

# McKenzie-Martin Ltd

## Ventilators Louvres Rooflights

Eton Hill Works, Eton Hill Rd, Radcliffe, Manchester M26 2US  
 Telephone: 0161-723 2234 Fax No: 0161-725 9531

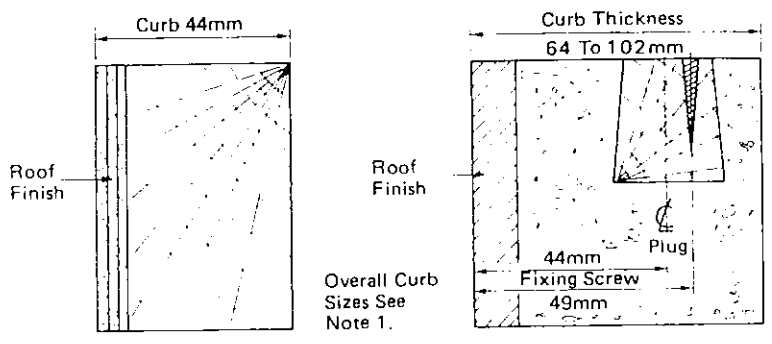


# Rooflight Fixing Instructions

### CONSTRUCTION OF CURB FOR TYPES A, B, CV, C AND CS

**IMPORTANT ROOF FINISH TO BE APPLIED BEFORE FIXING ROOFLIGHT. GLAZING TO BE CARRIED OUT AFTER ROOFLIGHT HAS BEEN FIXED.**

1. Types A, B, CV, C and CS are fixed unglazed to an existing timber or concrete builders curb which has a suitable felt or asphalt weathering. The overall finished curb size, including felt or asphalt weathering finish, should be exactly the same as the nominal size of the rooflight ordered, i.e. for 900mm x 900mm rooflight, the curb should be finished 900mm x 900mm overall. The overall finished curb height should be 150mm minimum. For types A, B and CV the curb thickness must be either exactly 44mm thick (for maximum daylight) or at least 75mm thick. For types C and CS the curb thickness must be a minimum of 64mm and a maximum of 102mm.



