

## **FUSION (TORSION) -Installation Instructions**

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**ATTENTION: If you have additional Questions after reviewal of this manual please contact your local ASI representative or an ASI professional at our headquarters (952)448-5300**

ASI MANUFACTURES DECORATIVE ACOUSTICAL PANELS AND PRODUCTS THAT MUST BE HANDLED WITH CARE. PRODUCTS SHOULD ONLY BE INSTALLED BY EXPERIENCED INSTALLERS.

### **RECEIVING**

Prior to unloading a crate from the delivery truck, check it for any obvious shipping damage. If no evidence of damage is present on the crate, offload it onto a dry/controlled area and inspect it for dents, breakage, or any lesser-noticeable crate damage that may affect enclosed panels or trim. If damage has been identified on the crate itself, record it/photograph it, and open the crate to inspect for concealed damage. If damage from the crate was transferred onto the panels or trim, document/photograph the issues.

**The Bill of Lading (BOL) must be signed as “Damaged” if any type of claim is required.** Failure to do so will disqualify the project for any type of claim, and the provided product will be considered accepted as delivered. Furthermore, do not simply estimate the number of damaged goods; receiving parties are responsible for verifying the actual count of damaged product(s) and noting the information on the BOL after checking for exact quantities. After signing the BOL as “Damaged”, please accept the delivery and contact ASI immediately regarding the occurrence. Be prepared to provide a detailed description of the issue(s), an accurate count of what was affected, information regarding identifiers (panel tags or numbers, etc.), and photographic documentation. *Do not install damaged product.* Instead, get in touch with ASI as soon as possible so that we may address the issue and provide a working plan for potential solutions and replacements.

If any panel or trim pieces appear to have manufacturing defects, *do not install.* ASI’s only obligation is replacing materials proved to be defective and that are returned for credit within the terms and conditions of the sale. Damaged material must remain crated and in customer’s possession until a decision on the claim is reached. At that time, the carrier responsible for the delivery will pick up the damaged product at the delivery site. Do not dispose of damaged product unless otherwise expressly instructed to do so by an ASI representative. In the event this occurs, documented acknowledgment will be required from all parties involved.

If no damage is observed, verify that all materials ordered for the job have been received and are in the proper style(s) and correct quantities.

### **WARRANTY NOTICE**

The above recommended installation instructions are reliable for most installations, but are not meant to imply any warranty or guarantee for which ASI assumes responsibility. This warranty notice does not supersede ASI’s Standard 1 Year Warranty.

The installer must undertake testing and verification as to specific applications to determine suitability for them prior to installation. The manufacturer’s only obligation is to replace any material proven to be defective, rather than the installation or removal of the same, for a period of one year from the date of shipment. Faulty installation shall be corrected by the installing contractor. Beyond the purchase price of the materials supplied, the manufacturer assumes no liability for damages of any kind and the user accepts the product “as is” without warranties expressed or implied. The suitability of the product for an intended use shall be solely up to the user.

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All wood and wood composite products sold by ASI are warranted to be free of defects in workmanship for a period of one year from the date of shipment, based on the following conditions:

Products with obvious flaws must be reported to ASI within 30 days of shipment to the customer. Wood products must be acclimated to site conditions prior to installations per our acclimation instructions. After installation, the space must be maintained within a relative humidity range of 25%-55%. Temperature range should be maintained within a range of 55-80 degrees Fahrenheit. The area must be enclosed; doors and windows installed, and the HVAC systems must be functioning properly and in continuous operation. Any maintenance or cleaning of our products must be done in accordance with the instructions found on our website.

ASI warranties are subject to typical conditions. Unusual conditions include any type of accident or any form of abuse, adhesives or tape, standing water, excessive or moderate humidity, excessive or moderate temperatures, vibrations, or exposure to chemicals or fumes. All products should be maintained to avoid dirt or dust buildup, which could provide a medium for microbial growth. The growth of mold or mildew is not covered by this warranty nor is it the responsibility of ASI.

