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## SECTION 09640 - WOOD FLOORING

### PART 1 - GENERAL

#### 1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data and material Samples.
- B. Hardwood Flooring: Comply with NOFMA grading rules for species, grade, and cut.
  - 1. Certification: Provide flooring that carries NOFMA grade stamp on each bundle or piece.
- C. Maple Flooring: Comply with MFMA grading rules for species, grade, and cut.
  - 1. Certification: Provide flooring that carries MFMA mark on each bundle or piece.
- D. Softwood Flooring: Comply with WCLIB grading rules for species, grade, and cut.

### PART 2 - PRODUCTS

#### 2.1 FIELD-FINISHED WOOD FLOORING

- A. Solid-Wood Strip and Plank Flooring: Kiln dried and as follows:
  - 1. Species and Grade: [**Select red oak**] [**No. 1 Common red oak**] [**No. 2 Common red oak**] [**First grade hard maple**] [**Second & Better grade hard maple**] [**C & BTR - Flooring Douglas fir**] [**D - Flooring Douglas fir**] <Insert species and grade>.
  - 2. Cut: [**Plain sawn**] [**Quarter/rift sawn**] [**Edge grain**] [**Vertical grain**] <Insert cut>.
  - 3. Thickness: [**3/4 inch (19 mm)**] [**25/32 inch (20 mm)**] <Insert thickness>.

Select from options in subparagraphs above and below or insert other sizes. Hardwood strip flooring is usually 25/32 by 2-1/4 inches (20 by 57 mm); softwood flooring is usually 3/4 by 3-1/8 or 5-1/8 inches (19 by 79 or 130 mm).

- 4. Face Width: [**2-1/4 inches (57 mm)**] [**3-1/8 inches (79 mm)**] [**5-1/8 inches (130 mm)**] <Insert face width>.
  - 5. Lengths: [**Random-length strips complying with applicable grading rules**] [**Lengths required to form pattern indicated**] <Insert requirements>.
  - 6. Simulated Wood Pegs: Contrasting wood pegs at ends of plank flooring pieces.
- B. Solid-Wood Parquet Flooring: As follows:

1. [Available] Products:
  - a. <Insert manufacturer's name; product name or designation.>
2. Species: [Red oak] [White oak] [Ash] [Maple] [Black cherry] <Insert species>.
3. Grade: <Insert grade.>
4. Thickness: [5/16 inch (8 mm)] [11/16 inch (17 mm)] [1/4 inch (6 mm)] <Insert thickness>.
5. Pattern: <Insert pattern.>
6. Size: <Insert size.>

C. Engineered-Wood [Strip] [and] [Plank] Flooring: HPVA EF.

1. [Available] Products:
  - a. <Insert manufacturer's name; product name or designation.>
2. Species: [Red oak] [White oak] [Ash] [Beech] [Maple] [Black cherry] <Insert species>.
3. Grade: <Insert grade.>
4. Thickness: [1/2 inch (12.7 mm)] [3/8 inch (9.5 mm)] <Insert thickness>.
5. Construction: [Five] [Three] ply.
6. Width: [2-1/4 inches (57 mm)] [3 inches (76 mm)] <Insert width>.
7. Length: Manufacturer's standard.
8. Edges: [Square] [Beveled (eased)].

## 2.2 FACTORY-FINISHED WOOD FLOORING

A. Solid-Wood Strip and Plank Flooring: Kiln dried and as follows:

1. [Available] Products:
  - a. <Insert manufacturer's name; product name or designation.>
2. Species: [Red oak] [White oak] [Ash] [Birch] [Maple] [Black cherry] [Hickory] [Walnut] <Insert species>.
3. Grade: <Insert grade.>
4. Cut: [Plain sawn] [Quarter/rift sawn] [Edge grain] [Vertical grain] <Insert description>.
5. Thickness: [3/4 inch (19 mm)] [25/32 inch (20 mm)] <Insert thickness>.

Select from options in subparagraphs above and below or insert other sizes. Hardwood strip flooring is usually 25/32 by 2-1/4 inches (20 by 57 mm); softwood flooring is usually 3/4 by 3-1/8 or 5-1/8 inches (19 by 79 or 130 mm).

6. Face Width: [2-1/4 inches (57 mm)] [3-1/8 inches (79 mm)] [5-1/8 inches (130 mm)] <Insert face width>.
7. Lengths: [Random-length strips complying with applicable grading rules] [Lengths required to form pattern indicated] <Insert requirements>.
8. Edge Style: [Square] [Beveled (eased)].
9. Finish: UV urethane system.

## B. Solid-Wood Parquet Flooring: As follows:

1. [Available ]Products:
  - a. <Insert manufacturer's name; product name or designation.>
2. Species: [Red oak] <Insert species>.
3. Grade: <Insert grade.>
4. Thickness: [5/16 inch (8 mm)] [11/16 inch (17 mm)] [1/4 inch (6 mm)] <Insert thickness>.
5. Edge Style: <Insert description.>
6. Pattern: <Insert pattern.>
7. Size: <Insert size.>

Coordinate option retained in subparagraph below with products and manufacturers selected.
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8. Finish: [UV urethane] [Acrylic impregnated].

