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Distributed By:
Canada West Wood Flooring
#120 - 11180 Voyageur Way, Richmond, BC V6X 3N8
www.canadawestwood.ca 604-214-0962





Canada West Wood Flooring Solutions is the proud distributor of BC made, Harmony Long Length Engineered Plank Flooring. Harmony is an “all purpose” wood flooring solution designed and manufactured for all wood flooring applications. This outstanding engineered floor is manufactured to rigorous quality control standards. The Harmony Supreme Series features industry leading 2ft to 10ft lengths, while the Premium Series is offered in an “all” 8 ft format.

Harmony Long Length Engineered Plank Flooring Features:

- Local manufacturing and technical support in the Lower Mainland.
- Install over plywood, concrete, or radiant heated surfaces.
- Glue, float, or nail down application. Install on, above, or below grade.
- Dry, solid sawn veneers replicate solid wood on the Supreme Series.
- Use our Premium 8' Series for floor, wall, and ceiling applications.
- Our 9 ply hardwood core ensures the ultimate in stability.
- Dimensionally superior flooring, less gaping and movement.
- Fewer customer call backs, claims and concerns.
- Far fewer butt ends and joins for a less busy look.
- Superbly graded and manufactured flooring.
- Available in European Oil/Wax Finish or Aluminum Oxide.
- Unrivalled in appearance and elegance.

Your Harmony Sales Package Includes:

- Our unique, light weight, portable cedar presentation sample box features wood species and profiles of the Premium and Supreme Line, and can easily be carried to staff or client meetings, and site presentations.
- A comprehensive, easy to follow, information binder containing complete species information, grading, floor maintenance, sales terms and conditions, and ordering procedure.



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Harmony Flooring Sales Terms and Conditions

Pricing: All prices quoted are in Canadian currency and are FOB our mill in Delta British Columbia. Note: orders under 500 sqft are subject to a \$100.00 set up fee. Please contact Canada West Wood Flooring Solutions Inc. for details and pricing on Harmony Premium and Supreme Flooring.

- **Deposits:** A 50%, non-refundable deposit is required to proceed with your order with the balance of 50% due prior to shipping. In the event of a project delay, where materials are required to be stored or held, part or all of the balance will be required.
- **Shipping:** Orders are processed at our mill in Delta BC and can be picked up directly from the plant or delivery can be arranged. Freight charges are extra. Contact Canada West Wood Flooring for freight rates and details. Unless otherwise determined, full payment of the balance is required at the time of pick up.
- **Installation:** Harmony Long Length Engineered Plank Flooring must be installed by a professional installer/contractor in accordance with accepted NWFA installation procedures. Installation of Harmony flooring implies acceptance of the quality, machining, and finish of the floor. Installation by anyone other than a flooring professional will void all warranties.
- **Site Conditions:** Flooring should never be shipped to site until all wet trades have completed their work. The installation site must be acclimatized to "live in" conditions to minimize the tendency of wood flooring to crack, swell, shrink or warp. The uninstalled flooring should acclimate at site for a period of no less than 72 hours. Low humidity must be avoided (below 40%) otherwise the top layer can be susceptible to shrinking and splitting. Ultimately, the buyer assumes the responsibility for site conditions and for variations of climate within the site.
- **Warranty Protection and Coverage:** It is the buyers responsibility to inspect goods upon receipt. No claims will be considered if goods have been cut, glued, finished, installed, marked or damaged. In the unlikely event any portion of Harmony flooring fails with respect to the provisions of the warranty a manufactures representative must be given reasonable opportunity to inspect the floor prior to determination of any coverage or remedy issue.



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Harmony Premium 8ft Series Long Length Engineered Plank – Specifications.

“Uniquely West Coast...Proudly Made in British Columbia”

Harmony Premium 8’ Series combines 5 of our wood species with a highly graded, sliced 1.5mm veneer in an “all” 8ft long length plank. This popular and affordable series can also be easily adapted for wall and ceiling applications. Local manufacturing provides close technical support and out standing quality control measures to ensure product consistency and excellence.

- **Species:** Red Oak, N.A. Cherry, N.A Walnut, Eastern Maple, and Old Growth VG (vertical grain) Douglas Fir.
- **Grade:** Select and Better, all species. Douglas Fir is clear grade, Vertical Grain.
- **Wear Layer:** 1.5mm standard on all species.
- **Installation:** Glue, float, or nail. Radiant heat approved.
- **Construction:** Hot pressed, sliced veneer with water/heat proof adhesive.
- **Core material:** 9 layer cross ply Birch hardwood core.
- **Width:** 5 ¼” and 7 ¼” standard widths.
- **Length:** All 96” boards.
- **Thickness:** ½” overall board thickness.
- **Bevel:** Micro bevelled all 4 sides.
- **Finishes:** Aluminum Oxide or European Hard Wax – Oil.
- **Options:** Available unfinished, with square edge.
- **Other applications:** Wall and ceiling panelling.
- **Warranty:** 20 year limited residential warranty.

Product notes: * Orders under 500 sqft subject to \$100.00 set up fee.
* Allow 4 – 6 weeks delivery on all orders.
* All orders are FOB Delta, British Columbia
* Custom colours and stains available.



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Harmony Supreme Series 2ft – 10ft Long Length Engineered Plank – Specifications

“Uniquely West Coast...Proudly Made in British Columbia”

The **Harmony Supreme 2ft – 10ft Series** is our flagship line of flooring and features six popular North American wood species, in 4 grades, 4 wear layers, and 2 outstanding finishes. All veneer is dry sawn from solid lumber for a natural appearance with no repetitive pattern. The Harmony Supreme Series is strictly monitored for quality, consistency and excellence, with local sales, technical and manufacturing support, close at hand for ongoing customer support and service.

