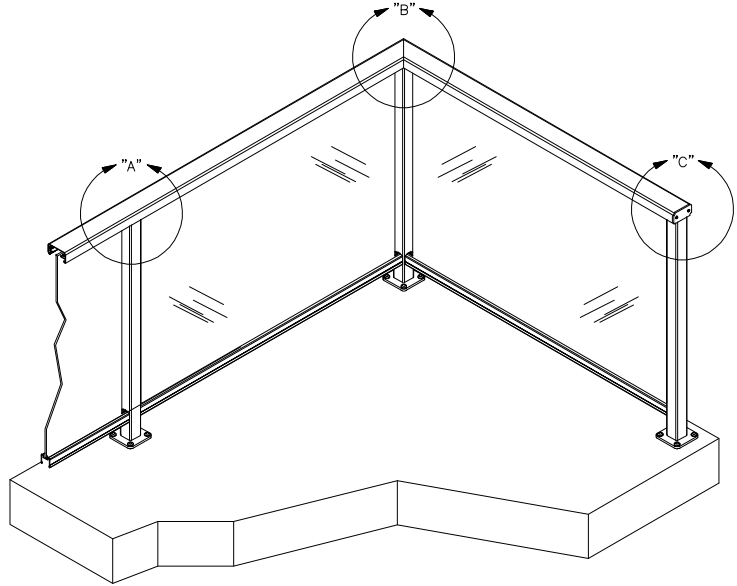


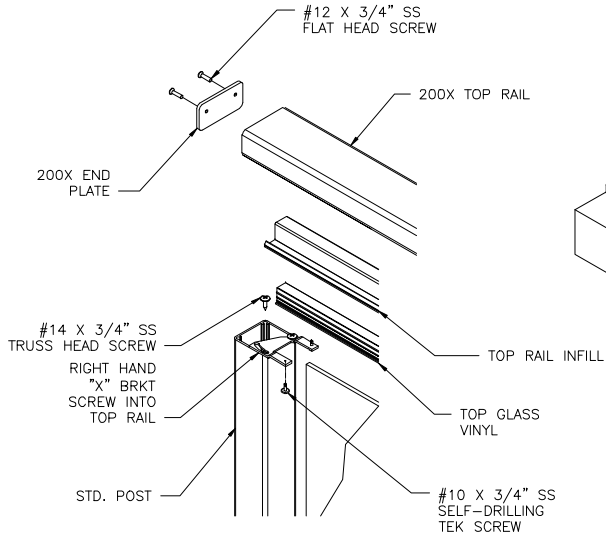


WORLD CLASS ARCHITECTURAL PRODUCTS
HANSEN
 ARCHITECTURAL
 SYSTEMS

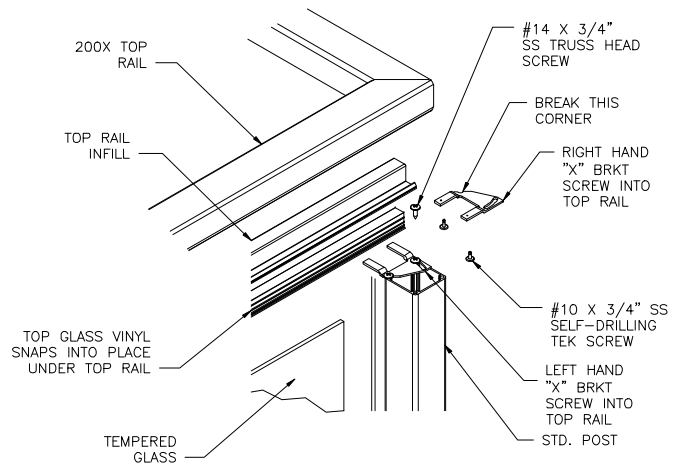
5500 SE ALEXANDER ST. HILLSBORO OR. 97123
 PH. 503-356-0959 FAX 503-356-8478



— TYPICAL ISOMETRIC
 NTS

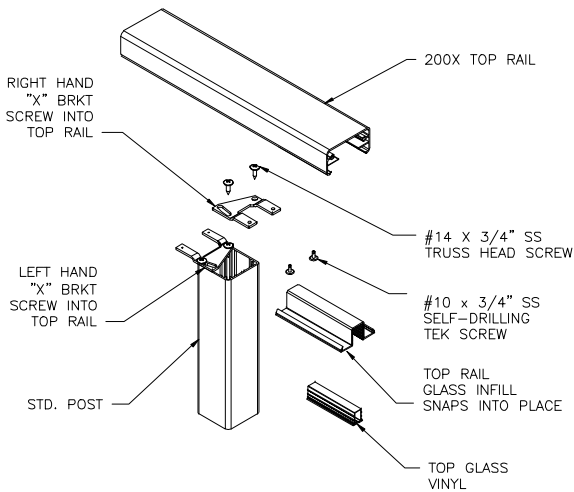


Ⓒ END CONDITION DETAIL
 SCALE: 2.5



NOTE:
 FOR 90° MITERS, BREAK OFF
 CORNERS OF BRACKETS AND
 PLACE AS SHOWN

Ⓓ TYP. CORNER CONN.
 SCALE: 2.5



Ⓐ TYP. TOP RAIL CONNECTION
 SCALE: 2.5

SERIES 200X GLASS RAILING CONNECTION DETAILS
www.aluminumrailing.com

WALL MOUNTED

Standard sizes

width: 4 ft
length: 6 ft
8 ft
10 ft
12 ft
14 ft
depth: 2" or 3" thick

Custom Sizes

Available in widths and lengths in
2" increments up to 4 ft x 14 ft

Finish

- galvanized steel wire panels
- baked on powder coat finish
 - ~ green
 - ~ black
 - ~ silver
 - ~ white
 - ~ custom

Accessory Options

trim: #5104 channel
#5105 angle

Mounting Hardware

full range available





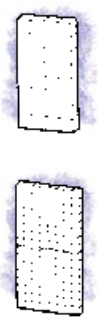
Beverly Connection, Beverly Hills, CA

Wall Mounted Green Facade Trellis Panel

The **greenscreen**® trellis system can transform blank concrete or masonry walls into soft-textured, vine covered, seasonally varying surfaces commonly referred to as "green facade walls." The elements are simple and the possibilities are endless for mounting modular or shaped panels near entries, around windows and in interior courtyards as a living plant matrix that covers all or part of a building facade... the examples are many!

Our system of engineered mounting accessories is designed to hold **greenscreen**® trellis panels off the building surface, protecting the building's waterproof membrane from direct plant attachment and transferring the weight of the plants to the screen structure and the wall. Integrate wall mounted **greenscreen**® elements into new construction or retrofit to existing buildings with adjustable clips that adapt to uneven surfaces. Panels can be stacked side to side or top to bottom to cover larger areas.

WALL MOUNTED



Memorial Hospital, Houston, TX



Universal Studios CityWalk Universal City, CA

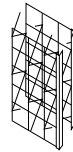
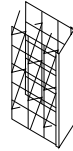
accessories

Our Accessory Items list will provide your project with the necessary edge trims, mounting clips, straps, posts, and caps to match your specified finishes with maximum flexibility.

To assist with design and product specification we provide additional details, material specifications, engineering data, complete accessory specifications, BIM and CAD details for inserting into working drawings. Also included is a helpful **Mounting Options** section for use as a guide on typical installations. This additional information is available online at www.greenscreen.com and in our Complete Catalog Binder. Contact us for additional materials or with specific questions.

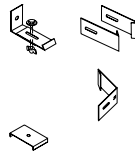


EDGE TRIMS



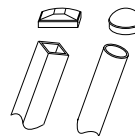
Use as a closure strip at edges of **greenscreen®** panels. Recommended on panel edges adjacent to pedestrian traffic or where edge reinforcement is required for special mounting conditions or long term plant maintenance. #5104 Steel Channel Trim or #5105 Steel Edge Trim can be added to panels in multiple configurations.

MOUNTING CLIPS



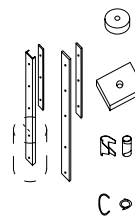
A selection of engineered clips and brackets can be used for a variety of project requirements. Examples are on our website. Please contact a **greenscreen®** Project Manager for more information.

POSTS AND CAPS



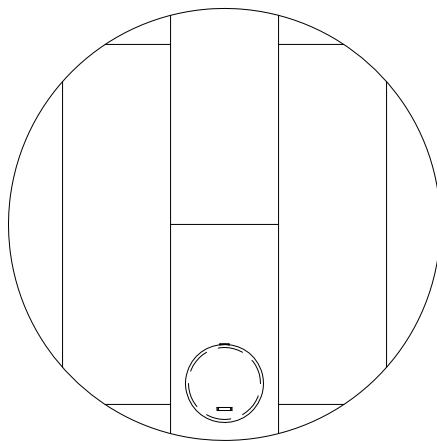
Available in matching finishes and custom lengths.

STRAPS, SPACERS AND RINGS



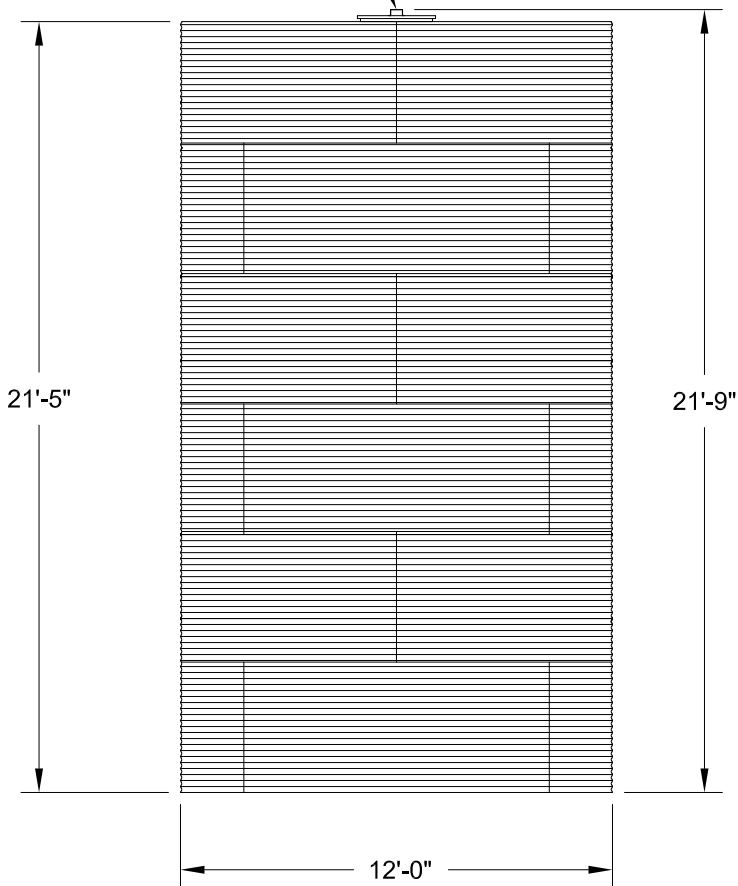
Use for adapting to uneven surfaces, isolating different building materials, aligning screens and joining screens together in a stacking configuration.

Roof sheet layout may differ from plan view.



PLAN

24" MANWAY



ELEVATION



WATER STORAGE TANKS, INC.
 1-800-463-1898
 www.corgaltanks.com

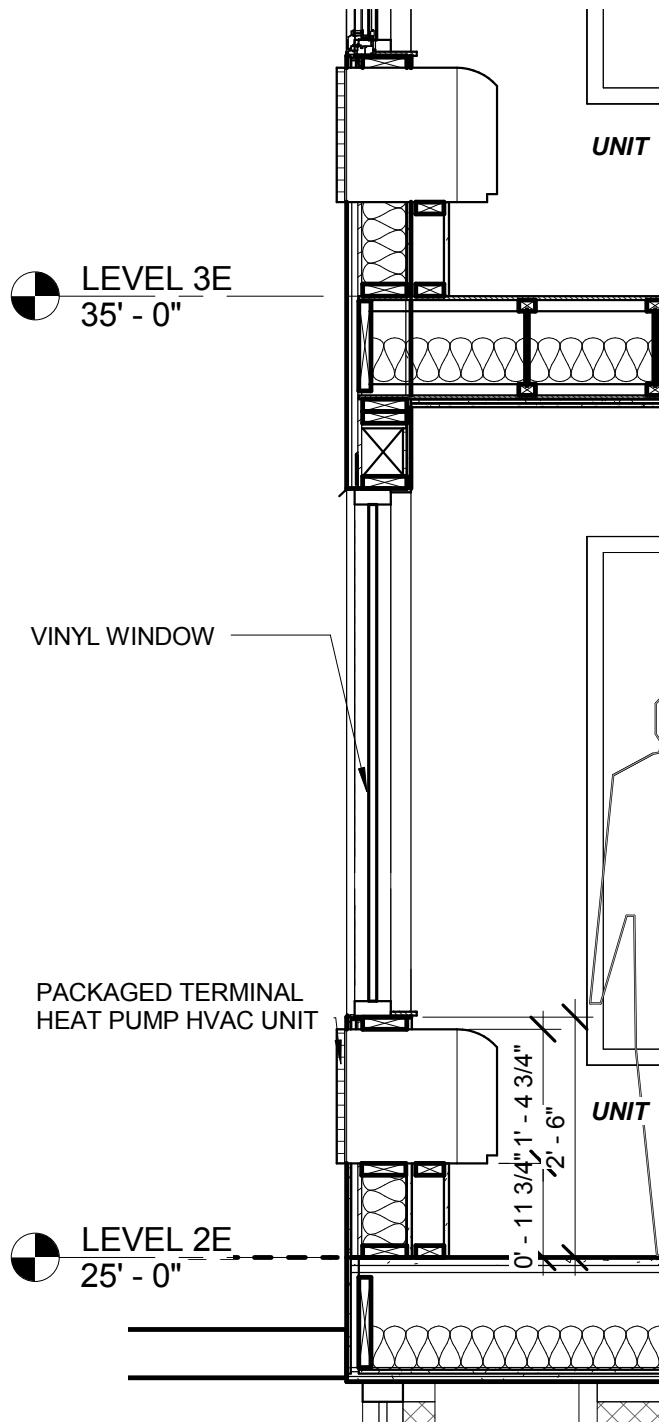
| | BY | DATE |
|-----|----|--------|
| DWN | IU | 3/9/10 |
| CKD | JH | 3/9/10 |
| ENG | JH | 3/9/10 |

TITLE MODEL 1206-WT-FR
 COR GAL STEEL WATER STORAGE TANK
 NOMINAL CAPACITY - 17,200 GALLONS (U.S.)

