

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 tiles, it is advisable to order a minimum of 3% extra material. It is the customer's responsibility to plan the tile 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 tiles 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
Studio drawing (if applicable)	15/16" Suspension System
Finishing molding	Accessories for 15/16" suspension system
Flat wood backer	
Edge banding	
Acoustic material	
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 tile
Double-thread particle screws #6 or #8 - variable lengths	To attach additional wood backers to the tile

3.3 Installation plan

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

4. INSTALLATION

NOTE: For indoor use only.

4.1 Ceiling installation procedure

Before starting any ceiling installation with ELEMENT tiles, 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 tiles must be installed with a standard 15/16" heavy-duty metal T-bracket suspension system that meets the requirements of applicable ASTM C636. (**Fig. 1**) For more information and installation instructions, please follow the recommendations of the suspended ceiling system manufacturer.

Depending on the ELEMENT tile model installed in the project, a standard 24" x 24" grid (**Fig. 2**) or 24" x 48" grid (**Fig. 3**) will be required.

Consult the corresponding construction plan for the finished ceiling height. Add the height of the ELEMENT tile's main blades and subtract 1/8" to determine the suspension system's elevation. Remember to account for the weight of the ELEMENT tile and any acoustic paneling (if applicable) to determine the total system weight. The main blade height and weight of the ELEMENT tiles are listed on the technical data sheet.

It is recommended to install the ELEMENT tiles one after the other throughout the room, using a laser level to ensure panel alignment. The tiles can be cut to fit any perimeter spacing. The tiles fit directly into the suspension system.



Figure 1. Installation of ELEMENT tiles in a suspension system.

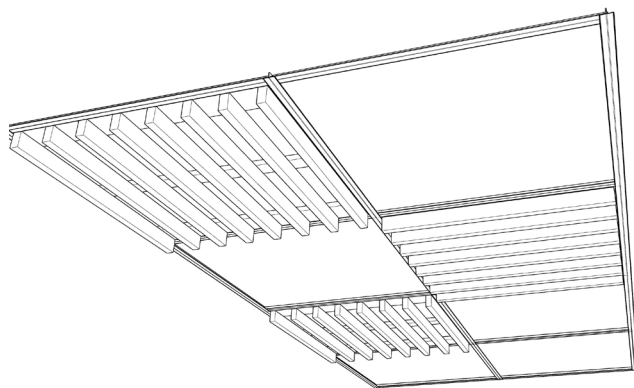


Figure 2. Installation of ELEMENT tiles, with a 24in x 24in grid.

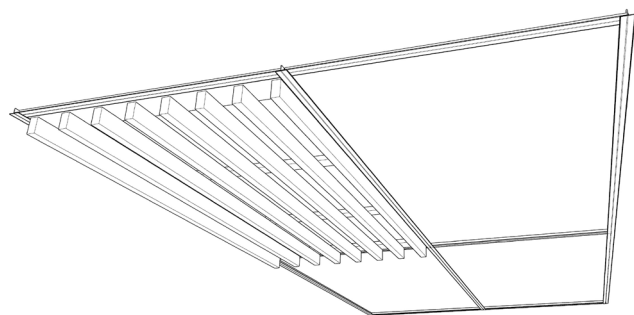


Figure 3. Installation of ELEMENT tiles, with a 24in x 48in grid.

4.1.2 Seismic installation

ELEMENT tiles 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 Integration of MEP equipment and terminals

For ceiling or wall installation of the ELEMENT tile, 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 tiles 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 tile. Cutouts made in the tile to accommodate accessories must not compromise the tile's structural integrity.

It is recommended to consult the construction plan before beginning. ELEMENT tiles 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 blade. 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.