- **Species:** Red Oak, White Oak, Eastern Hard Maple, North American Cherry, North American Walnut, and Old Growth Douglas Fir.
- **Grades:** Character, Select, Rift Sawn, Rift and Quarter Sawn.
- **Installation method:** Glue, float or nail. Radiant heat suitable.
- **Wear Layer:** Solid Dry Sawn for the same look as solid hardwood.
- **Construction method:** Hot pressed with water/heat resistant adhesive.
- **Core material:** 9 ply cross laminated Birch hardwood.
- **Wear layers:** 3mm, 4mm, 5mm and 6mm
- **Widths:** 5 1/4" and 7 1/4" standard width. Other widths available upon request.
- **Lengths:** 2' – 10' heavy percentage in 6ft to 10ft.
- **Thickness:** 3mm = 9/16" overall, 4mm = 5/8", 5mm = 11/16", 6mm = 3/4".
- **Bevel:** Micro bevel all 4 sides.
- **Finishes:** Aluminum Oxide or European natural Hard Wax – Oil Finish.
- **Options:** Available unfinished with square edge.
- **Warranty:** 25 year residential limited warranty.

Product notes:

- * Allow 4 – 6 weeks lead time from point of order.
- * Orders under 500 sqft subject to \$100.00 set up fee.
- * Custom color and staining available.
- * All orders FOB Richmond, British Columbia
- * Other species available. Check with sales representative.



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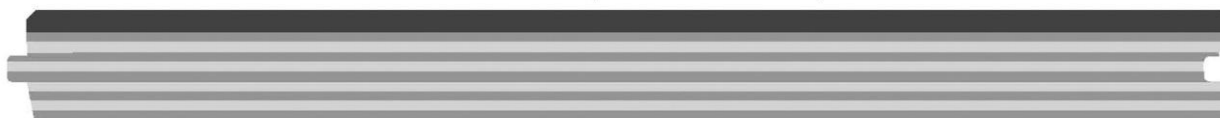
Long Length Engineered Flooring

6mm Solid Dry Sawn Wood Wear Layer



* Harmony Supreme 2'-10' Series.
Features a heavy duty 6mm wear layer on a 9 ply birch hardwood core.
Width Shown: 7 1/4" Length: 2'-10' Thickness: 3/4"

3mm Standard Dry Sawn Wood Wear Layer



* Harmony Supreme 2'-10' Series with Standard 3mm Wear Layer.
Choose from 4" - 7 1/4" widths.
Width Shown: 7 1/4" Length: 2'-10' Thickness: 9/16"

1.5mm Sliced Wood Wear Layer



* Harmony Premium Series. All 8' Lengths.
9 Ply Birch Hardwood Core
Standard Wear Layer: 1.5mm Length 96" Thickness 1/2"

CUSTOM ORDER OPTIONS:

- Supreme Series
Widths from 4" - 7 1/4"
- Supreme Series Wear Layers:
3mm, 4, 5 & 6mm
- Micro Bevel or Square Edge
- Oil Wax or Aluminium Oxide Finish
- Unfinished or Pre-finished



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Ordering Harmony Long Length Flooring

Follow the simple steps below to choose a Harmony Floor, or contact Canada West Wood Flooring solutions at 604 214-0962 for an in office, or on site consultation. Our goal is to provide complete product information sales and support whether it's at "your place" or ours. Full in house sales and technical support is provided for you and your client, from the plant manager through to the sales representative. All clients are also encouraged to visit the Canada West Showroom at #120 - 11180 Voyageur Way in Richmond.

- **Choose a species:** Harmony flooring is offered in White Oak, Red Oak, North American Walnut, North American Cherry, Maple and Old Growth Vertical Grain Douglas Fir....other species are available upon request.
- **Choose from our Premium or Supreme Line.** The Harmony Premium line features all 8ft lengths with a 1.5mm wear layer, hot pressed to a 9 ply Birch core. This economical and versatile floor can also be easily applied to walls and ceilings making it one of our most popular products.
- **The Supreme Line** is our ultimate expression of engineered flooring excellence. Manufactured in 2' to 10' lengths, Harmony Supreme flooring is offered in 3mm, 4mm, 5mm and 6mm wear layers, and in standard widths of 5 1/4" and 7 1/4"...other widths are available upon request. This magnificent floor features average lengths of 7 ft and is well represented in the 5' to 10' range.
- **Choose a finish:** Harmony flooring is offered in a European Hard Wax-Oil finish or in a UV cured Aluminum Oxide. We recommend the use of natural clear finishes on our products, however, many stain and color options are also available.
- **Contact Sales:** Contact Canada West Wood Flooring Solutions for pricing and carefully fill out the Harmony order form provided. Fax to Canada West Wood Flooring to place your order. On average, lead time for Harmony Premium and Supreme flooring is 6 weeks to 8 weeks. We encourage our clients to order well in advance to avoid disappointment or job delays.



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Harmony Flooring Order Form



Check each Option and Fax to: 604 214 – 0902.

