

INSTALLATION GUIDE

WARNING: Please read all instructions carefully before starting the installation to avoid having to repeat the steps.

1. GENERAL INFORMATION

1.1 Storage and handling

Woodzco products must be stored indoors in a dry place and kept in their original packaging until the acclimatization period to prevent damage. The products must be placed above the ground, flat, and on a stable, level surface. They must be handled with care to avoid deterioration or contamination from dirt.

Woodzco products must be stored in a climate-controlled environment where the temperature is maintained between 50°F and 86°F (10°C and 30°C) and the relative humidity is between 25% and 55%. They must not be exposed to extreme conditions, particularly near heat sources or direct sunlight, such as near a window.

1.2 Acclimatization

Woodzco products must be acclimatized before installation to reach ambient temperature and allow their moisture content to stabilize. This acclimatization period must be at least 72 hours. To facilitate this process, remove the plastic packaging to allow the products to adapt to ambient conditions. However, they must not be installed in spaces where the temperature or humidity level differs significantly from the building's normal occupancy conditions, as recommended in section 1.2.1.

1.2.1 Environmental conditions

Woodzco products are interior products designed for installation in environments with temperatures between 50°F and 86°F (10°C and 30°C). Installation must be performed only in an enclosed building, with HVAC systems in operation and intended to run continuously. Relative humidity must be maintained between 25% and 55% and should not exceed 30% during the panels' service life. All moisture-generating work, including plastering, concrete, ceramic, or any other wet materials, must be completely dry before installation. Additionally, all windows and doors must be installed. HVAC systems must be in place and operational to maintain proper temperature and humidity conditions before, during, and after product installation.

1.2.2 Dust and HVAC system control

Before commissioning the HVAC system, ensure that the indoor environment is free of dust from construction work. To reduce the accumulation of dirt, it is important that the air inlets and outlets are properly designed and that the HVAC (Heating – Ventilation – Air Conditioning) system filters, as well as the building's interior, are adequately maintained.

1.3 Material characteristics

Woodzco products are made from various types of solid wood or wood veneers, consisting of thin slices of real wood. Due to the nature of the material, the cut, grain, and color may vary from one sheet to another. These variations are normal and contribute to the authentic and unique character of the wood. To achieve the best possible visual consistency, it is recommended to unpack and examine the products together before installation to determine the most harmonious arrangement.

Upon receiving the product and signing the bill of lading, please verify that the product conforms to the order and notify Woodzco within seven (7) days of receipt of any product defects or damage. For details, please refer to the «Woodzco Limited Warranty» document on our website www.woodzco.com.

1.4 Considerations when ordering

When installing wood products, it is recommended to order a certain amount of extra material to cover normal waste associated with this type of material. For ELEMENT panels, it is advisable to order a minimum of 3% extra material. It is the customer's responsibility to plan the panel layout and determine the total quantity required based on the project. If additional material needs to be ordered after the first batch has been produced, the panels will be manufactured to match the finish of the initial order as closely as possible. However, some visual variations may occur due to the natural characteristics of real wood.

2. CUTTING TOOLS AND METHODS

2.1 Recommended tools (not included)

Drill	Table saw	Oscillating tool
Self-milling bit no. 8	Plunge-cut track saw	Stapler
Laser level	80-tooth finish saw blade (minimum)	

IMPORTANT: Always wear appropriate personal protective equipment (PPE) when handling or cutting wood.

2.2 Wood cutting methods

WARNING! WOOD DUST. Sawing, sanding, or shaping wood products can release dust particles into the air. Exposure to this dust can cause irritation of the respiratory tract, eyes, and skin. The International Agency for Research on Cancer (IARC) recognizes wood dust as a nasal carcinogen in humans.

Precautionary measures: Power tools must be equipped with a dust collection system. When large amounts of dust are generated, it is recommended to wear a suitable NIOSH-approved dust mask. Also, avoid contact between the dust and your eyes and skin.

