SECTION 06 0620 - DECORATIVE PLASTIC LAMINATE

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Standard Decorative Laminates.
- B. Custom Decorative Laminates.
- C. Marker Board Laminates.
- D. Chalk Board Laminates.
- E. Fire-Rated Decorative Laminates.
- F. Chemical Resistant Decorative Laminates.
- G. High Wear Decorative Laminates.
- H. Moldings.
- I. Adhesives.

1.2 RELATED REQUIREMENTS

- A. Division 06: Wood, Plastics, and Composites (Interior Architectural Woodwork, Finish Carpentry, Architectural Wood Casework, Wood Paneling, Adhesives).
- B. Division 08: Interior Doors.
- C. Division 10: Interior Specialties (Toilet Partitions, Cubicles, Wall Paneling).
- D. Division 12: Furnishings (Laminate Clad Casework, Specialty Casework, Residential Casework or Office, Retail, Hospitality, Institutional Furniture).

1.3 REFERENCES

- A. Reference Standards: In addition to requirements, comply with applicable provisions of following for design, materials, fabrication and installation of component parts:
 - 1. NEMA LD3 National Electrical Manufacturer Association.
 - 2. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 3. ASTM E162 Surface Flammability and 662 Rate of Smoke Generation.
 - 4. U.S. Coast Guard Conforms to IMO FTP Code Part 2 (smoke toxicity) and Part 5 (surface flammability).

Standards vary by product type. Additional certifications exist. Refer to the Tech Data Sheet on the Wilsonart Website or call Tech Services 800-433-3222 for more information as needed.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 3000.
- B. Product Data:
 - 1. Submit product data, including manufacturer's technical data sheet for specified products, including literature for high-pressure decorative laminate, adhesive for bonding plastic laminate, and substrate information as related.
- C. Shop Drawings:
 - 1. Submit shop drawings showing layout, profiles and product components, including edge conditions, panel joints, accessories, designs and textures.
- D. Samples:
 - 1. Submit selection and verification samples for product type, designs and textures.
- E. Quality Assurance Submittals:
 - 1. Test Reports: Submit certified test reports showing compliance with specified performance characteristics and physical properties, if required.
 - 2. Manufacturer's technical data sheets for laminate and adhesives.
 - 3. Manufacturer's Material Safety Data Sheets (MSDS).
 - 4. Certifications:
 - a. Recycled Content.



F.

- b. Forest Stewardship Council (FSC).
- c. VOC compliance with local jurisdictions.
- LEED Submittals: Submit applicable LEED Submittal Form for each different product.
- G. Submit GREENGUARD[®] Indoor Air Quality or SCS Indoor Advantage[™] Gold Certificates showing compliance with VOC requirements.
- H. Maintenance: Submit 2 copies of manufacturer's Care and Maintenance Guide.

1.5 REGULARY REQUIREMENTS

- A. Adhesives:
 - 1. SCAQMD (South Coast Air Quality Management District).
 - 2. Ozone Transport Commission (OTC) model Rule for Adhesives and Sealants.

1.6 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Manufacturer Qualifications: Manufacturer producing product in ISO 9001 certified facility.
 - 2. Fabricator/Installer must be experienced in performing work of similar type and scope.
- B. Mock-Ups:
 - 1. Install at project site using acceptable products and manufacturer approved installation methods. Obtain Architect's acceptance of finish color, texture, pattern, fabrication, and installation standards. Comply with Division 01 Quality Control (Mock-Up Requirements) Section.
 - 2. Mock-Up Size: _____ x _____
 - 3. Maintenance: Maintain mock-up during construction for fabrication and installation comparison. If required, remove and legally dispose of mock-up when no longer required.
 - 4. Incorporation: If allowed, mock-up may be incorporated into final construction upon Architect's approval.
- C. LEED rating system potential credits for adhesives:
 - 1. LEED-NC and LEED-CI IEQ Credit 3.2.
 - 2. LEED-NC and LEED-CI IEQ Credit 4.1.
 - 3. LEED-NC and LEED-CI IEQ Credit 4.4.
 - 4. LEED-NC and LEED-CI IEQ Credit 4.5.
- D. LEED rating system potential credits for plastic laminate:
 - 1. LEED-NC and LEED-CI MR Credit 4.
 - 2. LEED-NC and LEED-CI MR Credit 6.
 - 3. LEED-NC and LEED-CI MR Credit 7.
 - 4. LEED-NC and LEED-CI IEQ Credit 4.4.
 - 5. LEED-NC and LEED-CI IEQ Credit 4.5.