Species:

Maple _____
Red Oak _____
White Oak _____
N.A. Cherry _____
N.A. Walnut _____
Douglas Fir _____

Grade:

Character _____
Select _____
Rift Sawn _____
Quarter Sawn _____
Rift & Q.Sawn _____
Clear V. Grain _____

Quantity+7% waste: _____ **Pre Fin:** _____ **Unfin:** _____

Premium Series all 8 ft lgths: _____ **Supreme Series 2ft – 10ft:** _____

Wear Layer: 1.5mm _____ 3mm _____ 4mm _____ 5mm _____ 6mm _____

Standard Width: 5 1/4" _____ 7 1/4" _____ Other: _____

Type of Finish: Hard-Wax Oil _____ Aluminum Oxide _____

Aluminum Oxide Sheen: Semi - Gloss _____ Satin _____ Matte _____

Colour: Natural _____ Stain Colour _____

*** Additional Information:** _____



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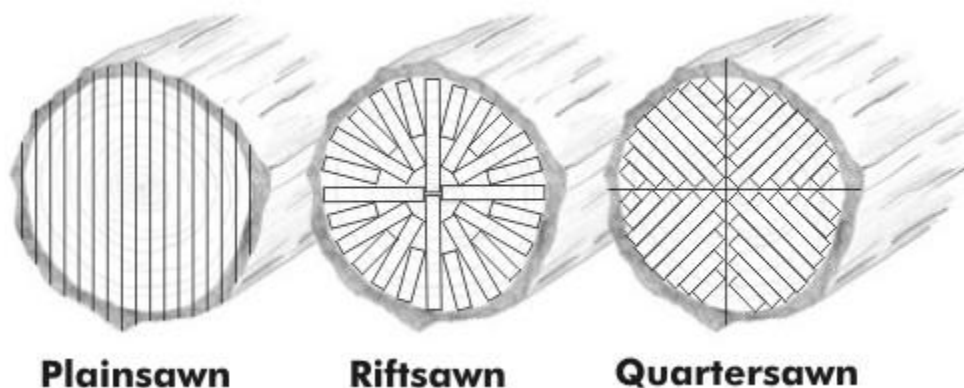
Harmony Flooring – Grading Characteristics

***Note:** Harmony Engineered Long Length flooring is subject to strict quality control and grading. Boards are carefully selected and those that do not make the grade are discarded. In the wood flooring industry a defect rate of 5% and less (of the quantity of material purchased) is within industry standards. The 5% rate includes both manufacturing defect and natural flaws.

Character Grade: Pronounced grain pattern from flat or plain sawing of raw lumber. Natural color variation allowed throughout the wood. Character knots are present along with smaller knots, shakes, and fissures. Larger knots are epoxy filled. Mineral streaks and irregular grain patterns are present.

Select Grade: Uniform color that allows for some minor color variation. A very limited amount of natural characteristics is allowed to produce a more unblemished, even appearance. A typical select grade will include roughly 40 to 50% plain sawn material with the balance being a mix of rift sawn and quarter sawn material.

Rift Sawn: This grade applies to Harmony Red and White Oak. The saw blade is positioned to cut at right angles to the trees growth rings which give the board a straight grain appearance. Rift sawing reduces the appearance of “flecking” or medullary ray.



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Rift and Quarter Sawn: This is the combination of 2 cuts of material that render a straight grained look to the board. Quarter Sawing, particularly of Red and White Oak, produces a straight grained appearance with the inclusion of “flakes” or medullary rays (see below) whereas the rift cut is substantially free of flaking. Combining the 2 cuts is a very common practice and produces a linear appearance to the board, with flaking, and results in a more dimensionally stable cut than flat or plain sawn. This grade is particularly popular for consistency of appearance and for radiant heat installations.

Medullary Rays on Quarter Sawn Oak Flooring.



Why choose Rift and Quartered or Vertical Grain (VG) Flooring.

- Rift and Quartered boards shrink less than plain sawn and remain more stable.
- R&Q boards resist movement over radiant heat.
- Seasonal gapping and buckling of flooring is minimized.
- A straight grained appearance to the floor for discriminating buyers.
- Flecking and medullary rays enhance the beauty of the floor.



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Hardwood Flooring and the Janka Hardness Rating Scale.

Janka, short for the Janka Scale or Janka Hardness Rating, is the industry standard for determining the hardness of a given species. The Janka Hardness Chart lists woods by their hardness rating with higher numbers indicating harder species. Of the characteristics and properties to consider when choosing your hardwood flooring, one of the most important is the relative hardness of the wood. **A wood's relative hardness is determined with the Janka Rating System, which measures the force required to drive a .444 inch steel ball into the wood until half the diameter of the ball is imbedded in the wood.**

Red Oak, which has a Janka rating of 1290, is the industry benchmark for comparing the relative hardness of different wood species. Since the hardness of the wood varies with the direction of the grain, both side testing and end testing is performed on wood. While it's true that the hardwood used in flooring is durable enough to withstand normal use, that doesn't mean that the wood won't dent or mar with a hard enough impact. Even appliances and furniture will eventually leave dents on a hardwood floor. Fortunately, the natural beauty of wood floors can easily be restored by sanding and refinishing the flooring.

Although the higher the Janka rating, the harder the wood, don't mistake hardness for the best wood. In addition to a wood's hardness, other qualities to consider when choosing a wood floor include both aesthetic and physical properties. For example, choose a wood with a texture, grain, and color that fit your style, and take into account the wood's durability and stability.

Hardwood flooring is priced by square foot, so it's important to have your measurements when pricing your flooring options. Keep in mind that there are two main groups of flooring materials: solid wood and engineered wood. Solid wood is milled from a solid piece of wood and is generally used over a wood sub-floor and nailed to the sub-floor. Harmony Engineered flooring is made by bonding layers of veneer and lumber in a 10 layer, cross-ply arrangement, and is typically used when installing wood flooring over concrete or in floor radiant heat. For our clients, it's important to recognize that each wood has its own personality and to decide which hardwood flooring is best for your specific application. Understanding the Janka table, and the pros and cons of each wood species, will give you a more realistic sense of how your wood flooring will perform.

