The Importance of Rain Screen Technology

Moisture is absorbed by the cladding or enters through surface cracks in the veneer or mortar joints. Capillary action draws the moisture further into the wall assembly.

Residual water vapor is removed by convective air currents within the ventilated airspace created by the rain screen. The airflow accelerates drying of the exterior cladding.

Moisture drains down the rainscreen surface and out of the wall via a weep screed at the bottom of the wall. The airflow created by the rain ventilated airspace draws the residual water vapor removed by convective air currents within the space also accelerates drying of the exterior cladding.

Wind swept rain saturates the exterior cladding. Residual water vapor is removed by convective air currents within the ventilated airspace created by the rain screen. The airflow accelerates drying of the exterior cladding.

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Moisture drains down the rainscreen surface and out of the wall via a weep screed at the bottom of the wall. The airflow created by the rain ventilated airspace draws the residual water vapor removed by convective air currents within the space also accelerates drying of the exterior cladding.

Thickness .40 in (10mm) .80 in. (20mm) 1.6 in. (40mm)

Coverage Area 53 sq. ft. (4.92m²)

Roll Width 16 in. (40.64cm)

Roll Length 40 ft. (12.19m)

Roll Weight 5.0 lbs. (2.27kg)

PHYSICAL DATA Mortairvent® CW 205 Mortairvent® CW 206 Mortairvent® CW 207

Core Material Polypropylene Polypropylene Polypropylene

Roll Weight 14 lbs. (6.35 kg) 16 lbs. (7.26 kg)

Roll Width 39.0 in. (99.06 cm)

Roll Length 61.5 ft. (18.75 m) 40 ft. (12.19 m)

PHYSICAL DATA Mortairvent® CW 202 Mortairvent® CW 203

Core Material Polypropylene Polypropylene Polypropylene

Installation Instructions:

Apply a weather resistant barrier over sidewall sheathing. Note: some regions may require two layers of weather resistant barrier. Check local codes for more information.

Install Mortairvent® after windows and doors have been properly installed and flashed.

On subsequent courses, butt the blue polymer material together without overlapping. Pull the fabric flap over the weather resistant barrier to create an insect screen. The top course roll will need to be inverted to achieve this.

Staple or nail every three square feet.

The top course roll will need to be inverted to achieve this.

Staple or nail every three square feet.

Staple or nail every three square feet.

Roll Weight 5.0 lbs. (2.27 kg) 14 lbs. (6.35 kg)

Roll Length 61.5 ft. (18.75 m) 40 ft. (12.19 m)

PHYSICAL DATA Mortairvent® 202 Mortairvent® 203

Core Material Polypropylene Polypropylene Polypropylene

Roll Weight 12.5 lbs. (5.67 kg) 14 lbs. (6.35 kg)

Roll Length 39 in. (99.06 cm) 39 in. (99.06 cm)

PHYSICAL DATA Mortairvent® 202 Mortairvent® 203

Core Material Polypropylene Polypropylene Polypropylene

Coverage Area 162.5 sq. ft (15.09m²)

UV Exposure 30 days 30 days 30 days

Roll Weight 5.6 lbs. (2.54 kg) 81.25 sq. ft. (6.22 m²) 14 lbs. (6.35 kg)

Roll Length 39 in. (99.06 cm) 39 in. (99.06 cm)

PHYSICAL DATA Mortairvent® 203

Coverage Area 162.5 sq. ft (15.09m²)

Roll Weight 5.6 lbs. (2.54 kg) 81.25 sq. ft. (6.22 m²)

Roll Length 39 in. (99.06 cm) 39 in. (99.06 cm)

PHYSICAL DATA Mortairvent® CW 206

Coverage Area 33.5 sq. ft (15.09m²)

Roll Weight 14 lbs. (6.35 kg) 33.5 sq. ft (15.09m²)

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PHYSICAL DATA Mortairvent® CW 205

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Installation Instructions:

Apply a weather resistant barrier over sidewall sheathing. Note: some regions may require two layers of weather resistant barrier. Check local codes for more information.

