

## SPECIFICATION & METHODOLOGY FOR NEW INCLINED ROOF WATERPROOFING

### Inclined roof Criteria:

- Fully cured – 28 days
- All the critical areas like wall slab joints, honey comb areas etc. should be void free.

### Specification for inclined roof waterproofing:

- The product should be flexible, high elongation, crack bridging.
- Applying two coats of waterproofing treatment to the inclined roof.

The product should demonstrate following properties:-

- Crack bridging -up to 1.5mm
- Tensile elongation -up to 80%
- Adhesion strength - approx. 1.5N/mm<sup>2</sup> at 28 days
- Tensile strength - 1.3N/mm<sup>2</sup>
- Vapour diffusion
- UV, age and frost resistant
- Water head pressure- up to 7 bars

### Products recommended:

#### **MYK Aquafin-2C**

It is a polymer modified Cementitious easy to apply coating  
It is a two component material  
It bonds on the wet surface without priming.

**Pack Size:** 35 Kg Composite Pack,  
24 Kg Powder + 11kg liquid polymer

#### **MYK Aso-Joint-Tape 2000**

It is a composite material with expandable water proof and high elongation properties.

**Pack size-**12cm x 50mtrs Roll  
20cm x 50mtr Roll

**MYK Aso Joint Tape 2000****MYK Joint Tape for Corners****MYK Grout ADD**

It is a single component powder Grout additive which is added to cement to produce a free-flow non-shrink expansive grout additive. It is generally used for injection pressure grouting wherever void filling is required and for weak concrete structures, honey combed areas etc.

**Consumption:**

**MYK Aquafin 2C** to be applied at 3 kg /m<sup>2</sup>.

**Methodology:**

- Step-1:- Surface preparation
- Step-2:- Procedure for injection pressure grouting
- Step-3:- Mixing of **MYK Aquafin 2C**
- Step-4:- Fixing of **MYK Aso Joint Tape-2000**
- Step-5:- Application of **MYK Aquafin 2C**

**Surface preparation**

- The area should be clean, sound and free from all loose particles.
- If any bond breakers such as oil, grease, dust laitance etc. should be removed by water blasting or dry sand blasting.
- Use suitable methods to prepare the substrate dependent on its condition such as brushing, vacuuming, grinding, milling, shot-blasting and water jetting.
- If the surface has any defects such as potholes, crack or any voids should be filled with suitable repair mortar.

The floor and the wall junctions should be cleaned thoroughly to have a uniform edge to receive the **MYK Aso Joint tape 2000** treatment.

### Procedure of Injection pressure grouting

- Drilling 12mm diameter holes with electric drilling machines along the honey combed area and floor wall joints @C/C 1 meter to a depth of half of the thickness of the slab and fixing PVC nozzles of 10mm dia or less in place using quick setting compound **MYK Fix 10 S** .
- Pressure grouting should be carried by using hand operated grouting machine of pressure 3.5 Kgs/cm<sup>2</sup> through the nozzles starting from one nozzle and stopping the operations when the grout starts coming out from adjacent nozzle, this is done similarly in all the nozzles.
- The Grouting is carried by admixing Grout Additive **MYK Grout Add** @ of 250 gms per bag of cement and Integral waterproof admixture/ **MYK Proof WP 10** @ 2% by Wt of cement by maintaining W/C ratio 0.45 for making the concrete water tight

### Mixing

- Take the 2/3<sup>rd</sup> content of the liquid component (The second liquid component of **MYK Aquafin 2C**) into a clean container and add **MYK Aquafin 2C** powder into it.
- Stir well with mechanical means @ 500-700 rpm until lump free homogeneous mix is obtained.

### Application of MYK Aso Joint Tape 2000

- On the cleaned joint and floor junction **MYK Aso Joint Tape 2000** is placed on the joint or up stand in such a way that 50% is on the slab surface and 50% on the wall.
- It can be sandwich with the mixed waterproofing material (**MYK Aquafin 2C**).

### Application of MYK Aquafin 2C

- Pre-wet the surface before doing the actual application is undertaken.
- The mixed material should be applied evenly @ 3kg/M<sup>2</sup> in two coats.
- The first coat should be applied horizontally @ 1.5-2 kg/M<sup>2</sup>.
- The second coat should be applied vertically an interval of 4-5 hours at 20<sup>o</sup> C.  
(**Note:** The application consumption for 1st coat and 2<sup>nd</sup> coat is given as a guide line for your understanding.)
- This will be purely based on the prevailing atmospheric conditions.
- More the ambient temperature lesser the time gap.

**Note:**-Waterproofing coating shall be continued over the parapet wall to the top.  
The rain water pipe opening shall be coated from inside to a distance of 3 inches.

#### **By brush:**

The application of **MYK AQUAFIN-2C** is a simple brush application.  
Use soft bristle brush.

#### **By spray:**

**MYK SCHOMBURG** recommends the use of peristaltic motion spray pumps, which are the most, appropriate, Practical and economic method for **MYK AQUAFIN-2C** application on large area applications. Please, Refer to **MYK SCHOMBURG** for list of approved spray equipment.

## Curing

**MYK AQUAFIN-2C** is a self curing product and does not require any post curing.

The coated substrate/area can be exposed to:

- Rain after 3 hours
  - Pedestrian traffic after 1 day
  - Pressure water after 7 days
  - Fixing of tiles etc after 1 day
- at ambient temperatures of +20°C and 60%relative humidity.

## WATCHPOINTS:

- All fittings like drain water pipes etc should be fixed prior to the treatment as these are the weak portions and may tend to leak. It should be treated with **MYK Aquafin 2C** and finished.
- All expansion joints to be carried through the treatment and should be filled with a suitable sealant with min. movement accommodation of 25% like Polysulphide sealant.
- All movements on the coated surface should be strictly as per the directives of the technical data sheets, however it is best to avoid any rough handling of the substrate, pointed objects etc should be avoided.

## Health & Safety

- Adopt health & safety regulations in accordance with local laws. Care should be taken when handling.
- **MYK AQUAFIN-2C** as it is may cause irritation due to its cementitious nature (please refer to Material Safety Data Sheet for specifics).
- As typical on most job sites, applicators should wear protective clothing and gloves. Those handling and mixing **MYK AQUAFIN-2C** should wear a facemask. Safety shoes and helmets must be worn by staff at all-times.
- **MYK SCHOMBURG** recommends the enforcement of stringent health and safety measures on all job sites.