

Nr. / No.

CERASHIELD ECO-M PD-1608-005EN

This document is intended to provide general recommendations only.

CERAMAX provides these informations, guidelines and all testing and design data for informational purposes only. CERAMAX strongly advises that the customer, project owner and architect seek independent advice from a certified construction professional, engineer and structural engineer regarding application and installation as well as compliance with design requirements, applicable codes, laws and regulations and test standards.

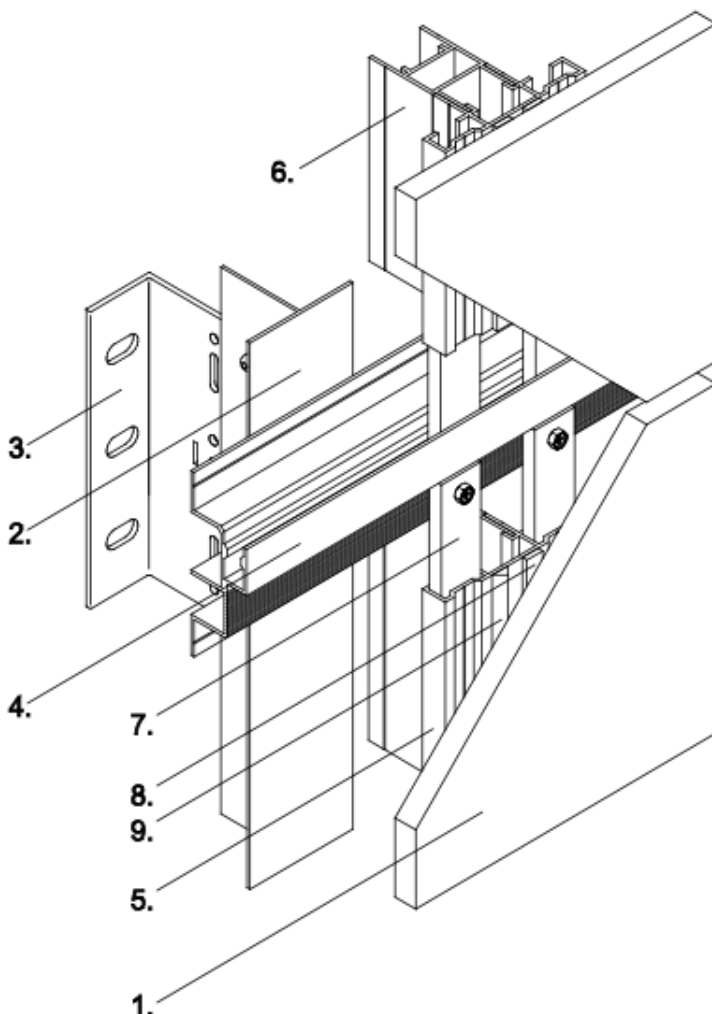
Please check your local codes and applicable design requirements for proper use.

CERATEC ECO-M facade system:

CERASHIELD ECO-M facade modules with invisible fixing are produced in combination with a CERATEC ECO Adapter System and a special bonding system.

They are „Made in Germany“. CERASHIELD ECO-M panels will be glued only by CERAMAX - according to the building certificates - on a special CERATEC ECO bonding profile. It is not necessary to glue at the construction site.

CERASHIELD ECO-M facade panels are completely customized for the use at the construction site. So quick and easy mounting is possible. – Under any weather conditions.



CERATEC ECO COMPONENTS

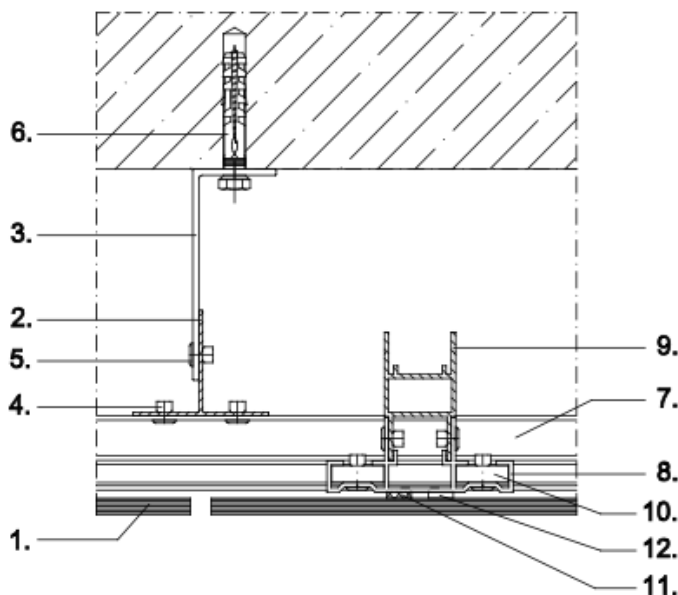
1. CERASHIELD ECO-M facade panel
2. CERATEC vertical holding track
3. CERATEC wall angle holder
4. CERATEC ECO carrier profile
5. CERATEC ECO bonding profile
6. CERATEC ECO static profile
7. CERATEC ECO splice plate
8. CERATEC ECO-M prefixing tape
9. CERATEC ECO-M adhesive

