Master Wall Inc.®
Building a Culture of Excellence

PRODUCT DATA

AIRSTOP FOR CMU

Master Wall® AirSTOP for CMU is a premium dry polymer modified Portland cement-based air and water barrier that integrates into approved Cemplaster Fiberstucco and approved Cobrand stucco products for a complete air and water solution over concrete and masonry substrates. AirSTOP is a dual purpose product that may be applied under ASTM C926 stucco as a concealed application or as a skim or leveling coat on the surface.

FEATURES & BENEFITS

- Air Control
- Adds Water Resistance
- Stucco Scratch Coat
- Stucco Leveler
- Vapor Open
- Convenient Bags for easy storage

Application Temperature: 40°-110°F (5°-43°C) Working Time: 1 hr. Set Time: 8-12 hrs. Dry Time: 12 hrs. at room temperature, working and drying time will vary with temperature and humidity.

JOB CONDITIONS

Job Conditions - Air and substrate temperature for application of AirSTOP for CMU must be 40°F (5°C) or higher and must remain 40°F (5°C) or higher for a minimum of 24 hours. Provide temporary protection to protect the wall system from damage until permanent flashings, caps and sealants are installed. Store materials within prescribed temperature limits and out of direct sunlight. Working and drying times are based upon normal room temperature conditions and will vary with temperature and humidity.

Installer must verify that deflection IS L/360 minimum or greater in compliance with veneer structural requirements.

PREPARATION

The substrate must be approved by Master Wall Inc®., clean, dry, structurally sound and free of efflorescence, oil, grease, form release agents and curing compounds or anything that would affect bond. Painted surfaces are not acceptable and must be removed. Concrete and masonry surfaces should cure for a minimum of 28 days.

Coverage per bag (sf/m²)*

Skim & Scratch Coat:
90-100 ft² (8.4 – 9.3 m²)

Skim Coat:
130-150 ft² (12.1 – 13.9 m²)

**Coverages are approximate and will vary depending on mix ratio with water, application technique, waste factor, surface conditions, and other variables that may exist. Construct a mock- up under actual conditions of use to verify proper surface preparation, coverage, and method of application, for approval by the appropriate authority.*

Packaging/Shelf Life/Storage

Packaging: 50 lb (23 kg) bag

Shelf Life: 1 year

Storage: Store off the ground in a cool, dry area. Protect from extreme heat, moisture, and direct sunlight.

Technical Data

- *Compression (ASTM C270)*
  24 hours - 500 psi (3447 kPa)
  7 day - 2700 psi (18,615 kPa)
  28 day - 3350 psi (23,097 kPa)
- *Tensile Strength (average)*
  7 day - 310 psi (2137 kPa)
  28 day - 395 psi (2723 kPa)
- *Shear Strength (average)*
  7 day dry - 467 psi (3219 kPa)
  7 day wet - 395 psi (2723 kPa)
  28 day dry - 537 psi (3702 kPa)
- *Sag Resistance*
  0-.485
- *Water Vapor Transmission*
  Vapor Permeable
- Air Leakage Resistance (ASTM E2178)
  <0.004 cfm/ft² @ 1.57 psf
  (< 0.02 L/m²s @ 75 Pa)
- Complies with 2018, 2021 and 2024 IBC, IRC, and IECC requirements as an air barrier material
- Complies with 2020, 2023 FBC requirements as an air barrier material
- Complies with 2020, 2023 FBC requirements as an air barrier assembly when used with Master Wall® SuperiorShield components and other components specified by the code

APPLICATION PROCEDURE

Verify that surfaces are fully cured, structurally sound, clean, dry, and free of frost, damage, and all bond-inhibiting materials, including dirt, dust, grease, efflorescence, form oil, curing compounds, paints or coatings, salts, laitance, or other surface conditions that could interfere with adhesion. The surface should be absorbent and slightly scarified or have surface roughness. Loose or weak materials must be removed, and surface damage must be repaired.

Concrete Masonry: provide open texture concrete masonry units with flush joints and free of surface contamination. Remove projecting mortar so it is even with the plane of the wall.

Concrete: Remove form release agents or other surface contamination, remove form ties and correct surface defects such as spalls or honeycombs with AirSTOP. Provide a surface that is slightly scarified.

If adhesion is in question conduct tensile bond tests as directed by design professional to verify adequacy of adhesion to the substrate. Conduct sufficient tests in a sufficiently wide area to ensure results are representative of the surface conditions on the project.

Where the surface is too smooth, dense, or non-absorbent to receive Master Wall® AirSTOP for CMU, or where form oil, an existing coating, or other surface contamination prohibits adhesion, furred or self- furred lath should be installed as specified by the design professional (refer to Master Wall Cemplaster Fiberstucco guide specifications and verify adequacy of lath attachment with respect to design wind pressures).

Mixing - Add 5 to 6 quarts (4.7-5.7 L) of potable water to a clean plastic pail. Add the AirSTOP slowly while stirring using a heavy-duty 1/2" (12.7 mm) drill at 400 - 500 rpm and a heavy-duty mixer. Mix thoroughly to a homogeneous but stiff consistency. Let the mixture stand for 5 to 10 minutes and then remix without adding any more water or powder. During use, stir occasionally to keep mix fluffy. DO NOT temper with water. Excessive stirring may cause faster setting and reduced working time. Do not add accelerators or retarders to the AirSTOP mixture.

