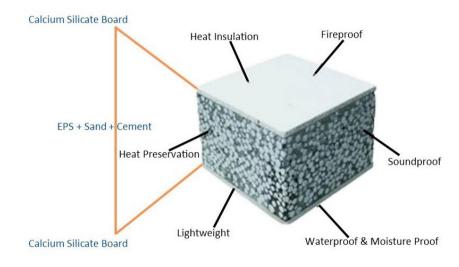


# SOLID CORE FULLY INSULATED WALL PANELS

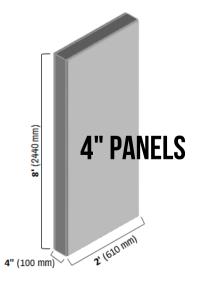
### A+ FIRE RATING

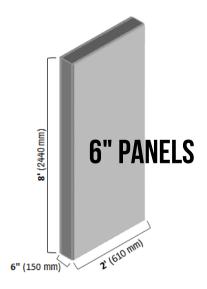
- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- HIGH-RISE
- OFFICES
- HOTELS
- STORES
- HOSPITALS
- STORAGE
- STRIP MALLS

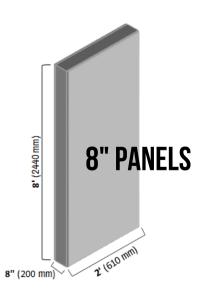




Seismic Performance









# **FEATURES**

#### **Load Bearing**

Universal Wall Systems 6" panels are rated for 200 lbs/in<sup>2</sup>

#### **Minimum Weight**

Universal Wall Systems solid core, honeycomb panels weigh less than 25% of typical precast concrete walls and 75% than typical block wall.

#### **Hydro-stability**

Test enclosures (rectangular vats) demonstrate that, even without watertight coatings, Universal Wall Systems panel composites effectively resist both moisture penetration and the formation of surface condensates common under humid conditions.

#### **Greater Suspension Loads**

Universal Wall Systems panels support isolated suspension loads exceeding well over 100 lbs. per wall-screw/nail. Loads exceeding 103 pounds can be obtained using a drywall anchor and screw combination.

#### **Extreme Fire Resistance**

Universal Wall Systems is rated "Class A" under certified tests of 3,092° F; for more than 3 hours of exposure per side.

#### **Thermal Conductivity**

Universal Wall Systems steady-State Thermal Transmission Properties (Guarded Hot Plate) tests result of "R 37" under certified tests utilizing - 8" thick panels.

#### Optimum Sound & Vibration Dampening

Universal Wall Systems' cellular polystyrene and cement composite structure demonstrates high resistance to vibration and sound. Universal Wall Systems' 4" panel tested at over 40 dB of sound absorption.

#### **Height: Single Story to High-Rise**

Universal Wall Systems panels can be used as filler wall panels within a steel, concrete or wood load structure such as a single story home or high-rise buildings.

#### **Proprietary Internal Structure**

Universal Wall Systems has a compliment of product, including filler wall panels with no c-channel members, panels with c-channel inserts for both load and integration capabilities. Our unique proprietary integrated structure allows for a variety of construction uses both for internal and external applications.

#### **Factory Pre-installed Piping On Request**

#### **Factory Pre-finished Face Plate**

Smooth, water tight, ready to paint, tiles or other finishes.

#### **Less Installation Time**

No wood framing, insulating or drywall.

#### Eco and forest friendly

100% recyclable, non-hazardous, time-tested materials.

# **PRODUCT SPECIFICATIONS**

**Length:** 7.5 and 8 foot - Longer walls are available on a project-to-project basis.

Width: 2 feet

Thickness: 4", 6", 8" - Other thicknesses are available on a project-to-project basis.

Sound Insulation Capacity: 36-58 dB of sound absorption and reflection.

