

# MasterSeal® AWB 661HP

Vapor Permeable, Air and Water-Resistive Barrier Membrane - meeting Class A requirements of ASTM E84 Surface Burning test

### DESCRIPTION

MasterSeal AWB 661HP is a one-component, liquid applied vapor permeable air/water- resistive barrier based on Silica Fortified Rubber™ chemistry. This waterproof, resilient coating may be spray-, roller-, brush-, or trowel- applied directly to approved above grade wall substrates. It provides excellent secondary moisture protection behind most wall claddings including brick, siding, metal panels, and EIFS.

### TYPICAL APPLICATIONS

As a HIGH vapor permeable, air and water barrier membrane for high rise and low rise residential, commercial, institutional buildings.

As an integral part of building designs to reduce heating and cooling costs during the life of the building.

For use over the following above ground, exterior wall substrates:

- In-situ concrete
- Precast concrete
- Concrete blocks (aerated, hollow and solid)
- Cement board

# ADVANTAGES

- Meets Class A classification of surface flame spread according to ASTM E 84
- Meets ASTM D1970 nail sealability requirements with and without Sheathing Fabric

- Self-sealing performance
- Easy to apply, one component, low-VOC formulation
- Non-flammable as applied; improves workplace safety
- Mineral oil and plasticizer free; will not dry out or crack due to loss of oil / plasticizer
- Water based tools can be cleaned with water; solvents and citrus based cleaners not required
- Tough, abrasion resistant rugged membrane resists damage after installation
- Approved for use with Master Builders Solutions EIFS and stucco systems - full system warranty, seamless membrane for buildings with multiple claddings
- Can be left exposed for 120 days allows flexible construction scheduling
- Complies with the air barrier requirements of the Massachusetts State Energy Code

# PACKAGING AND COLORS

**MasterSeal AWB 661HP** is supplied in 25 kg pails and available in grey color.

# TYPICAL PROPERTIES\*

Test	Results
Solids	74%
VOC Content ASTM D2369 (EPA method 24 part)	<0.1 g/L
Surface Burning - ASTM E84 @ 500 microns	Class A Flame Spread Index (<25) Class A Smoke Developed Index (<450)
Multi-Story Fire Tests - NFPA 285	Passed using Master Builders Solutions EIFS system.
Air Permeance of Building Materials - ASTM E2178	0.01 l/s.m² @ 75 Pa
Water Vapor Transmission - ASTM E96 Method B (wet cup)	> 8 Perms (grains/Hr.) @ 250 microns wet film thickness
Pull-Off Strength on concrete - ASTM D4541:2002	1.02 N/mm²
Nail Sealability (without Sheathing Fabric) - ASTM D1970	Pass - No water penetration at galvanized roofing nail penetration under 127 mm head of water after 3 days at 4°C
Resistance to Fungal Defacement - ASTM D5590	Pass
Drainage Efficiency ASTM E2273	> 90%
Water permeability BS EN 12390	Nil



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# **APPLICATION GUIDELINES**

Application Equipment
Use a 20 mm nap roller or paint brush.
If spraying, refer to Method Statement for
MasterSeal AWB 661I /
MasterSeal AWB 661HP /
MasterSeal AWB 661FL for details of spray
application equipment and application instructions.

Application: pretreatment of rough openings and joins in cement boards.

All rough openings such as window openings should be fully pretreated with **MasterSeal AWB 661HP.** 

If applying to cement fiber boards or similar, all joints should be pretreated with reinforcing fabric embedded in **MasterSeal AWB 661HP**.

For full details see Method Statement.

If using roller, brush or trowel application, allow any previously applied materials to board joints or rough openings to dry to the touch before applying **MasterSeal AWB 661HP** to entire wall surface. If spraying, "wet on wet" application is acceptable.

If applying by roller, it is necessary to pre-wet the synthetic roller pad with water spin out the excess water. The pre-wetting only needs to be done once at the start of application.

On untreated concrete or concrete masonry blocks, apply first coat to a uniform wet film thickness of 250 microns. Allow to dry and check for blisters and to ensure the coating is void and pinhole free. Apply second coat at 250 microns wet film thickness. Note very porous concrete blocks may require a third coat of material to obtain a complete film.

On concrete or concrete block substrates which have received a full treatment of

**MasterSeal AWB 661FL** Block Filler a single coat of 250 microns will suffice.

When spraying a single coat of 500 microns wet film thickness can be applied but only on cement boards meeting ASTM C1177 standard or on concrete masonry substrates that have first been pretreated with a scrape coat of

MasterSeal AWB 661FL.

Allow to dry completely. Drying time 2 - 4 hours @  $25^{\circ}$ C

Clean tools and equipment with water immediately after use. Dried material can only be removed mechanically.

Application temperatures

**MasterSeal AWB 661HP** can be applied from +5°C to 40°C

# SURFACE PREPARATION

Substrates must be dry, clean, sound and free of curing compounds, release agents, paint or other residue or contamination.

Surface irregularities in concrete, block or brick work should be pretreated with **MasterSeal AWB 661FL** (see Product Data Sheet) to provide a smooth surface and ensure a void and pinhole free membrane.

### MIXING

MasterSeal AWB 661HP is supplied as a single component material which can be used directly from original packaging or poured into a new container that is clean and free of foreign substances. It should be thoroughly stirred with a clean, rust-free drill and paddle until and homogeneous.

Never dilute **MasterSeal AWB 661HP.** Close container when not in use.

# COVERAGE / YIELD

Depends on substrate and degree of preparation:

Poured Concrete	Approx. 42 m² per pail
Concrete / Masonry pretreated and smoothed with MasterSeal AWB 661FL	Approx. 42 m² per pail
Cement Board	Approx. 42 m² per pail
Concrete Masonry Units	Standard Weight
(CMU)	Approx. 22 m² per pail
	Medium Weight Approx. 16 m² per pail
	Light Weight
	Approx. 11 m² per pail

\*Above figures refer to application by roller or spray and back-roll method for optimum coverage rate. Other application methods may provide less coverage. Actual results may vary depending on surface porosity, moisture uptake or other factors



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# WATCHPOINTS

Walls shall be capped to prevent moisture and precipitation from entering wall during construction.

Limit the weather exposure of apply **MasterSeal AWB 661HP** to a maximum of 120 days.

#### STORAGE AND SHELF LIFE

Shelf life is 12 months from date of manufacturing in unopened original containers. Product must be kept out of direct sunlight and in a dry, cool, airconditioned warehouse below 35°C temperature.

Store clear of the ground on pallets and do not stack pallets.

# **HEALTH AND SAFETY**

As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children & animals. Reseal containers after use. For further information, refer to material safety data sheet by accepted test methods.

# QUALITY AND CARE

All products originating from Master Builders Solutions facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health and safety standards of ISO 9001 and ISO 14001.

- \* Properties listed are based on laboratory controlled tests.
- ® = Registered trademark of the MBCC Group in many countries.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

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