1.7 DELIVERY, STORAGE & HANDLING

- A. Comply with Division 01 Product Requirements Sections.
- B. Storage and Protection: Store materials protected from exposure to harmful weather conditions, at temperature and humidity conditions recommended by manufacturer.

1.8 PROJECT CONDITIONS

- A. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.
- B. Adhesive: For best results, do not apply adhesives at temperatures below 65°F.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Wilsonart LLC 2400 Wilson Place Temple, Texas 76503-6110 254.207.7000, 800.433.3222, F: 254.207.2384 www.wilsonart.com/ http://sustain.wilsonart.com/

2.2 STANDARD DECORATIVE LAMINATES

- A. Acceptable Product: Wilsonart[®] Laminate.
- B. Decorative surface papers, impregnated with melamine resins, bonded under heat and pressure to kraft papers impregnated with phenolic resins.
- C. General Purpose Type: Wilsonart Type 107, having the following physical characteristics:
 - 1. Sheet thickness: 0.048 inch nominal (1.22mm).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision, Grade HGS.
 - 3. Surface burning characteristics in accordance with ASTM E 84; unbonded.
 - 4. Pattern: ____.
 - 5. Finish: ____.

NOTE: If pattern and finish are not specified in the two sentences above, indicate location of information or method of selection below.

- 6. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 7. Patterns and Finishes: Indicated on drawings.
- 8. Patterns and Finishes: Selected from manufacturer's full range of available selections.
- D. Vertical Surface Type: Wilsonart Type 335, having the following physical characteristics:
 - 1. Sheet thickness: 0.028 inch nominal (0.71 mm).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision, Grade VGS and VGP.
 - 3. Surface burning characteristics in accordance with ASTM E 84; unbonded.
 - 4. Pattern: ____.
 - 5. Finish: ____.

NOTE: If pattern and finish are not specified in the two sentences above, indicate location of information or method of selection below.

- 6. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 7. Patterns and Finishes: Indicated on drawings.
- 8. Patterns and Finishes: Selected from manufacturer's full range of available selections.
- E. Postforming Type: Wilsonart Type 350, having the following physical characteristics:
 - 1. Sheet thickness: 0.039 inch nominal (1.00 mm).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision, Grade HGP.
 - 3. Surface burning characteristics in accordance with ASTM E 84; unbonded.
 - 4. Pattern: ____.
 - 5. Finish: ____.

- 6. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 7. Patterns and Finishes: Indicated on drawings.

8. Patterns and Finishes: Selected from manufacturer's full range of available selections.

2.3 CUSTOM DECORATIVE LAMINATES

- A. Acceptable Product: Wilsonart[®] Custom Laminates.
- B. Decorative surface papers, impregnated with melamine resins, bonded under heat and pressure to kraft papers impregnated with phenolic resins.
- C. General Purpose Type: Wilsonart Type 173 or 174.
 - 1. Sheet thickness: 0.048 inch nominal (1.22).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision, Grade HGS.
 - 3. Pattern: ____.
 - 4. Finish: ____.

NOTE: If pattern and finish are not specified in the two sentences above, indicate location of information or method of selection below.

