

Rooflight Company Products

TECHNICAL SPECIFICATION

March 2005

GENERAL INFORMATION

Technical Specification:

Steelwork:

- Folded and welded steel sheet. Either S275JR or FeP01 to BS EN 10025 and BS EN 10130 respectively.
- Sheet steel generally 3mm thick, rising to 4mm on certain applications.
- Bending radii are generally 5mm. Welds are kept to a minimum, and located away from the main weathering areas.

Protective coatings:

- The coating regime provides longevity to first maintenance of equivalence to "medium" and "long" as defined in BS5493: 1977 Section 2, Table 3, according to the severity of exposure:
 - Exterior non-polluted inland: Long (10 to 20 years).
 - Exterior polluted inland: Long (10 to 20 years).
 - Exterior non-polluted coastal: Long (10 to 20 years).
 - Exterior polluted coastal: Medium (5 to 10 years).
- Galvanising is either: Hot-dip galvanising to BS En ISO 1461:1999, or shott blast/hot zinc spray respectively to SA3 and BS En 22063:1993 (minimum dry film thickness 75 microns).
- Paint coatings: Polyester Powder paint applied to BS 6497: 1984, Section 2.
- Inspection and documentation of coated fabrications is to BS 1722 part 16.

Glazing:

- Sealed double-glazing panels manufactured to BS 5713. Standard panels utilise 4mm clear toughened outer, a 12mm air gap and 4mm clear lowE toughened inner.
- The design of the glazing installation into the rooflight frame is of 'drained' type.
- Edge sealing and pointing between the glazing panels and metal frame is carried out in two separate applications of a BS 5889 Type A low modulus neutral-cure silicone sealant. This type of silicone is resistant to UV, ozone, is non-corrosive to ferrous metals and does not require painting. A 20 year guarantee is applicable with respect to adhesion.

Weathertightness:

- All standard rooflights meet and exceed the requirements of BS 6375 Part 1: 1989.

U-Value and Thermal Break:

- All standard Rooflight Company rooflights may be considered to be the equivalent of double-glazed metal windows with a thermal break (if fitted with a *Thermoliner*®) as set out in Building Regulations deemed to satisfy provisions.
 - As standard they have a stated installed U-value of 1.7 W/sq.m./deg K.
- The Patented *Thermoliner*® device (optionally available) provides a thermal shield between internally and externally exposed elements of the rooflight frame, collects condensation that may form on the internally-exposed sections, and drains this to the outside of the building.

Flashings and Weatherings (by others):

- Flashings to rooflight cill and (in exposed areas) head should be formed in Lead Sheet to BS1178: 1982. Code 3 is sufficient for sheltered locations and code 4 or 5 for more exposed locations. Maritime/seaside locations may additionally require clipping down of the flashings. Refer to The Lead Sheet Manual Volume 1 for further information. A low-modulus neutral-cure silicone should be used as a bedding between the rooflight cill and the lead flashing at the cill. See cill abutment details.
- Flashing width should be the co-ordinating width of the rooflight + 200mm + say a further 300mm to underlap adjoining tiles.
- Lead soakers are strongly recommended as weatherings to pitched roof rooflight jambs on account of their low-maintenance characteristic. These can in most cases be code 3 lead, or code 4 in exposed locations. See also jamb abutment details.
- Where mortar bedding is used at the rooflight jambs the mortar should be 1:1:5 (cement:lime:lime aggregate). The bedding should be struck off and pointed in one operation to give a clean vertical face slightly recessed from the edge of the bedded tile. Pointing should not be carried out in separate materials.

Roof tiling (by others):

- Roof tiling shall be laid in accordance with BS 5534 Part 1 and 2 – Code of Practice for slating and tiling, and BS 8000 Part 6 – Code of Practice for Workmanship on building sites for roof, slate and tile coverings and claddings.

Miscellaneous:

- All bolts utilised in the hinge assemblies are A2 -18/8 (304 grade S15 stainless) shanked steel. Nuts are also A2 nylon-lock type.
- Nylon washers are used between hinge posts, and 304 grade stainless washers under nuts/bolt heads.
- The Rooflight Company rooflights do not fall within the current HSE definition of 'frail' rooflights.