

Wood Flooring Trends Wide & Long Planks

Presented By: First Last
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Course Description



This course assists architect and design professionals in understanding the trend toward wide and long plank wood flooring and the variables that should be considered when specifying it for their client projects.

Learning Objectives



- Explain the differences among strip, plank, parquet wood floors
- Describe the differences between solid, engineered wood floors
- Understand how wide, long plank wood perform as flooring materials
- Discuss how saw cut can minimize performance issues with wide, long plank wood flooring
- Identify the availability, limitations of wide, long plank wood flooring
- Recommend maintenance for wide, long plank wood flooring



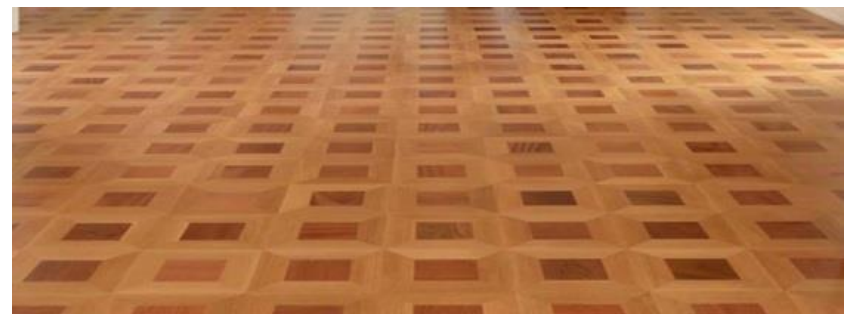
Strip, Plank, &
Parquet



Strip, Plank & Parquet



- Strip
 - Linear
 - Narrow
 - $> 3''$
- Plank
 - Linear
 - Wide
 - $\leq 3''$
- Parquet
 - Nonlinear
 - Geometric
 - Shape, size varies



Strip, Plank & Parquet

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Strip



Plank

Parquet



Strip

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- Solid
- Linear
- Narrow
- Traditional



Strip



- Solid
- Linear
- Narrow
- Nontraditional



Strip



- Solid
- Linear
- Narrow
- Nontraditional



Plank



- Solid
- Linear
- Wide
- Traditional



Plank



- Solid
- Linear
- Wide
- Nontraditional



Plank



- Solid
- Linear
- Wide
- Nontraditional



Parquet



- Solid
- Geometric
- Strip, plank
- Traditional



Parquet



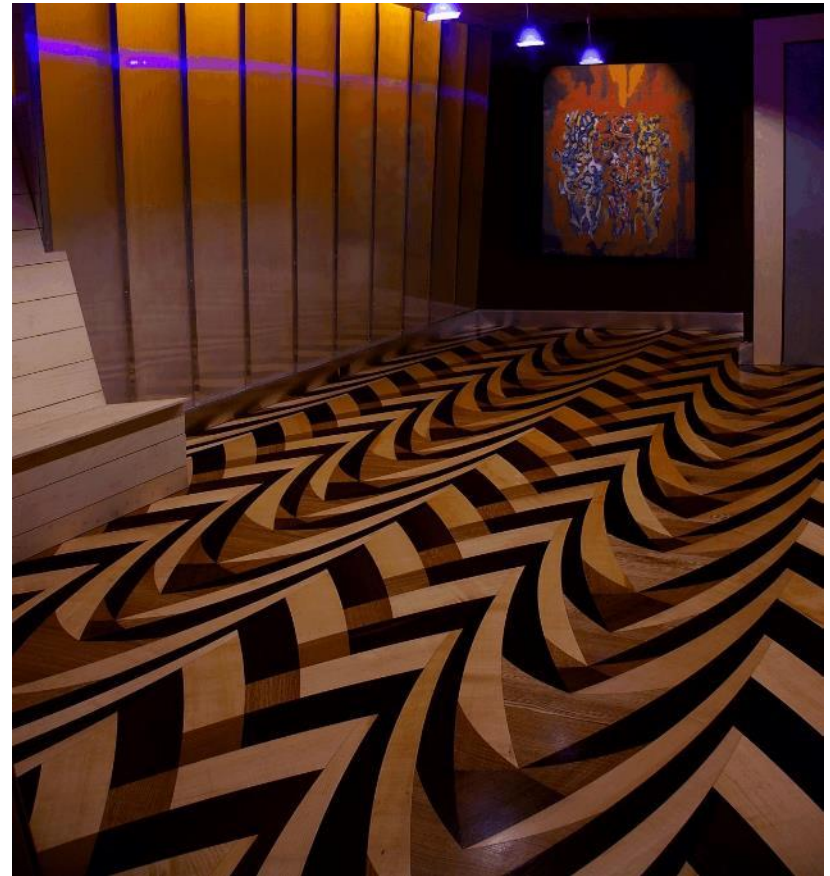
- Solid
- Geometric
- Strip, plank
- Nontraditional



