

TULEKINDEL BETOON

FIRE CONCRETE

Compressive strength class C35/45

With excellent heat resistance, aluminous cement-based strong cast concrete.

Highest usage temperature: up to + 1200⁰ C

To be used for casting hearth elements in stove and fireplace ceilings, bearing surfaces of heart grinds and supports.

In places concrete may be exposed to high temperatures

COMPOSITION

- Cementing agent aluminous cement, additives and fire resistant infilling with grain size not exceeding 3 mm.

TECHNICAL SPECIFICATION

- Density: 2100-2200 kg/m³
- Compressive strength class in normal conditions C35/45 EVS-EN 206-1
- One mix powder package of 25 kg makes 11-12 litres of ready-made concrete.

PREPARATION

- Pour necessary quantity of mix powder into a mixing vessel or mixer.
- Add water 20-22% of the weight of the mix (5-5.5 litres per package of 25 kg).
- Mix mechanically or manually until the mix becomes totally wet.
- Ready-made mixture to be used in 1 hour.

CASTING

- Minimum working temperature +5 °C.
- As thermal expansion of steel is greater than fire concrete, the cast must not be reinforced with steel.
- Concrete plates with a size not exceeding 600 x 600 or 800 x 400 should be used for hearth reinforcing. Minimum thickness of the plate 50 mm, of wider plates 100 mm.
- Concrete permanent expansion of +0.5-0.6% is formed at + 1200 °C.
- Setting time of the mix is 4-10 hours, depending on the layer thickness and environmental conditions.

USEFUL TIPS

- Before usage let the hearth dry 2-3 weeks in open ventilation conditions.
- First heating must be performed with small flames and in short cycles. Leave flues open after first heating. Use the hearth in full capacity only after repeated firing-up procedures.

STORAGE

- Store mix powder packages in a dry room.
- Shelf life of the mix powder is 6 months from the manufacturing date.