Our wood products will have natural variations, due to the characteristics of the wood or veneers. This warranty does not cover variations in texture, color, or grain. Appearances and colorings of wood products, stains and finishes can vary over time and as site conditions change and are therefore excluded from the warranty.

All products must be installed in accordance with written ASI installation instructions and/or approved shop drawings. Any lighting, ventilation, or other mounting parts must be suspended independently and supported securely by the substructure.

ASI shall have no responsibility for defective processing or alteration to the products by others after shipment. This warranty is limited to materials defects only. ASI reserves the right to repair or replace at our discretion.

The warranty does not cover removal or reinstallation or labor to do so of any kind.

### **ACCLIMATION AND STORAGE**

All wood products purchased from ASI must be acclimated to site conditions before installation. Failure to acclimate product will void the warranty. This is particularly important in Northern United States climates where low atmospheric humidity typically cause more wood movement than the higher humidity of Southern climates.

Once the installation site has been acclimatized to the temperature and humidity levels that will be the norm when occupied, all wood products should be moved into the site installation area for a minimum of 72 hours prior to any installation activity. Panels should be stored in a dry, fully-conditioned interior space on a flat surface in opened cartons. Relative humidity should be maintained between 25% and 55%. Temperatures should be maintained between 55 and 80 degrees Fahrenheit. To acclimate wood products, remove all packaging materials from the outside of the crate, leaving only the wood products. Exposure to conditions outside of this range will void the warranty. Panels should be handled with care and set on protective cushions while cutting. Product should be carefully stacked face to face and back to back.

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### **MINERAL STREAKING OR BLUE STAIN IN OAK**

Occasionally this may occur in oak panels by natural tannic acid in the wood. This does not show up in the manufacturing process, only after the veneer has come in contact with moisture. Should this occur, the stains can be removed, contact the varnish manufacturer for recommendations. Stained panels can also be used by cutting out streaked areas and installing as cut or end panels.

### **CLASS A VARNISH FIRE RETARDANT PANELS**

Panels that are chemically treated for flame resistance, Class 1, 0-25 flame spread, may be slightly discolored or have a whitish cast. This may occur if the panels are subject to high humidity conditions. The manufacturer assumes no liability if this condition occurs.

### **MOUNTING AND NRC**

Most conventional woodworking techniques are acceptable for working with ASI panels. Special mounting techniques are required to install perforated acoustical panels including perforated Fusion, Microperf and Audition planks. In all of these cases the space behind the panel, including the insulation or acoustically absorptive materials, work in conjunction with the panel to provide the noise reduction performance anticipated. The architect's details and/or shop drawings must be followed to achieve the look and NRC specified.

### **INSTALLATION**

Good wood working tools are needed to install wood panels. Care needs to be taken when cutting and fitting around windows, light switches and other fixtures. To achieve this, the following tools are recommended:

- Trim Nailer
- Table Saw
- Miter Saw
- Jig Saw
- Router
- Biscuit Jointer
- Hole Saw
- Iron
- Edge Band Trimmer
- Standard Details pamphlet

Blades and bits need to be sharpened, fine-tooth carbide. Jigsaw blades a medium tooth.

Panels should be cut face up when cutting on the table saw and miter box. When cutting with a circular saw or up cut jig saw blade, cut face down. Blade teeth should always cut into the face of the veneer. All panels need to be handled as fine furniture would be handled. Padded material should be used to avoid scratching or marring the face of the panels. Some panels may come predrilled for anchors, mounting, and safety clips. The holes have been engineered to accept the screws provided. Pilot holes should always be drilled. For example, to use a #8 screw a pilot hole of 3/32" diameter should be used. Do not drill pilot holes more than 5/8" deep. Care needs to be taken not to overtighten screws or anchors. Overtightening will lessen the holding power of the screw and may damage the face of the panel.

Penetrations in product (i.e. sprinklers, lighting, light switches, and outlets) should be cut with a jigsaw, router, or hole saw using sharp blades or bits (see sheets 11-15 of the standard details). Test cuts should

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be made on scrap panels to determine the proper tool speeds for cutting and routing. Field cuts should be sealed with finish material provided.

