



Section 09 64 29
Laminated Wood Flooring Specification

NOTE TO EDITING ARCHITECT:

THIS SECTION IS A PROPRIETARY SPECIFICATION BASED ON PRODUCTS MANUFACTURED BY:

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Nydree Acrylic Impregnated Engineered Hardwood Flooring with Pedestrian™ aluminum oxide urethane finish.
- B. Maintenance materials.
- C. Acrylic Impregnated accessories including: Flush Stair Nosing, Stair Tread, Stair Riser, T-Molding, Type A Reducer Strip, Type B Reducer Strip and Type C Flat Strip. Non-impregnated accessories including: 3” & 4” Base Molding and ¾” Quarter Round. *Note: Accessories are not available for COR.*

1.2 RELATED SECTIONS

- A. Section: 03 10 00 - Concrete Forming
- B. Section: 03 30 00 - Cast-in-place Concrete
- C. Section: 06 10 00 - Rough Carpentry

1.3 REFERENCES

- A. ASTM E648 - Test Method for Critical Radiant Flux (Radiant Panel) of Floor.
- B. ASTM F1869 – Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
- C. ASTM F2170 – Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using insitu Probes.

1.4 SUBMITTALS

- A. Submit product data in accordance with Section (01 30 00) (01 33 00), including manufacturer’s installation and maintenance instructions.
- B. Submit three representative samples of Nydree acrylic impregnated flooring in the final color(s) or custom color(s), species and optional ‘UV-Oil’ finish, if desired as selected by the owner or their representative.
Note: ‘UV-Oil’ Finish is not available on certain colors.

- C. Installer Certification: Submit a list of at least three Engineered Hardwood flooring installations successfully completed within the past year requiring the same general degree of installation expertise.
- D. Shop Drawings: Show floor pattern layout.

1.5 QUALITY ASSURANCE

- A. Installer: Shall be experienced in the wood and/or vinyl tile flooring industry and shall have a minimum of five (5) years experience in the installation of similar products.

1.6 STORAGE, DELIVERY, AND HANDLING

- A. Cartons of wood should be stored in dry, well ventilated storage areas or warehouses. Never store cartons of flooring outdoors. The idea storage environment should be maintained at 30-55% relative humidity and 60-90°F (15-32°C). Do not store cartons of flooring directly on warehouse floors.
- B. Deliver the flooring to a preferred 60-90°F (15-32°C), 30-55% relative humidity job site in unopened cartons. Protect flooring from exposure to moisture.
- C. Cartons of Nydree Flooring will arrive to the job site wrapped in a polyethylene bag and typically shrink-wrapped to maintain the flooring at its most desirable installation moisture content. If material needs to be inspected prior to flooring installation, carefully remove the shrink-wrap and lift off polybag. After inspecting, put polybag back over pallet of flooring and secure with tape until installation. **DO NOT REMOVE NYDREE FLOORING FROM THE POLYBAG UNTIL THE DAY OF INSTALLATION. (THE POLYBAG IS DIRECTLY BENEATH THE SHRINK WRAP).** Flooring that has not been used within a day should be returned to the polybag until ready for installation. No acclimation time is necessary or desired when installing Nydree Flooring. Temperature of material and adhesives should be acclimated to 60-90°F (15-32°C).

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Provide permanent HVAC operation (2 week minimum) and permanent lighting prior to installation.
- B. Maintain room temperature between 60°F (15°C) minimum and 90°F (32°C). The ideal relative humidity for Nydree Flooring installation is between 30% and 55%, prior, during and after the installation. Keep in mind that if the relative humidity drops below 30% for extended periods, the flooring could shrink causing surface splits and gaps.
- C. Do not install flooring until all other significant construction work is complete. Moisture producing activities such as drywall, concrete, masonry, painting and grouting must be complete and cured.