First aid for irritation: Rinse the eyes or skin with water for at least 15 minutes.

3. DESIGN

3.1 Accessories

Available upon request from Woodzco	Not included and supplied by others
Shop drawing (if applicable)	15/16" Suspension System
Finishing trim	Accessories for 15/16" suspension system
Flat wood backer	(E-Z Ancor) #8 Self-drilling zinc drywall anchors
Notched wood backer	
Edge banding	
Acoustic material	
Screw cover	
Correction pencil	
Premium matte finishing oil	
Satin clear varnish	

3.2 Staples and screws recommended

Staples, 16 gauge - various lengths	To attach additional wood backers to the panel
#6 Double-thread drywall screws - 1-1/4" to 1-5/8" length	To attach the panel to the 15/16" suspension system
#6 or #8 Double-thread particle screws - variable lengths	To attach additional wood backers to the panel
Countersunk head screws #8 - 1-3/4" length	To fix the panel to the wall using anchors

3.3 Installation plan

Before beginning the installation of ELEMENT panels, it is important to establish your installation plan. Determine the orientation of the panels and measure the dimensions of the surface to be covered to calculate the alignment and positioning of the panels. Please refer to the construction plan. It is recommended that at least two people handle the panels safely and thus reduce the risk of damage.

ELEMENT panels can be installed on ceilings and walls. During the design phase, it is important to consider the following points:

- 1-inch reveal between panel ends: ELEMENT panels require a 1-inch reveal between the ends of panels installed end-to-end. Take this into account when designing and laying out the ceiling and anticipate the location of the reveal on the ceiling plan. The 1-inch reveal between the panel ends must be maintained. Any modification to the panel or the suspension system to eliminate this reveal will void the warranty.

- Visibility of notched wood backers: When mixing blades of varying heights with wood veneer panels, blades 3" deep and above have deeper notched wood backers than those used for panels with blades less than 3" deep. These deeper notched wood backers may be visible when transitioning between different blade depths. It is also common to find both types of backings (flat and notched) on the same panel, depending on the product selected. This provides a visually distinctive effect.

- Wall installation: Wood backers may be visible from the sides with these types of installations. Consider the visibility of the wood backers in your design and when planning your space. Covering the panels or finishing them against a wall is recommended when visibility of the wood backers is not desired.

4. INSTALLATION

NOTE: For indoor use only.

4.1 Ceiling installation procedure

Before starting any ceiling installation with ELEMENT panels, make sure to validate all seismic requirements that must be met for your project and follow the recommended installation instructions.

4.1.1 Non-seismic installation

ELEMENT panels must be installed with a standard, heavy-duty 15/16" metal T-suspension system that meets the requirements of applicable ASTM C636. For more information and installation instructions, please follow the recommendations of the suspended ceiling system manufacturer.

Consult the relevant building plan for the finished ceiling height. Add the overall height of the ELEMENT panel to determine the suspension system elevation. Remember to factor in the weight of the ELEMENT panel and any acoustic material panels (if applicable) to determine the total system weight. The height and weight of the ELEMENT panels are listed on the technical data sheet.

It is recommended to install ELEMENT panels sequentially throughout the room. The panel and wood backers can be cut to fit any perimeter spacing. The panels attach directly to the suspension system with screws. For the wood backers, a matte black paint can be used for touch-ups.

For direct screw fixing, place the ELEMENT panels under the suspension system and screw them directly in using #6 double-threaded drywall screws. Use two (2) screws on each wood backer, aligning with the suspension system (**Fig. 1**).

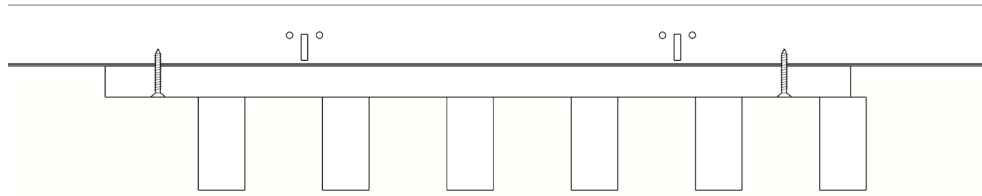


Figure 1. Direct fixing of an ELEMENT panel with screws.

