

## **RPG DIFFRACTAL® – WOOD FACT SHEET**

**26-MAR-09**

The DiffRACTAL® is both a composite wood and hardwood acoustical product. As such contains hydroscopic materials and all wood products contain some moisture. Wood readily exchanges its internal moisture with water vapor in the surrounding atmosphere according to existing relative humidity. In high humidity, wood picks up moisture and swells. In low humidity it gives up moisture and shrinks. These uncontrolled extremes may affect the structural integrity of the panels, cause visual problems, expansion, contraction and warping. To avoid the risk of costly replacement and/or canceling the warranty, it is the buyer's responsibility to:

### **Application Method**

- I. **Room Conditions:** Ensure that the area in which the DiffRACTAL® is being stored and installed is a controlled environment, with relative humidity maintained consistently between 30% and 55%, and a temperature between 60 and 80 degrees F. The DiffRACTAL® shall be stored on dry wooden pallets. Please pay special attention to moisture in the floor in new building construction.
- II. **Allow the DiffRACTAL® to Acclimate:** Ensure that the DiffRACTAL® has had a minimum of 72 hours to acclimate to the existing controlled conditions in the area where the panels are being stored and installed.
- III. **Installation:** The DiffRACTAL® shall be installed on a dry substrate and protected from moisture sources, such as CMU, which can give off water after installation and cause warping problems. Refer to RPG's mounting details for more information.
- IV. **After Installation:** Ensure that the area in which the panels are installed continues to be maintained environmentally as described in 1 above.
- V. **Excessive Changes:** Ensure that the area in which the DiffRACTAL® is installed is not exposed to warm or cold forced air, excessive moisture or rapidly changing temperatures.

### **Color**

Differences in color and grain are inherent to all natural wood products. There may be variations in color, texture, grain pattern and finish between a sample and the actual finished product. It should also be expected that color variances will exist between the hardwood and composite wood components.

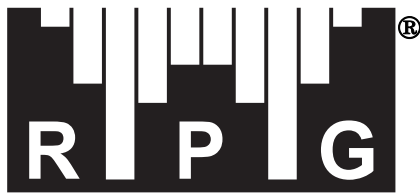
The natural process of color change in real wood is part of the unique character and beauty of real wood products. Wood naturally ages over a period of time, many species such as Cherry and Mahogany change color (darken) as a result of exposure to light sources.

RPG keeps its submittal sample stock in a room separate from its production facility which is exposed to indirect natural sunlight. Samples are stored on an open shelf for some amount of time and are in most cases more aged than any actual finished products that are shipped out to projects. A sample will most often not be from the same tree or even wood order as the finished product.

See Wood Color Chart on page 2.

Diffusor systems to enhance the acoustics of critical listening and performing environments

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## WOOD COLOR CHART



ANIGRE



CHERRY



MAHOGANY



UNIFORM WHITE BIRCH



WHITE MAPLE



WHITE OAK

*These examples are being provided for general differentiation of wood species and should not be used as an absolute measure of how finished products will appear. Natural wood varies in tone and grain.*

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