

WOODWORKS® Channeled

Assembly and Installation Instructions

1. GENERAL

1.1 Product Description

WoodWorks Channeled acoustical ceiling and wall planks are available 6" wide, 8' or 10' long and 3/4" thick. The two long sides interlock with a tongue and groove detail. The two short ends are cut square. Clips hold the panels to the wall or to a grid ceiling. The veneer finishes are Natural Variations™ Maple, Light Cherry and Dark Cherry. When installed as a wall, the panels can run horizontally or vertically. The same panels can be used as ceiling planks when installed on 15/16" grid.

1.2 Material and Surface Finish

All veneered planks are constructed of fire retardant medium density fiberboard with face-cut veneers and a semi-gloss coating. FSC-certified options are available (SW-C0C-003601).

1.3 Storage and Handling

All ceiling and wall components should be stored in a dry interior location and shall remain in the original packaging prior to installation to avoid damage. The materials shall be stored off the floor in a flat, level condition. Do not store in unconditioned spaces with humidity greater than 55% or lower than 25% or with temperatures above 86°F or lower than 50°F. Use proper care when handling to avoid damage or soiling.

CAUTION: Use proper care and caution when handling suspension systems due to the sharp edges on all exposed clips.

1.4 Site Conditions

Building areas that will receive ceiling or wall planks shall be free of construction dust and debris. Installation of the products shall be carried out where the temperature is between 50°F and 86°F and relative humidity levels maintained between 25% RH and 55% RH. These temperature and humidity conditions must be met throughout the lifetime of the ceiling or wall.

Real wood and wood composite products are natural building materials and they will react to changes in humidity. (Wood tends to contract with lower humidity

and expand with higher humidity.) With this in mind, you must place expansion joints so there are no runs of plank longer than 24 feet.

Wood could also have a tendency to warp, twist or bow, due to the natural stresses in the components and humidity changes. Be aware of these natural tendencies when evaluating the products.

It is also necessary for the area to be enclosed and for the HVAC systems to be functioning and in continuous operation. All wet work (plastering, concrete, etc.) must be complete and dry. These products cannot be used in exterior applications.

To ensure that the ceiling or wall planks have stabilized to the current building conditions, prior to their installation, the planks must be placed in an environmentally stable building location for a minimum of 72 hours.

1.5 Color

WoodWorks Channeled planks are made with real wood Natural Variations™ veneers. Natural variations in color and grain are characteristic of wood products. To maximize visual consistency, planks should be unpacked and examined collectively to determine the most desirable arrangement for installation. Consult the Hardwood Plywood and Veneer Association (HPVA) for additional information on veneers.

1.6 Ordering Considerations

Be sure to account for extra material that is normally needed for wood installations. Consider ordering at least 5% extra material for typical installations. Up to 10% more may be needed for odd size or diagonal installations. It is the customer's responsibility to plan each layout and order the correct amount of installation material needed, taking into account their design and the dimensions of the nominal 8' or 10' long by 6" wide plank modules.

2. FIRE PERFORMANCE

As with other architectural features located at the ceiling, WoodWorks Channeled may obstruct or skew the planned fire sprinkler water distribution pattern, or possibly delay or accelerate the activation of the sprinkler or fire detection systems by channeling heat from a fire either toward or away from the device. Designers and installers are advised to consult a fire protection engineer, NFPA 13, and their local codes for guidance where automatic fire detection and suppression systems are present.

