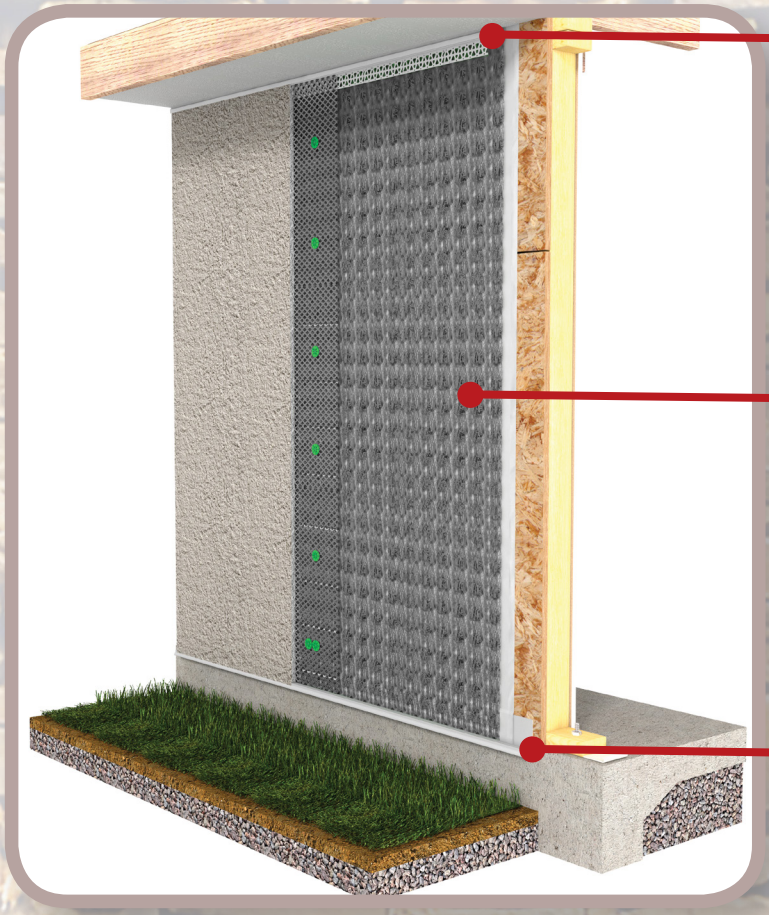
AMICO

HYDRODRY™

MOISTURE MANAGEMENT SOLUTION

THE REVOLUTIONARY SYSTEM THAT ALLOWS EXTERIOR CLADDING TO DRAIN, VENT & DRY



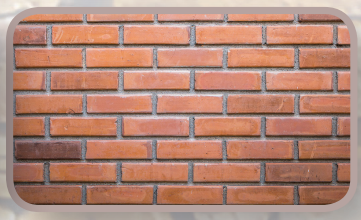
E-Z Vent
Top of Wall Ventilates & Dries!

Hydrodry Rain Screen
Ventilation & Drainage Cavity

Drain Screed
Gets the Water Out at the Bottom of the Wall!

