



CEILING SYSTEMS

[Between us, ideas become reality.]®

WOODWORKS™ Linear- Installation Instructions

1. GENERAL

1.1 Product Description

WoodWorks Linear ceilings consist of unperforated nominal 4" wide x 8' long or 6" wide by 8' long wood plank modules that are designed to install on Linear Carriers with factory-applied clips. Each type of linear plank module incorporates a 3/4" reveal between planks that is covered by black fleece applied to the back side of the planks at the top of the reveal. The linear wood planks are not accessible after installation.

1.2 Surface Finish

All Natural Variations™ wood planks are constructed of the same materials as 2' x 2' WoodWorks Tegular and Vector panels – namely, fire retardant particle board with face-cut veneers and a clear semi-gloss coating. The exposed edges along the length of the planks are edge banded with the same finish as the face.

Solid wood planks are also available as a custom option.

1.3 Storage and Handling

All ceiling 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.

1.4 Site Conditions

Building areas that will receive ceiling 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.

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 should consider separation joints at the ends of every three planks, or every 24 feet, if substantial swings in relative humidity are expected.

Wood could also have a tendency to warp, twist or bow, due to the natural stresses in the components and these 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 operations. All wet work (plastering, concrete, etc.) must be complete and dry. These products cannot be used in exterior applications.

To ensure that the ceiling 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 Linear planks are made with real wood Natural Variations™ veneers. Three standard veneer options are available as well as many other custom veneer options. Consult your Armstrong representative for more information on veneer selection. 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 HPVA for additional information on veneers.

1.6 Ordering Considerations

Be sure to account for extra material that is normally needed for linear wood installations. Typical installations should consider ordering at least 5% extra material. 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' long by 4" or 6" wide plank modules.

2. SUSPENSION SYSTEM

2.1 General

WoodWorks linear planks are supported by Linear Carriers installed no more than 2' on center. The Heavy Duty Linear Carriers are available with factory-applied linear clips spaced to accommodate either the nominal 4" or 6" wide plank modules.

2.2 Load Capacity

WoodWorks Linear planks weigh 0.8 lbs/lf for 4" module and 1.2 lbs/lf for 6" module. The Heavy Duty Linear Carriers supplied as part of the system are capable of carrying the weight of the planks in the manner prescribed.

3. FIRE PERFORMANCE

As with other architectural features located at the ceiling, WoodWorks Linear 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.

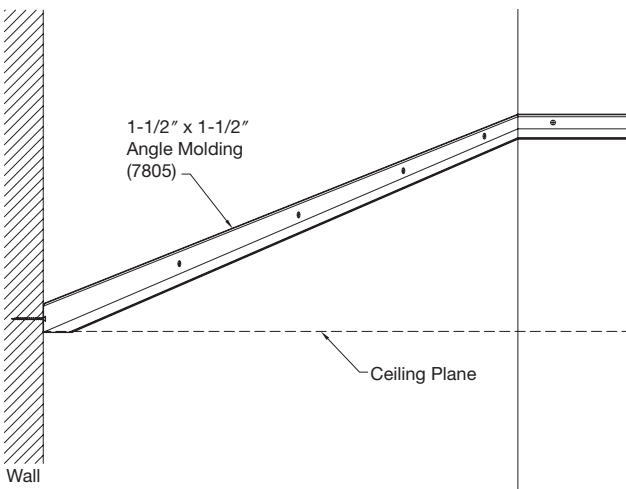
4. PREPARATION

Determine desired height of new ceiling. Strike a level line around the perimeter of the area to indicate the height of the top of the molding to be installed. Determine the desired direction of the linear wood ceiling.

