

GRIDWORX®



Mechanical Stone Hanging System



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Mechanical Stone Hanging System The Total Solution

Contemporary construction techniques and materials make the patented Gridworx mechanical stone hanging system the best stone installation system in the world.

Precision Wall Systems, Inc. possesses the manufacturing and distribution rights for the Gridworx mechanical stone hanging system. Gridworx channels are extruded from structural aluminum (6005 alloy). They are anodized with a Type II coating meeting the standards of AAMA 611-98. The channels are pre-punched for weep holes and screw slots and packaged for distribution at our Dallas, TX headquarters.

The Gridworx curtain wall construction system features our patented Gridworx channels, installation components, stone panels, engineering, shop drawings, stone cut tickets and the Gridworx warranty covering the entire wall cladding system. We are aware of the potential for system breakdowns that might occur as a result of using inexact assumptions or inappropriate components. It is for this reason we deliver a complete package, ready for installation.

Gridworx is a two part hanging system. It is the only system in the market that provides for the non sequential setting of stone. Because of this feature, broken or discolored panels are easily removed and replaced with Gridworx. Each stone is supported independently making Gridworx a perfect system for earthquake or hurricane prone areas. In the rare occasion that a panel should be damaged it can be easily replaced without disrupting or replacing the rest of the wall. Imagine the savings of time, resources, and money.

Our components include the appropriate fasteners for attaching the Gridworx channels to the substrate. We are aware of the issues of galvanic corrosion, Hydrogen embrittlement and HASCC. Our fasteners are special use, high quality fasteners designed for our purposes. Our specified silicone has been tested for leeching and adhesion. No other cladding system provides this complete of a wall cladding package.

Gridworx is an engineered stone cladding system. All projects are reviewed by a premier curtain wall Professional Engineering firm. They examine the project plans and specifications as well as the ASTM test results for the stone.

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They also perform calculations for wind load, dead load, pull-out and shear strength of the fasteners. They also provide seismic review calculations. Their project specific Letter of Compliance culminates in their opinion the cladding system as designed conforms to the International Building Code (IBC) as well as local area building codes. This letter is project specific, signed and sealed by a registered PE in the project State. No other cladding system provides “peace of mind” with this level of engineering.

Please visit our web page at <http://www.gridworxwalls.com> for additional information.



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Our Dealer Network

Gridworx *is International*



Our primary marketing effort rests with our dealer network. These dealer sales forces comprise an accumulation of hundreds of architectural representatives throughout the United States and Canada.

The architectural representatives demonstrate the benefits of the Gridworx system to architects, stone masons and builders. Through their efforts Gridworx becomes accepted and specified as “Basis of Design” on projects throughout North America.

Our representatives also offer the Gridstone line of natural stone and terra cotta panels. With this level of product array and support, Gridstone provides the tools for these architectural representatives to become the “Go-To Guy (Gal) for stone.” Architects need search no further.

The architectural representatives also coordinate material handling and installation training on the job site.

With communication, support and training provided by the Gridworx team, these certified dealers provide a seamless flow of information from design through specification, bidding, shipping and installation.