DWG. NO. 1206-WT-FR REV. NO. A

THE DRAWING DEPICTED ON THIS PRINT AND THE INFORMATION CONTAINED HEREIN ARE PROPRIETARY TO Water Storage Tanks, Inc. AND SHALL NOT BE USED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF Water Storage Tanks, Inc.

SIZE A SCALE 3/16"=1'-0" SHEET 1 OF 1



1. PTHP SECTION

SCALE: 1/2" = 1'-0"

LRS
ARCHITECTS
 www.lrsarchitects.com

720 NW Davis
 Suite 300
 Portland OR 97209
 503.221.1121 ☎
 503.221.2077 📠

PROJECT NAME: GRANT PARK VILLAGE
 PROJECT NUMBER: 211346
 DATE ISSUED: 11/21/12
 REVISION:

SHEET
DR510



Bench:

Manufacturer: Landscape Forms
Model: Neoliviano Backed Bench 69"
Wood Type: Purpleheart
Installation: Surface Mount

Description:

A light and lyrical bench with arms. The bench is cast aluminum with natural wood slats.





Ceramic Pots:

Manufacturer: Champa Ceramics

Model: Cana

Details: Large 24 w 18 ht,

Finish: Glazed

Color: Black Gloss

Description:

Champa's Glazed Ceramic pottery is high-fired stoneware. with wood fired glazing. The result of the wood firing process is a distinct, one of a kind, non-porous, ceramic vessel.





Ceramic Pots:

Manufacturer: Champa Ceramics

Model: Tall Cones #165-008

Details: Set of 3 – Large 25 w 35 ht, Medium 21 w 29 ht,
Small 17 w 25 ht

Finish: Rustic

Description:

Champa's Rustic pottery is high-fired stoneware. The pots are formed by hand with a brown clay and sand mixture then baked at up to 2200F for five days in a wood burning kiln. The result is a distinct, one of a kind, non-porous, ceramic vessel.



Ceramic Pots:

Manufacturer: Champa Ceramics

Model: Pinnacle #146-007

Details: Set of 2 – Large 19 w 36 ht, Small 15 w 32 ht

Finish: Rustic



Planter Pots:

Manufacturer: International Art Properties

Model: Monsoon Planter

Details: Size C - 48" Length, 14" Width, 24" Height,

Finish: Bronze

Description:

The IAP Monsoon Planter is a modern rethink of the standard window box. The signature Fusion finish, a process by which metal is fused to the fiberglass structure, creates a planter with unparalleled strength and beauty.



Cigarette Receptacle:

Source: Belson Outdoors, Inc

Model: #R1SM, Smokers Pole Cigarette Receptacle, 4" dia x 41" ht

Color: Silver Metallic

Description:

A simple space saving solution to control smokers waste. The easy to empty cigarette receptacle requires no tools and minimal bending. The fire safe aluminum body features a durable weather resistant powder-coat finish.





Black Vinyl Coated Fencing:

Manufacturer: TBD

Mesh Size: 2" mesh, 9 gauge wire, 72" height

Type: Knuckle and Knuckle

Rails: 2.5" dia vinyl coated poles, top rails, bottom tension wire

Vinyl Coating: Extruded and Bonded

Color: Black

Posts set into wall below

Gates: 2 - 3' wide gates, as above with center and bottom rails.



Pet Waste Station:

Manufacturer: Zero Waste USA

Model: The Gladiator Station with Roll Bag # JJB12B

Color: ZW Green

Description:

A professional grade Pet Waste Station for commercial applications, The heavy-duty Gladiator Pet Waste Station has a square post, locking can and fully sealed chute system that stops odors, pests, insects and vandals.





Trash Receptacles:

Manufacturer: Landscapeforms

Model: Steely Can, top-opening

Finish: Stainless Steel

Description:

Made of type 304 solid stainless steel with a brushed finish, the Steely Can is dent-and-scratch resistant and very durable. The unique liner stabilizer slots grab the bag and hides it from view.

ELF15J THIN LINE STATIONARY LOUVER EXTRUDED ALUMINUM

STANDARD CONSTRUCTION

FRAME

1 1/2" (38) deep, 6063T5 extruded aluminum with .063" (1.6) nominal wall thickness. Caulking surfaces provided.

BLADES

6063T5 extruded aluminum with .063" (1.6) nominal wall thickness. Blades are positioned at 45° angle and spaced approximately 1 7/8" (48) center to center.

SCREEN

5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH

Mill.

MINIMUM SIZE

6"w x 6"h (152 x 152).

APPROXIMATE SHIPPING WEIGHT

2.5 lb. per sq. ft. (12.2 kg/m²).

MAXIMUM FACTORY ASSEMBLY SIZE

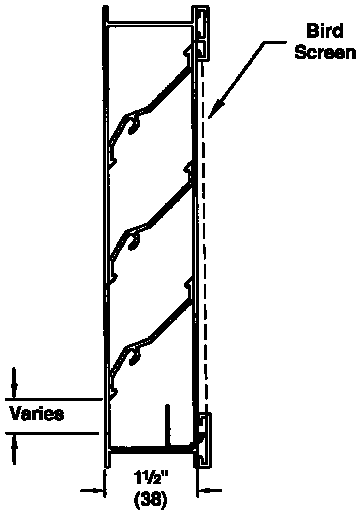
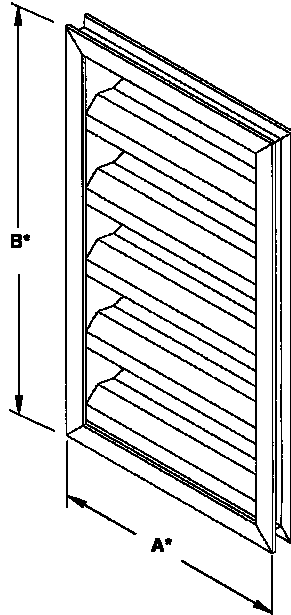
Shall be 60 sq. ft. (5.6m²) per section, not to exceed 120"w x 72"h (3048 x 1829) or 72"w x 120"h (1829 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS

Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or wind-load.

Consult Ruskin for additional information.



FEATURES

The ELF15J offers:

- 50% Free Area.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- Aluminum construction for low maintenance and high resistance to corrosion.

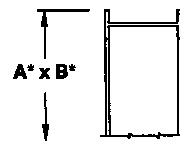
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

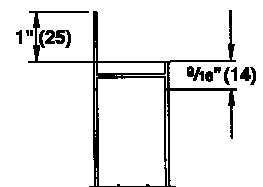
- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Ruskin for other special requirements.

FRAME CONSTRUCTION



STANDARD



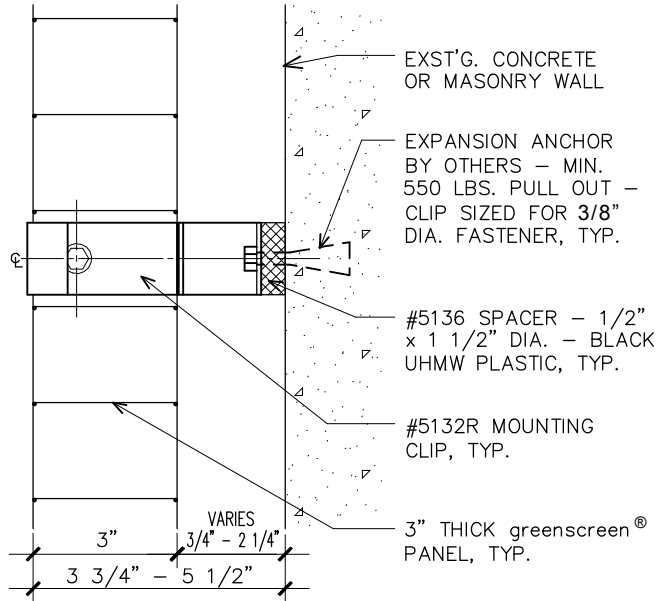
INTEGRAL FLANGE

Dimensions in inches, parenthesis () indicate millimeters.

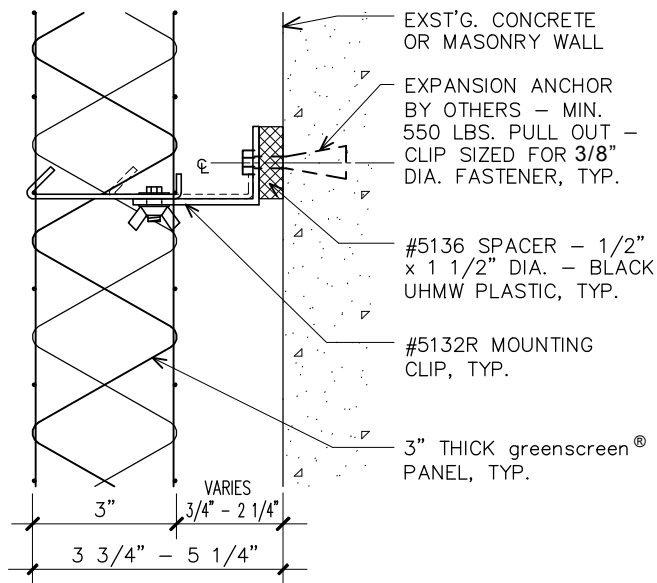
*Units furnished 1/4" (6) smaller than given opening dimensions.

| TAG | QTY. | SIZE | | FRAME | VARIATIONS |
|---|------|---------|---------|--------------------------------|------------|
| | | A*-WIDE | B*-HIGH | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| PROJECT ARCH/ENGR. REPRESENTATIVE | | | | LOCATION CONTRACTOR DATE | |

5132R
Wall Mounted, Plan & Section **MOUNTING CLIP**



○ #5132R MOUNTING CLIP - WALL MOUNTED
PLAN



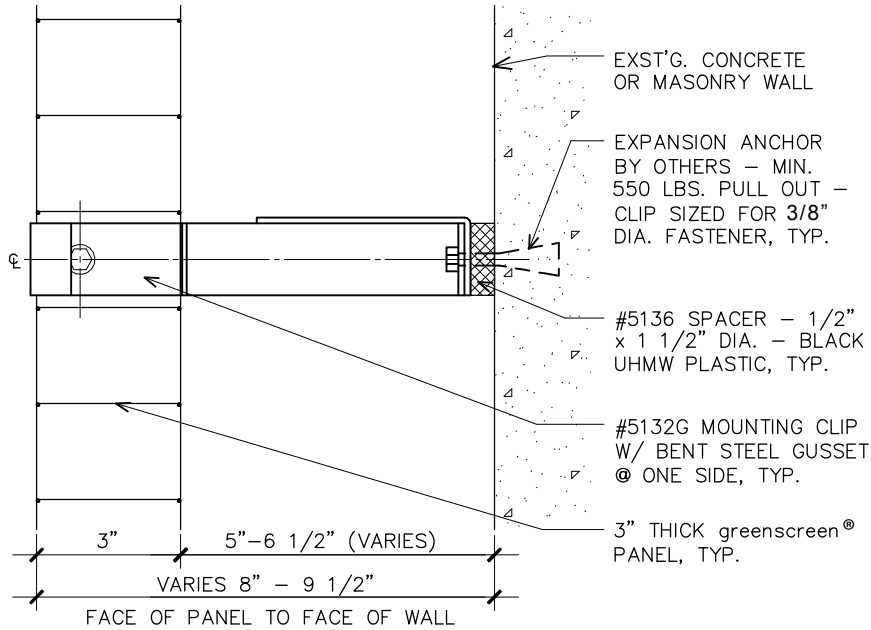
○ #5132R MOUNTING CLIP - WALL MOUNTED
SECTION

*Fasteners and expansion anchors by others
– at stucco and plaster locations clips should
be mounted into solid blocking, sheathing or
wall studs.

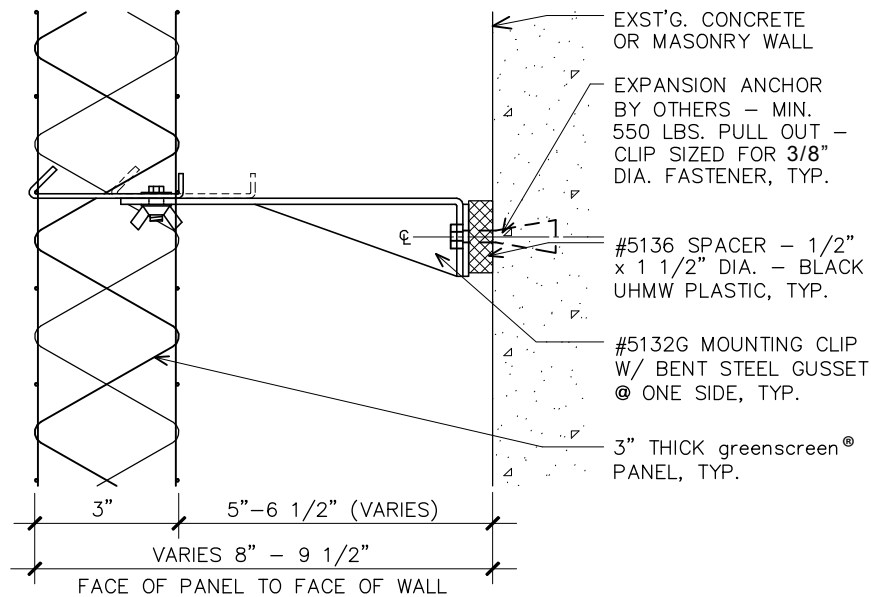
Note: Mounting hole in clip is sized for
maximum 3/8" diameter fastener.

