

## Specifying Screens

Division 6 (6400 Architectural Millwork)

Interlam has a standard lead time of 1 to 4 weeks for the majority of Screen patterns Carved MDF panel orders. Specific lead times are determined upon receipt of both the deposit and approved shop drawings. Lead times are based on a "first come first served" basis and are solely dependent upon our current work load. Interlam does not charge nor accept additional charges to rush orders. All orders will be manufactured as fast as possible in the order they are received.

The Screen pattern Carved MDF panel product offers the customer an extremely broad variety of patterns and materials. In order to translate a customer requirement into an accurate product specification, it is important to understand all of the product options and terms used to describe these options. Product specification terms and options are discussed below along with helpful illustrations.

It is important to first select a core material based on specific project needs, such as contribution towards "Leed" credits, FSC Certified fibers with COC, Class A fire rating, interior or exterior applications, formaldehyde emissions or moisture resistance. Not all core materials are available in all sizes and or patterns. Consult the specific pattern page to determine available thickness and sheet size for each individual core. Lead times will be increased if a non-standard sheet size or thickness is required for any given job.

### **Flame Spread Performance of MDF / IDF Wood Panels:**

Unless otherwise stated, Interlam's IDF or Carved MDF wood panels are not certified for a specific flame spread rating. Untreated [2] MDF has been tested for flame spread by a number of different manufacturers and the results met the Class III or C rating. The Department of Housing and Urban Development(HUD) in their Manufactured Home Construction and Safety Standards(Section 3280.203) accepts MDF 3/8 inch and thicker as having a flame spread rating of 76 to 200 for general use. The American Wood Council (AWC) of the American Forest and Paper Association (AF&PA) has published information in their "Design for Code Acceptance" series (DCA1) relating to Flame Spread Performance of Wood Products. The document can be found at [www.awc.org](http://www.awc.org). Table 1 in that document places MDF in the Class III or C rating. Likewise, Table 2 in that document places factory finished products (i.e. printed or with overlays) containing untreated particleboard and MDF substrates in the Class III or C flame spread rating. Smoke data specific to every product is currently not available; however other manufacturers have found typical values of 100-200 for smoke developed. The AF&PA document states that "a smoke-developed index was measured for some of the wood products listed in Tables 1 and 2". None of the products tested exceeded 450, a limiting value commonly used in building code regulations. Interlam's MDF treated with fire-retardant [3] (FR) additives are certified by Underwriters Laboratories to have a Class A or Class I flame spread rating and must be specifically ordered as an available option with an up charge.

[2] Without a fire-retardant additive

[3] Trade names: Premier® FR, VESTA FR MDF

### **Color Consistency of IDF, MDF, SDF, FR & Valchromat Products:**

Our Screen pattern Carved MDF panel products are manufactured from recycled/recovered forest products; therefore due to the color of the raw material, the raw unfinished Screen products will have variations in color and fibre. This condition is relevant when the designer wishes to clear coat the raw product. The end result will be a natural variation of color and fibre found naturally within the fibre used for the manufacturing of the board products. Interlam will not guarantee a color match of raw boards. Interlam currently utilizes three mills for the fabrication of raw products, each of which contain distinct variations. This variation is especially noticeable when a class A fire rated board is used. The mills have begun to die the center core a pale orange color to distinguish it from other board products. Due to previously stated variables, we do not offer stain as a stock finish.

### **Pattern Number or Name:**

Every Screen pattern has an identifying number or name such as "Organica Screen", "HSPVT Screen" or "POP006 Screen". The pattern choice is the second step after choosing a material for the core. A full page is dedicated to each pattern online at [www.interlam-design.com](http://www.interlam-design.com) complete with pattern characteristics and photos of the actual product. Do not place an order without requesting a sample and verifying the scale of the pattern. A hand has been included in the pattern shots for use as scale; however this alone cannot give a true representation of the pattern appearance. Due to

the fact that many screen patterns are also offered either as an Element or Art Diffusion pattern as well, please insure the designation of the "SCREEN" pattern when ordering or requesting a quotation.

**Panel Size:**

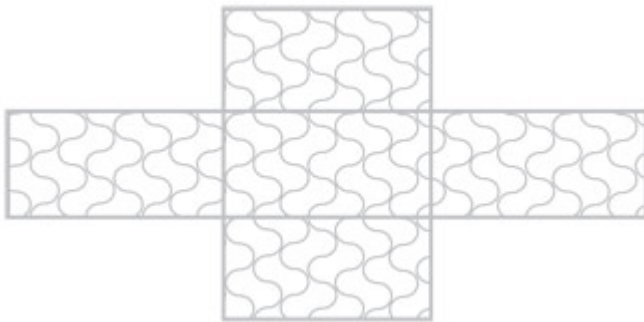
The standard panel size is 48" x 96" (4' x 8'). Custom panels may or may not be available, please contact Interlam for a specific need. Not all core materials are available in all sizes. Please contact Interlam to determine material availability for custom projects. For multiple panel cut-to-size projects, please forward a dimensioned layout via e-mail to [josh@interlam-design.com](mailto:josh@interlam-design.com) in any of the following formats: .DXF, .DWG, or PDF files. DWG files are preferred.

