

Since 1985

### 1. Surface Preparation

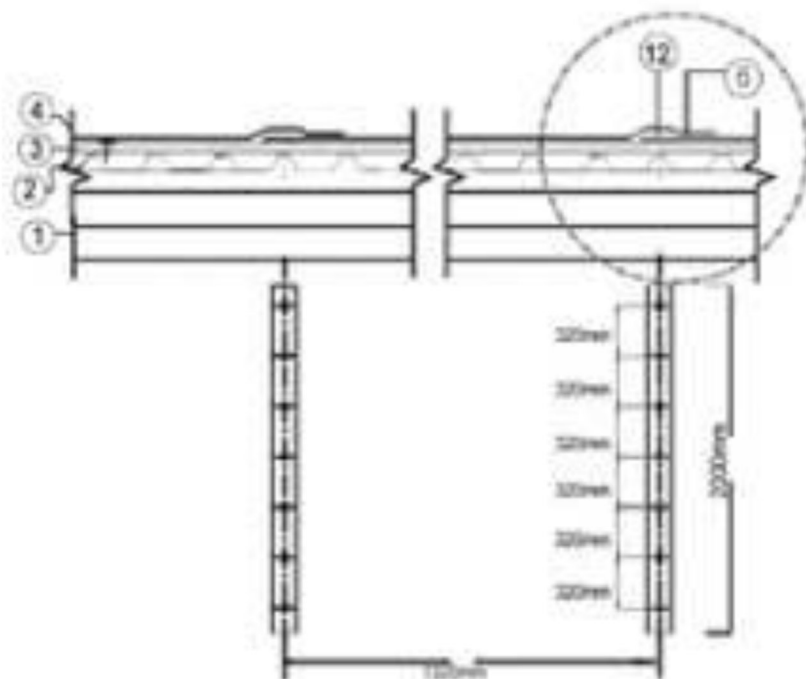
Clean the top of metal surface, remove all the loose particles and sharp edges to be ready to receive the roofing system.

### 2. Thermal Insulation or Plywood

Using proper types of washers & screws, a working flat surface should be mechanically fixed to the metal deck. The working surface can be either 50mm thick. extruded thermal insulation or 9mm thick plywood.

### 3. Separation layer

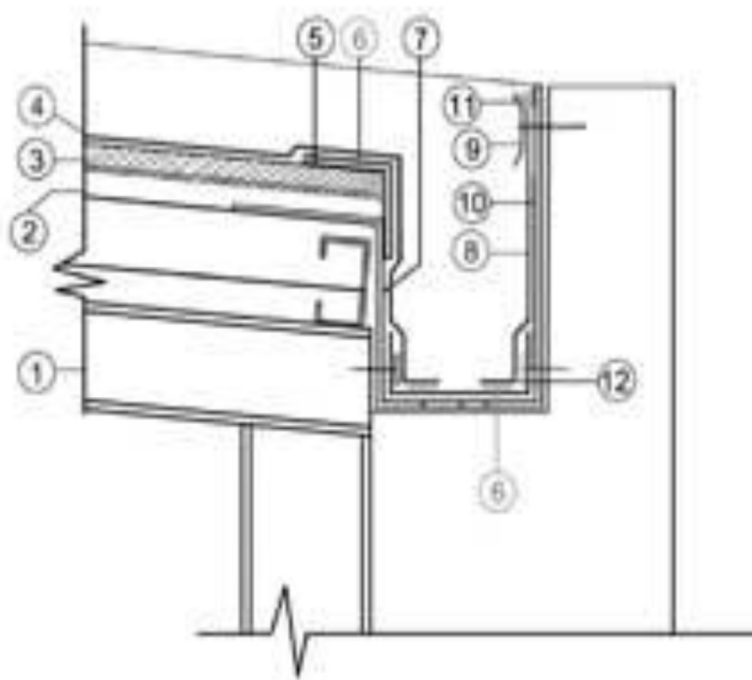
Apply minimum 100 micron thick polyethylene sheet with 100mm overlap of the joints.



### 4. Horizontal Application

Apply one layer of Insuwrap PVC waterproofing membrane. reinforced with polyester mesh & ultra violet resistant ( WMR-UV). This membrane will be fixed by means of mechanical fixation using aluminum or GI metal strips (30mm wide). These strips will be fixed by mechanical fasteners at 40cm spacing on top of the overlapping joints. Then these joints are welded by

hot air welding machine and the overlapping will be 50mm minimum. Special metal screws and washers with spacing 300mm on the overlaps can be used instead of holding metal screws.



