Enclose Framed and Frameless Handbook Architectural Wall Products August 2020

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For additional Project Management Process Support please refer to document "Installations Best Practices" found in the Haworth Library for the topics below:

Installation Quoting Scope of Work

Installation Production Rates Offload Review and Quoting
Trash Handling Recommendations Schedule and Site Readiness

Drawing Review Site Plan Review
Ceiling Track Pre-Delivery Benefits Drawing Review
Shipment Paperwork Damage Reporting

Mixed Content Packages Product Staging Process

Layout Start Points

Product Installation Lateral Bracing

Trim Installation (LSE)

Door Performance Review

Correction Tracking

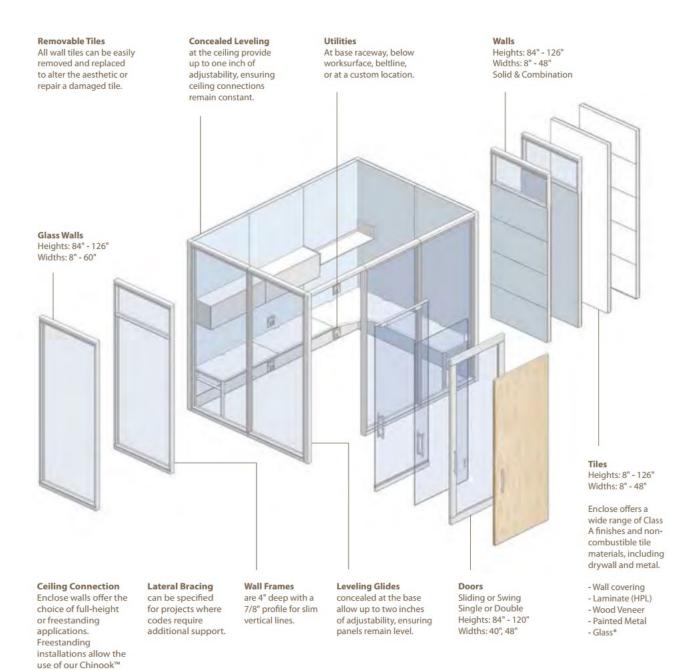
Punch Recommendations

Correction Orders Warranty Risks

Storage of Product Guidelines for all Wall Product

Any building where Haworth Wall Products are to be stored or installed shall be <u>fully closed in, dry and protected</u> from the natural elements, with temperatures <u>between 40°F and 90° (4°C and 32°C)</u> and relative humidity <u>not to exceed 70% at all times</u> this also includes receipt of products, during and after installation and shall be adequately heated and/or air-conditioned. Where unusual site conditions exist which impede or prevent the normal installation of any Products, applicable extra charges shall apply at prevailing rates.

Enclose Framed Product Family



ceiling support system.

Typical Packaging For Frame/Panel Shipment









All Enclose Framed Panels and Doorframes are grouped together as shown above. Typical pallet skids are 40" wide by the tallest panel. A wood center brace will support frames/panels once the packaging straps and outer wrap has been removed.

On one side of the pallet you will find duplicate copies of the CSI/CALM labels of all frames/panels, this will assist during the inventory process.

Take care when removing Frames from pallet skid, each frame/panel is taped to the center brace but remaining frames/panels need to be held vertical.

Ensure that per Component Tagging is not removed when removing frames/panels from pallet.

Typical Glass Crating Standards







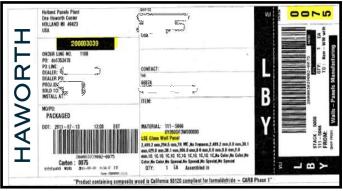
All Enclose Frameless Glass panes and Enclose Framed Door Slabs come to site in vertical crates from the supplier. These crates are designed to open from one side and should be tilted to overcome the trailer un-levelness so that the panes are leaning towards back of crate.



Please refer to 'Site Safety Guidelines—Safe Handling and Storage of Glass' document (found in the Haworth Library) for important considerations for unloading, transporting, staging and installation of all Glass Product.

Additional tilting or support is required and to keep the glass panes against the back of the crate during the removal of each pane to carts.

Product Tagging and Circle Sheet Inventory



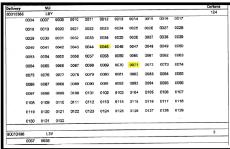
Frame/Panel ID Location



missile approach.

Component

CSI / CALM



Circle Sheet Inventory

Please refer to document "Walls Delivery Review 082914" for further information

Every frame/panel has one or several Product Tagging applied during packaging to assist with inventory, staging, identifying product and communicating Quality issues to Corporate Quality Teams.

CSI / CALM

This label is first used by the installation teams to understand the Carton Number to complete the required Inventory. The Carton Number is recorded on the top right hand side of the label. In the example above "0075" is the carton number. The order number is recorded in the black box in the top left hand side of the label. The package content's description is near the bottom center of label.

Frame/Panel ID Location

This label describes the final placement of the product contents, in this example "A-10" and is located at the top left side of the label. The order number is also included on this tag.