Parquet



- Engineered
- Geometric
- Strip, plank
- Nontraditional



Characteristics of Wood



- Organic material
- Responds to its environment
- Changes over time
- Proper expectations important to performance



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Solid &
Engineered



Types of Hardwood Floors



- Solid
 - Solid wood top to bottom



- Engineered
 - Several layers of wood veneer/slabs bonded together with an adhesive

Solid vs. Engineered

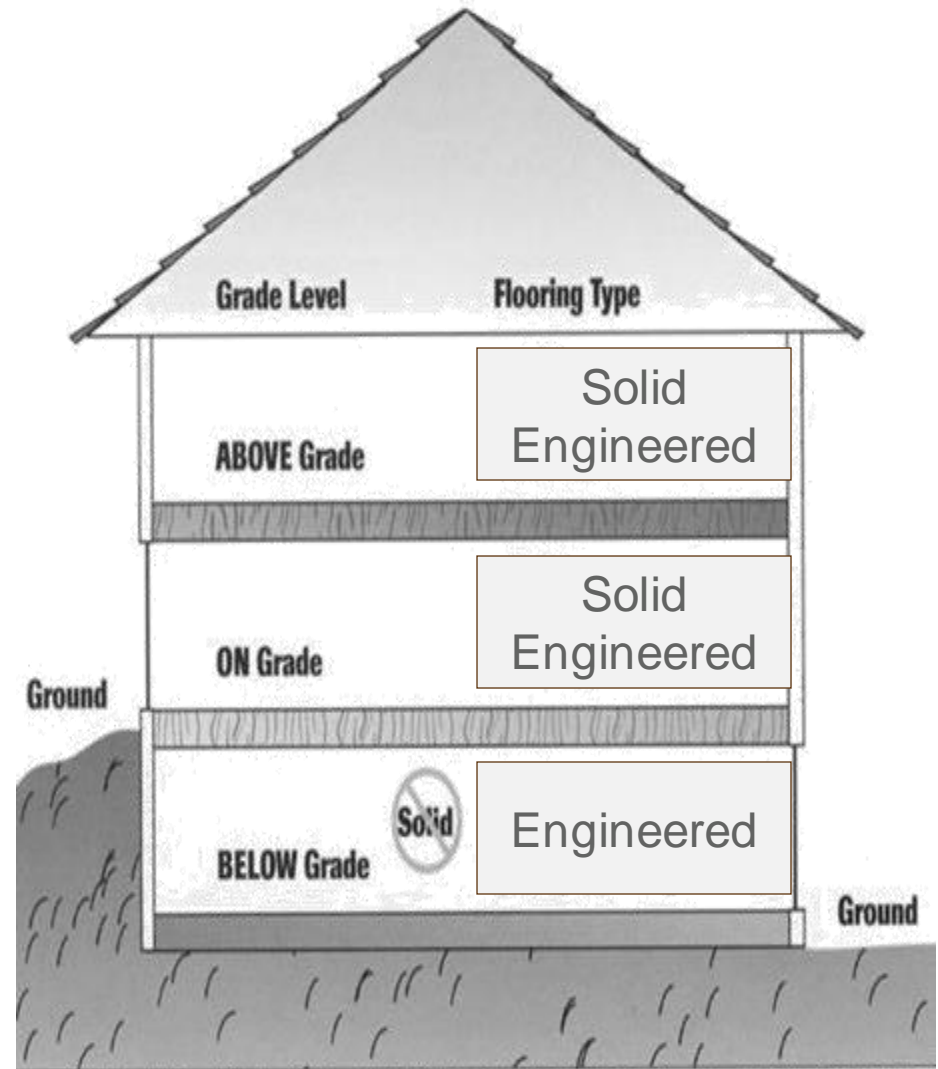


- Solid can be resanded, refinished numerous times
- The “sandability” of engineered depends on wear layer thickness
- Solid cannot be installed below grade
- Engineered can be installed above, on, below grade