VENEER STONE

STUCCO



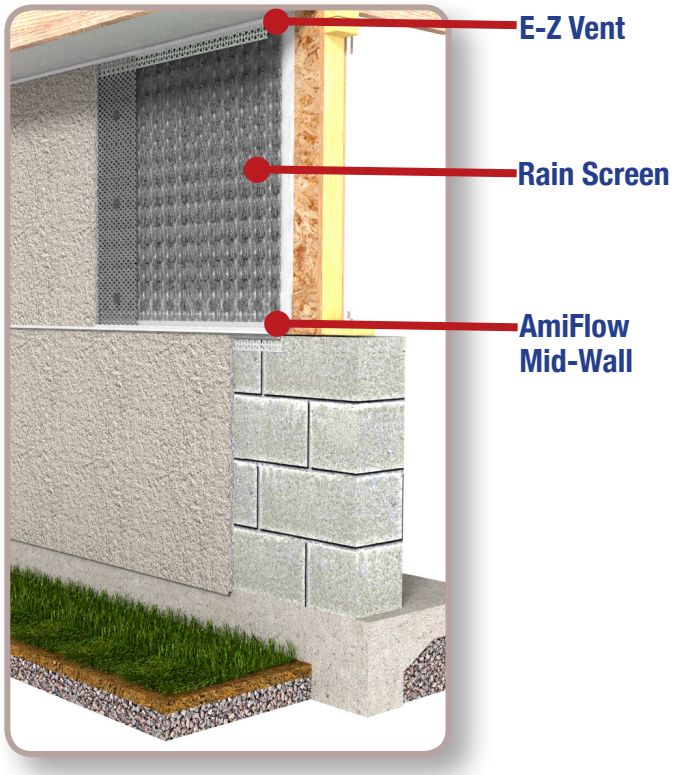
VENEER BRICK

FIBER CEMENT

MOISTURE IN THE WALL CAVITY IS A GROWING PROBLEM FOR NEW CONSTRUCTION

The building industry has seen an increase in moisture problems as it relates to the exterior cladding of newly built homes. These issues are affecting all types cladding. Our research shows that there are a few main factors that are impacting this sudden increase in moisture intrusion, some of these include the following:

- Recent code changes and products designed to seal the house and improve energy efficiency have caused moisture to accumulate and become trapped between the OSB and exterior cladding.
- Upgraded insulation, combined with house wraps fail to allow air to pass through the wall cavity allowing moisture to dry as it has in the past.
- Extreme temperature differentials between the inside and outside of the building causes moisture to accumulate in the wall cavity.
- Water that is not released and remains inside the wall cavity will eventually permeate the OSB, studs and drywall causing cause mold, mildew and rotting problems.

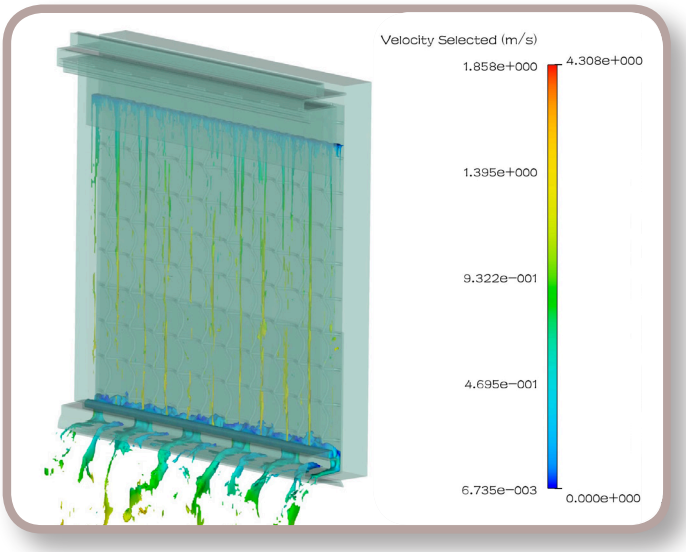


Solution

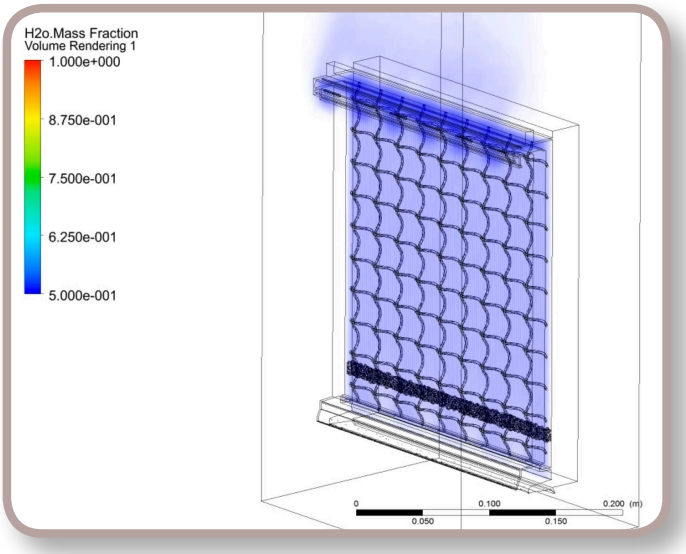
HYDRODRY is a unique self draining, vented wall system that works by creating a defined drainage and ventilation cavity behind stucco, veneer stone and various other exterior claddings. A series of unique profiles allow water to drain from within the wall cavity. The remaining water vapor is then allowed to evaporate and escape through a vent system located at the top of the wall. If you are looking for a cost effective way to combat water absorption in new construction and remediation then we can help. We would embrace the opportunity to sit down with your team and demonstrate to you the HYDRODRY system.

