











Specify and Install with Confidence

With CavityComplete® Wall Systems, you can reduce liability and efficiently specify and detail quality assemblies with components that are tested as a system and are completely compatible®, code compliant and warrantied** to perform together.

<u>Efficiency and Reduced Liability:</u> With the introduction of <u>CavityComplete</u> Wall <u>Systems</u>, you can easily specify and detail high performance assemblies with components that are tested, proven and fully documented to produce wall systems you can have confidence in. This helps save time and minimizes the risk for errors and omissions.

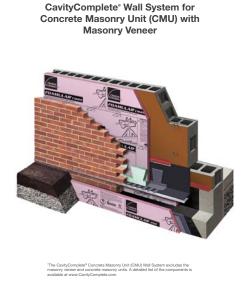
Quality: The CavityComplete® Wall Systems feature components that were tested together to produce systemized codes and standards compliance data. Each component is great on its own, and when combined, they produce wall systems that provide thermal efficiency, continuous insulation, fire resistance, air and water management, vapor resistance and veneer anchoring systems, plus design options that are engineered to maximize performance by climatic region.

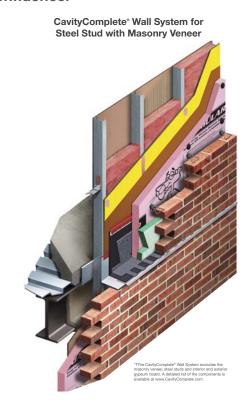
Recognized and trusted: The easily available, category-leading product components of CavityComplete® Wall Systems are recognized by architects, Consultants, contractors and building inspectors for delivering long-term performance. The trusted brands behind CavityComplete® Wall Systems deliver added peace of mind for those creating, owning and occupying the building.

With thousands of products to choose from when designing a masonry cavity wall system for your upcoming project, the CavityComplete® Wall Systems team has designed complete systems that take the guesswork out of specification. CavityComplete® eliminates the headaches of having to make literally thousands of decisions when designing a wall, which increases design efficiency, and allows the you to spend more time designing a unique building and less time worrying about the nuts and bolts of the wall.

With the warranty and testing of these systems, you can specify with confidence.







Complete Testing

When evaluating a wall system, it's not enough to look at tests of individual components. A true wall system must have test results proving the individual components perform together. The companies behind the CavityComplete® Wall Systems have conducted extensive industry testing and have proven that all components perform as a system that meets or exceeds industry standards.

| | NFPA 285 | ASTM E119 | ASTM E331 | ASTM E2307 | ASTM E2357 |
|---|---|---|---|---|--|
| Test Symbol | | | | | 1 |
| Test Description | Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components | Standard Test Methods for Fire Tests of Building Construction and Materials (Timed Fire Resistance) | Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference | Standard Test Method for Determining Fire Resistance of Perimeter Fire Barriers Using Intermediate-Scale, Multi-story Test Apparatus | Standard Test Method for Determining Air Leakage of Air Barrier Assemblies |
| CavityComplete® Steel Stud Compliance Status | | | $\overline{\checkmark}$ | | |
| CavityComplete® Wood Stud Compliance Status | N/A | \checkmark | \checkmark | N/A | \checkmark |
| CavityComplete® CMU Compliance Status | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |



NFPA Standards

The International Building Code requires wall assemblies in types I through IV construction to comply with NFPA 285. It is a standardized fire test procedure for evaluating the performance of exterior, non-load bearing wall assemblies and panels that are constructed using combustible materials or that incorporate combustible components for installation on buildings where the exterior walls are required to be non-combustible. Where applicable CavityComplete® Wall Systems have been tested or evaluated by independent third party as a unified system to meet NFPA 285 standards.



ASTM Standards

The International Building Code references multiple ASTM standards that exterior wall systems must meet. It is critical that the architect for any wall system have data readily available that demonstrates that the wall system being specified meets current building codes and testing standards. The CavityComplete® Wall Systems have been tested to meet all the necessary ASTM standards for fire, water leakage, and air leakage testing.

Ask the experts

"Architects are always looking for ways to improve the performance of their exterior wall assemblies and CavityComplete" helps make the complicated process more predictable by leveraging the knowledge of multiple product manufacturers. The CavityComplete" systems provide documentation that architects can submit to building officials demonstrating that the assembly meets mandatory building code fire containment, air leakage, water penetration and thermal resistance requirements."

