

Lampocem

**Ready-to-use
shrinkage-free rapid
setting and hardening
hydraulic binder**

WHERE TO USE

Fast fixing of every kind into vertical and horizontal substrates in concrete and masonry.

Some application examples

- Laying manhole covers.
- Sinking and securing foundation bolts, pipeclips, sanitary-ware, hinges.
- Laying sub- frames in wood and metal.
- Installing boxes and sheathes for electrical systems.
- Sinking and securing wooden plugs.
- Sealing concrete conduits, drains, tanks, etc.
- Stopping small water leaks in underground structures, cellars and lift wells.

TECHNICAL CHARACTERISTICS

Lampocem is a ready-to-use powder binder composed of high-strength cements and special additives in a formula developed in the MAPEI research laboratories.

Lampocem contains no chlorides.

Mixed with water, **Lampocem** produces a paste with a plastic-thixotropic consistency which is easy to apply even on vertical surfaces, without any need for formwork.

Lampocem has a very fast setting time (about 3 minutes at +20°C) and, after curing, has the following property:

- very high compressive and flexural strength after only three hours;
- low shrinkage;
- no loss in performance over a long period of time.

RECOMMENDATIONS

- Do not use **Lampocem** for restoring deteriorated concrete structures (use **Mapegrout Thixotropic** or **Mapegrout Fast-Set**).
- Do not use **Lampocem** to anchor machines or bearing structures (use **Mapefill**).
- Do not use **Lampocem** for levelling or repairing floors, walls or steps (use **Nivorapid**).
- Do not apply **Lampocem** to dry or dirty surfaces.
- Do not mix **Lampocem** with more water than prescribed and do not add more water to the mix when it has begun to set.
- Do not add lime, cement or gypsum to **Lampocem**.
- Do not leave bags of **Lampocem** exposed to sunlight before use.

APPLICATION PROCEDURE

Preparing the substrate

The surface must be solid, strong and free from dust and degraded or loose material.

Cavities formed for fixing must be roughened and



Lampocem

thoroughly soaked with water. This operation must be carried out very carefully, especially if the substrate is highly absorbent (mixed masonry, brickwork) and if it is exposed to hot sun.

Preparing the mix

While stirring, pour 1 kg of **Lampocem** into a container holding 200-210 g of water (20-21% of water to 1 kg of **Lampocem**) and mix manually with trowel or float to obtain a smooth mix with no lumps.

Lampocem can be prepared in larger quantities, in which case an electric mixer is recommended.

Given **Lampocem**'s fast setting time, prepare only amounts which can be placed within 1-2 minutes.

For mixing by volume, 4 parts **Lampocem** should be mixed with 1 part water.

Applying the mix

Apply the **Lampocem** mix rapidly with trowel or smooth float.

Securing foundation bolts, hinges, tie-rods, etc.

Completely fill the appropriately prepared cavity with **Lampocem** and then insert the hinge, foundation bolt or tie-rod. Finish off surface with trowel.

Securing sub frames and window and door frames.

Position frame and seal off anchor bolts with **Lampocem**.

Finish off surface with trowel.

Keep frame firmly in position for a few hours.

Stopping small water leaks

After preparing the mix, wait a few minutes before applying it so that the material warms up and begins to cure.

At this point, with gloved hands, force the **Lampocem** into the cavity and keep it pressed down until it has set.

Precautions to be taken during the preparation and application of Lampocem

No special precautions need to be taken when the temperature is approx. +20°C.

In warm weather **Lampocem** should not be exposed to sunlight and very cold water should be used in preparing the mix.

In cold weather water should be approx. +20°C and the material should be stored in heated rooms since the beginning of setting and curing is delayed in cool weather.

To fill large cavities on vertical surfaces, apply several layers at approx. five minute intervals.

On very warm or windy days, after applying **Lampocem**, keep surface damp for the first hour of curing to obtain perfect setting.

CONSUMPTION

1.8 kg of **Lampocem** will fill a one-litre cavity.

Cleaning

Before it hardens, **Lampocem** can be cleaned from tools with water.

After setting, residues can be removed by mechanical means.

PACKAGING

25-kg bags.

Cartons containing four 5-kg bags.

Packages made up of 4 boxes of 5 kg each.

Packages made up of 9 boxes of 1 kg each.

STORAGE

12 months if stored in a dry place indoors.

Manufactured in compliance with the regulations of the 2003/53/EC Directive.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Lampocem contains cement that in contact with sweat or other bodily fluids, produces an irritant alkaline reaction and allergic reactions to those predisposed. Wear protective gloves and clothing. For further information refer to the safety data sheet.

PRODUCT FOR PROFESSIONAL USE.

WARNING

While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.

**All relevant references
for the product are available
upon request and from
www.mapei.com**



Fixing foundation bolts for windows using Lampocem



Laying pipes and manhole covers using Lampocem

TECHNICAL DATA (typical values)

PRODUCT IDENTIFICATION

Consistency:	fine powder
Colour:	grey
Bulk density (kg/m³):	1200
Dry solids content (%):	100
Storage:	12 months in unopened original packaging in a dry place
Hazard classification according to EC 1999/45:	irritant. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packing and Safety Data Sheet
Customs class:	2523 90 90

COMPOSITION AND PROPERTIES OF THE MIXTURE (at +23°C and 50% R.H.)

Colour of mix:	grey
Mix ratio by weight:	100 g of Lampocem to 20-21 g of water
Mix ratio by volume:	4 parts Lampocem to 1 part water
Consistency of mix:	plastic - thixotropic
Density of the mixture (kg/m³):	2100
pH of mix:	11
Minimum application temperature:	+5°C
Pot life of mix:	about 1 minute
Finish setting time:	about 3 minutes
Ready for use after:	1-2 hours

FINAL PERFORMANCES

Mechanical strength according to EN 196/1: mixture water 21%	
Flexural strength (N/mm²):	
– after 20 minutes:	2
– after 3 hours:	3
– after 24 hours:	4
– after 28 days:	5
Compressive strength (N/mm²):	
– after 20 minutes:	8
– after 3 hours:	15
– after 24 hours:	18
– after 28 days:	35



Fixing anchor bolts for radiators using Lampocem



Fixing brackets for pipes using Lampocem



Fixing enclosures and electric cable tubes using Lampocem

Lampocem



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