Install Mortairvent® after windows and doors have been properly installed and flashed.

Starting at the base of the wall, unroll Mortairvent® from right to left with the fabric flap on the bottom. The blue geomatrix should be facing the weather resistant barrier and the filter fabric facing the exterior of the building.

On subsequent courses, butt the blue polymer material together without overlapping. Pull the fabric flap over the weather resistant barrier to create an insect screen. The top course roll will need to be inverted to achieve this.

Staple or nail every three square feet.

On the bottom and top course only, fold the fabric flap and tuck it between the blue polymer matrix and the weather resistant barrier to create an insect screen. The top course roll will need to be inverted to achieve this.

On subsequent courses, but the blue polymer material together without overlapping. Pull the fabric flap over the previous course (shingle style) and staple.

Apply lath, scratch coat, and stucco or masonry veneer siding over Mortairvent® using recommended fasteners and spacing.

www.mortairvent.com
A rain screen is a system that creates a pressure neutralized airspace between the structural envelope and the exterior cladding of a wall structure. This facilitates the drainage, as well as the ventilation of moisture from the wall system, which is beneficial to the life of the structure.

As more information becomes available, many in the building products industry have become aware of the absolute necessity for rain screens, and the negative ramifications for not implementing them. 90% of all wall failures are due to moisture related issues, and since many wall claddings are not water tight, managing moisture has become a critical design characteristic. Below are examples of what happens when a rain screen isn’t used, and moisture inevitably penetrates:

- Corrosion of Building Materials
- Staining/Efflorescence
- Cracking and Spalling
- Interior Deterioration of Finishes
- Poor Indoor Air Quality
- Increased Maintenance
- Decreased Life-span of Building

These damages are time consuming, costly, and in some circumstances, irreversible. Luckily, Advanced Building Products has developed the technology to combat this issue, and proudly offers three distinct engineered polymeric rain screens that mitigate the potential damage caused by moisture intrusion:

- Mortairvent® 202 & 203 (Residential Use)
- Mortairvent® CW (Commercial Use)

When building exterior walls with stone, stucco, brick, cedar, or fiber cement siding, an effective rain screen system is imperative. Mortairvent® is a drainage and ventilation system specifically designed for use with most exterior siding materials, primarily in residential and mixed use structures. Mortairvent® is available in 0.25 in. (6 mm) or .40 in (10 mm) thicknesses.

**Benefits**
- 95% open design enables moisture drainage and drying
- Resistant to most known corrosive chemicals and reduces the risk of mold or mildew
- Minimizes staining, peeling, and blistering of exterior finishes
- Contributes to LEED points
- Simple installation. Easier and more cost effective than traditional methods
- 2-ply design improves the strength properties of the rain screen, and deflects mortar
- Meets the National Building Code of Canada at 10mm thickness
- Tested to ASTM E 2925
- Filter fabric allows for guide lines to be snapped

The Mortairvent® CW Mortar Deflection & Ventilation System is a full cavity wall product used to reduce the overall cavity width in ventilated wall assemblies. Mortairvent® CW combines the benefits of rain screen technology through the use of integrated mortar deflection, drainage and ventilation design. Mortairvent® CW does not allow mortar blockage in the cavity wall drainage planes due to the heat bonded filter fabric. This dedicated airspace allows proper drainage and convective drying. Mortairvent® CW is available in .40 in (10mm), .80 in (20mm), and 1.6 in (40mm) thicknesses.

**Benefits**
- Improves the overall performance of the entire cavity wall assembly
- Reduced continuous airspace expedites moisture drainage and drying
- Mortar deflection fabric layer provides a dedicated airspace for ventilation and convective drying
- Lightweight and easy to install between brick ties. Provides simple one-step installation as brickwork is completed
- Mold & mildew resistant
- Contributes to LEED points

Securock® Glass-Mat Sheathing is a registered trademark of USG.
WHAT IS A RAIN SCREEN?

