

SECTION 09930

STAINS AND TRANSPARENT FINISHES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Penetrating wood floor finish.
- B. Pastel wood floor stain.
- C. Fast drying wood floor stain.
 - 1. Wood floors.
 - 2. Unglazed tile floors.
- D. Fast drying floor sealer.
 - 1. Wood floors.
 - 2. Unglazed terra cotta tile.
- E. Polyurethane wood floor finish.
 - 1. New wood floors.
 - 2. Recoating.
 - 3. Old wood floors.
- F. Floor cleaner and reconditioner.
 - 1. Hardwood floors.
 - 2. Terrazzo.
 - 3. Concrete.
 - 4. Unglazed terra cotta tile.
- G. Paste wax floor finish.
 - 1. New wood floors.
 - 2. Old wood floors.
- H. Liquid wax finish.
 - 1. Wood floors.
 - 2. Unglazed tile.
- I. Floor wax and cleaner.
- J. Hardwood floor cleaner.
- K. Gym floor sealer and finish.
- L. Gym floor penetrating finish.

1.2 RELATED SECTIONS

- A. Section 03300 - Cast-In-Place Concrete.
- B. Section 09300 - Tile.
- C. Section 09340 - Paver Tile.
- D. Section 09400 - Terrazzo.
- E. Section 09640 - Wood Flooring.
- F. Section 09690 - Flooring Restoration.
- G. Section _____ - _____.

1.3 REFERENCES

- A. NOFMA - National Oak Flooring Manufacturers Association.
- B. NWFA - National Wood Flooring Association.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Three copies of manufacturer's current technical data sheets for materials.
- C. Samples:
 - 1. Opaque: One draw down of each specified color.
 - 2. Semi-Transparent: Substrate with two transparent variations.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum five years experience regularly engaged and specializing in the application of stains and transparent finishes to floors.
- B. Pre-Installation Meetings:
 - 1. Before Application: Installer shall inspect surfaces to be treated, noting in writing to the Architect, deficiencies or flaws which would affect the performance or appearance of the finish.
 - 2. Beginning of Application: Manufacturer's Representative shall assure utilization of proper equipment, verify material quantities, and supervise material application techniques upon a substantial floor section. This section shall act as a comparative standard for the project.

- C. Installer shall not proceed with material application until all deficiencies noted in pre-application inspection report have been corrected.
- D. Installer shall notify manufacturer no less than 5 days before starting application.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials in original sealed containers, clearly marked with manufacturer's name, type of material, and batch number.
- B. Inspect the materials upon delivery to assure that specified products have been received.
- C. Store materials where temperatures are not less than 40 degrees F (4.5 degrees C).
- D. Use all means necessary to protect material before, during, and after installation, and to protect work of other trades.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Comply with current Federal and State environmental requirements.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Dura Seal, a division of Minwax, 10 Mountainview Road, Upper Saddle River, NJ 07458; ASD. Tel: (201) 818-7500 or (800) 526-0495.
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.
- C. Substitutions: Not permitted.
- D. Provide all stains and transparent finishes from a single manufacturer.

2.2 MATERIALS

- A. Penetrating Wood Floor Finish: Dura Seal(R) "Penetrating Wood Finish" semitransparent stain; oil and resin blend.
 - 1. Color: No. 200 Natural.
 - 2. Color: No. 201 White.
 - 3. Color: No. 204 Chestnut.
 - 4. Color: No. 208 Royal Mahogany.
 - 5. Color: No. 210 Neutral.
 - 6. Color: No. 216 Antique Brown.
 - 7. Color: No. 221 Golden Brown.
 - 8. Color: No. 223 Coffee Brown.
 - 9. Color: No. 228 Medium Brown.
 - 10. Color: No. 231 Ebony.
 - 11. Color: No. 237 Spice Brown.
 - 12. Color: No. 239 Rosewood.
 - 13. Color: No. 243 Sedona Red.
- B. Pastel Wood Floor Stain: Dura Seal(R) "Pastels Stain" penetrating oil-based stain.
 - 1. Color: Country White.
 - 2. Color: Golden Wheat.
 - 3. Color: Stone Gray.
- C. Fast Drying Wood Floor Stain: Dura Seal "Fast Dry Wood Stain."
 - 1. Color: Antique Brown.
 - 2. Color: Golden Brown.
 - 3. Color: Medium Brown.
 - 4. Color: Spice Brown.
- D. Fast Drying Floor Sealer: Dura Seal(R) "500 Fast Drying Sealer" penetrating sealer.
- E. Polyurethane Floor Finish: Dura Seal "Polyurethane" transparent oil-based finish.
- F. Floor Wax and Cleaner: Dura Seal(R) "Wax & Cleaner" blend of cleaning agents and wax.
- G. Paste Wax Floor Finish: Dura Seal "Paste Wax" blend of four waxes.
 - 1. Color: Neutral.
 - 2. Color: Coffee Brown.
- H. Liquid Floor Wax Finish: Dura Seal(R) "Dura Finish" liquid wax blend.
- I. Floor Cleaner and Reconditioner: Dura Seal(R) "Renovator(tm)" blend of solvent and resin.
- J. Hardwood Floor Cleaner: Dura Seal(R) "Hardwood Floor Cleaner."
- K. Gym Floor Sealer and Finish: Dura Seal(R) "Gymthane(R)."
- L. Gym Floor Penetrating Finish: Dura Seal(R) "Penetrating Gym Finish."

