SECTION 09 93 23
ZAR® Interior Staining and Finishing

(Notes to Specifier are accessible by pressing the ¶ (pilcrow) key)

PART 1 - GENERAL

1.1   RELATED DOCUMENTS

A.   Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2   SUMMARY

A.   Section Includes:
1.   Interior wood cabinetry, flooring, paneling, door and trim stain.
2.   Interior clear wood sealer.
3.   Interior clear wood abrasion protection.
4.   Exterior fiberglass or metal door stain and protection.

B.   Related Sections:
1.   Section 06 20 23 – Interior Finish Carpentry.
2.   Section 06 40 23 – Interior Architectural Woodwork.
3.   Section 06 41 00 – Architectural Wood Casework.
4.   Section 06 42 00 – Wood Paneling.
5.   Section 06 43 00 – Wood Stairs and Railing.
6.   Section 06 44 00 – Ornamental Woodwork.
7.   Section 06 46 00 – Wood Trim.
8.   Section 06 48 00 – Wood Frames.
9.   Section 08 13 00 – Metal Doors.
10.   Section 08 14 00 – Wood Doors.
11.   Section 08 16 00 – Composite Doors.
12.   Section 09 94 00 – Decorative Finishing.

1.3   REFERENCES

A.   ASTM International (ASTM)
1.   ASTM D 16 – Standard Terminology for Paint, Related Coatings, Materials and Applications.

1.4   ACTION SUBMITTALS

A.   Submit under provisions of Section 01 30 00.

B.   Product Data: For each type of product.

1. Include construction details, materials descriptions and tested physical properties of stain and finish.
2. Include manufacturer's instructions for evaluating, preparing and treating substrate.

C. Shop Drawings:
1. Show locations and extent of application.

D. Samples:
1. For each product system specified, two samples, minimum 4 inches square, representing actual finished product color, sheen and texture.

1.5   QUALITY ASSURANCE

A. Comply with Section 01 40 00.

B. Qualifications:
1. Manufacturer Qualifications: Company with minimum 15 years of experience in manufacturing of specified products and systems.
2. Applicator Qualifications: Company with minimum of 5 years' experience in application of stains and finishes as specified in this section on projects of similar size and scope, and employs installers and supervisors who are trained by and acceptable to product manufacturer.
   a. Successful completion of a minimum of 5 projects of similar size and complexity to specified Work.

C. Field Mock-up:
1. Install at Project site or pre-selected area of building for field mock-up, as directed by Architect.
2. Apply material in strict accordance with manufacturer's written application instructions.
3. Manufacturer's representative or designated representative will review technical aspects; surface preparation, application, and workmanship.
4. Field sample will be standard for judging workmanship on remainder of Project.
5. Maintain field mock-up during construction for workmanship comparison.
6. Do not alter, move, or destroy field mock-up until Work is completed and approved by Architect.
7. Obtain Architect's written approval of field mock-up before start of material application, including approval of aesthetics, color, texture, and appearance.
8. Subject to compliance with requirements, field mock-up may become part of the completed Work, if undamaged at time of Substantial Completion.

1.6   DELIVERY, STORAGE, AND HANDLING

A. Comply with Section 01 60 00.

B. Comply with manufacturer's ordering instructions and lead-time requirements to avoid construction delays.

C. Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

D. Transport and store in unopened containers and keep in clean, dry condition protected from rain, dew, and humidity.

E.   Do not allow Water-Base ZAR® products to freeze.

1.7   PROJECT CONDITIONS

A.   Environmental Requirements:
1.   Do not apply when air or surface temperatures are below 50 degrees F (10 degrees C).
2.   Provide adequate ventilation for drying.

1.8   WARRANTY

A.   Specific product warranty period and limitations.
1.   Review manufacturer website: www.zar.com for complete warranty details.
2.   Warranty Inspection: Manufacturer representative or designated representative.