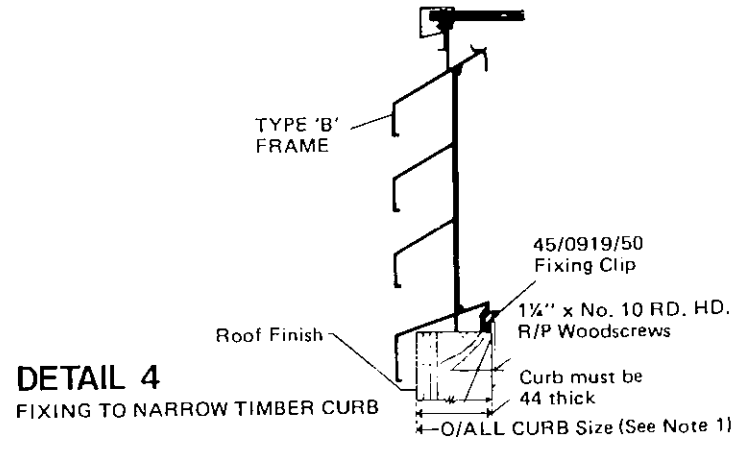
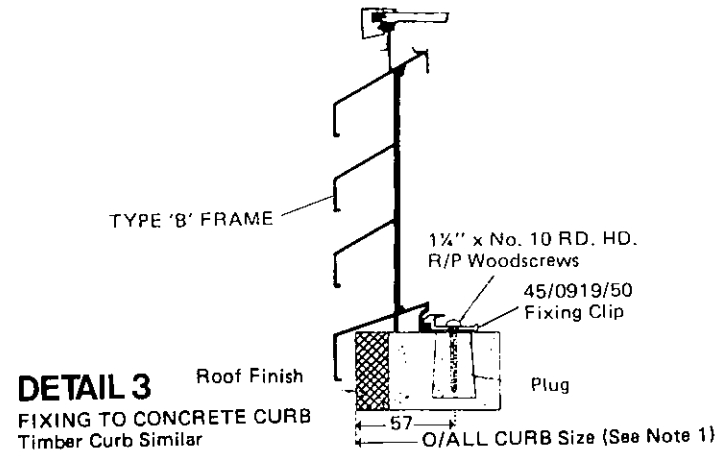
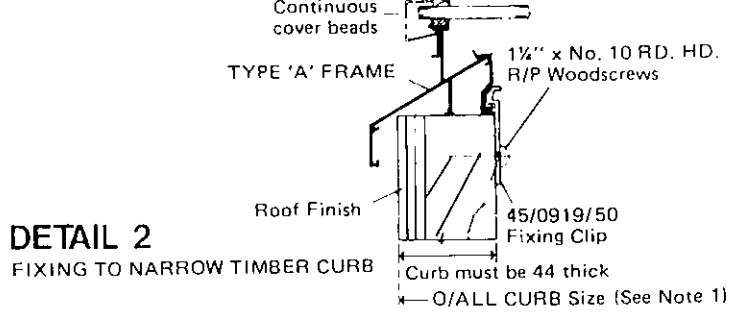
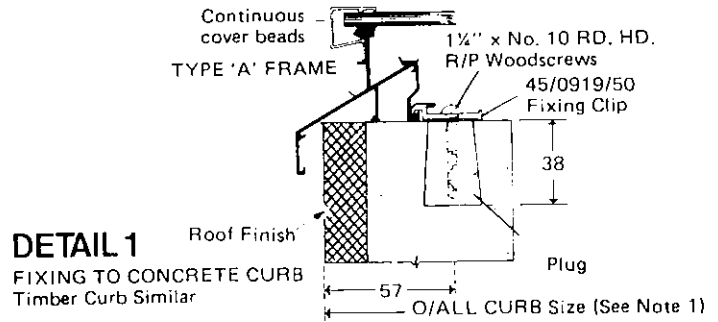
2. The top face of the curb should be firm, flat and level. Any cavities or protrusions may distort the rooflight frame, resulting in possible breakage of the glass and leaks.

All future dimensions in this leaflet are in millimetres except wood screws & P.K. screws which are imperial sizes.

### FIXING TYPES A (DETAILS 1 & 2) AND TYPE B (DETAILS 3 & 4).

3. Place the rooflight centrally over the curb to give an even overhang all round. This should be 12mm on each side.

4. Fix the rooflight to the curb at the fixing position shown on Page 5 using the universal fixing clip and the wood screws supplied. The clips locate in the continuous recess in the inside leg of the frame and can be moved along to pick up the fixing plugs as required. Before finally screwing down make sure that the rooflight is touching the curb at all points, or bed if necessary, to prevent distortion and possible leakage.

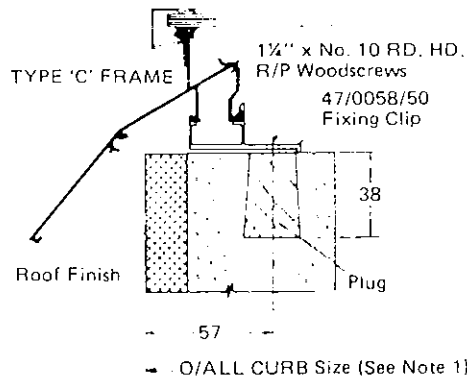


# FIXING TYPE CV (DETAILS 5 & 6)

5. Snap the permanent ventilation fixing clip into the frame, at curb position indicated on Page 5.

6. Place the rooflight centrally over the curb to give an even overhang all round.

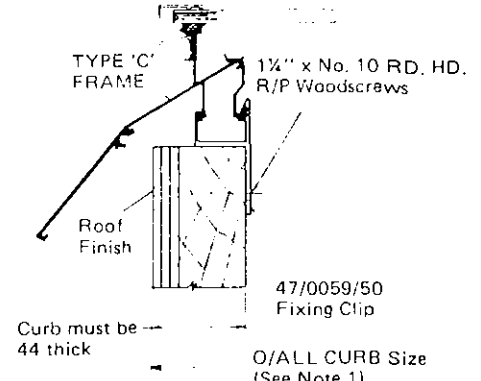
7. Fix the rooflight to the curb at fixing positions shown in Page 5 using the wood screws supplied. The fixing clips can be tapped along to pick up with the fixing plugs as required.



