

CASEA Bauprocalc 830 – Hydraulic Lime Based Render

CASEA Bauprocalc 830 is a factory produced hydraulic hardening render/plaster based on lime, specially designed for hand and machine application produced to DIN EN 998-1: 2010. It is manufactured from a controlled blend of selected aggregates, hydraulic and building lime to EN 459-1 and other components to give a high quality rendering product which is suitable for use in external rendering and internal plastering. The unique properties of this render makes it suitable for application on low, medium and high density substrates, for renovation of old and listed building and ecological new builds.

- High water vapour permeability (breathability)
- Machine or Hand Application
- Suitable for external and internal use
- Sustainable
- Application up to 15 mm
- DIN EN 998-1:2010

Field Of Application

A hydraulic hardening render/plaster based on lime for walls constructed out of low, medium and high density blockwork and any other masonry substrate. The product's special composition allows the product to breathe and also permits constant hygrometric exchange between the substrate and the environment.

Substrate

Substrates to be plastered should be examined for contamination, deterioration, surface roughness, suction and strength. Dust and contamination such as residues of concrete release agents, gypsum plaster, paint, other coatings, organic growth, salts and efflorescence should be removed prior to plastering. Salts and efflorescence should be removed by dry brushing (non-metallic bristles). Other special precautions may need to be taken if this removal is not achievable. The line and flatness of the substrate should also be assessed to determine if the render can be applied to a uniform thickness or if dubbing out is required. The substrate should be reasonably dry and free of frost, with a temperature of +5 °C or above at the time of plastering. It is important that the wall is not too wet at the time of plastering.

Preparation

CASEA Bauprocalc 830 should only be applied to mature stable surfaces. A minimum of one month should be allowed following completion of the wall construction before application of the plaster commences. In slow

drying situations, a longer interval should be allowed. All substrates must be clean, sound and dust free as the render relies on a combination of suction and surface texture to achieve bond. The recommendations set out in EN 13914- 1:2005 and BS 5262:1991 should be followed. It is essential that all steps are taken to ensure that a satisfactory bond is achieved between the render and the substrate.

Instructions

CASEA Bauprocalc 830 can be applied using all suitable spray rendering machines (e.g. G4, G5, m3, S48, MP25, SP11) and can be transported on all pneumatic conveyor systems. When hand applied, mix for 5 minutes using a suitable electric mixer. In case of great unevenness in the substrate (e.g. rough stone masonry) the recesses require dubbing out. On highly absorbent substrates, it is essential to apply the plaster in two passes, pressing the first pass (minimum 2/3 of the total thickness) well into the surface using a straight edge and trowel. Then prior to the first layer drying, apply the second pass (wet in wet) extending the render to the desired uniform thickness. When the render is partially set, finish to the desired finish using a steel float, wood float or grid float. The open time, after mixing, is approximately two and a half hours. However, the open time greatly depends on the consistency of the render, the ambient temperature and the absorbency of the substrate.

Application

During application the temperature must be between 5 - 35°C. Bead out the application area with Stainless Steel, Aluminium or UPVC beading, which also serves as a reference for the thickness applied. Beads need to be carefully bedded in CASEA Bauprocalc 830. Always maintain a wet edge, when working in sections.

Practical Advice

We recommend the use of a mineral key coat (Bauprotec RHS) on concrete and smooth / non-absorbent substrates prior to the application of CASEA Bauprocalc 830. Fibreglass mesh must be embedded into the render when applied on critical substrates, in case of changes in substrate material and at stress points around openings.

Storage

9 months under dry protected conditions in original unopened packaging.

Disposal Considerations

Must not be disposed together with household garbage. Do not allow product to reach sewage system. European waste catalogue 17 08 02. Uncleaned packaging: Recommendation: Disposal must be made according to official regulations. Recommended cleansing agents: Water, if necessary together with cleansing agents.

Safety

Classification according to Regulation (EC) No 1272/2008: **Hazard pictograms: GHS05. Corrosion.** Skin Corr. 1A H314 Causes severe skin burns and eye damage. Eye Dam. 1 H318 Causes serious eye damage. **Signal word: Danger.** **Hazard-determining components of labelling:** calcium dihydroxide, cement, portland, chemicals. All standard precautions for the handling of construction materials/chemicals must be taken. See CASEA Health and Safety Data Sheet for further detailed information.

Hazard Statements

H314 Causes severe skin burns and eye damage.

Precautionary Statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P260 Do not breathe dusts or mists.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].


P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Technical Information

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| Yield | approx. 830 l/t approx. 55 m ² at 15 mm applied thickness approx. 2 m ² per 30 kg bag |
| Consumption | appr. 15 kg/m ² per 15 mm applied thickness |
| Water Demand | 7.5 l per 30kg bag |
| Compressive strength | > 2.0 N/mm ² |
| Flexural Strength | > 1.0 N/mm ² |
| Modulus of Elasticity | approx. 6 kN/mm ² |
| Water vapour permeability coefficient | $\mu \leq 20$ |
| Adhesion | ≥ 0.08 N/mm ² FP: A, B or C |
| Thermal Conductivity (Tabulated Value) | λ_{10} , dry,mat ≤ 0.82 W/(mK) @ P=50% λ_{10} , dry,mat ≤ 0.89 W/(mK) @ P=90% |
| Dry Bulk Density | approx. 1300 kg/m ³ |
| Grain size | 0-1 mm |

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|  | <p>CASEA GmbH Pontelstraße 3, 99755 Ellrich, Germany 10 CASEA-114 760</p> |
| | <p>EN 998-1: 2010 General purpose rendering/plastering mortar Plastering of ceilings and walls inside and outside of buildings</p> |
| Reaction To Fire | A1 |
| Compressive Strength | CS II |
| Capillary Water Absorption | W0 |
| Durability | NPD |
| Dangerous Substances | NPD |

NPD Properties not determined as they are not relevant (No Performance Determined)

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