4.1.2 Seismic installation

ELEMENT panel systems are designed for use in all seismic zones. For more information and installation instructions, please follow the recommendations of the suspended ceiling system manufacturer.

4.2 Reveal between panels

The ends of the ELEMENT panels installed end to end are separated by a 1-inch reveal. This uniform spacing and alignment is maintained by the arrangement of a 15/16" suspension system with a 24" x 24" grid (**Fig. 2**).

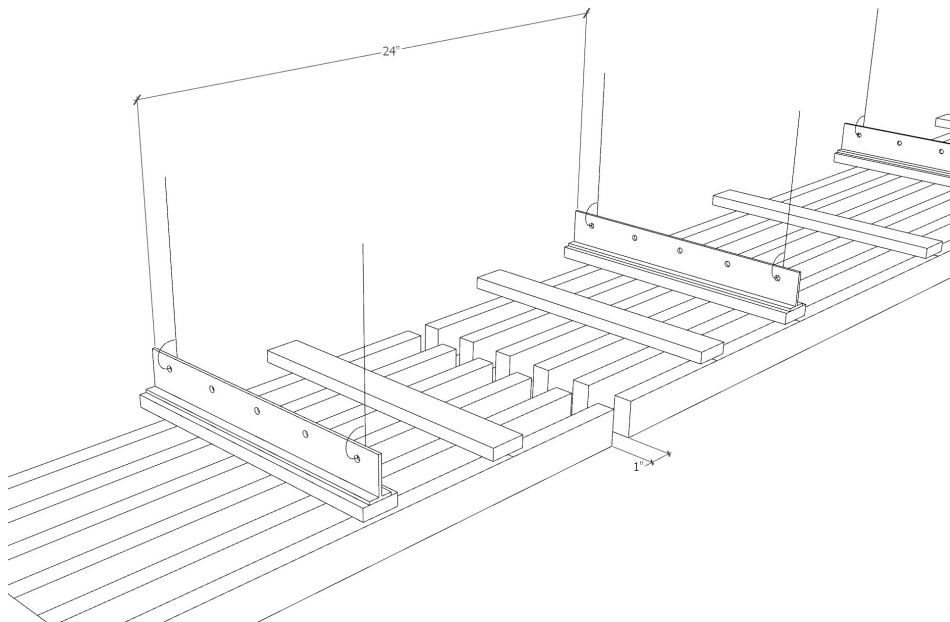


Figure 2. 1-inch reveal between ELEMENT panels, with a 24" x 24" grid.

4.3 Ceiling perimeter

To determine the dimensions and perimeter spacing, please refer to the construction plan. A 1-inch reveal must be maintained between the panel and the wall (**Fig. 3**).