## DETAIL 5

FIXING TO CONCRETE CURB GIVING PERMANENT VENTILATION

Timber curb similar



## DETAIL 6

FIXING TO NARROW TIMBER CURB GIVING PERMANENT VENTILATION

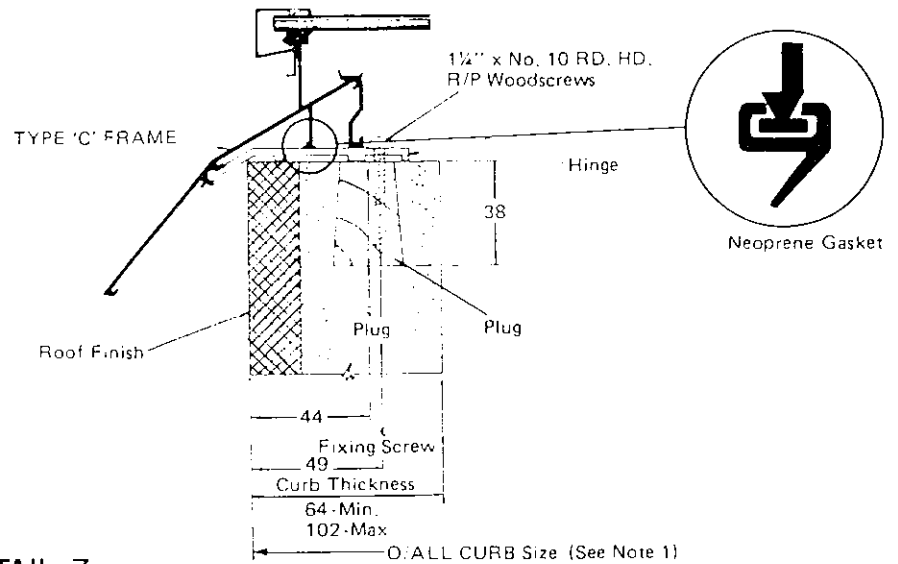
# FIXING TYPE C AND TYPE CS

IMPORTANT. Types C and CS are not access rooflights and must not be opened more than 45° or hinge will be strained.

8. Identify the hinged side and gear side of frame and curb before fixing.

## TYPE C ONLY (DETAIL 7).

9. Fit neoprene gasket and place the rooflight centrally over the curb to give an even overhang all round. Fix each hinge to the curb with the wood screws supplied. Before finally screwing down make sure the rooflight is level with the curb.



## DETAIL 7

FIXING OF HINGED SIDE OF 'C' TYPE TO CONCRETE CURB

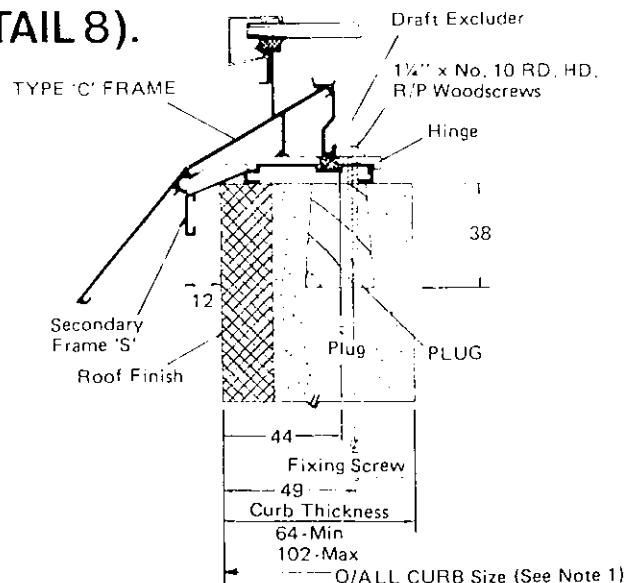
Timber curb similar

## FIXING TYPE CS ONLY (DETAIL 8).

10. Place the secondary frame centrally over the curb to give an even overhang all round. The hinged side can be identified by double holing for hinge.

