

### Specifications

On the supporting structure, lay a cement mortar slab with a slope of 2-4% to ensure water runoff to the drainage.

Prepare the laying surface by applying a coating of oxidised additive and solvent based bituminous primer such as DERMAPRIMER with wet volume mass of: 0.98 kg/dm<sup>3</sup> ; residue at 450°C: 0%; effusion time with FORD cup No. 3 at 23°C: 30 sec.; dry volume residue: 38%; dry mass residue: 40% applying 300 g/sq.m. by brush or roller.

Dry lay a vapour dispersion layer such as GRUVER with holes, having mass per unit area of 1.3 kg/sq.m., thickness 1.3 mm (EN 1849-1), flexibility at low temperatures -10°C (EN 1109), 119 holes/sq.m.. The membrane must be laid with overlaps of at least 10 cm leaving vertical embossments of at least 20 cm beyond the depth of the soil bed.

Lay an aluminium reinforced vapour barrier such as VAPOREX 2.2 kg/sq.m. (EN 1849-1), with longitudinal and transverse load at break of 300N (EN 12311-1), maximum longitudinal and transverse elongation at break 3% (EN 12311-1), vapour resistance factor  $\mu > 200.000$  (EN 1931). Glue the membrane, by partially bonding or spot bonding the underside covered with polyethylene film by means of a propane gas blowpipe over the vapour dispersion layer, making longitudinal joints of at least 10 cm and gluing the membrane to the perimeter embossments by at least 20 cm.

Lay the thermal and/or acoustic insulation with thickness and characteristics as per the design specifications

Dry lay a vapour dispersion layer such as GRUVER, having mass per unit area of 1.3 kg/sq.m., thickness 1.3 mm (EN 1849-1), flexibility at low temperatures -10°C (EN 1109), 119 holes/sq.m.. The membrane must be laid with overlaps of at least 10 cm leaving vertical embossments of at least 20 cm beyond the depth of the soil bed.

Lay a waterproofing membrane consisting of a distilled bituminous compound

modified with plastomer polymers such as DERMAFIL 30200 SP, with mass per unit area of 3.3 kg/sq.m, thickness 3 mm, (EN 1849-1), load at break, long. 700N, transverse 7500N (EN 12311-1), maximum longitudinal and transverse elongation at break 45% (EN 12311-1), flexibility at low temperatures -10°C (EN 1109). Fully bond on the underside covered by polyethylene film by means of a propane gas blowpipe on the flame resistant self-protected insulation or lay a dividing layer in heat resistant high grammage polyester 200-250 g/sq.m. TNT, making longitudinal joints of at least 10 cm, closing them over, including the joint necks with the vertical walls. On the perimeter embossments, the membrane must be fully bonded by at least 20 cm beyond the depth of the soil bed.

Lay a second waterproofing membrane consisting of a distilled bituminous compound modified with root stop plastomer polymers such as ERADIX 50200, with mass per unit area of 5 kg/sq.m, thickness 5 mm, (EN 1849-1), longitudinal and transverse load at break 800N (EN 12311-1), maximum longitudinal and transverse elongation at break 50% (EN 12311-1), flexibility at low temperatures -15°C (EN 1109). On 5/10/1998, the membrane was awarded certification after successfully passing the German FLL root propagation tests under the strictest conditions provided by DIN 4062, lasting 4 years. The membrane must be fully bonded with sheets staggered by 50 cm with respect to the first layer, torching the underside covered by polyethylene film by means of a propane gas blowpipe, overlapping the longitudinal joints by least 20 cm, closing them over, including the joint necks with the vertical walls. On the perimeter embossments, the membrane must be fully bonded by at least 20 cm beyond the depth of the soil bed.

Dry lay a dividing layer in high grammage polyester TNT (200-250g/sq.m.).

Lay a 6-8 cm drainage layer consisting of rounded river gravel.

Dry lay a dividing layer in high grammage polyester TNT (200-250 g/sq.m.).

Lay the soil bed prepared according to the design specifications.

- **SUPPORTING STRUCTURE:** R.C./P.R.C./CLAY-CEMENT MIX
- **FINISH:** SOIL BED
- **ROOF GARDEN - INSULATED**