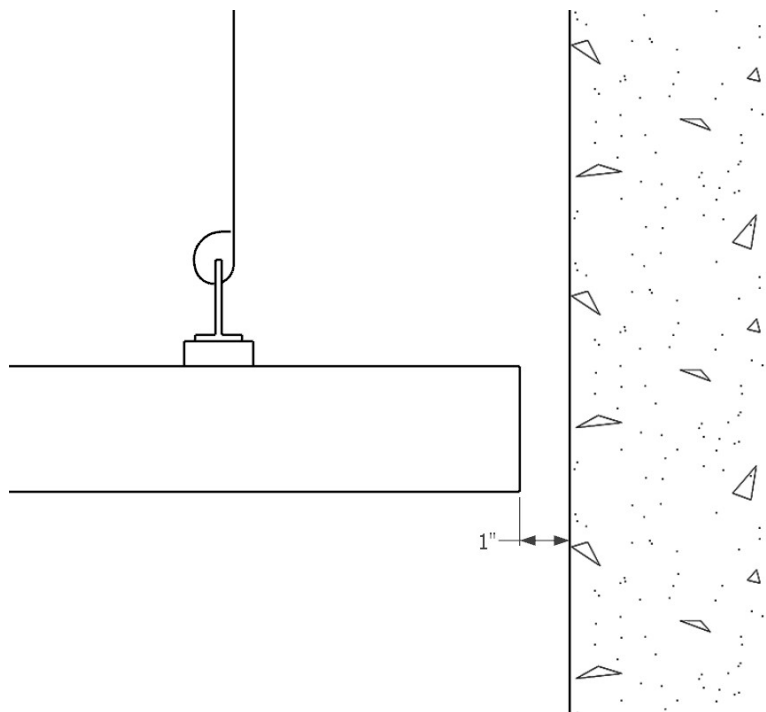


Figure 3. 1-inch reveal between the ends of the ELEMENT panels and the wall.

4.4 Integration of MEP equipment and terminals

For ceiling or wall installation of the ELEMENT panel, building mechanical, electrical and plumbing elements such as light fixtures, speakers, sprinklers and other MEP equipment and terminals must be considered.

For ceiling installations, these components must be installed in the suspension system before the ELEMENT panels are installed. All mechanical components must be supported by the suspended ceiling system structure. Fixtures can be installed between the slats or flush with the bottom of the panel. Cutouts made in the panel to accommodate accessories must not compromise the panel's structural integrity.

It is recommended to consult the construction plan before beginning. ELEMENT panels can be cut to fit the openings created for fixed components. It may be necessary to adjust the height of the fixed accessory to match the height of the wood panel slat. If needed, add cross tees to reinforce the installation.

Use Woodzco premium matte finishing oil and/or satin clear varnish to finish any visible edges that were cut on-site, ensuring the color matches the panel finish.

For more information on panel cutting for MEP element integration, please refer to section 5.4.

4.4.1 Sprinklers

The ELEMENT panels have been subjected to a test method based on CAN ULC S-102 and ASTM E-84. The panels may obstruct or divert the existing or planned water distribution system for automatic fire extinguishers, potentially delay the activation of automatic fire extinguishers or fire detection systems, or accelerate the activation of automatic fire extinguishers by channeling heat from the fire toward or away from the device. Designers and installers are advised to consult a fire safety engineer, NFPA 13 standards, and their local codes. A hole can be cut through the panel to allow the sprinkler head to protrude.

4.4.2 Lighting

For ceiling or wall mounting, the weight of tested and approved lighting fixtures must be supported by the suspension system and/or the structure, not by the wooden panel. Other lighting fixtures that have not been tested or approved must be supported independently by the structure.

4.4.3 Recirculating air diffuser/device

ELEMENT panels are natural wood products. Therefore, air diffusers and recirculating air devices must be installed so that they are level with or below the wood slats. For ceiling installations, this ensures that when cooled or heated air is released, it is vented below and does not come into direct contact with the wood slats. For wall installations, the air outlet must be integrated into the finished face of the panel. Failure to comply with these requirements may cause damage to the wood panels and will void the warranty.

4.4.4 Access to ceiling plenum

Access when installed with screws:

Access to the plenum space can be achieved by simply unscrewing the panels where access is required. Refer to section 4.1.1 for instructions on attaching the panel to the suspension system using screws (**Fig. 1**).

However, if frequent access is required, a site-made access door is recommended instead of using screws. For more information, please refer to the Woodzco document «Assembling a Plenum Access Hatch - ELEMENT Collection».

4.5 Installation procedure for a sloped ceiling

The safe installation of a sloped ceiling requires a project assessment to verify compliance with building codes. Please refer to the suspension system manufacturer's recommendations and applicable standards for your project and/or jurisdiction. Your project design team is responsible for obtaining approval and determining the final design and installation parameters.

- Panels weighing less than 3 lb/sq.ft. are recommended for sloped installations. The maximum slope angle of the ceiling should not exceed 30°.