5. INSTALLATION

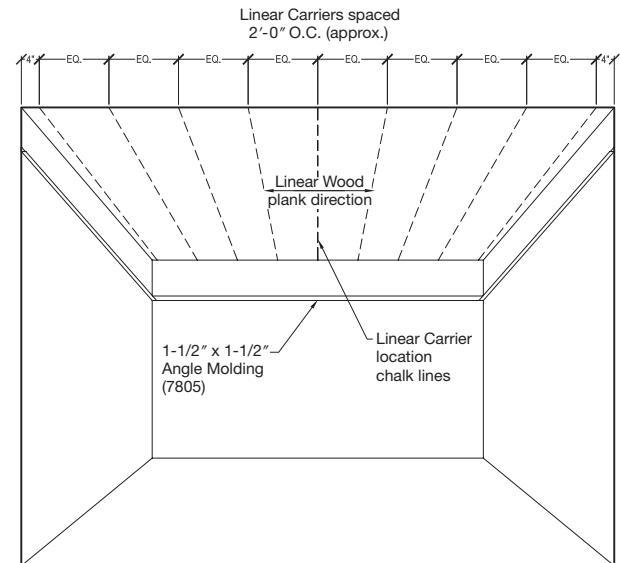
5.1

If the installation is to run from wall to wall, install wall molding on a level line around the perimeter of the area. Available molding includes 1-1/2" Angle Molding (item 7805) and 2" Shadow Molding (item 7823). Fasten the molding with screws appropriate for the wall construction (supplied by others).



5.2

Secure 12 gauge hanger wires to the structure above. The Linear Carriers must be supported at least every 4' along their length. The carriers will run the opposite direction of the linear wood planks. The first and last rows of hangers and carriers must be hung within 4" of the side walls (or within 4" of the ends of the wood planks if the installation is not wall-to-wall). The remaining rows of hangers and carriers must be no more than 2' on center from the first and last rows.



5.3

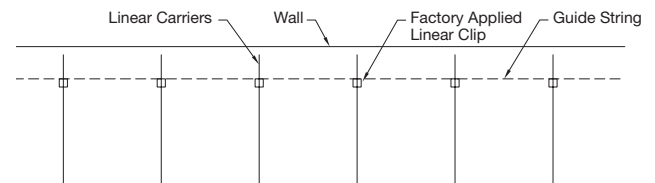
Bend the hanger wires so the bottoms of the carriers are 3/4" above the bottom of the molding.

5.4

Stretch a guide string from one side of the area to the other. Use this guide string to align the linear clips on the carriers from one carrier to the other across the area.

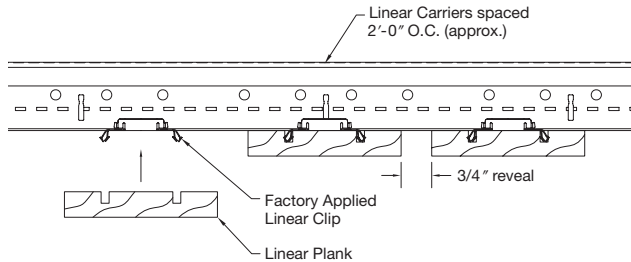
5.5

Hang the carriers on the hanger wires, aligning the clips with the guide string at the starting end. Splice carriers together to reach the other end of the installation.



5.6

With the starting end of a wood plank 3/4" from the side wall (temporary spacers can be used for this), and the black fleece backer toward you, push the wood plank onto the clips on the carriers allowing the clip to enter the grooves on the back of the plank. Make sure the clip is fully entered into the grooves. The optional Linear Assembly Tool is recommended for a tight and safe fit.

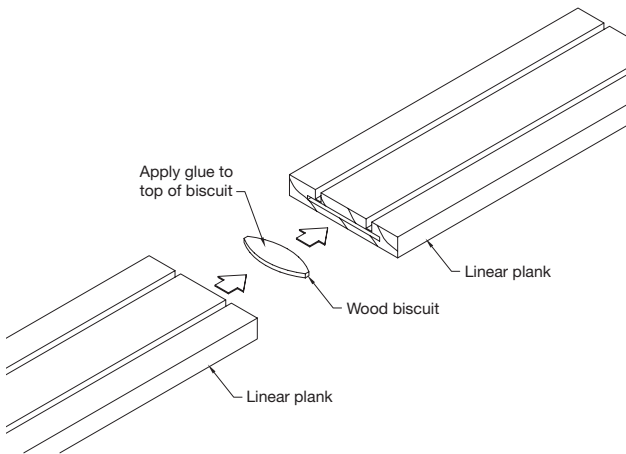


5.7

Work from one end of the strip to the other. If hand pressure is not enough to seat a clip into the kerfs fully, use the linear assembly tool to seat the clip. If the clip still does not fit securely, standard practice dictates using a 1/2" long self-tapping screw driven through the carrier into the back of the plank. Planks should be screwed at each end in this manner to draw them tight against the carrier.

