Technical Information

Tree Frog Veneer™ • 39 O'Neill Street • Easthampton, MA 01027
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Treefrog is a division of Chemetal, the metal laminate company.

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PRODUCT DESCRIPTION

Treefrog Veneer features composite wood technology, an innovative process that creates the look, feel and warmth of almost any wood species. This technology allows for the elimination of many of the naturally occurring imperfections in wood grain, ensuring a consistent and reliable selection of beautiful wood patterns. The material is only available in 96" x 48" or (2440 x 1220 mm) sheet size.

APPLICATION

Treefrog Veneer is recommended for interior use on vertical and light duty horizontal surfaces. Slight color and pattern variation may occur because Tree Frog veneer is manufactured with real wood. Exposure to direct or strong UV light (natural or artificial) can result in a change in the color over time. Either occurrence does not indicate a product defect or failure.

STORAGE & HANDLING

Treefrog Veneer should be stored horizontally, face to face, at a moderate ambient temperature, normally 72 F and relative humidity of approximately 60%. Treefrog Veneer must be completely protected from sunlight or incandescent light with a dark, non- transparent product. The entire sheets of the veneer must be covered. This will protect the sheet from any color change do to the exposure of UV light, natural or artificial. Care should be taken to avoid bending or cracking if the sheets are to be rolled. Rolling against the grain may cause the veneer to crack, and should be done with care. It is not recommended that the veneer be stored in rolls.

PROTECTIVE MASK

Treefrog Veneer is supplied with a clear protective mask. We recommend that you leave the mask on the surface while working the veneer. Color uniformity and quality checks should be carried out on the sheets before working with the veneer. The protective film is clear enough that you may inspect the material without removing the mask. When in doubt peel the mask in the area, or up to the area that is suspect.

ADHESIVES

Treefrog Veneer may be laminated with many of the conventional adhesives normally used with plastic laminates. A good vinyl adhesive is recommended for a stronger bond. A cold or hot press is recommended when working with the vinyl type adhesives. This type of adhesive may reduce dimensional movements that can be caused by changes in temperature or humidity. Always check with your adhesive supplier to make sure that the adhesive you select is suitable for your application. The adhesive manufacturer's instructions must be followed as to the use of the adhesive and the preparation of the substrate. It is recommended that you check your adhesive system with a Treefrog sample. Solvent based contact cements and water based contact cements may also be used for bonding Treefrog Veneer.

LAMINATION

Proper substrates must be used and careful bonding procedures must be observed. Treefrog Veneer may be laminated to most substrates if the proper adhesive is used. Typical substrates would be plywood MDF board, particleboard, sheet rock, and rigid plastics. The more resistant the substrates are to dimensional change (shrinking and expansion from changes in humidity and temperature) the better the result. The substrate must be smooth and free of grease, wax, dust, oil, silicones, and other foreign matter. All raised areas must be sanded or filled so that the surface is smooth. The substrate must be uniform in thickness. Finish all edges to help prevent moisture absorption. Use adequate drying time to ensure that the solvents (or water if you use a water based adhesive) can evaporate. Also use adequate ventilation as a health aid.

Allow Treefrog Veneer sheets and the substrate to acclimate to the same ambient conditions (temperature and humidity) for a minimum of 48 hours prior to lamination. The laminated parts should be stored for at least 48 hours before exposure to extreme temperature and humidity changes. We would also recommend the use of a balancing sheet. This will certainly help in the prevention of the warping or cupping of the sheet.

CUTTING AND MACHINING

Panel saws, table saws may be used to cut Treefrog Veneer before or after lamination. Routers for trimming edges after bonding must have a smooth, clean base plate, so that the surface of the veneer will not be scratched. Use carbide-tipped bits with ball bearing guide rolls. Keep the bits sharp. Drilling into Tree Frog veneer may be done with standard wood bits or with router bits. Use a flat, smooth or fine file for a final edge finishing. You may consider applying a light or dark stain to the edge to hide the phenolic line.

POST FORMING

Treefrog Veneer can be post-formed utilizing similar equipment and techniques that are used with the plastic laminate. The post forming temperature is 145 degrees centigrade and 293 degrees Fahrenheit. It is also important to know that when post forming with the gloss finish it is acceptable to leave the protective mask on the product. When post-forming with the wax finish it is important to remove the protective mask prior to form. If the protective mask is not removed prior to the post-forming the mask will burn and adhere to the veneer.

CLEANING & MAINTENANCE

Treefrog Veneer may be cleaned with a soft cloth using mild soap and water or non-abrasive glass and wood cleaning products. Do not use abrasive cleaners, pads, or harsh solvents. Do not allow any solvent to come in contact with the surface. Accidental spills, splatters or over sprays should be wiped off immediately with a soft cloth and mild soap. If done immediately the solvents should not have an effect on the veneer. Alcohol, ammonia and other light solvents may be used for tougher stains.

