

# CT 174



## SILICATE-SILICONE AQUASTATIC

### Silicate-silicone render, stone like structure, grain 1.5 mm or 2.0 mm

Decorative thin-layer render for indoor and outdoor applications

#### CHARACTERISTICS

- ▶ hydrophobic, resistant to dirt
- ▶ vapour permeable
- ▶ low water absorption
- ▶ resistant to damage
- ▶ highly resistant to weather conditions
- ▶ BioProtect formula - resistant to fungi, algae and mould
- ▶ possibility of machine application
- ▶ available in full palette of Ceresit Colours of Nature®



#### SCOPE OF USE

Ceresit CT 174 combines strengths of silicate render and silicone render. It is vapour permeable, with low water uptake and dirt resistant (Double Dry Technology). CT 174 is used for making thin-layer renders in insulation systems, on concrete substrates, traditional renders, gypsum substrates and chipboards, gypsum cardboards, etc.

We recommend the application of CT 174 as facade render within Ceresit Ceretherm ETICS (External Thermal Insulation Composite Systems) with the application of EPS-boards (Expanded Polystyrene boards) and mineral wool. CT 174 render is recommended to be applied to external walls where high permeability is required together with very low water absorption and high dirt resistance (Double Dry Technology). In case of intensive dark colours, the material application should be limited to small areas, e.g. architectural details. CT 174 is protected from biological contamination e.g. fungi, mould and algae (Bio Protect formula).

#### SUBSTRATE PREPARATION

CT 174 can be applied on smooth, carrying, dry and clean substrates free from grease, bitumen, dust and other substances decreasing adhesion:

- cement renders and lime-cement renders (age above 28 days, moisture  $\leq$  4 %), concrete (age above 3 months, moisture  $\leq$  4 %) - primed with the priming paint Ceresit CT 16,
- armoured layers made of Ceresit CT 80, CT 85, ZU, CT 190 mortars primed with CT 16 (age above 3 days) and CT 87 (age above 2 days),
- gypsum substrates (only inside the buildings) with moisture below 1% - firstly primed with the agent Ceresit CT 17, and then with CT 16,



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- chipboards, gypsum-fibre boards and gypsum cardboards (only inside the buildings), fixed according to the recommendations of the board manufacturers - firstly primed with CT 17, and then with CT 16,
  - strong paint coats (only inside the buildings) - strong, with good adhesion to the substrate, primed with CT 16.
- Uneven and damaged substrates should be first smoothed and repaired. In case of traditional renders and concrete substrates, Ceresit CT 29 render filler can be used. The existing dirt, layers of low strength, as well as elastic, lime and adhesive paint coatings should be removed. Absorbent substrates should be primed with the agent CT 17 and then painted with CT 16 after minimum 2 hours. It is recommended to use the colour of CT 16 similar to the colour of the render. CT 174 can be applied when CT 16 becomes completely dry. The moisture coming from the substrate can cause the destruction of the render, therefore one should be assured that the adequate sealing layers have been made in the rooms (places) endangered with constant moisture.

#### APPLICATION

The whole content of the container should be carefully stirred. If the need appears, add no more than 1% of clean water and mix again. Neither rusty containers nor tools can be used. CT 174 should be evenly applied on the substrate at the thickness of the grain by means of a steel long float held at the angle.

Then, it should be given homogenous structure with round movements by means of a plastic long float flatly held to achieve the appearance densely laid out aggregate grains structure.

**Do not sprinkle render with water!**

Work should be done on one surface without breaks, keeping the same product consistency. If there is a need to stop working, the self-adhesive tape should be applied along the previously fixed line. Then render should be applied, structure formed and tape torn off with the render remaining on it. After a break, the application should be continued from the fixed place (the edge of the previously applied render can be protected with self-adhesive tape). Tools and fresh render stains should be washed with water and the hardened render remains can be mechanically removed. Render renovation can be done by painting with Ceresit CT 54, CT 48 or CT49 silicone paint. Possibility of machine application. Recommended machine, e.g. Wagner PC 15, PC 830, SPG Baumaschinen PG 20.

