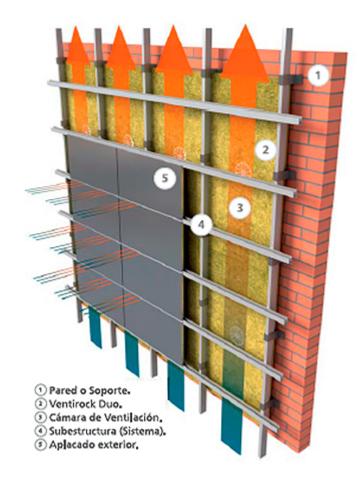
## **VENTILATED FAÇADES**

This typology of façades has open joints in all systems. What it is really relevant in this system, is the sufficient drainability and of the air chambers and the waterproofing of the exterior side of the inner layer. There is air circulation among the outer and inner skins of the façade, and this keeps the surfaces dry.

Safe and durable support is obtained by mechanical anchors and aluminum profiles without mortar involvement. Water does not affect the System as it does for mortar fixing solutions

Very important to remark that ventilated façades have at least a 30% better insulation performance than traditional mortar brick insulated walls. It is huge improvement in interior



comfort thanks to their outstanding properties coming for double skin and convection air circulation.

In summer air convection keeps the inner layer wall at a reduced temperature. In winter, there is no convection so you get an additional air layer added to the insulation that the inner wall already has.

The outer layer of ventilated façades are made of very resistant materials to weather conditions protecting the wall from moisture and corrosion. These materials have low porosity and are resistant to UV discoloration.

Gracco panels **Water-tightness** and **Drainability** are certified, and you can find in chapter 3,2 and 3.3of the European Certification (ETA European Technical Approval, also available in our downloads section).

More important than water absorption, is the change in size (expansion/contraction) when **Relativity Humidity (RH)** changes drastically. For Gracco, going from 30% RH to 85% RH has an inferior effect of 0,18 mm/m. That would mean that for a panel with a length of 4 meters the change in size would be as maximum as 0.72mm (under 1 mm)

Gracco's **anchoring system** with slots is fast and safe with minimum error during installation phase and high flexural values. Please find attached a technical drawing description for the system.