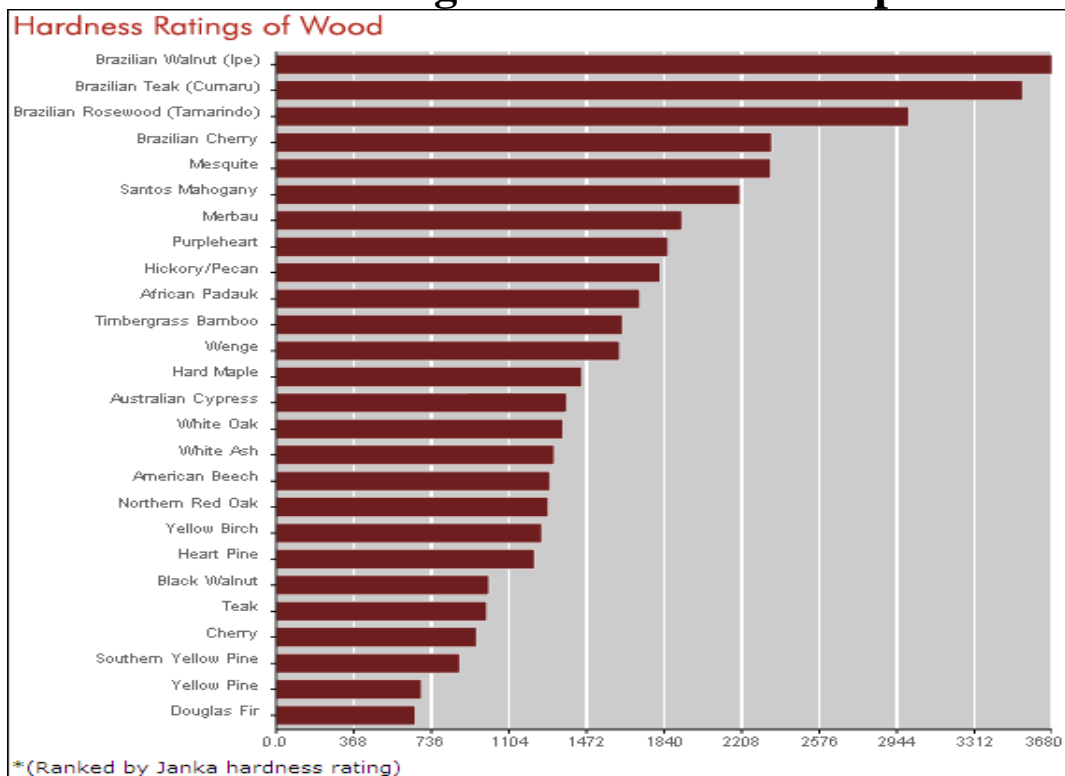


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Janka Hardness Rating of Some Common Species.



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Hardwood Flooring Facts

- Wood is a natural product and that each piece of wood is unique. Minor color variations, knots and mineral streaks, or variation in grain are not considered as defects.
- Seasonal shrinkage and expansion of hardwood flooring is not due to flawed or defective material, and is not due to an improper installation. Wood contains moisture which can vary depending on the surrounding environment. **Dry conditions will cause wood flooring to shrink, while humid or moist conditions will cause flooring to expand or cup.** In order to prevent excessive movement of your floor maintain a relative humidity in your home of 40 % to 50 % year round.
- In the winter time, heating systems can, and often do, cause wood floors to shrink and to develop gaps between the boards. This is not a defect, or an improper installation. The use of a humidifier can help to reduce this effect. In the spring and summer, as moisture levels increase in the air, the flooring often expands and returns to its original state.

Installer Guidelines and Responsibility

Please read and have a thorough understanding of installer guidelines and responsibilities:

- Each Harmony order is manufactured to meet or exceed the accepted industry standard of 5 % defect. Defect can be of either a natural type or a manufacturing defect. Double check your measurements to ensure the proper quantity is ordered.
- Inspect each and every board prior to installation. Use a reasonable degree of selectivity.
- **DO NOT INSTALL** boards that exhibit glaring or obvious defect.
- Minor filling, touch up, and finishing of boards is considered an accepted, normal, procedure with any installation of hardwood.
- Installation of Harmony flooring implies acceptance of quality, machining, milling and finishing.
- Claims will not be accepted on installed floors that show visual defects or moisture related issues.
- Subfloor levelling and dryness are the contractor's responsibility. Claims will not be accepted for either condition.
- Harmony flooring is custom manufactured and specially run per order. No returns are accepted on custom made material.



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Formaldehyde Emissions and Harmony Flooring.

In 1995, the Japanese Government introduced a rating system designed to improve the integrity of new homes and in particular to address formaldehyde emissions and interior air quality. The Japanese rating system for Formaldehyde emissions is the most stringent in the world and requires manufacturers to adhere to a rating of 0.04 parts per million.

Harmony Engineered Hardwood Flooring was tested and exceeded the Japanese F-4 star **** formaldehyde emissions standard. Tests conducted on Harmony Flooring concluded that formaldehyde emissions are far less than those allowed by current international standards.

