cross-section

Number	Description
1	Downslope Metal Sheet
2	Marlon CS Rooflight
3	Upslope Metal Sheet
4	Primary Fixings
5	Side Stitchers

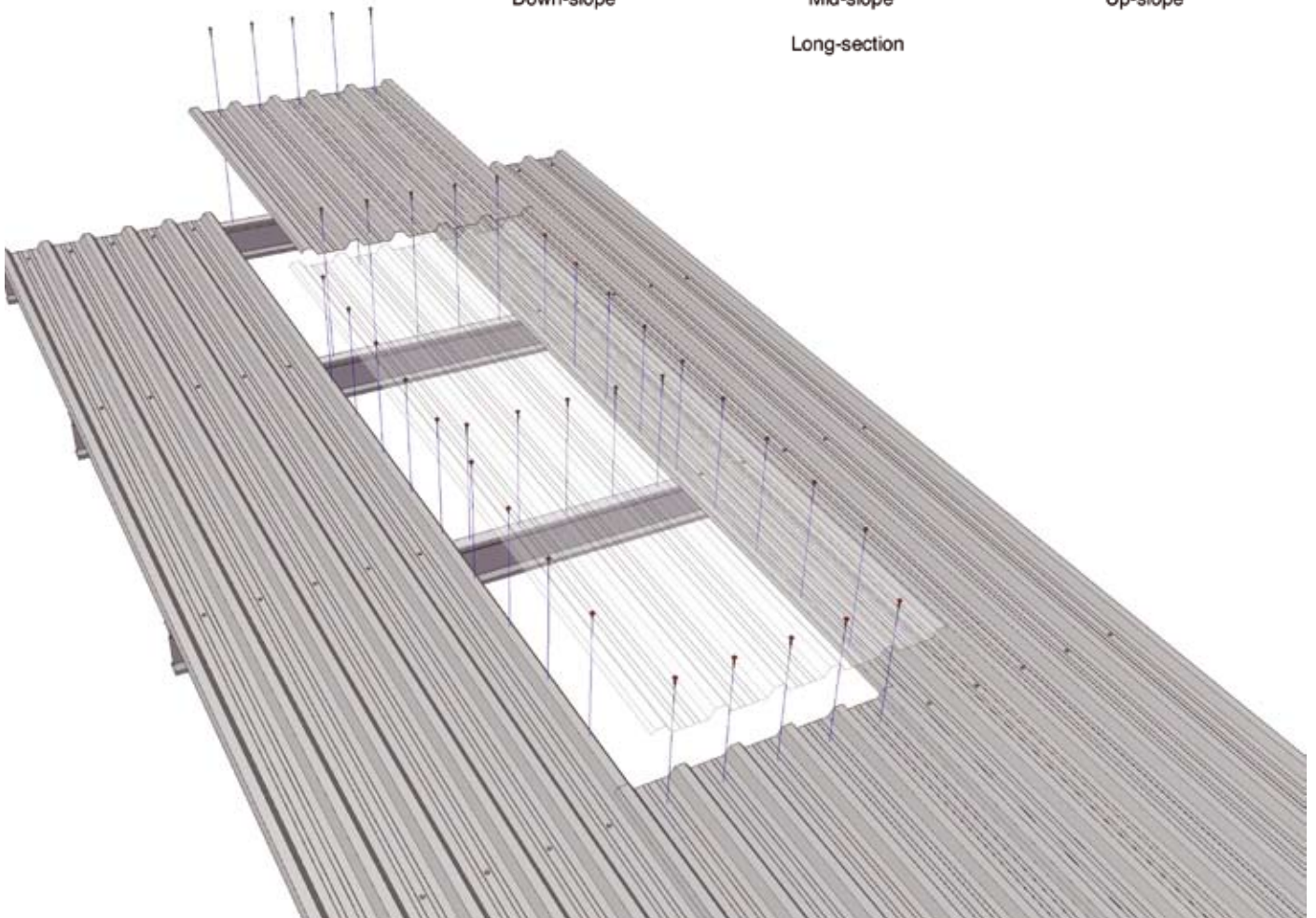


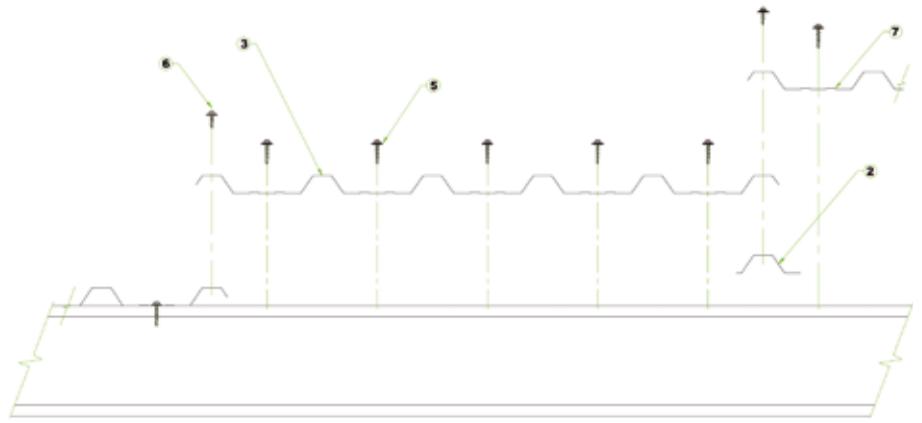
Down-slope

Mid-slope

Up-slope

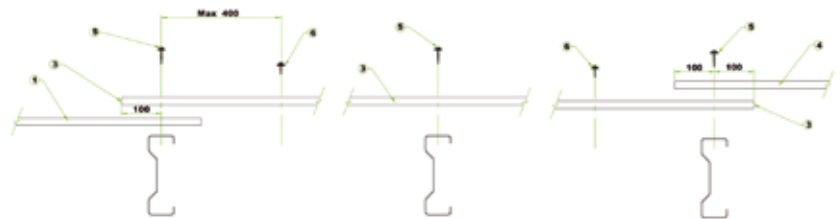
Long-section





Cross-section

Number	Description
1	Downslope Metal Sheet
2	Under-lap Support
3	Marlon CS Rooflight
4	Upslope Metal Sheet
5	Primary Fixings
6	Side Stitchers
7	Adjacent Metal Sheet