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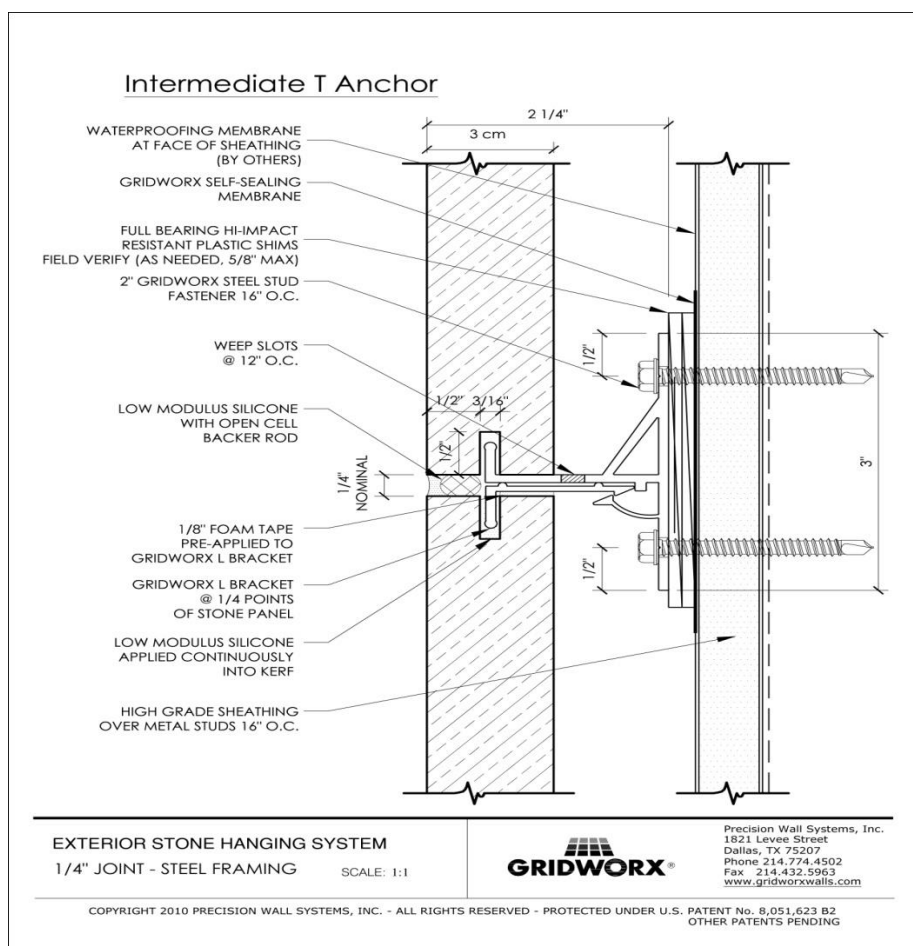
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Architects Are Our Best Customers

Architects love Gridworx because we provide the total solution. Our web page at www.gridworxwalls.com contains hundreds of pre-engineered design details for architects, designers and builders. These are available for downloading in PDF or DWG format. Simply select the "Technical Details" tab to see our wide array of typical project design details. These are organized by joint size, substrate and insulation placement method. With this feature architects can access our design drawings and save directly to their AutoCAD file. Our low learning curve makes designing with Gridworx fast and easy.



Our in-house architectural staff is available for consultation and assistance in the creation of "project specific" design details. Once the design architect has had an opportunity to work with Gridworx and the Gridworx team they are quick replicate the Gridworx experience on future stone cladding projects. **Architects Are Our Best Customers!**

Gridworx Works!

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Stone – The Material of Choice

The prestige and unmatched beauty of natural stone has made it the “material of choice” for all who can afford it. This has been true since the days of the Roman Empire. Building with stone is often too expensive, necessitating substitution with brick, stucco or some lesser product. Gridworx combines the efficiency of curtain wall construction with the beauty of natural stone.



Gridworx has strategic relationships with dozens of domestic quarries. We have similar relationships with some of the largest Granite importers in North America. Through these relationships Gridworx offers stone panels from around the world; FOB jobsite, “cut to size”, and kerfed to fit in the Gridworx stone cladding system.

Stone quarries and importers are aware of the marketing advantages of selling stone “cut to size” for the Gridworx

system. By being responsible for preparing the stone cut tickets, Gridworx makes it easy for these groups to manufacture and promote stone for the Gridworx system. This is a solid arrangement that strengthens the project stone specification when sold in conjunction with Gridworx.

Gridworx markets stone through the Gridworx dealer network. The stone quarry markets Gridworx to its customers as a means of keeping the project’s stone specification intact. This strengthens our dealer network, enhances our quarry partnerships, solidifies our architectural relationships and cements our dealings with stone installers. These relationships enhance project performance for all.

