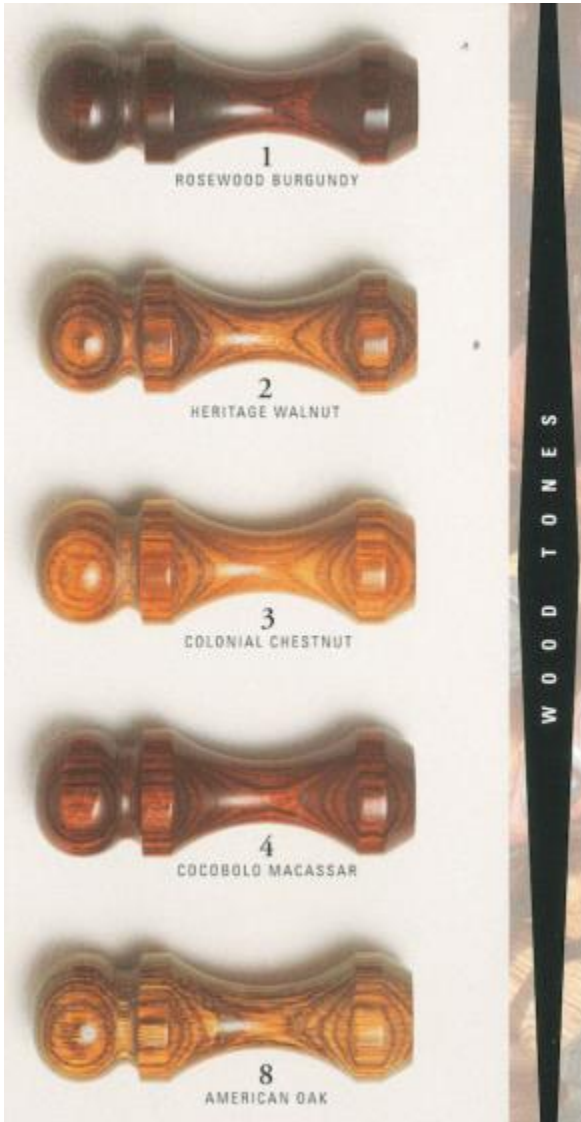




PROFESSIONAL PLASTICS



The time honored natural beauty of wood in an unprecedented range of rich colors combines with outstanding strength in Dymondwood®, a technologically advanced wood composite.

Through state of the art impregnation and lamination processes, multi-colored hardwood veneers are transformed into a totally homogenous material with unique physical and mechanical properties, as well as the exceptional beauty that inspires unlimited creative applications.

Select hardwood veneers 1/16" thicknesses are vacuum impregnated with advanced penetrating dyes to create rich natural or vivid colors, and with advanced engineering-grade phenolic resins to provide strength and durability. These veneer sheets are layered and subjected to tremendous heat and pressure in a densification process that can compress 2" of raw material into a finished 1" thick panel. The result is a beautiful, highly engineered material with properties that allow precise and efficient crafting with the most woodworking, plastics and metal fabricating tools and equipment .

Our wide range of color offerings provides the basis for a multitude of visual effects. If you require custom patterns, we'll work with you to create new color sequences and layups according to your specifications. But beyond color choices, the unique character of Dymondwood® emerges in the effects created through the crafting and machining of each individual piece.

Exceptional beauty, durability and ease of fabrication are all combined in Dymondwood® for endless possibilities in high quality products in all aspects of production and service, and to working with you toward achieving your continues success with our materials.

PROFESSIONAL PLASTICS, INC.

