

Product Technical Manual

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TDS Number: WHF 401

Product Grade: Gypsum-Based Self-Leveling Mortar

Version: V 3.0

Product Introduction

This product is made from high-strength building gypsum as the base material, supplemented with polymer components, and is precision-manufactured. It can completely solve problems such as ground cracking, hollowing, and poor sound insulation. The product offers high construction efficiency and features thermal insulation, soundproofing, and heat storage functions.

Construction Method

1. Substrate Requirements

The substrate must meet specified strength criteria prior to application. Any surface defects - including sanding, hollowing, or loosening - must be rectified. Strengthen weak substrates with appropriate treatment. Ensure surfaces are completely dry, clean, and free from oil stains, grease, or loose particles before construction.

2. Primer Treatment

After substrate preparation, apply a specialized water-based interface agent uniformly across the entire surface. Pay particular attention to achieve complete coverage without any missed spots during application.

3. Mixing and Application

Begin by pouring the designated amount of clean water into the mixing container. Gradually add the powder material at the prescribed ratio while continuously mixing. Use a mechanical mixer to blend into a homogeneous slurry. Apply the mixture onto the prepared

substrate and level using a notched scraper. Note: Mechanical methods are acceptable for both mixing and application processes.

4. Surface Finishing

Following application, allow the material to stand until surface bubble formation ceases. Subsequently, employ a bubble-eliminating roller to remove any remaining surface bubbles.

Performance Indicators

Test Items	Test Data
30-min Fluidity/mm	≥140
24-h Flexural Strength/MPa	≥2.0
28-d Dry Flexural Strength/MPa	≥5.0
24-h Compressive Strength/MPa	≥6.0
28-d Dry Compressive Strength/MPa	≥20.0
28-d Dry Tensile Bond Strength/MPa	≥1.0
Dimensional Change/%	-0.05~+0.05
Impact Resistance	No cracking or delamination

The values provided are typical test results and may vary slightly depending on environmental conditions.

For our company's products, the listed data are not legally binding specifications.

Precautions

1. Application Thickness

The recommended thickness for single-layer application should be 5-30mm.

2. Construction Environment

Avoid construction under direct sunlight or in strong wind conditions.

3. Temperature and Humidity Requirements

Construction should be performed at temperatures between 5-35 °C with humidity below 80%.

4. Material Usage Prohibitions

Do not add any unauthorized materials during use.

It is strictly prohibited to add water and remix the slurry after initial setting has begun.

5. Construction Time Limit

Mixed material must be fully applied within 30 minutes.

The Buyer must conduct tests under conditions identical to the actual construction environment before formal construction begins, to ensure the reliability of the material for this specific project. The commencement of formal construction shall be deemed as the Buyer's acceptance that the product has passed performance inspection. If the above procedures are not followed, all responsibilities shall be borne by the Buyer.

Packaging Specifications

25 ±0.5kg/bag。

Storage Precautions

Store in a cool, dry and well-ventilated place. Prevent package damage during transportation.

Shelf Life

6 months from production date when stored under recommended conditions.

Safety Warnings

May cause moderate eye irritation and mild skin irritation. May trigger skin allergic reactions.

In case of eye contact: Immediately rinse thoroughly with clean water for at least 15 minutes. Seek medical attention if necessary.

If swallowed: Get medical help immediately.

For skin contact: Wash with plenty of soap and water. Consult doctor if irritation persists.

Fire and Explosion Hazards

This product is not classified as hazardous during storage and transportation. It is not a flammable liquid, explosive, oxidizer, corrosive substance, toxic material, or radioactive hazard.

Fire Extinguishing Media

Recommended: Carbon dioxide (CO₂), foam, or dry chemical powder extinguishers.

Alternative: If no other extinguishing agents are available, use large amounts of water spray (fog pattern).

Post-Fire Cleanup

Once the fire is extinguished, clean up spilled material immediately (refer to Spill Handling Procedures).

Firefighting Protocol

Standard protective measures apply.

Spill and Leakage Handling

- Small Spills: Rinse with water.
- Large Spills: Contain, recover, and clean with water/detergent. Dispose of waste per local environmental regulations.

For more information, please refer to the Safety Data Sheet (SDS) of our products or contact our Customer Service Center.

The indicators and data provided in this document are based on our current level of technical knowledge and practical experience, and are for reference only. Specific guaranteed indicators are subject to the quality assurance certificate or supply contract. The user is responsible for testing the products purchased from our company to verify their suitability for their intended processes and applications, and to achieve the desired objectives. Further application and processing of our products are beyond our control. Therefore, our liability for the products provided is limited to the portion delivered by us and used by you. We do not assume responsibility for indirect losses incurred during the production process using our products as raw materials. Our technical support and customer service center are available to provide consultation and technical services related to our products. We welcome your inquiries and communication via mail or phone.

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