

### 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](http://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 HARMONY FLEX 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       | Plunge-cut track saw                | Retractable utility knife |
| Laser level | 80-tooth finish saw blade (minimum) | Oscillating tool          |
| Table saw   | Stapler                             | Pneumatic brad nailer     |

**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)        | Cartridge construction adhesive     |
| Finishing trim                      | Contact adhesive                    |
| Correction pencil                   | Contact adhesive trowel             |
| Premium matte finishing oil         |                                     |

### 3.2 Staples and screws recommended

|                                                            |                                                     |
|------------------------------------------------------------|-----------------------------------------------------|
| Staples, 16 gauge - various lengths                        | To attach wood blades to the acoustic backing       |
| #8 particle screws - 1-3/4" length                         | To fix the panel to the substrate or furring strips |
| Double-thread particle screws #6 - 1-1/4" or 1-5/8" length | To fix the panel to the substrate                   |
| Finishing nails, 18 and 23 gauge                           | To fix the panel to the substrate or furring strips |
| #8 round head screws - 5/8" length                         | To attach wood blades to the acoustic backing       |

### 3.3 Installation plan

Before beginning the installation of HARMONY FLEX 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 breakage.

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

- HARMONY FLEX panels installed on a wall can be positioned in a straight line or staggered (**Fig. 1**). A wall installation always requires a 1/2" reveal between the ends of the panels. For wall installations, the visual line is more visually appealing with a 1/2" horizontal reveal. Take this into account during the design and installation phases.

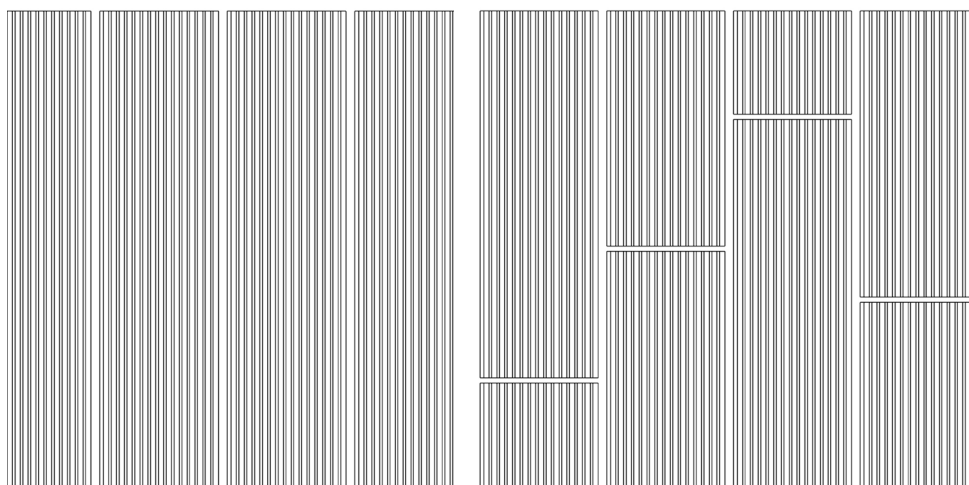


Figure 1. Installation of HARMONY FLEX panels (aligned or staggered).

## 4. INSTALLATION

NOTE: For indoor use only.

### 4.1 Ceiling installation procedure

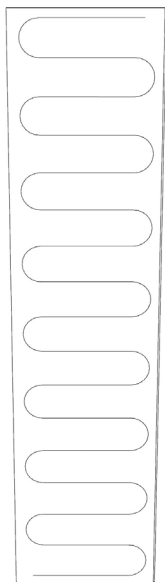
Before starting any ceiling installation with HARMONY FLEX panels, make sure to validate all seismic requirements that must be met for your project and follow the recommended installation instructions.

#### 4.1.1 Installation on a straight substrate

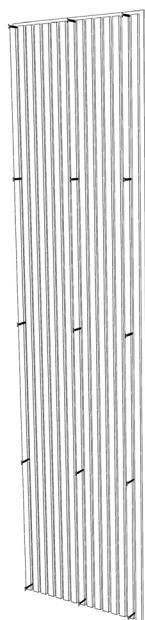
The panel orientation can be horizontal or vertical. Please refer to the construction plan to determine the panel orientation and layout. For wall mounting, we recommend chemical and mechanical fastening. Apply a cartridge-type construction adhesive behind the acoustic backing in a zigzag pattern (**Fig. 2**). For mechanical fastening, it is recommended to use #6 double-threaded drywall screws, 1-5/8" length, positioned between the wood blades. Fifteen (15) screws per panel are recommended (**Fig. 3**). Depending on the color of the acoustic backing selected, the screw color should match the backing color.

As a replacement for or in addition to screws, finishing nails can also be used. These are positioned between the wood planks or directly into the face of the wood planks. For a more aesthetically pleasing finish when using finishing nails on the face of the wood plank, it is recommended to use 23-gauge finishing nails.

