INSTITUT DE RECHERCHE ET COORDINATION ACOUSTIQUE/MUSIQUE (1973-1990) R.PIANO, R.ROGERS, G.F.FRANCHINI

Typology: Research Institute Address: 1, Place Igor-Stravinsky, 75004 Paris Surface: 1092,71 m2 Height: 24 m



The Ircam (Institut de Recherche et Coordination Acoustique/Musique), institute for musical research, a collaboration between scientists and musicians, is a 'musical instrument on an urban scale'. Prefabricated terracotta bricks are attached to concealed support bars in grids of aluminium supports for the panel. The panels hang on the structure of the building and act as rain screens. Every panel is made up of twelve terracotta bricks. Each brick is 275 x 50 x 50mm, held by within the aluminium panel frame by three bolts. The terracotta bricks are separated by washers which hold them in even vertical alignment.

TerraCotta

Baked earth, clay-based unglazed or glazed ceramic

Making process: Appropriately refined clay is formed and dryed and put in the kiln and fired in 1000⁻³. Fired terracotta is not watertight, but surface burnishing the body before firing can decrease its poroudness and a layer of glaze can make it watertight.

Material properties : Fireproof, lightweight, inexpensive, durable, can be used for rainscreen cladding with waterproof membrane behind.

Metal rod

Allows the bricks to stack on top of each other and keep fixed in the panel.

Washer

Allows the bricks the be separated from each other.



TS2 MATETERIALS SITE MATERIAL EXERCISE

> MINJU KIM INTERMEDIATE 7

Metal Frame Structure

Allows the blockage of direct transmission of the outside air to the concrete.

Aluminium

The frame which holds 5 sets of 12 terracotta bricks in a single planel. The panels are held on the metal rail (the metal structure of the building). It is durable and weatherproof and lightweight.

Concrete

Load bearing material

Insulation

Keeps the warm air inside and helps the prevent the cool air from the outside getting inside.