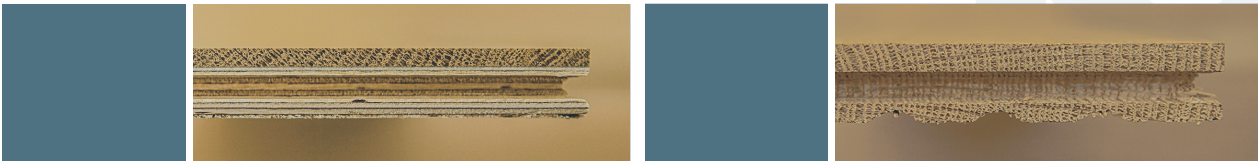




ENGINEERED VS SOLID

A SIDE-BY-SIDE LOOK



ABOUT ENGINEERED

Engineered wood floors are real wood floors that are manufactured using multiple layers of wood veneers. The grain of each layer runs in perpendicular directions, which creates exceptional dimensional stability. This means the wood will expand and contract less than solid wood flooring during fluctuations in humidity and temperature.

Because of the way engineered hardwood is processed, it is not as affected by humidity as solid wood planks are. Therefore, the product is often the preferred choice for kitchens and bathrooms or in areas where the humidity level can vary like in a basement or a part of the house below grade, as long as a moisture barrier is placed between the subfloor and the hardwood planks. They are also better suited for installing over in-floor heating systems.

The top layer of engineered wood consists of high-quality wood. Engineered floors can be nailed or stapled to a wood sub-floor, or glued down to a wood subfloor or concrete slab. This makes engineered wood floors ideal for slab and basement installations, but they can be used in any room either above or below grade.

This type of flooring can be sanded and finished. Engineered hardwood floors are suitable for installation on all levels of the home and over plywood, wood, OSB and concrete subfloors.



ENGINEERED VS SOLID

ENGINEERED FLEXIBILITY

Solid hardwood flooring can generally be refinished many times because it can be sanded and re-sanded nearly all the way down to the tongue and groove of the boards. That could be as much as 1/4" or about one third of the thickness of the board. Especially with the Graf Custom Hardwood Engineered 4.2MM Wear Layer you will be able to sand engineered flooring just as much. Finishes are so durable that you will get a lifetime of carefree use before a new finish is ever needed. Refinishing, therefore usually becomes a secondary consideration in the selection process.

ENGINEERED FLEXIBILITY

Versatility is always an important issue in choosing flooring. Today, engineered hardwood flooring is really quite versatile. It can be installed using either glue or staples. It can also be installed over all types of sub-floors from suspended wood to concrete slab. Engineered hardwood flooring, given proper conditions, can be used below grade. Solid hardwood flooring, on the other hand, has the limiting requirement of needing to be stapled down over suspended floors - above grade. In order to fasten solid hardwood flooring over a concrete floor, plywood or firing strips would have to be installed first. It can be done, but it is time consuming and expensive.

ENGINEERED THICKNESS

Engineered hardwood flooring is generally thinner than solid hardwood. That means it can be used in many remodeling projects where a solid 3/4" floor would create a height problem. Graf Custom Hardwood Engineered floors range in thickness from 5/8" to 3/4".

ENGINEERED STABILITY

For the most part, hardwood flooring is quite dimensionally stable over time. Solid hardwood may, under certain climatic conditions, be subject to swelling or shrinking. Engineered hardwood flooring, on the other hand while still subject to slight movement is the better choice where extreme seasonal climate changes may cause problems. The plywood-like construction of an engineered floor gives it more dimensional stability.



