

# MasterSeal® AWB 661I

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

## DESCRIPTION

**MasterSeal AWB 661I** is a one-component liquid applied air/water-resistive barrier that can also function as a **vapor retarder**. It is based on Silica Fortified Rubber™ chemistry.

This waterproof, resilient membrane may be spray-, roller-, or brush- 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 very low permeability, air, vapor and water barrier 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
- Exhibits 0.01%l/s/m<sup>2</sup> air permeance according to ASTM E2178 – easily meets air permeance of Building Materials ASTM E2178

- Meets ASTM D1970 nail sealability requirements with and without Sheathing Fabric – Self-sealing performance
- Tough, abrasion resistant membrane when cured – rugged resists damage by following trades after installation
- One component, low-VOC formulation – easy to apply, meets statutory VOC requirements
- Non-flammable; improves workplace safety
- Mineral oil and plasticizer free; will not dry out or crack
- Water based – tools can be cleaned with water; solvents and citrus based cleaners not required
- 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

## PACKAGING AND COLORS

**MasterSeal AWB 661I** is supplied in 25 kg pails and available in grey and reddish-brown colors.

## TYPICAL PROPERTIES\*

Test	Results
Solids Content	74%
VOC Content – ASTM D2369 (EPA method 24 part)	4 g/l
Surface Burning – ASTM E84 @ coating thickness ±600 microns	Class A Flame Spread Index (<25) Class A Smoke Developed Index (<450)
Fire Resistance E119/UL263	Has been shown not to add or detract from the rating of a fire resistive wall assembly
Air Permeance of Building Materials - ASTM E2178	0.01 l/s.m <sup>2</sup> @ 75 Pa
Water Vapor Transmission - ASTM E96 Method B	<1.0 Perms (grains/Hr.) @ 0.5 mm wet film thickness
Pull-Off Strength - ASTM D4541-2002	1.0 N/mm <sup>2</sup>
Multi-Story Fire Tests - NFPA 285	Passed using Master Builders Solutions EIFS System
Water permeability BS EN 12390	Nil
Drainage efficiency ASTM E2273	>90%

# MasterSeal<sup>®</sup> AWB 661I

## APPLICATION GUIDELINES

Application Equipment  
 Use a 20mm 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  
 joints in cement boards.

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

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

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 661I** 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.

Apply first coat to a uniform wet film thickness of  
 300 - 325 microns. Allow to dry and check for  
 blisters and to ensure the coating is void and  
 pinhole free. Apply second coat at 300 - 325  
 microns wet film thickness.

When spraying a single coat of 600 - 650 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  
 @ 20°C.

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

Application temperatures  
**MasterSeal AWB 661I** 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 661I** 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 homogeneous.

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

## COVERAGE / YIELD

Depends on substrate and degree of preparation:

Poured Concrete	Approx. 23.5 m <sup>2</sup> per pail
Concrete Masonry Units (CMU)	Approx. 18 m <sup>2</sup> per pail
Concrete / Masonry pre-treated and smoothed with <b>MasterSeal AWB 661FL</b> Block Filler	Approx. 24.5 m <sup>2</sup> per pail
Cement Board	Approx. 23.5 m <sup>2</sup> 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.

## WATCHPOINTS

Protect from rain until completely cured.

Do not use **MasterSeal AWB 661I**  
 for below-grade applications or on surfaces subject to  
 water immersion.

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

Limit the weather exposure of  
**MasterSeal AWB 661I** to a maximum of 120 days in  
 Middle East conditions.

# MasterSeal® AWB 661I

## 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, air-conditioned 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.

## 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.

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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

Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

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