



11151 NW 22nd St. Pembroke Pines, FL 33026  
e-mail: iriusa@earthlink.net

## **Installation and Storage Guidelines**

Industrial Resources Ipe is an extremely dense hardwood with exceptional durability and performance characteristics. When installed properly, Ipe will provide a lifetime of beauty and service.

### **Handling and Storage**

Industrial Resources Ipe decking products are supplied as partially air-dried lumber and are intended for exterior use only. They may be used for interior applications but will require additional drying processes. The lumber should be stored out of direct sunlight and in a well-ventilated area. This will allow the wood to acclimate and stabilize to the relative humidity of the installation environment before installation, allowing minimal movement in service. The structure design must allow for adequate air-flow to keep the structure from accepting moisture buildup from the ground. This will eliminate the possibility of cupping problems caused by the bottom side of the deck boards accepting moisture while the top remains dry. Recommended installation spacing is a 1/16 gap between deck boards to aid in air circulation. When fully acclimated, movement of approximately 1/16 on 4 wide boards to 1/8 on 6 wide boards can be expected between seasons.

### **Cutting and Drilling**

Ipe is an extremely dense wood but mills to a very smooth finish using quality carbide tipped tools. Premium carbide tipped saw blades and high quality drills are recommended for smooth cuts. Pre-drill all holes as Ipe is a non-compressible material. Care should be given to insure the proper size drill bits and correct depth of holes to avoid fastener breakage and board splitting. Countersink all fasteners well to avoid exposure to possible personal injury hazards.

### **Fastening**

Stainless steel fasteners are highly recommended over all other materials. The wood is going to last a long time and so should the fasteners. Other materials such as galvanized or painted fasteners will have the potential for coating breakdown, stain the wood and eventually could structurally fail.

Screws are the strongest and most secure method of fastening decking. Pre-drilling with the use of screws, countersunk below the surface, guarantees a positive fastening system securing the material in all directions, including for uplift. Many screw manufacturers claim success with self-drilling screws but little success has been reported. Another method is to use #7 trim-head stainless steel screws with a 9/64 pilot hole, and to drive the screw with a slow speed drill below the surface of the wood.

Stainless steel nails may be used but do require pre-drilling. Probably the most attractive method of installation is to pre-drill with a light countersink and hand nail with a stainless steel ring-shank nail. This will allow the head to be set just below the surface, leaving a stainless steel peg effect. Other installations have successfully used pneumatically driven nails on 1x4 decking, shot at a 15-degree angle towards the center of the board creating a clip effect. If splitting occurs, the air pressure should be lowered and the nail head should be set manually. When finishing nails are used, a bead of high quality exterior adhesive similar to PL Premium, or PL 500 is recommended between the deck boards and the joists. Due to the alkaline content of Ipe, sample test bonds should be made, fully cured and tested before use on your project. To determine proper fastener length, multiply the wood thickness by 2.5.

continued next page



11151 NW 22nd St. Pembroke Pines, FL 33026  
 e-mail: iriusa@earthlink.net

### End Sealing

When cutting the ends of boards, it is necessary to seal the capillary ends with a clear latex end seal or aqueous wax end sealer immediately. This will stop the rapid escape of moisture from the end of the board and let the wood acclimatize from the surface, rather than from the end, reducing the possibility of end checking.

### Hidden Fastener Systems

Hidden fastener systems have become a popular method of installation because most of the fasteners are hidden from the deck surface. These fastener systems have been very successful in some areas of the country but problematic in others. Caution is advised when using them in climates with dramatic and prolonged moisture swings. The following are some of the most popular systems:

The EB-TY fastener (800-869-1375) is installed from the top-side of the deck into biscuit slots cut into the edge of the deck board.

The Deckmaster (800-869-1375) is a bracket fastened to the joist and screwed to the decking from the underside. The galvanized version uses Fas-Tap (800-847-4714) #8,1-1/4 self-drilling screws for net 1 decking, add a washer for use on net 3/4 decking. The stainless version uses Swaneze #10,1 stainless self drilling screws for net 3/4 decking and #10,1-1/4 on net 1 decking.

### Ipe Decking Span Values

Nominal Size	40 lbs/sf	50 lbs/sf	60 lbs/sf	100 lbs/sf
1x4	32	30	28	24
1x6	38	34	32	28
5/4 x 6	42	38	36	32
2 x 6	62	58	56	48

Consult your local building department for required load ratings.

### FINISHING

Deck installations are recommended to be sealed upon completion to assist in the acclimation process to reduce the potential of surface checking. The Industrial Deck Coating System will keep your deck looking like an exterior piece of furniture. Unlike other deck sealants that require constant upkeep, the Industrial Deck Coating System will provide protection for years without maintenance. The Industrial Deck Coating System is a four step process that is more labor intensive but well worth the effort to protect your premium deck.

If any molds or fungus might be present wash with 50/50 water and bleach mixture. Let stand 15minutes and rinse with water.

Step#1: Industrial Deck Coating Wood Surface Prep.: A spray on pressure wash off surface cleaner to remove oils and tannins from the wood.

Step#2: Industrial Deck Coating Multi-surface Conditioner: A 100% acrylic tie coat to bond to the wood.

Step#3: Industrial Deck Coating Pigmented UV Sealer: The ultimate coating for wood decks and docks.

Step#4: Industrial Deck Coating Clear Wood Protector: Top coat for additional protection and satin sheen.

If a natural weathering to a silver gray is desired, apply a penetrating oil based sealer during installation and let the wood take its natural course.