For wall installation, the visual line will be more visually appealing with a 1/2-inch reveal between two end-to-end panels. See section 3.3.



**Figure 2.** Chemical fastening of the HARMONY FLEX panel with construction adhesive.



**Figure 3.** Mechanical fastening of the HARMONY FLEX panel with 15 screws.

- For wall installations at eye level, a complete substrate must be installed behind the panels. A rigid substrate (e.g., 3/4" plywood or gypsum board) must be installed over the entire surface to be covered behind the panels to ensure product stability.

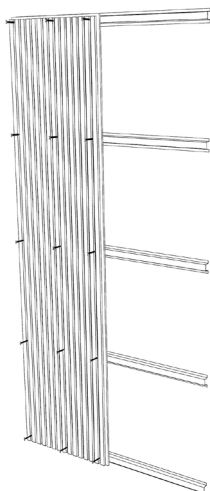
- For wall installations that are not at eye level, the panels can be installed directly onto furring strips.

Beforehand, and depending on the situation, ensure that the substrate or furring strips have been properly prepared or painted to receive the panels.

#### 4.1.1.1 Installation with Furring Strips

For a fire-rated installation, it is recommended to use 3/4" FR plywood furring strips or metal furring strips attached to the wall structure. The HARMONY FLEX panels must then be attached to the furring strips. The location and spacing between the furring strips will depend on the orientation and layout of the panels (**Fig. 4**).

If the specification requires an air gap, with or without insulation material, behind the HARMONY FLEX panel, the installation of Z-bars is recommended to create this air gap.



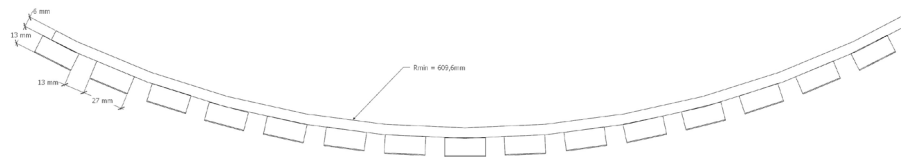
**Figure 4.** Wall mounting of a HARMONY FLEX panel with furring strips.

For mechanical fastening, it is recommended to use #6 double-threaded drywall screws, 1-5/8" long, which will be positioned between the wood strips. It is recommended to use fifteen (15) screws per panel (**Fig. 4**). Depending on the color of the acoustic backing selected, the screw color should match the backing color.

As an alternative or in addition to screws, finishing nails can also be used. These can be positioned between the wood slats or directly into the face of the wood slats. For a more aesthetically pleasing finish when using finishing nails on the face of the wood slat, it is recommended to use 23-gauge finishing nails.

#### 4.1.2 Installation on a Curved Substrate

A rigid substrate (e.g., 3/4" plywood or gypsum board) must be installed over the entire surface to be covered behind the panels to ensure product stability. With a maximum bend radius of 24" (600 mm), it is recommended to apply contact adhesive to the acoustic backing and to the portion of the substrate to be covered by the panel (**Fig. 5**). Refer to the contact adhesive manufacturer's information for application recommendations and for mechanical fastening; see section 4.1.1.



**Figure 5.** Maximum bend radius of 24 inches for the HARMONY FLEX panel.

#### 4.4 Integration of MEP equipment and terminals

For ceiling or wall installation of the HARMONY FLEX 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 HARMONY 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. HARMONY FLEX 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 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 HARMONY FLEX 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

HARMONY FLEX 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.

### 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 saw with a track, table saw, etc.), it is recommended to use 80-tooth finishing blades. Wood veneer 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 holes for sprinklers (or other accessories) will be made by simply stopping the wood panels in their positions and using woodworking tools to cut an access hole in the panels.

HARMONY FLEX panels are available in the following lengths: 8 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 possible or to expedite installation.

Ensure you have the necessary tools and accessories to make any on-site modifications. Removing a wood blade or staple can be done by lifting it with a suitable tool. Exercise caution and avoid prying on the visible faces of the main wood blades to prevent damage.

#### 5.2 Cut the panels lengthwise

If the measurement requires ripping a HARMONY FLEX panel lengthwise, a plunge-cut track saw is used to simultaneously cut the acoustic backing and the wood blade.

For main wood blades cut on-site, the cuts or veneers can be corrected with a matching finishing oil.

Therefore, it is recommended to fasten the wood blades installed on-site with staples (see Table 3.2) and adjust the staple length according to the height of the main wood blades of the panel. If screws are used to fasten the wood blades on-site, it is recommended to use #8 screws with a length of 3/4 in.

#### 5.3 Cut the panels widthwise

A retractable utility knife is used to cut the acoustic backing. If the measurement requires ripping a wood blade, a plunge-cut track saw is used, which will simultaneously cut the acoustic backing and the wood blades.

#### 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, 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](http://www.woodzco.com).

We recommend two methods for cleaning an HARMONY FLEX 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.