Cavity depth and ventilation:

For a continuous ventilation behind the CERASHIELD ECO panel, CERAMAX recommends the free air cavity depth between the CERASHIELD ECO bonding profile and the insulation or wall construction to be between 20 and 50 mm, in order to allow for ambient air to flow through from the ventilation inlets and outlets.

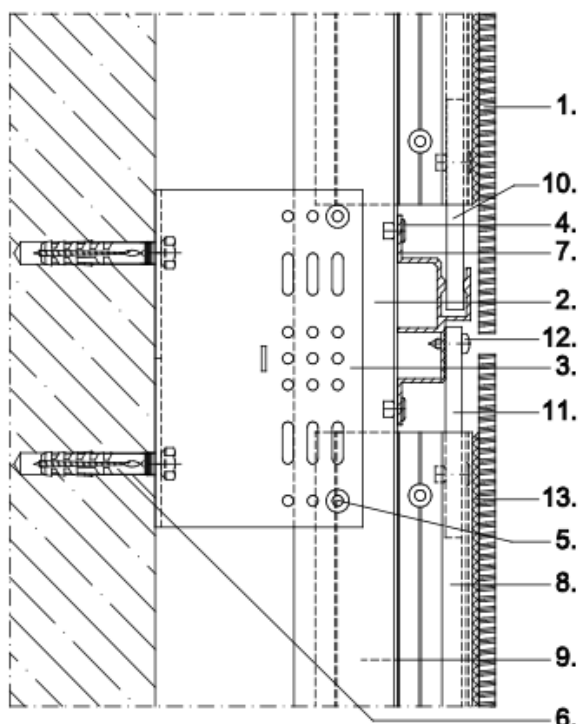
Ventilation inlets and outlets must be the equivalent of minimum 50 square cm per square meter over the whole façade.

The cavity depth as well as the minimum size of the ventilation inlets and outlets must be in accordance with applicable building standards, regulations and certificates.



CERATEC ECO COMPONENTS

1. CERASHIELD ECO facade panel
2. CERATEC vertical holding track
3. CERATEC wall angle holder
4. CERATEC fixing rivet
5. CERATEC connecting rivet
6. CERATEC fixing
7. CERATEC ECO carrier profile
8. CERATEC ECO bonding profile
9. CERATEC ECO static profile
10. CERATEC ECO splice plate
11. CERATEC ECO-M prefixing tape
12. CERATEC ECO-M adhesive



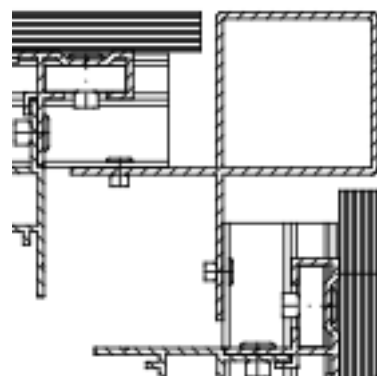
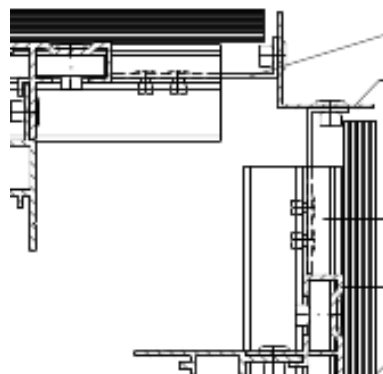
CERATEC ECO COMPONENTS

1. CERASHIELD ECO facade panel
2. CERATEC vertical holding track
3. CERATEC wall angle holder
4. CERATEC fixing rivet
5. CERATEC connecting rivet
6. CERATEC fixing
7. CERATEC ECO carrier profile
8. CERATEC ECO bonding profile
9. CERATEC ECO static profile
10. CERATEC ECO splice plate 1
11. CERATEC ECO splice plate 2
12. CERATEC ECO-M prefixing tape
13. CERATEC ECO-M adhesive

