

Contractor Guidelines for Melamine Foam General Overview



Tolerances and Dimensions

Due to the nature of WILLTEC™ foam, temperature and humidity may cause dimensional changes of +/-1.5 percent by volume.

Relative to these environmental tolerances and changes, pinta acoustic's factory tolerances are negligible.

Convoluted Products

SONEX® One, Valueline, Classic, Mini and Junior panels:

- Pattern alignment to edge of panel: tolerances of +/-1" (25 mm)

As a result of pattern alignment to edge, pinta recommends spacing SONEX panels 1" (25 mm) apart.

Alignment tolerances also apply to other convoluted foam products outside of the SONEX product line.

WILLTEC™ Melamine Foam Specifications

pinta acoustic's WILLTEC is an open-celled melamine based foam developed to provide noise control over a wide audible spectrum range. WILLTEC foam may be uncoated or coated in pinta's water-based acoustic coating, which have been specifically formulated for acoustical applications.

WILLTEC products are LEED certified 4.0 and 4.1. For additional details, including details regarding specific product lines, please visit the products page of our website.

WILLTEC foam is suitable for use at temperatures up to 302°F (150°C) in long-term applications. It also passes class A flame spread and smoke density per ASTM E 84, and ULC S-102 (Canada). It has a fungal resistance rating of 0 (ASTM G21), and is rated UL 181 Section 11 regarding microbial growth. Density is 0.05-0.07 pounds per cubic foot.

For Installers

WILLTEC foam should always be handled carefully during installation. Wearing clean, white glove during installation is recommended. Melamine foam can be vacuumed or lightly brushed to clean off dust and debris whenever necessary. In general, heavy compression of foam should be avoided, particularly when localized. Avoid handling panels by their edges and corners as much as possible.

WILLTEC should be stored flat and allowed to acclimate to the site of installation for at least 72 hours. Once panels have been effectively attached to a surface with adhesive, shrinkage and expansion are minimal and non-problematic.

For technical assistance, do not hesitate to contact Pinta's engineering department during business hours Monday-Friday 8:00am-5:00pm Central Standard. For all other issues, including warranty issues, please contact the project's Pinta sales representative.

Contractor Guidelines for Melamine Foam Using acouSTIC™ Adhesives

Application Methods

For application of acouSTIC™ PA-02 to wall or ceiling panels from a pail, a 1/8" notched trowel is recommended. Adhesive should be applied to both the backside of the WILLTEC panel and the surface it is going to be applied to.



For application from a caulk tube of acouSTIC PA-02 and PA-04 adhesives, a continuous 1/4" (6mm) bead should be applied approximately 1.5" (38 mm) inset from the panel's perimeter. Then apply intermittent beads from corner to corner in an X pattern.

Once adhesive is applied, firmly, but carefully, press the panel to the surface with the palms of your hands.

PA-02 adhesive can be easily cleaned up with soap and water if needed.



acouSTIC Adhesives

pinta acoustic's acouSTIC PA-02 and PA-04 adhesives are formulated for use with melamine foam.

PA-04 is a polyurethane based adhesive and is the recommended adhesive for most circumstances, especially in high humidity environments with little temperature control. PA-04 is available in 10.6 ounce caulk tubes.

For installations on unfinished gypsum, concrete decks, or in controlled environments with low humidity, use acouSTIC PA-02 water based adhesive. In humid applications, PA-02 will take extra time to set up. In these applications, pinta recommends PA-04 or other adhesives. In LEED credit applications when water based adhesive is preferred, ventilate and dehumidify the area, cooling the surface where the panel is to be applied. PA-02 adhesive is available in both five-gallon pails and 10.5-ounce caulk tubes.

acouSTIC adhesives are not suitable for epoxy painted surfaces. Alternative glues containing epoxy are recommended.

PA-04 and PA-02 adhesive tubes contain enough adhesive for installations covering approximately 16 to 24 square feet (1.49 to 2.23 square meters). Each five-gallon pail of PA-02 contains the approximately 175 square feet (16.26 square meters).