## C. Engineered-Wood [Strip] [and] [Plank] Flooring: HPVA EF.

1. [Available ]Products:
  - a. <Insert manufacturer's name; product name or designation.>
2. Species: [Red oak] [White oak] [Ash] [Beech] [Maple] [Black cherry] [Hickory] [Walnut] <Insert species>.
3. Grade: <Insert grade.>
4. Thickness: [1/2 inch (12.7 mm)] [3/8 inch (9.5 mm)] <Insert thickness>.
5. Construction: [Five] [Three] ply.
6. Width: [2-1/4 inches (57 mm)] [3 inches (76 mm)] <Insert width>.
7. Length: Manufacturer's standard.
8. Edges: [Square] [Beveled (eased)].

Coordinate option retained in subparagraph below with products and manufacturers selected.
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9. Finish: [UV urethane] [Acrylic impregnated].

## D. Engineered-Wood Parquet Flooring: HPVA EF.

1. [Available ]Products:
  - a. <Insert manufacturer's name, product name or designation.>
2. Species: [Red oak] [Ash] [Beech] [Maple] [Walnut] <Insert species>.
3. Grade: <Insert grade.>
4. Thickness: [3/8 inch (9.5 mm)] [1/2 inch (12.7 mm)] <Insert thickness>.
5. Construction: [Five] [Three] ply.
6. Edges: <Insert edge style.>
7. Pattern: <Insert pattern.>
8. Size: <Insert size.>
9. Finish: UV urethane.

## 2.3 FINISHING MATERIALS

Retain this article if wood flooring is finished on-site.

- A. Urethane Finish System: Complete [**solvent-based, oil-modified**] [**water-based**] system of compatible components that is recommended by finish manufacturer for application indicated.
  - 1. Stain: Penetrating and nonfading type.
    - a. Color: [**Match sample**] [**As selected**].
  - 2. Floor Sealer: Pliable, penetrating type.
  - 3. Finish Coats: Formulated for multicoat application on wood flooring.
- B. Wood Filler: Formulated to fill and repair seams, defects, and open-grain hardwood floors; compatible with finish system components and recommended by filler and finish manufacturers for use indicated. If required to match approved samples, provide pigmented filler.

## 2.4 ACCESSORY MATERIALS

- A. Vapor Retarder: ASTM D 4397, polyethylene sheet not less than 6.0 mils (0.15 mm) thick.
- B. Asphalt-Saturated Felt: ASTM D 4869, Type II.
- C. Wood Flooring Adhesive: Mastic recommended by flooring and adhesive manufacturers for application indicated.
- D. Fasteners: As recommended by manufacturer, but not less than that recommended in NWFA's "Installation Guidelines: Wood Flooring."

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Comply with flooring manufacturer's written installation instructions, but not less than applicable recommendations in NWFA's "Installation Guidelines: Wood Flooring."
- B. Provide expansion space at walls and other obstructions and terminations of flooring of not less than [**3/4 inch (19 mm)**] <**Insert dimension**>.
- C. Felt Underlayment: Where strip or plank flooring is nailed to solid-wood subfloor, install flooring over a layer of asphalt-saturated felt.
- D. Vapor Retarder: Where wood flooring is [**nailed to sleepers over concrete, install flooring over a layer of polyethylene sheet with edges overlapped over sleepers and turned up behind baseboards**] [**installed on concrete slabs, install a layer of polyethylene sheet according to flooring manufacturer's written instructions**].

- E. Solid-Wood, [**Strip**] [**and**] [**Plank**] Flooring: Blind nail or staple flooring to substrate.

First option in subparagraph below is commonly used for hardwood, second option for softwood.

1. Plank Flooring: For flooring of face width more than 3 inches (75 mm), [**install countersunk screws at each end of each piece in addition to blind nailing. Cover screw heads with wood plugs glued flush with flooring**] [**install not less than 2 countersunk nails at each end of each piece, spaced not more than 16 inches (406 mm) along length of each piece, in addition to blind nailing. Fill holes with matching wood filler**].

- F. Solid-Wood Parquet Flooring: Set in adhesive.

- G. Engineered-Wood Flooring: [**Set in adhesive**] [**Nail or staple**] [**Install floating floor**].

### 3.2 SANDING AND FINISHING

Retain this Article if wood flooring is finished on-site.

- A. Machine-sand flooring to remove offsets, ridges, cups, and sanding-machine marks that would be noticeable after finishing. Vacuum and tack with a clean cloth immediately before applying finish.
- B. Fill open-grained hardwood.
- C. Apply floor-finish materials in number of coats recommended by finish manufacturer for application indicated, but not less than one coat of floor sealer and [**three**] <**Insert number**> finish coats.
  1. Apply stains to achieve an even color distribution matching approved Samples.

END OF SECTION 09640