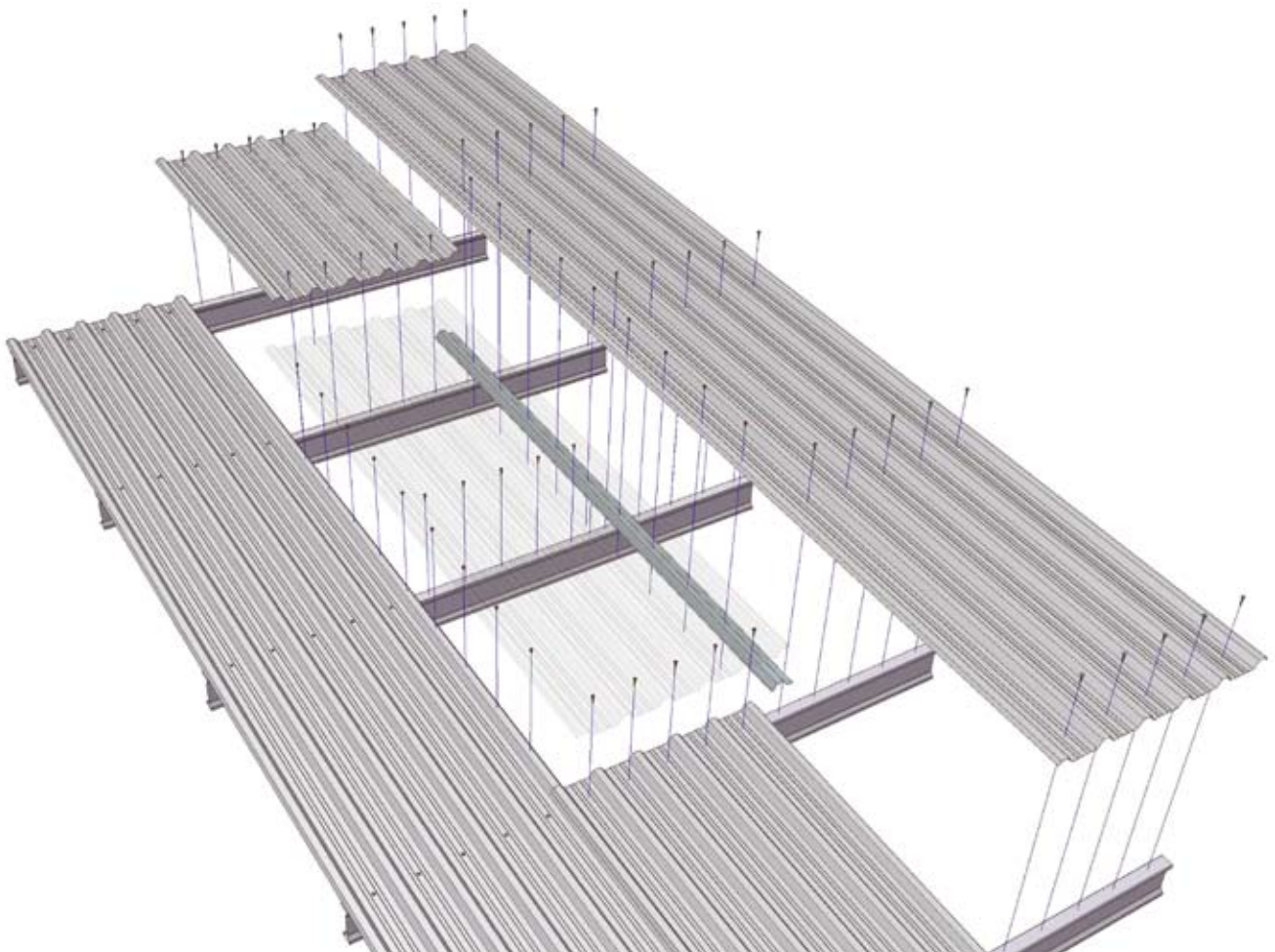


Down-slope

Mid-slope

Up-slope

Long-section



As a basis for this specification, impact tests, to the method described in ACR[M]001:2000, have been completed on a range of profiled Prolight® extruded polycarbonate rooflights, with co-extruded UV protection, of thickness from 0.8mm to 1.5mm, installed as part of a roofing assembly, to confirm non-fragile specification details, including fixing, and any additional requirements. This specification is valid where the purlins are of hot or cold rolled steel section or timber of appropriate section.

The condition of profiled rooflights, including the security of fixings, should be checked periodically as part of the overall maintenance programme for the structure into which they are incorporated. If a rooflight is found to be damaged it must be replaced in accordance with the original specification for the installation to remain non-fragile.

Recommendations are made specific to individual projects, detailing rooflight material and form, together with the appropriate sheet weight or thickness, fixings and any additional measures necessary to provide non-fragile rooflight installations.

Only competent persons should be authorised to be on a roof at any time: they must be made aware of the hazards likely to be encountered e.g. fragile areas of roofing, slippery surfaces, risk of falling at eaves or gable, and any other hazards specific to any one building.

Rooflights must not be walked on at any time.

Ref.: BML , October 2007, Issue 4