PART 2 - PRODUCTS

2.1   MANUFACTURERS

A.   Subject to compliance with requirements, provide products from the following manufacturer:
1.   United Gilsonite Laboratories (UGL), which is located at 1396 Jefferson Avenue, P.O. Box 70 Scranton, PA 18501; Customer Service: 1-800-845-5227 or 1-570-344-1202; Email: ugllabs@ugl.com; Website: www.ugl.com

B.   Substitutions: Not Permitted.

C.   Specifications and Drawings are based on manufacturer's proprietary literature from United Gilsonite Laboratories (UGL).

D.   Single Source Limitation for Complete System: Obtain materials from a single manufacturer to create a complete system.

2.2   MATERIALS

A.   Oil-Base Interior Wood Stain.
1.   Acceptable product:
a.   ZAR® Oil-Base Stain.

B.   Oil-Base Interior Polyurethane.
1.   Acceptable product:
a.   ZAR® Poly.
b.   ZAR® Poly High Solids.
c.   ZAR® Poly PRO.

C.   Water-Base Interior Oil-Modified Urethane.
1.   Acceptable product:
a.   ZAR® Poly OMU.

D.   Water-Base Interior Sanding Sealer.
a.   ZAR® Sanding Sealer.

E.   Water-Base Interior Polyurethane.
1.   Acceptable product:
a.   ZAR® Crystal Clear Poly.

F. Tung Oil Finish.
    1. Acceptable Product:
        a. ZAR® Tung Oil Wipe-On.

2.3 MIXING

A. Stir thoroughly before and during application.

B. Thinning per manufacturer's label instructions.

C. Color:
    1. Refer to Drawings.

D. Tinting per manufacturer's Product Data Sheet on website: www.zar.com.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Comply with Section 01 70 00.

3.2 SURFACE PREPARATION

A. Ensure that substrates are sound, dry and free of dust, dirt, loose wood fibers, oil, or grease.

B. Sand all bare wood surfaces to receive wood stain with 120 – 150 grit sandpaper.

C. Sand all bare wood surfaces to receive polyurethane only with 180 -220 grit sandpaper.

D. Apply ZAR® Sanding Sealer to bare softwood species prior to staining or finishing.

E. Remove existing lacquer or shellac.

3.3 APPLICATION - GENERAL

A. Stir thoroughly before application.

B. Apply coating per manufacturer's label instructions.

3.4 CLEANING AND DISPOSAL

A. Clean tools per manufacturer's label instructions.

B. Dispose of cloth application materials used for Oil-Base Stain in a sealed, water-filled metal container immediately after use.

3.5 PROTECTION

A. Protect work from damage of other trades during construction. Correct deficiencies or damage by cleaning or recoating, as approved by Architect.

3.6 SCHEDULE

A. Unfinished Wood Flooring.
    1. Oil Base Stain with Polyurethane top coats:
        a. 1st Coat: ZAR® Interior Oil-Base Stain.

       b.   2nd Coat: ZAR® Interior Oil-Base Stain (optional: if deeper color is desired).

       c.   Apply Three protective topcoats of any the following products:
- 1) ZAR® Poly [Gloss] [Semi-Gloss] [Satin] [Matte], or
- 2) ZAR® Poly PRO [Gloss] [Satin], [Matte], or
- 3) ZAR® Poly OMU [Gloss] [Semi-Gloss] [Satin] [Matte].
- 4) ZAR® Crystal Clear Poly [Gloss] [Semi-Gloss] [Satin] [Matte].

2. Oil-Base Polyurethane without basecoat Stain:
   a. 1st Coat: ZAR® Poly [Gloss] [Semi-Gloss] [Satin] [Matte], or ZAR® Poly PRO [Gloss] [Satin] [Matte].
   b. 2nd Coat: ZAR® Poly [Gloss] [Semi-Gloss] [Satin] [Matte], or ZAR® Poly PRO [Gloss] [Satin] [Matte].
   c. 3rd Coat: ZAR® Poly [Gloss] [Semi-Gloss] [Satin] [Matte], or ZAR® Poly PRO [Gloss] [Satin] [Matte].

3. Oil-Base High Solids Polyurethane without basecoat Stain:
   a. 1st Coat: ZAR® High Solids Poly [Gloss] [Semi-Gloss] [Satin].
   b. 2nd Coat: ZAR® High Solids Poly [Gloss] [Semi-Gloss] [Satin].