11. Fix down frame to curb with wood screws supplied using all single fixing holes on all four sides but leave double holes for hinges. Before finally screwing down make sure the secondary frame is flat and touching the curb at all points, or bed if necessary, to prevent distortion and possible leakage.

12. Place hinged frame on secondary frame so that inside leg sits evenly on draughtproofing strip, and holes in hinges line up with double holes in secondary frame. Screw down each hinge with wood screws.



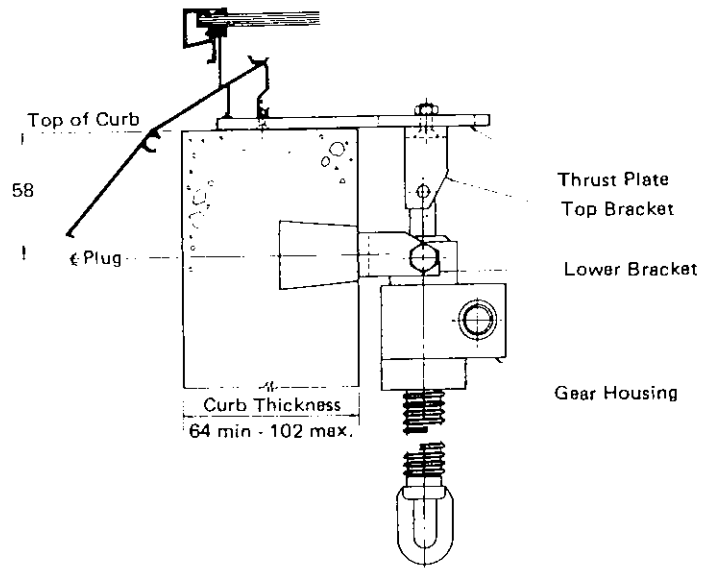
## DETAIL 8

FIXING OF HINGE SIDE OF "CS" TYPE TO CONCRETE CURB.

Timber curb similar

## OPENING GEAR TO TYPES C AND CS (DETAIL 9).

13. Gears must be fitted before glazing.
14. Ensure that gears are in the closed position.
15. Offer up assembly and loosely bolt top brackets to slotted holes in thrust plates.
16. Line up gears in the closed position – mark position of lower brackets then detach these brackets from gear housings and fix to curb with woodscrews provided.
17. Refix one gear to its lower bracket – insert connecting rod in recessed keyways – bolt other gear to its bracket.
18. Plumb and level the gear assembly by moving the top brackets in the thrust plate slots. Tighten bolts.

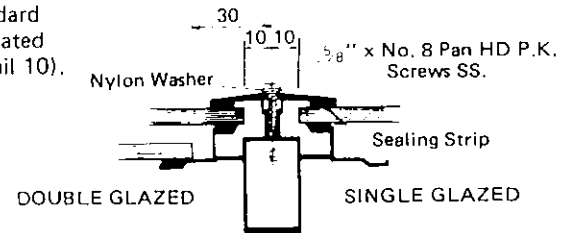


DETAIL 9

## CONTINUOUS ROOFLIGHTS TYPES A, AE, B, BE AND CVE

19. Curbs and prepared openings are similar to those constructed for unit rooflights.
20. Continuous rooflights are supplied in knock-down form and progressively assembled on site using joint plates weathered by the sealant supplied. Fixing cleats must be fitted both sides of the joint plates and 200mm from each corner. Other cleats are positioned at intervals not greater than 600mm. Before finally screwing down make sure the rooflight is touching the curb at all points, or bed if necessary, to prevent distortion and leakage.

