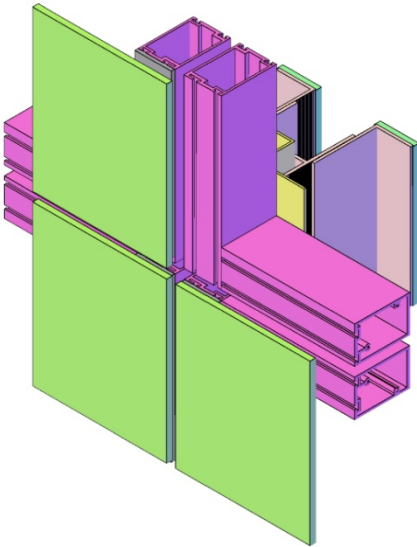


VENTILATED COATING CELLS



The ventilated coating is developed using Granitech technology with profiles suitably designed for the project features and the consequent manufacturing of factory cells, in order to reduce the assembly operations in the work site. The porcelain ventilated coating elements are assembled to the system profiles to form a cell coating capable of mechanically interconnecting with adjacent cells and to guarantee the walls continuity.

The cell coating system is characterised by:

- carried out in a controlled environment for the components preparation,
- continuity of the assembly operations and productivity not effected by weather conditions,
- reduction in human resources and / or time of installation of manufactured products in the work site (usually without the aid of scaffolding),
- work site operations limited to predetermined cell positions with therefore reduce the operations installation criticality.

The manufacturing facility also ensures that all structural sealing are carried out and controlled in an optimal manner.

The cells are produced and packed in specific containers following a predefined sequence driven by the work site and laying needs and are then sent directly to the work site ready for installation.

The coating system consists of: fine porcelain stoneware panels, cell-structure with a supporting frame, anchor brackets, insulating layer (if required), and finishing elements.

The cell structure is made of dedicated and appropriate extruded aluminium sections, that are assembled together to obtain the necessary modular frames. The cells are a self-supporting structure and are anchored to the structure and to the wall building using an interconnecting mechanism consisting of hollow profiles and aluminium brackets and / or galvanized steel, in turn connected by iron rods or predisposed Halfen type dowels.

The anchor brackets have eyelets and components that allow the adjustment of positions of the single cell according to the three spatial axes, therefore compensating for any construction tolerances of the supporting structure within the established limits.

The interconnections between the various cells and assembly of individual components are designed to absorb the differential thermal expansions of various elements by means of slotted elements and anti-friction dividers.

In the first project phase, it is possible to change the design of the group profiles and brackets interconnections to increase the tolerance and movements limit of the building structure absorbed by the coating system resulting in enlarged cell perimeter joints.

The loads and stresses imposed on the cell (such as the weight, the wind force and other service loads) are transmitted from the coating elements to the beams, the uprights and, through the brackets, to the structure.

The cell frame creates the casing for the insertion or structural bonding of porcelain stoneware coating elements, which are positioned by means of appropriate seals, dividers and structural sealants.

Specific seals are placed near the outer surface of the coating elements to create a partial resistance to air and water by reducing the absorption of the latter within the cavity wall ventilation.

The ventilation of the air gap determined between the external surface and the wall structure of the building insulated with insulating material, effect is guaranteed through the chimney which is determined by the movement of air inlet openings located at the bottom end of the system front to the corresponding openings located under the cover flashing; the lower openings at the same time allow the drainage of any rain water inside the air gap.

The air gap ventilation allows removing moisture continuously which may be present in the cavity itself in order to maintain the insulating state in ideal conditions.

The insulating layer that completes the system is fixed to the back wall independently from the cell.