**PLEASE NOTE**

Application should be performed in the ambient and substrate temperature ranging from +5 °C to +25 °C and the humidity below 80 %. This product should not be mixed with other renders, pigments, resins and binders. The rooms where the material has been applied should be aired until the odour disappears and before they are used. In case of contact with eyes, they should be rinsed with water and the general practitioner should be consulted. This product should be stored out of reach of children.

**OTHER INFORMATION**

The render should not be applied on walls exposed to solar radiation to avoid fast drying. Until it dries completely, it should be protected against rain. It is recommended to use scaffolding protection. Due to the render mineral fillers that can cause differences in the colour and shadows of render, one surface should be rendered with the material of the same production badge

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards of the German Standards Institute (DIN). The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23 °C and 50 % relative air humidity unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.

number printed on each container. In order to ensure a uniform structure of render there should be provided adequate number of employees at various levels of scaffolding and work surfaces combined „wet on wet“. The opened container should be carefully closed and its content used as soon as possible.

**PACKAGING**

Plastic containers of 25 kg.

**TECHNICAL DATA**

Base:	water dispersion of synthetic resins with mineral and pigment fillers
Density:	approx. 1.8 kg/dm <sup>3</sup>
Temperature of application:	from +5 °C to +25 °C
Open time:	approx. 15 min.
Resistance to rain:	after approx. 24 hours
Water vapour permeability:	cat V1, S <sub>d</sub> <0,14 m acc. EN 15824
Water absorption:	cat. W3, w <sub>s</sub> ≤0,1 [kg/m <sup>2</sup> h <sup>0,5</sup> ] acc. EN 15824
Adhesion:	0.6 MPa acc. EN 15824
Thermal conductivity:	λ 0.61 W/(m*K) acc. EN 15824
Impact resistance:	cat I or II acc. ETAG 004 (depends on system)
Water absorption after 24 h:	< 0.5 kg/m <sup>2</sup> acc. ETAG 004
Water vapour permeability:	S <sub>d</sub> ≤ 1.0 m acc. ETAG 004
Adhesion between layers after ageing:	≥ 0.08 MPa acc ETAG 004
Fire classification acc. EN 13501-1:	A2-s1;d0 in: Ceresit Ceretherm Universal MW
B-s1, d0 in:	Universal EPS, Ceresit Ceretherm Popular, Ceresit Ceretherm Classic, Ceresit Ceretherm Premium, Ceresit Ceretherm Wool Classic, Ceresit Ceretherm Wool Premium
B-s2, d0 in:	Universal XPS, Ceresit Ceretherm Impactum
Assessment of natural radiation:	meets the requirements of ITB Instruction No. 234/2003, p.6.2.1, according to Regulation of the Council of Ministers on 2 January 2007. & 3, p.1
Assumed consumption:	CT 174 grain 1.5 mm approx. 2.5 kg/m <sup>2</sup> CT 174 grain 2.0 mm from 3.1 to 3.4 kg/ m <sup>2</sup>

Shelf life/ Storage: Up to 12 months since the production date when stored on pallets in dry cool conditions and in original undamaged packages. **Protect against frost! Protect against direct sunlight!**

- This product possesses documents of reference:
- BBA Certificate No. 14/5142
  - Irish Agreement Board Certificate No. 09/0340
  - European Technical Assessment (ETA) in systems:

Ceresit Ceretherm System	Popular	Classic	Premium	Impactum	Wool Classic	Wool Premium	Universal EPS	Universal XPS	Universal MW
ETA	08/0309	09/0014	08/0308	13/0086	09/0026	09/0037	13/0535	13/0807	14/0127
Certificate	1488-CPR-0382/Z	1488-CPR-0439/Z	1488-CPR-0363/Z	1488-CPR-0407/Z	1488-CPR-0440/Z	1488-CPR-0375/Z	1488-CPR-0457/Z	1488-CPR-0456/Z	1488-CPR-0362/Z
DoP	00426	00420	00428	00436	00424	00430	00433	00434	00435

- National Technical Assessment in systems:

Ceresit Ceretherm System	Reno
NTA	ITB-KOT-2018/0472 wydanie 1
Certificate	020-UWB-0895/Z
NDoC	00444

Product complies with EN 15824. External renders on organic binders. Declaration of Performance No 00269.