21. The glazing space is divided by intermediate bars, averaged to give the largest equal pane size not exceeding 1.8m<sup>2</sup>. Special glazing requirements, e.g. standard pyramids or domes, can be accommodated by agreement at order stage. (See Detail 10).



DETAIL 10

DETAIL FOR PYRAMID AND DOME PROFILES SIMILAR

## CONSTRUCTION OF ROOF OPENINGS FOR TYPES AE, BE, CE, CVE, ACCESS AND SMOKEVENT ROOFLIGHTS

22. Types AE, BE, CE, CpE, Access Rooflights and Smoke Vent are supplied shop fitted to extruded aluminium upstands. No builders curb is required. (See Note 27 below).
23. The prepared roof opening should be exactly the same as the nominal size of the rooflight ordered, i.e. for a 900mm x 900mm rooflight, the opening should be prepared 900mm x 900mm inside. This allows 9mm all round for light-well finishes to the inside leg of the upstand.
24. The seating for the upstand should be firm and flat. Roof felt or asphalt weathering finish should be applied after the upstand is fixed.

## FIXING TYPES AE, BE, CE, CVE, ACCESS AND SMOKEVENT ROOFLIGHTS (DETAIL 11)

**IMPORTANT.** Type CE is not an access rooflight and must not be opened more than 45° or hinge will be strained.

25. Centralise rooflight within roof opening. Position fixing clips at locations shown in Page 6. The ribbed face of clip engages with ribbed on flange of upstand.

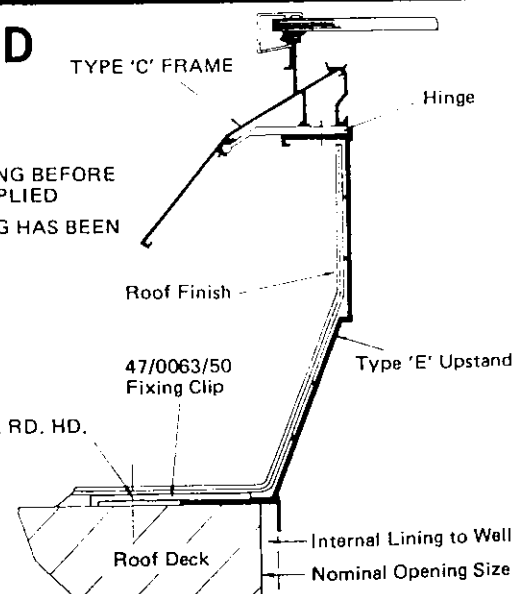
26. Before screwing down ensure that the upstand is properly seated all round, and pack if necessary to avoid distortion.

27. Complete roof finish, carrying it up to the top of upstand as shown.

**NB.**

ROOFLIGHT TO BE FIXED IN ROOF OPENING BEFORE ROOF FINISH and INTERNAL LINING IS APPLIED  
ROOFLIGHT TO BE GLAZED AFTER FIXING HAS BEEN COMPLETED.

No. 10 x 1 1/4" LG. RD. HD. R/P Woodscrew



DETAIL 11

FIXING FOR 'E' UPSTANDS

Common for all Rooflight Types

# GLAZING INSTRUCTIONS.

- 28. All rooflights are glazed after fixing. Ensure glass is clean and edges unchipped.
- 29. All glazing is bedded on 5mm sealing strip which is normally supplied fitted to the rooflight frame.