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that surfaces to be coated are in proper condition.

3.2 PREPARATION

- A. Before application, completely remove existing finishes to bare wood.
- B. Properly prepare surfaces according to NOFMA or NWFA approved methods.
 - 1. Use No. 100 grit screen for final sanding cut.
 - 2. Use No. 80 grit screen for final sanding cut before 201 White.
 - 3. Use No. 80 grit screen for final sanding cut to allow deeper penetration of stain.
 - 4. Use No. 100 grit screen for final screening.
 - 5. Use No. 100 grit screen for final cut.
 - 6. Use No. 80 grit screen for final screening.
- C. Remove all dust with broom and/or vacuum; tack surface with a clean towel moistened with mineral spirits.
- D. Protect work of other trades against damage from coatings.
- E. Ensure proper ventilation, application equipment, and safety precautions as recommended by manufacturer.

3.3 APPLICATION

- A. Penetrating Wood Floor Finish:
 - 1. Stir material thoroughly before and occasionally during use.
 - 2. Ensure uniform color and appearance by confirming the same product code on each can.
 - 3. Apply a test sample on a small inconspicuous area before proceeding with entire job.
 - 4. Use "Penetrating Wood Finish No. 210 Neutral" to lighten standard colors as directed by Architect.
 - 5. Apply first coat liberally with brush, lambswool applicator, or cloth at approximately 500 square feet per gallon (12.27 square m/L).
 - 6. Allow material to penetrate 5 to 8 minutes, then remove excess by wiping with rags or buffing with No.

2 steel wool. Remove all excess material to ensure proper dry time.

7. If required to obtain expected results, apply thin second coat at 800 square feet per gallon (19.63 square m/L).
8. Allow material to penetrate and remove excess as for first coat.
9. Allow to dry at least 8 hours and apply finish coat as specified. Increase drying time for conditions of high humidity, low temperature, lack of air movement, or incomplete removal of excess stain.
10. IMPORTANT: Rags, steel wool, or other waste soaked in Dura Seal(R) Penetrating Finish may spontaneously catch fire if disposed of improperly. Immediately after use, place rags, steel wool, or other waste soaked in Dura Seal(R) Penetrating Wood Finish into a sealed, water-filled metal container. Dispose of in accordance with local fire department regulations.

B. Pastel Wood Floor Stain:

1. Stir material thoroughly before and occasionally during use.
2. Apply a test sample on a small inconspicuous area before proceeding with entire job.
3. Always stain with the grain.
4. Apply liberally with brush, lambswool applicator, or cloth at approximately 400 square feet per gallon (9.81 square m/L); maintain wet edge.
5. Allow material to penetrate 2 to 4 minutes, then remove excess by wiping with clean rags. If stain becomes tacky, wipe surface with rag moistened with mineral spirits.
6. Allow to dry at least 8 hours and apply finish coat as specified. Increase drying time for conditions of high humidity, low temperature, lack of air movement, or incomplete removal of excess stain.
7. Allow to dry and apply finish coat as specified. Increase drying time for conditions of high humidity, low temperature, lack of air movement, or incomplete removal of excess stain.

C. Fast Drying Wood Floor Stain:

1. Ensure temperature of wood surface and stain are approximately 70 degrees F (21 degrees C).
2. Stir material thoroughly before and occasionally during use.
3. Apply a test sample on a small inconspicuous area before proceeding with entire job.