With the Gridworx system communication is clear and efficient from the quarry to installation. No other stone cladding company operates with this level of depth and breadth. Gridworx makes building with stone affordable once again.

Gridworx - A Win/Win strategy!

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In Partnership With Stone Masons



Stone masons are sold on Gridworx. Gridworx provides a number of installation aids for stone masons. These include an installation manual, an installation video guide available on DVD or by streaming from our web page, installation tools and onsite training. In conjunction with the International Masonry Institute we offer installation training seminars around the country. Gridworx technical representatives provide onsite project training throughout the US and Canada. We recognize the value in having trained and experienced installers. We take great care in making this happen.

Once stone installers have had the opportunity to work with our system they “value engineer” Gridworx into their projects. This is not difficult as Gridworx always proves to be a better, more efficient stone hanging system than what the architect specified in the original design of the building envelope.

We are now working with some of the largest stone installers in the nation. They bring Gridworx into every one of their project installations. Our partnerships with masons are just one more way Gridworx is becoming the recognized standard in the stone cladding market.

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Gridworx is Internet Friendly



Architects no longer reference specification catalogues. The Internet has become the major venue for disseminating product and specification information.

Most of our projects begin with the architectural specification. Many times this originates with the architect sourcing Gridworx from the Internet. We achieve Internet visibility by sponsoring dozens of Ad Words and utilizing Search Engine Optimization techniques. The Gridworx IT team maintains our web page; keeping it up to date with fresh and current information.

Our web page supports design architects with examples of projects using the Gridworx system, hundreds of typical design details available for downloading and contact information to access our architectural staff for help with project specific design details. Whether they are searching for information on Pressure Equalized Rainscreen systems, meeting the requirements of ASHRAE 90.1-2010 or simply designing for exterior insulation www.gridworxwalls.com is their best source of information.

We make it easy for architectural specification writers by providing Gridworx standard specification information, a sample interactive 4850 file, Material Safety Data Sheets and a plethora of other technical information.

We offer an entire section for stone installers. This is designed to provide methods and guidance for installation of the Gridworx system. Installers can download our installation manual or simply view it by streaming video. In this area we cover Gridworx installation information, required installation component information and recommended installation materials. We also demonstrate the use of installation tools and techniques.

Builders find our web page helpful as well. We offer examples of our typical project specific engineering reports, recommended construction details and the Gridworx warranty document.

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Innovation

Interior Stone Hanging Systems



Gridworx continually expands its offerings. In 2010 Gridworx introduced its interior stone hanging system. Currently this system comprises 10% of overall sales.

Some of the advantages of this system include:

- The ability to secure large panel sizes
- Designed for stone panels as thin as 2cm (3/4") in thickness
- Delivers a reduced distance from the substrate to the face of the stone panel.

Our interior stone hanging system is a solid complement to our exterior stone system. It creates the opportunity for architects and designers to expand their vision by providing an economical means for safely attaching large stone panels on multi-story interiors. Stone cladding on the entry façade, transitional walls and interior lobby project the feeling the entire building is made with stone. Most visitors will agree.