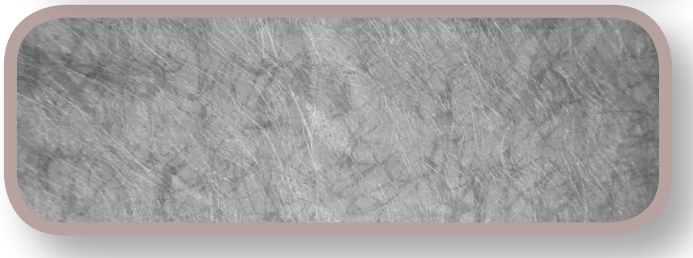
COMPUTATIONAL FLUID DYNAMIC - ANALYSIS

AMICO contracted FEAmax Engineering Services to perform computational fluid dynamic modeling on our exclusive HydroDry system. They rigorously tested the system at various temperatures ranging from 40° F - 100° F and found that temperature had little effect on the system. Water exited through the Amiflow Drain Screed at an astonishing rate of 150 gallons per hour.



The findings were that the E-Z Vent design creates a venturi effect forcing the vapor to release through the vent openings at a rate of .08 lbs per hour. This ensures moisture in the wall cavity can now be vented out the top of the wall. This process also provides continuous airflow throughout the wall promoting dry healthy walls and greatly reducing the risk of microbial growth.

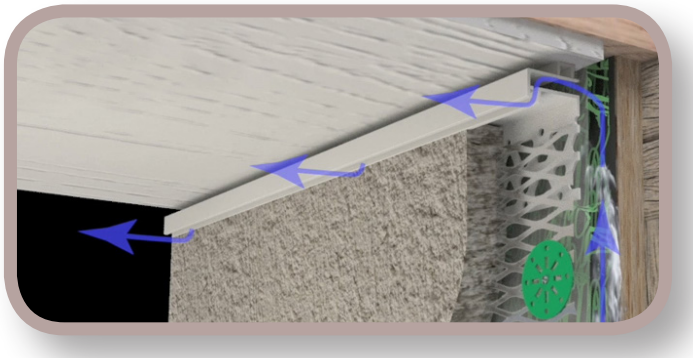




HYDRODRY RAIN SCREEN

First, a primary drainage cavity is created between the sheathing and exterior finish with HYDRODRY Rain Screen made from anti-microbial polymer strand. Highly resistant to compression even after attachment, rain screen maintains the integrity of the drainage cavity by ensuring gravity induced moisture can flow to the bottom of the wall and water vapor can escape the top of the wall.

- Creates a drainage and ventilation cavity which allows the interior of the wall to drain, vent and dry.
- Available in 6 & 10 mm



E-Z VENT
TOP OF WALL - VENTILATES AND DRIES!

E-Z Vent is a vinyl HI-PERFORMANCE trim when used in conjunction with rain screen allows the top of the wall cavity to properly vent and release unwanted water vapor through a series of venting slots.

- A 7/8” ground ensures the proper thickness of stucco is achieved.
- AMICO’s exclusive diverter conceals vent slots to provide proper ventilation while preventing water or driving rain from entering the wall cavity.
- A built in flexible caulking bead is simple to caulk, and bond breaker tape prevents caulk joint failure.

AMIFLO MID-WALL

In the middle of a wall there are several AmiFlow Mid-Wall profiles designed to ventilate most any type of exterior finish at any thru-wall penetration or joining of different finishes.