Spring '12

5132G
Wall Mounted, Plan & Section **MOUNTING CLIP**



○ #5132G MOUNTING CLIP - WALL MOUNTED
PLAN



○ #5132G MOUNTING CLIP - WALL MOUNTED
SECTION

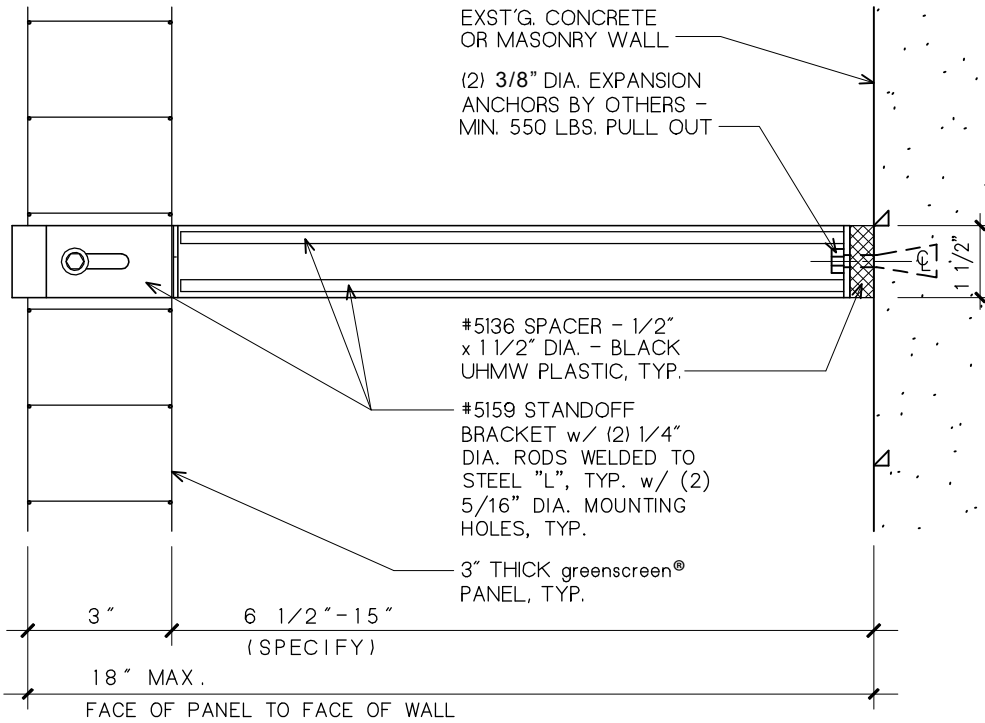
*Fasteners and expansion anchors by others – at stucco and plaster locations clips should be mounted into solid blocking, sheathing or wall studs.
*Used to hold panels off face of wall or structure a maximum of 9"
Note: Mounting hole in clip is sized for maximum 3/8" diameter fastener.

Spring '12

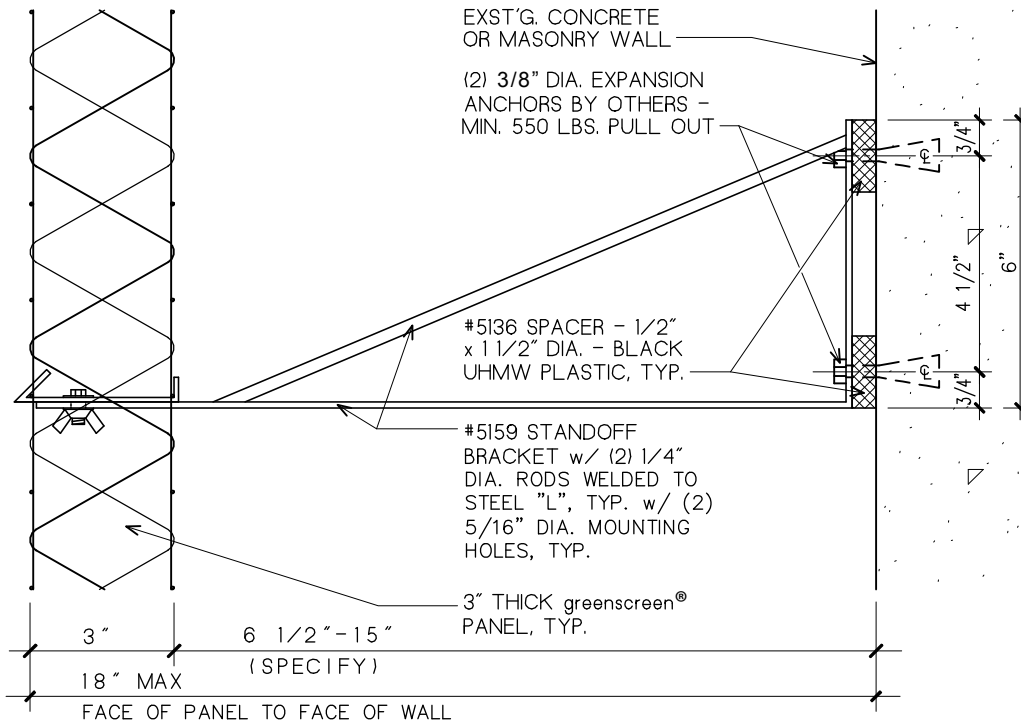
5159
Standoff Bracket, Wall Mounted, Plan & Section **MOUNTING CLIP**

*Used to hold panels off face of wall or structure a maximum of 18"

Note: Mounting hole in clip is sized for maximum 3/8" diameter fastener.



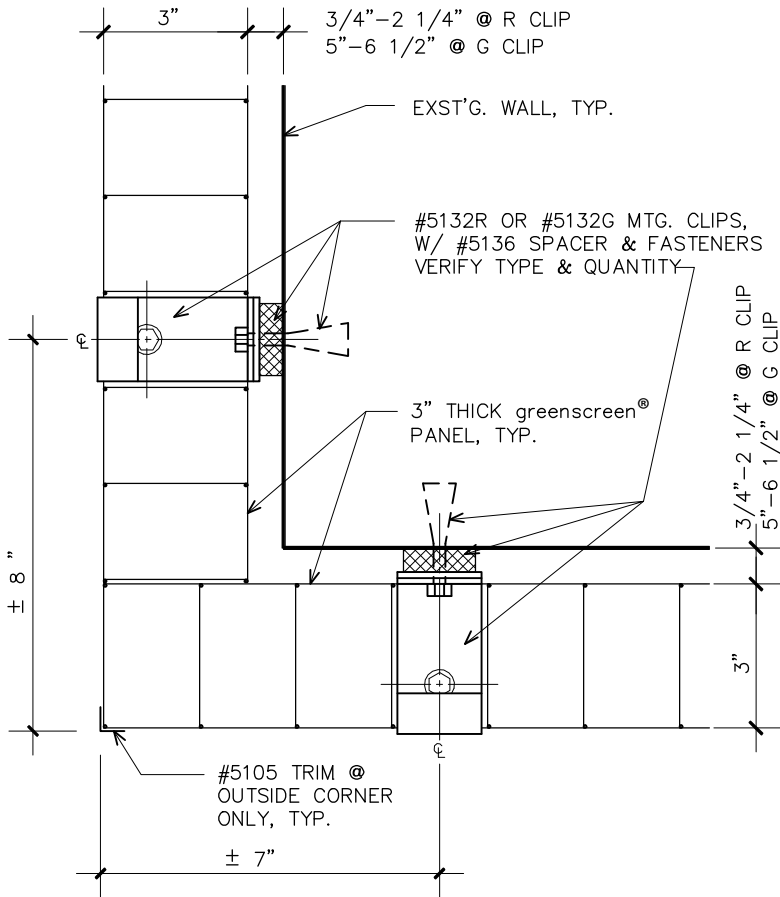
○ #5159 STANDOFF BRACKET - WALL MOUNTED
PLAN



○ #5159 STANDOFF BRACKET - WALL MOUNTED
SECTION

Spring '12

*Most common panel to panel corner configuration

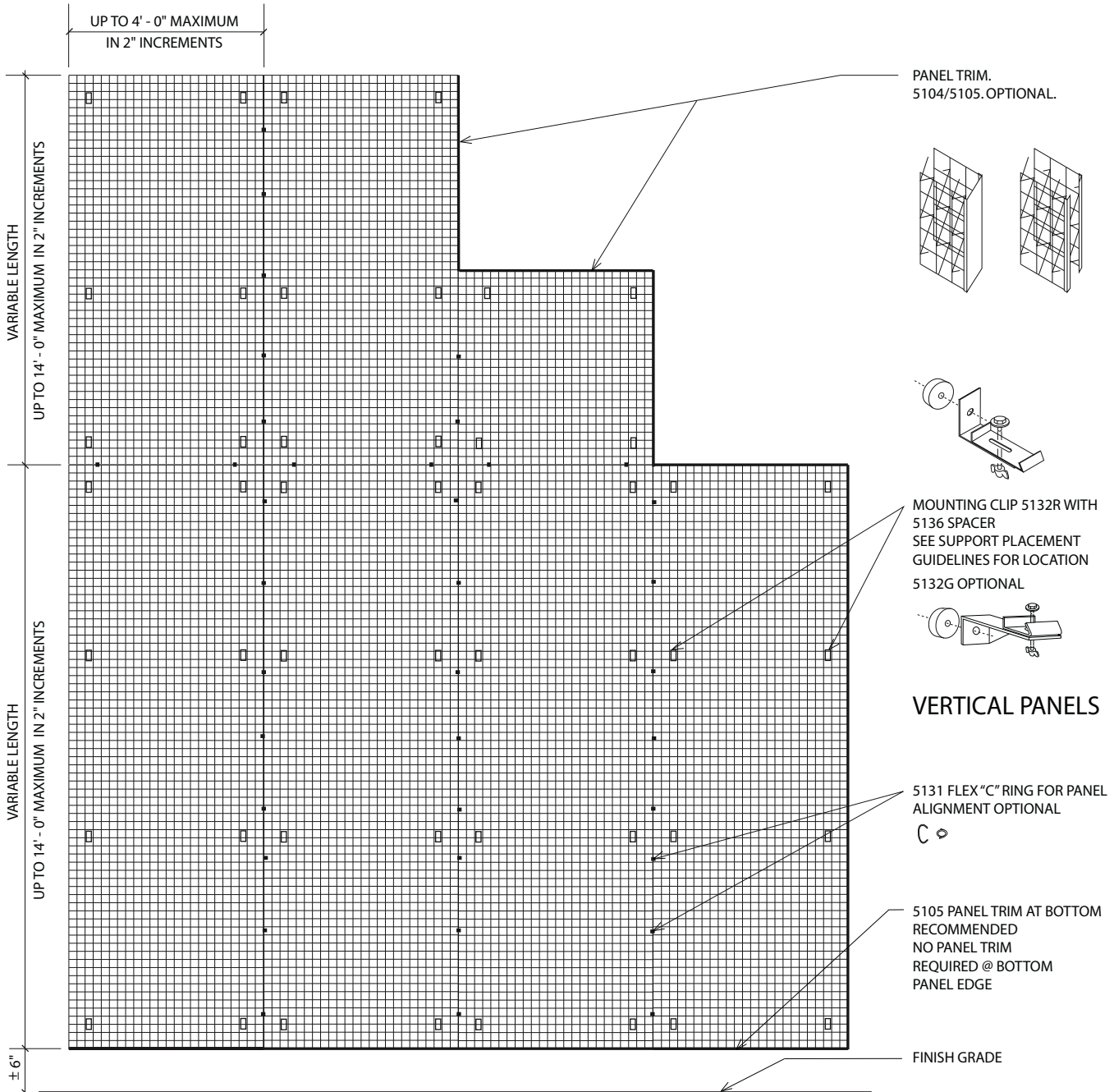


CORNER DETAIL

mounting options

Wall Mounted

This example showing multiple modular panels in a wall hung application references typical trims and clips from our Accessory Items list. Combine custom screen sizes and profiles for your own unique **greenscreen®**.



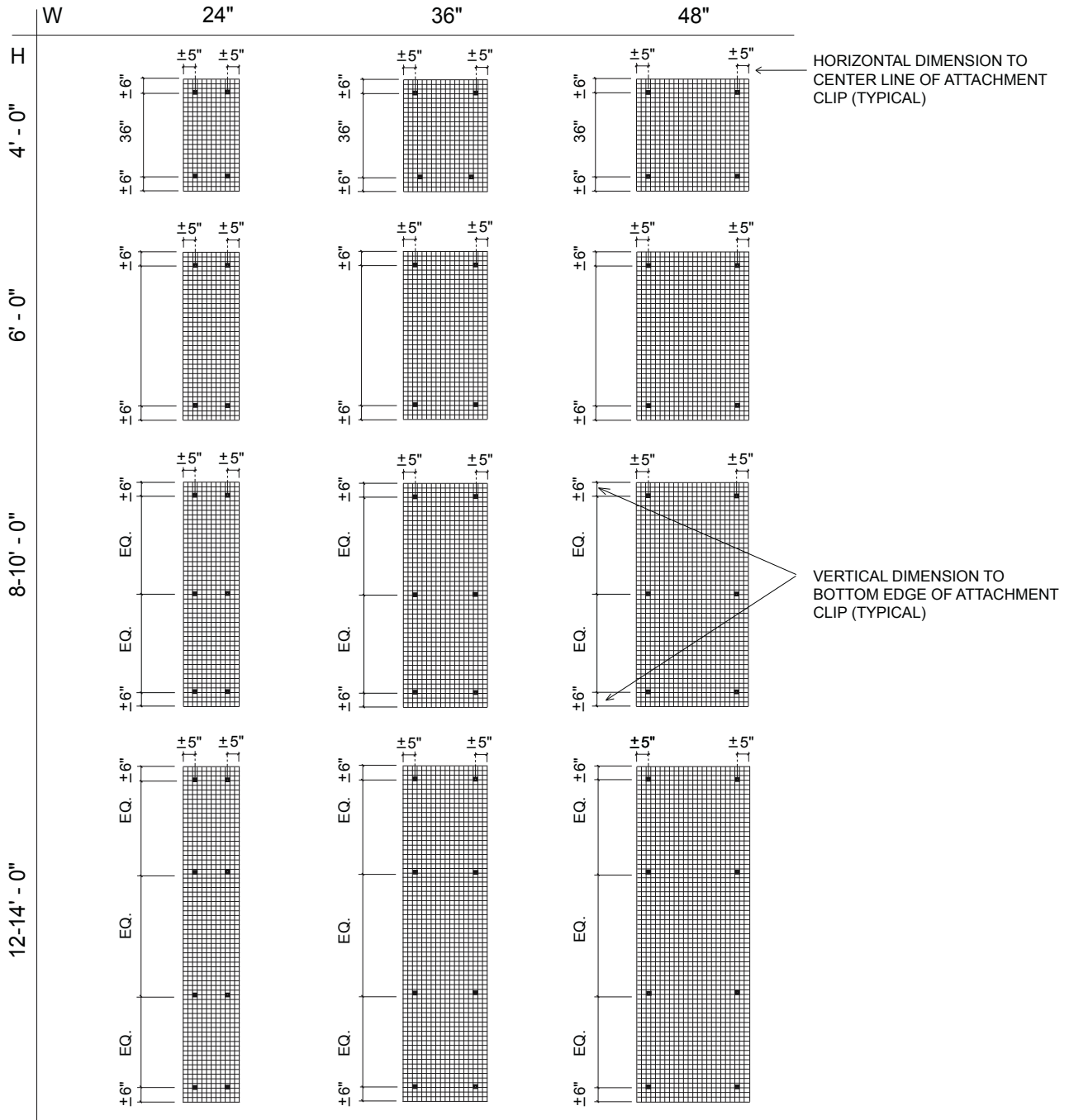
Mounting Options **WALL MOUNTED**

WINTER '12

mounting options

Support Placement

Use this guide as general recommendations for support placement with multiple modular panels in a wall hung application. Consult the Accessory Items list for descriptions of available engineered attachment clips, trims, spacers, and straps for your specific panel attachments.