1.8 WARRANTY

- A. Nydree Flooring offers a Limited Lifetime Impregnated Wear Surface Warranty and Limited Lifetime Structural Defect Warranty. The Pedestrian finish offers a Limited Wear Through Warranty (3 years for commercial applications, 35 years for residential applications). Please contact Nydree Flooring for a complete copy of the warranty or visit the website at www.nydreeflooring.com.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. **Basis of Design:** Product specified is “Nydree Engineered Acrylic Impregnated Hardwood Flooring” as manufactured by Nydree Flooring, LLC. Items specified are to establish a standard of quality for design, function, materials, and appearance. Installation adhesive, moisture retarder, and applicable maintenance materials shall be specified and manufactured by Nydree Flooring, LLC. Transition strips, trim moldings and stair treads/risers manufactured by Nydree Flooring, LLC are available; however, equivalent products by other manufactures are acceptable. The Architect will be the sole judge of the basis of what is equivalent.

2.2 MATERIALS

- A. **Laminated Flooring:** Provide Nydree Engineered Acrylic Impregnated Hardwood Flooring as follows:

SELECT SPECIES BELOW. FOR EACH SPECIES RETAINED, SELECT APPLICABLE COLOR.

1. **Species and Color:** COR [Natural], [Bluebird], [Havanna], [Escondido], [Mint Green], [Tomato], [Walnut], [Sunrise], [Gothic], [Wenge], [Ice].
2. **Species and Color:** Reclaimed Oak [Natural], [Walnut], [Cashmere Gray]
3. **Species and Color:** Reclaimed Poplar [Natural].
4. **Species and Color:** Rustic Maple [Natural].
5. **Species and Color:** Radiata Pine [Natural], [Windy City Rain], [Everglade], [Caribbean Azul], [Cohiban], [Salsa], [Sassafras Falls], [Sunflower], [Ember Glow], [Chrome], [Bellaire].
6. **Species and Color:** Walnut [Natural], [Espresso], [Steel Gray].
7. **Species and Color:** African Mahogany [Natural], [Finally Alive].
8. **Species and Color:** Rift & Quartered White Oak [Natural], [Cinnamon Toast], [Starry Night], [Centennial].
9. **Species and Color:** Hickory [Natural], [Gunsmoke], [Saddlewood], [Mocha Rio].
10. **Species and Color:** Red Oak [Natural], [Harvest Wheat], [Winter Storm], [Cocoa Bayou], [Twilight].
11. **Species and Color:** Ash [Natural], [Vanilla], [Beaujolais].
12. **Species and Color:** Maple [Natural], [Down to Earth], [City Fog], [Fumed], [Bella Luna], [Latte], [Cider], [Midnight Run], [Noreaster Gray], [After Midnight].
13. **Species and Color:** Cherry [Natural], [Gettysburg Gray], [Essences De Rosa], [Winchester], [Riccio Rosso], [Moroccan Spice], [Cherico].
14. **Species and Color:** White Oak [Fumed], [Luxe].
15. **Size:**
 - a. **Thickness:** 3/8" (nominal) thickness, actual thickness 0.325 inch (8.26 mm).

SELECT WIDTH AND LENGTH BELOW.

COR, Reclaimed Oak, Reclaimed Poplar, Rustic Maple, African Mahogany, White Oak Fumed & Luxe (4" and Accents Only)

- b. **Width and Length:** Random Plank; 4 inches (101.6mm) wide by random length, 12 inches (305mm) to 47 inches (1194mm).
- c. **Width and Length:** Accent; 1/2" inch (12.7mm) wide by random length, 12 inches (305mm) to 47 inches (1194mm).
- d. **Width and Length:** Accent; 1 inch (25.4mm) wide by random length, 12 inches (305mm) to 47 inches (1194mm).
- e. **Width and Length:** Accent; 1-1/2 inches (38.1mm) wide by random length, 12 inches (305mm) to 47 inches (1194mm).

Radiata Pine, Walnut, Rift & Quartered White Oak, Hickory, Red Oak, Ash, Maple, Cherry

- f. **Width and Length:** Random Plank; 2-2/3 inches (67.6mm) wide by random length, 12 inches (305mm) to 47 inches (1194mm).
- g. **Width and Length:** Random Plank; 4 inches (101.6mm) wide by random length, 12 inches (305mm) to 47 inches (1194mm).
- h. **Width and Length:** Accent; 1/2" inch (12.7mm) wide by random length, 12 inches (305mm) to 47 inches (1194mm).
- i. **Width and Length:** Accent; 1 inch (25.4mm) wide by random length, 12 inches (305mm) to 47 inches (1194mm).
- j. **Width and Length:** Accent; 1-1/2 inches (38.1mm) wide by random length, 12 inches (305mm) to 47 inches (1194mm).