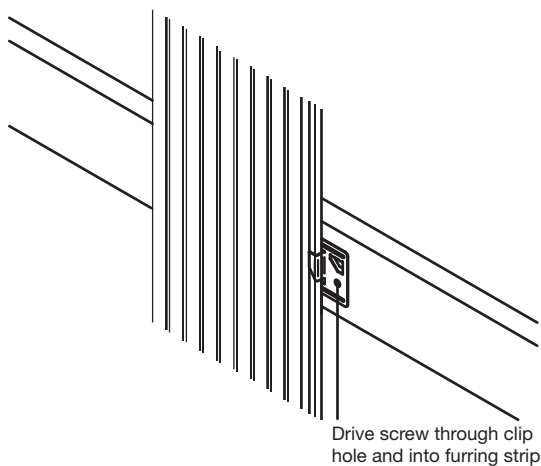
3. WALL INSTALLATION

3.1 Vertical Wall Panel Installation

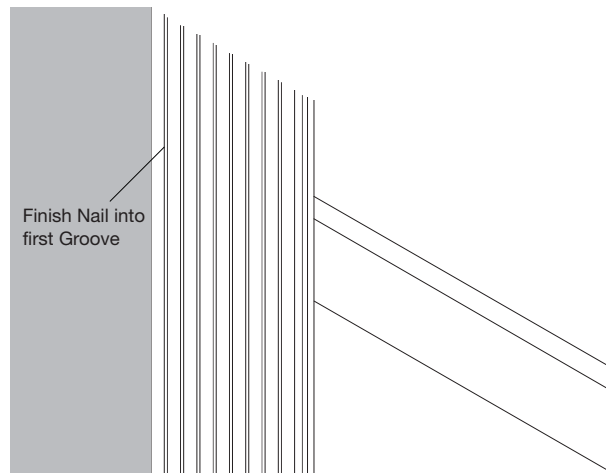
Install wood furring strips horizontally, securing them to wall studs or a solid wall with appropriate fasteners for the substrate. Spacing between furring should be not more than 18". The first furring strip at the bottom should be elevated from the floor by 3/4". The next furring strip should then be installed 18" above the first and should fall just above any electrical boxes. 18" spacing should then be maintained to the top of the installation.

The last furring strip at the top should be just below the existing ceiling. If a manufactured ceiling will be installed after the wall panels are in place, furring should be installed at the height of the new ceiling to facilitate attachment of wall molding.

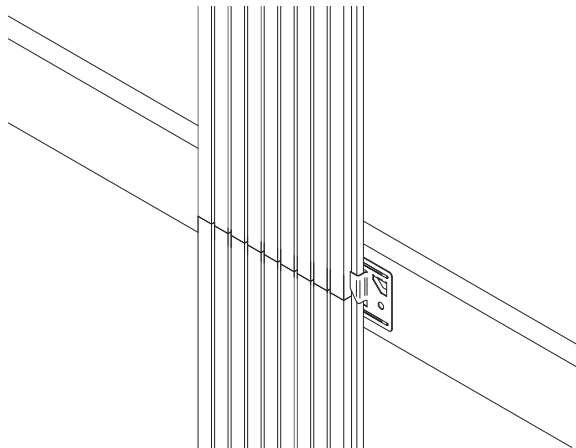
Strike a plumb line on the wall to guide the placement of the first wall panel. You will line up the groove detail of the first panel with the plumb line. Rip the panel to fit between the plumb line and an adjacent wall, if necessary. Secure the panel to the wall with clips at every furring strip.



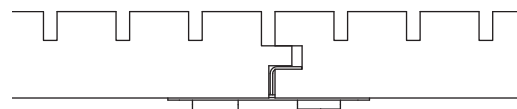
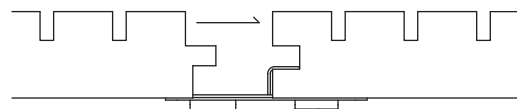
Shim up the bottom edge of each panel about 1/2" from the floor. The cut edge of the panel should be secured to the wall with finish nails into the furring strips. Enter the nails in the striations of the face of the panel to minimize the visual impact of the nails.



If the wall is higher than the plank length you must butt the short ends of the panels after you cut them to the desired length.

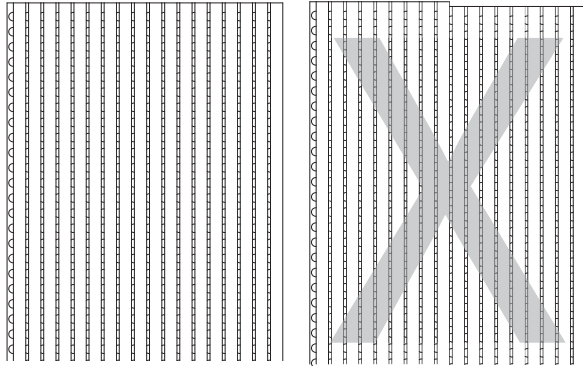


Always butt factory ends, not cut ends. It is not necessary to butt panel ends on a furring strip, but it may help alignment if you do. Use a colored marker to touch up the butted ends of panels before securing them to the wall. With the groove side of the first panel open to view, insert the tongue of the panel in the second column into the groove of the first column.



Secure the panel with clips. Repeat the procedure to the other side of the wall. Rip the last column of panels to fit the adjacent wall or termination point. Secure the last column of panels with finish nails as you did with the first column.

To preserve the linear visual in the front of the panel, the holes in the back of the panels must line up from side to side, panel to panel. You must make sure the first row of holes at the bottom of the panel you are installing lines up with the holes in the previous panel.