- In addition to the above requirements, please also follow the requirements of ASTM C636. All installations must comply with ASTM C636 and local building codes.

- When constructing a sloped suspended ceiling, code officials and/or the relevant authorities in your area may require engineering documentation. For these unique installations, the project's structural engineer is responsible for verifying and approving the use of the suspended ceiling system components. For these unique installations, the project's structural engineer is responsible for verifying and approving the use of the selected suspended ceiling system. For more information, contact the suspended ceiling system manufacturer.

4.6 Wall installation procedure

The panel orientation can be horizontal or vertical. Please refer to the construction plan to determine the orientation and layout of the panels.

4.6.1 Installation with furring

For a fire-rated installation, it is recommended to use 3/4" FR plywood furring strips or furring channels attached to the wall structure. The ELEMENT panels must then be attached to these furring strips. The placement and spacing of the furring strips will depend on the orientation and layout of the panels. Regardless of the direction in which your furring strip is positioned, the wood backer must always align with a furring strip to be secured with screws (**Fig. 4**).

If the specification calls for an air gap, with or without insulation, behind the ELEMENT panel, we recommend installing Z-bar channels to create this air gap.

For panel mounting, we recommend using two (2) screws per wood backer. For optimal visual appeal, we recommend painting the substrate or furring strips the same color as the wood backers for a seamless look.

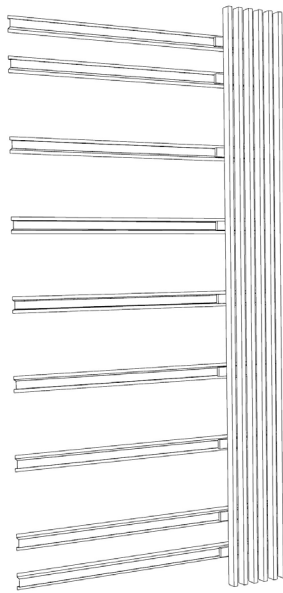


Figure 4. Installation of ELEMENT panels with furring strips.

4.6.2 Installation on a rigid substrate, with or without anchoring

A rigid substrate (e.g., 3/4" plywood or drywall) can be installed over the entire surface to be covered behind the panels to ensure product stability. Beforehand, ensure the substrate has been properly prepared or painted to receive the ELEMENT panels.

Pre-drill the wood backers of each panel with a countersink bit to prevent splitting and facilitate installation. Drill holes in every other wood backer. It is recommended to pre-drill in two (2) places on each wood backer of each panel (Fig. 5).

For plywood substrates, position the panel correctly and screw the #8 countersunk screws through the pre-drilled holes in the panel's wood backers. Repeat these steps, taking care to leave a 1-inch reveal between each panel (along its length) to allow for natural wood expansion. Place the next panel next to it and continue installing the panels in this manner until you have covered the entire surface of your project.

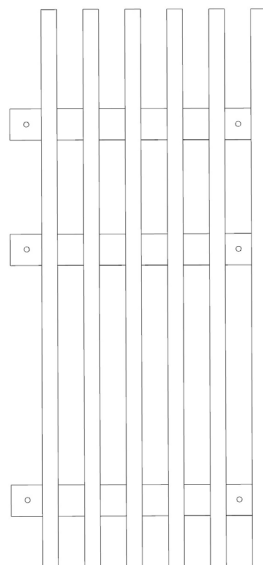


Figure 5. Pre-drilling of ELEMENT panels.

For drywall, position the panel on the surface to be covered, ensuring it is level and in the correct location according to your installation plan. While holding the panel in place, mark the pre-drilled locations with a pencil to position the anchors on the drywall. Remove the panel. NOTE: Leave a 1-inch reveal between panels installed end-to-end, along the sides and/or end of the panel if adjacent to a wall or ceiling, to allow for natural wood expansion.

Properly install the #8 zinc drywall anchors – 1-3/4" length (E-Z Ancor type) at the pencil marks previously made on the drywall.