- Provides a drain-able juncture between block and framing.
- Also used between floors on a multi-story buildings where rain screen is used.
- Multiple grounds incorporated on bottom to accommodate various stucco thicknesses - direct applied, 3 coat stucco, and 3 coat stucco with a 6mm rain screen.
- Built in flexibility to allow for expansion and contraction.

DRAIN SCREED

When water or moisture remains in the wall cavity is when damage, mold and rotting can occur. Drain screed’s patented slots allows water to flow down the drainage plain and out through the bottom of the wall.

- Large slots drain & ventilate the bottom of the wall.
- A drain trough accommodates rain screen thicknesses up to 10MM - insuring the proper 7/8” thickness throughout.
- Rain screen termination with drainage slots prevent cracking at bottom of wall.
- Integrated drip edges divert and flow water.

INSTALLATION

E-Z Vent

- Install water resistive barrier (WRB) over the sheathing
- Install rain screen product over the top of the WRB with the backing toward the lath ensures cavity remains open when applying cladding to the wall face
- E-Z Vent should then be installed at top of wall.
- All corners and terminations should be cut using a miter saw
- Upon completion of installation apply a bead of approved caulk to the vertical caulking surface between the E-Z Vent and the adjacent surface. Once the caulk dries a bond breaker tape will release to prevent joint failure

Amiflow mid-Wall

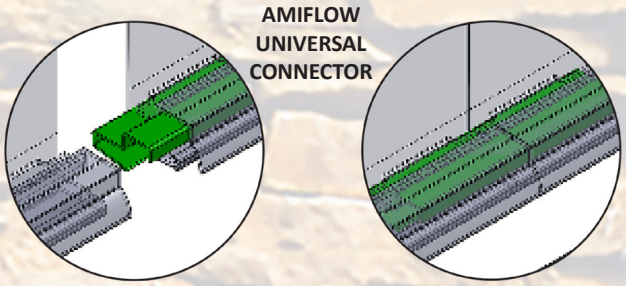
- Center Mid-Wall at junction between concrete block and framing
- Water resistive barrier shall lap over the top nailing flange of the Mid-Wall
- Rain screen drainage plane shall be fully seated in the bottom of the Mid-Wall - For bug screen trim 1" of entangled mesh leaving a scrim flap - Lap scrim flap underneath mesh to cover slots
- Exterior lath shall terminate even with the horizontal ledge on the Mid-Wall Screed
- Apply stucco to the bottom half of the wall using built in grounds to accomplish desired thickness

Drain Screed

- Install Drain Screed at or below foundation plate
- Drain screed shall be installed no less than 4" above the earth or 2" above paved areas
- Water resistive barrier shall lap over the Drain screed
- Rain screen drainage plane shall be fully seated in the bottom of the Drain Screed - Lap scrim flap underneath mesh and cover slots to create a bug screen
- Exterior lath shall terminate even with the horizontal ledge on the Drain Screed

For All Profiles

- AMICO recommends the use of HYDRODRY Drain Screen drainage mat to drain and ventilate the interior of the wall cavity
- All corners and terminations should be cut using a miter saw
- Profiles should be attached at studs on 16" centers
- Insert universal connector 2.5" into the end of the E-Z Vent, Amiflow Mid-Wall or Drain Screed. It is important to compress the connector several times to reduce the loading, so it fits snug but does not warp the bottom and top of the piece when you insert. Slide the next piece of profile over the remaining 2.5" of the connector
- If you see bulging, remove connector and repeat compression until the screed is even
- Apply cladding to manufacturers specifications just as you would with EZ Bead or standard casing bead
- When installing stucco use the built in ground to gauge the proper thickness of the stucco. Be sure not to plug or fill vent slots with stucco



The AMIFLOW universal connector allows installers to attach pieces of Hydrodry profiles to create a continuous seamless profile that lines up perfectly every time.

Installation of Drain Screed

Installation of E-Z Vent

Installation of Lath

Drain Screed on Finished Wall

AMICO®
A GIBRALTAR INDUSTRIES COMPANY

For More Information on the Hydrodry System & Other High Performance Products:
AMICOBP.COM ♦ 205.470.9823