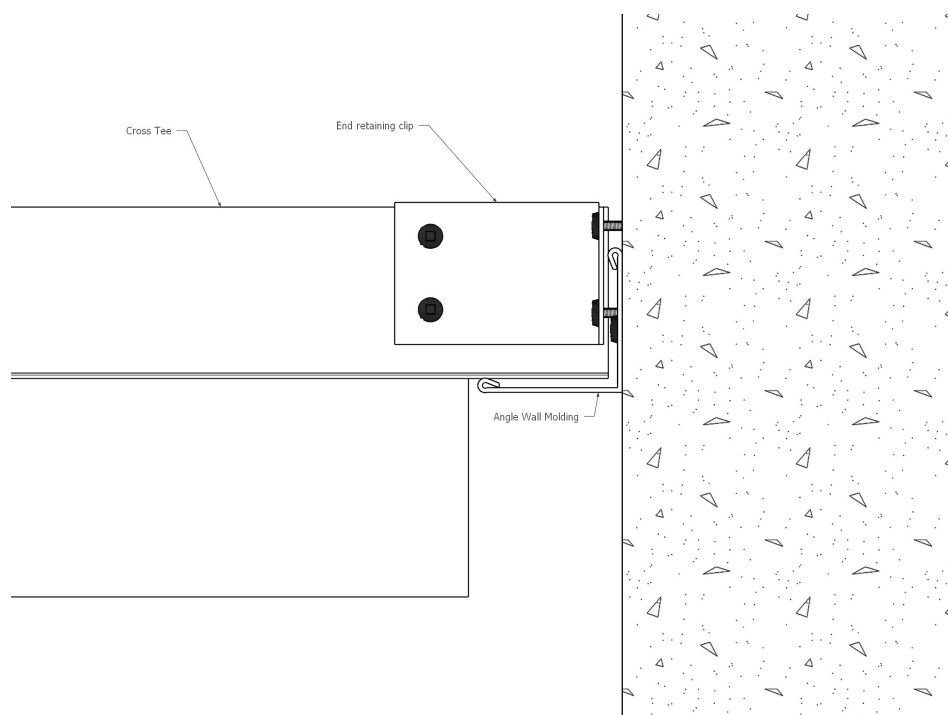


Figure 4. Installation of ELEMENT tiles around the perimeter of the walls.

4.2.1 Sprinklers

The ELEMENT tiles 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 tile to allow the sprinkler head to protrude.

4.2.2 Lighting

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

4.2.3 Recirculating air diffuser/device

ELEMENT tiles 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 blades. For wall installations, the air outlet must be integrated into the finished face of the tile. Failure to comply with these requirements may cause damage to the wood tiles and will void the warranty.

4.2.4 Access to ceiling plenum

The plenum can be accessed by removing the ELEMENT tile from the suspension system. Caution: moving the tile on top of the suspension system may damage the wood or the finish of the wood blades.

4.3 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.

- Tiles 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.

5. CUTTING

IMPORTANT : Porter en tout temps un équipement de protection individuelle (EPI) lors de la coupe du bois.

5.1 Instructions before cutting

Please plan any modifications to the tile. Use a flat surface to lay your tile down and keep it level. When cutting Woodzco tiles, for cutting tools (e.g., a plunge-cut track saw, table saw, etc.), it is recommended to use eighty (80) tooth finishing saw blades. Wood veneer tiles are prone to splintering. For optimal cutting, it is recommended to apply masking tape to the cut area on the wood tiles. Then, turn the tile 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 tiles in place and using woodworking tools to cut an access hole in the tiles. Please add additional T-brackets to the suspension to create attachment points.

ELEMENT tiles are available in the following lengths: 2 ft and 4 ft. Please consider the existing dimensions when installing your surface. Selecting the most appropriate tile size from the available options can resolve, reduce, or eliminate the need for on-site modifications in certain situations. Custom-sized tiles are also available when on-site modifications are not feasible or to expedite installation.

5.1.1 Tile design

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

- Solid Wood and Wood Veneer: These tiles consist of wood backers stapled to the main wood blades. The tiles are then placed in the suspension system. The positioning of the wood backers must be compatible with the dimensions of the chosen suspension system (24" x 24" or 24" x 48"). Additional wood backers can be provided separately for on-site modifications requiring extra support to reinforce the tile.

Ensure you have the necessary tools and accessories to perform any on-site modifications. The 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 blades to prevent damage.

It is recommended to secure the on-site installed wood backers with staples (see Table 3.2). Adjust the staple length according to the height of the main wood slats of the tile. If you are using screws to secure the on-site added wood backers 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 tile.