4. Water-Base Oil Modified Urethane without basecoat Stain:
   a. 1st Coat: ZAR® Poly OMU [Gloss] [Semi-Gloss] [Satin] [Matte].
   b. 2nd Coat: ZAR® Poly OMU [Gloss] [Semi-Gloss] [Satin] [Matte].
   c. 3rd Coat: ZAR® Poly OMU [Gloss] [Semi-Gloss] [Satin] [Matte].

5. Water-Base Polyurethane without basecoat Stain:
   a. 1st Coat: ZAR® Crystal Clear Poly [Gloss] [Semi-Gloss] [Satin] [Matte].
   b. 2nd Coat: ZAR® Crystal Clear Poly [Gloss] [Semi-Gloss] [Satin] [Matte].
   c. 3rd Coat: ZAR® Crystal Clear Poly [Gloss] [Semi-Gloss] [Satin] [Matte].

B. Unfinished Wood Trim, Doors, Cabinets.

1. Oil Base Stain with Polyurethane top coats:
   a. 1st Coat: ZAR® Interior Oil-Base Stain.
   b. 2nd Coat: ZAR® Interior Oil-Base Stain (optional: if deeper color is desired).
   c. Apply Two protective topcoats of any the following products:
      - 1) ZAR® Poly [Gloss] [Semi-Gloss] [Satin] [Matte], or
      - 2) ZAR® Poly PRO [Gloss] [Satin] [Matte], or
      - 3) ZAR® High Solids Poly [Gloss] [Semi-Gloss] [Satin], or
      - 4) ZAR® Poly OMU [Gloss] [Semi-Gloss] [Satin] [Matte], or
      - 5) ZAR® Crystal Clear Poly [Gloss] [Semi-Gloss] [Satin] [Matte].

2. Oil-Base Polyurethane without basecoat Stain:
   a. 1st Coat: ZAR® Poly [Gloss] [Semi-Gloss] [Satin] [Matte], or ZAR® Poly PRO [Gloss] [Satin] [Matte].
   b. 2nd Coat: ZAR® Poly [Gloss] [Semi-Gloss] [Satin] [Matte], or ZAR® Poly PRO [Gloss] [Satin] [Matte].

3. Oil-Base High Solids Polyurethane without basecoat Stain:
   a. 1st Coat: ZAR® High Solids Poly [Gloss] [Semi-Gloss] [Satin].
   b. 2nd Coat: ZAR® High Solids Poly [Gloss] [Semi-Gloss] [Satin].

4. Water-Base Oil Modified Urethane without basecoat Stain:
   a. 1st Coat: ZAR® Poly OMU [Gloss] [Semi-Gloss] [Satin] [Matte].
   b. 2nd Coat: ZAR® Poly OMU [Gloss] [Semi-Gloss] [Satin] [Matte].

5. Water-Base Polyurethane without basecoat Stain:
   a. 1st Coat: ZAR® Crystal Clear Poly [Gloss] [Semi-Gloss] [Satin] [Matte].

b.   2nd Coat: ZAR® Crystal Clear Poly [Gloss] [Semi-Gloss] [Satin] [Matte].

C.   Previously Painted Surfaces.
1.   Oil Base Stain:
     a.   1st Coat: ZAR® Interior Oil-Base Stain.
     b.   2nd Coat: ZAR® Interior Oil-Base Stain (if deeper color is desired).
     c.   INTERIOR FACING: Apply Two protective topcoats of any of the following products:
          1)   ZAR® Poly [Gloss] [Semi-Gloss] [Satin] [Matte], or
          2)   ZAR® Poly PRO [Gloss] [Satin] [Matte], or
          3)   ZAR® High Solids Poly [Gloss] [Semi-Gloss] [Satin] OR
          4)   ZAR® Poly OMU [Gloss] [Semi-Gloss] [Satin] [Matte], or
          5)   ZAR® Crystal Clear Poly [Gloss] [Semi-Gloss] [Satin] [Matte].
     d.   EXTERIOR FACING: Apply Three protective topcoats of either of the following products:
          1)   ZAR® Oil-Base Poly Exterior UV [Gloss] [Satin] [Matte], or
          2)   ZAR® Water-Base Exterior HP [Gloss] [Semi-Gloss] [Satin] [Matte].