Mark Kalin

FAIA, FCSI, President of Kalin Associates

"The building industry has to stop only producing products and to start developing and producing building assembly systems. No one material by itself can provide the functions of air barrier and moisture management. These are the two most critical functions to address. By addressing the functions of a building assembly on a system basis, you will receive something that will work as intended and a building that will perform and be resilient."

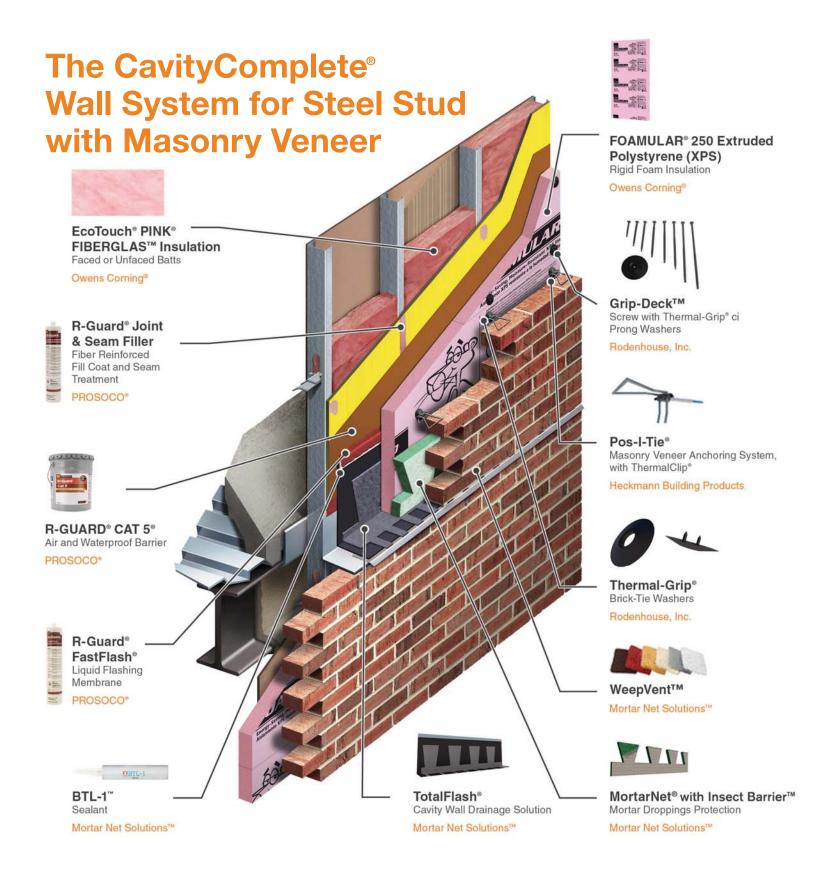
Laverne Dalgleish

Executive Director of the Air Barrier Association of America

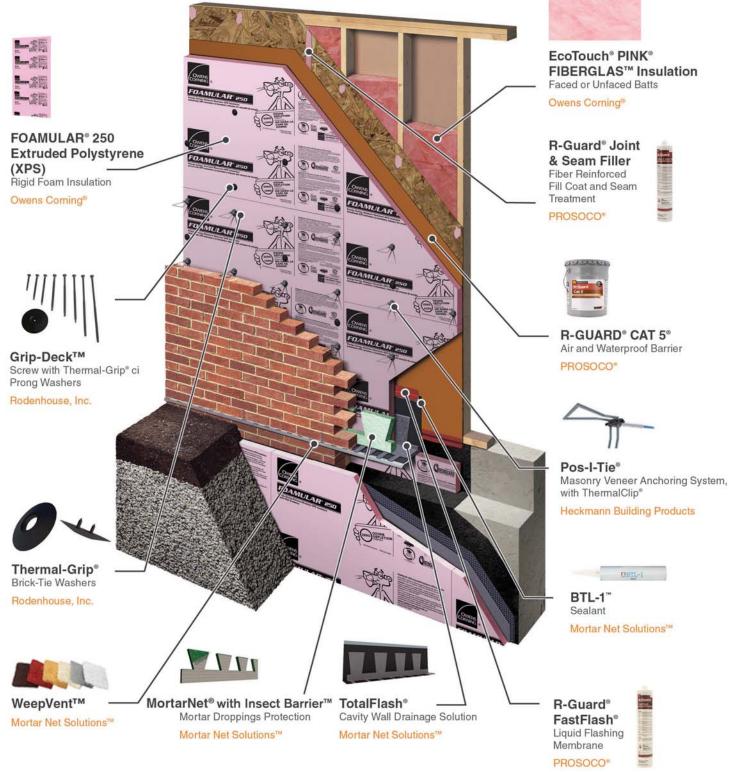
"In commercial construction, our customers demand that a Project Team not only have a concern for first cost of cavity wall systems, but also an understanding of and a respect for long term performance costs as well. Specifying, detailing and installing complex cavity wall installations demands a significant, time consuming, multi-disciplinary approach due to the number of individual building elements that must be successfully combined. The CavityComplete® team has not run from these challenges, but has embraced a solution that systematically addresses water and moisture management, thermal considerations, fire resistance, air transmission and connection detailing. This unified solution is a big step in the right direction for our owners and for the construction industry in general."