4. Apply liberally with brush, lambswool applicator, or cloth at approximately 500 square feet per gallon (12.27 square m/L).
 5. Remove excess stain by wiping with clean rags within 10 minutes. Work in areas small enough to ensure removal of stain within 10 minutes.
 6. Allow to dry at least 3 hours and apply finish coat as specified. Increase drying time for conditions of high humidity, low temperature, lack of air movement, or incomplete removal of excess stain.
- D. 500 Fast Drying Sealer over Wood Floors:
1. Apply liberally with lambswool applicator at 600 square feet per gallon (14.72 square m/L).
 2. Allow to dry at least 2 hours or until dry to the touch. Increase drying time for conditions of high humidity, low temperature, lack of air movement, or heavy application.
 3. Buff with No. 2 steel wool and remove all excess material.
 4. Apply finish coat as specified.
- E. Fast Drying Floor Sealer over Unglazed Terra Cotta Tile:
1. Apply first coat with lambswool applicator at 300 square feet per gallon (7.36 square m/L).
 2. Allow to dry at least 6 hours. Increase drying time for conditions of high humidity, low temperature, lack of air movement, or heavy application.
 3. Apply second coat in same manner as first, 300 square feet per gallon (7.36 square m/L).
 4. Allow to dry at least 6 hours. Increase drying time for conditions of high humidity, low temperature, lack of air movement, or heavy application.
 5. Buff with medium stiff scrubbing brush under buffing machine, removing all excess material.
 6. Apply finish coat or paste wax as specified.
- F. Polyurethane Floor Finish over New Wood Floors:
1. Seal wood floors as specified above and allow to dry thoroughly.
 2. Stir material thoroughly before and occasionally during use.
 3. Apply first coat liberally with brush or lambswool applicator in thin coats, approximately 750 square feet per gallon (18.40 square m/L).
 4. Apply first coat liberally with brush or lambswool applicator in thin coats, approximately 500 square feet per gallon (12.27 square m/L).

5. Allow to dry at least 8 hours. Extend drying time for thicker applications.
 6. Screen lightly with No. 120 grit screen.
 7. Tack floor with a cloth moistened with mineral spirits to remove dust.
 8. Apply second coat in same manner and application rate as first coat.
 9. Allow to dry at least 8 hours. Extend drying time for thicker applications.
- G. Recoating Wood Floors with Polyurethane Floor Finish:
1. Clean floors with an abrasive pad moistened with mineral spirits, removing all grease, oil, dirt, soap residue, and other foreign material.
 2. Screen with No. 100 grit screen.
 3. Tack floor with a cloth moistened with mineral spirits to remove dust.
 4. Stir material thoroughly before and occasionally during use.
 5. Apply first coat liberally with brush or lambswool applicator in thin coats, approximately 750 square feet per gallon (18.40 square m/L).
 6. Apply first coat liberally with brush or lambswool applicator in thin coats, approximately 500 square feet per gallon (12.27 square m/L).
 7. Allow to dry at least 8 hours. Extend drying time for thicker applications.
 8. Screen lightly with No. 120 grit screen.
 9. Tack floor with a cloth moistened with mineral spirits to remove dust.
 10. Apply second coat in same manner and application rate as first coat.
 11. Allow to dry at least 8 hours. Extend drying time for thicker applications.
- H. Polyurethane Floor Finish over Old Wood Floors:
1. Sand floors to bare wood according to NOFMA or NWFA approved methods. Remove all existing stain and finish.
 2. Tack floor with a cloth moistened with mineral spirits to remove dust.
 3. Stir material thoroughly before and occasionally during use.
 4. Apply first coat liberally with brush or lambswool applicator in thin coats, approximately 750 square feet per gallon (18.40 square m/L).
 5. Apply first coat liberally with brush or lambswool applicator in thin coats, approximately 500 square feet per gallon (12.27 square m/L).

6. Allow to dry at least 8 hours. Extend drying time for thicker applications.
 7. Screen lightly with No. 120 grit screen.
 8. Tack floor with a cloth moistened with mineral spirits to remove dust.
 9. Apply second coat in same manner and application rate as first coat.
 10. Allow to dry at least 8 hours. Extend drying time for thicker applications.
- I. Floor Cleaner and Reconditioner:
1. Mix four parts floor cleaner and reconditioner with one part Dura Seal(R) penetrating wood floor finish, color as specified.
 2. Apply floor cleaner and reconditioner using lambswool applicator or sprayer at 900 square feet per gallon (22.08 square m/L).
 3. Allow 5 minutes for floor cleaner and reconditioner to act.
 4. Scrub floor with No. 2 steel wool until floor cleaner and reconditioner and dirt have been removed and surface is dry to the touch. Periodically change steel wool to ensure proper removal.
 5. Allow to dry at least 4 hours. Increase drying time for conditions of high humidity, low temperature, or inadequate removal of excess material.
 6. **IMPORTANT:** Rags, steel wool, or other waste soaked in Dura Seal(R) Renovator(tm) Cleaner and Reconditioner may spontaneously catch fire if disposed of improperly. Immediately after use, place rags, steel wool buffing pads, or other waste soaked in Dura Seal(R) Renovator Cleaner and Reconditioner into a sealed, water-filled metal container. Dispose of in accordance with local fire department regulations.
- J. Paste Wax Floor Finish over New Wood Floors:
1. Stain and seal wood floors as specified above and allow to dry thoroughly.
 2. Place a small amount of paste wax in the center of a piece of cheese cloth; fold the cloth so that paste wax will not come in direct contact with floor.
 3. Wipe floors with cheese cloth in circular motion, applying light pressure to force paste wax through the cloth.
 4. Apply paste wax in small enough areas so that surface can be buffed before wax has set and hardened, approximately five minutes.