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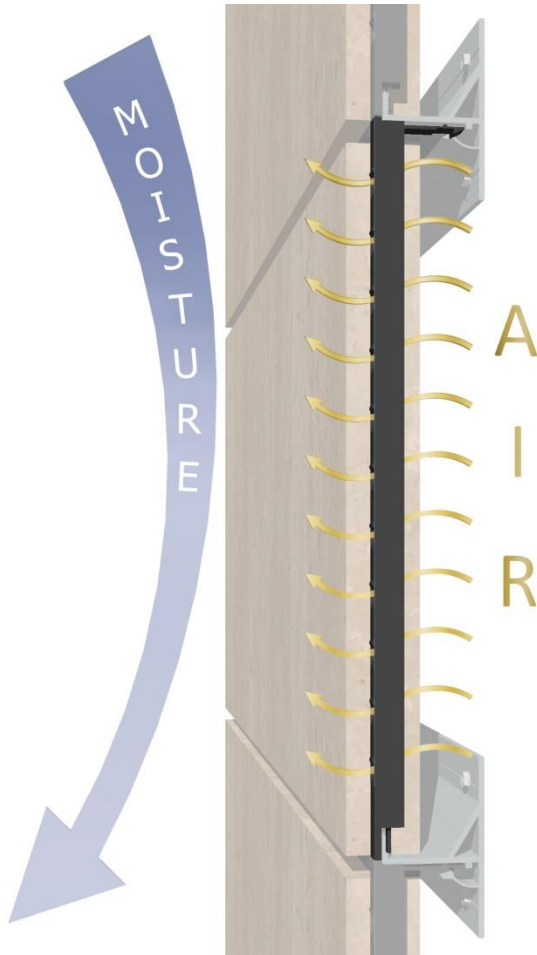
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Pressure Equalized Rainscreen System

Gridworx manufactures the world's most advanced Pressure Equalized Rainscreen cladding system. It is the only PER system that includes the patented Gridworx **Vertical Water Blocker**.



With cavity wall systems, the difference in air pressures across the exterior cladding is a significant force causing infiltration of air and water. As thunderstorms approach the air pressure in the cavity becomes less than the external air pressure along the building face. The natural equalization of this differential in air pressure causes the wall cavity to literally draw water into it.

The basic premise of the rain screen principle is to control the forces that permit moisture into the wall system. Its primary function is to restrict the passage of this moisture through the wall caused by atmospheric induced pressures. Additionally these systems allow for quicker drying of water in the wall cavity due to increased air circulation.

Other PER systems simply leave the horizontal joint open. This allows water falling on or cascading down the wall plane to invade the wall cavity. Not with Gridworx

Gridworx is the recognized leader in the design and development of Pressure Equalized Rainscreen systems. Gridworx offers the only system that includes a water blocker to deflect both the kinetic energy and capillary action of rain on the wall plane. This enhancement keeps 95% of the water that might enter the wall cavity through the open joint out of the wall cavity. The louvered openings in this component are designed to allow for the free flow circulation in the wall cavity.

The Gridworx Vertical Water Blocker keeps water out – allows for free flow of air circulation.

Vertical Water Blocker by Gridworx

THE BEST OF BOTH WORLDS!