<i>International Standards</i>	<i>Formaldehyde parts per million(ppm)</i>
German E ₁	0.106 ppm
European E ₀	0.07 ppm
(CARB) Phase 2 California	0.05 ppm
Japanese JIS/JAS F☆☆☆☆	0.04 ppm
* <u>Harmony Flooring</u>	<u>*0.0133 ppm</u>



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Red Oak Technical Data.

RED OAK	Green	Dry	English
Bending Strength	8672	13730	psi
Crushing Strength	681	1117	psi
Density		43	lbs/ft3
Hardness		1290	lbs
Impact Strength	53	47	inches
Maximum Crushing Strength	3933	6804	psi
Shearing Strength		1738	psi
Static Bending	4116	8134	psi
Stiffness	1430	1701	1000 psi
Toughness		470	inch-lbs
Work to Maximum Load	13	15	inch-lbs/in3
Specific Gravity	0.56	0.62	
Weight	47	42	lbs/ft3
Radial Shrinkage	3		%
Tangential Shrinkage	8		%
Volumetric Shrinkage	13		%

Red Oak Description.

Quercus rubra

- **Red Oak:** aka Northern Red Oak, Southern Red Oak, Canadian Red Oak.
- **Colour:** Sapwood lighter in color than heartwood with most pieces showing a reddish to pink tone.
- **Grain:** Coarse, open grain wood. Plain sawn exhibits plumed or flared grain. Growth rings highly visible. Riftsawn exhibits linear appearance and less figure; quarter sawn shows medullary rays and more prominent flaking.
- **Janka Hardness:** 1290 lbs of dent resistance.
- **Finishing:** Stains and finishes well. Strong contrast between spring and summer wood due to porous nature of the species.
- **Notes:** a commodity wood species used throughout the flooring industry.



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White Oak Technical Data.

WHITE OAK	Green	Dry	English
Bending Strength	8134	14455	psi
Crushing Strength	657	1049	psi
Hardness		1360	lbs
Impact Strength	41	36	inches
Maximum Crushing Strength	3489	7291	psi
Shearing Strength		1960	psi
Static Bending	3626	4704	psi
Stiffness	1225	1744	1000 psi
Work to Maximum Load	11	15	inch-lbs/in3
Specific Gravity	0.59	0.67	
Weight	60	45	lbs/ft3
Radial Shrinkage	5		%
Tangential Shrinkage	10		%
Volumetric Shrinkage	16		%

White Oak Description.

Quercus alba

White Oak: aka Arizona Oak, Roble, Stave Oak, American White Oak.

Colour: Sapwood is white to creamy beige color. Heartwood is light brown with grey to green cast. Some board may display light pinkish tint.

Grain: Open grain wood with longer, more prominent medullary ray than red oak. Plumed and flared grain, particularly on flat or plain sawn boards. Rift sawn shows tighter linear grain and less figuring; Quarter Sawn displays linear grain with flaking.

Janka Hardness: 1360 lbs of dent resistance; 5 % harder than Red Oak.

Finishing: Absorbs finish and stains well. Reaction to tannins in wood can change wood to greenish cast.

Notes: Tannic acids in White Oak protect this species from fungi and insects.



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Douglas Fir Technical Data.

DOUGLAS FIR	Green	Dry	English
Bending Strength	7558	12238	psi
Crushing Strength	446	872	psi
Density		33	lbs/ft3
Janka Hardness		660	lbs
Impact Strength	25	36	inches
Maximum Crushing Strength	3906	6951	psi
Shearing Strength		1172	psi
Static Bending	4572	8428	psi
Stiffness	1554	1917	1000 psi
Toughness		170	inch-lbs
Work to Maximum Load	6	9	inch-lbs/in3
Specific Gravity	0.43	0.47	
Weight	33	31	lbs/ft3
Radial Shrinkage	4		%
Tangential Shrinkage	7		%
Volumetric Shrinkage	12		%

Douglas Fir Description.

Pseudotsuga menziesii

Douglas Fir: aka Coastal Douglas Fir, Oregon Pine, Puget Sound Pine, BC Pine.

Colour: Heartwood is yellow/tan to light brown. Sapwood ranges from tan to white.

Grain: Plain sawn fir displays arched, plumed grain. Vertical or VG Fir is typically straight grained with occasional wavy or spiral texture. Old Growth VG Douglas Fir displays tell tale pin striped, tight, straight grain.

Janka Hardness: 660 lbs of dent resistance...49 % softer than Red Oak.

Finishing: Sands and finishes well. Can be blotchy and uneven when stained.

Notes: Douglas Fir ages to a salmon/orange color from exposure to UV light.



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North American Cherry Technical Data.

NORTH AMERICAN CHERRY	Green	Dry	English
Bending Strength	7612	12363	psi
Crushing Strength	402	946	psi
Density		34	lbs/ft3
Hardness		950	lbs
Impact Strength	37	34	inches
Maximum Crushing Strength	3586	7015	psi
Shearing Strength		1559	psi
Static Bending	3528	9702	psi
Stiffness	1383	1627	1000 psi
Work to Maximum Load	10	10	inch-lbs/in3
Specific Gravity	0.45	0.51	
Weight	35	34	lbs/ft3
Radial Shrinkage	3		%
Tangential Shrinkage	7		%
Volumetric Shrinkage	12		%

North American Cherry Description.

Prunus Serotina

NA Cherry: aka American Cherry, Black Cherry, Rum Cherry, Wild Cherry.

Colour: Heartwood is light red to dark reddish brown colour; sapwood is light brown to pale with some pinkish tone.

Grain: Fine, uniformly textured grain, with frequent wavy appearance. Some gum and pitch pocket; smooth satin like texture to wood surface.