Component

This label describes internal routing and manufacturing processes. This label will assist Haworth to guickly identify defective or incorrect parts. Photos of these labels will allow guicker resolution of potential issues.

Circle Sheet Inventory

All Carton Numbers of product removed from the trailer must be identified on the Circle Sheet. Each unidentified carton number must be researched.

Product Staging Recommendations







It is critical that Wall product is staged close to the installation area for several reasons.

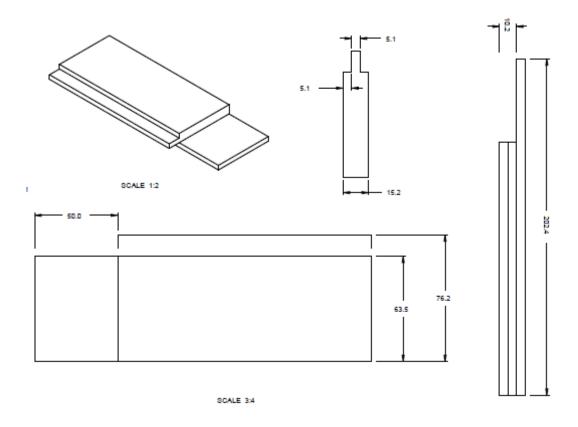
- Wall product is large and heavy, double and triple handling increases chance of damage.
- Installation Team members will spend excessive time locating required panels which will reduce production rates of installed product.

When staging, it is preferred not to use hard walls, columns or workstations. Haworth supports usage of wooden A-Frames to avoid storage conflicts with other trades and to protect the surfaces of the building. One wooden A-Frame consists of 1—clean Spruce/Pine/Fir. 2x4x12' cut into 3 equal pieces. Two 4' pieces are cut with a 13 degree angle. The square cut piece is the bottom plate and the 2 mitred pieces screw to the plate and to each other creating a A-Frame. Use adequate screws to fasten the parts together.

Above we show several panels stored using A-Frames, ensure that each side of the A-Frame is balanced. It is also good practice to write the Panel ID location on each end of panel so that the installers can locate the required panel/frame quickly.

On large projects you can assist staging by creating sheets (top right picture).

Enclose Tap Block Recommendation

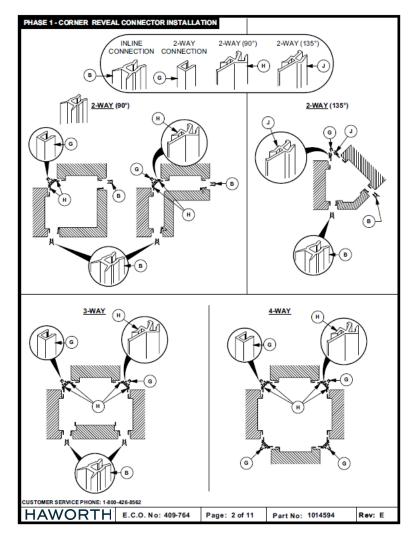


It is recommended to use a UHMW material to build these blocks as this material is less prone to tear finishing material and denting of the panel substrate. Avoid using materials similar to Acrylic.

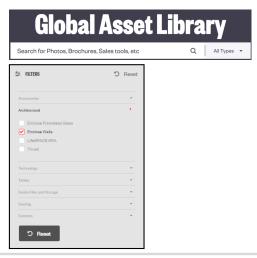
The UHMW plastic is the same material used for some kitchen cutting boards and is easily available. It is also recommended to sand the corners of the block with high grit sandpaper after machining to remove any sharp edges.

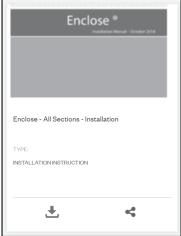
The offset long thin end is used to insert and set inner corner clips, the long center edge is for PostCap or Reveal insertion and setting.

Installation Instructions



Installation Instructions are shipped within Hardware Boxes and are also available electronically from the Haworth Library.







Recommended Tools

General Person Protection (may include but not be limited to the following)

Always pre-confirm safety equipment requirements with the site safety officer

Steel toed boots KneePads Safety Glasses

Gloves Hard Hat High Visibility Vest

Traffic cones Face Shield

Offload Tools (may include but not be limited to the following)

Rail Carts Single Wall Cart (door cart) Masonite

Pallet Jack (8') Building hard wall protection Glass Cups

Skid Puller Adequate Chains for puller A-Frames

Layout Tools (may include but not be limited to the following)

Tape Measure Chalk Line (light chalk) Plumb Bob/Laser

Masking Tape Pencils/Markers Calculator
Dry Line Quality Level Ladder

<u>Install Tools</u> (may include but not be limited to the following)

Job Box Ladders Stud Finder

Saw Horses Accurate levels Construction Square

Quick Grips/Clamps Small Pry Bar Box cutter 7/16" Nut driver Assorted Screw Drivers Wall Hooks

Glazing bars Tap Block (see page 10) Quality Glass Cups

Cleaning Supplies

Please refer to document "Care And Maintenance_011216" for information