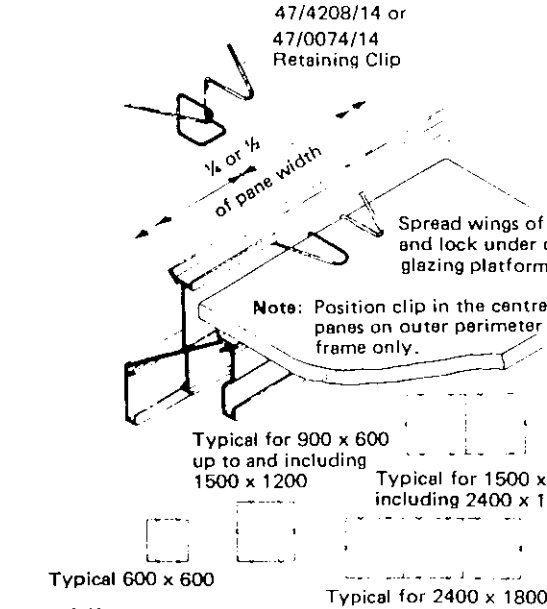
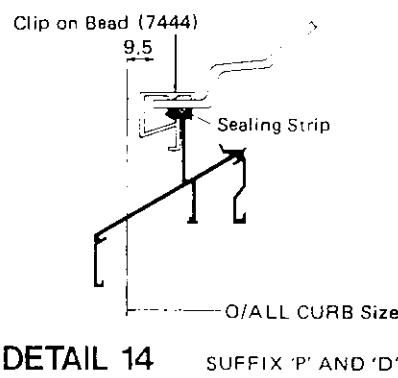
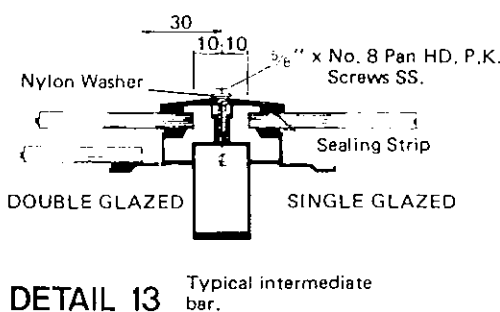
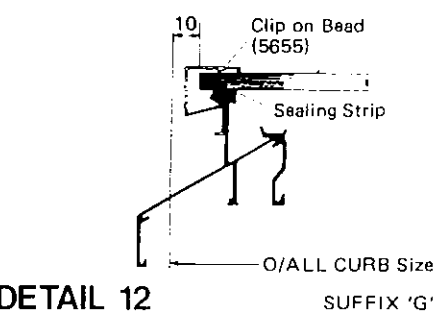
## SINGLE GLAZING – 6mm Georgian Wired Cast Glass, P.V.C. Pyramids or Domes (Details 12, 13, 14.)

- 30. Place glazing centrally on top glazing level (glass, smooth side up).
- 31. On rooflights divided by an intermediate bar, next fit the intermediate bar cap. Position cap over bar. Insert the special nylon washer to P.K. screw. Screw down sufficiently to compress sealing strip.
- 32. Place snap on glazing beads over the edge of the glazing with the flat surface on top. These are cut to give an 2mm drainage gap at mitre. Equalise position of bead and working from one end dress bead into snapped position with mallet.