- Because of their cross ply construction, engineered floors are more dimensionally stable
- Engineered can be installed on wood, concrete subfloors
- Solid can be installed on wood subfloors, on concrete subfloors if recommended by the manufacturer

Job Site Elevation



- Solid
 - Above grade
 - On grade
- Engineered
 - Above grade
 - On grade
 - Below grade
 - Soil $\leq 3''$ above floor



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Performance



Performance



- Unique challenges
- Installation expertise required
- Not for DIY



Performance



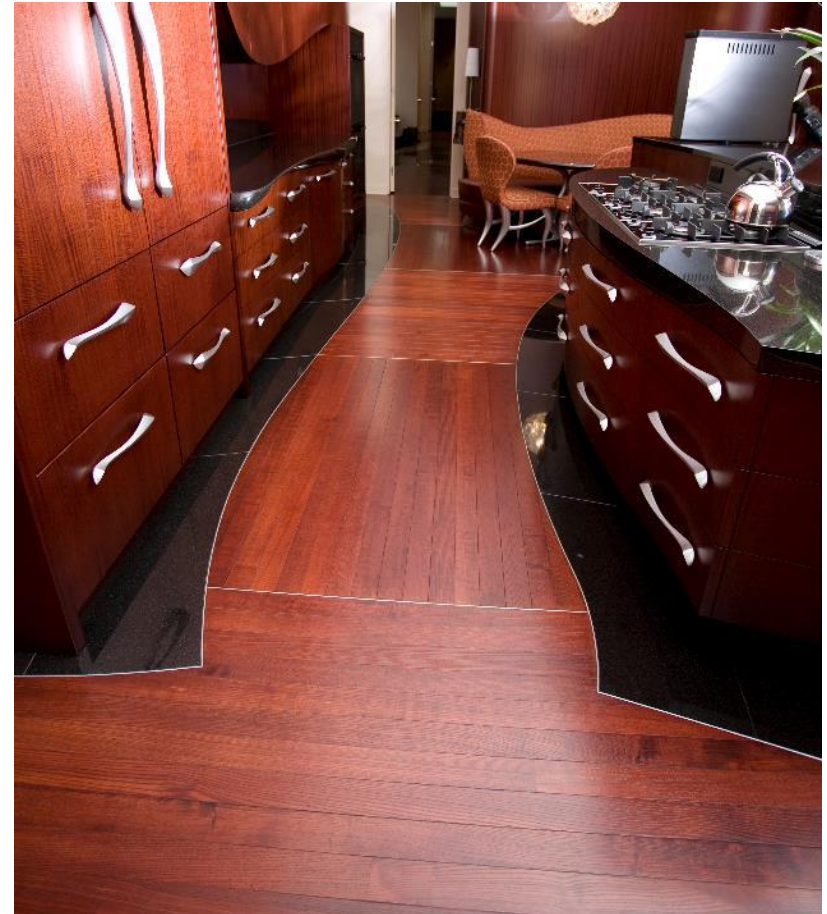
- Wood is hygroscopic
- Absorbs, loses moisture depending on environment
- Swells = moisture gain
- Shrinks = moisture loss
- Direction of movement based on growth rings