Janka Hardness: 950 lbs of dent resistance....26% softer than Red Oak.

Finishing: Sands and finishes well.

Notes: Light sensitive species that darkens upon exposure to UV light.



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North American Walnut Technical Data.

NORTH AMERICAN WALNUT	Green	Dry	English
Bending Strength	9300	14831	psi
Crushing Strength	549	1103	psi
Density		40	lbs/ft3
Hardness		1010	lbs
Impact Strength	52	40	inches
Maximum Crushing Strength	4276	7330	psi
Shearing Strength		1590	psi
Static Bending	4312	8918	psi
Stiffness	1433	1695	1000 psi
Work to Maximum Load	12	13	inch-lbs/in3
Specific Gravity	0.48	0.55	
Weight	43	38	lbs/ft3
Radial Shrinkage	4		%
Tangential Shrinkage	7		%
Volumetric Shrinkage	14		%

North American Walnut Description

Juglans Nigra

- **NA Walnut:** aka Black Walnut. Found throughout the Eastern US and Ontario.
- **Colour:** Heartwood ranges from deep rich dark brown to a purplish black. Sapwood ranges from white to tan.
- **Grain:** Mostly straight open grain with some burl and curly grain.
- **Janka Hardness:** 1010 lbs of dent resistance...22 % softer than Red Oak.
- **Finishing:** Finishes well with deep, rich, dark color.
- **Notes:** Walnut will fade over time with exposure to UV light.



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Canadian Maple Technical Data.

CANADIAN MAPLE	Green	Dry	English
Bending Strength	10688	16904	psi
Crushing Strength	627	1441	psi
Density		45	lbs/ft3
Hardness		1450	lbs
Impact Strength	39	40	inches
Maximum Crushing Strength	4069	7233	psi
Shearing Strength		2235	psi
Stiffness	1566	1828	1000 psi
Toughness		358	inch-lbs
Work to Maximum Load	11	14	inch-lbs/in3
Specific Gravity	0.49	0.55	
Weight	46	44	lbs/ft3
Radial Shrinkage	3		%
Tangential Shrinkage	9		%
Volumetric Shrinkage	14		%

Maple Description.

Acer Saccharum

- **Maple...** aka Sugar Maple, Hard Maple, Eastern Hard Maple, Canadian Maple
- **Colour:** Heartwood is creamy white to light/dark brown. Sapwood is pale to creamy white.
- **Grain:** Closed subdued grain with medium figuring and uniform texture. Some boards exhibit birds eye, fiddle back, and quilted figuring.
- **Janka Hardness:** 1450 lbs of dent resistance...12% harder than Red Oak
- **Finishing:** Finishes well when left natural, does not stain uniformly.
- **Notes:** A contemporary wood, will amber over time with exposure to UV light.



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Harmony Flooring and Aluminum Oxide Finish - Floor Care Essentials:

- Apply felt protectors to all furniture legs, and chairs to avoid scratching your hard wood floor. Do not wear high heeled shoes on your floor.
- Do not use household cleaners on your floor, such as Pine Sol, Mop and Glo or other ammonia based cleaners. Do not wax your floor or apply oil based soaps such as Murphy's Oil Soap.
- Use water based, non toxic cleaner on your floor, such as Bona Brand floor cleaning solution.
- Sweep, vacuum, or dry mop your floor regularly. Vacuum using a soft brush attachment.
- Lightly mist an area of approximately 4' x 6' or mist the cleaning pad of your applicator with your cleaning solution.
- Finish one area and then move on to the next. When your applicator pad becomes soiled, rinse with water thoroughly, ring out and continue cleaning. If your applicator pad becomes heavily soiled, clean it with your next load of laundry.
- Do not "wet" mop your floor. Too much water can cause your floor to swell and cup. Trim your pet's claws to prevent scratches and gouges.
- If a spill occurs on your hardwood floor wipe it up immediately, mist the area with your cleaning solution and wipe clean.
- Renew worn surfaces with Bona Wood Floor Refresher before bare wood is exposed.
- Maintain a consistent humidity level between 45 and 55 % Excessive swings in humidity levels will cause hardwood floors to cup, swell, shrink and crack showing gaps and cracks between boards. Use a humidifier or dehumidifier to control humidity levels.

Your floor is finished with an abrasion resistant Aluminum Oxide finish but can scratch...notably from sand, grit, and other abrasive materials. Regular dry mopping prevents most of this from happening, but if you should scratch or dent your floor, apply a small amount of stain using a stain pen. Stain pens are available at building supply stores and paint stores throughout the lower mainland



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Osmo Polyx Hardwax Oil Finish and Harmony Engineered Plank Flooring

Harmony flooring is available with Osmo Polyx Hardwax Oil Finish as an alternative to our standard Aluminum Oxide Finish. Wax-Oil finishes are extremely popular in Europe and increasing in popularity in North America.