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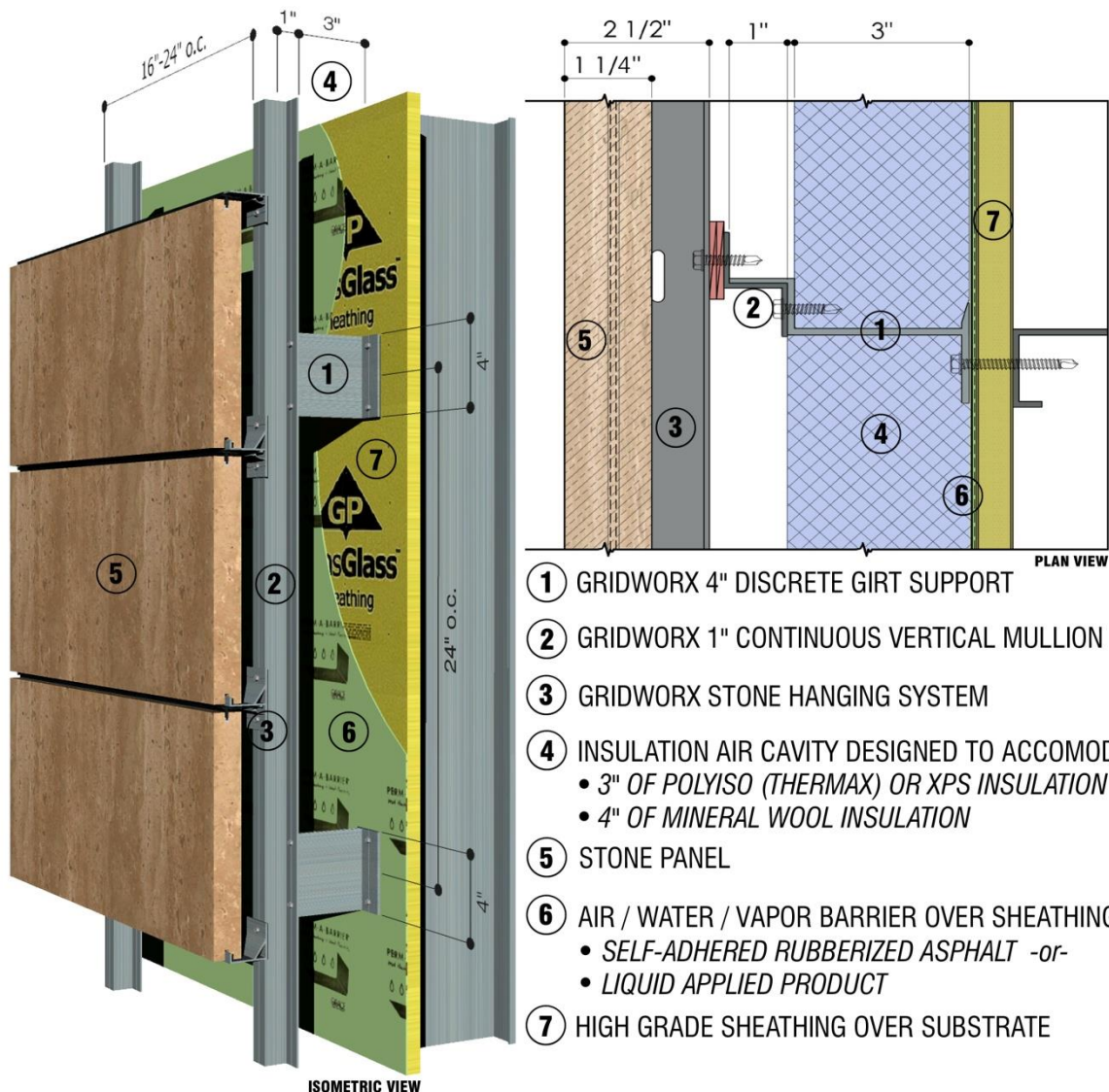
New Demands / New Solutions With Gridworx



ASHRAE 90.1 SYSTEM

ASHRAE

THE GRIDWORX MECHANICAL STONE HANGING SYSTEM MEETS OR EXCEEDS THE HEAT, AIR, AND MOISTURE TRANSFER STANDARDS OF ASHRAE 90.1-2010, PROMULGATED BY THE AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS.



- 1 GRIDWORX 4" DISCRETE GIRT SUPPORT
2 GRIDWORX 1" CONTINUOUS VERTICAL MULLION
3 GRIDWORX STONE HANGING SYSTEM
4 INSULATION AIR CAVITY DESIGNED TO ACCOMMODATE:
• 3" OF POLYISO (THERMAX) OR XPS INSULATION
• 4" OF MINERAL WOOL INSULATION
5 STONE PANEL
6 AIR / WATER / VAPOR BARRIER OVER SHEATHING
• SELF-ADHERED RUBBERIZED ASPHALT -or-
• LIQUID APPLIED PRODUCT
7 HIGH GRADE SHEATHING OVER SUBSTRATE

TO REQUEST A COPY OF THE INDEPENDENT THIRD PARTY ANALYSIS OF THE GRIDWORX ASHRAE SYSTEM, CONTACT US AT: info@gridworxwalls.com

*GRIDWORX DOES NOT SPECIFICALLY SPECIFY, AND IS IN NO WAY AFFILIATED WITH GRACE PERM-A-BARRIER, OR GEORGIA PACIFIC DENSGLASS SHEATHING. SIMILAR GRADE MATERIALS CAN ALSO ACHIEVE ASHRAE90.1 2010 COMPLIANCE

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Flexible *and* Affordable



This is an example of one of our **Pressure Equalized Rainscreen** installations.