PA-02 and PA-04 adhesives should always be stored in a dry, room temperature environment. In all applications using pinta's acouSTIC™ PA-04 or PA-02 adhesive, test with the intended substrate and foam to ensure a good bond is made. Before gluing, make sure that the intended surface is clean, dry and dust free. A mock up prior to installation in a stable environment to test adhesion is critical. The end user is solely responsible for proper glue up.

Contractor Guidelines for Melamine Foam Cutting and Trimming

Special Cuts

In addition to straight through cuts, curved cuts, holes, slots and grooves may be required in order to accurately fit panels to the site conditions.



A clean holes saw is recommended when holes are needed for features such as fire sprinklers. Carefully drill in reverse at the desired location. If possible, always practice on scrap material first.



Sometimes an improvised jig may be the best solution. Below, a simple wood strip has been used to assist to flush cut a rabbeted edge or lip on a panel that fits around an projecting HVAC feature.



Cutting Foam On Site

Due to environmental tolerances of WILLTEC™ melamine foam, installation often requires cutting the foam to its final dimensions at the site. Before doing so, always make sure to allow the foam to acclimate to the site as long as possible.

The four most important tools needed when cutting foam panels are a flat clean surface, a good straight edge, a sharp, clean, and stiff blade such as the Milwaukee job site knife shown below, and a tape measure. Standard and snap-off utility knives are great for detailed cuts, but are often too short or flimsy to make accurate material cutoffs.



When making cuts in foam, do not slice in multiple passes to avoid steps or jagged cuts along the cut edges. A smooth single stroke is ideal when fitting flush to adjacent panels or architectural features. Hold the blade as straight possible.

A clean and level surface such as cutting mat or plastic sheet is recommended for making through cuts. Corrugated carboard may cause blades to jump and leave a jagged and unsightly edge.

Cutting errors or other mistakes that occur during installation are beyond pinta acoustic's control. The end user is solely responsible for any damage caused during install.

Contractor Guidelines for Melamine Foam Hanging Baffles and Clouds

T-Slot and T-Grid

SONEX® Plano Baffles include a custom cut T-shaped slot in which a standard 15/16" (24 mm) ceiling grid may be inserted. This provides extra rigidity to the baffle and the means to attach cable, wire or similar to in order to hang it from the ceiling.

T-Slots may also be provided in clouds in order to reduce the number of hanging points or to provide additional structural support.



T-Grid should always be slid in from the side of the piece and never forced in through the top.

C-Channel

Baffles may also be flush mounted to a ceiling or structure using C-Channel. A generous 1/4" (6 mm) bead of acouSTIC™ adhesive should be ran along the inside of the channel before inserting foam. When viable, PA-04 is recommended.



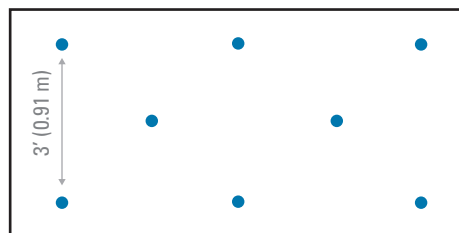
Corkscrew Hangers

The most common method of hanging pinta acoustic products is pinta's standard corkscrew fastener. Corkscrews come in several different types and sizes. The correct size, quantity and type will have been determined by a pinta engineering team member by the time the material has been delivered to the site.

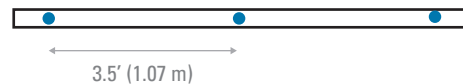
When installing corkscrews into WILLTEC foam, be careful not to apply too much force as the hanger nears full insertion. This may cause foam to tear out and possibly damage it beyond repair.

The diagrams below show placement of corkscrews in a standard 3" x 48" x 96" (76 mm X 1219 x 2438 mm) cloud and a 2" x 96" (51 x 2438 mm) baffle. Similar spacing can generally be followed with all sizes. Under most circumstances a good guideline would be no more than 3' (0.91 m) apart for clouds and no more than 3' (0.91 m) apart for clouds.

3" x 48" x 96" (76 x 1218 x 2438 mm) Cloud



2" x 96" (51 x 2438 mm) Baffle



Once corkscrews have been installed, the panels can be hung and leveled off as per the intended design. This should be done using either the provided cable hanger kits, 50 lb. test fishing line or equivalent, or other suitable methods.