

# INSTALLATION OVERVIEW

DensElement™ Barrier System



# SYSTEM SOLUTION

The DensElement™ Barrier System unites science with technology. Comprised only with approved components, it has undergone rigorous performance testing for conformance with the current water-resistive barrier and air barrier requirements of the International Building Code (IBC) and the International Energy Conservation Code (IECC). Today, those components include:

- DensElement™ Sheathing from Georgia-Pacific Gypsum
- R-Guard® FastFlash® Liquid Flashing Membrane from PROSOCO

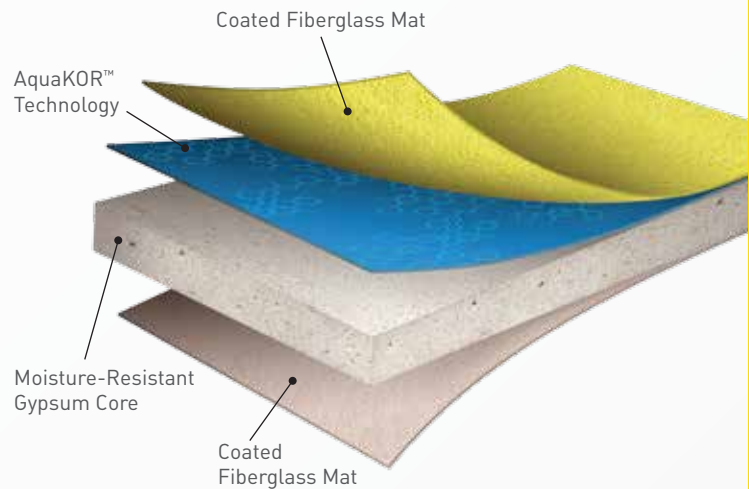


## REVOLUTIONIZING THE WATER-RESISTIVE AND AIR BARRIER SYSTEM

Keep walls dry. It sounds simple, but time and time again water infiltration is the main culprit for failure within a building envelope. History has proven that typical construction will allow some moisture to penetrate either the structural wall or rough openings. It's not a question of if moisture will get into a building; it's a question of when.

So how can you ensure that when moisture gets into your building that it can get out too? The DensElement™ Barrier System is the answer. Until now, industry-accepted water-resistive and air barrier (WRB-AB) products have not delivered fully:

- Fabric wraps may rip and tear in even mild breezes, let alone strong storms. Even where they stay on, staple holes may provide air and water access to the structural walls.
- Conventional fluid-applied WRB-AB membrane systems can be time and labor intensive; requiring installers to coat the entire sheathing surface with potential coating thickness variations.
- Low permeable peel-and-stick membranes can trap and hold water if moisture penetrates to the sheathing through the seams in the membrane, accelerating the very problem of moisture-related decay they were designed to prevent.



## SCIENTIFICALLY ENHANCED

The layered construction of the DensElement™ Sheathing chemically bonds a water-resistive and air barrier (WRB-AB) directly within its gypsum core and is finished with GOLD fiberglass mats for moisture and mold resistance. It completely eliminates the need for an additional WRB-AB to be installed over the face of the sheathing during installation – no more building wrap, no more fluid-applied membranes and no peel-and-stick membranes required.

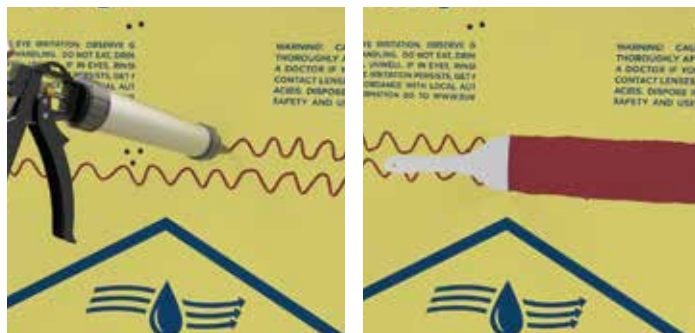
Every seam or penetration causes potential for moisture intrusion. So, for maximum protection, the system is complete only with tested and approved PROSOCO® R-Guard® FastFlash® liquid flashing, which fills and seals joints, fasteners, openings, penetrations and transitions.



# INSTALLATION INSTRUCTIONS

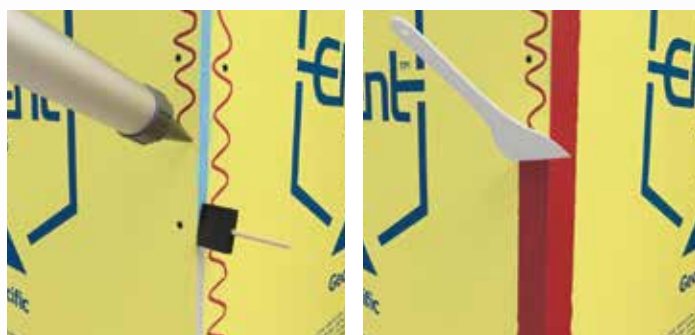
## Sealing Joints, Vertical Corners, Fasteners, Openings, Penetrations and Transitions for Water-Resistive Barrier and Air Barrier Compliance

### JOINTS



1. Apply R-Guard® FastFlash® liquid flashing over the DensElement™ Sheathing joint in a zig-zag or ribbon pattern dispensed from a tube type container. Cover a minimum of 2-in. on both sides of the joint.
2. With a 4- or 6-in. straight edge knife or trowel, spread evenly over the sheathing joint.
3. Apply at a rate to achieve a wet mil thickness of 16-30 mils over the entire joint area, leaving no exposed sheathing.

