

## MEP WORKS IN ESPAC MATERIALS - METHOD OF STATEMENT

### 1. MEP WORKS

#### 1.1. GENERAL INFORMATION

- 1.1.1. All the MEP works are done in the same manner of executing in the conventional concrete building with taking in attention the following points;
  - 1.1.1.1. hammering is not allowed in ESPAC;
  - 1.1.1.2. All the chipping works should be done using the recommended tools;
  - 1.1.1.3. In the case of load-bearing panels with standard size 60 cm, the maximum width of the vertical groove is 30% from the width of the panel is the case of standard panels the max groove will be 20cm ;
  - 1.1.1.4. The maximum core diameter in the standard AAC slabs is 15 cm ;
  - 1.1.1.5. Please mention the electric panel place and any other wide duct in your tender drawings to take care of those openings on ESPAC design;

#### 1.2. EXECUTION STEPS

- 1.2.1. Assign and mark all the conduits and ducts places on the walls;
- 1.2.2. Start the cutting process using the normal grinder, or using our recommended machine ( Macrozza );
- 1.2.3. Place all the conduits and ducts and use the cement glue materials for close the opening ( Cement Glue Data Sheet is attached **Attachment # 1** );
- 1.2.4. Repair all the surfaces filled by the cement glue using the sandpaper and make it ready for the finishing works;
- 1.2.5. **Cutting Depth is detailed as below;**
  - 1.2.5.1. **Non-load Bearing walls;**
    - 1.2.5.1.1. Vertical cutting can be done with any required depth;
    - 1.2.5.1.2. Horizontal cutting should be as follows
      - 1.2.5.1.2.1. 10 cm walls - max depth is 5 cm
      - 1.2.5.1.2.2. 15 cm walls - max depth is 7.5 cm
      - 1.2.5.1.2.3. 20 cm walls - max depth is 10 cm

### 1.2.5.2. Load Bearing walls

- 1.2.5.2.1. Vertical cutting can be done with any required depth with considering that the cutting will not affect the slab bearing distance
  - 1.2.5.2.1.1. Slabs should be rested on 75% of its width as a minimum bearing distance.
- 1.2.5.2.2. Horizontal cutting shouldn't exceed 5 cm depth & shouldn't exceed 25 % of the panel width - in case of required big opening, please mention in the drawings to consider in the design.

## 2. WALLS FINISHING WORKS

### 2.1.1. EXECUTION STEPS

- 2.1.1.1. Repair and clean the joints between the panels to get a soft leveled surface;
- 2.1.1.2. Spray the joints with enough water then place the fiber mesh (10 cm width at least ) using Gesol;
  - 2.1.1.2.1. In case of mini panels system fiber mesh should be used in all the joints between AAC and concrete elements before applying the coat;
  - 2.1.1.2.2. In case of wide opening such as the electric panel board - fiber mesh has to be applied to close the opening on the right way and to cover the joint between the opening and the wall before applying the coat;
- 2.1.1.3. Spray all the walls with enough quantity of water before applying the cement coat ( Execution steps as per the cement coat data sheet );
- 2.1.1.4. Apply the cement coat with minimum thickness 3 mm to cover all the variations between the panels, Thickness of the fiber mesh as well.
- 2.1.1.5. ( Thickness of the applied cement coat should be increased if needed to get a leveled surface );
- 2.1.1.6. In the case of Block full system & Mini-panels full system, you have to repair and level the surface using ( AAC mortar to fill any
- 2.1.1.7. damage ) & ( Manual sanding or using sanding machines for leveling ) and you will be interested on the item no. 2.1.1.4 only;

## ( ESPAC MEP VIDEO )