

HUNTSMAN

BUILDING SOLUTIONS

W-WALL™ SYSTEM

ALL-IN-ONE SOLUTION:

- AIR SEALING
- 2-HOUR FIRE RATING
- ACOUSTIC PERFORMANCE



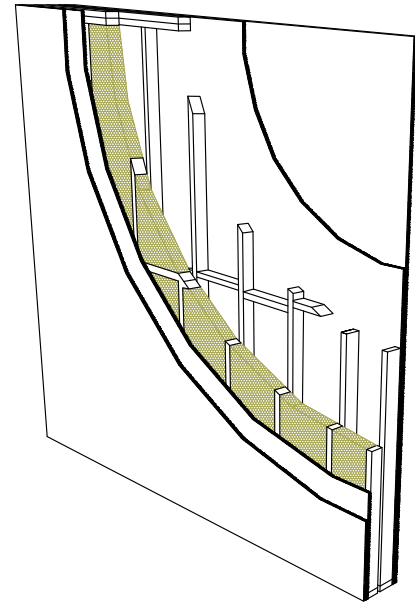
Builders and Architects today are faced with a multitude of challenges in designing a strong, reliable partition wall that will:

1. Deliver excellent value at a reasonable installed cost
2. Air seal to solve blower door issues
3. Meet the 2-hour fire-rated load-bearing wall requirements
4. Provide sustainable sound attenuation for the life of the building

The W-WALL™ SYSTEM provides everything needed to ensure a solid and tightly sealed partition wall with the highest quality products & accessories, custom design assistance and engineering support, and approved installer network. One complete system designed to enhance the construction of your project with savings of up to three days in cycle time for town homes and even more for multi-family or condo projects.

W-WALL SYSTEM Assembly Concept

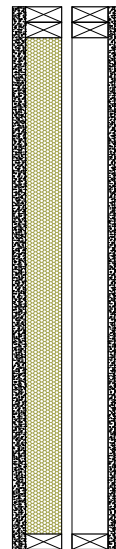
- Wall sheathing consists of two layers of 5/8" Type X gypsum wallboard
- Walls are constructed with 2"x4" studs at 16" on-center - no need for 8" off-set
- Sheathing is secured with screws, and only the face layer is covered with tape and joint compound
- Insulated wall leaf is filled with 3-1/2" of open-cell spray foam insulation
- 1" (min) air gap remains between the two wall leaves
- Overall assembly is 1" thinner than typical shaft liner wall



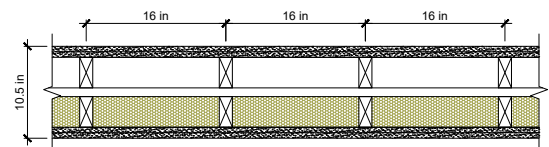
Benefits

- Simplicity meets Functionality in 3 functions: air barrier, insulation, and sound attenuation.
- Compatible with most common building materials and other air barrier auxiliary products
- Spray foam insulation applied only in one leaf of the wall
- Saves one inspection for the gypsum wallboard installation
- Only the face layer of sheathing needs to be taped and sealed
- Fewer products to install equals cost savings
- Reduce construction costs by maximizing speed of installation and requiring fewer workers
- More livable square footage due to thinner structure than common partition walls
- Technical Evaluation Report (TER) available for every state with Engineer's seal/stamp
- ASTM E119 - 2-hour load bearing assembly
- Multiple HBS open-cell products approved in this assembly. All ESR or CCRR accredited

Complete set of drawings available.



Top view



Section view

Certifications

The W-WALL SYSTEM has successfully passed ASTM E119 and ASTM E90 in accordance with IBC requirements. HBS open cell-spray foam insulation products are also GREENGUARD Gold Certified, which means it is low VOC emission to ensure better indoor air quality.

1. ASTM E119 - 2-hour load-bearing assembly
2. ASTM E90 - STC 57
3. ASTM E2178 Air Permeance
4. ESL 1373 - ICC Evaluation Service Listing
5. TER 2011-01 - Technical Evaluation Report

Environmentally Friendly Technology and Lasting Performance

The HBS W-WALL SYSTEM includes our most technologically advanced and environmentally friendly open-cell spray foam products. This assembly can save time on-site and delete costs by reducing the amount of materials needed in the assembly like shaftliner panels, fiberglass insulation and the caulk and seal package. Open-cell spray foam products do not settle over time, which guarantees fire, acoustic and air sealing performance for the lifetime of the building. All of this makes the HBS W-WALL SYSTEM an ideal choice for forward-thinking building owners, builders and architects seeking outstanding performance from an environmentally friendly product system.