TECHNICAL DATA SHEET

Effective March 15, 2010



Hardie® Reveal™ Panel

All national, state, and local building code requirements must be followed and where they are more stringent than the Hardie® Reveal™ Panel installation requirements, state and local requirements will take precedence.

JamesHardie

General Description

Hardie® Reveal™ Panel is a noncombustible Fiber-Cement panel siding, manufactured by James Hardie Building Products. All James Hardie Manufacturing Plants are third party quality assurance certified by Intertek Testing Services.

Product Dimension

Thickness – 7/16 inch Length – 95-½ inches Width – 47-½ inches

Product Composition

Hardie® Reveal™ Panel is a *Grade II, Type A*, fiber-cement flat sheet as defined by ASTM C 1186. The panels are manufactured by the Hatschek process and cured by high pressure steam autoclaving.

Code Compliance

-Hardie® Reveal™ Panel fiber-cement complies with:

ICC-ES AC90 *Acceptance Criteria on Fiber Cement Siding used as Exterior Siding*,

The 2006 International Building Code® (IBC) Sections 1404.10 and 2006 International Residential Code® (IRC) Table R703.4 as ASTM C 1186-02 *Standard Specification Grade II, Type A, Non-Asbestos Fiber-Cement Flat Sheets*. (as shown in Table 1 below).

- Wind Design ~ Allowable Fastener Spacing:

Design Table 2a as shown in this sheet provides allowable fastener spacing to wood studs

Design Table 2b as shown in this sheet provides allowable fastener spacing to minimum 20 gauge metal studs, metal hat channel furring or Z-girts

- Fire Characteristics:

Hardie® Reveal™ Panel is deemed a noncombustible building material in accordance with ASTM E 136,

Hardie® Reveal™ Panel may be used in ASTM E119 fire resistance rated assemblies as listed by Warnock Hersey (for more information contact James Hardie at 1-888 J-HARDIE (1-888 542-7343) or info@JamesHardie.com):

120 minute Designs JH/WA 120-02 or JH/WA 120-04,

60 minute designs JH/WA 60-01, JH/WA 60-09 or JH/WA 60-10,

In all designs double studs may be required at the vertical joints.

Hardie® Reveal™ Panel is a Class A Product, Surface burning characteristics in accordance with ASTM E 84 are,

Flame Spread Index = 0 and Smoke Developed Index ≤ 5.

-Hardie® Reveal™ Panel shall be installed on exterior walls braced in accordance with the following sections of the applicable code: Sections 2308.9.3, 2308.11, or 2308.12 of the International Building Code®; Sections R602.10 or R603.3.3 of the International Residential Code®

-A water-resistive barrier complying with Section 1403.2 of the International Building Code® or Section R703.2 of the International Residential Code® is required to be installed.

-Hardie® Reveal™ Panel and Reveal™ Trims do not form a moisture management system; the architect and the builder are responsible for designing and installing a building code compliant building enclosure.

-Hardie® Reveal™ Panel shall be installed in accordance with this report and the manufacturer's published Installation Requirements, for a copy contact your local James Hardie Sales Representative or visit www.JamesHardieCommercial.com. All national, state, and local building code requirements must be followed and where they are more stringent than the Hardie® Reveal™ Panel Installation Requirements, state and local requirements will take precedence.

-The Building Official reserves the right to approve alternate materials, design and methods of construction based on research reports and tests

2006 International Building Code® Section 104.11, 2006 International Residential Code® Section R104.11.

-Test reports can be furnished to the Building Official upon request, contact your local James Hardie Sales Representative.

-Product Sampled and Tested by Intertek Testing Services. www.intertek-eflsemko.com

Table 1, Hardie® Reveal™ Panel ASTM C 1186 Physical Properties and Supplementary Requirements

| Property | Requirement | Pass/Fail |
|--|--|--|
| Dimensional Tolerances | Length | ± 0.5% |
| | Width | ± 0.5% |
| | Thickness | ± 1.6 mm |
| | Squareness | < 10.9 mm |
| | Edge Straightness | < 10.9 mm |
| Dimensional Variation (mm) | Length Width | < 6.0 |
| | Width | < 6.0 |
| | Thickness | < 2.4 |
| Water Absorption, % by mass | As reported | Note 1 |
| Density, kg/m3 | As reported | Note 1 |
| Moisture Movement, % Linear Change | 30 – 90% Relative Humidity | As reported |
| | After 48 hr saturation | As reported |
| Flexural Strength | Wet conditioned, MPa | > 7.0 MPa |
| | Equilibrium conditioned, MPa | > 10.0 MPa |
| | Freeze/Thaw, % wet retention | ≥ 80% |
| | Warm Water, % wet retention | ≥ 85% |
| Moisture Content, % | As reported | Note 1 |
| Water Tightness | No drop formation | Pass |
| Warm Water Resistance, Observations | No visible cracks or structural alteration | Pass |
| Heat/Rain Resistance | No visible cracks or structural alteration | Pass |
| Freeze/Thaw Resistance | Observations | No visible cracks or structural alteration |
| | Mass Loss, % | ≤ 3.0 |
| Accelerated Weathering Test | No cracking, checking, or crazing | Pass |
| Surface Burning Characteristics | FSI = 0 SDI ≤ 5 | Pass |

Note 1. No pass/fail requirement, results are reported.

Warnock Hersey
AUTHORIZATION TO
MARK



LISTED

Client # 8518,
17832





TECHNICAL DATA SHEET

Effective March 15, 2010



Hardie® Reveal™ Panel

All national, state, and local building code requirements must be followed and where they are more stringent than the Hardie® Reveal™ Panel installation requirements, state and local requirements will take precedence.

JamesHardie

Table 2a, Basic Wind Speed - Allowable Fastener Spacing Wood Framing

IBC® & IRC®/2006

Table Shows Maximum Allowable Fastener Spacing⁹, 7/16" Hardie® Reveal™ Panel

FRAME TYPE AT 16 INCHES ON CENTER⁸: Minimum 2X4 S-P-F Grade Wood Stud

SHEATHING TYPE^{7,8}: Minimum 7/16" thick APA Rated OSB (or equivalent)

| Basic Wind Speed ⁴ | Building Height (feet) | FASTENER: 0.092" Shank X 0.222" Head Diameter X 2" Long Galvanized Siding Nail (or equivalent) | | | | | | FASTENER: No. 10 X 1-1/2" Long X 0.375" Head Diameter Ribbed Wafer Head Screw (or equivalent) | | | | | |
|-------------------------------|------------------------|--|-----------------------------|--------------------|-----------------------------|--------------------|-----------------------------|---|-----------------------------|--------------------|-----------------------------|--------------------|-----------------------------|
| | | Exposure | | | | | | Exposure | | | | | |
| | | B | | C | | D | | B | | C | | D | |
| | | Fastener Spacing | | Fastener Spacing | | Fastener Spacing | | Fastener Spacing | | Fastener Spacing | | Fastener Spacing | |
| | | Field ⁵ | Vertical Joint ⁶ | Field ⁵ | Vertical Joint ⁶ | Field ⁵ | Vertical Joint ⁶ | Field ⁵ | Vertical Joint ⁶ | Field ⁵ | Vertical Joint ⁶ | Field ⁵ | Vertical Joint ⁶ |
| 90 mph | 0-15 | 14.5 | 24.0 | 11.9 | 24.0 | 9.9 | 24.0 | 24.0 | 24.0 | 22.2 | 24.0 | 18.3 | 24.0 |
| | 20 | 14.5 | 24.0 | 11.3 | 24.0 | 9.4 | 24.0 | 24.0 | 24.0 | 21.0 | 24.0 | 17.5 | 24.0 |
| | 30 | 14.5 | 24.0 | 10.4 | 24.0 | 8.8 | 24.0 | 24.0 | 24.0 | 19.2 | 24.0 | 16.3 | 24.0 |
| | 40 | 13.4 | 24.0 | 9.8 | 24.0 | 8.3 | 24.0 | 24.0 | 24.0 | 18.1 | 24.0 | 15.5 | 24.0 |
| | 50 | 12.5 | 24.0 | 9.3 | 24.0 | 8.0 | 24.0 | 23.3 | 24.0 | 17.3 | 24.0 | 14.9 | 24.0 |
| | 60 | 11.9 | 24.0 | 9.0 | 24.0 | 7.7 | 24.0 | 22.2 | 24.0 | 16.7 | 24.0 | 14.4 | 24.0 |
| | 70 | 9.1 | 24.0 | 6.9 | 24.0 | 6.0 | 24.0 | 16.9 | 24.0 | 12.9 | 24.0 | 11.2 | 24.0 |
| | 80 | 8.7 | 24.0 | 6.7 | 24.0 | 5.9 | 24.0 | 16.2 | 24.0 | 12.4 | 24.0 | 10.9 | 24.0 |
| | 90 | 8.4 | 24.0 | 6.5 | 24.0 | 5.8 | 24.0 | 15.7 | 24.0 | 12.1 | 24.0 | 10.8 | 24.0 |
| | 100 | 8.2 | 24.0 | 6.4 | 24.0 | 5.7 | 24.0 | 15.2 | 24.0 | 11.9 | 24.0 | 10.5 | 24.0 |
| 100 mph | 0-15 | 11.7 | 24.0 | 9.7 | 24.0 | 8.0 | 24.0 | 21.8 | 24.0 | 18.0 | 24.0 | 14.8 | 24.0 |
| | 20 | 11.7 | 24.0 | 9.1 | 24.0 | 7.6 | 24.0 | 21.8 | 24.0 | 17.0 | 24.0 | 14.1 | 24.0 |
| | 30 | 11.7 | 24.0 | 8.4 | 24.0 | 7.1 | 24.0 | 21.8 | 24.0 | 15.6 | 24.0 | 13.2 | 24.0 |
| | 40 | 10.8 | 24.0 | 7.9 | 24.0 | 6.7 | 24.0 | 20.1 | 24.0 | 14.7 | 24.0 | 12.5 | 24.0 |
| | 50 | 10.2 | 24.0 | 7.5 | 24.0 | 6.5 | 24.0 | 18.9 | 24.0 | 14.0 | 24.0 | 12.0 | 24.0 |
| | 60 | 9.7 | 24.0 | 7.3 | 24.0 | 6.3 | 24.0 | 18.0 | 24.0 | 13.5 | 24.0 | 11.7 | 24.0 |
| | 70 | 7.4 | 24.0 | 5.6 | 24.0 | 4.9 | 24.0 | 13.7 | 24.0 | 10.4 | 24.0 | 9.1 | 24.0 |
| | 80 | 7.1 | 24.0 | 5.4 | 24.0 | 4.8 | 24.0 | 13.1 | 24.0 | 10.1 | 24.0 | 8.8 | 24.0 |
| | 90 | 6.8 | 24.0 | 5.3 | 24.0 | 4.7 | 24.0 | 12.7 | 24.0 | 9.8 | 24.0 | 8.7 | 24.0 |
| | 100 | 6.6 | 24.0 | 5.2 | 24.0 | 4.6 | 24.0 | 12.3 | 24.0 | 9.7 | 24.0 | 8.5 | 24.0 |
| 110 mph | 0-15 | 9.7 | 24.0 | 8.0 | 24.0 | 6.6 | 24.0 | 18.0 | 24.0 | 14.9 | 24.0 | 12.3 | 24.0 |
| | 20 | 9.7 | 24.0 | 7.5 | 24.0 | 6.3 | 24.0 | 18.0 | 24.0 | 14.0 | 24.0 | 11.7 | 24.0 |
| | 30 | 9.7 | 24.0 | 6.9 | 24.0 | 5.9 | 24.0 | 18.0 | 24.0 | 12.9 | 24.0 | 10.9 | 24.0 |
| | 40 | 8.9 | 24.0 | 6.5 | 24.0 | 5.6 | 24.0 | 16.6 | 24.0 | 12.1 | 24.0 | 10.4 | 24.0 |
| | 50 | 8.4 | 24.0 | 6.2 | 24.0 | 5.4 | 24.0 | 15.6 | 24.0 | 11.6 | 24.0 | 9.9 | 24.0 |
| | 60 | 8.0 | 24.0 | 6.0 | 24.0 | 5.2 | 24.0 | 14.9 | 24.0 | 11.2 | 24.0 | 9.6 | 24.0 |
| | 70 | 6.1 | 24.0 | 4.6 | 24.0 | 4.0 | 24.0 | 11.3 | 24.0 | 8.6 | 24.0 | 7.5 | 24.0 |
| | 80 | 5.8 | 24.0 | 4.5 | 24.0 | - | - | 10.8 | 24.0 | 8.3 | 24.0 | 7.3 | 24.0 |
| | 90 | 5.6 | 24.0 | 4.4 | 24.0 | - | - | 10.5 | 24.0 | 8.1 | 24.0 | 7.2 | 24.0 |
| | 100 | 5.5 | 24.0 | 4.3 | 24.0 | - | - | 10.2 | 24.0 | 8.0 | 24.0 | 7.0 | 24.0 |
| 120 mph | 0-15 | 8.2 | 24.0 | 6.7 | 24.0 | 5.5 | 24.0 | 15.2 | 24.0 | 12.5 | 24.0 | 10.3 | 24.0 |
| | 20 | 8.2 | 24.0 | 6.3 | 24.0 | 5.3 | 24.0 | 15.2 | 24.0 | 11.8 | 24.0 | 9.8 | 24.0 |
| | 30 | 8.2 | 24.0 | 5.8 | 24.0 | 4.9 | 24.0 | 15.2 | 24.0 | 10.8 | 24.0 | 9.1 | 24.0 |
| | 40 | 7.5 | 24.0 | 5.5 | 24.0 | 4.7 | 24.0 | 14.0 | 24.0 | 10.2 | 24.0 | 8.7 | 24.0 |
| | 50 | 7.0 | 24.0 | 5.2 | 24.0 | 4.5 | 24.0 | 13.1 | 24.0 | 9.7 | 24.0 | 8.4 | 24.0 |
| | 60 | 6.7 | 24.0 | 5.1 | 24.0 | 4.4 | 24.0 | 12.5 | 24.0 | 9.4 | 24.0 | 8.1 | 24.0 |
| | 70 | 5.1 | 24.0 | - | - | - | - | 9.5 | 24.0 | 7.2 | 24.0 | 6.3 | 24.0 |
| | 80 | 4.9 | 24.0 | - | - | - | - | 9.1 | 24.0 | 7.0 | 24.0 | 6.1 | 24.0 |
| | 90 | 4.7 | 24.0 | - | - | - | - | 8.8 | 24.0 | 6.8 | 24.0 | 6.0 | 24.0 |
| | 100 | 4.6 | 24.0 | - | - | - | - | 8.6 | 24.0 | 6.7 | 24.0 | 5.9 | 24.0 |
| 130 mph | 0-15 | 6.9 | 24.0 | 5.7 | 24.0 | 4.7 | 24.0 | 12.9 | 24.0 | 10.6 | 24.0 | 8.8 | 24.0 |
| | 20 | 6.9 | 24.0 | 5.4 | 24.0 | 4.5 | 24.0 | 12.9 | 24.0 | 10.0 | 24.0 | 8.4 | 24.0 |
| | 30 | 6.9 | 24.0 | 5.0 | 24.0 | 4.2 | 24.0 | 12.9 | 24.0 | 9.2 | 24.0 | 7.8 | 24.0 |
| | 40 | 6.4 | 24.0 | 4.7 | 24.0 | - | - | 11.9 | 24.0 | 8.7 | 24.0 | 7.4 | 24.0 |
| | 50 | 6.0 | 24.0 | 4.5 | 24.0 | - | - | 11.2 | 24.0 | 8.3 | 24.0 | 7.1 | 24.0 |
| | 60 | 5.7 | 24.0 | 4.3 | 24.0 | - | - | 10.6 | 24.0 | 8.0 | 24.0 | 6.9 | 24.0 |
| | 70 | 4.4 | 24.0 | - | - | - | - | 8.1 | 24.0 | 6.2 | 24.0 | 5.4 | 24.0 |
| | 80 | 4.2 | 24.0 | - | - | - | - | 7.8 | 24.0 | 6.0 | 24.0 | 5.2 | 24.0 |
| | 90 | 4.0 | 24.0 | - | - | - | - | 7.5 | 24.0 | 5.8 | 24.0 | 5.2 | 24.0 |
| | 100 | - | - | - | - | - | - | 7.3 | 24.0 | 5.7 | 24.0 | 5.0 | 24.0 |
| 140 mph | 0-15 | 6.0 | 24.0 | 4.9 | 24.0 | 4.1 | 24.0 | 11.1 | 24.0 | 9.2 | 24.0 | 7.6 | 24.0 |
| | 20 | 6.0 | 24.0 | 4.7 | 24.0 | - | - | 11.1 | 24.0 | 8.7 | 24.0 | 7.2 | 24.0 |
| | 30 | 6.0 | 24.0 | 4.3 | 24.0 | - | - | 11.1 | 24.0 | 8.0 | 24.0 | 6.7 | 24.0 |
| | 40 | 5.5 | 24.0 | 4.0 | 24.0 | - | - | 10.3 | 24.0 | 7.5 | 24.0 | 6.4 | 24.0 |
| | 50 | 5.2 | 24.0 | - | - | - | - | 9.6 | 24.0 | 7.2 | 24.0 | 6.1 | 24.0 |
| | 60 | 4.9 | 24.0 | - | - | - | - | 9.2 | 24.0 | 6.9 | 24.0 | 6.0 | 24.0 |
| | 70 | - | - | - | - | - | - | 7.0 | 24.0 | 5.3 | 24.0 | 4.6 | 24.0 |
| | 80 | - | - | - | - | - | - | 6.7 | 24.0 | 5.1 | 24.0 | 4.5 | 24.0 |
| | 90 | - | - | - | - | - | - | 6.5 | 24.0 | 5.0 | 24.0 | 4.4 | 24.0 |
| | 100 | - | - | - | - | - | - | 6.3 | 24.0 | 4.9 | 24.0 | 4.4 | 24.0 |
| 150 mph | 0-15 | 5.2 | 24.0 | 4.3 | 24.0 | - | - | 9.7 | 24.0 | 8.0 | 24.0 | 6.6 | 24.0 |
| | 20 | 5.2 | 24.0 | 4.1 | 24.0 | - | - | 9.7 | 24.0 | 7.5 | 24.0 | 6.3 | 24.0 |
| | 30 | 5.2 | 24.0 | - | - | - | - | 9.7 | 24.0 | 6.9 | 24.0 | 5.9 | 24.0 |
| | 40 | 4.8 | 24.0 | - | - | - | - | 8.9 | 24.0 | 6.5 | 24.0 | 5.6 | 24.0 |
| | 50 | 4.5 | 24.0 | - | - | - | - | 8.4 | 24.0 | 6.2 | 24.0 | 5.3 | 24.0 |
| | 60 | 4.3 | 24.0 | - | - | - | - | 8.0 | 24.0 | 6.0 | 24.0 | 5.2 | 24.0 |
| | 70 | - | - | - | - | - | - | 6.1 | 24.0 | 4.6 | 24.0 | 4.0 | 24.0 |
| | 80 | - | - | - | - | - | - | 5.8 | 24.0 | 4.5 | 24.0 | - | - |
| | 90 | - | - | - | - | - | - | 5.6 | 24.0 | 4.4 | 24.0 | - | - |
| | 100 | - | - | - | - | - | - | 5.5 | 24.0 | 4.3 | 24.0 | - | - |