Chris Jahrling

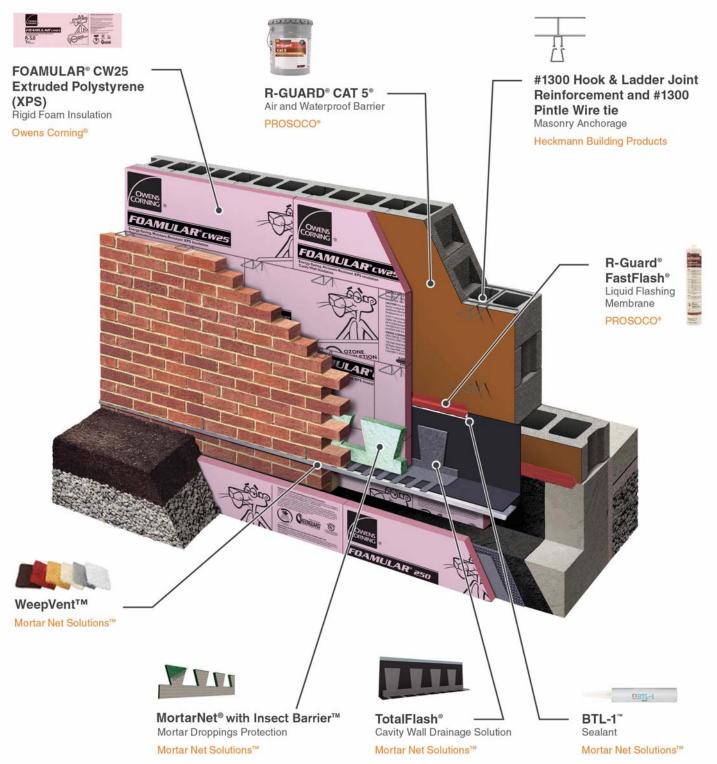
Vice President and General Manager of Turner Federal Services



The CavityComplete® Wall System for Wood Stud with Masonry Veneer



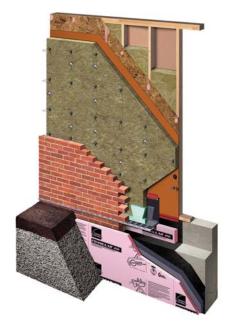
The CavityComplete® Wall System for Concrete Masonry Unit (CMU) with Masonry Veneer



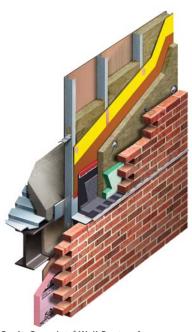


CavityComplete® Wall Systems with Owens Corning® Thermafiber® Mineral Wool Insulation

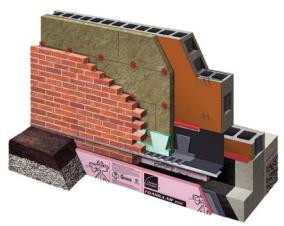
When the building code requires fire containment we've got solutions for that too with Owens Corning® Thermafiber® Insulation.



CavityComplete® Wall System for Wood Stud with Thermafiber® Mineral Wool



CavityComplete® Wall System for Steel Stud with Thermafiber® Mineral Wool



CavityComplete® Wall System for Concrete Masonry Unit (CMU) with Thermafiber® Mineral Wool



CavityComplete® Wall System for Perimeter Fire Containment Assembly

Insulation



Since 1938, Owens Corning has been a market-leading innovator in high-performance building solutions.

