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## I-Tech Panels for Mezzanine Deck Installation Recommendations

I-Tech Panels should be installed in accordance with accepted industry installation practices and recommendations from the American Plywood Association. Due to the specialized nature of the I-Tech Panel and application for mezzanine decking the following recommendations are offered.

For best results panels should be allowed to acclimate to the conditions in which they will be used. This will minimize any expansion or contraction of the panels once they are installed.

Fasteners – this will somewhat depend upon the exact panel being used and the structure into which the panel is being fastened. Consult the fastener supplier for their specific recommendations.

Good results of fastening ¾" panels onto metal roof decking have been achieved using a #8 shank size with coarse threads. A bugle shaped head is preferred. The fastener should be driven flush to the surface but should not penetrate the thickness of the poly overlay. Some type of clutch mechanism on the driver is recommended to ensure the fasteners are not over driven.

Fastener schedule – per APA recommendations. The  $\frac{3}{4}$ " panel has a 24" on center span rating. The rows of fasteners going the length of the panel should not exceed the span rating. A typical schedule would be for a row of fasteners starting on the short edge of the panel. Additional rows of fasteners located at 24", 48" 72" and the other short edge of the panel. The fasteners on both short edges should be 6" on center or 9 fasteners per short edge. The fasteners on the 24", 48" and 72" intermediate rows should be 12" on center or 5 fasteners per row. This would require a total of 33 fasteners per 4' x 8' panel. Adjustments are necessary for different thickness or sized panels. Fasteners should be located 3/8" from the panel's edge.

Expansion gaps – a 1/16'' expansion gap on all four-panel edges is normally sufficient for an interior mezzanine installation if the panels are allowed to acclimate. For installations where humidity and temperature variations are extreme or frequent, a 1/8'' expansion gap should be considered.