Plank Performance



- Movement increases as width increases
- 6" board moves 2x more than 3" board
- 6" board moves $\frac{1}{2}$ as much as 12" board



Plank Performance



- 5" Solid oak plank
 - 70°F & 40% RH = 5"
 - Across 10' = no movement
 - 70°F & 20% RH = 4.941"
 - Across 10' = 1.4" shrinkage
 - 70°F & 65% RH = 5.079"
 - Across 10' = 1.9" swelling



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Saw Cuts



Wood Flooring Cuts



- Plainsawn
- Quartersawn
- Riftsawn
- Livesawn



Plainsawn



- Series of parallel cuts
- Remaining cuts perpendicular to first set
- Produces wider boards than rift, quartered
- Board length varies



Plainsawn



- Board face has “cathedral” grain
- Contains flat-grain, some vertical-grain
- Contains more variation within, among boards than other cuts
- End grain growth rings between 0-45°

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- Contains flat-grain, some vertical-grain
- Contains more variation within, among boards than other cuts
- End grain growth rings between 0-45°

Quartersawn



- Quarter the log
- Remaining cuts perpendicular to growth rings
- Produces narrow boards
- Vertical grain
- More waste



Quartersawn



- Board face has fleck pattern
- Contains tight, wavy grain
- End grain annual growth rings 45-90° to surface

Riftsawn



- Quarter the log
- Remaining cuts from center face, work out
- Boards 30-60° to growth rings
- Comes from smaller part of wedge, produces more waste
- Hard to produce only wide-width rift



Riftsawn



- Board face has vertical grain
- Contains minimal fleck
- End grain annual growth rings 30-60° to surface



- First cut straight through log's center
- Remaining cuts parallel to first
- Yields extremely wide boards
- Produces very little waste





- Board face growth rings work from parallel in center to perpendicular at edges
- End grain annual growth rings 0-90° to surface

Plainsawn



- Expands, contracts through width
- Less dimensionally stable

Quartersawn



- Expands, contracts through thickness
- More dimensionally stable

Riftsawn



- Expands, contracts through thickness
- More dimensionally stable

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Availability



Availability



- Harder to manufacture
- Produce more waste
- Limited availability



Availability



- Wider boards require longer boards
- Limited availability



Plank Availability



- Limited availability
- Increased cost



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Maintenance



- Most neglected aspect of specifying hardwood floors
- Essential component of the specification process
- Maximizes lifetime of product
- Minimizes inconvenience of costly renovation
- Protects client's investment
- Promotes long-term sustainability of raw materials

Routine Maintenance



- Sweep, dust mop
- Vacuum with beater bar off to remove dirt, grit between floor boards
- Avoid water, steam mops which can damage finish, wood



Preventive Maintenance

- Place breathable throw-rugs at entrances
- Put felt pads on furniture in contact with floor
- Avoid walking on floor with sport cleats, high heels in disrepair



Preventive Maintenance



- Elephant = 50-100 PSI
- 125-pound woman in high heels = 2,000 PSI
- An exposed high heel nail head = 8,000 PSI



Preventive Maintenance



- Clean spills immediately with damp cloth
- Allowing liquids to sit damages finish, wood

