# **ROOF GUARDRAIL INSTALLATION GUIDE**

Use this **installation guide** to learn how to assemble our free-standing Roof Guardrail system.

The free-standing roof guardrail system that provides ultimate roof edge protection without the need to penetrate the roof memebrane.

Constructed from 48mm diameter galvanised steel tubes and preassembled posts, the system is very simple to install.

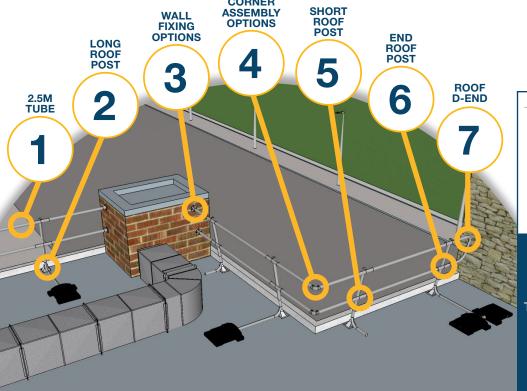
Use this guide to learn the basic principles that are involved in assembling our roof guardrail system.

#### **TOOLS REQUIRED**

- 5mm Allen Key
- 8mm Allen Key for corners / wall fittings.
- Saw to cut metal tubes to length.
- SDS drill if fixing guardrails into wall.
- Impact driver / Combi drill for fixing guardrails to walls.
- Tape Measure



## ROOF GUARDRAIL DIAGRAM





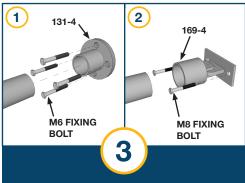
2.5m lengths for easy installation. Tubes can be cut to different lengths on site if required, e.g. at a corner.
Simply slot the 2.5m tube into the posts, corner or wall fixing and tighten the grubscrews provided to hold the rail securely in position.



#### **LONG ROOF POST**

The long roof post has the counterbalance weight on it to hold the guardrail system in position. Tighten the grubscrews on the long roof post to secure the 2.5m tubes. with the

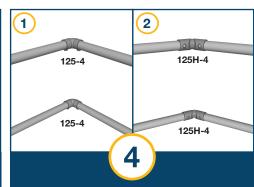
grubscrews provided. Slide the rubber weight onto the end of the Post and tighten the grubscrew in the top.



#### **WALL FIXING OPTIONS**

The span between a wall and a post should not exceed 1.5m.

- Use the 131-4 fitting to fix the guardrail to a wall which is perpendicular to the guardrail run. Fix with M6 fixings.
- Use the 169-4 fitting to fix the guardrail to a wall which is not perpendicular to the guardrail run. Fix with M8 fixings.



#### **CORNER OPTIONS**

The corners are not level as the posts are sloping, therefore the bottom rail will need to be longer than the top rail, measure to ensure they are cut to the correct length.

- Use the 125-4 fitting to make a 90° bend in quardrail.
- Use the 125H-4 fitting to make a bend in the guardrail other than 90°.

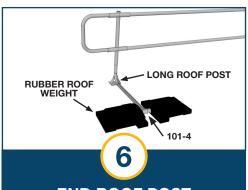


#### **SHORT ROOF POST**

The **short roof post** is used in between the long roof post to provide more stability to the handrail.

Tighten the grubscrews on the post to secure the 2.5m tubes in place.

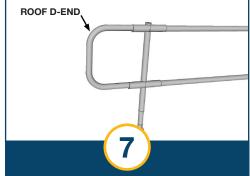
Spaces between posts must not exceed 2.5 meters.



#### **END ROOF POST**

The end roof post has a double weight to ensure the guardrail is firm on the roof. Tighten the grubscrews on the post to secure the 2.5m tubes in place.

To connect the double weights, attach the **101-4** fitting to the end of the post, insert a short section of tube and add the rubber weights either side, then tighten the grubscrew in the top of each weight.



#### **ROOF D-END**

The pre-fabricated roof D-end is for returning the top rail into the middle rail at the end of the guardrail run.

The **D-end** fitting is simply connected into the end roof post and tightened by the 5mm grubscrews supplied in the posts.

### **INSTALL GUIDANCE**

- It is best to start at a fixed or freestanding end on your run.
- If the layout connects back to itself i.e. a square. Start at a corner with a long roof post approx. 1m in from the corner.
- Once the starting point has been decided, lay out the 2.5m rails on the roof, and place the uprights at the joints of the rails. 3.
- The uprights should be laid out alternately, long roof post short roof post long roof post and so on. Always start with the long roof post first.
- With all the rails and uprights now in position, next place the rubber weights with every long roof post. If there are any end roof posts, two (2) weights should be placed at this point as shown in diagram 6.
- Place all corner fittings at the appropriate corners.
- Now all the system is laid out and ready to be assembled. Go to your starting point. Place the long roof post in position and slide the rails into it. Holding the rails horizontal, attach to the next post, usually a short roof post.
- Tighten up the grubscrews with your 5mm allen key. You now have the first 2.5m section in place. 8
- 9 Insert the rubber weight on to the end of the long roof post, tighten the grub screw in the top of the weight but do not over tighten.
- 10. Double check everything is correct with the alignment at this stage and re-adjust at this stage before assembling more.
- 11. Continue to assemble the handrails as in point 7, inserting the rails and the next long roof post etc. until the run ends or you come to a corner. Assemble a corner as per diagram 4 and continue the run until complete.
- 12. On completion, check the system is set at 1100mm high, aligned and level, and all grubscrews are tightened. If levelling is required, unscrew the bottom bolt on the top section of the upright and adjust accordingly.