### VERTICAL CORNERS



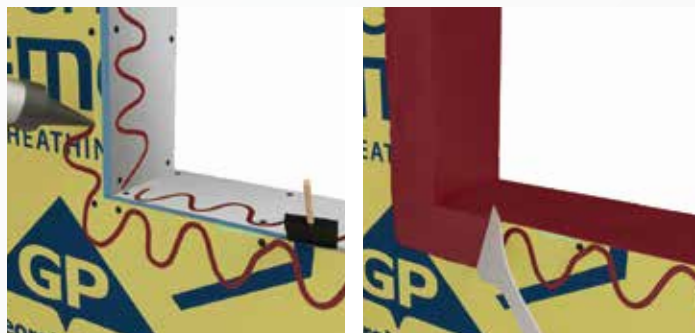
1. Prime exposed gypsum edges of the DensElement™ Sheathing with R-Guard® PorousPrep™ Water-Based Primer.
2. Apply R-Guard® FastFlash® liquid flashing over the inside and/or outside corner in a zig-zag or ribbon pattern dispensed from a tube type container. Cover a minimum of 2-in. on both sides of the corner.
3. With a 4- or 6-in. straight edge knife or trowel, spread evenly over the sheathing corner.
4. Apply at a rate to achieve a wet mil thickness of 16-30 mils over the corner area.

### FASTENERS



1. The fasteners should be spotted with R-Guard® FastFlash® liquid flashing and wiped down with a straight edge tool leaving a 12-15 mil thick coating over the entire fastener.

## ROUGH OPENINGS



1. Prime exposed gypsum edges of the DensElement™ Sheathing with R-Guard® PorousPrep™ Water-Based Primer.
2. Apply a bead of R-Guard® FastFlash® liquid flashing into the entire width of the inside corners of the opening dispensed from a tube type container.
3. Apply R-Guard® FastFlash® liquid flashing onto the following openings:
  - a. Sills
  - b. Jambs
  - c. Headers
4. Apply R-Guard® FastFlash® liquid flashing over the entire width of the opening sill, jamb and header in a zig-zag or ribbon pattern dispensed from a tube type container.
5. Apply R-Guard® FastFlash® liquid flashing over the DensElement™ Sheathing adjacent to the opening sill, jamb and header in a zig-zag or ribbon pattern dispensed from a tube type container. Cover a minimum of 2-in. of the sheathing surface adjacent to the opening.
6. With a 4- or 6-in. straight edge knife or trowel, spread R-Guard® FastFlash® liquid flashing over the entire width of the sill, jamb, header and DensElement™ Sheathing surface adjacent to the opening.
7. Apply at a rate to achieve a minimum wet mil thickness of 16 mils over the opening area, leaving no exposed sheathing.

## PIPE PENETRATIONS



1. Mechanically secure penetrations.
2. If the gap between materials is over 1/8-in., install backer rod between penetration and DensElement™ Sheathing to form a back dam regardless of size of penetration or opening.
3. Apply a thick bead of R-Guard® FastFlash® liquid flashing from a tube type container around the penetration.
4. Use a spatula to feather and completely seal the joint around the penetration.

# MATERIAL TRANSITIONS



- 1. If the gap between materials is over 1/8-in., fill the gap between the DensElement™ Sheathing and adjacent materials with a backer rod.
- 2. If necessary, prime the adjacent material with primer per the material manufacturer's recommendations.
- 3. Apply R-Guard® FastFlash® liquid flashing over the DensElement™ Sheathing and adjacent material in a zig-zag or ribbon pattern dispensed from a tube type container. Ensure the flashing is applied with a minimum of 2-in. on each substrate material surface.
- 4. With a 4- or 6-in. straight edge knife or trowel, spread R-Guard® FastFlash® liquid flashing over material transition joint.
- 5. Apply at a rate to achieve a minimum wet mil thickness of 16 mils.

## DENSELEMENT™ BARRIER SYSTEM FLUID APPLIED FLASHING APPLICATION CHART\*

Container	Coverage: 4-in. wide joint at 16-30 mils	Coverage: 6-in. frame opening at 16-30 mils
20 oz. "sausage"	30-35 lin. ft	20-25 lin. ft

\* Coverage assumes that joints and corners are butted tightly together and gaps and voids are prefilled with backer-rod

\* Assumes zero waste





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Gypsum

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**CAUTION:** For fire, safety and use information  
go to [www.buildgp.com/safetyinfo](http://www.buildgp.com/safetyinfo).

**WARRANTY:** For current limited warranty for  
this product, visit [DensElementDocuments.com](http://DensElementDocuments.com).

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