Care should be taken so as not to damage edges or corners. Refer to the tools recommended for installation of wood panels. All field cuts should be sealed with the finish materials provided.

ASI recommends painting the walls or ceilings black at the perimeter to help conceal the expansion joints at the edges of the wall or ceiling system.

### **CEILING INSTALLATION**

Wood naturally varies in color and grain characteristics. It is recommended that panels be presorted before installation to assure a uniform final appearance. Plan the plank layout using the centerline of the ceiling such that the cut planks or reveals will be equal in width on both sides. Lay out the T-grid so that T-grid mains run parallel to the panel length.

Fusion panels are designed to be installed on 15/16" heavy duty T-grid. T-grid mains and cross tees shall conform to heavy duty classification ASTM C635. Install main tees 24" O.C. and not more than 4" from each parallel wall with #12 pre-straightened galvanized steel wire not more than 4' O.C., wrapped tightly at least three full turns. Cross tees shall be installed 2' or 4' O.C. Always refer to the T-grid manufacturer's installation instructions. Hanger wire and cross tees are to be installed according to local codes and seismic requirements. If grid system is existing, use a variable placement of cross tees 4" from each parallel wall to form a 2' module. Install extra hanger wires at lights or as required to support the wood panel system (see sheets 11-15 of the standard details). Check with the grid system manufacturer for proper O.C. hanger spacing, if in doubt.

Once grid is laid out as specified, install the torsion spring saddles provided over 15/16" T-bar grid mains at the spring locations determined by the clips on the back of the panels (see sheet 1 of the standard details). Torsion spring clips are to be field installed into pre-drilled holes in the panel back with the loop side of the clip facing the outside of the panel and the flange side of the clip facing the center of the panel (see detail 3 on sheet 2 of the standard details). In some cases, custom clip locations may be necessary, in which case pilot holes must be drilled no more than 5/8" deep into the back of the panel. Torsion springs must be hooked through the torsion spring clips prior to clip install. Making a drilling template to use with a Vick's bit is advised.

Prior to panel install, 1/4" reveal spacers must be put in place to help keep the 1/4" mandatory reveals at the panel edges. To install 1/4" reveal spacers, simply snap the ears onto the bottom of the T-grid such that the 1/4" wide tabs stick downwards. Spacers should be located at panel perimeter on the T-grid. 1/4" wide tabs can be folded up if all four tabs are not needed (see detail 1 on sheet 2 of the standard details). Panels should have spacers at each corner.

Once the torsion springs and torsion spring clips (on the panel backs) are aligned with the torsion spring saddles (on the T-grid mains), and the 1/4" reveal spacers are in place (on the T-grid mains @ intended reveal locations); hold the clip-side of the panel up to the aligned torsion spring saddles and, squeezing the torsion spring, fit the torsion spring ends into the grooves on the torsion spring saddles. The panel should be hanging below the T-grid by one edge, but do not leave panel unsupported. Lift the opposite clip-side of the panel to the aligned torsion spring saddles on adjacent T-grid main, and fit torsion spring ends into grooves on the torsion spring saddles. Once all torsion springs are fit into torsion spring saddles (2' OC max), push panel up to T-grid, taking care not to smash or bend the tabs on the reveal spacers. If installed properly, torsion springs should engage and draw the panel tight to the T-grid. Adjustment may be necessary to fit the panels into the allotted locations defined by the 1/4" reveal spacers.

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### **SPECIAL HANDLING INSTRUCTIONS**

When handling product, care must be taken to not damage edges. Handle all edges with care. To avoid damage to the veneer, do not twist or bow the panels during installation.

### **ACOUSTICAL BACKER INSTALLATION**

The following tools are recommended:

- Insul-knife
- BAC Blade
- Utility knife
- Utility knife blades
- Sharp Sheers
- Drywall square

For ceiling installation, grid should be laid out in a 2x4 pattern. Acoustical backer is precut to fit within this pattern. At the perimeter, a sharp utility knife or sheers can be used. On large jobs an Insul- knife, or BAC cutting blade for a table saw will increase speed.