Fire Rating: Grade A

Load Bearing: 6" panels are rated for 200 lbs/in

• Compressive Load: 28,844 lbs

Horizontal Transverse Load: 1,843 lbs

• Vertical Transverse Load: 1.16 psi

· Racking Load: 2,660 lbs

Water & Moisture: 100% waterproof. 100% moisture-proof Insulation R Value: 28.39 - 47.30 (RI Value 5.00 - 8.33)

Typhoon & Earthquake Rating:

Beaufort Scale: Grade 8 - 12
Earthquake: Magnitude 6 - 8

#### **APPLICATIONS**

- Residential (i.e.: single & multi-family, condos, town homes, etc.)
- Light-Commercial
- Commercial
- Industrial
- · High-Rise

#### **USES**

- Interior Walls
- Exterior Walls
- Flooring
- Ceiling
- Sound Barriers (i.e.: highway sound barrier, hotel, etc.)
- Firewalls (i.e.: restaurant kitchens, etc.)

# 

#### **SUMMARY BENEFITS**

- Light-Weight
- Eco-Friendly
- · Fire Resistant
- Solid Core Structure
- · Mold and Moisture Proof
- Sound Resistant
- Generationally Durable

# **CERTIFICATIONS**

#### EXTREME FIRE RESISTANCE

#### ASTM E119

Temperature: 1700° Celsius

**Duration: 3 Hours** 

**Evaluation: Intertek ETL SEMKO** 

- Exposure to high-pressure water immediately following prolonged fire exposure.
- Registered marginal temperature change on opposite surfaces.

#### LOAD BEARING

#### **ASTM E72-15**

**Evaluation: Intertek** 

 Standard test methods of conducting strength tests of panels for building construction.

## THERMAL NON-CONDUCTION ASTM C177

**Evaluation: Intertek ETL SEMKO** 

- Evaluates thermal conductivity (insulative properties).
- Registered low thermal conductivity (high insulation values).

#### MOISTURE / MOLD RESISTANCE

#### ASTM E96

**Evaluation: Intertek ETL SEMKO** 

- Standard test methods for water vapor transmission of materials.
- Registered no detectable moisture penetration through composite.











# **PROJECTS BIG AND SMALL**

Universal Wall Systems brings to the market a new and revolutionary interlocking wall product that can be used for both the exterior as well as interior wall applications.

Once a product of mere imagination, Universal Wall Systems now offers a wall that is not only fireproof, flood resistant, extremely strong and eco-friendly, but also provides peace of mind that when the extraordinary happens, you have a product that will stand against the forces of nature.

Rigorously tested by the North American materials evaluation authority, Intertek. Universal Wall panels exceed contemporary building and construction standards established by one of the world's most trusted standards organizations, ATSM (The American Society for Testing and Materials).

The center of each light-weight panel is a proprietary mixture of high-grade concrete, polystyrene foam beads and fiberglass meshing. This provides not only exceptional resistance to fire, vibration and moisture penetration but also superior strength and thermal qualities.

The outer panels and face plates, are processed using a unique fiber-reinforced cement compound, further adding resistance to moisture and heat. The result is an exceptionally light-weight, strong, 100% mold proof, fully customizable construction system. A system that is simple to use, transport and store. The Universal Wall system provides a world class structure while saving tremendous amounts of construction time and capital.

Universal Wall is a proprietary solid core product that is the only fully integrated panel system in North America. All utilities, metal channel, insulation and any other structural load elements can be fully encapsulated within the Universal Wall panels. The panel's encapsulation system provides protection to those expensive components from extreme fire, impact, water and severe vibration.

Universal Wall panels eliminate the need for costly framing, insulating, and dry walling. In addition, vertically integrated conduits can greatly reduce the time to install utilities (i.e. electrical, plumbing, communication lines, etc.), resulting in reduced construction time and labor contracting requirements, thereby lowering the overall capital costs.

We support all projects big or small. You may be building a one-bedroom getaway on the beach or your four-story hotel near a famous national park. Universal Wall is great for both types of buildings. From residential to industrial, we have the right solution that will fit all of your needs. You may not be able to control mother nature, but when she strikes, Universal Wall Systems will provide peace of mind beyond what typical construction can offer. We know you won't be disappointed.



# **CONTACT US**

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