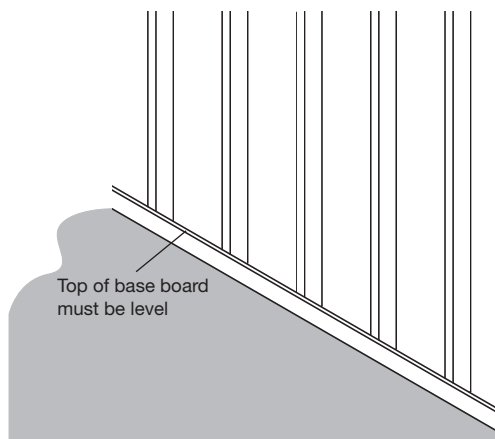
You may have to trim the bottom edge of each column to achieve this.

Installation methods that do not include the installation clip (for instance, when blind nailing, etc.) are not recommended by Armstrong and are the sole responsibility of the installation contractor.

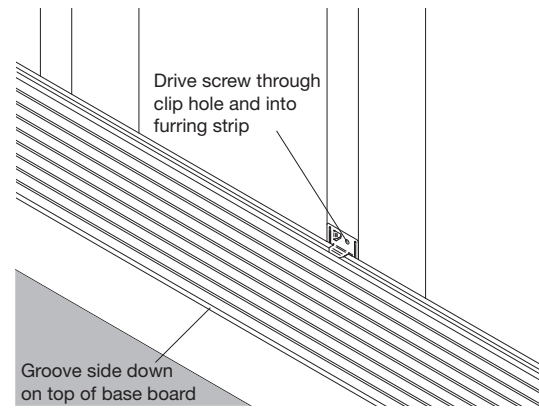
The ends and top of the installation can be trimmed with custom moldings by others. Armstrong offers two types of standard base molding in 4" (item 5855) and 6" (item 5856) heights as well as finish molding (item 5857).

3.2 Horizontal Wall Panel Installation

When wall panels are installed horizontally, the clips are screwed to wall studs using screws appropriate for the substrate. A 3/4" thick base (by others) must be installed to start the installation at the bottom. The top of this base must be level and straight because the long side of the first course of planks will rest on it. Be sure the baseboard you are using will cover this base and extend over the face of the first course of panels about 1/2".

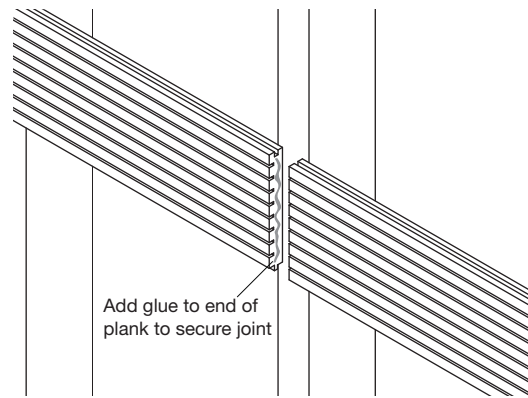


With the base in place, start the wall panel installation by sitting the long tongue edge of the first plank onto the base. Secure the panel to the wall using a clip with a screw into the wall stud.



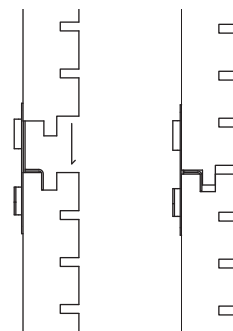
The short end of this plank should not be against the adjacent wall or termination point. If the horizontal run is 24 feet or less, allow 1/2" space at each end of the run. Adjust the space at each end appropriately for longer runs. For instance, a run of 72 feet long, allow 1-1/2" space at each end of the run.

With the first plank in place, apply a small amount of wood glue on the end of the second plank and butt the short end of the second plank to the end of the first plank. Do not use more wood glue than necessary so no glue squeezes out on the face of the planks.



Continue to the end of the first course of planks. Cut the last plank short of the end the appropriate distance as noted above.

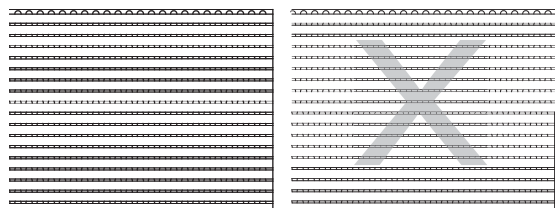
Start the next course of planks by fitting the tongue of the first plank in the second course into the groove of the first course.



Adjust the spacing at the starting end and install the second course like you installed the first.

For optimal visual, panel joints can be staggered.

