

# TitanForce™

## High-Strength Carbon Fiber Waterproof Mortar

**Aerospace-Grade Carbon Fiber • Stronger, Tougher, Waterproof**

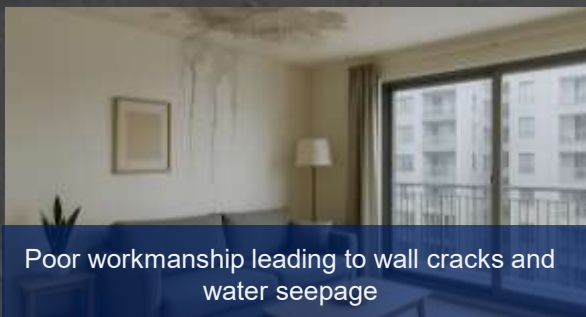
Are these worries troubling you?



Cracks appearing in structures after frequent earthquakes



Building materials failing to bear heavy loads, causing stress fractures



Poor workmanship leading to wall cracks and water seepage



Bathrooms leaking as cracks spread and waterproofing layers fail



Sun, wind, and rain accelerating the aging and decay of your building

### **What if your building could be different?**

Imagine a structure that stands strong and endures —resistant to extreme weather, natural disasters, and even the impact of air raids. A true fortress of safety, built to protect what matters most.

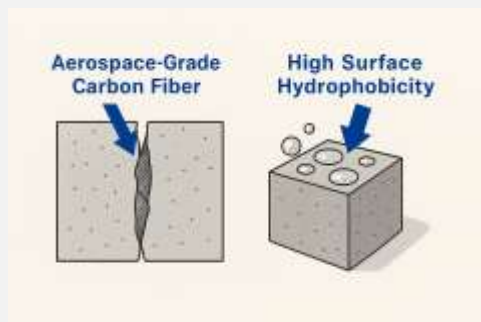
## 【Product Features】

- ✔ **Seamless Roof Protection** – Smooth leveling, lasting protection
- ✔ **Balcony Coating** – Strong base, leak prevention
- ✔ **Bathroom Repair** – Seal cracks, stop leaks



### ► Aerospace-Grade Carbon Fiber

Using high-strength aerospace carbon fiber evenly dispersed in the mortar, it enhances compressive and tensile strength, reduces cracking, bridges micro-fractures, and reinforces structural stability and seismic resistance, making it ideal for heavy-load and earthquake-prone buildings.



### ► Superior Hydrophobic Formula

Special hydrophobic additives create a lasting waterproof layer inside and out, blocking moisture, slowing corrosion, and protecting concrete in humid, coastal, or rain-exposed areas.

### ► Self-Healing Formula

A special silicate blend reacts with moisture to automatically fill micro-cracks, preventing them from spreading. This feature slows aging, preserves waterproofing and structural integrity, extends building lifespan, and reduces maintenance costs — an innovative application of smart construction materials.

### ► Outstanding Weatherproof & Anti-Corrosion Performance

Ideal for coastal areas, chemical environments, and harsh climates.

### ► High Adhesion

Seamlessly bonds with tiles, coatings, and various materials for faster, more efficient construction.

### ► Standards & Certifications

Complies with CNS, ASTM, EN, and JIS international structural and waterproofing standards. The incorporated recycled carbon fiber is certified under UL 2809 for recycled content and ISO 14067 for carbon footprint, demonstrating exceptional environmental performance and material reliability.

【 Product Information 】

- ◆ **Product Name:** TitanForce™ High-Strength Carbon Fiber Waterproof Mortar
- ◆ **Packaging:** 25 kg/bag
- ◆ **Manufacturer:** Thermolysis Co., Ltd.
- ◆ **Type:**

Type	Product Name
TitanForce™-AF	High-Strength Waterproof Mortar (Floor Application)
TitanForce™-AW	High-Strength Waterproof Mortar (Wall Application)
TitanForce™-NS	High-Strength Waterproof Non-Shrink Mortar
TitanForce™-UF	High-Strength Waterproof Ultra-Rapid Hardening Mortar

- ◆ **Dosage:** Approximately 2,000 kg of carbon fiber non-shrink leveling mortar is required per cubic meter. This equals about 20 kg per square meter for a 1 cm thickness application.
- ◆ **Transportation, Storage & Handling:** Store indoors in a dry, well-ventilated area, protected from direct sunlight and moisture. Keep at least 10 cm above the floor and away from walls. Use within the 6-month shelf life.

【 Construction Method 】



**01. Surface Preparation**

Remove surface contaminants and rust. Reinforcement bars must be cleaned of rust and treated with anti-corrosion protection.



**02. Interface Treatment**

After roughening the substrate, apply a bonding agent to the cement or metal surface, and complete the mortar application within 2 hours.



**03. Mixing**

Add 160 g of water per 1 kg of mortar. Mix thoroughly and use within 120 minutes.



**04. Pumping**

Carry out pumping within the workable time. Do not add extra water during the process.



**05. Placing**

Add 160 g of water per 1 kg of mortar. Mix thoroughly and use within 120 minutes.



**06. Curing**

Start water curing after final set, three times daily for at least 3 days. For outdoor work, cover to protect from wind and sun.



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