SELECT FINISH BELOW. NOTE THAT UV-OIL FINISH IS NOT AVAILABLE FOR THE COLORS SHOWN IN RED ABOVE. ALSO, KEEP IN MIND THAT UV-OIL FINISH MAY SLIGHTLY ALTER THE SHADE OF CERTAIN SELECTED COLORS.

16. **Finish:** Standard Factory-applied Pedestrian urethane containing aluminum oxide.
17. **Finish:** Optional Factory-applied UV-Oil Finish. Not available in the colors shown in red above.
18. **Edge Detail:** Micro-bevel.
19. **Milling:** Tongue and groove sides, end-matched.
20. **Construction:** Engineered multi-ply laminated construction; 1/10 inch (2.54mm) acrylic impregnated wear layer shall be laminated to the multi-ply platform using non-formaldehyde adhesive. Each plank shall meet or exceed Hardwood Plywood Veneer Association (HPVA) Type II Bond Test.
21. **Fire Ratings:** Maple, Rustic Maple, Red Oak, Ash, Cherry, Reclaimed Poplar, Hickory, Rift & Quartered White Oak and African Mahogany flooring has a Class I rating when tested in accordance with ASTM E-648. COR, Reclaimed Oak, Radiata Pine and Walnut flooring has a Class II rating when tested in accordance with ASTM E-648.
22. **Adhesive:** Nydree Flooring UP-28-0VOC moisture-cured adhesive.

RETAIN BELOW ONLY IF CALCIUM CHLORIDE TEST RESULTS ARE EQUAL TO OR GREATER THAN 8 POUNDS (3.63 KG) PER 1000 SQUARE FEET (92.9 M2) PER 24 HOURS OR WHEN INSITU RELATIVE HUMIDITY RESULTS ARE EQUAL TO OR GREATER THAN 85% OR WHEN THERE IS CONCERN OVER FUTURE SUBFLOOR MOISTURE.

23. **Moisture Retarder:** Nydree Flooring OVR-8 Self-Leveling Moisture Retarder.

SELECT MAINTENANCE MATERIALS BELOW DEPENDING ON FINISH SELECTED.

24. **Maintenance Materials:**
 - a. **Standard Pedestrian Finish:** Bona Pro Series Hardwood Floor Cleaner and Nydree Flooring Dust Mop Treatment.
 - b. **Optional UV-Oil Finish:** Nydree Flooring Spray Buff Cleaner and Nydree Flooring Dust Mop Treatment. Restoration Product: Oil Finish Conditioner.

B. Accessories:

1. **Reducers and Transition Strips:** Acrylic impregnated type A reducer strips (wood to vinyl), type B reducer strips (wood to carpet), type C flat strips (wood to wood), T-molding and other manufacturer standard strips as indicated on the Drawings or, if not indicated, as selected by the Architect from the manufacturer's standards, in the same species and colors as the laminated flooring.
2. **Stairs:** Acrylic impregnated flush stair nosing, stair treads (3/4" x 12" / 19mm x 304.8mm) with one side bullnose and risers (3/4" x 8" / 19mm x 203.2mm), in the same species and colors as the laminated flooring.
3. **Length:** 3 foot (914mm) pieces.

SELECT ABOVE OR BELOW.

4. **Length:** 6 foot (1829mm) pieces.
5. **Trim Moldings:** *Non-impregnated* 3/4" (19mm) quarter round, 3" (76.2mm) and 4" (101.6mm) base moldings, and other manufacturer standard trim moldings as indicated on the Drawings or, if not indicated, as selected by the Architect from the manufacturer's standards, in the same species and colors as the laminated flooring.
6. **Length:** Standard Random length, 6 (1829mm) to 10 (3048mm) foot pieces.
7. **Finish:** Finish accessories to match laminated flooring.