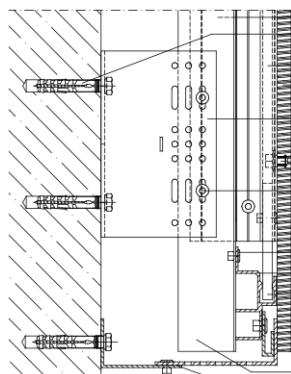
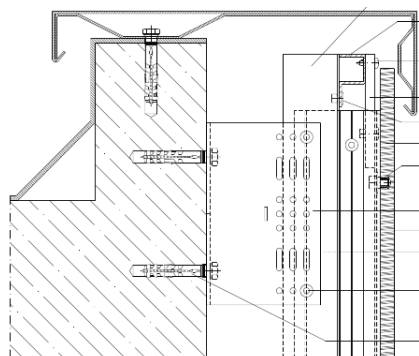
Sub-construction:

The horizontal CERATEC ECO carrier profile must be installed on a vertical aluminium sub-frame (sub-construction) of sufficient strength and permanent durability. Quality and treatment of the sub-frame must be in accordance with certificate holders' recommendations as well as applicable building standards and regulations.

Samples for corner-details:



Sample for roof edge fascia:

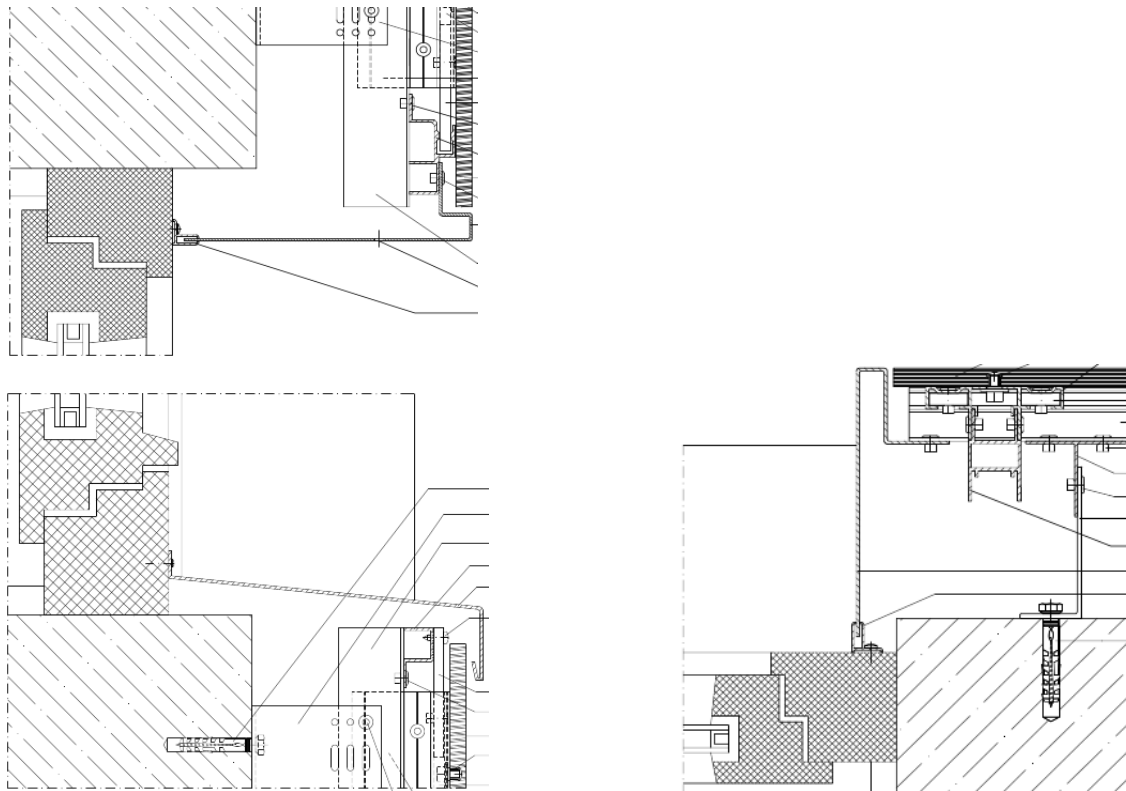


Fixing detail:

The CERATEC ECO facade system is also developed for storey height floor-to-ceiling facade modules.

In this case one or more CERATEC ECO static profiles are needed to stabilize the CERASHIELD ECO module against static loads.

Sample for window connection:



CERASHIELD plate dimensions:

The maximum plate dimension for CERASHIELD ECO facade plates is 150 x 300 cm. Some CERASHIELD Designs have a structure-/pattern line with height.