Notes to Table:

- Maximum basic wind speed shall be 150 mph.
- Interpolation to address building height is permitted.
- 1 inch = 25.4 mm, 1 foot = 305 mm, 1 mph = 0.44 m/s
- Basic wind speed is 3-second gust
- Field fastening shall be into framing
- Vertical Joint fastening shall be into sheathing or into framing when a double stud is installed at the vertical joint
- Minimum 7/16" APA rated OSB attached to studs with minimum 6d common nails at maximum 6 inches on center along the perimeter and maximum 12 inches on center in the field
- Framing shall be designed to resist the necessary wind and seismic loads
- Based on ASCE 7-05 a pressure coefficient of 1.58 for hs<60ft and 1.98 for h>60ft, Importance factor of 1, Kzt = 1, Kd = 0.85



TECHNICAL DATA SHEET

Effective March 15, 2010



Hardie® Reveal™ Panel

All national, state, and local building code requirements must be followed and where they are more stringent than the Hardie® Reveal™ Panel installation requirements, state and local requirements will take precedence.

JamesHardie

Table 2b, Basic Wind Speed - Allowable Fastener Spacing Metal Framing

| | | IBC® & IRC®/2006 | | | | | |
|-------------------------------|------------------------|---|-----------------------------|--------------------|-----------------------------|--------------------|-----------------------------|
| | | Table Shows Maximum Allowable Fastener Spacing ¹¹ , 7/16" Hardie® Reveal™ Panel | | | | | |
| | | FRAME TYPE AT 16 INCHES ON CENTER ¹⁰ : Min. 20 ga. 2X4 metal C-studs, Min. 20 gauge 1.5 in. wide Hat Channel Furring, or Min. 20 ga. X 2 in. flange X 2 in. deep Z-girts | | | | | |
| | | SHEATHING TYPE ^{7,8,9,10} : 4 inch wide Minimum 20 gauge metal strapping | | | | | |
| Basic Wind Speed ⁴ | Building Height (feet) | FASTENER: No. 8 X 1-5/8" L X 0.33" Head Diameter Ribbed Wafer Head Screw (or equivalent) | | | | | |
| | | Exposure | | | | | |
| | | B | | C | | D | |
| | | Fastener Spacing | | Fastener Spacing | | Fastener Spacing | |
| | | Field ⁵ | Vertical Joint ⁶ | Field ⁵ | Vertical Joint ⁶ | Field ⁵ | Vertical Joint ⁶ |
| 90 mph | 0-15 | 21.2 | 24.0 | 17.5 | 24.0 | 14.4 | 24.0 |
| | 20 | 21.2 | 24.0 | 16.5 | 24.0 | 13.7 | 24.0 |
| | 30 | 21.2 | 24.0 | 15.1 | 24.0 | 12.8 | 24.0 |
| | 40 | 19.5 | 24.0 | 14.3 | 24.0 | 12.2 | 24.0 |
| | 50 | 18.3 | 24.0 | 13.6 | 24.0 | 11.7 | 24.0 |
| | 60 | 17.5 | 24.0 | 13.1 | 24.0 | 11.3 | 24.0 |
| | 70 | 13.3 | 24.0 | 10.1 | 24.0 | 8.8 | 24.0 |
| | 80 | 12.7 | 24.0 | 9.8 | 24.0 | 8.6 | 24.0 |
| | 90 | 12.3 | 24.0 | 9.6 | 24.0 | 8.5 | 24.0 |
| | 100 | 12.0 | 24.0 | 9.4 | 24.0 | 8.3 | 24.0 |
| 100 mph | 0-15 | 17.2 | 24.0 | 14.1 | 24.0 | 11.7 | 24.0 |
| | 20 | 17.2 | 24.0 | 13.4 | 24.0 | 11.1 | 24.0 |
| | 30 | 17.2 | 24.0 | 12.3 | 24.0 | 10.4 | 24.0 |
| | 40 | 15.8 | 24.0 | 11.6 | 24.0 | 9.9 | 24.0 |
| | 50 | 14.8 | 24.0 | 11.0 | 24.0 | 9.5 | 24.0 |
| | 60 | 14.1 | 24.0 | 10.6 | 24.0 | 9.2 | 24.0 |
| | 70 | 10.8 | 24.0 | 8.2 | 24.0 | 7.2 | 24.0 |
| | 80 | 10.3 | 24.0 | 7.9 | 24.0 | 7.0 | 24.0 |
| | 90 | 10.0 | 24.0 | 7.7 | 24.0 | 6.9 | 24.0 |
| | 100 | 9.7 | 24.0 | 7.6 | 24.0 | 6.7 | 24.0 |
| 110 mph | 0-15 | 14.2 | 24.0 | 11.7 | 24.0 | 9.6 | 24.0 |
| | 20 | 14.2 | 24.0 | 11.0 | 24.0 | 9.2 | 24.0 |
| | 30 | 14.2 | 24.0 | 10.1 | 24.0 | 8.6 | 24.0 |
| | 40 | 13.1 | 24.0 | 9.6 | 24.0 | 8.1 | 24.0 |
| | 50 | 12.3 | 24.0 | 9.1 | 24.0 | 7.8 | 24.0 |
| | 60 | 11.7 | 24.0 | 8.8 | 24.0 | 7.6 | 24.0 |
| | 70 | 8.9 | 24.0 | 6.8 | 24.0 | 5.9 | 24.0 |
| | 80 | 8.5 | 24.0 | 6.6 | 24.0 | 5.7 | 24.0 |
| | 90 | 8.3 | 24.0 | 6.4 | 24.0 | 5.7 | 24.0 |
| | 100 | 8.0 | 24.0 | 6.3 | 24.0 | 5.5 | 24.0 |
| 120 mph | 0-15 | 11.9 | 24.0 | 9.8 | 24.0 | 8.1 | 24.0 |
| | 20 | 11.9 | 24.0 | 9.3 | 24.0 | 7.7 | 24.0 |
| | 30 | 11.9 | 24.0 | 8.5 | 24.0 | 7.2 | 24.0 |
| | 40 | 11.0 | 24.0 | 8.0 | 24.0 | 6.8 | 24.0 |
| | 50 | 10.3 | 24.0 | 7.7 | 24.0 | 6.6 | 24.0 |
| | 60 | 9.8 | 24.0 | 7.4 | 24.0 | 6.4 | 24.0 |
| | 70 | 7.5 | 24.0 | 5.7 | 24.0 | 5.0 | 24.0 |
| | 80 | 7.2 | 24.0 | 5.5 | 24.0 | 4.8 | 24.0 |
| | 90 | 6.9 | 24.0 | 5.4 | 24.0 | 4.8 | 24.0 |
| | 100 | 6.7 | 24.0 | 5.3 | 24.0 | 4.7 | 24.0 |
| 130 mph | 0-15 | 10.2 | 24.0 | 8.4 | 24.0 | 6.9 | 24.0 |
| | 20 | 10.2 | 24.0 | 7.9 | 24.0 | 6.6 | 24.0 |
| | 30 | 10.2 | 24.0 | 7.3 | 24.0 | 6.1 | 24.0 |
| | 40 | 9.4 | 24.0 | 6.8 | 24.0 | 5.8 | 24.0 |
| | 50 | 8.8 | 24.0 | 6.5 | 24.0 | 5.6 | 24.0 |
| | 60 | 8.4 | 24.0 | 6.3 | 24.0 | 5.4 | 24.0 |
| | 70 | 6.4 | 24.0 | 4.9 | 24.0 | 4.2 | 24.0 |
| | 80 | 6.1 | 24.0 | 4.7 | 24.0 | 4.1 | 24.0 |
| | 90 | 5.9 | 24.0 | 4.6 | 24.0 | 4.1 | 24.0 |
| | 100 | 5.7 | 24.0 | 4.5 | 24.0 | - | - |
| 140 mph | 0-15 | 8.8 | 24.0 | 7.2 | 24.0 | 6.0 | 24.0 |
| | 20 | 8.8 | 24.0 | 6.8 | 24.0 | 5.7 | 24.0 |
| | 30 | 8.8 | 24.0 | 6.3 | 24.0 | 5.3 | 24.0 |
| | 40 | 8.1 | 24.0 | 5.9 | 24.0 | 5.0 | 24.0 |
| | 50 | 7.6 | 24.0 | 5.6 | 24.0 | 4.8 | 24.0 |
| | 60 | 7.2 | 24.0 | 5.4 | 24.0 | 4.7 | 24.0 |
| | 70 | 5.5 | 24.0 | 4.2 | 24.0 | - | - |
| | 80 | 5.3 | 24.0 | 4.0 | 24.0 | - | - |
| | 90 | 5.1 | 24.0 | - | - | - | - |
| | 100 | 4.9 | 24.0 | - | - | - | - |
| 150 mph | 0-15 | 7.6 | 24.0 | 6.3 | 24.0 | 5.2 | 24.0 |
| | 20 | 7.6 | 24.0 | 5.9 | 24.0 | 4.9 | 24.0 |
| | 30 | 7.6 | 24.0 | 5.5 | 24.0 | 4.6 | 24.0 |
| | 40 | 7.0 | 24.0 | 5.1 | 24.0 | 4.4 | 24.0 |
| | 50 | 6.6 | 24.0 | 4.9 | 24.0 | 4.2 | 24.0 |
| | 60 | 6.3 | 24.0 | 4.7 | 24.0 | 4.1 | 24.0 |
| | 70 | 4.8 | 24.0 | - | - | - | - |
| | 80 | 4.6 | 24.0 | - | - | - | - |
| | 90 | 4.4 | 24.0 | - | - | - | - |
| | 100 | 4.3 | 24.0 | - | - | - | - |

Notes to Table:

- Maximum basic wind speed shall be 150 mph.
- Interpolation to address building height is permitted.
- 1 inch = 25.4 mm, 1 foot = 305 mm, 1 mph = 0.44 m/s
- Basic wind speed is 3-second gust
- Field fastening shall be into framing
- Vertical Joint fastening shall be into metal sheathing or into framing when a double stud is present
- Metal sheathing shall be installed when double studs are not installed at the Hardie Reveal Panel vertical joint
- Metal sheathing installed at maximum 24" on center vertically
- Metal sheathing shall be 4 inches tall and wide enough to fully span the stud bay
- Framing shall be designed to resist the necessary wind and seismic loads
- Based on ASCE 7-05 a pressure coefficient of 1.58 for h≤60ft and 1.98 for h>60ft, Importance factor of 1, Kzt = 1, Kd = 0.85



TECHNICAL DATA SHEET

Effective March 15, 2010



JamesHardie

Hardie® Reveal™ Panel

All national, state, and local building code requirements must be followed and where they are more stringent than the Hardie® Reveal™ Panel installation requirements, state and local requirements will take precedence.

