

# Daraflexsystem

## WATERPROOFING OF CONCRETE ROOF

### Discussion

Concrete roof decks normally consist of a slab screeded to fall with a sand cement mixture. In the case of a new structure a minimum of 2 rain free weeks curing period is required before waterproofing. In the case of an old roof, existing waterproofing should be removed and a drying period allowed appropriate to the amount of water penetration experienced. This is sometimes difficult to determine and it is suggested that either our technical department is contacted or vent pipes be placed at 10m<sup>2</sup> centres in the new waterproofing system. Should excessive moisture be trapped in the screed bubbling will result.

### Surface Preparation

All forms of surface contamination must be removed to ensure a smooth surface, free of any loose material, or any other barrier to adhesion. Cracks or voids in the surface must be filled using HYPERCRETE (modified cementitious material) and allowed to cure for a minimum of 24 hours. Should the parapets be rough a HYPERCRETE slurry should be applied over the area which is to receive the flashing. Fullbore covers should be removed to facilitate "dressing in" the waterproofing. It is recommended that the full-bores be checked to ensure that they function correctly.

Finally an assessment should be made as to what extent, if any, ponding is likely to occur. Standing water present after rain and run-off in excess of 5mm in depth is considered as excessive and will invalidate any performance assurances. A topping of HYPERCRETE in such areas is recommended. Expansion joints (if present) should be sealed and a PVC slip sheet placed over the joint. In no circumstances should the waterproofing be laid directly over the expansion joint.

### Application

Apply by brush or roller one coat of diluted DARAFLEX (60 part water, 40 part product) as a primer, at the rate of 1L/6m<sup>2</sup>. Allow a minimum of 30 minutes drying.

Apply at the rate of 1L/m<sup>2</sup> undiluted DARAFLEX and immediately embed the SBP Geo-Fabric into the wet product ensuring no creases or folds in the material. Work the membrane into the DARAFLEX using a brush. Product should be evident "striking through" the membrane and if this is not the case, too little product has been applied or the product has been allowed to dry before embedding the membrane. At this point the bedding coat for the second run of membrane can be applied.

Apply the second run of membrane into the bedding coat in the same manner ensuring an additional coat at 1L/m<sup>2</sup> between the 2 layers of membrane at the 100 mm overlap.



After allowing a minimum drying period of 45 minutes. Apply a coat of diluted DARAFLEX (90 part product, 10 part water) at the rate of .75L/m<sup>2</sup>. Allow a minimum of 45 minutes drying period.

Apply a further similarly diluted final coat of DARAFLEX at the rate of .75/m<sup>2</sup>. It will be noted that a total of 2.5/m<sup>2</sup> of DARAFLEX has now been applied. The minimum weight of the membrane alone shall be 100g/m<sup>2</sup>. The total weight per m<sup>2</sup> shall therefore be 1.5 kg

Note drying times are based on a temperature of 25<sup>0</sup>c min. and a R.H. of 60% max.

## Flashings

It is recommended that the membrane be turned up the parapets 150 mm. A flashing strip of 300mm(available in pre-cut rolls of 20 m in length) should overlap the turn-up in such a manner that 100 mm of its width be on the horizontal plane and 200 mm on the vertical.

## Finish coat

**A finishing coat of DARACOA REFLECT** Bitumenous Aluminium Paint, which is highly reflective, is recommended.

## Application

### REFLECT:

After allowing the final DARAFLEX coating a minimum drying period of one full day the REFLECT may be applied. The coating should not be applied later than one week of the final DARAFLEX application. Using a paint roller apply REFLECT at the rate of 5m<sup>2</sup>/l.

NOTE: The product should be well stirred before use and should be stirred periodically during application to ensure a consistent appearance. The product must not be applied under wet conditions, and the drum once open must be protected against moisture. Failure in doing so will result in a dull coppery appearance.

NOTE: REFLECT is a solvent based material and as such is highly flammable in the wet state.

The completed system has a very bright silver appearance, which ensures excellent U.V. protection. Maintenance repaints are recommended at three yearly intervals. Owing to the flexibility differential between REFLECT and DARAFLEX imperfections in the coating may develop. This is not abnormal and generally does not redevelop after the first maintenance coat. The completed system is suitable for occasional light foot traffic only.

The completed system is resistant to rain after a period of 3 hours. However full resistance develops over a period of days and it is therefore critical that excessive ponding not be anticipated when using this system.



## maintenance

A maintenance re-coat is recommended after three years.

Grating/Rooster

Waterproofing/  
Waterdigting

technical data sheet