5. Buff each area to a soft sheen with a soft, dry cloth, weighted buffer, or polisher.
- K. Paste Wax Floor Finish over Old Wood Floors:
1. Clean floor with floor cleaner and reconditioner as specified above.
 2. Place a small amount of paste wax in the center of a piece of cheese cloth; fold the cloth so that paste wax will not come in direct contact with floor.
 3. Wipe floors with cheese cloth in circular motion, applying light pressure to force paste wax through the cloth.
 4. Apply paste wax in small enough areas so that surface can be buffed before wax has set and hardened, approximately five minutes.
 5. Buff each area to a soft sheen with a soft, dry cloth, weighted buffer, or polisher.
- L. Liquid Wax Finish:
1. Apply with cloth, lambswool applicator, or fine steel wool pad, approximately 2,000 square feet per gallon (49.08 square m/L).
 2. Allow to dry and buff to satin luster using a cloth or floor polishing machine. Drying time will be increased for conditions of high humidity, low temperature, or heavy application.
 3. Allow overnight drying before subjecting floor to traffic or replacing rugs and furniture.
- M. Floor Wax and Cleaner:
1. Shake container well before use.
 2. Apply with cloth or fine steel wool pad, approximately 500 square feet per gallon (12.27 square m/L).
 3. Gently rub surface to remove dirt.
 4. Wipe away loosened dirt and allow to dry 20 to 30 minutes. Drying time will be increased for conditions of high humidity, low temperature, or heavy application.
 5. Polish using a clean cloth or polishing machine.
- N. Hardwood Floor Cleaner:
1. Use full strength; do not add water.
 2. Sweep or vacuum to pick up loose dirt.
 3. Squirt cleaner lightly in an "S" pattern directly onto floor in a 3 to 4 square foot (0.279 to 0.372 square m) area; avoid puddling.

4. Damp mop using a well wrung-out mop; rinse mop as needed to remove dirt.
- O. Gymthane(R) Gym Floor Sealer and Finish:
1. Tack floor with a clean cloth moistened with mineral spirits to remove dust.
 2. Apply one coat of sealer with lambswool applicator at 500 square feet per gallon (12.27 square m/L).
 3. Allow to dry at least 8 hours. Increase drying time for conditions of high humidity, low temperature, lack of air movement, or heavy application.
 4. Screen with No. 100 disc.
 5. Tack floor with a clean cloth moistened with mineral spirits to remove dust.
 6. Apply gym line paint according to label directions.
 7. Allow to dry thoroughly.
 8. Screen with No. 120 screen or finer.
 9. Tack floor with a clean cloth dampened with mineral spirits to remove dust.
 10. Apply one coat of finish with lambswool applicator at 500 square feet per gallon (12.27 square m/L).
 11. Allow to dry at least 8 hours. Increase drying time for conditions of high humidity, low temperature, lack of air movement, or heavy application.
 12. Screen with No. 100 disc.
 13. Tack floor with a clean cloth moistened with mineral spirits to remove dust.
 14. Apply second coat of finish in the same manner as the first.
- P. Penetrating Gym Finish:
1. Apply first coat with lambswool applicator at 500 square feet per gallon (12.27 square m/L).
 2. Allow to penetrate 5 to 10 minutes.
 3. Remove excess material by wet buffing with No. 2 steel wool until surface is dry to the touch.
 4. Allow to dry at least 8 hours. Increase drying time for conditions of high humidity, low temperature, or inadequate removal of excess material.
 5. Apply second coat in the same manner as the first and allow to dry at least 8 hours.
 6. Apply game lines using a moisture-cure urethane line paint or a two-component epoxy line paint according to label directions.
 7. IMPORTANT: Rags, steel wool, or other waste soaked in Dura Seal(R) Penetrating Gym Finish may spontaneously catch fire if disposed of improperly.

Immediately after use, place rags, steel wool and other waste soaked in Dura Seal(R) Penetrating Gym Finish into a sealed, water-filled metal container. Dispose of in accordance with local fire department regulations.

3.4 ADJUSTING AND CLEANING

- A. Clean equipment and adjacent surfaces using paint thinner, turpentine, or mineral spirits.

END OF SECTION