RAMCO HARD WORKER

FLOOR SCREED - WITHOUT SAND HW220

Self-Curing Screed Without Sand

TECHNICAL DATA SHEET

Product Description

HW220 Floor Screed is a self-curing, polymer-modified floor screed binder designed for internal and external floor levelling applications. This without-sand variant is formulated to be mixed with well-graded sand at site to produce a high-performance screed mortar. The formulation provides excellent workability, strong adhesion to concrete substrates, and high compressive strength suitable for supporting tile and floor finishes. The self-curing technology minimizes water curing requirements, enabling faster construction cycles and improved site productivity.

Features

- Self-curing: no external water curing required
- Desired strength for durable flooring base
- Desired workability and levelling properties
- Compatible with site-available M-sand or river sand
- Reduced shrinkage and cracking
- Suitable for both internal and external floor applications

Application Areas

Recommended for floor levelling and screeding prior to installation of tiles, stone, or other floor finishes.

Suitable substrates include:

- Concrete slabs
- Cementitious base floors
- Structural screed surfaces
- Balconies and terraces
- Residential and commercial floor areas

Typical applications include:

- Internal floors
- External balconies and terraces
- Commercial foot-traffic areas
- Floors requiring slope towards drainage points

Surface Preparation

The substrate shall be structurally sound, clean, and free from dust, oil, grease, loose particles, curing compounds, or contaminants that may affect bond.

All weak material shall be removed prior to application. The surface shall be pre-wetted with clean water to achieve a Saturated Surface Dry (SSD) condition before screed placement.

For smooth concrete substrates, mechanical roughening or light hacking is recommended to improve bonding.

Mixing Instructions

HW220 Floor Screed shall be mixed with well-graded sand. The mixing ratio shall be maintained based on application requirements. For the best results use 1:5 mix ratio. Clean water shall be added, and the material should be mixed for a maximum of 5 minutes until a smooth and uniform mortar is achieved. Do not remix or use hardened material.

Application Instructions

Apply a thin layer of cement slurry bonding coat over the damp substrate.

Place the prepared screed mortar while the slurry is still tacky.

Spread the mortar evenly and compact properly.

Level using screed bars or straight edge to achieve the required thickness and slope.

Finish the surface using wooden or steel float as required.

Recommended screed thickness: 12 mm to 80 mm in single layer, for higher thickness greater 80 mm go for multiple layer.

For thicker sections, application may be done in layers allowing the previous layer to firm before applying the next.

Curing

HW220 Floor Screed is a self-curing mortar formulated with special chemical additives that retain moisture within the matrix to ensure proper hydration. No external water curing is required after application.

Physical Parameters

Property	Typical Result
Water Demand @ 1:5	**13% – 14%**
Mix Ratio	**1:4 – 1:8**
Compressive Strength @ 7 Days (IS 4031- Part 6) @ 1:3	**10 – 12 MPa**
Compressive Strength @ 28 Days (IS 4031- Part 6) @ 1:3	**18 – 20 MPa**

All values tested under standard laboratory conditions.

Package

HW220 Floor Screed is available in 40 kg.

Coverage

HW220 - 40 kg gives a coverage of 2 – 3 sqft/kg at 30 mm thickness for 1:6 mix ratio by volume.

Storage

The product has a shelf life of 6 months from the date of manufacture when stored in sealed condition in a dry area protected from moisture and direct sunlight. Bags shall be stacked off the ground and protected from damp conditions.

Precautions

Product is non-hazardous, however it is cementitious. Use gloves, mask, and goggles during handling. Avoid eye contact. In case of contact, rinse with clean water and seek medical advice if irritation persists.

Health and Safety

HW220 Floor Screed Without Sand is cementitious in nature and should be handled with appropriate care. Use gloves, protective mask, and goggles during handling and mixing. Avoid contact with eyes and prolonged skin contact. In case of eye contact, rinse immediately with clean water and seek medical advice if irritation persists.

Technical Support

All values provided are tested under controlled laboratory conditions; performance may vary depending on site conditions and workmanship. For site-specific recommendations, technical data, or detailed guidance, contact the Hard Worker Technical Services Team at:

Toll-free number 1800 202 5700

Email customercare@ramcocements.co.in

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