Figure 1, Wood Studs – Hardie Reveal Panel Vertical Joints Fastened into Sheathing

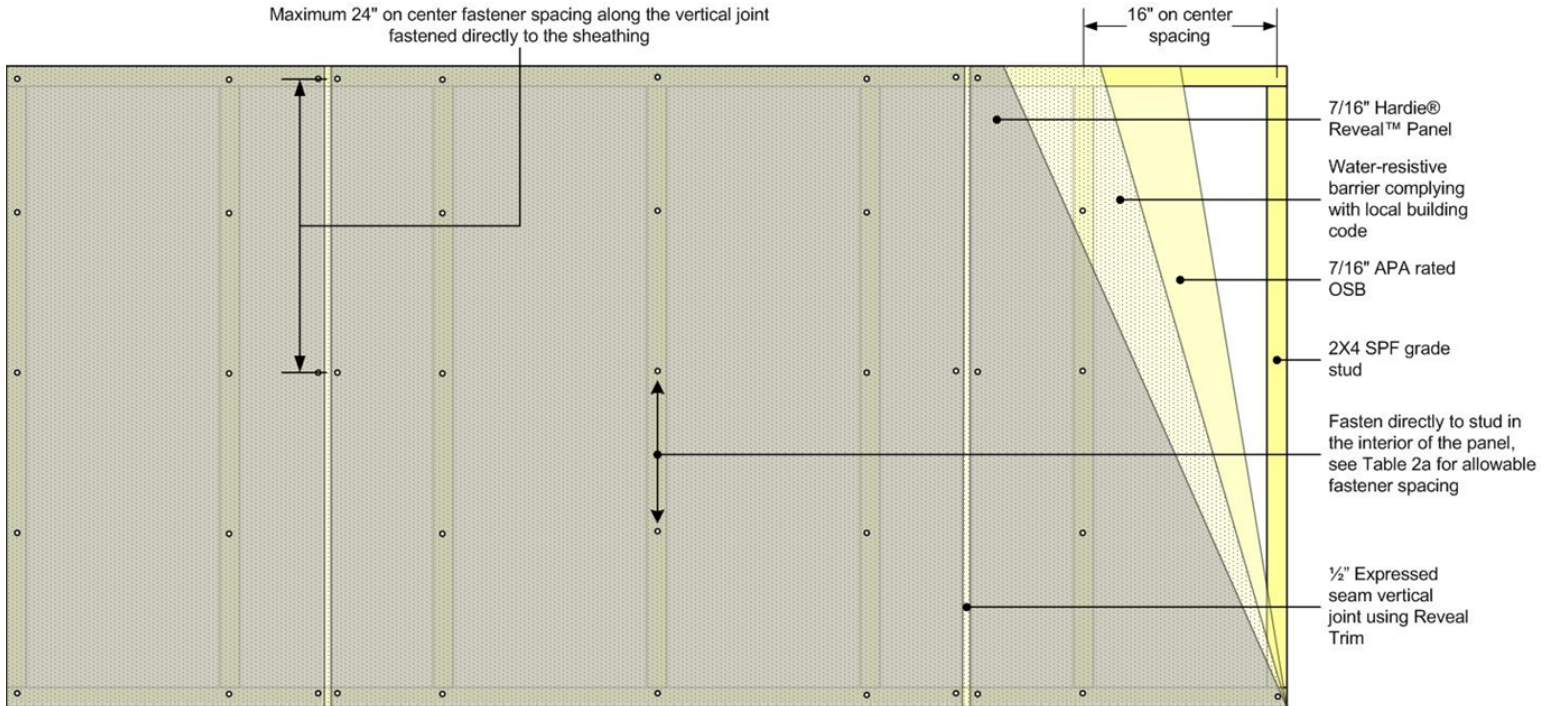
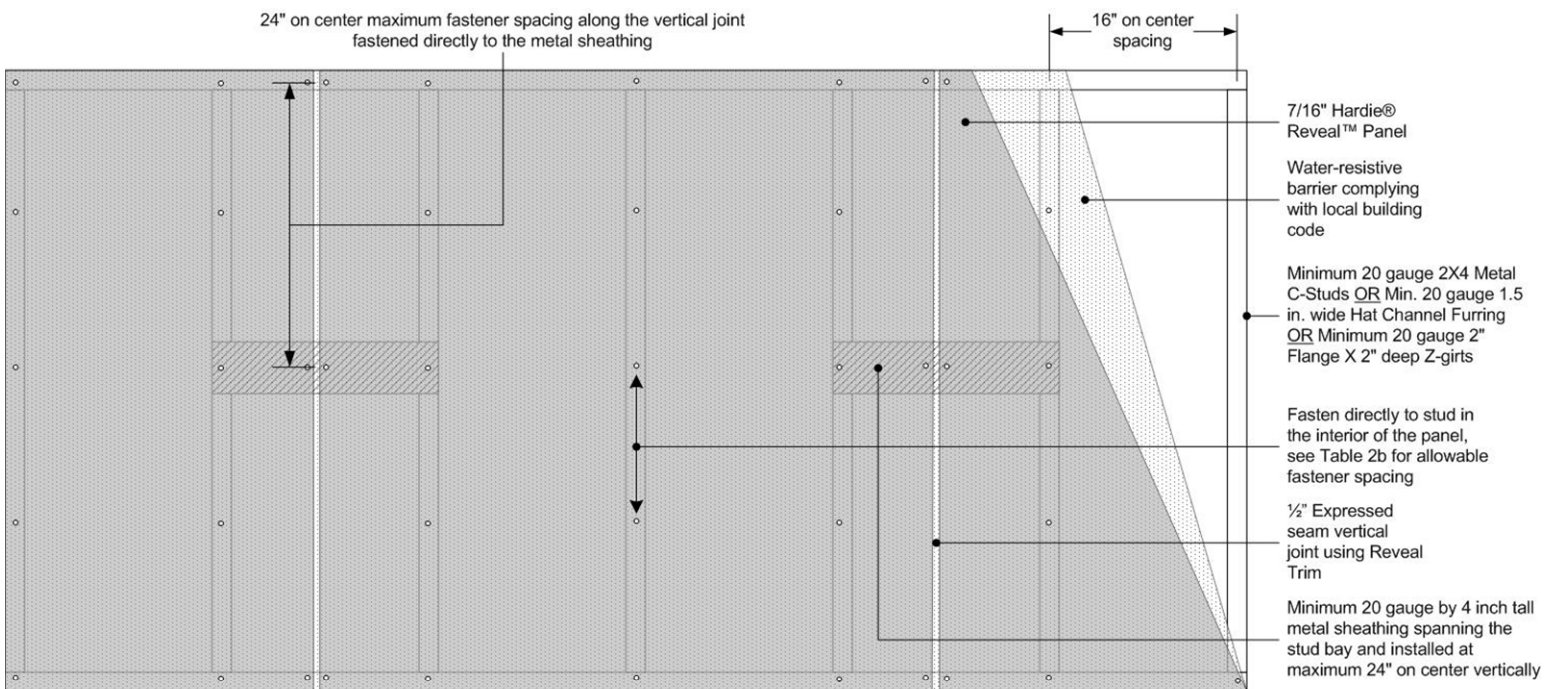
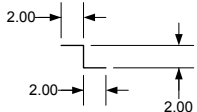


Figure 2, Minimum 20 gauge Metal – Hardie Reveal Panel Vertical Joints Fastened into Metal Sheathing



20 ga. Z – girt cross section





1663BZ-ES

Luna

The Luna collection features a variety of sleek designs. Here, the solid aluminum construction features a Bronze finish, dual light sources with etched glass lenses and a decorative washboard reflector. ADA compliant.

Width: 8"

Height: 7.25"

Weight: 5 lbs.

Material: Extruded Aluminum

Glass: Etched Glass Lens

Bulb: One 18w CFL GU24 (Included)

Voltage: 120v

UPC: 640665166316

Notes: Ceiling Mount

Notes





1909MT
Saturn
Metro Bronze or Stainless Steel finish with
cased opal etched glass

Width: 8"
Height: 20.5"
Weight: 10 lbs.
Material: Brass
Glass: Etched Opal Glass
Bulb: Two 75w Medium Base
Voltage: 120v
TTO: 10.25"
Extension: 4.5"
Back Plate Height: 20"
Back Plate Width: 5"
Certification: c-UL-us Wet
UPC: 640665190908

Notes





Canopy Lighting



Wall Lighting &
Post Light

Lighting



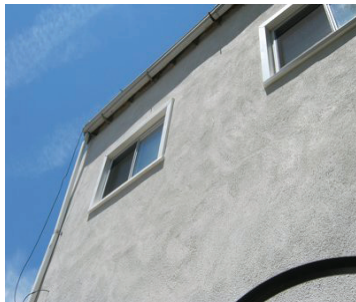
VPI Windows



Mauna Loa Brick



Cream Stucco Sand Finish



Cream Stucco Sand Finish



Hardie Panel Reveal System



Hardie Panel Colors

Exterior

SATURN

Like 0

Metro Bronze or Stainless Steel finish with cased opal etched glass

1901MT

- Width:** 10"
- Height:** 21.75"
- Weight:** 14 lbs.
- Material:** Solid Brass
- Glass:** Cased Opal-Etched Glass
- Bulb:** One 100w Medium Base
- Voltage:** 120v
- Certification:** c-UL-us Wet
- UPC:** 640665190120
- Notes:** 3"D Post Fitter; Energy Saving / Energy Star certified options available

exhibit

J



Metro Bronze



Stainless Steel

- Order a Finish Sample
- Add to Wishlist
- Share with a Friend
- Buy Online
- Find a Local Showroom
- Print Spec Sheet
- Assembly & Installation



1900MT



1904MT



1902MT

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- Wish List
- Live Help
- Employees
- Where to Buy
- Catalog
- Replacement Parts
- Warranty
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- Privacy Policy

CONNECT WITH HINKLEY LIGHTING





Hardie® Reveal™ Panel

Contemporary Panel Solution for light commercial and multi-family projects.

DURABILITY & LOW MAINTENANCE

James Hardie Fiber Cement and Aluminum Trims

DESIGN FLEXIBILITY

Panel and Trim Options

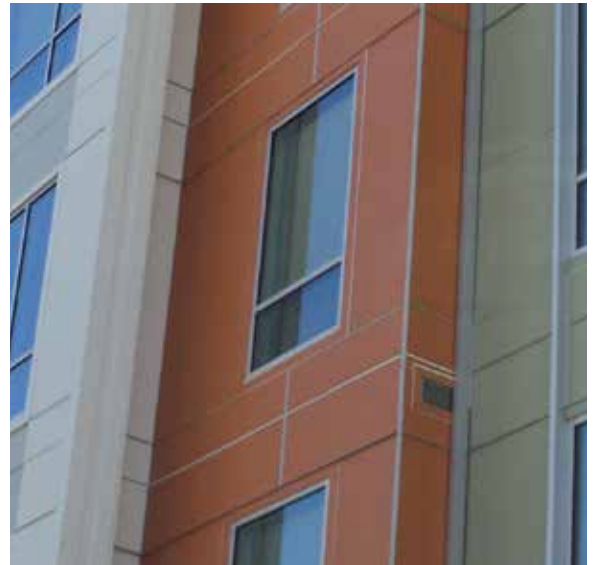
SINGLE SOURCE SOLUTION

Complete System From James Hardie

Unique, Modern Aesthetic

Get the look you're after with the solution that offers optimal design flexibility. There are several options for panel application, panel color and trim color.

- Horizontal or vertical application
- Thick, commercial grade panels
- Available in ColorPlus Technology
- Allow for sharp expressed joints and deep shadow lines
- Trims available in metal or panel matching shades
- Fasteners are exposed
- Cleaner look with fewer fasteners



Get it Pre-Finished with **ColorPlus**® Technology

- Single source manufacturing and finishing
- Multiple coats of paint baked on in factory
- Better paint adhesion due to superior durability of boards
- 15 year finish warranty

Result: Long lasting, consistent finish that resists cracking, peeling and fading



Get more information: JamesHardieCommercial.com/Reveal

The Solution

Hardie® Reveal™ Panel and Reveal™ Trims can be used together to create an effective modern, panelized look on your low-rise multifamily or light commercial building.



Reveal Panel

Available for HZ5® and HZ10® markets and offered in primed or ColorPlus®



Texture: Smooth

Nominal Size: 4'x8'
Actual Size adjusted for the Reveal:
47½" x 95½"

Weight: 3.1 lbs/sq. ft.
Thickness: 7/16"

Order it in 10 piece or 40 piece pallets

TRIMS

Chemical film for field applied application; clear anodized for ColorPlus®

Description

Quantity/Size
(approx.)



Drip Cap Trim

QTY: 10 per box
Length: 12'



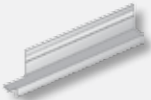
Vertical Trim

QTY: 20 per box
Length: 12'



Horizontal Trim

QTY: 20 per box
Length: 12'



Horizontal Trim
Termination

QTY: 20 per box
Length: 12'



Outside Corner

QTY: 10 per box
Length: 12'



Inside Corner

QTY: 10 per box
Length: 12'



J-Channel Trim

QTY: 10 per box
Length: 12'

Fasteners

Please refer to James Hardie SFS data sheet



Fastener

TECH
SUPPORT

CAD Details

Installation
Instructions

On-Site
Training

Preferred
Installers

Get more information: JamesHardieCommercial.com/Reveal

The Hardie Advantage

Thirty years of fiber cement manufacturing and innovation allows us to continuously provide you with high quality, premium products that reduce the need to look elsewhere.