PART 3 EXECUTION

3.1 EXAMINATION

A. Concrete Subfloors

1. Verify that the substrate is clean, sound and free of wax, dirt, dust, mold, mildew, loose material,

- grease, oil, coatings, paint, rust, cutback, old adhesives (carpet), weak powdery concrete or gypsum, adhesive removers, efflorescence and other surface contaminants that will interfere with the bonding of the adhesive. Concrete surface sealers and curing compounds must be removed if present.
2. Verify that the substrate is flat to within 3/16" in 10 ft. (5mm per 3m). The substrate must be smooth, free from cracks, holes, voids, ridges, projections and other defects impairing performance or appearance.
 3. Verify that new slab cure is a minimum of 30 days, preferably 60 days.
 4. Verify that the concrete is clean, sound, free from contaminants and dry regardless of concrete age, history or grade level. Concrete must be less than 8 lbs./1000sq.ft./24 hrs using the Calcium Chloride Test Method (ASTM F1869) or less than 85% insitu relative humidity (ASTM F2170). The protocol for either moisture test must be followed precisely for warranty consideration. If both tests are performed, the insitu RH test is always the qualifying standard. Calcium Chloride Test kits are available from Nydree Flooring Customer Service. If any Calcium Chloride test is equal to or greater than 8 lbs. or the insitu relative humidity is equal to or greater than 85%, Nydree Flooring OVR-8 Self Leveling Moisture Retarder must be used prior to installing the flooring with UP-28-0VOC adhesive. Also if there is concern over any excessive future subfloor moisture, OVR-8 should be used prior to installing the flooring with UP-28-0VOC. See OVR-8 application bulletin at www.nydreeflooring.com.
- B. Other Subfloors
1. Plywood Overlays, Structural Suspended Plywood Subfloors, Existing Wood Flooring, Acoustical Underlayments, Radiant Heated Floors (Hydronic), Terrazzo, Marble Tile, Ceramic Tile, Clay Tile, Existing Vinyl Tile or Sheet Vinyl as well as metal subfloors are all acceptable subfloors. Consult installation instruction guidelines.
- C. All Subfloors
1. Coordinate work with that of other trades prior to installation so that no discrepancies may exist with installation of doors, frames, saddles, floor drains or any materials that would interfere in any other way.
 2. Notify Architect of moisture test results and any unsatisfactory conditions. Do not begin installation until unsatisfactory conditions have been corrected. Beginning of installation means substrate and job site conditions have been accepted as suitable.

3.2 PREPARATION-CONCRETE SUBFLOORS

- A. If a sealer, curing compound, bond breaker, densifier/hardener, prior adhesive or other surface coating has been applied, it must be completely "ground" off by diamond grinding, shot blasting or scarifying. Whenever possible, grind a concrete subfloor to tolerance rather than fill. Scour all concrete surfaces, except when using the floating installation method, using 3 1/2 open coat (20 grit) sand paper. Sweep and vacuum substrate after scouring or grinding.
- B. Use Portland cement-based filler to patch saw-cut control joints (score marks in concrete), cold/construction seams(concrete), cracks, holes, voids, low spots, depressions, grooves, indentations and defects of small areas. Fill level with the surrounding surface. Do not fill or bridge concrete slab expansion joints. These joints must be carried through the flooring surface using an expansion joint covering system. **DO NOT skim coat large areas with extremely thin layers of patching compound.** Sand and/or scour patched areas smooth after material is fully cured according to manufacturer's instructions. Use only quality materials and Portland cement-based patching products. Suggested patching products include: Bostik Fast Patch 102™, Durabond Webcrete™ Ultra Finish and Durabond Webcrete™ 95.
- C. If self-leveling underlayments are used, they must dry sufficiently (run moisture test) and dry hard (not dusty/powdery). Self-leveling underlayments must have a compressive strength equal to or greater than 2000 psi.. Gypsum-based self-leveling underlayments must be dry, "above-grade" installations where the gypsum has dried hard (not dusty/powdery), and the Gypsum has a compressive strength equal to or greater than 2000 psi.. Nydree Flooring can not be responsible for the strength, adhesion, or general performance of underlayments as proper compounding and preparation of subsurface are the responsibility of the installer. Suggested products include: Bostik SL-150™ and Durabond Duralevel™ 83P.