www.professionalplastics.com

(888) 995-7767

18 Locations - USA, Singapore & Taiwan

E-Mail: sales@proplas.com



41
FRENCH GREEN



13
TURQUOISE GEMWOOD



39
AQUA



12
INDIGO ROYALWOOD



11
TAHITIAN JADEWOOD



5
CHARCOAL SILVERTONE



10
BERMUDA LEMONWOOD



14
TROPICAL PURPLEWOOD



15
FIJI ORANGEWOOD



38
FUCHSIA



9
BAHAMA CHERRYWOOD



37
TROPICAL PASSIONWOOD

*N is natural wood impregnated
*WB is White Birch impregnated



48
ALABASTER
12-13



32
EVERGREEN
CAMO
11-5



16
VERMONT
MARBLEWOOD
11-N*



22
DESERT
STRIPEWOOD
5-N*



19
CRIMSON
IRONWOOD
1-3



36
ROYAL
MARBLEWOOD
5-2



20
CHARCOAL
RUBY
5-1



21
SANTOS
ZEBRA
5-4



26
HAWKEYE
10-5



52
TERRACOTTA
9-10



43
APPLE JACK
9-5



23
RIO GRANDE
APPLEWOOD
WB*-2-3



33
DESERT
CAMO
2-3-1



47
HAZELNUT
4-2-1-8-3-WB*



45
TORTOISE
3-2-5-1



18
AMAZON
MARBLEWOOD
N*-5-9



30
MAGNUM
1-10-5-4-2



17
ROYAL
JACARANDA
1-5-2

MULTI NATURALS

MULTICOLORS



Although production processes are consistent and strict quality control standards are employed, color tones may vary from dye lot to dye lot. Therefore, orders for the same colors and configurations may vary from shipment to shipment. This is due to the natural characteristics of wood and the following factors: The natural composition (density and surface condition) of the wood in each individual veneer can affect dye absorption. Note that some variation occurs as a result of the origin of the veneer used, thereby resulting in dissimilar shades of a given color. Very slight variance in the thickness of veneers may cause slight differences in color penetration from sheet to sheet. The dyes used for impregnation can vary from lot to lot resulting in variation of color hue.

Note: The colors shown in the brochure may not be exact representations of the actual material colors because of the inherent limitations of photography and printing. Material samples are available and recommended for final color specifying.

1. Custom ordering of color configurations is available upon request.
2. Custom orders must meet regular ordering minimums.
3. In an alternating pattern sequence, it is important to specify beginning and ending colors.

DYMONDWOOD® LAYUP COLORS

1. Rosewood Burgundy
2. Heritage Walnut
3. Colonial Chestnut
4. Cocobolo Macassar
5. Charcoal Silvertone
7. Heritage Brown
8. American Oak
9. Bahama Cherrywood
10. Bermuda Lemonwood
11. Tahitian Jadewood
12. Indigo Royalwood
13. Turquoise Gemwood
14. Tropical Purplewood
15. Fiji Orangewood
16. Vermont Marblewood - Tahitian Jadewood/Natural
17. Royal Jacaranda - Rosewood Burgundy/Charcoal Silvertone/Heritage Walnut
18. Amazon Marblewood - Natural/Charcoal Silvertone/Bahama Cherrywood
19. Crimson Ironwood - Rosewood Burgundy/Colonial Chestnut
20. Charcoal Ruby - Charcoal Silvertone/Rosewood Burgundy
21. Santos Zebra - Charcoal Silvertone/Cocobolo Macassar
22. Desert Stripewood - Charcoal Silvertone/Natural
23. Rio Grande Applewood - Natural/Heritage Walnut/Colonial Chestnut
25. Field & Stream - Tahitian Jadewood/Heritage Walnut/Charcoal Silvertone/Indigo Royalwood
26. Hawkeye - Bermuda Lemonwood/Charcoal Silvertone
27. Olympic - Bahama Cherrywood/Natural/Indigo Royalwood
28. Regal - Bahama Cherrywood/Bermuda Lemonwood/Indigo Royalwood
29. Spectrum - Tahitian Jadewood/Colonial Chestnut/Indigo Royalwood/Colonial Chestnut/Bahama Cherrywood/
Colonial Chestnut