Preventive Maintenance

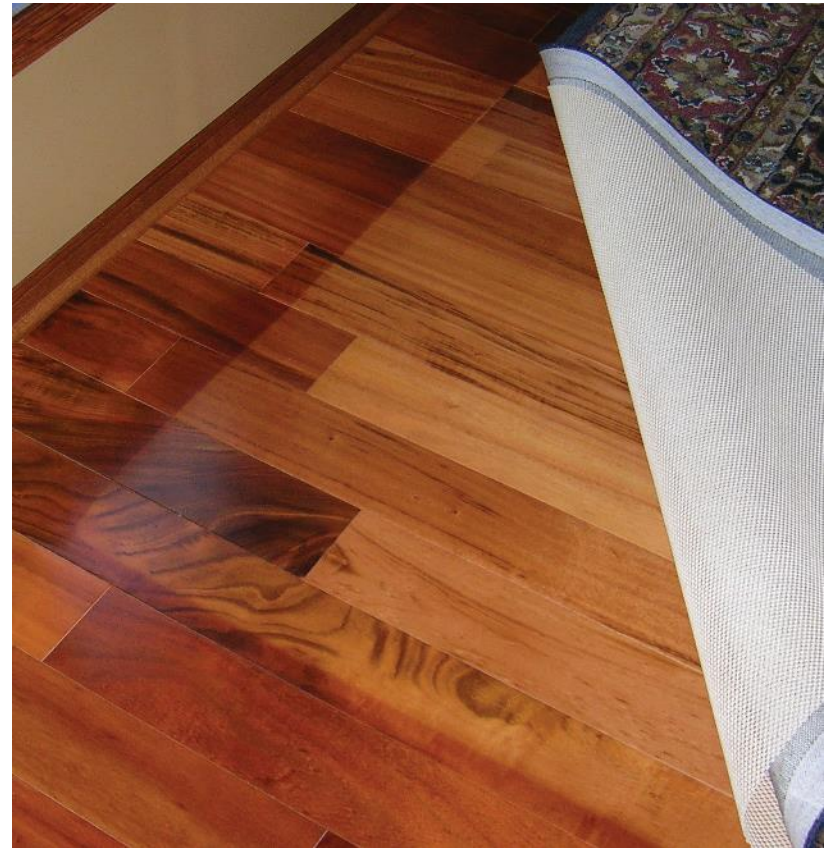


- Clean pet stains immediately
- Urine stains floor when left untreated
- Repair often requires board replacement
- Damage may reach subfloor, requiring replacement

Preventive Maintenance



- Sunlight affects wood floors like skin
- Oxidation, UV exposure
- Periodically move furniture, rugs to minimize exposure



Preventive Maintenance



- Never use household dust cleaners on wood floors
- Use manufacturer recommended cleaner for floor's
- If unsure, wood flooring professional can identify



Long-Term Maintenance



- Maintenance coat
 - Restores luster
 - Repairs small surface finish scratches
 - Lightly abrade surface finish
 - Apply new finish
 - Similar to repainting furniture
- Sand & refinish
 - Repair large scratches, dents
 - Repair exposed wood
 - Sand off finish, some wood
 - 1/32" wood removed
 - Apply new finish



Maintenance



- Restores beauty
- Will last decades
- Delivers enjoyment, value
- Extends service life



Summary



- Plank wood floors are wider, longer than strip, parquet wood floors
- Solid wood floors are one solid piece of wood, engineered wood floors are multiple layers of wood veneers, wood composites
- Plank wood flooring experiences more movement than strip, parquet wood flooring
- Quartersawn, riftsawn wood can minimize performance issues with plank wood flooring
- Plank wood flooring has limited availability, costs more
- Routine maintenance for plank wood floors includes sweeping, dry mopping

Thank You

The logo for the Northwest Florida Area (nwfa) is located in the top right corner. It consists of the lowercase letters 'nwfa' in a white, sans-serif font, with a small green leaf icon integrated into the letter 'a'. The background of the top right corner of the slide features a photograph of a young child sitting on a couch and reading a book.

This concludes this course for:

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A photograph of a bedroom interior. The floor is made of dark wood planks. On the left, a bed with a white and grey plaid sheet is visible. In the background, there is a dark desk with a white object on it. To the right, there are white and dark curtains. The lighting is soft and indoor.

Questions?