Refratechnik Ceramics GmbH Barkhausener Str. 55 49328 Melle Germany Phone: +49 5427 810

Phone: +49 5427 810 Fax: +49 5427 81 102 ceramics@refra.com



Processing instructions **REFRALITE®** 230

The specifications listed in this document are to be observed when processing and installing the respective insulating concrete! Modification of or deviation from the processing specifications can lead to considerable installation problems and possibly to a complete failure of the installed refractory material! This processing specification describes general guidelines for the storage, processing and installation of the refractory material specified. If, e.g. due to individual construction site conditions, it seems necessary to deviate from the procedure described here, be sure to consult Refratechnik Ceramics GmbH before processing!

General:

- REFRALITE 230 is a ready pre-mixed heat-insulating insulating concrete which can only be used as backup insulation. Volume change during storage and transport has no effect on the quality.
- This product is a hydraulically setting lightweight refractory concrete. Delivered dry in 10 kg sacks, it is mixed with water at the construction site, poured and slightly compacted. It hardens at room temperature.

Storage:

- In general: store in a dry, cool and frostfree place!
- The shelf life specified on the product information applies when stored according to our recommendations and from the production date. This date is printed on the package.
- Refractory concrete that has become wet or passed its shelf life cannot be used.
- In case of incorrect storage, a product can become unusable or its quality

limited well before the expiry of the specified shelf life.

- The original shrink wrap foil should be left around the pallets for as long as possible for additional protection. The pallet protection foil does not replace a storage under cover.
- Standing wetness, e.g. through insufficient drainage of the storage space can also damage the material.
- Stacking of the goods delivered by us (bagged goods, big bags, etc.), is at the liability of the forwarder or customer.
 Refratechnik Ceramics GmbH bears no responsibility for any resulting consequential damages (damage to the packaging, personal injury, etc.).

Health and safety:

- Always use suitable eye protection, dust mask, protective clothing and work gloves!
- Direct skin contact should be avoided due to alkaline reactions.
- Wash thoroughly after processing the material!
- Observe the safety data sheet!

Mixing:

- Mixers, tools, conveying equipment, etc. need to be clean and free of any contamination!
- A clean gravity mixer is required for mixing (normal concrete mixer)
- Always mix complete packaging units (1 sack). Processing of partial quantities can lead to demixing and deviating material properties.
- There should be absolutely no contaminations (e.g. cement residues) in the mixer.
- Before processing, tip out the contents of a sack (10 kg) and mix dry. Slowly add the mixing water volume of 14 – 16 litres/sack until the required consistency is achieved. Do not exceed the maximum water addition.
 - Only mix briefly after adding water (max. 1 minute).
- Only use water in drinking water quality, otherwise the setting characteristics could be affected.



Processing:

- Store material in a dry place until use! Only process at over 5°C.
- Apply REFRALITE 230 by compacting gently. By mixing and adding water, a pre-compression of 10% is already achieved.

Setting - curing:

• Low temperatures (<10°C) may delay or even prevent the setting process; the temperature of the material and the mixing water should therefore be at least 5 $^{\circ}$ C. It may be necessary to heat the installation site itself.

- At temperatures above 25 °C on the other hand, the setting process can be considerably accelerated.
- The hardening of REFRALITE 230 can be accelerated by heating to 100-120°C, at the earliest after 24 hours, however.

• Complete setting of the refractory concrete takes at least 24 hours. Until then, the concrete is to be kept frost-free.