- Osmo is a low VOC, penetrating wood finish that protects the wood from within rather than coating a floor with a layer of plastic.
- Made from natural plant oils and waxes including sunflower, soybean, and thistle oil, plus Carnauba and Candelilla natural plant wax.
- Osmo, like any type of finish, needs a solvent to perform properly and utilizes a benzene free, low odor mineral spirit.
- Osmo does not crack, blister, flake, or peel off.
- Osmo is spot repairable...this is a DIY product, sand and reapply to the worn area.
- Meets the German industrial standard for resistance to beer, wine, coffees, colas, tea, fruit juices, milk and water.
- Once dry, is safe for adults, children, and animals...Osmo is used on toys in Europe as per the European norm EN 71.3.
- Osmo Polyx-Hardwax Oil is a winner of Sustainable Industries Top 10 Green Building Products 2006.
- Osmo is an eco-friendly LEED compliant product.
- Recommended for use on all wooden floors, cork floors, wood furniture, slate, terracotta, and other natural ceramic tiles.
- For additional information on Osmo finishes and maintenance products go to www.osmona.com



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Harmony Engineered Flooring and Osmo Hardwax Oil Finish – Maintenance

For everyday cleaning, a broom or vacuum cleaner is all you need. To remove stains, the floor can also be damp mopped. If done regularly, using *Wash & Care* it will help to clean and maintain your floor.

OSMO Wash & Care (concentrate)



Wash & Care is a mild and gentle non-toxic cleaner for wood. It is made with soaps based on coconut and other vegetable oils. It is gentle on the skin and biodegradable. It contains no solvents, formaldehyde or phosphates.

Wash & Care has been especially developed for wooden floors treated with *OSMO Hardwax Oil* and is easily maintained by regular cleaning. It is also possible to clean other surfaces with *Wash & Care*: stone, cork, vinyl and other water-resistant surfaces.

How to use:

Spray the cleaner on to the floor. Then wipe the floor with a sponge mop or cloth. The surface should not be wet. If there is excess moisture, wipe the floor dry with a clean cloth. It is not necessary to rinse after cleaning. The concentrate ratio is 7ml to 750ml spray bottle, add water, shake and spray.

OSMO Liquid Wax Cleaner

The *OSMO Hardwax Oil* finish is extremely durable, but like any finish, it will show wear over time, especially in high-traffic areas such as the kitchen, main entries and stairways. The *Liquid Wax Cleaner* is easy to use and buffs to a sheen. It is also extremely water repellent and odorless when dry. Timely use of *Liquid Wax Cleaner* restores the finish and helps to keep it lasting indefinitely. This product can also be used on any waxed woodwork.



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How to use Liquid Wax Cleaner:

First clean the floor or wood thoroughly, preferably with a moist cloth or mop dampened in *Wash and Care*, diluted in water. Wring out the cloth or mop thoroughly so that no water puddles. Allow to fully dry.

To remove stains:

Apply a *small amount* on a cloth or a white scotchpad and rub the dirty area. For heavier stains, use fine steel wool. Wipe off the dirt residue.

To maintain:

Apply very thinly on the clean surface. 2 teaspoons will cover 10 sq ft . Allow to dry for 30 to 60 minutes or until a white haze has formed. Buff the surface with a soft cotton cloth. The surface can be polished.

Spot repairs are easy. There is no need to strip the whole floor or even to remove old *Hardwax Oil*. For minor repairs, just scuff the damaged area, coat with *Liquid Wax Cleaner* and buff lightly when the cleaner is dry. Make repairs regularly, and the finish will last indefinitely. Be aware that liquid wax cleaner will restore the finish but not repair damaged wood. If a more extensive fix is needed, use OSMO 3054 Hardwax Oil.

OSMO Polyx®-Oil

Spot repairs are made easy with *Osmo Hardwax Oil*. It is water and stain resistant, completely ecological and has no emissions. The major benefit of *Hardwax Oil* is that minor damaged areas or high wear areas can be rebuilt without refinishing the entire floor, saving thousands of dollars. You can even leave the furniture in place! Color stained floors will require extra attention if the stain needs to be repaired before application of the Hardwax Oil.



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How to use OSMO Polyx – Oil.

Sand off scratches or other damage. Use 80-grit sandpaper on deep gouges and finish with 100/ 120grit. Light repairs can be done with 150/ 180 grit. Vacuum or wipe away dust then apply the finish by hand. Wipe on a small amount of *Hardwax Oil*. Do not allow it to puddle, and allow it to dry for 24 to 48 hours with good ventilation. Buff with extra-fine steel wool or a Scotchpad to blend the edges of the patch into the surrounding finish. Repeating the process after fully dry if necessary to get a nice blend

OSMO Brush Cleaner & Thinner

De-aromatized and benzene-free to meet European purity demands, OSMO Brush Cleaner and Thinner can be used for cleaning brushes and tools, as well as thinning of the Hardwax Oil by up to 10% (when necessary).

Some extremely dense and oily tropical hardwoods may require thinning of the Hardwax Oil for proper penetration.

Keeping your brushes clean will aid in their longevity and improve the quality of your work.



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Lifetime Limited Structural Warranty.

Harmony Engineered Hardwood Flooring warrants, to the original purchaser, that our flooring has been manufactured to remain free from structural manufacturing defects. We warrant that, for the life of the floor, when used under “normal” household conditions”, the floor will not buckle, twist, warp or separate at the plies due to glue bond failure. “Normal household conditions”, is defined as those daily activities commonly associated with residential use where the flooring is maintained according to maintenance procedures as prescribed in the National Wood Flooring Association Maintenance Guidelines.

25 Year Finish Warranty.

Harmony Engineered Hardwood Flooring warrants, to the original purchaser, that the surface finish, a factory applied UV cured aluminum oxide urethane finish, will not wear through or separate from the wood for a full twenty (25) years, from the date of purchase, when used under normal residential traffic conditions, and as long as you follow the preventive maintenance and regular maintenance as prescribed in the National Wood Flooring Association Maintenance Guidelines.