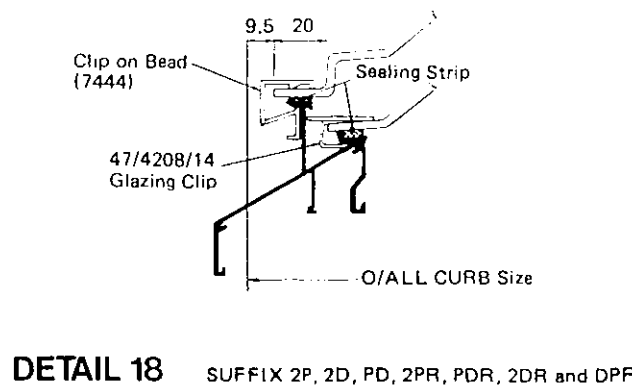
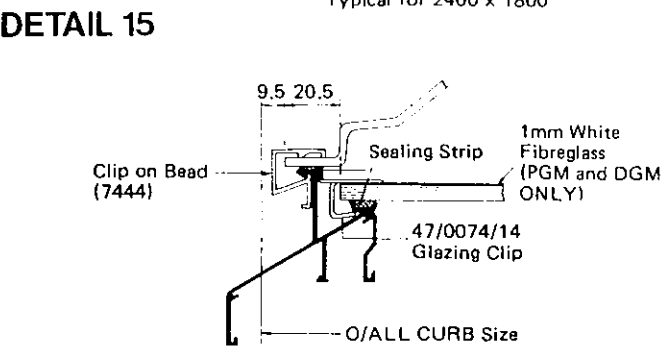
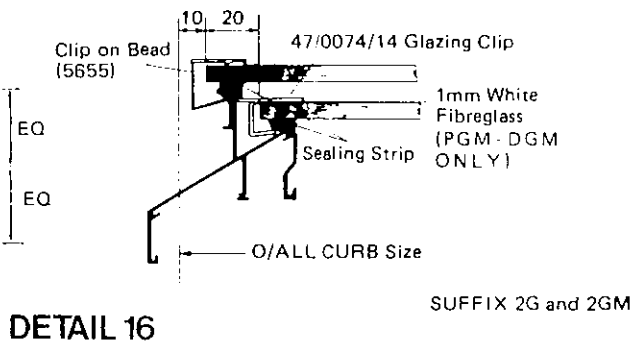
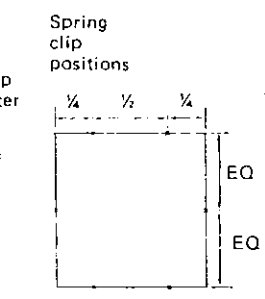
## DOUBLE GLAZING – Glass 6mm Rough Cast over 6mm Georgian Wired Rough Cast (Details 13, 15, 16) – Pyramids and Domes (Details 18 and using 6mm glass inner, detail 17.)

- 33. Fit lower glazing first. If necessary, apply 5mm sealing strip to lower glazing level, tightly butting sealing strip at corners. Glass – (smaller pane) is fitted smooth side down and secured with spring glazing clips. Where a fibreglass interlayer is supplied, it is secured on top of the lower pane with these spring clips. Pyramids and Domes – secure inners with spring glazing clips provided.
- 34. Upper glazing as Single Glazing.

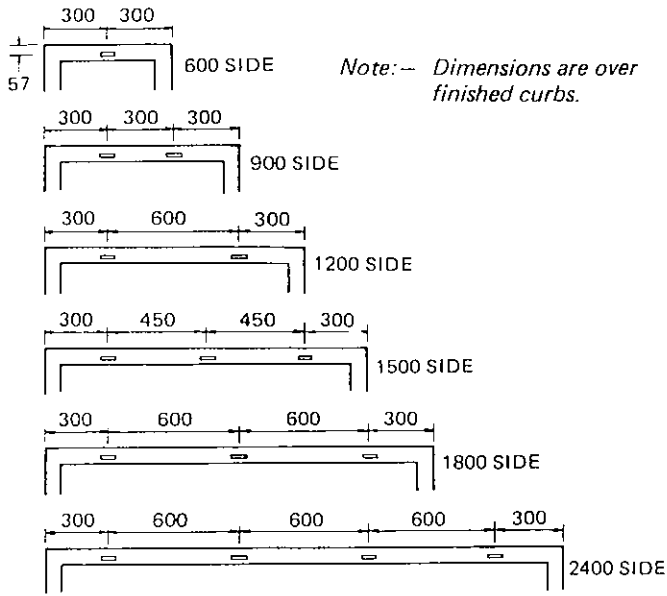
**IMPORTANT.** Regular cleaning of glass is necessary to avoid possible thermal build up and breakage.