- 5. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 6. Patterns and Finishes: Indicated on drawings.
- 7. Patterns and Finishes: Selected from manufacturer's full range of available selections.
- D. Vertical Surface Type: Wilsonart Type 363 or 364.
 - 1. Sheet thickness: 0.028 inch nominal (0.71 mm).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision, Grade VGP.
 - 3. Pattern: ____.
 - 4. Finish: ____

NOTE: If pattern and finish are not specified in the two sentences above, indicate location of information or method of selection below.

- 5. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 6. Patterns and Finishes: Indicated on drawings.
- 7. Patterns and Finishes: Selected from manufacturer's full range of available selections.

2.4 HIGH DEFINITION LAMINATES

- A. Acceptable Product: Wilsonart[®] HD[®] High Definition[®] Laminates.
- B. Decorative surface papers, impregnated with melamine resins, bonded under heat and pressure to kraft papers impregnated with phenolic resins.
- C. High Definition Type: Wilsonart Type 376.
 - 1. Sheet thickness: 0.039 inch nominal (0.99 mm).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision, Grade HGP.
 - 3. Surface burning characteristics in accordance with ASTM E 84; unbonded.
 - 4. Pattern: ____.
 - 5. Finish: ____

NOTE: If pattern and finish are not specified in the two sentences above, indicate location of information or method of selection below.

- 6. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 7. Patterns and Finishes: Indicated on drawings.
- 8. Patterns and Finishes: Selected from manufacturer's full range of available selections.

2.5 MARKER BOARD LAMINATES

- A. Acceptable Product: Wilsonart[®] Marker Board Laminate.
- B. Overlay saturated with melamine resins and decorative surface papers, impregnated with melamine resins, bonded under heat and pressure to kraft papers impregnated with phenolic resins.
- C. Marker Board Laminate Wilsonart Type 136.
 - 1. Sheet thickness: 0.048 inch nominal (1.22mm).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision, Grade HGS.
 - 3. Surface burning characteristics in accordance with ASTM E 84; unbonded.
 - 4. Color: _

NOTE: If color is not specified in the sentence above, indicate location of information or method of selection below.

- 5. Colors: Specified in SCHEDULE Article of this section.
- 6. Colors: Indicated on drawings.
- 7. Colors: Selected from manufacturer's full range of available selections.

2.6 CHALK BOARD LAMINATES

- A. Acceptable Product: Wilsonart[®] Chalk Board Laminate.
- B. Overlay saturated with melamine resins and decorative surface papers, impregnated with melamine resins, bonded under heat and pressure to kraft papers impregnated with phenolic resins.
- C. Chalk Board Laminate Wilsonart Type 137.
 - 1. Sheet thickness: 0.048 inch nominal (1.22mm).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision Grade HGS.
 - 3. Surface burning characteristics in accordance with ASTM E 84; unbonded.
 - 4. Color: Graphite Nebula or Hunter Nebula.
 - 5. Color: ____
 - 6. Finish: #38 only.

NOTE: If color is not specified in the sentence above, indicate location of information or method of selection below.

- 7. Colors: Specified in SCHEDULE Article of this section.
- 8. Colors: Indicated on drawings.
- 9. Colors: Selected from manufacturer's full range of available selections.

2.7 FIRE-RATED DECORATIVE LAMINATES

- A. Acceptable Product: Wilsonart[®] Fire-Rated Laminate.
- B. Fire retardant overlay and decorative alpha cellulose surface papers bonded under heat and pressure to fire retardant resin coated kraft papers impregnated with phenolic resins.
- C. Vertical Surface Type: Wilsonart Type 604.
 - 1. Sheet thickness: 0.032 inch nominal (0.813 mm).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision, Grade VGF.
 - 3. Surface burning characteristics in accordance with ASTM E 84 or UL 723; unbonded.
 - 4. Pattern: ____.
 - 5. Finish: ____.

- 6. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 7. Patterns and Finishes: Indicated on drawings.

