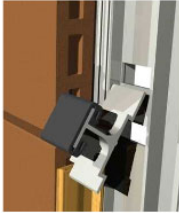


ASSEMBLY

There are a lot of factors that must be considered in the pre-assembly and assembly of terra cotta curtain walls. A few aspects that must be worked out before the assembly is the width of the cavity, the vent hole diameter size that is used for drainage, and the materials, colors, panel sizes. Once these choices are made the assembly may begin. Usually, terra cotta or hollow core clay panels are hung on a pre-engineered aluminum track system with aluminum clip supports, gaskets, and trim. Clay panels are supported by extruded aluminum clips, which are attached to an aluminum track. Terra cotta panels are then attached to vertical tracks at base channels and head grooves, with A1 clips wrapped in a silicone isolator. The silicone isolator provides color consistency. Finally silicone gaskets are inserted into vertical tracks which are then attached to specific sections of the wall assembly.



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TERRA COTTA RAIN SCREEN PRINCIPLE



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TERRA COTTA RAIN SCREEN PRINCIPLE

TERRA COTTA RAIN SCREEN PRINCIPLE

- DEFINITION
- ADVANTAGES & DISADVANTAGES
- AESTHETICS
- ASSEMBLY



* **Terra cotta** is a type of curtain wall that consist of ceramic tiles of different sizes hanging from its support system.

* In this type of curtain wall the pressure-equalized system allows air to circulate behind the tiles of terra cotta through joints to provide a pressure-equalization in the cavity, which prevents water from entering into the interior walls, also along with a vapor barrier on the outside face that acts as a water barrier back ventilation which assists in maintaining a dry cavity and the buildup of hot air.

“ a pressure-equalization in the cavity, which prevents water from entering into the interior walls”

ADVANTAGES

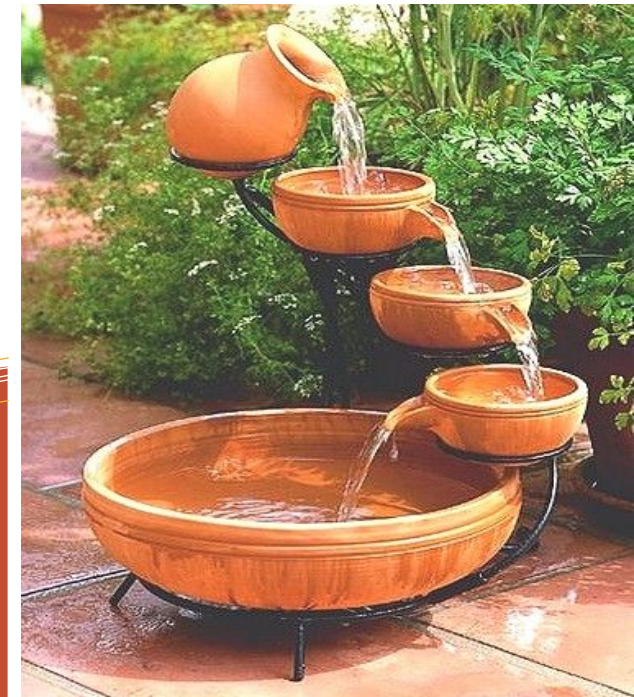
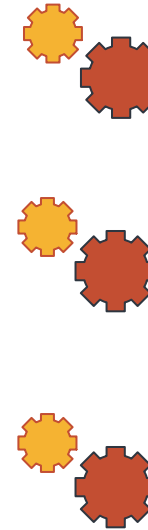
This rain screen system keeps your building dry and protected from the worst weather conditions you could think of. It not only prevents rain, but also controls heat, light, sound and fire. It's dry joint technology makes it easy to switch between different materials, they are also easy to replaced if any is damaged with-out harming others. These tiles don't have calcium leakage or efflorescence effect which is good because they can simply be cleaned with just water. These terra cotta tiles also come in various colors and are all made from natural clay which will give you the right finish and a green resource for your building.

DISADVANTAGES

The rain screen system with all it's advantages also has its down falls. If there is any imperfection on the material is very possible that the water will be able to penetrate into the surface. If the material doesn't have the ability to store a lot of moisture the relative humidity is going to go up and quickly reach saturation point which then will cause the water to penetrate into the wall system and eventually creating damages. This is possible to occur in any space that there is trapped moisture or thermal movements. That's why the air barrier is very important in the pressure-equalized system it has to be very secure, rigid, durable, and air impermeable.

AESTHETICS

As a type of earthenware, Terra cotta is made from fired clay, which is slightly porous and permeable. The ancient techniques employed to make earthenware, since the appearance of the olmec culture, considered to be the “mother of Mesoamerican cultures”, are still used today in mostly the rural parts of Mexico. It's amazing how people are able to preserve their artistic techniques, from one generation to another!!!!



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