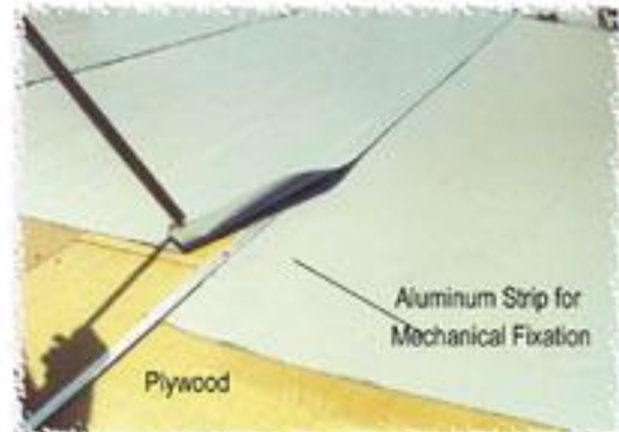
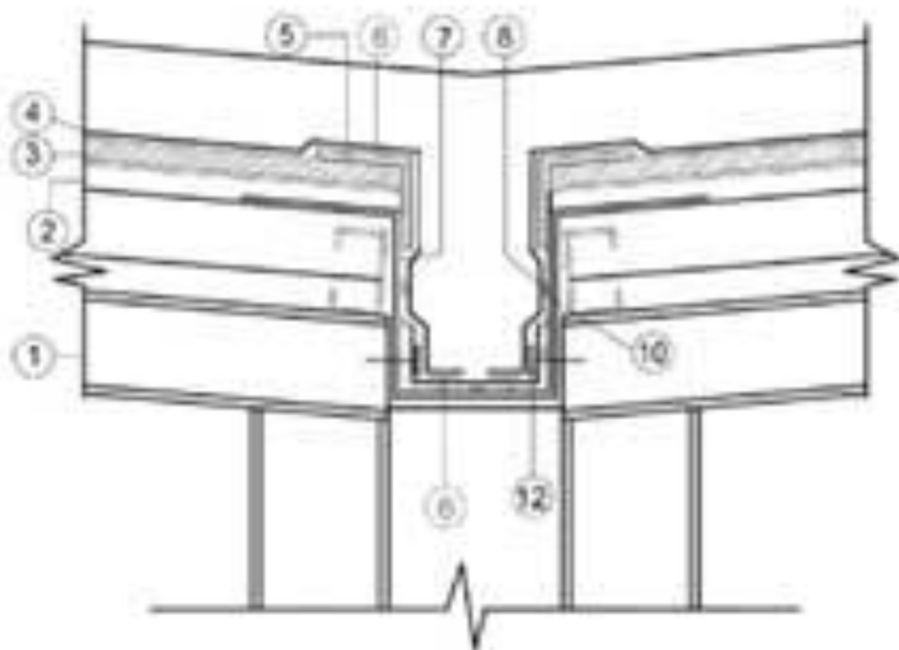
### 5. Vertical Application

Apply Insuwrap PVC 1500 WMR-UV (1.50 mm thickness) membrane reinforced with high tenacity polyester mesh, Ultra violet resistant. This membrane will be fully adhered by Insurbond 106 or equivalent to parapet wall up to 30cm height and the bottom portion of this membrane will be properly dressed to the gutter & drains, PVC coated metal angles will be fixed on the junctions of horizontal membrane and gutter. A double layer of the membrane will be welded by hot air welding on that angle.

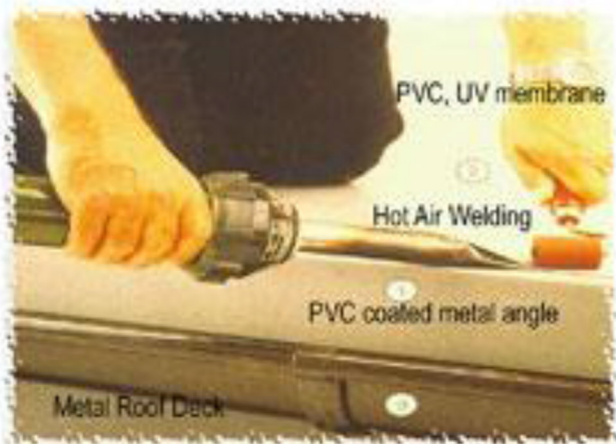
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## 6. Aluminum Flashing

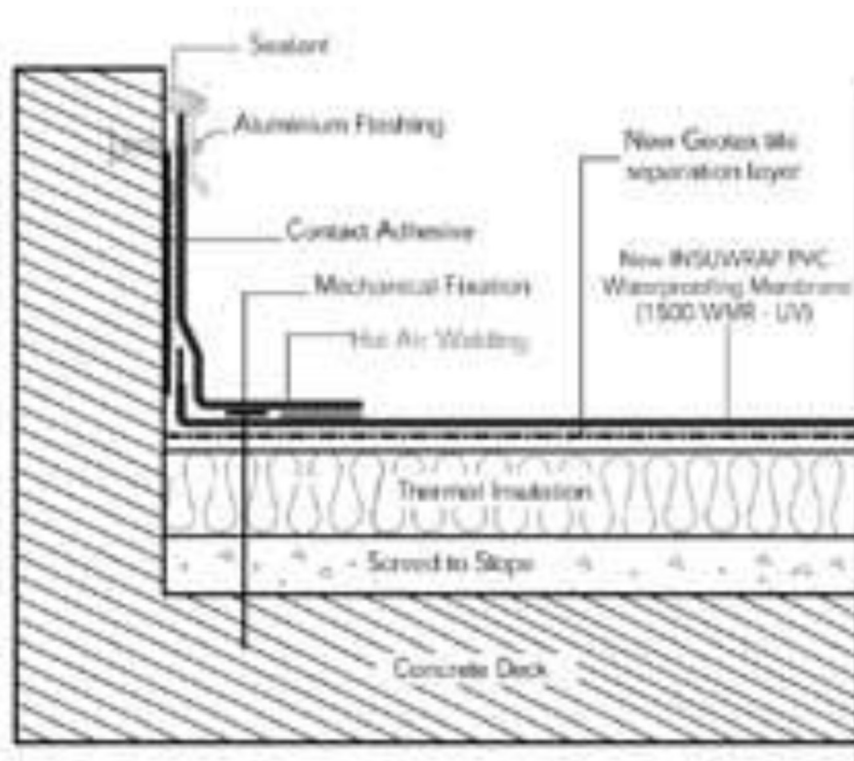
Install aluminum flashing at the top edge of the PVC membranes. The flashing will be fixed with fasteners, then the upper bend is filled with sealant