FOAMULAR® XPS, Thermafiber® Mineral Wool, and EcoTouch® PINK® Fiberglas™ Insulation with PureFiber® Technology are proven energy efficient solutions and offer a wide range of advantages for the CavityComplete® Wall Systems.



Continuous Insulation

FOAMULAR® 250 Extruded Polystyrene (XPS) Rigid Foam Insulation

Owens Corning® FOAMULAR® 250 XPS Insulation is an R-5 per inch of thickness, closed cell, moisture-resistant rigid foam board well suited for commercial steel stud continuous insulation applications.

Used in

CavityComplete® Steel Stud Wall System CavityComplete® Wood Stud Wall System

Key Features

- Excellent long-term stable insulating performance at R-5 per inch.
- Exceptional moisture resistance, long-term durability. Will not corrode or support mold growth.
- Limited lifetime warranty* maintains 90% of R-value and covers all ASTM C578 properties.



FOAMULAR® CW25 XPS Rigid Foam Insulation

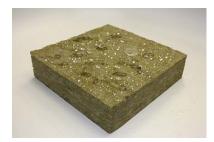
Owens Corning® FOAMULAR® CW25 XPS Insulation is an R-5 per inch of thickness, closed cell, moisture-resistant rigid foam board well suited for masonry cavity wall applications.

Used in:

CavityComplete® CMU Wall System

Key Features

- Excellent long-term stable insulating performance of R-5 per inch.
- Exceptional moisture resistance, long-term durability. Will not corrode or support mold growth.
- Pre-cut to 16" wide to readily suit CMU construction.
- Limited lifetime warranty*— maintains 90% of R-value and covers all ASTM C578 properties



Thermafiber[®] Rainbarrier[®] Mineral Wool Insulation

Owens Corning® Thermafiber® RainBarrier® Mineral Wool Insulation is an R-4.3 per inch of thickness. It is designed for exceptional performance in rain screen and cavity wall construction applications.

Used in:

CavityComplete® CMU Wall System

CavityComplete® Steel Stud Wall System

CavityComplete® Wood Stud Wall System

- Non-combustible, non-deteriorating, and inorganic
- · Repels and efficiently drains water
- · Highly UV resistant
- Helps conserve energy, reduce greenhouse gas emissions
- Fire resistant to temperatures above 2,000° F (1,093° C)
- Enhances acoustical performance

^{*} See actual warranty for complete details, limitations, and requirements.

Insulation



Cavity Insulation

EcoTouch® PINK® Fiberglas™

Owens Corning® EcoTouch® Insulation with PureFiber® Technology is flexible batt insulation with available R-values from 11 to 30. EcoTouch® Insulation is available faced, or unfaced, for climatic situations where a vapor retarder is not recommended.

Used in:

CavityComplete® Steel Stud Wall System CavityComplete® Wood Stud Wall System



EcoTouch® Flame Spread 25 Fiberglas™

Owens Corning EcoTouch Flame Spread 25 Fiberglas insulation is a light density, flexible batt, with a factory applied facing that has a flame spread less than 25 to meet code requirements. The product is available in R-values ranging from 11 to 30. The FSK (foil-scrim-kraft) and light-reflective white PSK (polypropylene-scrim-kraft) facings act as vapor retarders, and provide a neat, finished appearance.

Jsed in:

CavityComplete® Steel Stud Wall System

Key Features

- With the range of R-values and thicknesses available, EcoTouch* Insulation meets most thermal requirements.
- EcoTouch® Insulation enhances interior noise control.
- EcoTouch® Insulation will not rot or mildew and is noncorrosive to steel, copper, and aluminum.

Key Features

- With the range of R-values available, Flame Spread 25 insulation meets most thermal requirements.
- Meets building code requirements for types
 I and II construction or exposed applications.



Thermafiber^o FireSpan^o 40 or 90

Thermafiber® FireSpan® mineral wool insulation products are designed to provide fire protection in curtain wall and perimeter fire containment systems. These products are noncombustible, moisture-resistant, noncorrosive and non-deteriorating. FireSpan® has a proven history of performance and is listed in fire rated designs in the UL® and Intertek® fire resistance directories. It is used in conjunction with Thermafiber® Safing to achieve outstanding fire containment.

Used in:

CavityComplete® Steel Stud Wall System

Key Features

- Exceptional performance in perimeter fire containment systems.
- Fire resistant to temperatures above 2,000°F (1,093°C)
- Controls noise and sound.



