As easy as 1 – 2 – 3!

The NeaCera® Terra-cotta Panel Research & Development Team, having solved the industry problem of the bulky, heavy and unwieldy hollow-core 2nd generation panels, turned their attention to simplifying.

Having created the 3rd generation solid-wall panels, they were able to configure the required reinforcing ribs on the panels to become an integral part of the “hanging-system.” Working with advanced computer modeling, they set about creating a pre-engineered installation that could eliminate all the various clips and fixings that are required to install the 2nd generation systems.

1. Support Profiles

Support Profiles are of 5083 aluminum and come in 3-meter (9’9”) lengths in 3 different depths.

For normal wind-loading requirements in the US (110-mph at 40-psf) we prefer to specify the 55-mm (2-1/8”) depth which has the deepest profiles.

The upward-facing hooks on the Support Profiles are engineered to mate precisely with the reinforcing ribs of the panels.

As a result, individual Support Profiles are engineered differently for each size of the panel and are not interchangeable.

Support Profiles are shipped in stock lengths and will require field cutting based on the dimensions provided in the cutting schedule on the NeaCera Field Use drawings.

Support Profiles for standard panel heights (150mm, 175mm, 200mm, 300mm, and 400mm) have notches to indicate where to cut.
2. Joint Inserts

Joint Inserts come in a variety of different sizes, shapes, and configurations (see below). They are produced from powder-coated aluminum and are made to just snap into place in the Support Profile, without any additional fixings. The Joint Inserts also come in 3-meter (9’9”) lengths and while they are finished with black powder-coat as standard, they can be powder-coated in other colors.

The flange locators on the side of the Joint Insert are designed to mate with the “half-disc” indentures on the Support Profile, so each Joint Insert is designed for a specific size of Support Profile and Panel size and are not interchangeable. Incorporated in the “tongue” of the Joint Inserts is a simple pull-down Security Tab.

Available Joint Inserts:
Closed Joint – Recessed (This is the most commonly used Joint Insert);
Closed Joint – Flush;
Closed Joint – Proud;
Open Joint Insert;
Fine-Line Joint Insert – Recessed;
Fine-Line Joint Insert – Proud; Blank Joint Insert (for corner and window jamb details).

3. NeaCera® Panels

NeaCera Terra-cotta Panels are extruded solid-wall panels with integral reinforcing ribs. They are configured to match the upward-facing hooks on the required Support Profile.

Once the Support Profiles and Joint Inserts have been installed on the elevations, the panels are locked into place.

This is done by lifting the reinforcing ribs on the Panel over the corresponding upward-facing hooks on the Support Profile and then pushed down to lock in place. If a panel has been cracked or broken, it is easy to break out the cracked panel, bend up the Security Tab and replace with a new panel.
The simplicity of this pre-engineered NeaCera Lift & Lock installation system eliminates any additional clips or fixings that need to be installed to hold the panels in place. As it is a completely Open Joint Rainscreen system, no caulk or other sealants are used.

NeaCera Terra-cotta Rainscreen Solutions is a NON-SEQUENTIAL INSTALLATION, so panels can be easily removed and replaced, without the need for disturbing any of the surrounding panels. Sequential systems, such as those used by the hollow-core panel systems, require you to remove all the panels from the top of the elevation in order to replace a panel that is lower down.