**NOVEMBER 2023** PAGE 1 OF 3

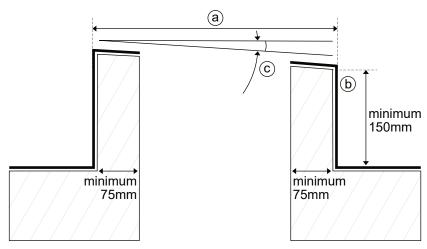
### Flat Glass



### **TB400**

# Fixed Flat Glass Rooflight Builders upstand and pitch requirements

#### Upstand and pitch requirements



- (a) Finished insulated and weathered upstand external dimension: Unvented rooflight = Nominal Rooflight size (+20/-0mm) Vented rooflight = Nominal Rooflight size (+40/-20mm)
- ⓑ Roof covering should cover side and top of insulated upstand in accordance with manufacturer's installation recommendations

IB there should be no excessive build up of layers. The top urface should be level and free from protrusions or projections.

© The rooflight must be mounted at a minimum pitch (dependent on size, shown below) to ensure adequate water runoff. If the roof fall is less than required then the upstand itself should be built with a pitch.

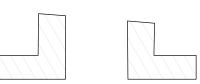
Flat Glass units are suitable for mounting at pitches of 2°-15°

A minimum pitch of 2° or 4° is required to prevent water ponding on the glass leading to rapid dirt build up. See matrix for minimum pitch according to size.

|       |      |     |     |     |      |      |      |      | ι    | Jnit L | ength |      |      |      |      |      |      |      |      |      |
|-------|------|-----|-----|-----|------|------|------|------|------|--------|-------|------|------|------|------|------|------|------|------|------|
|       |      | 600 | 750 | 900 | 1000 | 1050 | 1200 | 1350 | 1500 | 1650   | 1800  | 1950 | 2000 | 2100 | 2250 | 2400 | 2550 | 2700 | 2850 | 3000 |
|       | 600  | 2°  | 2°  | 2°  | 2°   | 2°   | 2°   | 2°   | 2°   | 2°     | 2°    | 2°   | 2°   | 2°   | 2°   | 2°   | 2°   | 2°   | 2°   | 2°   |
|       | 750  |     | 2°  | 2°  | 2°   | 2°   | 2°   | 2°   | 2°   | 2°     | 2°    | 2°   | 2°   | 2°   | 2°   | 2°   | 2°   | 2°   | 2°   | 2°   |
|       | 900  |     |     | 2°  | 2°   | 2°   | 2°   | 2°   | 2°   | 2°     | 2°    | 2°   | 2°   | 2°   | 2°   | 2°   | 2°   | 4°   | 4°   | 4°   |
| _     | 1000 |     |     |     | 2°   | 2°   | 2°   | 2°   | 2°   | 2°     | 2°    | 2°   | 2°   | 2°   | 2°   | 4°   | 4°   | 4°   | 4°   | 4°   |
| Width | 1050 |     |     |     |      | 2°   | 2°   | 2°   | 2°   | 2°     | 2°    | 2°   | 2°   | 2°   | 2°   | 4°   | 4°   | 4°   | 4°   | 4°   |
|       | 1200 |     |     |     |      |      | 2°   | 2°   | 2°   | 2°     | 2°    | 2°   | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   |
| Unit  | 1350 |     |     |     |      |      |      | 2°   | 2°   | 2°     | 2°    | 2°   | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   |
| -     | 1500 |     |     |     |      |      |      |      | 4°   | 4°     | 4°    | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   |
|       | 1650 |     |     |     |      |      |      |      |      | 4°     | 4°    | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   | 4°   |
|       | 1800 |     |     |     |      |      |      |      |      |        | 4°    | 4°   | 4°   |      |      |      |      |      |      |      |
|       | 1950 |     |     |     |      |      |      |      |      |        |       | 4°   | 4°   |      |      |      |      |      |      |      |
|       | 2000 |     |     |     |      |      |      |      |      |        |       |      | 4°   |      |      |      |      |      |      |      |

For finished roof pitches that are less than the minimum needed then the pitch can be built into the upstand

If finished roof pitch is greater than 5 degrees then the top of the upstand must be perpendicular to the sides and parallel with the roof surface.



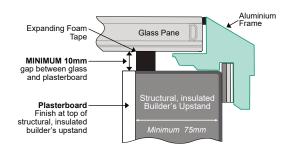




Roof pitch less than minimum required

Roof pitch more than 5 degrees

#### Plasterboard guidance



Finish plasterboard at the top of the structural, insulated builder's upstand, ensuring there is a MINIMUM 10mm gap between the plasterboard and the underside of the glass. For more information see TB409.

#### Annealed, laminated inner pane

These Flat Glass rooflights are manufactured using double glazing which includes an inner pane of annealed, laminated safety glass, which prevents falling glass in the event of accidental breakage, for the safety of those below the rooflight.

In some circumstances, annealed, laminated safety glass can be subject to thermal stress fracture in the event of uneven heat build-up directly under the glass. Installation of blinds, or any other alterations made to the lightwell below the rooflight, must be done so with consideration to the risk of thermal stress fracture. In the case of blinds, the risk of thermal stress fracture can never be fully removed, but it can be reduced by choosing light coloured blinds, positioning them as far away from the glass as possible, and including ventilation in the rooflight specification.



More detailed guidance can be obtained upon request.

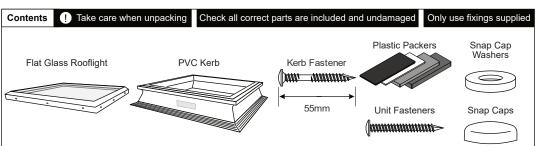
NOVEMBER 2023 PAGE 3 OF 3

### **Flat Glass**



### **TB400**

Fixed Flat Glass Rooflight on PVC kerb



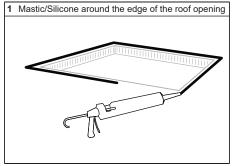
| Kerb                     | Fixing Quantities |                               |  |  |  |  |  |  |
|--------------------------|-------------------|-------------------------------|--|--|--|--|--|--|
| Length of N<br>Unit Side |                   | Number of fixings<br>per side |  |  |  |  |  |  |
| 750 and เ                | ınder             | 2                             |  |  |  |  |  |  |
| 751 to 1                 | 200               | 3                             |  |  |  |  |  |  |
| 1201 to 1                | 650               | 4                             |  |  |  |  |  |  |
| 1651 to 1                | 950               | 5                             |  |  |  |  |  |  |
| 1951 to 2                | 2250              | 6                             |  |  |  |  |  |  |
| 2251 to 3                | 3000              | 7                             |  |  |  |  |  |  |

#### 1 All Health & Safety Regulations must be followed on site throughout the installation process

#### (i) Unit pitch

See page 1 for minimum roof pitch requirements.

If roof pitch is less than the minimum required then firring strips should be used to ensure unit is installed with adequate pitch.



## WARNING! Flat glass units are heavy. Some units may require a mechanical lift.

| Glass Unit                        | Fixing Quantities |
|-----------------------------------|-------------------|
| Length of Nomin<br>Unit Side (mm) |                   |
| 899 and under                     | 2                 |
| 900 to 1500                       | 3                 |
| 1501 to 2000                      | 5                 |
| 2001 to 2500                      | 7                 |
| 2501 to 3000                      | 9                 |
| 3001 to 3600                      | 11                |