**Panel Thickness:**

Panel thicknesses can vary from 3/4" to 3".

**Pattern Repeat Type:**

Repeating Pattern Type - Repeating patterns allow the customer to fill a project area of any size using identical standard 4' X 8' panels. The standard panels fit together top-to-bottom and left-side to right- side creating a monolithic appearance. In the illustration below, 5 identical repeating panels are shown to match on all edges. The orientation of all panels must be maintained in the same direction to allow repeat. Repeating panels are only available in full 4' X 8' sheets.



**Installation Methods:**

The following information is a compilation of published information pertaining to the use and application of carved MDF/IDF products. This publication is intended to serve as an informative tool and a "sharing of information" rather than a strict directive. Each application will have unique circumstances and varied site conditions resulting in an assortment of available techniques and practices to achieve the same result. MDF/IDF products have a possible linear expansion of +/- .33%. Wood is a hygroscopic material, and under normal use conditions all wood products contain some moisture. Wood readily exchanges this molecular moisture with the water vapor in the surrounding atmosphere according to the existing relative humidity. In high humidity, wood picks up moisture and swells; in low humidity wood releases moisture and shrinks. As normal minor fluctuations in humidity occur, the resulting dimensional response in properly designed construction will be insignificant. To avoid problems, it is recommended that the relative humidity be maintained within the range of 25-55%. Uncontrolled extremes – below 20% or above 80% relative humidity-can likely cause problems. Immediately upon receipt of a your order, the panels should be placed in a climate-controlled environment and allowed three days to acclimate to the existing relative humidity (within the above stated ranges). It is very important to note that the panels must be stored flat to reduce the bowing and warping. When MDF/IDF panels are carved, the face of the panel is removed and creates an "unbalanced panel effect". The level of this effect varies depending upon pattern and board thickness

Our Carved MDF/IDF wood products are manufactured from 100% recycled/recovered wood chips dried to appropriate average moisture content of 4-6% and maintained at this condition up to time of shipping. Interlam cannot control the conditions the panels are exposed to during the storing and shipping process. Subsequent dimensional change in MDF/IDF is and always has been an inherent natural property of composite panels. These changes cannot be the responsibility of the manufacturer. Specifically:

- Responsibility for dimensional change problems in MDF resulting from improper design rests with the designer/architect/specifier.
- Responsibility for dimensional change problems in MDF resulting from improper relative humidity exposure during site storage and installation rests with the General Contractor.
- Responsibility for dimensional change problems in MDF resulting from humidity extremes after occupancy rests with engineering and maintenance.
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All Screens will be shipped unfinished. Sealing the back is imperative to reduce the possibility of excessive bowing and warping. All panels ordered as raw or unfinished, **MUST BE SEALED OR BACK PRIMED** prior to installation!! Failure to seal the back will allow moisture to be released and or absorbed from one side, resulting in excessive warping.

### **Seams and Installation:**

The pattern will continue perfectly from one to another, however depending upon the pattern and pattern direction relative to the seam location, the severity of the seam visibility will vary. Some patterns allow the seam to be hidden within the patterns, while others may require the seam to be placed against the direction of the pattern and be more noticeable. It is recommended that the designer contact Interlam Corp. prior to specifying a pattern or specific installation technique to achieve the highest level of design intent. During this contact, the specifier should provide the following information:

- Complete layout in AutoCAD of the specified area only, including plan, elevation and section
- A selection of patterns being considered with *desired pattern direction*
- Desired finish
- Installation technique being considered
- Site conditions
- Specific core requirements I.E. fire rating, LEED's, CARB etc....

Screens may be applied using a captured border, standoffs or a custom designed method. Screens may be manufactured with solid borders or fully continued patterns.

Consideration of all the aforementioned elements will allow Interlam to determine a suggestion for optimal placement of material seams and methods of installation.

The installation of "Screens" requires more than a basic knowledge of rough carpentry and should only be performed by a certified AWI millwork company. Special conditions such as miter corner conditions, radius applications, custom shapes etc... should be addressed during the initial design phase.

**FURTHER QUESTIONS SHOULD BE DIRECTED TO:** [josh@interlam-design.com](mailto:josh@interlam-design.com)