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

When cutting ELEMENT tiles, it is necessary to retain at least two (2) main wood blades per tile to ensure its structural integrity.

The main boards, cut on-site, can be finished with a finishing oil and/or a clear satin varnish (for solid wood tiles) or edge banding with Woodzco premium matte finishing oil and/or a clear satin varnish (for wood veneer tiles).

- Edge Banding Installation

It is recommended to use pre-glued edge banding applied with an iron or edgebander, ensuring even pressure on the veneer. Allow to cool, then trim the excess with a banding 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 tile.

5.2 Cut the tiles lengthwise

The wood backers serve to support the main wood blades and also to provide support for the metal suspension system. A wood backer must be added to every end cut of the tile. To do this, use a 3-inch wide wood backer and attach it to the end of the main wood blades, allowing a 7/16-inch overhang. It is important not to staple or screw the new wood backer to the ends of the main wood blades to prevent them from splitting. We recommend that mechanical fasteners be made at least 1-1/2 inches from the end of the main wood blades. (Fig. 5, Fig. 6 & Fig. 7).

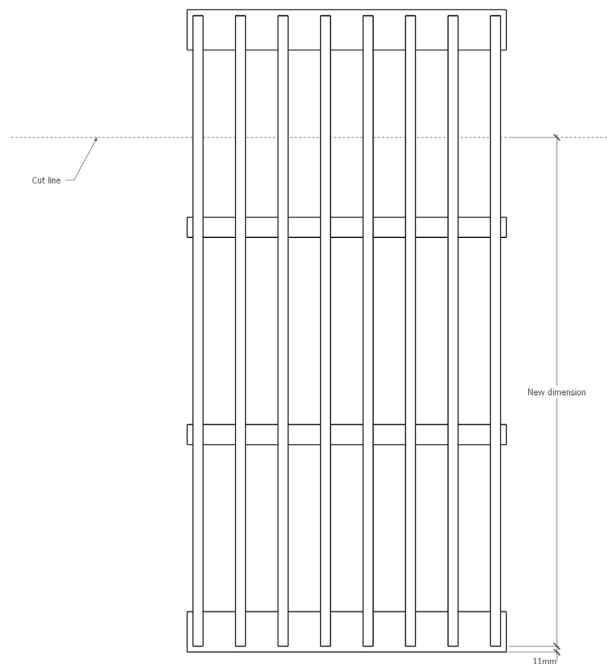


Figure 5. Cut perpendicular to the main wood blades on an ELEMENT tile.

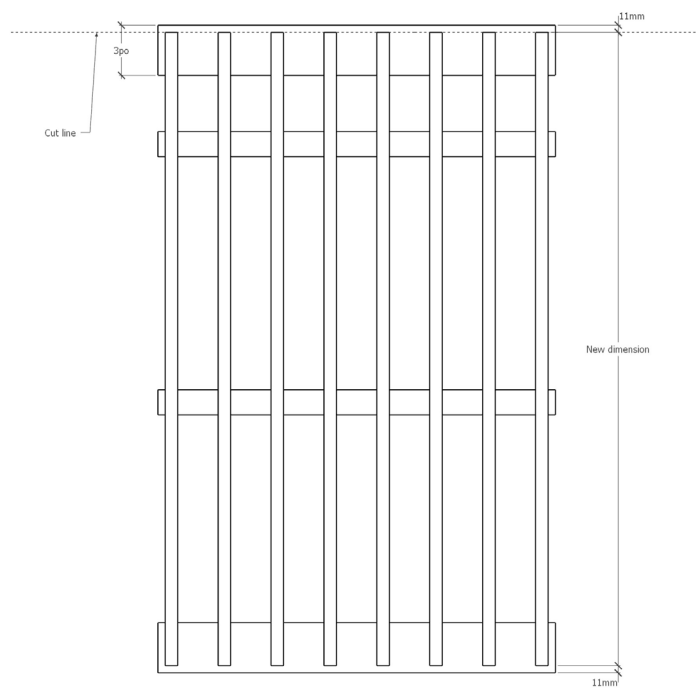


Figure 6. Positioning the new wood backer on an ELEMENT tile.