To preserve the linear visual in the front of the panels, the holes in the back of the panels must line up from top to bottom, panel to panel. You must make sure the first row of holes at the end of the panel you are installing lines up with the holes in the panel under it.



You may have to trim the end of the first panel in each course to achieve this.

Continue installing panels to the top of the installation. You may have to rip the last course of panels to width. Fasten the last course of panels using finish nails into the striations in the panels.

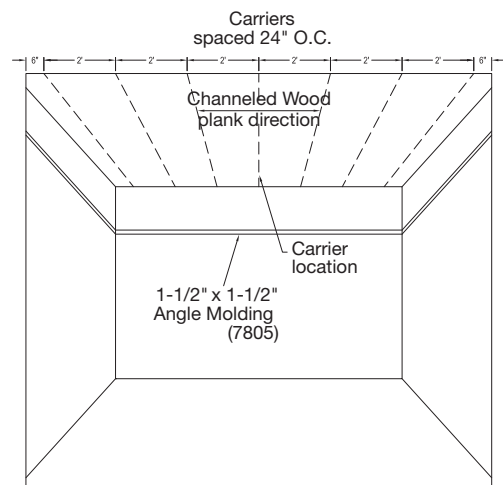
The ends and top of the installation can be trimmed with custom moldings by others. Armstrong offers two types of standard base molding in 4" (item 5855) and 6" (item 5856) heights as well as finish molding (item 5857).

4. CEILING INSTALLATION

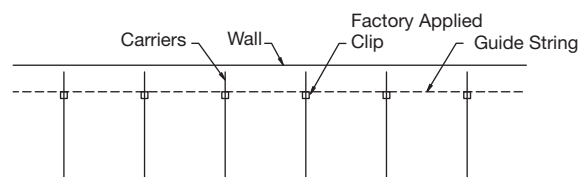
Ceiling installations are limited to runs (the direction of the length of the panel) of 24 feet or less. If the area is longer than that, you must interrupt the run with a break in the ceiling. For runs of 24 feet, you must allow 1/2" of clearance at each end of the run.

Install 1-1/2" (item 7805) wall molding on a level line around the room at the height of the finished ceiling. This will accommodate the 1/2" clearance requirement for the panels at the walls. If more clearance is required due to the size of the run, increase the size of the molding accordingly.

Install main beams on 2 foot centers in the opposite direction you want the panels to run. The first main should be no more than 1 foot from the side wall. Bend the hanger wires so the bottoms of the mains are 7/8" above the face of the molding. Connect the mains with 2' cross tees every 4 feet.

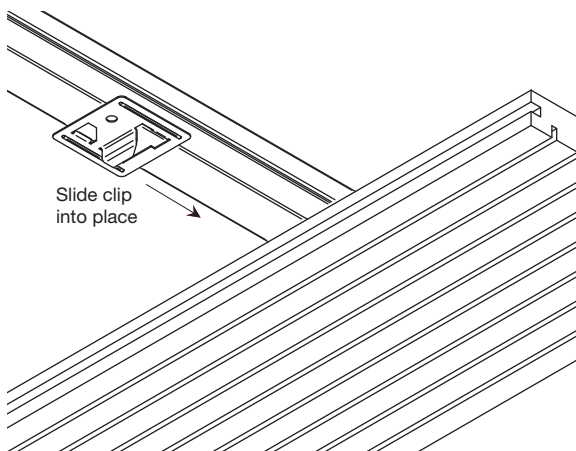
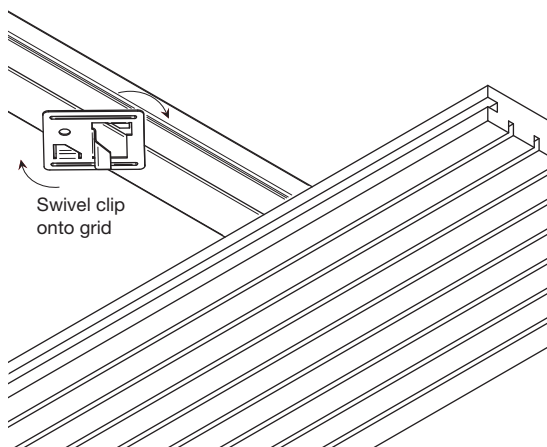


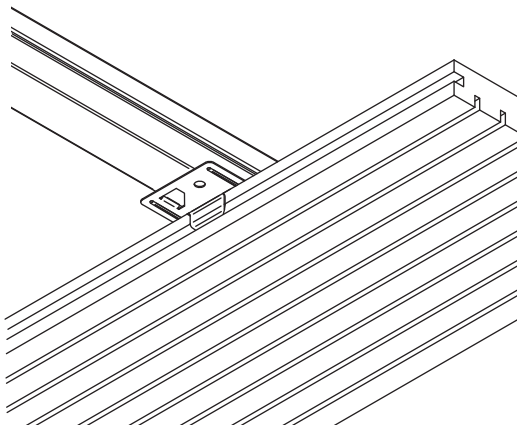
Stretch a string from one side wall to the other to align the first row of panels. The string should be no more than 5-7/8" from the end wall.