Support

The Huntsman Building Solutions technical team is available to review design details, specifications and provide on-site quality control services to tailor the W-WALL SYSTEM to the specific needs of each project and ensure quality installation.

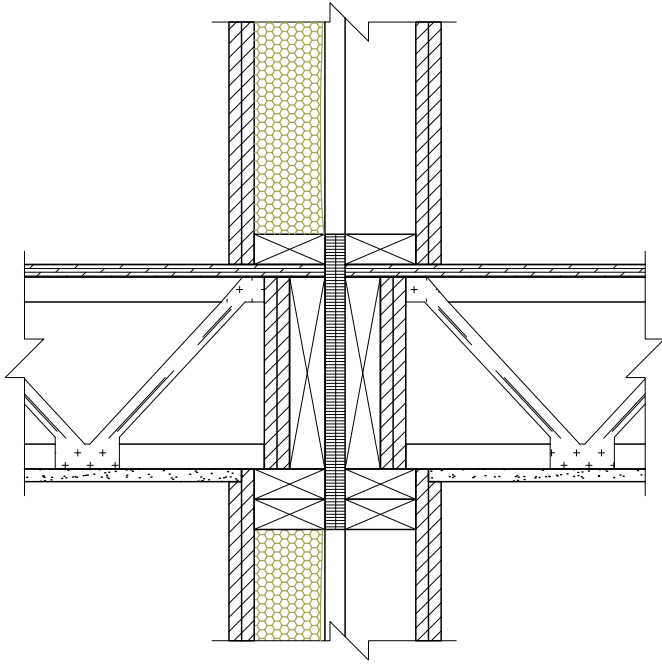
For more information, please call 817-640-4900 or email us at architect@huntsmanbuilds.com

W-WALL SYSTEM Assembly Step by Step

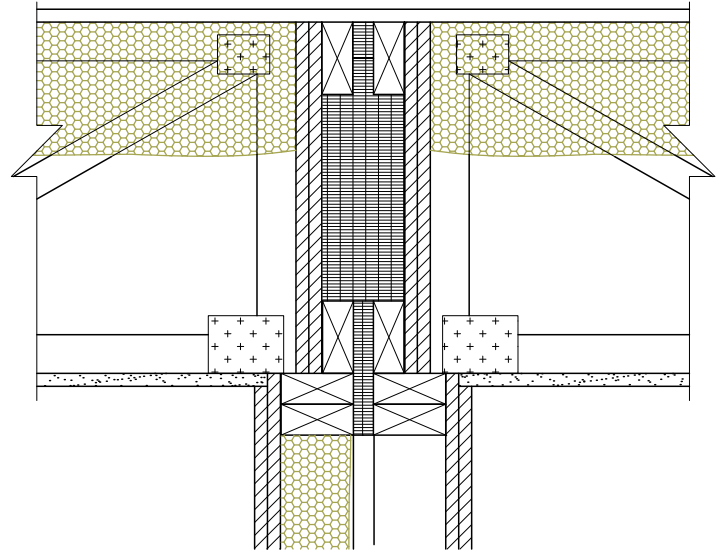
- 1.** Installation of wood framing. Only one side or both sides of the framing can be installed. Any type of wood can be used.
- 2.** Installation of stone wool, mineral wool or type x gypsum to act as a firestop (firestop sealant around floor joists only) in connection details.
- 3.** Installation of gypsum wallboard panels on one side of the wall. Only one layer needs to be installed at this point and does not need to be plastered. Only the second layer needs plastering.
- 4.** Installation of spray foam insulation in the cavity where the gypsum wallboard has been installed.
- 5.** Installation of full cavity fireblocking at intervals not exceeding 10 feet, in accordance with IBC Section 718.2.2.
- 6.** Installation of the final layers over the gypsum wallboard already installed and on the open side of the wall.
- 7.** Installation of plaster over the joints of the final gypsum wallboard layer.

Note : Some of these steps might be in different order depending on the most productive sequencing for each site.

**Typical Detail - Wood Framing
Floor/Ceiling - Perpendicular Trusses/Joists**



**Typical Detail - Wood Framing
Unvented Attic - Perpendicular Trusses**



Complete set of drawings available.

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