Position the panel in the correct location and drive the #8 countersunk screws through the pre-drilled holes in the panel's wood backers. Repeat the steps, taking care to leave a 1-inch reveal between each panel (along the length) to allow for the natural expansion of the wood. Place the next panel next to it and continue installing the panels in this way until you have covered the entire surface of your project.

5. CUTTING

IMPORTANT: Always wear personal protective equipment (PPE) when cutting wood.

5.1 Instructions before cutting

Please plan any modifications to the panel. Use a flat surface to lay your panel down and keep it level. When cutting Woodzco panels, for cutting tools (e.g., a plunge-cut track saw, table saw, etc.), it is recommended to use eighty (80) tooth finishing saw blades. Veneered wood panels are prone to splintering. For optimal cutting, it is recommended to apply masking tape to the cut area on the wood panels. Then, turn the panel face down and use a plunge-cut track saw to cut it. The sprinkler holes (or any other fittings) will be created by simply stopping the wood panels in place and using woodworking tools to cut an access hole in the panels. Please add additional T-brackets to the suspension to create attachment points.

ELEMENT panels are available in the following lengths: 8 ft, 9 ft, and 10 ft. Please consider the existing dimensions when installing your surface. Selecting the most appropriate panel size from the available options can resolve, reduce, or eliminate the need for on-site modifications in certain situations. Custom-sized panels are also available when on-site modifications are not feasible or to expedite installation.

5.1.1 Panel design

ELEMENT panels can be assembled in various ways. Construction details for solid wood and wood veneer panels are provided below.

- Solid Wood and Wood Veneer: These panels consist of wood backers stapled to the main wood blades for attachment to the suspension system. The center-to-center spacing will adhere to the 24" x 24" suspension system. Therefore, the wood backers cannot be reused. These wood backers, available in flat or notched versions, can be supplied separately for on-site modifications requiring additional wood backers for suspension or alignment.

Ensure you have the necessary tools and accessories to perform any on-site modifications. Wood backers can be removed by lifting them, along with the staples, using a suitable tool. Exercise caution and avoid prying on the visible faces of the main wood slats to prevent damage.

If you are using screws to attach the wood backers added on site, it is recommended to pre-drill a 3/32" hole and use #8 screws. Adjust the screw length according to the height of the main wood blades of the panel.

If the cut must be made through a factory-installed wood backer, add additional wood backers as needed, then remove the factory-installed wood backer before cutting. Proceed with cutting the blades in the panel. No other factory-installed wood backers should be removed or repositioned on the rest of the panel, as this will void the warranty.

When cutting ELEMENT panels, it is necessary to retain at least two (2) main wood blades per panel to ensure its structural integrity. The main wood blades cut on site can be finished with a premium matte finishing oil and/or a satin clear varnish (for solid wood panels) or edgebanded with a premium matte finishing oil and/or a satin clear varnish (for wood veneer panels).

- Edgebanding Installation

It is recommended to use pre-glued edgebanding applied with an iron or edgebander, ensuring even pressure on the veneer. Allow to cool, then trim the excess with a strip cutter or edge trimmer for a clean finish. Lightly sand the edge to even out the surface and remove any visible excess thickness. Finish with the finish that matches the panel.

5.2 Cut the panels lengthwise

If a factory-installed end wood backer is removed, a new end wood backer must be added within 6" of the cut, unless one is already present 3" from the cut end (**Fig. 6**). When replacing end wood backers on panels, add a tee fitting to the suspension system as needed to create a fastening point. Therefore, it is recommended to secure job site-installed end wood backers with staples (see Table 3.2), adjusting the staple length according to the height of the main wood blades of the panel.