Thermafiber® Ultrabatt® Mineral Wool Insulation

Owens Corning[®] Thermafiber[®] UltraBatt[®] Mineral Wool Insulation is an R-4.3 per inch of thickness. It is designed to provide excellent thermal insulation, fire resistance and noise control.

Used in:

CavityComplete® Steel Stud Wall System CavityComplete® Wood Stud Wall System

Key Features

- Energy saving thermal insulation**
- Provides fire resistance
- · Controls sound between floors and walls
- Minimum 70% recycled content²
- Easy to install
- Mold resistant¹
- ** Savings vary. See Owens Corning publication "Thermafiber[®] UltraBatt[™] Manufacturers Fact Sheet" (Pub No. 10021146) for more information.

1. ASTM C 1138

Moisture Management



Since 1992, Mortar Net Solutions™ has been the leader in developing and providing moisture management solutions for masonry.

The MortarNet[®] mortar dropping collection device has been installed for over 25 years in thousands of walls without a single wall failure. The TotalFlash® Cavity Wall Drainage Solution for the CavityComplete® Steel Stud, Wood Stud and CMU Wall Systems combines an EPDM through-wall flashing standard membrane, a mortar dropping collection drainage mat, mesh weep tabs, termination bar, and metal drip edge into a single, easy-to-install panel. Together, these two systems offer an unequaled level of moisture management for the CavityComplete® Steel Stud, Wood Stud and CMU Wall Systems.

Cavity Wall Drainage



TotalFlash® Cavity Wall Drainage Solution

TotalFlash® is a complete flashing system for masonry cavity walls that features a standard 45 mil EPDM membrane with a PVC termination bar, stainless steel drip edge, no-clog drainage mat and weep tabs all pre-assembled at the factory. In CavityComplete® Wall Systems, TotalFlash® extends completely through the masonry and air space, extending under and behind the continuous insulation layer and turning up to terminate, providing a secondary drainage plane at the weather barrier.

Used in:

All CavityComplete® Wall Systems



WeepVent[™]

WeepVent ensures that moisture can migrate out of the cavity and that debris and insects can't enter the weep holes.

All CavityComplete® Wall Systems

Mortar Dropping Collection



MortarNet® with Insect Barrier™ **Mortar Dropping Collection Device**

MortarNet helps prevent moisture damage to masonry cavity walls by preventing mortar droppings from blocking the weep holes and by providing hundreds of clear drainage pathways that allow moisture to flow to the weeps.

All CavityComplete® Wall Systems

Key Features

- · Available in custom lengths for wall openings to speed installation times.
- · Factory fabricated in 5' long panels for reduced labor time in the field.
- · Excellent tensile, elongation, and permeance characteristics.
- · Also available in other types of membrane.
- Membrane available in 12", 18", and 24" widths
- Drip edges available in copper and four colors of Kynar®-coated galvanized steel.

Key Features

- 90% open weave polyester mesh allows unobstructed water and air movement.
- Compressible to completely fill weep holes.
- Unique "prickly adhesion" holds WeepVent in place without fasteners or adhesives.

Key Features

- Breaks up and suspends mortar droppings above the flashing on two levels so weeps stav open.
- 90% open weave mesh construction provides hundreds of pathways for moisture to exit the cavity.
- · Insect Barrier helps prevent wall damage and health hazards from insect infestations.
- · Is very permeable to air, water and water vapor due to the low fiber density of the non-woven structure.
- · Helps prevent efflorescence, damage from freeze-thaw cycles and mold growth.
- · Easy to transport, handle and cut, even on scaffolding
- Recycled content may help with LEED[®] certification.

Key Features

- · Provides excellent adhesion and sealing.
- · Low emitting product with low volatile organic compounds (VOC).



BTL-1 is a synthetic rubber sealant that is ideal for most construction applications. It produces high-performance joints with both high strength and elasticity. BTL-1 bonds aggressively to steel, aluminum, ceramics, wood, Kynare -coated metal, glass, fiberglass and many plastics.

All CavityComplete® Wall Systems



Air & Weather Barrier System



The R-Guard air and water barrier system stops air leakage through wall structures, rough PROSOCO openings, sheathing seams, and material transitions to make your building airtight. An airtight building is an energy-efficient building. That's why buildings that meet the world's toughest energy efficiency requirements use R-Guard. The Bullitt Center, considered the world's greenest commercial building, selected R-Guard for its air and water barrier system.