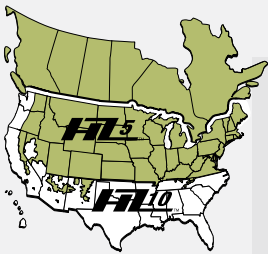
- Aesthetic: options for color and trims
- Accountability: single source manufacturing and finishing
- Affordability: locally sourced materials for cost effectiveness



Resources

- Sales Support
- Installation Support
- Technical support
- Multifamily Quote Desk

The Durability Story



HL5

- Engineered for freezing, wet climates

HL10

- Engineered for climates with a combination of hot, humid or high precipitation conditions

As with any James Hardie product, Reveal panel is engineered for climate, so the materials installed are going to stand up to the specific climates of that location.

Sustainability



Sustainability is important to us so we take steps to reduce environmental impact.

- Locally sourced materials
- Efficient processes
- Long lasting materials

Get more information: JamesHardieCommercial.com/Reveal

THE COLOR COATING THAT'S SEVEN TIMES HARDER THAN PAINT.



KEY BENEFITS

Searching out innovative new technologies is vital to window and door manufacturers looking for ways to attract new customers, gain market share and differentiate their brands. The most effective technologies not only offer superior performance, but also offer green, cost-effective alternatives.

SuperCoat™ Advanced Color Technology accomplishes all three goals. SuperCoat is a next-generation color system offering excellent weatherability and superior durability that virtually eliminates touch-up repair costs.

- 7 times harder than paint
- Highly abrasion and scratch-resistant
- Heat-resistant
- Patent-pending vacuum-applied, UV-cured technology
- More environmentally sensitive than paint
- Exclusive to Mikron partners

**Innovative Technologies.
Superior Performance.**

ADVANCED TECHNOLOGY

SuperCoat is a polyurethane acrylate coating that's vacuum applied, resulting in even coverage and less waste.

The surface is cured with ultraviolet light, which helps avoid lengthy drying and curing and gets your product to market faster.

ENVIRONMENTAL BENEFIT

Not only does the vacuum application process create smooth, even coverage, it also results in zero volatile organic content (VOCs). It's a benefit that helps a manufacturer avoid environmental regulations, and it also helps you establish your company as offering green products.

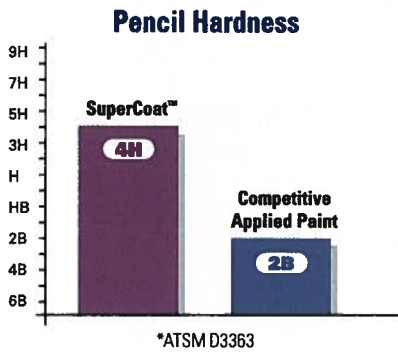
ONLY FROM MIKRON

SuperCoat's patented technology is available only to Mikron's partners who build vinyl, composite or fiberglass windows and doors. Manufacturers will find the vacuum-application, UV-curing process faster and less capital intensive than setting up a labor-intensive, in-house, specialty paint application process.

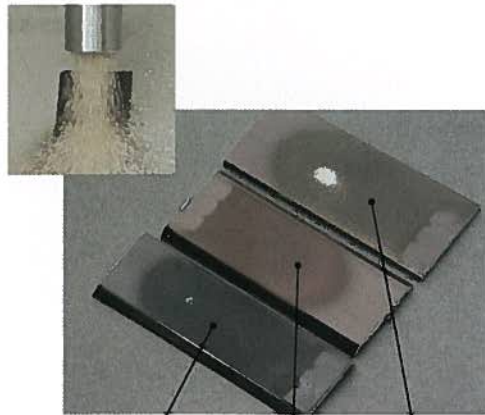


SUPERIOR DURABILITY AND HARDNESS

Based on color surface hardness testing (ASTM D 3363), SuperCoat has proven to be seven times harder than competitive paint with superior resistance to abrasion and scratching. The test measurements show surface hardness in pencil hardness units, ranging from 3B to 9H. SuperCoat achieves a 4H result, seven pencil units harder than competitive applied paints (2B).



In a Falling-Sand Abrasion Test, 36 liters of sand was passed over applied coatings, offering visual proof of SuperCoat's superior weathering. As a result, products withstand the elements better and are less prone to damage in shipping and installation, saving the need for costly touch-up repairs.

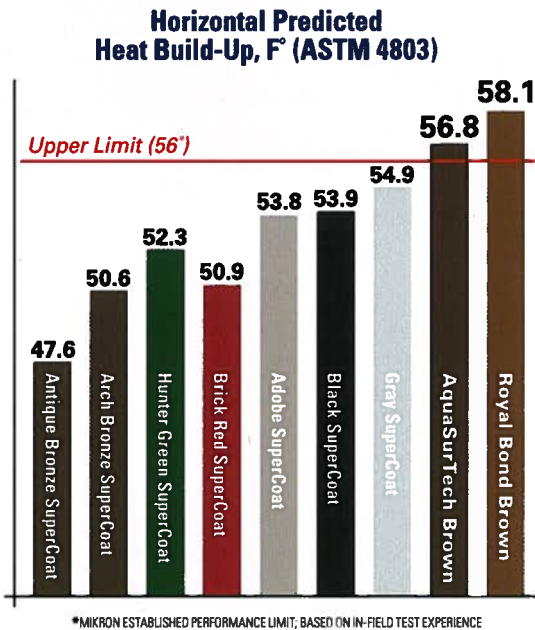


AquaSur Tech SuperCoat Royal Bond

HEAT DEFLECTION

SuperCoat incorporates Mikron's innovative low-heat absorbing color technology to prevent heat distortion that can occur when darker colors are specified on vinyl and composite windows.

In accelerated testing equivalent to a two-year time period in Arizona, SuperCoat was shown to meet AAMA 613 residential-grade specifications. As a result, Mikron backs SuperCoat with an **industry-leading 20-year warranty**.



COLOR RANGE

SuperCoat is available in seven colors: Black, Architectural Bronze, Antique Bronze, Brick Red, Adobe, Hunter Green, and Gray.



To learn more about Mikron, visit www.mikronvinyl.com



vpi Quality Windows

Design, Technology and Value



ENDURANCE Windows

SERIES



Midrise Performance

If you are building a midrise structure in the Northwest United States, you are probably already specifying the Endurance Series by VPI Quality Windows.



In a world where demanding specifications and uncompromising jobsite testing is a way of life, The Endurance Series excels. Unlike many other window companies, VPI achieves superior product performance ratings in the lab and consistent performance in the field.



We diligently apply a consistent set of design and manufacturing principles to deliver industry leading water intrusion resistance. Reinforcement of framing members and flexible panel functionality, eliminating window mulling significantly reduces potential water penetration pathways. Our manufacturing process is systematic, documented, controlled and constantly improving.

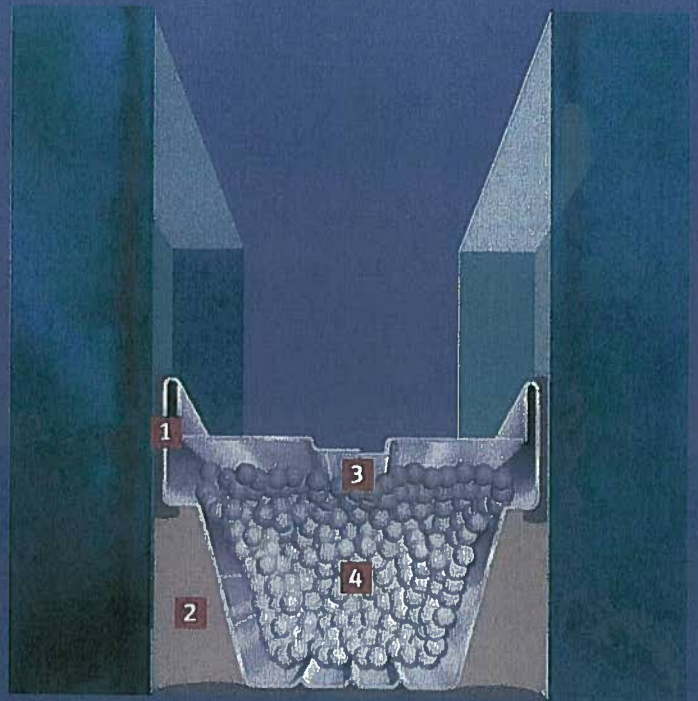
VPI offers the widest variety of operational styles, combinations, and colors available anywhere. No matter what the requirements are for your project, VPI Quality Windows has a product that will do the job, confidently and consistently.

Super Edge™ exceeds industry standard for seal durability by 4 times or more

Super Edge™ glazing in the VPI Endurance window is based on a rugged polyisobutylene/silicone dual sealed insulating glass unit. This construction delivers the best durability available today.

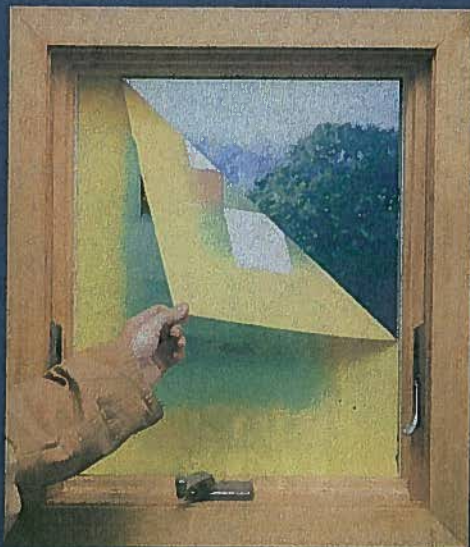
In the rigorous P-1 test, insulating glass units are subjected to worst case, real world conditions: 140° F, 100% humidity and constant UV exposure. *Most* insulating glass units fail this test in between eight and twenty two weeks. VPI's Super Edge™ insulating glass units passed 80 weeks of testing, and never failed!

The proof is in the field. Failure rates of these units is demonstrated to be less than 0.20% in twenty years, a fraction of windows with other sealant and spacer systems.



Super Edge™ Unit Construction

- 1** Primary Seal- Polyisobutylene (PIB). Excellent resistance to UV, moisture permeation and argon retention.
- 2** Secondary Seal- Specifically formulated silicone. Excellent weathering resistance, glass adhesion and UV protection. Best sealant available for structural integrity.
- 3** Spacer- Stainless steel. Maximized area for sealant coverage and low seal stress. Four bent corner, single joint construction.
- 4** Desiccant- Molecular sieve. Optimized moisture absorption.



Protecting everyone's interest, with Protective Film™

Excess stucco. Slopped mud. Scratched glass. Spattered paint. Cleaning up this mess at the end of a job is a hassle, taking up valuable time and labor. Even worse, damaged glass must be reordered and replaced.

Choose VPI Quality Windows with our patented Protective Film™ and make clean-up a snap. When the job is over, builders simply peel off the Protective Film and throw it away- saving you both time and money.

"VPI performance is better and more consistent than any of the vinyl window products we've used."

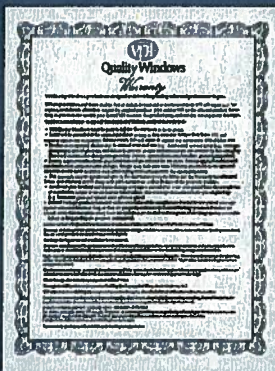
Ryan Roberts, Lake Washington Windows

"Thomton Place was the largest project to date for Walsh Seattle and was full of challenges. Your dedication and collaboration were instrumental... On behalf of a grateful Company, we thank you."

Walsh Construction

"We are very satisfied with VPI. VPI window products demonstrate a blend of solid performance, high quality manufacturing and color options that are unique in the industry."

George H. Singer, Senior Architect, The Soltner Group, Architects Inc.



The proof is in our performance.

Backed by one of the strongest warranties in the business including twenty year seal failure coverage, project owners can be confident that the Endurance Series™ will stand the test of time. Thousands of units have been built with or converted to Endurance.