30. Magnum - Rosewood Burgundy/Bermuda Lemonwood/Charcoal Silvertone/Cocobolo Macassar/Heritage Walnut
31. Camo Supreme - Tahitian Jadewood/Colonial Chestnut/Charcoal Silvertone/Heritage Walnut
32. Evergreen Camo - Tahitian Jadewood/Charcoal Silvertone
33. Desert Camo - Heritage Walnut/Colonial Chestnut/Rosewood Burgundy
34. Sportsman Camo - Bahama Cherrywood/Charcoal Silvertone/Tahitian Jadewood
35. Agatewood - Natural/Cocobolo Macassar/Indigo Royalwood
36. Royal Marblewood - Charcoal Silvertone/Heritage Walnut
37. Tropical Passionwood
38. Fuchsia
39. Aqua
40. Camo - Tahitian Jadewood/Charcoal Silvertone/Heritage Walnut
41. French Green
42. Chutney - Bahama Cherrywood/Bermuda Lemonwood/Charcoal Silvertone
43. Apple Jack - Bahama Cherrywood/Charcoal Silvertone
44. Paisley - Charcoal Silvertone/Indigo Royalwood/Bahama Cherrywood
45. Tortoise - Colonial Chestnut/Heritage Walnut/Charcoal Silvertone/Rosewood Burgundy
46. Timberland - Heritage Walnut/Charcoal Silvertone/Bahama Cherrywood/Tahitian Jadewood
47. Hazelnut - Cocobolo Macassar/Heritage Walnut/Rosewood Burgundy/American Oak/Colonial Chestnut/WB Impreg
48. Alabaster - Indigo Royalwood/Turquoise Gemwood
49. Bubblegum - Tropical Passionwood/Fuchsia/Indigo Royalwood
50. Dakota - Aqua/Cocobolo Macassar/Colonial Chestnut/American Oak/Bermuda Lemonwood/Rosewood Burgundy
51. Madras - Rosewood Burgundy/Tropical Purplewood/Charcoal Silvertone/Bahama Cherrywood/American Oak/Aqua
52. Terracotta - Bahama Cherrywood/Bermuda Lemonwood
53. Tapestry - Rosewood Burgundy/WB Impreg/Tahitian Jadewood/Tropical Passionwood/Indigo Royalwood

Sizes & Configurations:

Dymondwood® Panels

Size: 31 1/2"(800mm) x 16 1/2"(419mm)

Size: 51"(1295mm) x 16 1/2"(419mm)

Dymondwood® Dowels

28 1/2"(trimmed) or 31 1/2" (untrimmed)

48"(trimmed) or 51" (untrimmed)

Dymondwood® Squares

28 1/2"(trimmed) or 31 1/2" (untrimmed)

48"(trimmed) or 51" (untrimmed)

Working with DymondWood®

DymondWood® is a composite material. As such, users need to be aware of factors that affect the material, both internally and externally. Factors that cause variations in the product, include but are not limited to the following.

- These factors can be both a cause and effect in the how the material reacts in a given situation.

Temperature	Moisture Content	Excess Heat	*Cracking
Packaging and Storage	Thickness	Product Design	*Color

* Cracking

Because DymondWood® is a composite material comprised of wood and plastic, opposing forces, affected by external factors can cause cracking in the wood. Cracks in finished products are out of RPC's control and, therefore, RPC assumes no liability for the same.

*Color Statement

Finished Product colors are representative of an average color when applied to a specific species and grade of veneer. Understanding the potential for variation in how wood takes color, RPC has established an acceptable range for finished any given color. Further the variations of wood's natural color and grain structure are to be expected. The natural color of wood will change with exposure to light moisture and temperature. The degree of change depends on a variety of factors including, but not limited to the wood specie, and the type(color) and intensity of the light to which it is exposed. This natural change may result in variations between DymondWood® in its unfinished state and DymondWood® that has been made into finished products

Physical Properties

As a highly engineered wood composite, DymondWood® has the physical and mechanical properties of high density hardwoods, acrylics and polycarbonate plastics and brass. DymondWood® is distinguished by its unique strength, durability, dimensional stability, weather and moisture resistance as compared to regular wood. Exceptional hardness makes it resistant to unusual wear and abrasion. Mechanical properties are similar to brass. The natural bright wood grain requires no further finishing other than sanding and polishing.

Physical Properties of DymondWood®

- Specific Gravity 1.18-1.30
- Bending Strength 27,000 psi(1,900 kg/cm)
- Compression Strength 25,600 psi(1,800 kg/cm)
- Water Absorption 1.5% after 24 hr. immersion

Fabrication

Exceptionally versatile for a wide range of applications, DymondWood® can be readily:

Precision Cut	Silk Screened	Laser Engaved	Threaded	Beveled & Molded
Laser Cut	Planed	Drilled	Doweled	Mechanically Engraved
Bored	Decorated	Routed	Polished	Milled
Tapped	Sanded	Edge Finished		

DymondWood® can be easily and effectively worked on today's woodworking machines, plastics fabricating equipment, and metalworking tools including:

CNC Routers & Lathes	CNC Turning Machines	Wet Saws	Dowel machines	Centerless Grinding Machines
Laser Cutting Machines	Internal and External Threading	Laser Engraving Units	Automatic Screw Machines	Close Tolerance Belt & Drum Sanders
CNC Milling Machines	High Precision Panel Saws			

General Machining Information

Turning

Carbide or diamond cutting Tools are recommended. Be Alert to any dulling of cutters, as this can cause problems.