A rain screen is a system that creates a pressure neutralized airspace between the structural envelope and the exterior cladding of a wall structure. This facilitates the drainage, as well as the ventilation of moisture from the wall system, which is beneficial to the life of the structure.

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MORTAIRVENT® 202 & 203

When building exterior walls with stone, stucco, brick, cedar, or fiber cement siding, an effective rain screen system is imperative. Mortairvent® is a drainage and ventilation system specifically designed for use with most exterior siding materials, primarily in residential and mixed use structures. Mortairvent® is available in 0.25 in. (6 mm) or .40 in. (10 mm) thicknesses.

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- Minimizes staining, peeling, and blistering of exterior finishes
- Contributes to LEED points
- Simple installation. Easier and more cost effective than traditional methods
- 2-ply design improves the strength properties of the rain screen, and deflects mortar
- Meets the National Building Code of Canada at 10mm thick
- Tested to ASTM E 2925
- Filter fabric allows for guide lines to be snapped

MORTAIRVENT® CW (Cavity Wall Applications)

The Mortairvent® CW Mortar Deflection & Ventilation System is a full cavity wall product used to reduce the overall cavity width in ventilated wall assemblies. Mortairvent® CW combines the benefits of rain screen technology through the use of integrated mortar deflection, drainage and ventilation design. Mortairvent® CW does not allow mortar blockage in the cavity wall drainage plane due to the heat bonded filter fabric. This dedicated airspace allows proper drainage and convective drying. Mortairvent® CW is available in 0.25 in. (6 mm), .40 in. (10 mm), and .60 in. (15 mm) thicknesses.

- Improves the overall performance of the entire cavity wall assembly
- Reduced continuous airspace expedites moisture drainage and drying
- Mortar deflection fabric layer provides a dedicated airspace for ventilation and convective drying
- Lightweight and easy to install between brick ties. Provides simple one step installation as brickwork is completed
- Mold & mildew resistant
- Contributes to LEED points

Our rain screen products are easy to use, efficient, and effective with all wall structures. The Clear Choice™ in allowing moisture to drain, not remain."
WHAT IS A RAIN SCREEN?

A rain screen is a system that creates a pressure neutralized airspace between the structural envelope and the exterior cladding of a wall structure. This facilitates the drainage, as well as the ventilation of moisture from the wall system, which is beneficial to the life of the structure.

As more information becomes available, many in the building products industry have become aware of the absolute necessity for rain screens, and the negative ramifications for not implementing them. 90% of all wall failures are due to moisture related issues, and since many wall claddings are not water tight, managing moisture has become a critical design characteristic. Below are examples of what happens when a rain screen isn’t used, and moisture inevitably penetrates:

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- Mortairvent® 202 & 203 (Residential Use)
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DON'T LET THIS HAPPEN TO YOU!

• Mortairvent® 202 & 203
• Mortairvent® CW

MORTAIRVENT® 202 & 203

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BENEFITS

• 95% open design enables moisture drainage and drying
• Resistant to most known corrosive chemicals and reduces the risk of mold or mildew
• Minimizes staining, peeling, and blistering of exterior finishes
• Contributes to LEED points
• Simple installation. Easier and more cost effective than traditional methods
• 2-ply design improves the strength properties of the rain screen, and deflects mortar
• Meets the National Building Code of Canada at 10mm thick
• Tested to ASTM E 2925
• Filter fabric allows for guide lines to be snapped

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BENEFITS

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• Contributes to LEED points
The Importance of Rain Screen Technology

Moisture is absorbed by the cladding or enters through surface cracks in the veneer or mortar joints. Capillary action draws the moisture further into the wall assembly. Wind swept rain saturates the exterior cladding. Residual water vapor is extracted via convective currents within the ventilated airspace created by the rainscreen surface and the wall assembly. Moisture drains down the wall. The airflow created by the rain action draws the moisture out of the wall via a weep screed at the bottom of the wall.