LIMITED WARRANTY

The technical information contained in these sheets and all related documents released by Treefrog are believed to be reliable. Treefrog disclaims the creation of any expressed or implied warranty including the warranties of merchantability and fitness for a particular purpose with respect to Treefrog products. In all cases, users must determine the suitability of such products for a particular use and shall assume the risk and liability whatsoever in connection herewith. Since we exercise no control in handling, storage, application and use of these products or the products of others with which they are used in combination, no warranty, express or implied, is made as to the results and effect of their use. The user must establish his or her procedures and verify the finish of any product to be the one as ordered before use. We recommend testing all procedures before beginning production or installation. Buyers exclusive remedy for a loss or claim resulting from the use of Treefrog products shall be by replacement of product proven to be defective. In no event shall the Seller be liable for and special, incidental, consequential or exemplary damages.

TECHNICAL SERVICES

Additional technical assistance may be obtained through your local Treefrog distributor or by contacting Treefrog at 1-800-830-5448.

RESISTANCE TO STAINING

Principle: Test specimens are left in contact with a series of staining agents, which are likely to be encountered in everyday use. The time and conditions of contact are specified for each staining agent. At the end of the specified period, the specimens are washed and examined for residual surface marks.

Procedure: Apply a small quantity of 2 to 3 drops of the staining agents to the specimen. The staining agents and the specimen shall be at ambient temperature. Place a glass cover over the staining agent for a specified period of time usually 16 to 24 hours. Keep specimen flat during testing. After the specified contact time has elapsed, remove the staining agents with a suitable solvent, such as alcohol, and then wash the specimen with water.

Expression of Result: The effect on the surface of the specimen shall be expressed in accordance with the following rating scale for each of the staining agents.

Rating 5: No visible change.

Rating 4: Slight change of gloss and or color only visible at certain viewing angles.

Rating 3: Marked change of gloss and or color.

Rating 2: Marked change of gloss, color and some blistering

Rating 1: Surface distortion and or heavy blistering or peeling.

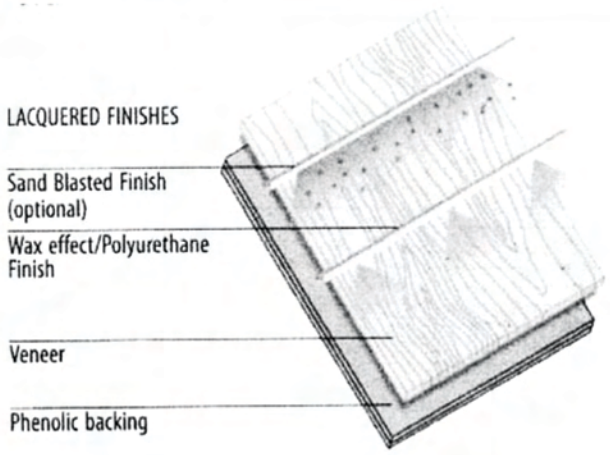
Group 1: Testing for 24 hours; Acetone, Trichloroethane, Toothpaste, Hand Cream, Alcoholic beverages, Natural fruit and vegetable juices, Lemonade, and fruit drinks, Animal and vegetable fats and oils, Water, Yeast suspension in water, Salt, Mustard, Stain and paint remover based on organic solvents, Citric acid 10 % solution.

Group 2: Testing for 16 hours; Coffee, Black Tea, Milk, Cola beverages, Wine vinegar, Hydrogen peroxide, Ammonia 10% concentrate, Nail varnish, Nail varnish remover, Lipstick, Water colors, Laundry marking inks, Ball point inks.

Group 3: Testing for 10 minutes; Sodium hydroxide 25% solution, Hydrogen peroxide 30% solution, Concentrated vinegar 30% acetic acid, Bleaching agents, Acid based metal cleaners, Shoe polish, Hair color and bleaching agents, Iodine, Boric Acid, Lacquers and adhesives except for fast curing materials.

Group 4: Testing for 20 minutes; Citric acid 10% solution, Acetic acid 5% solution.

Please note: Acids and alkalizes in concentrations stronger than those shown in group 3, which can be contained in commercial cleaning agents, can cause surface damage or marking even with very short contact time. Any spillage of such materials shall be washed off immediately.

TEST RESULTS

	Wax effect	Polyurethane finish
Nominal thickness	.039"	.039"
Grade	Postformable	Postformable
Bending radius (average)		
Longitudinal	.75"	.75"
Transversal	.75"	.75"
Postforming temperature	293°F	293°F
Weight per sq ft	.25 lbs	.25 lbs
Dimensional variations		
Longitudinal	.384" along grain	.384" along grain
Transversal	.528" along grain	.528" along grain
Abrasion resistance (average values) EN 438-2.6	> 80 Taber turns	> 150 Taber turns
Stain resistance		
Group 1	No effect	Halo caused by acetone + trichloroethylene
Group 2, 3, 4	No effect	No effect
Lightfastness (Xenotest) UNI 9427	> 3 Grey scale	> 3 Grey scale