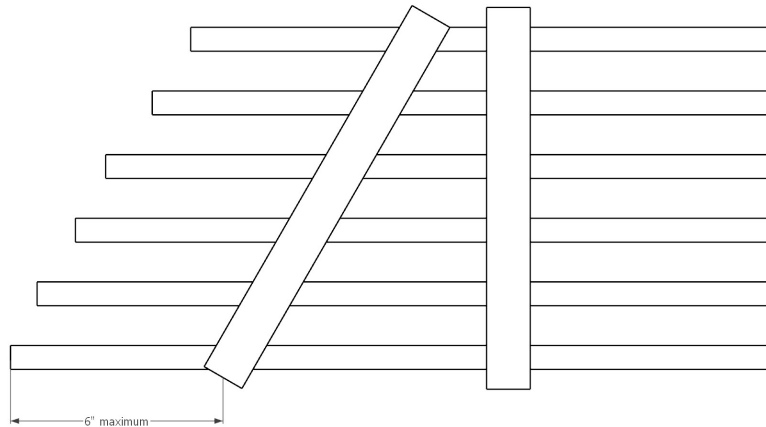


Figure 6. Adding a support blade to an ELEMENT panel.

5.3 Cut the panels widthwise

The ends of the wood backers can be cut to fit the perimeter. When cutting panels widthwise, it is recommended to leave the equivalent of the spacing between two (2) main wood blades and add an extra 1/4" so that the length of the wood backer extends beyond the edge of the main wood blade. This facilitates alignment and allows space for a fastening point if needed.

If a main wood blade remains after cutting a panel, there must be sufficient space on the wood backer on both sides of the main wood blade to attach the panel to the hanging system using screws. Ensure that the wood backers remain perpendicular to the main wood blade during installation.

5.4 Cutting of panels for insertion of MEP equipment and terminals

Please refer to sections 5.2 and 5.3 above, depending on the cutting orientation. If the panel is to be perforated, wood backers must be added on either side of the perforation to adequately support the main wood blades. It is recommended to use an oscillating tool to cut the panel.

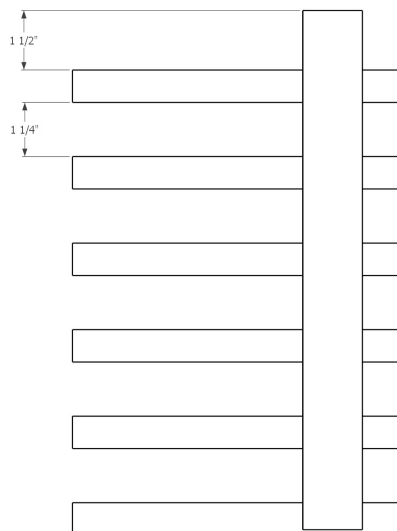


Figure 7. Overhang of the wood backer on an ELEMENT panel.

6. CLEANING AND MAINTENANCE

NOTE: For detailed cleaning and care recommendations, please refer to the CARE GUIDE on our website www.woodzco.com.

We recommend two methods for cleaning an ELEMENT panel:

- 1) Vacuum the panels to remove any dust or dirt that may accumulate on the Woodzco product.
- 2) Use a clean, dry, soft white cloth to remove dust or greasy fingerprints. If this is not sufficient, wipe the panel with a clean, soft white cloth and a pH-neutral cleaner.

7. LIMITATIONS

For indoor use only.

8. RESPONSABILITY

We disclaim all liability for incidental and consequential damages, whether direct or indirect, and for any loss caused by the use of these products in a manner inconsistent with the printed instructions provided or for any purpose other than that for which they were intended. Our liability is expressly limited to the replacement of defective products. Any claim will be considered void unless made in writing within seven (7) days of the delivery date and the date of signature of the bill of lading. Please refer to the document «Woodzco General Terms and Conditions of Sale» for details.

9. SECURITY

Please observe good industrial safety and hygiene practices during installation. Wear appropriate personal protective equipment. Read the product data sheet and all documentation concerning this product before specifying and installing it.

10. NOTICE

The information contained in this document is subject to change without notice. Woodzco Architectural Wood Inc. disclaims all liability for any errors that may have been inadvertently made in this document.