Mechanical Fixation Detail



Perimeter Termination Detail



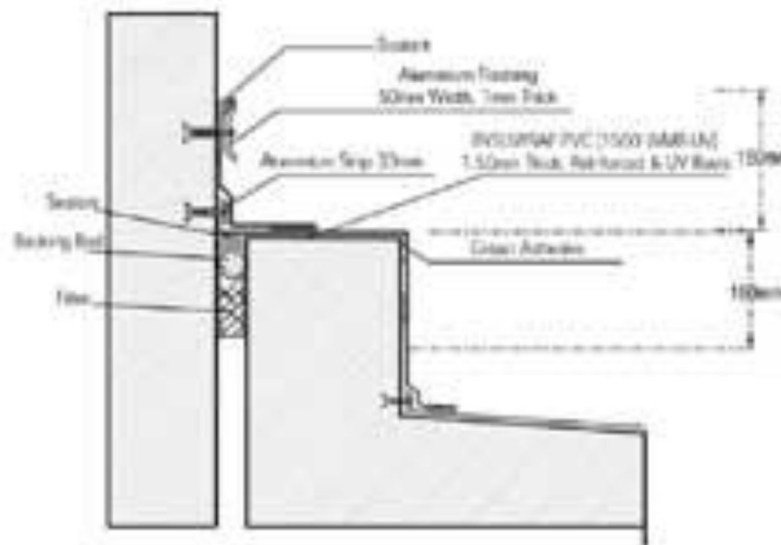
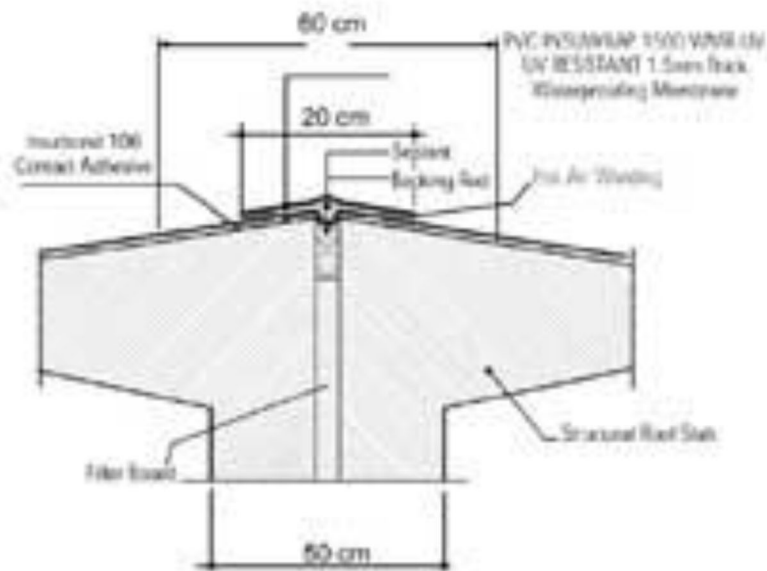
### ➔ Conventional System

PVC waterproofing system can be applied exposed above thermal insulation or tiles which is very useful in reroofing cases.



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## Expansion Joint ( Precast Roofs)



### Drawing Key

- 1- Main Steel Frame
- 2- Corrugated Metal Sheet
- 3- Plywood (9mm thick), if needed, maybe covered with polyethylene separation layer
- 4- Insuwrap PVC 1500 WMR UV, 1.5mm thick, reinforced with high tenacity polyester mesh & ultra violet resistant
- 5- PVC coated Metal angle ( 50mm x 50mm )
- 6- Hot air welding
- 7- Gutter
- 8- Insuwrap PVC 1500WMR UV, 1.5mm thick, reinforced with high tenacity polyester mesh & Ultra violet resistant, fully bonded
- 9- Aluminum Flashing
- 10- Insurbond 106 contact adhesive or equivalent
- 11-Sealant
- 12- Aluminum Holding Strip