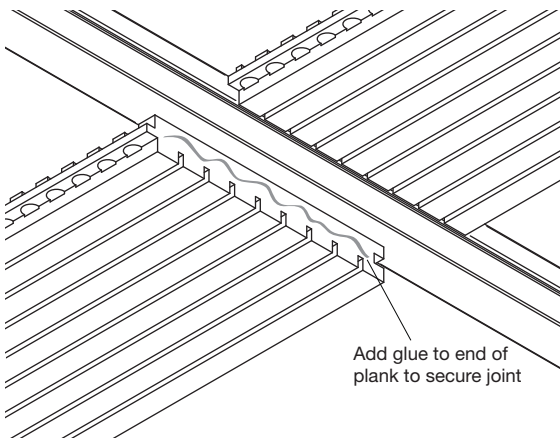
Measure from the end wall to the string several times and mark the first panel so you can cut it to width. After the width is adjusted, make another cut so the panel ends under a main beam. Lay the panel on the molding against the end wall and leave 1/2" clearance at the end of the panel against the adjacent side wall. The groove edge of the panel should be directly above the guide string.

Twist an installation clip onto the flange of the main beam and slide the clip into the grooved edge of the panel.



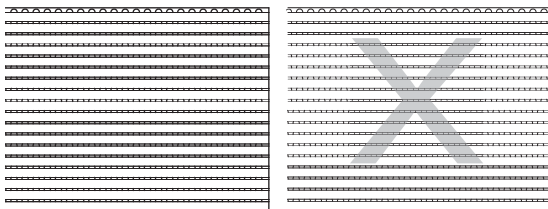


Twist clips onto each main and clip the panel to the grid. Measure and cut the second panel to width. Butt the end of the second panel against the end of the first with a small amount of wood glue at the butt joint.



Install the clip at the butt joint. Finish the first row by cutting the last panel 1/2" short of the other side wall. Insert a wall spring at both ends of each row.

After the first row of panels is installed, start the second row with full width panels. You may have to trim the end of the panels so the holes on the back of the panel line up with the holes in the first row.



When making the alignment cut in the first panel in each row, one option is to end the panel under a main beam. Once the first panel ends under a main beam, the rest of the panels in that row will also. If you do not end the panel under a main beam, place a clip over the butt joint to aid alignment.

Continue in this manner to the other end of the room. Cut the last row of panels 1" short of the end wall. Insert wall springs to hold the last row against the next to last row. You will have to recurve the wall springs to gain pressure on the last row.

5. CUTTING

When you cut a plank to length, you can use normal woodworking tools, (e.g., circular saws, saber saws, hole saws, etc.).

Penetrations for sprinklers (or other fixtures) can be accomplished by simple interruption of the wood planks at those locations or by using normal woodworking tools to cut access in the planks.

▲ CAUTION: WOOD DUST. Sawing, sanding and machining wood products can produce dust. Airborne wood dust can cause respiratory, eye and skin irritation. The International Agency for Research on Cancer (IARC) has classified wood dust as a nasal carcinogen in humans.

Precautionary measures: If power tools are used, they should be equipped with a dust collector. If high dust levels are encountered, use an appropriate NIOSH-designed dust mask. Avoid dust contact with eyes and skin.

First Aid measure in case of irritation: In case of irritation, flush eyes or skin with water for at least 15 minutes.

6. SEISMIC RESTRAINT

WoodWorks Channeled has been engineered for application in seismic areas. This system has been successfully tested in applications simulating seismic design categories D, E & F. For applications in seismic zones, review the following guidelines.

Check local code for the need for lateral bracing and/or compression posts/splay wires, perimeter wires and for additional installation requirements.

7. CLEANING RECOMMENDATIONS

WoodWorks Channeled planks can be cleaned with a soft, dry cloth.

MORE INFORMATION

For more information, or for an Armstrong representative, call 1 877 ARMSTRONG.

For complete technical information, installation information and many other technical services, call Architectural Specialties at 1 877 ARMSTRONG, and select options 1-1-4.

For the latest product selection and specification data, visit armstrong.com/woodworks.