Installation Instructions:

1. Install Mortairvent® after windows and doors have been properly installed and flashed.
2. Apply a weather resistant barrier over sidewall sheathing. Note: some regions may require two layers of weather resistant barrier. Check local codes for more information.
3. On subsequent courses, butt the blue polymer material together without overlapping. Pull the fabric flap over the weather resistant barrier to create an insect screen. The top course roll will need to be inverted to achieve this.
4. Staple or nail every three square feet.
5. Geomatrix should be facing the weather resistant barrier and the filter fabric facing the exterior of the building.
6. Starting at the base of the wall, unroll Mortairvent® from right to left with the fabric flap on the bottom. The blue geomatrix should be facing the weather resistant barrier and the filter fabric facing the exterior of the building.
7. Staple or nail every three square feet.
8. On the bottom and top course only, fold the fabric flap and tuck it between the (blue) polymer matrix and the geomatrix to create an insect screen. The top course roll will need to be inverted to achieve this.

PHYSICAL DATA

<table>
<thead>
<tr>
<th>Mortairvent® CW 205</th>
<th>Mortairvent® CW 206</th>
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</thead>
<tbody>
<tr>
<td>Core Material</td>
<td>Polypropylene</td>
<td>Polypropylene</td>
</tr>
<tr>
<td>Thickness</td>
<td>.40 in (10mm)</td>
<td>.80 in. (20mm)</td>
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<tr>
<td>Roll Length</td>
<td>615 ft. (189.75 sq)</td>
<td>48 ft. (14.62 sq)</td>
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<td>Roll Widths</td>
<td>39.0 in. (99.06 cm)</td>
<td>39.0 in. (99.06 cm)</td>
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<tr>
<td>Roll Weight</td>
<td>5.0 lbs. (2.27kg)</td>
<td>5.0 lbs. (2.27kg)</td>
</tr>
<tr>
<td>Coverage Area</td>
<td>67 sq. ft. (6.22m²)</td>
<td>67 sq. ft. (6.22m²)</td>
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<tr>
<td>UV Exposure</td>
<td>30 Days</td>
<td>30 Days</td>
</tr>
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<tr>
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</tr>
</tbody>
</table>

Packaging

Wind swept rain saturates the exterior cladding.

Moisture drains down the wall.

Residual water vapor is removed by convective currents within the ventilated airspace created by the rainscreen surface. The airflow created by the rain action draws the moisture out of the wall via a weep screed at the bottom of the wall assembly.

www.advancedbuildingproducts.com
Phone: 1-800-252-2306, Fax: 1-207-490-2998
95 Cyro Drive, Sanford, Maine 04073
ADVANCED BUILDING PRODUCTS INC.
www.advancedbuildingproducts.com

www.mortairvent.com
The Importance of Rain Screen Technology

Deflect, Drain, & Dry

Moisture is absorbed by the cladding or enters through surface cracks in the veneer or mortar joints. Capillary cracks further draw the moisture into the wall assembly.

The airflow created by the rainscreen draws the moisture further into the ventilated airspace within this space also accelerates drying of the exterior cladding.

Residual water vapor is removed by convective action at the rainscreen surface and out of the wall via a weep screed at the bottom of the rainscreen facade.

Moisture drains down the rainscreen surface and out of the wall via a weep screed at the bottom of the rainscreen facade.

Installation Instructions:
Apply a weather resistant barrier over sidewall sheathing. Note: some regions may require two layers of weather resistant barrier. Check local codes for more information.

Staple or nail every three square feet.

On subsequent courses, butt the blue polymer material together without overlapping. Pull the fabric flap over the weather resistant barrier to create an insect screen. The top course roll will need to be inverted to achieve this.

On the bottom and top course only, fold the fabric flap and tuck it between the (blue) polymer matrix and the geomatrix.

Geomatrix should be facing the weather resistant barrier and the filter fabric facing the exterior of the building.

Starting at the base of the wall, unroll Mortairvent® from right to left with the fabric flap on the bottom. The blue backer roll will need to be inverted to achieve this.

On subsequent courses, apply Mortairvent® after windows and doors have been properly installed and flashed.

Application:
Apply latex, scratch coat, and masonry veneer siding over Mortairvent® using recommended fasteners and spacing.