

NON WALKABLE INCLINED ROOF WATERPROOFING

This application concerns the thermal and waterproofing of accessible roofs, conventional type with a single sealing layer.

NOTES:

1. **SOPREMA**, with regard to roofing sealing systems, recommends a double waterproofing layer. The case of single sealing layer described below relates to the bituminous membrane **SOPRALENE FLAM 180-40 AR**, which is certified by SCTB for single layer.

1. SURFACE PREPARATION

- Good cleaning of the surface.
- Lowering of any loose parts and restoration with the mortar repair base cement **DOMOREPAIR R4**.
- Construction of a perimeter margin (gully) made of cement, with the addition of the high demanding construction resin **DOMORESIN SP**, to ease the climbing angle of the bituminous membrane to the parapets.

2. THERMAL & WATERPROOFING TASKS

- Vapor Barrier
Creation of a vapour barrier with **AQUADERE** water based elastomeric bituminous varnish, and diluted with 50% of water.
- Screed Insulation
Placement of insulation boards.
- Creation of a Casting Layer
Cement casting purposes reinforced with the construction resin **DOMORESIN SP**.
- Priming
Further, the surface and parapets are rubbed with **AQUADERE**, a bituminous water-based varnish, with a consumption of about 0,250 Kg/m². Before applying the primer, the surface must be dry.
The primer is also extended to vertical elements (parapets, walls), with a height of at least 20 cm.
- Application of bituminous membrane
 1. Full paste with a burner of the elastomeric bituminous membrane **SOPRALENE FLAM 180-40** (bending at cold: -20°C, reinforcement by nonwoven polyester, weight 180g/m², mineral granules top coat, weight 5,6 kg/m²)
 2. The bituminous membrane welding work starts from the lowest point of the casting purposes, ensuring the uninterrupted flow of water.
 3. Bituminous membranes are placed in a direction perpendicular to that of the casting purposes.
 4. The overlapping of the rolls should be 10cm. The coatings of the membranes during the pasting are burned & pressed lightly with a spatula until the molten bituminous material appears in the seam, indicative of a successful welding of the bituminous membranes.

5. On the points where the gluing is done on the chippings rather than a PE film, a dipping of the chippings precedes with the help of a burner and spatula.
6. The waterproofing layer is extended up to the parapet. On the parapets, an implementation of a reinforced angular strip with a bituminous membrane **SOPRALENE FLAM 180-40**, at a height of 20cm vertically and 10 cm horizontally (a dipping of the chippings is preceded).
7. The endings of the bituminous barriers or other vertical elements are stamped with the ready to use polyurethane asphalt **ALSAN FLASHING**. The application of **ALSAN FLASHING** is done into strips of at least 8 cm (4 cm above the asphalt and 4 cm on the handrail).
8. In the location of gutters, vents, stubs and generally of waterproofing details, it is recommended the use of **ALSAN FLASHING**.

NOTES:

1. In cases where thermal and waterproofing applications are done during periods of increased humidity, or in cases where the humidity from the layer casting is not eased (cement, lightweight concrete, etc.), and after priming, follows the stratification without gluing of the venting **AERISOL FLAM** layer over all the roof surface, except of a zone of about 50 cm around. The **AERISOL FLAM** is a perforated bituminous membrane with upper and lower polyethylene film coating, preventing a complete adhesion of the waterproofing layer to the substrate and allowing any steam to circulate between vents and substrate layer, directed to the roof vents. **ETERNO IVICA** vents are placed per 30 m².
2. In the case of bituminous membranes bonding to vertical surfaces greater than 50 cm, it is recommended that priming should be done with the bituminous impregnation varnish solvent **SOPRADERE**.