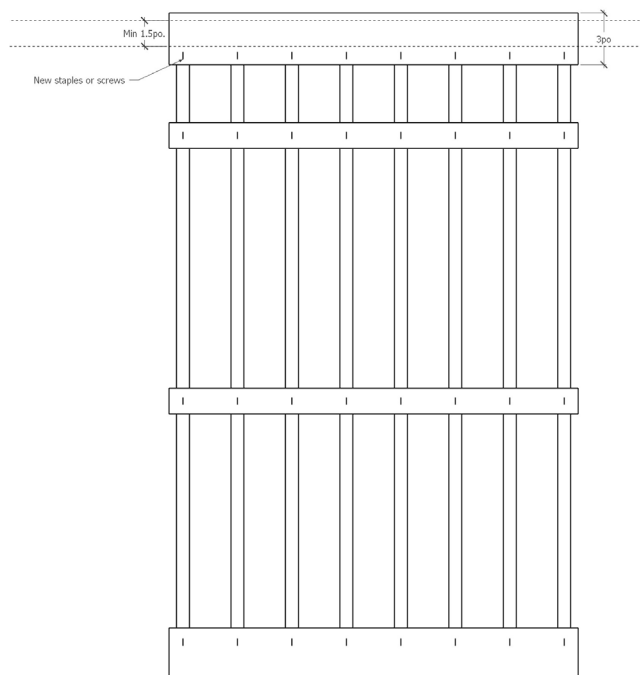


Figure 7. Fixing the new end wood backer onto an ELEMENT tile.

5.3 Cut the tiles widthwise

The ends of the support blades can be cut to adapt the installation to the geometry of the room. When the cut is parallel to the main blades, the support blades must be able to rest on the metal suspension system. To achieve this, the support blades must extend $7/16''$ beyond the dimensions of the insertion into the suspension system. (**Fig. 8 & Fig. 9**).

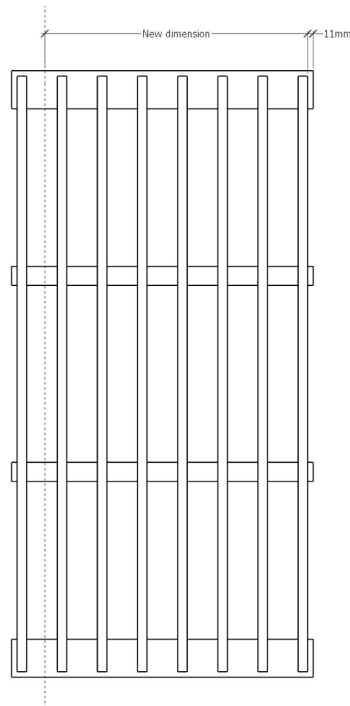


Figure 8. Parallel cut to the main wood blades on an ELEMENT tile.

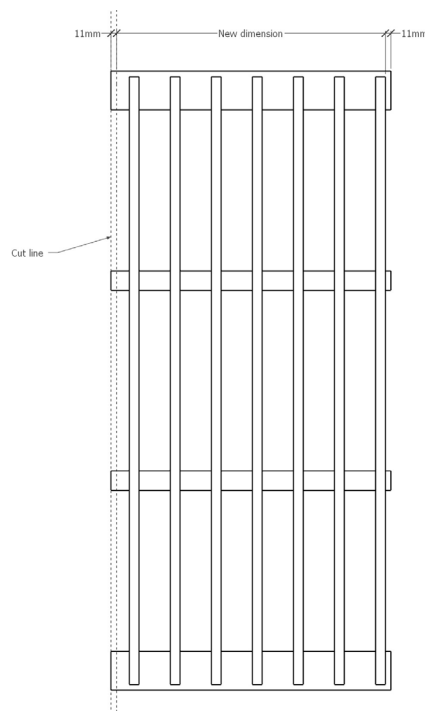


Figure 9. Cut to 11mm from the dimension of the insertion on an ELEMENT tile.

5.4 Cutting of tiles for insertion of MEP equipment and terminals

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

- 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.