Application - Apply only to clean, sound, properly prepared, frost-free surfaces. In hot weather store material in a cool environment just prior to use and use cold water for mixing. Thoroughly dampen CMU and absorbent concrete surfaces in hot, dry weather to reduce surface absorption just prior to installation of product. Work away from the sun or provide shade, and work during cooler periods of the day.

Hazard: This chemical is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

VOC: Less than 50 g/L.

Approved Substrates

- CMU
- Concrete
- Masonry
- Stucco
- Mortar Parge Coat
- Adheres to:
  - Rollershield
  - SuperiorFlash
  - SMP Sealants
- Others approved in writing

Limitations

- Rapid loss of moisture during drying period due to direct sun, wind, or high temperatures, can cause cracking and low strength development in Portland cement-based materials. Adjust scheduling of work accordingly to avoid each of these conditions.
- Use of excess water in the mix can cause cracking and low strength development in Portland cement-based materials. Do not exceed the recommended amount of mix water.
- Do not use to level irregular or out-of-plane wall surfaces. Use appropriate Master Wall® repair mortar for these purposes.
- Do not use on surfaces with standing or glistening water.
- Do not use on wood substrates.
- Do not use over non-Master Wall® air barrier, flashing, or rough opening protection materials. Sequence work so these materials lap over the Master Wall® AirSTOP for CMU skim coat and apply appropriate stucco accessories over the lapped area.
- Not intended for use as rough opening protection
- Not intended for permanent exposure to weather. Protect with stucco brown coat within 60 days of application.
- Not for use below grade.

APPLICATION PROCEDURE

AirSTOP Stucco Scratch Coat with Brown

The application will consist of a skim coat and scratch coat of AirSTOP and brown coat of Cemplaster Fiberstucco

Skim Coat: Apply a uniform coat of Master Wall® AirSTOP for CMU at nominal 1/16- 1/8 inch (1.6-3 mm) thickness by trowel BEFORE stucco grounds and accessories are installed to achieve a void and pinhole free surface.

Air Barrier and Flashing Connections: tie-in adjoining air barrier and flashing components such as window rough opening protection, making sure overlap onto Master Wall® AirSTOP for CMU DOES NOT EXCEED THE WIDTH OF THE PERFORATED FLANGE on stucco accessories (e.g. casing beads, expansion or control joint accessories). The Master Wall® AirSTOP for CMU scratch coat (see below) may not adhere to other air barrier and flashing components.

Scratch Coat: Apply a nominal ¼ inch (6 mm) scratch coat of Master Wall® AirSTOP for CMU by trowel minimum 24 hours after the skim coat is dry. Scratch the surface horizontally with a stucco scarifier. Allow to dry a minimum 24 hours, longer in cool or damp weather, before application of brown coat.

Brown Coat: apply Master Wall® Cemplaster Fiberstucco or Cobrand stucco in accordance with applicable codes and manufacturer's requirements, including moist curing of the stucco brown coat for minimum 4 hours. Limit total thickness, including Master Wall® AirSTOP for CMU skim coat and scratch coat, and stucco brown coat, to 5/8 inches (16 mm) nominal thickness. Allow to cure according to manufacturer recommendations prior to priming or finishing.

AirSTOP Leveling Coat Over Stucco

Apply a uniform coat of Master Wall® AirSTOP for CMU at nominal 1/16-1/8 inch (1.6-3 mm) thickness by trowel over 5/8 inches (16 mm) nominal thickness stucco to achieve a void and pinhole free surface.

If mesh is used, Immediately embed the reinforcing fabric into the wet AirSTOP mixture and smooth from the center to the edge to avoid wrinkles. The reinforcing fabric must be continuous at all corners and lapped or abutted in accordance with Master Wall® specifications. The color of the mesh shall not be visible, but a slight mesh pattern may be visible. Allow to cure according to manufacturer recommendations prior to priming or finishing.

CLEAN UP

Tools and equipment can be cleaned with soapy water while the AirSTOP is still wet.

Information contained in this product data sheet conforms to the standard detail recommendations and specifications for the installation of Master Wall Inc.® products and is presented in good faith. Master Wall Inc.® assumes no liability, expressed or implied as to the architecture, engineering, or workmanship of any project. This information may be concurrent with, or superseded by other applicable documents, such as specifications and details. Contact Master Wall Inc.® for the most current product information. ©2026 Master Wall Inc.®

Health & Safety

WARNING! Causes eye and skin irritation. Precautionary Statement Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

Skin Contact: Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

Ingestion: If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Store locked up. Dispose of contents/container in accordance with Local, State, Federal and Provincial regulation.

Spills: Collect with suitable absorbent material such as cotton rags.

Disposal: Dispose of in accordance with local, state or federal regulations.

Warning: KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. Consult the Safety Data Sheet (SDS) in the Products section at masterwall.com for further health and safety information.

LIMITED WARRANTY

This product is subject to a written limited material or system warranty. Obtain a warranty from the Tech Support tab of our website. Refer to Specifications for more complete information on proper use and handling of this product.

WARNING, THIS PRODUCT CONTAINS SILICA

If sanding or scraping are performed, ventilate work area and/or use a NIOSH/MSHA-approved respirator in accordance with our Safety Data Sheet.

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