It is possible to fix more than one CERASHIELD ECO plate on a CERATEC ECO bonding profile. So storey height CERASHIELD modules with a height up to 400 cm can be produced and mounted.

product	thicknes	laminated backside	weight	Maximum panel dimension
CERASHIELD ECO 6	6 mm (± 0,5 mm)		14,5 kg/sqm	100 x 300 cm
CERASHIELD ECO 6L	6 mm (± 0,5 mm)	X	15,0 kg/sqm	100 x 300 cm
CERASHIELD ECO S 6	6 mm (± 0,5 mm)		15,0 kg/sqm	150 x 300 cm
CERASHIELD ECO S 10	10 mm (± 0,5 mm)		24,5 kg/sqm	100 x 100 cm

CERACLEAN BIOACTIV:

Surfaces of high insulated facades tended to become covered with algae and limescale deposits. The ageing process of surfaces is accelerated. So normal facade surfaces become unsightly after just a few years.

Optional CERASHIELD ECO facade panels (special designs) can be equipped with CERACLEAN BIOACTIV. An effective protection against algae and limescale deposits, organic dirt and surface-aging.

CERACLEAN BIOACTIV is a transparent, durable and resistant on-line coating that lasts the lifetime of the facade. It is permanently baked onto the external CERASHIELD ECO surface in a high temperature manufacturing process by 1,200 °C.

Its self-cleaning properties make it ideal for use in hard-to-reach places that are difficult to clean.

CERACLEAN BIOAKTIV the dual-action self-cleaning coating has revolutionary photo-catalytic and hydrophilic properties, and works in two stages:

1. Photo-catalytic effect

The coating reacts with natural daylight to break down and loosen organic dirt.

2. Hydrophilic effect

When it rains, instead of forming droplets, the water spreads evenly over the facade surface, helping to wash away any dirt and reduce streaking.

During long dry spells the facade can be cleaned by simply hosing it down with clear water.

Organic dirt breaks down and washes away when it rains.

The self-cleaning properties of CERACLEAN BIOACTIV reduce the need of manual cleaning, saving water and eliminating potentially harmful run-off from expensive detergents, also increasing personal safety. It works even on cloudy days and during the night.

A revolutionary benefit and USP for back ventilated facades! CERASHIELD ECO facade solutions are highly durable for the lifetime of your building.

General Information:

CERASHIELD ECO facade panels and the CERATEC ECO facade system must be fastened according to the guidelines of CERAMAX and those of third party suppliers (e.g. sub-construction). They must be corrosion resistant fixed on a suitable sub-construction in such a way that the moduls are not restrained and are able to move freely.

When determining the sub-frame the following should be considered:

- Static loads like wind loads etc.
- Unimpeded movement of the CERASHIELD facade panels
- Energetic requirements (e.g. dimension of insulation)
- Required ventilation provisions
- Applicable building standards, regulations, certificates and CERAMAX technical advice with regards to technical installation details (e.g. panel dimensions, fixing distances, etc)
- Anchoring possibilities in the load bearing wall (construction)

Any modification to CERASHIELD panels or components thereof, its geometry or its specifications, and any use or installation of CERASHIELD panels or CERATEC fixing systems in combination with any material or component other as advised by CERAMAX, shall be exclusively at the risk of the parties involved in such modification, use or installation, and each of such parties assumes all such risks.

Disclaimer

This is a print generated by you from of the website www.ceramax.de | www.cerashield.de. By accessing the website and printing this document you have accepted the Terms of Use of the website. Please refer to the website for all conditions that apply to this document. Not all the systems shown in this document may be suitable for all applications and jurisdictions. We provide you with testing, code and design data for informational purposes only and strongly recommend that you or any other user of this document obtains independent advice regarding compliance with design requirements, applicable codes, laws and regulations, and test standards. Please check your local codes and design requirements for proper use. CERAMAX will not accept any liability in relation to your use of this document.

Any description of product properties or other declarations are not to be understood as guarantee or as warranted characteristics. All informations and data correspondent to the technical standard and based on our experience at the time of printing.

All trademarks, company logos, texts, graphics, tables and images are subjects to copyright. Further processing and use in media is permitted only with prior written approval by CERAMAX Deutschland GmbH.

All oral and written statements, offers, quotations, sales, supplies, deliveries and agreements - and all related activities - of CERAMAX are governed by the latest version of CERAMAX General Terms and Conditions of Sale which can be found on and downloaded from the CERAMAX website www.ceramax.de | www.cerashield.de A copy of these General Conditions of Sale will be provided free of charge on request.