Hard wax oil finish penetrates into the wood fibers preventing the separation of the finish from the wood. It is easily recoat able and is available with a user friendly care and maintenance package which will ensure that the finish will not wear through under normal residential use when properly followed. The use of other maintenance products not approved for Hard wax oil finish may damage your floor.

Finish warranty excludes any surface check/splits caused by improper environment conditions, indentations, scratches, or surface damage caused by lack of proper maintenance, misuse, negligence, accidents, pets, spiked heel shoes, (or shoes not under proper repair), water, wet mopping, erosion, pebbles, sand, other abrasives, and/or insufficient protection. The surface wear must be readily visible and cover at least a full square inch of the surface area. Gloss reduction is NOT considered surface wear. All wood is natural, therefore there will be variances in color and wood grain, and wood flooring will naturally change in color after exposure to UV indoor or sunlight. This will NOT be covered in the finish warranty.



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Limited Warranty - Exclusions and Conditions.

Given that wood is a product of nature, minor quality variations in grain and associated milling defects of up to 5% of total square footage purchased are not covered by this limited warranty as per industry standards determined by the National Wood Flooring Association Guidelines.

WARRANTY EXCLUSIONS.

- **IMPROPER STORAGE, HANDLING OR INSTALLATION.** Installation instructions must be followed. Subflooring must be dry and properly installed.
- **IMPROPER ADHESIVES.** Damage caused by use of water based adhesives over sheet vapor barriers or sound insulation.
- **IMPROPER MAINTENANCE.** Maintenance instructions must be followed and in particular the floor cannot be wet mopped.
- **EXTREME CONDITIONS AND SURFACE CHECKING.** The humidity level in the home must be in the 40%-50% range throughout the year using air conditioners, humidifiers or dehumidifiers as appropriate. Dramatic variations in humidity may cause micro checking of the finish. This is not considered a defect and is not covered by the warranty.
- **GAPPING OF PLANKS.** This warranty does not cover gapping caused by natural expansion and contraction, improper seating of planks during installation or by mastic memory.
- **ABUSE OR MISUSE.** This warranty does not cover damage caused by neglect, abnormal use or misuse, application of solvents, corrosives or other chemicals to the flooring, color changes, excessive pivot and point-loads, stiletto shoes, heavy furniture or equipment, unpadded furniture feet, water, pet claws, pet urine, damage from sand, pebbles or other abrasives or other unintended use.
- **WATER DAMAGE.** This warranty does not cover the damage caused by moisture penetration through the subfloor, flooding, leaking plumbing, overflowing sinks or similar water damage.
- **INSECT INFESTATION.** This warranty does not cover any insect infestation after the product has left the factory.
- **RADIANT HEAT.** Only low temperature radiant heating systems which are regulated to never exceed 80F at the wood surface may be used. If surface area is allowed to exceed 80 all warranties are void. There is a greater risk of gaps occurring especially when installed over radiant heating systems. Such gaps are NOT manufacturing defects and are not covered by this warranty.
- **NATURAL VARIATIONS.** Wood is a natural product, containing natural variation in color, tone and grain. We do not warrant natural variation in color within the floor nor variations between samples and the installed floor. Variation may also develop over time because of varying exposure to sunlight or UV light.
- **NOISE.** This warranty does not cover any noises, such as popping, cracking or squeaking.

*Other items not covered under the warranties include damage caused by natural events such as hurricanes, tornadoes, earthquakes, and floods; installation of flooring with visible defects; construction traffic abuse to the surface of the flooring; use of non-recommended nailers, staplers or adhesives.



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Harmony Warranty Protection and Coverage.

In the unlikely event that any portion of your floor fails under the provisions of this warranty Harmony Flooring must be given every reasonable opportunity to inspect the floor prior to any determination of warranty coverage or any remedies. Warranty protection and coverage includes: (1) replacement of material; or (2) refund the purchase price of material.

Installation Over Radiant Heat

Installer – Advise your customer of the following

- Maximum allowable wood surface temperature is 82° Fahrenheit. Note that rugs can increase surface temperature 5° Fahrenheit or more.
- Maintain 40-60% humidity at all the times. If necessary, use humidifiers.
- Room temperature should not vary more than 15° Fahrenheit season to season.

Heating system requirement

- Only low temperature radiant heating systems with accurate control systems that assure that the floor surface temperatures never exceed 82° F are permitted.
- The entire floor area must be evenly heated. Even with perimeter heating systems the floor's surface temperature must never exceed 82° F.

Setting the heating system for installation

- System must be fully operating at normal temperature for a minimum of 21 days prior to floor installation.
- The heating system must be turned off 24 hours prior to installation and must remain off for 24 hours after installation.
- Starting 24 hours after completion of installation, turn on the heating system and gradually increase the temperature over a 7 day period to normal operating. Never allow the floor temperature to exceed 82° Fahrenheit.

Subfloor

- The floor construction should have a heat dissipating layer that provides an even temperature across the entire floor area and avoids high temperature in any area. Under plywood subfloors heat transfer plates or insulation must be in place.
- The subfloor should be completely dry. Moisture on a dry weight basis must not exceed 1.5% for concrete, 0.3% or less for gypsum and 6-12% for wood subfloors.
- A vapor barrier should be installed on all concrete, stone, mineral or wood subfloors. It must be directly under and as close to the flooring as possible.
- Heating pipes must be covered with 1" of concrete or be a minimum of 1/8" below bottom of plywood subfloor.
- The wood floor must lie tight against the sub-surface without an air gap that can cause considerable drying out of the wood.

Layout

- Separation adjoining radiant heated and non-radiant heated areas with expansion joints.



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