vpi Quality Windows

Design, Technology and Value

www.vpiwindows.com • 800.634.1478

3420 E. Ferry Avenue • Spokane, Washington 99202



ISO 9001: 2008 Certified

Endurance U-Values

SHGC / VT

Structural

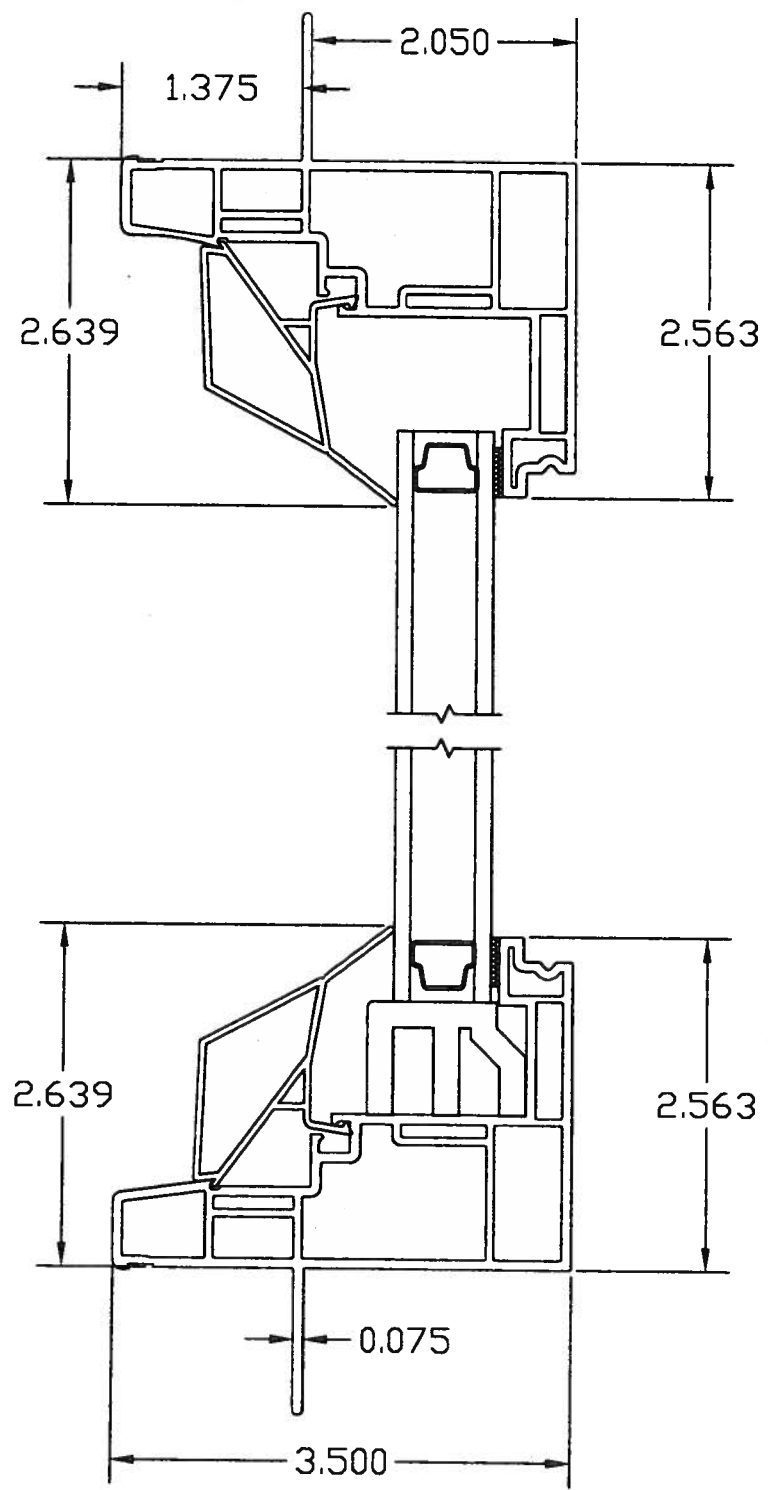
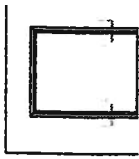
| Product Style | 30/30 Standard (California Energy Star) | | | | | Energy Star Standard | AAMA/WDMA/CSA 101/1.S.2/A440-08 |
|---------------|--|---|---|-----------------------------------|-----------------------------------|----------------------|------------------------------------|
| | Premium | Supreme | Supreme (SW) | | | | |
| PW | 0.26* 0.22 / 0.53 | 0.16* 0.30 / 0.51 | 0.16* 0.20 / 0.46 | 0.26 0.22 / 0.53 | 0.27 0.34 / 0.59 | | CW-PG50 |
| CA | 0.27* 0.18 / 0.42 | 0.19* 0.24 / 0.41 | 0.19* 0.16 / 0.37 | 0.27 0.18 / 0.42 | 0.27 0.27 / 0.46 | | CW-PG50 |
| AWN | 0.27* 0.18 / 0.42 | 0.19* 0.24 / 0.41 | 0.19* 0.16 / 0.37 | 0.27 0.18 / 0.42 | 0.27 0.27 / 0.46 | | CW-PG35 |
| XO, OX, XOX | 0.28 0.22 / 0.52 | 0.22 0.29 / 0.50 | 0.22 0.20 / 0.45 | 0.29 0.22 / 0.52 | 0.29 0.33 / 0.57 | | LC-PG40 |
| SH | 0.28 0.22 / 0.52 | 0.21 0.29 / 0.50 | 0.21 0.20 / 0.45 | 0.28 0.22 / 0.52 | 0.29 0.33 / 0.57 | | LC-PG55 |
| | Double Glaze SC / TrSv + Argon 3/4"OA + Foam | Triple Glaze DbSv/SgSv + Argon 1"OA+ Foam | Triple Glaze TrSv/SgSv + Argon 1"OA+ Foam | Double Glaze TrSv + Argon 3/4" OA | Double Glaze DbSv + Argon 3/4" OA | | Latest Test Result |

Size Limitations


| Product Style | Window Minimum Width | Window Minimum Height | Window Maximum Width | Window Maximum Height | Fixed Glass Maximum Size | Vent Maximum Size |
|-----------------------|----------------------|-----------------------|----------------------|-----------------------|--------------------------|-------------------|
| PW | 10.00" * | 19.00" * | 143.50" | 71.50" | 50 sq. ft. | n/a |
| XO, OX | 23.50" * 20.00" * | 11.50" * 13.50" * | 143.50" | 71.50" | 50 sq. ft. | 18 sq. ft. |
| SH | 11.50" * 13.50" * | 23.50" * 20.00" * | 47.50" | 95.50" | 26 sq. ft. | 18 sq. ft. |
| XOX | 29.50" * | 17.50" * | 143.50" | 71.50" | 40 sq. ft. | 18 sq. ft. |
| XOU, OXU | 23.50" * | 23.50" * | 95.50" | 83.50" | 40 sq. ft. | 18 sq. ft. |
| XOA, OXA, XOXA | 23.50" * | 23.50" * | 83.50" | 83.50" | 40 sq. ft. | 12 sq. ft. |
| XOUT, OXUT | 23.50" * | 23.50" * | 143.50" | 83.50" | 40 sq. ft. | 18 sq. ft. |
| XOAT, OXAT | 23.50" * | 23.50" * | 143.50" | 71.50" | 40 sq. ft. | 18 sq. ft. |
| SHISH | 29.50" * | 23.50" * | 95.50" | 71.50" | 26 sq. ft. | 18 sq. ft. |
| SH PW SH | 35.50" * | 23.50" * | 143.50" | 71.50" | 50 sq. ft. | 18 sq. ft. |
| SH SH SH | 47.50" * | 23.50" * | 142.50" | 71.50" | 26 sq. ft. | 18 sq. ft. |
| XOXU, XOXUT, XOXAT | 29.50" * | 23.50" * | 143.50" | 71.50" | 40 sq. ft. | 18 sq. ft. |
| CA | 13.5 | 23.50" * | 35.50" | 71.50" | N/A | 17.6 sq.ft |
| AWN | 17.50" * | 11.50" * | 59.50" | 41.50" | N/A | 12 sq. ft. |

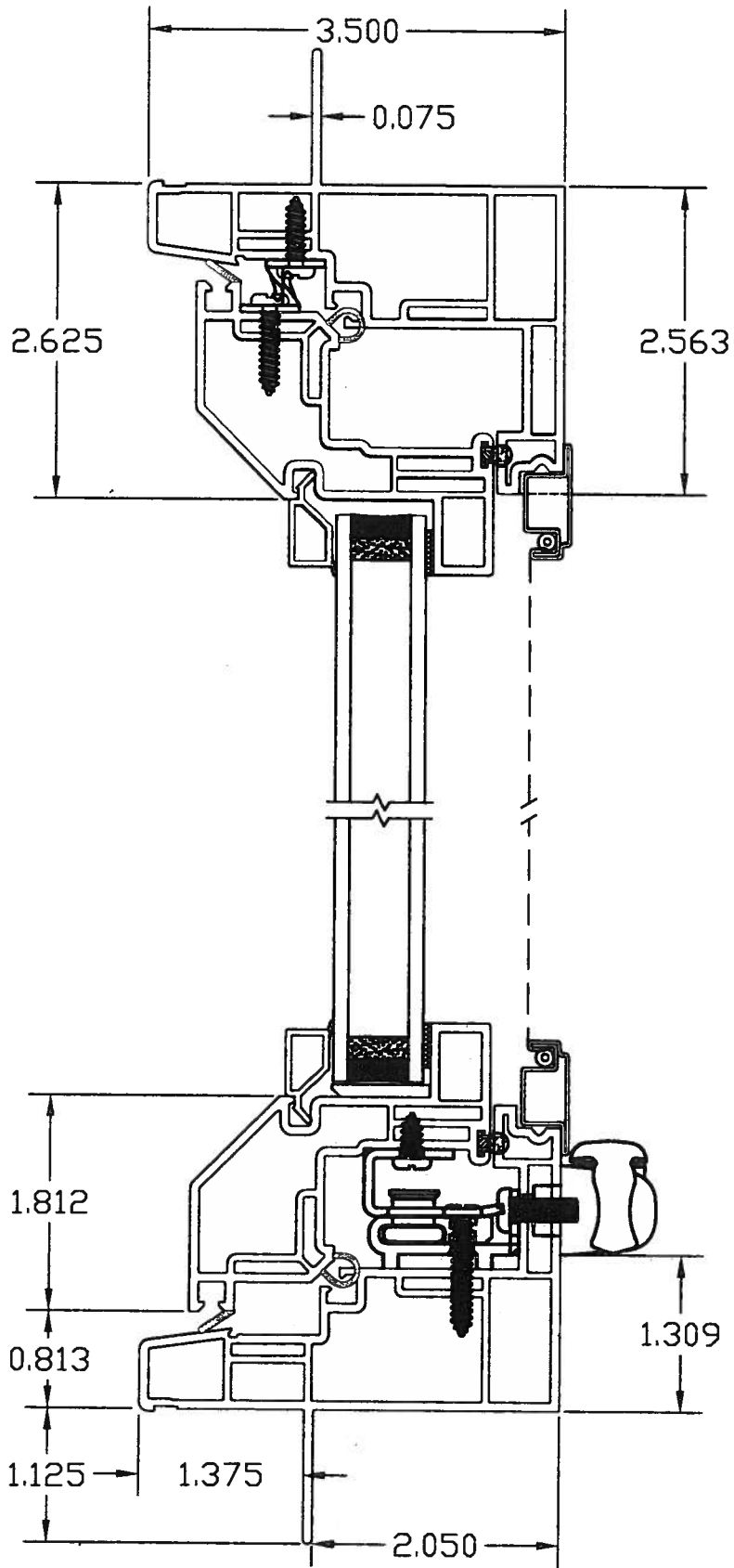
* Note: Foam Fill not available in this window

* Min Tempered glass is 8-1/2. Note that Lami can be used as Safety Glass.




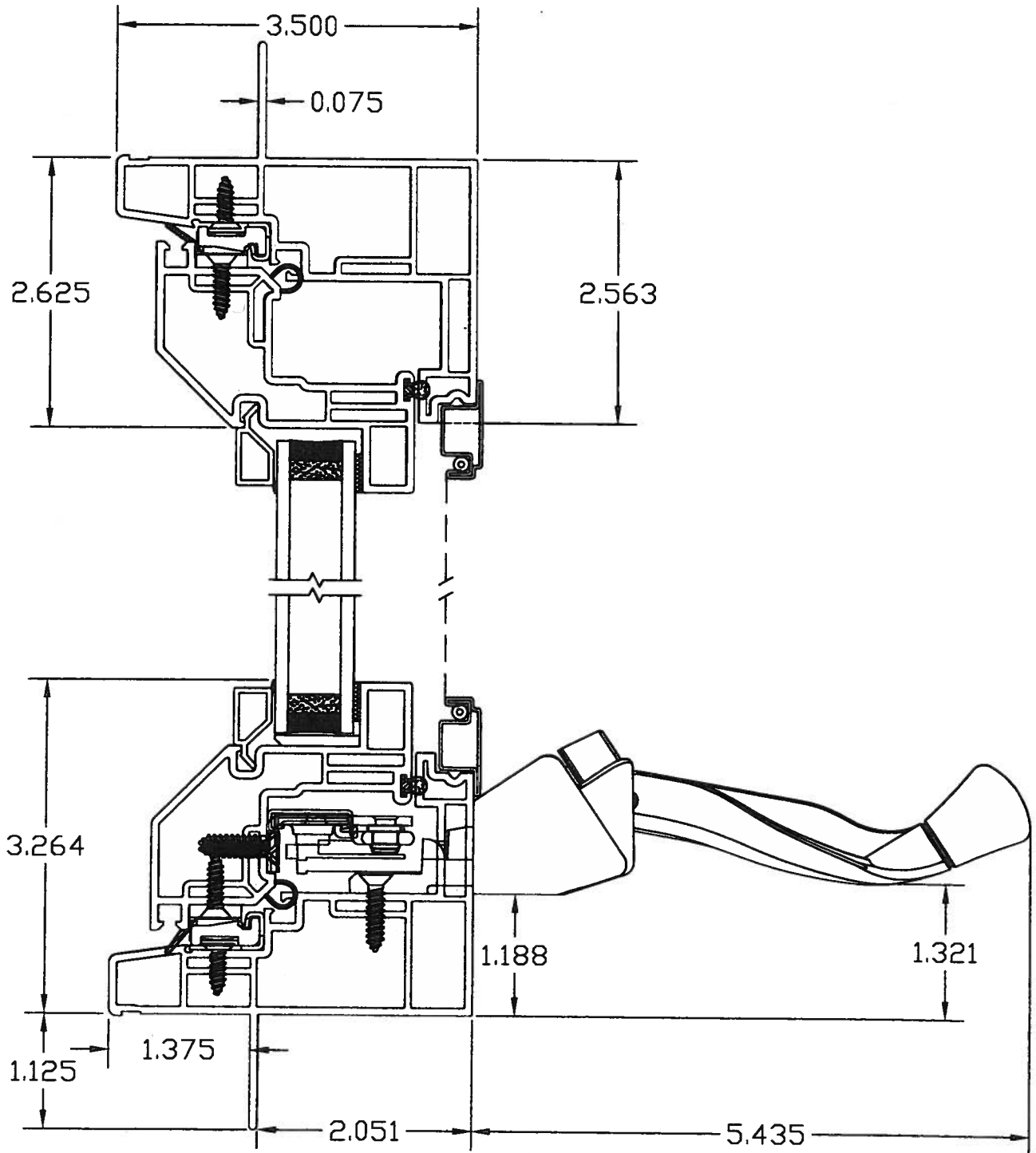
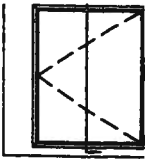
NOT TO BE REPRODUCED WITHOUT EXPRESS PERMISSION OF VPI QUALITY WINDOWS

| Series | Type | Position | FAV | IGU Thickness | Drawn By | Checked By: RWK | Finish Date: 07/09/10 |
|-----------|----------------|------------------|-----|---------------|--------------|---|--|
| Endurance | Picture Window | Vertical Section | No | 3/4" | MS |  Quality Windows | 3420 E. Ferry Spokane, WA 99202 www.vpiwindows.com |
| | | | | | Scale: 1:1.5 | | |




NOT TO BE REPRODUCED WITHOUT EXPRESS PERMISSION OF VPI QUALITY WINDOWS

| Series | Type | Position | FAV | IGU Thickness | Drawn By | Checked By: RWK | Finish Date: 07/08/10 |
|-----------|----------|--------------------|-----|---------------|--------------|---|--|
| Endurance | Casement | Horizontal Section | No | 3/4" | MS |  Quality Windows | 3420 E. Ferry Spokane, WA 99202 www.vpiwindows.com |
| | | | | | Scale: 1:1.5 | | |



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| Series | Type | Position | FAV | IGU Thickness | Drawn By | Checked By: RWK | Finish Date: 07/08/10 |
|-----------|----------|------------------|-----|---------------|--------------|---|--|
| Endurance | Casement | Vertical Section | No | 3/4" | MS |  Quality Windows | 3420 E. Ferry Spokane, WA 99202 www.vpiwindows.com |
| | | | | | Scale: 1:1.5 | | |

WATER VEIL IMAGES- BETWEEN BUILDINGS #3 AND 5-BROADWAY ELEVATION