D.   Grained Embossed Surfaces (Fiberglass, Steel or Composite).
1.   Oil Base Stain:
     a.   1st Coat: ZAR® Interior Oil-Base Stain.
     b.   2nd Coat: ZAR® Interior Oil-Base Stain (if deeper color is desired).
     c.   INTERIOR FACING: Apply Two protective topcoats of any of the following products:
          1)   ZAR® Poly [Gloss] [Semi-Gloss] [Satin] [Matte], or
          2)   ZAR® Poly PRO [Gloss] [Satin] [Matte], or
          3)   ZAR® High Solids Poly [Gloss] [Semi-Gloss] [Satin], or
          4)   ZAR® Poly OMU [Gloss] [Semi-Gloss] [Satin] [Matte], or
          5)   ZAR® Crystal Clear Poly [Gloss] [Semi-Gloss] [Satin] [Matte].
     d.   EXTERIOR FACING: Apply Three protective topcoats of either of the following products:
          1)   ZAR® Oil-Base Poly Exterior UV [Gloss] [Satin] [Matte], or
          2)   ZAR® Water-Base Exterior HP [Gloss] [Semi-Gloss] [Satin] [Matte].

E.   Flat Primed Surfaces or Steel Doors for Simulated Wood Graining.
1.   Oil Base Stain:
     a.   1st Coat: ZAR® Interior Oil-Base Stain (applied with graining tool).
     b.   2nd Coat: ZAR® Interior Oil-Base Stain (if deeper color is desired).
     c.   INTERIOR FACING: Apply Two protective topcoats of any of the following products:
          1)   ZAR® Poly [Gloss] [Semi-Gloss] [Satin] [Matte], or
          2)   ZAR® Poly PRO [Gloss] [Satin] [Matte], or
          3)   ZAR® High Solids Poly [Gloss] [Semi-Gloss] [Satin], or
          4)   ZAR® Poly OMU [Gloss] [Semi-Gloss] [Satin] [Matte], or
          5)   ZAR® Crystal Clear Poly [Gloss] [Semi-Gloss] [Satin] [Matte].
     d.   EXTERIOR FACING: Apply Three protective topcoats of either of the following products:
          1)   ZAR® Oil-Base Poly Exterior UV [Gloss] [Satin] [Matte], or
          2)   ZAR® Water-Base Exterior HP [Gloss] [Semi-Gloss] [Satin] [Matte].

F. Previously Stained Wood, Top Coated with Polyurethane, Lacquer, or Shellac.
    1. Oil-Base Stain:
        a. 1st Coat: ZAR® Interior Oil-Base Stain.
        b. 2nd Coat: ZAR® Interior Oil-Base Stain (if deeper color is desired).
        c. Apply Two protective topcoats of any the following products:
            1) ZAR® Poly [Gloss] [Semi-Gloss] [Satin] [Matte], or
            2) ZAR® Poly PRO [Gloss] [Satin] [Matte], or
            3) ZAR® High Solids Poly [Gloss] [Semi-Gloss] [Satin], or
            4) ZAR® Poly OMU [Gloss] [Semi-Gloss] [Satin] [Matte], or
            5) ZAR® Crystal Clear Poly [Gloss] [Semi-Gloss] [Satin] [Matte].

G. Previously Clear Coated Wood - Polyurethane, Lacquer or Shellac.
    1. Apply Two coats of any the following products:
        a. ZAR® Poly [Gloss] [Semi-Gloss] [Satin] [Matte], or
        b. ZAR® Poly PRO [Gloss] [Satin] [Matte], or
        c. ZAR® High Solids Poly [Gloss] [Semi-Gloss] [Satin], or
        d. ZAR® Poly OMU [Gloss] [Semi-Gloss] [Satin] [Matte], or
        e. ZAR® Crystal Clear Poly [Gloss] [Semi-Gloss] [Satin] [Matte].

END OF SECTION