

Cem Classic - lightweight drainage mortar

Latermix Cem Classic | 50 L | Staenis 00046

This sheet brings together Staenis practical advice and basic product data. Staenis experience and practical trials underpin its own application advice. General manufacturer data are presented separately, with the original documents available.

Staenis practical advice

Staenis offers Cem Classic in bags as a lightweight drainage mortar for a permeable base under small or difficult-to-access terraces. The existing Staenis advice describes application comparable to drainage mortar from a silo, with the benefit of a product that is approximately three times lighter. Match the remaining terrace build-up to the selected finish.

If you do not have a concrete mixer, Cem Classic can also be mixed with a powerful handheld mortar mixer, at least of the Rubimix type shown on our Dutch information page (1200 W, two gears). Use a suitable mortar paddle and respect the mixer capacity. This advice is based on Staenis practical experience; the manufacturer data sheet describes concrete or planetary mixers and excludes drill-type mixers. An ordinary drill with a mixing attachment is therefore not equivalent to this handheld mortar mixer.

Product data

Cem Classic is a premixed, non-structural, no-fines lightweight concrete with an open pore structure, based on water-repellent expanded clay of intermediate grain size. It is suitable indoors and outdoors: lightweight sub-screeds and fills, incorporating services below screeds, thermal insulation, roof falls with a levelling layer, and drainage layers below paving or slabs. It dries quickly, even in thick layers.

Packaging: 50 L per bag; bag weight stated by Staenis 25.6 kg. A pallet contains 60 bags, totalling 3 m³ of nominal dry product, on a non-returnable wooden pallet. Nominally, 1 m³ = 1000 L = 20 bags and 1 bag is approximately 5 cm over 1 m². For installation, allow approximately 0.21 bag/m² per cm (10 mm), depending on compaction: approximately 10.5 bags for 10 m² at 5 cm.

Manufacturer data: bagged density approximately 500 kg/m³; in-place density approximately 600 kg/m³. Average compressive strength 2.5 N/mm² (25 kg/cm²); thermal conductivity λ 0.134 W/mK; water permeability ≥ 7.5 L/(s·m²). Vapour diffusion factor μ 6 in humid conditions; vapour permeability δ 27.6 × 10⁻¹² kg/(m·s·Pa); specific heat 1000 J/(kg·K). Fire reaction A1 according to the technical sheet; French emissions class A+. Shelf life: 12 months from manufacture, stored dry and under cover in the unopened original packaging.

The French manufacturer information describes DTU 26.2 for class D sub-screeds, suitable for P4S premises, and DTU 43.1 for lightweight roof falls. These are the cited French application frameworks; they do not separately approve every Staenis assembly.

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Application and points to note

General manufacturer method: use full bags without additional aggregates or admixtures. Fill a concrete or planetary mixer to no more than 60% and gradually add approximately 3 L of water per bag. Mix for approximately 3 minutes until all grains are evenly coated with shiny grey cement slurry; do not extend this mixing time. With a pneumatic mixer/pump, additional mixing water depends on pumping distance. Excess water may cause segregation; insufficient water may leave incomplete coating. Apply at +5 to +35 °C; working time approximately 60 minutes at 20 °C. The Staenis advice for a handheld mortar mixer is set out separately on the previous page.

The substrate must be clean, sound, dry and free of cracks, without a risk of rising damp. Protect services and space them apart. On highly absorbent substrates, limit water loss with a suitable primer or separating film. For new concrete beneath moisture-sensitive finishes, the source describes a moisture barrier; secure timber substrates against movement and use the specified waterproof, vapour-permeable membrane. Select the appropriate procedure from the full original sheet.

Set levels, spread the mix, level it and compact the surface with a float. The general minimum thickness is 5 cm. Above 50 cm, the source requires plate compaction and technical assessment. Walkable after approximately 24 hours. Do not re-wet; keep clear while drying and protect against rapid drying, rain, site traffic and heavy loads. The product must eventually be covered.

For sub-screeds, fills and roof falls, the manufacturer describes a levelling, load-distributing screed or concrete layer before the floor finish or waterproofing. This is a separate case from the drainage layer below the terrace assembly described. Beneath loose covering materials such as sand or soil, use a suitable geotextile. Beneath fluid or self-levelling screeds/concrete, use a separating film. Use below insulation boards with a screed is also described.

The source allows approximately 1 day before a subsequent screed, concrete layer, sand or soil, subject to the associated conditions. For moisture-sensitive finishes above the screed: provide a moisture barrier or check the residual moisture of Cem Classic by the carbide method, maximum 3% by mass. Laboratory guide values at 20 °C and 55% relative humidity: 5 cm / 7 days; 8 cm / 9 days; 10 cm / 10 days; 15 cm / 14 days. These are not fixed drying periods for every site.

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Safe use

Read the label and full original safety data sheet before use. The French SDS lists H315, H318, H335 and H317: skin irritation, serious eye damage, respiratory irritation and a possible allergic skin reaction. Avoid inhaling dust and wear the gloves, clothing and eye/face protection specified in the SDS; also follow its ventilation and respiratory protection instructions.

The available original SDS is FR/France, version 3 dated 30.05.2023, UFI 0G7F-P5G8-210D-0N7J. Compare this identification with the supplied label. This does not establish availability of a suitable NL/BE, EN or DE safety sheet. The original manufacturer documentation is intended for professional use.

Sources and complete instructions

[Manufacturer - full technical sheet \(FR\), edition 04/22](#)

[Manufacturer - technical summary \(EN\)](#)

[Manufacturer - original SDS \(FR/France\), version 3, 30.05.2023](#)

[Manufacturer - original SDS \(FR/France\), stored copy](#)

[Manufacturer - previously linked technical sheet \(FR\), stored copy](#)

[Manufacturer - previously linked technical summary \(EN\), stored copy](#)

[Staenis - Rubimix mortar mixer \(NL\)](#)

[Staenis - quantity calculator](#)

[Staenis - full product page and practical information](#)

Staenis is your contact for its application advice. This is a product and application sheet, not a complete translation of a manufacturer sheet, a safety data sheet or a declaration of performance. The customer's statutory rights remain unaffected.