3.3 INSTALLATION

NOTE: A direct-bond (flooring is glued to subfloor) or floating installation (flooring is glued to underlayment felt) must be specified. Complete installation instructions for both types of installations are

included in each carton of Nydree Flooring. A floating floor will utilize Nydree Flooring Underlayment Felt (The Felt is not glued to the subfloor). Direct Bond is always the preferred installation method.

- A. [Direct Bond – Calcium Chloride Tests less than 8 lbs. or Insitu Relative Humidity results less than 85%]
 1. Follow manufacturer’s installation instructions.
 2. Spread UP-28-0VOC adhesive using a 3/16” x 5/32” (4,8mm x 4,0mm) V-notched trowel.
 3. Install flooring per manufacturer’s instructions.
 4. Roll floor with 150 pound (70kg) roller (100 pound plus 50 pound attachment) one hour after spreading adhesive, but not later than 2.5 hours. Be sure to roll in both directions (with plank and across plank).
 5. Spread adhesive only over surface that can be finished within cure time of adhesive.
 6. It is extremely important to remove excess adhesive while still fresh. Use mineral spirits and a white cloth. ***Cured adhesive is nearly impossible to remove.***
 7. Install trim, molding and transition strips per manufacturer’s installation instructions.
- B. [Direct Bond – Calcium Chloride Tests equal to or greater than 8 lbs. or Insitu Relative Humidity results equal to or greater than 85%]
 1. Follow OVR-8 installation instructions.
 2. Apply OVR-8 using a 3/16” x 5/32” (4,8mm x 4,0mm) V-notched trowel to achieve a flat, uniformly thick 30-mil membrane (thickness of a credit card).
 3. Allow OVR-8 to cure for a minimum of 12 hours.
 4. Follow with plank installation using Nydree Flooring UP-28-0VOC adhesive.
- C. [Floating Installation – Typically only specified when old resilient tile and mastic can not be removed.]
 1. Follow Floating Installation Method in installation instructions.
 2. For the floating installation method, concrete must be visibly dry and **less than 3 lbs./1000sq.ft./24 hrs** using the Calcium Chloride Test method (ASTM F1869) for warranty consideration. In areas of 1000 sq. ft. or less, conduct three tests. Add one more test kit for each additional 1000 sq. ft.. Test kits are available from Nydree Flooring. **If any test is greater than 3 lbs., the floating installation method can not be used.**
 3. Underlayment Felt is 50” wide (127cm) and should be placed so that it is perpendicular to the finished flooring. Seams are butted without overlaps. The felt is not glued to the subfloor.
 4. Expansion space is critical using this installation method. The required expansion space is ½”, but for areas larger than 24 lineal feet, use an additional ¼” expansion for each additional 12 linear feet.
 5. Glue flooring to Underlayment felt using UP-28-0VOC adhesive as described in letter A above.

3.4 PROTECTION

- A. Protect finished floor from abuse by other trades using heavy kraft paper or equivalent. Make sure the floor has been cleaned thoroughly (swept, vacuumed and dust mopped) prior to protecting, so that the flooring surface will not be scratched by debris. Avoid covering the installation with protective paper or equivalent for at least 24 hours. Keep traffic out of spaces and areas where flooring is being installed until adhesive has set. Light foot traffic after 10-12 hours. Normal traffic after 24 hours.

3.5 CLEANING

- A. Nydree Flooring Sealed with Pedestrian Urethane: Prior to turning the floor over to the owner, it shall be thoroughly cleaned by sweeping, vacuuming or dust mopping to remove debris, followed by cleaning with Bona Pro Series Hardwood Floor Cleaner.
- B. Nydree Flooring Sealed w/Optional ‘UV-Oil’ Finish: Prior to turning the floor over to the owner, it shall be thoroughly cleaned by sweeping, vacuuming or dust mopping to remove debris, followed by spray buffing with Nydree Flooring Spray Buff, a red pad, and a heavy (100 lb./45kg), low speed (175-250 rpm) buffing machine.

END OF SECTION

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