

STEULER RAMMING MASS S 50 HF

Three-component ramming mass

Base

Potassium water glass

Material Group

Primers, levelling compounds

Description

Three-component potassium silicate-based material. The system is halogen-free and can be applied directly to substrates without any special preparation.

Physical Data

after 28 days at 20°C in the open air

Property (unit), Test method	Value
Density [g/cm ³], DIN EN ISO 1183-1, ASTM D 792	2.2
Flexural strength [MPa], DIN EN ISO 178, ASTM C 580	13.5
Compressive strength [MPa], DIN EN ISO 604, ASTM C 579	42.0
Modulus of elasticity [MPa], DIN EN ISO 178, ASTM C 580	8,000
Linear shrinkage [%]	1.0
The thermal coefficient of linear expansion [1/K], ISO 11359-2, ASTM C 531	12 x 10 ⁻⁶
Lowest working temperature [°C]	5
Maximum working temperature [C] (Cool material to 20°C)	35
Thermal conductivity [W/mK], ISO DIS 22007	1.2
Adherence to ceramic bricks [MPa], DIN EN ISO 4624	≥ 1.5
Water absorption [%]	14
Temperature resistance [°C]	900

Data are mean values

Chemical Resistance

Resistant to all acids and acid-hydrolysing compounds as well as to all organic compounds as long as they do not hydrolyse alkaline.

For detailed information about the chemical resistance please refer to Technical Information TI 350.

Please contact our application engineering for approval of the project-specific possible application.

Substrate

If the substrate is lead, prime it first with ALKADUR VS (Technical Information TI 131) and then sand it (SKC-Filler 18). The product can be applied to concrete after previous priming with OXYDUR K 425 (Technical Information TI 102) and subsequent sanding.

Packaging / Shelf life

All components must be stored and transported dry and frost-free. The minimum storage life applies to a storage temperature of 20 °C, unless otherwise specified. Higher temperatures reduce, lower temperatures increase the shelf life.

Components	Item number	Package	Content	Shelf life
Silica MH	5021007001	Drum	25 kg	24 Months
Acid-Cement-Powder-S50-HF	5021138001	Bag	25 kg	24 Months
SKC-Filler 18	5011018890	Bag	25 kg	24 Months

For handling, transport and storage observe the relevant material safety data sheets.

If necessary larger packages of Silica MH are also available.

Mixing Ratio / Consumption

STEULER Ramming Mass S 50 HF

	Part by weight
Silica MH	1.0
Acid-Cement-Powder-S50-HF	3.5
SKC-Filler 18	3.5
Consumption	2,200 kg/litre mortar mass

Waiting Times

See curing times.

Pot Life

Pot life depends on temperature:

20 °C	approx. 35 minutes
-------	--------------------

Lower temperatures prolong, higher temperatures shorten the processing time. Substrate and ramming mass should, if possible, have the same temperature throughout the application work.

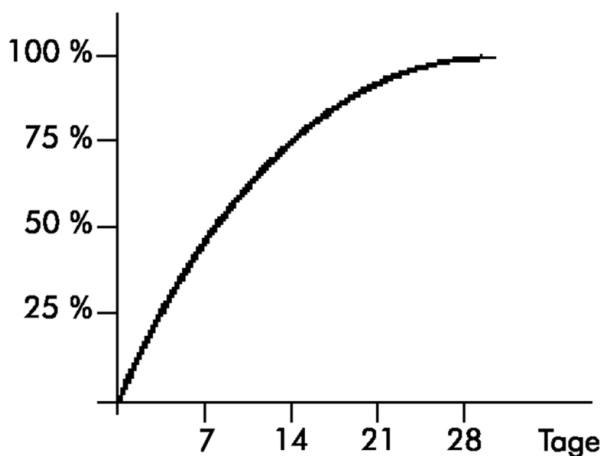
Curing times

Curing times to support foot traffic depend on the temperature and are as follows:

5 °C	48 h
> 10 °C	24 h

Please note

STEULER Ramming MASS S 50 HF reaches its strength at 20°C only after 28 days. The strength curve appears as follows:



Due to the curing process, the full mechanical and chemical strength is not achieved until 28 days after the last brick / tile has been installed. Please refer to the above graph for the applicable strength values based on elapsed time.

Due to the curing process, commissioning should be avoided before 28 days have elapsed.

Safety and Disposal

- Sufficient aeration and de-aeration (especially in tanks and pits).
- No smoking/no fire
- Refer to the Safety Data Sheets
- Observe danger references and safety recommendation labels.
- Wear required personal protective equipment (avoid skin contact with materials)
- Clean and protect hands with skin protective soap and skin protection cream (no solvents)
- Wear a dust mask when sanding (e.g. for repairs).
- Instructions as per § 14 of GefahrstoffV (Toxic Substances Act) and TRGS 507 (Technical regulations for Hazardous Substances - Germany)
- Accident precautions issued by the Liability Insurance Association for the Chemical Industries (Germany)

Do not expose materials to heat or open flame, this applies in particular to welding works (weld beads).

Preferably consume residual quantities. Do not pour into a spout or dustbin! Collect separately for disposal in durable, lockable and labeled containers.

Cleaning of Equipment

Tools soiled with uncured materials can be cleaned with water. During application, the mortar must not come into contact with water.

27021599775755915 • V 4 • en

All information contained in this Technical Information is based on the present state of our knowledge and practical experience. All data are approximate values for guidance only. A legally binding warranty of certain characteristics or the suitability for a certain purpose of use cannot be derived from this.

The information given in this Technical Information is our intellectual property. The Technical Information may neither be copied nor used by unauthorized parties, nor professionally distributed or otherwise made accessible to third parties without our prior consent.

This issue replaces all previous versions.