> As key components of the CavityComplete® Steel Stud, Wood Stud and CMU Wall Systems, the PROSOCO R-Guard air and water barrier products, along with other partner products, are designed to perform as a system to protect the inner structure against air

All R-guard air and water barrier products are solvent-free, isocyanate-free, phthalatefree and comply with all VOC regulations.



Cat 5 – Air and waterproof barrier

Cat 5 is a single-component, silyl-terminated polymer (STP) that is roller-applied to produce a highly durable, seamless, elastomeric weatherproofing membrane on exterior sheathing, CMU backup walls, and precast concrete. Cat 5 is proven to prevent water and air penetration of the building envelope in conditions ranging from everyday weather to the drenching rains and 155-mph winds of a Category 5 hurricane.

Used in: CavityComplete® Steel Stud Wall System CavityComplete® Wood Stud Wall System CavityComplete® CMU Wall System

Kev Features

- · Bonds to most common building materials without priming.
- · Bonds and cures in wet weather and on damp substrates.



FastFlash® - Liquid flashing membrane

Available in cartridges and sausages

FastFlash® is a waterproofing, adhesive and detailing compound that combines the best characteristics of silicone and polyurethane. This single-component, silyl-terminated polymer is easy to gun, spread-andtool, or roller-apply to produce a highly durable, seamless, elastomeric flashing membrane.

Used in: CavityComplete® Steel Stud Wall System CavityComplete® Wood Stud Wall System CavityComplete® CMU Wall System

Key Features

- · Bonds to most common building materials without priming.
- · Bonds and cures in wet weather and on damp substrates.
- Phthalate-free



Joint & Seam Filler – Fiber-reinforced fill coat and seam treatment

Available in cartridges and sausages

Joint & Seam Filler is a gun-grade, crack and joint filling, adhesive and detailing compound that combines the best of silicone and polyurethane properties. This single-component, fiber-reinforced, silyl-terminated polymer is easy to gun, spread and tool.

Used in: CavityComplete® Steel Stud Wall System CavityComplete® Wood Stud Wall System CavityComplete® CMU Wall System

Kev Features

- Streamlines preparation by eliminating the need for joint reinforcing tapes.
- Bonds and cures in wet weather and on damp substrates. Tolerates rain immediately after application.
- Phthalate-free



AirDam - Air and weather barrier sealant for windows and doors

Installed as the interior air sealant, R-Guard AirDam creates a longlasting, weather-tight seal that prevents moist outside air from entering, and conditioned indoor air from escaping around window and door assemblies. This ensures that wind-driven rain and condensed water are diverted to the flashing membrane and the water-resistive barrier before it can enter the living space.

Utilize AirDam in all rough openings prepared with R-Guard FastFlash®.

Used in: CavityComplete® Steel Stud Wall System CavityComplete® Wood Stud Wall System CavityComplete® CMU Wall System

- · Silane functional polymer provides superior long term adhesion, crack bridging and weathering characteristics.
- · Produces a durable, weather-tight
- Stops penetration of air and water under normal and extreme weather conditions.

Anchors and Fasteners



Heckmann Building Products, has provided the construction industry with masonry anchors and ties since 1923. The Pos-I-Tie® Veneer Anchoring system is one of the most recognized and specified anchoring systems available today.

Veneer Anchoring System



Pos-I-Tie® Veneer Anchoring System with ThermalClip®

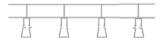
The Pos-I-Tie® is a three piece system incorporating a Barrel-Screw, a thermal break clip and a veneer wire tie for attaching brick and stone veneers to various backups. For the CavityComplete® Wall System with steel stud or wood stud backup, continuous insulation and sheathing board (gypsum or wood structural panel), the screw penetrates the insulation and sheathing, screws into the stud backup, and seals the hole, preventing moisture penetration with an EPDM washer at the face of the continuous insulation. The barrel makes a positive contact with the stud backup wall, transferring all compression and tension loads between the backup wall and the veneer. Wire ties are available in Hotdip Galvanized After Fabrication or Type 304 Stainless Steel.