SPEC SHEET ENGINEERED

SPECIES	WHITE OAK RED OAK HICKORY WALNUT
GRADES	CHARACTER SELECT/BETTER CLEAR
GRAIN PATTERNS	RIFT + QUARTERED RIFT ONLY QUARTERED ONLY PLAIN SAWN
SURFACE	UNFINISHED PREFINISHED
LENGTH	STANDARD 2-10' • APPROXIMATELY 4' // SPECIAL 4-10' • CAN BE ORDERED UP TO 12'
THICKNESS	STANDARD 5/8" • 4MM WEAR LAYER • 9 PLY BALTIC BIRCH SPECIAL 3/4" • 4MM WEAR LAYER • 9 PLY BALTIC BIRCH // 3/4" • 6MM WEAR LAYER • 11 PLY BALTIC BIRCH
WEAR SURFACE	STANDARD 5/32" OR 4MM • PRE-SANDED WHEN IT LEAVES THE MILL, WILL STILL NEED SANDED ON SITE.
MACHINING	TONGUE + GROOVE AND END MATCHED, SQUARE EDGE BACK SCORED 4" CENTERS + PRE-SANDED
BEVEL	2 SIDED • STANDARD 1/8" OR MICRO BEVEL 1/16" // 4 SIDED • STANDARD 1/8" OR MICRO BEVEL 1/16"
INSTALLATION	CAN BE NAILED, STAPLED, OR GLUED. WHEN GLUING PLEASE FOLLOW NOFMA/NWFA RECOMMENDATIONS.

INDIVIDUAL SPECIFICATIONS

RED OAK	5-8" SELECT/BETTER • P/S // CHARACTER P/S
WHITE OAK	4-8" SELECT/BETTER • R/Q • RIFT • QTD • P/S // CHARACTER R/Q OR P/S
WALNUT	5-8" SELECT/BETTER • P/S // CHARACTER P/S
NOTE	STOCK ITEMS WILL BE NESTED + BOXED FOR SHIPPING PROTECTION.



SPEC SHEET ENGINEERED

GRADE SPECIFICATIONS

SELECT + BETTER • MOSTLY HEARTWOOD WITH A MINIMUM NUMBER OF CHARACTER MARKS + DISCOLORATION THAT PROVIDES A UNIFORM APPEARANCE WHILE ALLOWING FOR NATURAL COLOR VARIATIONS IN THE HEARTWOOD. | AVERAGE LENGTH 3.25'

CHARACTER • CONTAINS SELECT, 1 COMMON, 2 COMMON | NESTED NOMINAL LENGTH 2'+ | AVERAGE LENGTH 4'

BUNDLE GUIDELINES

5/8" ENGINEERED | 11' LONG // BUNDLE SIZE • 2-10'

WIDTH	SQ FT PER BOX	SQ FT PER PALLET	BOXES PER PALLET
2¼	22	880	40
3	19.5	936	48
4	26	1040	40
5	33	1056	32
6	19.5	936	48
7	23	920	40
8	26	1040	40

3/4" ENGINEERED | 11' LONG // BUNDLE SIZE • 2-10'

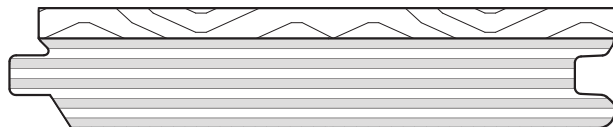
WIDTH	SQ FT PER BOX	SQ FT PER PALLET	BOXES PER PALLET
2¼	16	768	48
3	14.5	696	48
4	19.5	780	40
5	24.5	784	32
6	14.5	696	48
7	17	680	40
8	19.5	780	40



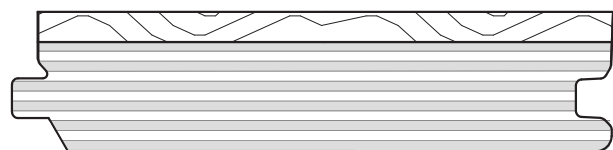
SPEC SHEET ENGINEERED

THICKNESS OPTIONS

5/8" ENGINEERED | 4MM WEAR LAYER • 9 PLY BALTIC BIRCH



3/4" ENGINEERED | 4MM WEAR LAYER • 11 PLY BALTIC BIRCH



3/4" ENGINEERED | 6MM WEAR LAYER • 9 PLY BALTIC BIRCH