This project also demonstrates Gridworx's ability to deal with whatever curves an architect may throw our way. Both concave and convex radial walls become just a part of the process.

Not only is Gridworx the most flexible stone installation system in the market, it also:

- Provides an architectural staff for help with problem solving issues
- Offers the complete wall cladding package including stone and engineering
- Requires less stone and accompanying freight
- Allows utilization of a less skilled labor force
- Supplies an array of installation aids and methods
- Provides on-site training

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And **Yes, Gridworx** is **Green!**

Our vision goes beyond today - to future generations as well. This is why we introduced GridGreen. Sustainability and conservation are more than just buzzwords at Gridworx. They are principles upon which our company was founded. Our materials not only set the bar in quality, but also meet exceptional standards in sustainability and environmental sensitivity.

Let Gridworx help your project achieve LEED® certification. We offer a variety of online resources to make it easier for you to determine how our product can assist you in meeting your sustainability goals.



Made with 75 % Recycled Material
67% Less material than traditional masonry

Not only does this reduce stone costs, but it also means less associated costs quarrying the stone from the earth. Less stone means reduced shipping fees and fewer carbon emissions being released during transport, loading, unloading and so on...



Precision Wall Systems, Inc.

Biography and Corporate Experience

Precision Wall Systems, Inc. was founded in 2003 by its President, **Stephen Loyd**.

Mr. Loyd is a 1969 graduate of Texas Tech University. He served as President and CEO of Stephen N. Loyd, Certified Public Accountants until 1983. He later founded Commander Financial Corporation a mortgage banking firm with offices throughout Texas. He served as President and CEO until 2001.

After touring France and Italy, Mr. Loyd recognized architects no longer built with natural stone as it had become too expensive. He perceived improved construction techniques could once again restore the beauty of this natural product to the public arena. Working with a team of engineers, architects and builders he created the Gridworx mechanical stone hanging system.

Precision Wall Systems, Inc. (PWS) was created to receive the license for manufacturing and distribution of the Gridworx product. Since its inception Precision Wall Systems, Inc. has been dedicated to the highest quality product possible. With this philosophy of quality coupled with customer service, the Gridworx system administered by Precision Wall Systems is setting a new standard for alternative construction techniques.

Chase Loyd graduated from North Texas University in 1999. Chase joined Precision Wall Systems as an installer of the Gridworx system in 2006. After gaining experience working with outside installation teams he took over the installation division of Gridworx. He then assumed the oversight functions of all installation and production aspects of Gridworx. In 2010 Chase was promoted to Vice President of Production of PWS.

Chase now travels extensively training installers and architects on the Gridworx stone hanging system. He has made multiple presentations in conjunction with the International Masonry Institute training members of the International Brotherhood of Masons. He also conducts on-site project installation training seminars.

Headquartered in Dallas, Texas, Precision Wall Systems occupies a state-of-the-art facility. Sales, research, consulting and production for the United States and Canada are executed from our Headquarters while dealers located throughout North America provide international sales and project support.

Gridworx now sets the standard for wall cladding systems by incorporating the natural beauty of stone with its unique and proprietary installation method. Gridworx allows you to build with stone economically – just: ***“Set, Swing and Snap.”***

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Gridworx Rocks!



**Gridworx is protected with US Patents number 8,051,623 B2, and 8,341,901 as well as additional US and Canadian patents pending.*

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