Used in:

CavityComplete® Steel Stud Wall System CavityComplete® Wood Stud Wall System

Key Features

- Pos-I-Tie® Barrel-Screw, ThermalClip® and wire ties are highly corrsion resistant.
- ThermalClip® proprietary composite material creates a thermal break between the wire tie and the Pos-I-Tie® Barrel Screw. The clip is extremely tolerant of freeze/ thaw conditions and mortar alkalines.
- ThermalClip® creates a dissimilar metals break, allowing the use of Stainless Steel Ties or Stone Anchors with the Original Pos-I-Tie® Barrel Screw.



#1300 Hook & Ladder Joint Reinforcement

The #1300 Hook & Ladder Joint Reinforcement is a ladder style adjustable joint reinforcement with "Lollipop" style eyelets and pintles.

Used in: CavityComplete® CMU Wall System

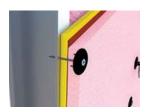
- Eyes are double welded on to side wires to provide maximum strength and durability.
- Level Eyes make it easier to maintain 3/8" mortar joint.
- Allows use of 3/16" side rods.
- Eliminates weld points that are too thick.
- Meets ASCE/ACI 530 building code requirements for masonry structures and ASTM A951 (standard specification for masonry joint reinforcing).

Anchors and Fasteners



Rodenhouse, Inc., was established in 1993 and is one of the industry leading manufacturers of innovative fastening systems for exterior building envelopes and facades. The line of Thermal-Grip* washers and Grip-Deck* screws is a great solution for attaching rigid insulation easily and effectively.

Air/Water Sealing Washers



Thermal-Grip° ci Prong Washers with Grip-Deck® screws

Thermal-Grip° ci Prong Washers and Grip-Deck° screws are used to initially secure FOAMULAR® XPS rigid continuous insulation to the wall. The prong features enable pre-spotting of the washers on the insulation for fast on-the-wall screw assembly. The solid cap designed 2" diameter Thermal-Grip° ci Prong Washer not only seals the penetration, but it also provides stress distribution around the screw head to provide exceptional blow off resistance. Tools are available for rapid installation.

Used in:

CavityComplete® Steel Stud Wall System CavityComplete® Wood Stud Wall System

Key Features

- · Large 2" diameter washer for exceptional wind-loading resistance helps prevent
- Solid cap washer clamps down on insulation sealing the penetration against moisture and air infiltration.
- · Screws are coated for premium corrosion protection.



Thermal-Grip® Brick-Tie washers

Thermal-Grip® Brick-Tie Washers are used with Pos-I-Tie® anchors to permanently secure FOAMULAR® XPS rigid continuous insulation in brick veneer cavity wall applications. The prong features enable pre-spotting of the washers on the insulation for fast on-the-wall anchor placement. The 2" diameter Thermal-Grip® Brick-Tie Washer not only seals the penetration, but it also provides stress distribution around the screw head to provide exceptional blow off resistance.

CavityComplete® Steel Stud Wall System CavityComplete® Wood Stud Wall System

- Large 2" diameter washer for exceptional wind-loading resistance helps prevent blow-offs.
- · Saves labor time by combining two installation steps into one (eliminates need for full attachment with screws and washers).
- · Washer clamps down on insulation sealing the penetration against moisture and air infiltration.



Complete Warranties

The CavityComplete® Wall Systems Warranties are the only one of their kind in the industry that cover all the components of the systems from multiple manufacturers, not just individual components.

The warranty for each system provides you with a single point of contact, and provide the peace of mind and convenience no other warranties can offer.

Warranty Details

The CavityComplete® Wall Systems each have a 10-year limited material and replacement warranty: covered by the CavityComplete® Wall Systems manufacturer group.

The following must be completed to receive a CavityComplete® Wall Systems 10-year limited material and replacement warranty:

- 1. Submit a Project Profile at least two (2) weeks prior to beginning wall system construction, and receive a return acceptance.
- 2. Submit a Project Completion Notice upon completion of work.
- 3. Receive a written CavityComplete® Wall System 10-year limited material and replacement warranty.

For complete details, limitations and requirements about the warranty process and to print the necessary forms, visit www.CavityComplete.com.





Owens Corning Sales, LLC

www.owenscorning.com 1-800-GET-PINK°



Heckmann Building Products

www.heckmannanchors.com 1-800-621-4140



Mortar Net Solutions™

www.mortarnet.com 1-800-664-6638



Rodenhouse, Inc.

www.rodenhouse-inc.com 616-454-3100



PROSOCO

www.prosoco.com 1-800-255-4255