Sawing

Carbide or Diamond Blades are recommended for table saws.

On large band saws, high speed blades will do the job.

Recommended blades> 10 tooth per inch, skip tooth suggested speed, 60 feet per minute.

Circular Saws: Carbide or diamond blades with alternating tooth bevels are recommended (10" blades/60 teeth)

Adhesives

DymondWood® Glue Guide

DymondWood® always needs a light sanding for a good bond. The contact surface should be grease free. Many glues are available to glue DymondWood® to DymondWood®, DymondWood® to natural wood and Dymond-Wood® to metal. The best choice of glue depends on the application.

Adhesive	Application	Contact (does not imply endorsement by RPC)
Cyanoacrylate	Works best on small, sanded surface. "Maxicure" type is recommended. Requires good contact.	Hut Products, Distributor Phone: 800-547-5461
Epoxy (Brand used: Loctite item#81502)	Works best on clean surface. Unlike the Cyanoacrylate type glue which is very thin after being cured. Epoxy actually has some body so it can be used in moderately large areas with less than perfect contact surfaces.	Henkel Corporation 1001 Trout Brook Crossing Rocky Hill, CT 06067-3910 Phone: 860-571-5100 Fax: 1 860 571 5465 www.loctite.com
Loctite 330 (Modified methacrylate)	Works well for both DymondWood® to DymondWood® and DymondWood® to metal. This is a two component system. Apply the glue to the DymondWood® surface, and apply the activator to the metal surface before assembly. It can work with oily surface.	Henkel Corporation 1001 Trout Brook Crossing Rocky Hill, CT 06067-3910 Phone: 860-571-5100 Fax: 860-571-5465 www.loctite.com
Polyurethane: Ashland IsoSet(WD3- C130&CX- 47), Ashland Isogrip(SP 3030D)	Many Polyurethane based adhesives can be used with DymondWood®. This type of glue is slow curing under ambient temperature and needs some pressure for good bond; not very convenient to use on small areas. Certain formulations can permit DymondWood® to be glued to slightly greasy material(e.g. rubber).	Ashland Chemical Company 3889 Flowerland Drive Atlanta, GA 30319 Phone: 770-986-7480 Phone 614-790-3625 www.ashland.com

Finishing

The smooth, high-gloss finish that is characteristic of DymondWood® finished products is achieved by the following process

- 1) using a #120 grit or finer sandpaper, remove any cutter marks. Sand all surfaces, working with the grain(A belt sander does a fine job). Remember, the higher the grit, the greater the luster.
- 2) using a cloth buffing wheel, apply the rough buff compound and buff to a matte finish(TRIPOLI #1010). If a gloss is desired, apply the finer textured finishing compound(MOCO#1918). These compounds may be purchased from: The Mosher Company, Inc.

Machining Availability

Ripping: width tolerance $+.080"/-.000"$

Cross Cutting: length tolerance $+.080"/-.000"$

Planing Strips(less than 3-7/8" wide)

Thickness Tolerance: $+.020"/.000"$

Dowels Diameter Tolerance $+.05"/-.000"$

Other machining may be available on request

Warranty and Disclaimers

DymondWood® is designed to Rutland Plywood Corporation's internal quality control specifications. Rutland Plywood Corporation makes no warranty expressed or implied about the suitability of these materials for any final application. Due to the nature of both the material and additives, there is the possibility of variation both in colors and material, users should read "How DymondWood®-A User's Guide" carefully and determine the product is suitable for your application. By purchasing DymondWood® end users accept these conditions and the product as-is for their own personal use.

DymondWood® is a registered tradename of Rutland Plywood Corp, Professional Plastics is an authorized distributor of DymondWood® with 18 locations worldwide including USA, Singapore & Taiwan.

Order DymondWood® Online at:

<http://www.professionalplastics.com/DymondWood>



**PROFESSIONAL
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