

Technical Data Sheet

BC Plaster SM

High-Performance Premixed Cementitious Plaster

1. Product Description

BC Plaster SM is a premium-grade, factory-blended, cementitious premixed plaster/render designed for internal and external wall applications. Formulated with hydraulic binders, natural sand, graded aggregates, special fibers, and advanced additives, the product offers superior workability, reduced shrinkage cracking, and excellent adhesion on block walls, fair-faced concrete, and precast elements.

Supplied as a dry powder requiring only the addition of clean water, BC Plaster SM is optimized for spray-machine application while remaining fully suitable for manual works.

2. Features & Advantages

- Ready-to-use factory-controlled blend ensuring consistent quality
- Fast, economical spray-machine application
- Enhanced workability and smooth finishing
- Improved adhesion—no scratch coat required on block walls
- Reduced shrinkage cracking
- Contains special lubricating additives to extend equipment/service life
- Suitable for both internal and external applications
- Performs well in humid and dry climates
- Uniform color and controlled setting time

3. Applications

Suitable for plastering/rendering of:

- Concrete block walls
- Fair-faced concrete
- Precast panels
- Internal and external wall surfaces
- Manual or mechanical spray application



4. Technical Properties (Typical Values @ 25°C)

Property	Value	Standard/Test Method
Appearance	Grey powder	Visual
Application Thickness (per layer)	10 – 15 mm	Internal Standard
Pot Life	~2 hours	Internal Standard
Setting Time	3.5 – 4.5 hours	Internal Standard
Wet Density	~1.6 kg/L	Internal Standard
Dry Bulk Density	~1.4 kg/L	Internal Standard
Compressive Strength (28 days)	> 7.0 N/mm ²	EN 1015-11
Flexural Strength (28 days)	> 2.0 N/mm ²	EN 1015-11
Bond Strength (28 days)	> 0.35 N/mm ²	EN 1015-12
Thermal Conductivity	0.47 W/m.K	EN 1745
Reaction to Fire	Class A1 (Non-combustible)	EN 13501-1

5. Surface Preparation

- Substrate must be structurally sound, clean, and free of loose particles
- Pre-wet hot or highly absorbent surfaces
- Ensure proper neutralization for block surfaces before application
- Repair cracks or defects prior to plastering

Mixing

- Add clean potable water to a clean container
- Gradually add BC Plaster SM while mixing
- Recommended water dosage: 8–9 liters per 50 kg bag
- Mix for 3–5 minutes until a uniform, lump-free mortar is achieved



6). Application

- Apply using a spray machine or manually with a trowel
- Maintain layer thickness of 10–25 mm
- For multi-layer application:
 - Apply 10–15 mm per coat
 - Allow 2 days curing between layers
- Level using aluminum straightedge

Curing

- Mist-cure the applied plaster every 8–12 hours for at least 3 days
- In hot or dry climates: minimum 5 days of curing
- Avoid rapid drying or exposure to direct sunlight during initial curing

7). Coverage / Yield

- 50 kg bag yields approx. 31.25 liters of mortar
- Approximate coverage at 15 mm thickness: 2.0 – 2.2 m² per bag
(Actual coverage depends on substrate roughness and application conditions.)

8). Packaging

50 kg bag

9). Storage & Shelf Life

- Store indoors in original sealed packaging
- Keep away from moisture and direct sunlight
- Recommended storage temperature: 5–35°C
- Shelf life: 12 months from production date when properly stored

10). Health & Safety

- Highly alkaline — avoid contact with skin and eyes
- Use gloves, dust mask, and goggles during application
- In case of eye contact, rinse immediately with clean water
- Refer to Safety Data Sheet (SDS) for full details

DISCLAIMER

The data presented in this sheet are based on laboratory testing and practical experience. Variations in substrate, application method, and environmental conditions may impact performance. Users are advised to carry out tests under their own conditions. Building Chemistry Industry's responsibility is limited to the product replacement in cases of proven manufacturing defect.