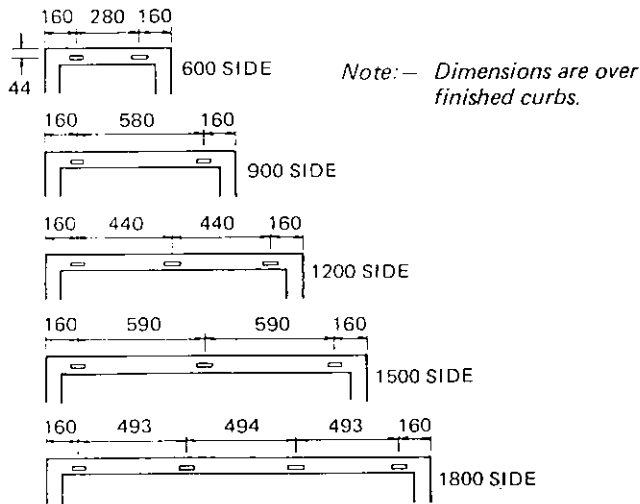
Suffix are for arrangements of glazing materials (glass, pyramids and domes) as illustrated in catalogue.



# CURB PLANS RELATIVE FIXING POSITIONS FRAME TYPES A, B & CV AND TYPES AE, BE & CE



# FRAME TYPES C & CS



Type C Frame – Plug positions for hinges. Only required on one long side of curb.  
Type CS Frame – Plug positions for secondary frame, required on all four sides.

# FIXING PARTS LIST

PROFILE	PART No.	DESCRIPTION
	98/5655/50	GLAZING BEAD FOR 6mm GLAZING
	7444	GLAZING BEAD FOR 3mm PVC GLAZING
	98/5656/50	INTERMEDIATE BAR CAP
	47/4208/14	SPRING GLAZING CLIP FOR 3MM PVC INNER GLAZING
	47/0074/14	SPRING GLAZING CLIP FOR 6mm INNER GLAZING
	47/0063/50	FIXING CLIP FOR TYPE 'E' UPSTAND
	45/0919/50	FIXING CLIP FOR TYPE A & B
	47/0058/50	HORIZONTAL FIXING CLIP FOR TYPE Cp
	47/0059/50	VERTICAL FIXING CLIP FOR TYPE Cp
	98/74680/73	NEOPRENE WEATHERING TYPE C, CS & CE HINGED FRAME

# DO'S AND DONT'S FOR FIXING VENTURA ROOFLIGHTS

- DO CHECK      The opening sizes, thickness and level surface of curbs.
- DO CHECK      That the correct number and types of rooflights are on site. At the same time check for damage and that all inseal strips are correctly sited. If Type B's check that the P.V.C. shutters operate freely. On all types check that the condensation weep holes are open.
- DO CHECK      Glass or plastic skins for size and damage.
- DO CHECK      That all fixing materials are on site.
  
- DO REMOVE    All labels and chalk marks from glass or skins before glazing.
  
- DO NOT        Fix frames on oversize curbs, this opens up joints in continuous rooflights and puts stress on welded corners.
- DO NOT        Fix joining plates dry.
- DO NOT        Leave cover paper on inseal strip.
- DO NOT        Cut down on fixings to curb.
- DO NOT        Double glaze with wet glass or skins, or rough side outside or uneven bedding all round.
- DO NOT        Site fibreglass interlay, where supplied, beyond the bedding channel, this will act as blotting paper if it travels into condensation channels.
- DO NOT        Cut down on spring clip fixings.
- DO NOT        Open up clip on beads for easier fixing, this is a positive requirement for a watertight situation.
- DO NOT        Leave off the plastic washers when fixing screws to inner bar cappings.
- DO NOT        Use longer self tappers than those supplied for the job, on inter bar cappings, if box channel sections of inter bars are penetrated possible leaks could occur at each end of bars.

McKENZIE-MARTIN LIMITED  
ETON HILL WORKS  
ETON HILL ROAD  
RADCLIFFE  
MANCHESTER M26 9US  
Telephone: 0161-723 2234  
Fax: 0161-725 9531

THESE INSTRUCTIONS SUPERSEDE ALL PREVIOUS ISSUES MM/11/94

Due to the Company's policy of manufacturing to customers specific requirements the Company accepts no responsibility for any discrepancies which may occur between the equipment supplied and the descriptions in this publication.

Whilst the Company has made every effort to ensure that the information contained in these fixing instructions is accurate, it cannot be held responsible for any errors or omissions arising.