5.8

Apply standard wood glue (supplied by others) to the top side of a biscuit and insert it into the groove in the end of the first plank. Apply glue only to the top side of the biscuit (toward the back of the wood plank).



5.9

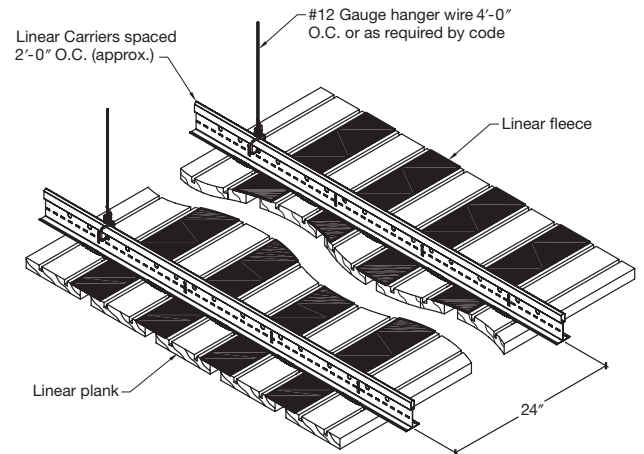
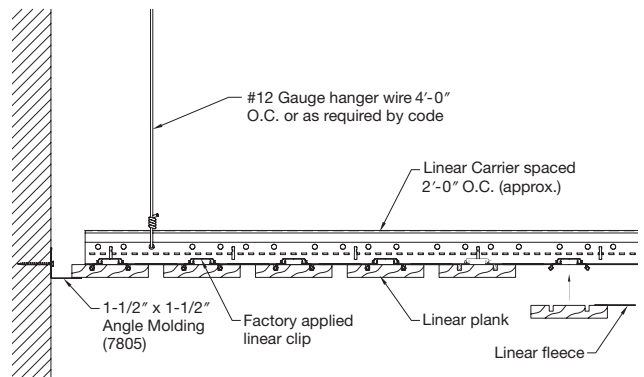
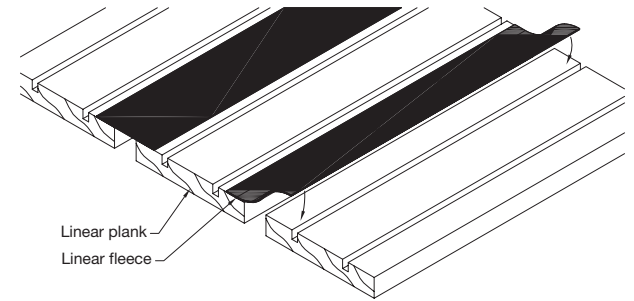
Slide the second wood plank onto the other side of the biscuit to continue the row of linear wood and push the wood plank up onto the clips on the carrier. Continue to the other side of the installation. After the two wood planks are installed together, you may also insert an additional linear splice into the kerfs across the butt joint to align the planks laterally.

5.10

Cut the last wood plank in the first row 3/4" short of the other side to complete the first row of planks in the progressive assembly.

5.11

As you start the second row of planks, make sure the black fleece from the first row lays over the back side of the adjacent planks in the second row.



5.12

Continue in this manner to the other end of the area. Note: Expansion joints are recommended after every three planks so that the longest run of wood planks is no more than 24 feet long.

6. PERIMETER TREATMENT OPTIONS

When the installation is not slated to run from wall to wall, cut the ends of the planks in place with a circular saw to better establish a straight edge (Caution: The fleece could jam the saw blade. Consider taping it down first to the wood.) Then stain or edge band the cut ends of the planks.

7. CUTTING

When you cut a plank to length, first tape the fleece to the wood and then cut the plank with normal woodworking tools of your choice.

Also, when you cut the planks, be sure to create a new biscuit slot that matches the standard plank slots.

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.

8. SEISMIC RESTRAINT

WoodWorks Linear has been engineered for application in seismic areas. This system meets the requirements for seismic design categories D, E & F.

9. CLEANING RECOMMENDATIONS

WoodWorks Linear 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, detail drawings, CAD design assistance, installation information and many other technical services, call TechLine™ services at 1 877 ARMSTRONG or FAX 1 800 572 TECH.

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