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- 8. Patterns and Finishes: Selected from manufacturer's full range of available selections.
- D. General Purpose Type: Wilsonart Type 605.
 - 1. Sheet thickness: 0.048 inch nominal (1.22mm).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision, Grade HGF.
 - 3. Surface burning characteristics in accordance with ASTM E 84 or UL 723.
 - 4. Pattern: ____.
 - 5. Finish: ____.

NOTE: If pattern and finish are not specified in the two sentences above, indicate location of information or method of selection below.

- 6. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 7. Patterns and Finishes: Indicated on drawings.
- 8. Patterns and Finishes: Selected from manufacturer's full range of available selections.
- E. General Purpose Type: Wilsonart Type 607.
 - 1. Sheet thickness: 0.059 inch nominal (1.50 mm).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision, Grade SGF.
 - 3. Surface burning characteristics in accordance with ASTM E 84 or UL 723; unbonded.
 - 4. Pattern: ____.
 - 5. Finish: ____.

NOTE: If pattern and finish are not specified in the two sentences above, indicate location of information or method of selection below.

- 6. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 7. Patterns and Finishes: Indicated on drawings.
- 8. Patterns and Finishes: Selected from manufacturer's full range of available selections.
- F. Backer Type: Wilsonart Type 264.
 - 1. Sheet thickness: 0.030 inch nominal (0.76 mm).
 - 2. Surface burning characteristics in accordance with ASTM E 84 or UL 723; unbonded.
 - 3. Pattern: ____.
 - 4. Finish: ____.

- 5. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 6. Patterns and Finishes: Indicated on drawings.
- 7. Patterns and Finishes: Selected from manufacturer's full range of available selections.
- G. Backer Type: Wilsonart Type 266.
 - 1. Sheet thickness: 0.050 inch nominal (1.27 mm).
 - 2. Surface burning characteristics in accordance with ASTM E 84 or UL 723; unbonded.
 - 3. Pattern: ____.
 - 4. Finish: ____.

NOTE: If pattern and finish are not specified in the two sentences above, indicate location of information or method of selection below.

- 5. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 6. Patterns and Finishes: Indicated on drawings.
- 7. Patterns and Finishes: Selected from manufacturer's full range of available selections.

2.8 CHEMICAL RESISTANT DECORATIVE LAMINATES

- A. Acceptable Products: Wilsonart[®] Chemsurf[®] Chemical-Resistant Laminate.
- B. Chemical resistant overlay and decorative alpha cellulose surface papers, impregnated with melamine resins, bonded under heat and pressure to kraft papers impregnated with phenolic resins.
- C. Chemical Resistant Decorative Laminate: Wilsonart Type 390.
 - 1. Sheet thickness: 0.034 inch nominal (0.86 mm).
 - 2. Meeting bacterial resistance and susceptibility requirements of ASTM G 22.
 - 3. Pattern: ____.
 - 4. Finish: ____.

NOTE: If pattern and finish are not specified in the two sentences above, indicate location of information or method of selection below.

- 5. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 6. Patterns and Finishes: Indicated on drawings.
- 7. Patterns and Finishes: Selected from manufacturer's full range of available selections.

2.9 HIGH WEAR DECORATIVE LAMINATES

- A. Acceptable Product: Wilsonart[®] High Wear Laminate.
- B. Abrasion resistant overlay and decorative surface papers, impregnated with melamine resins, bonded under heat and pressure to kraft papers impregnated with phenolic resins.
- C. General Purpose Type: Wilsonart Type 107HW.
 - 1. Sheet thickness: 0.048 inch nominal (1.22 mm).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision, Grade HGS, High Wear.
 - 3. Pattern: ____.
 - 4. Finish: ____.

NOTE: If pattern and finish are not specified in the two sentences above, indicate location of information or method of selection below.

- 5. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 6. Patterns and Finishes: Indicated on drawings.
- 7. Patterns and Finishes: Selected from manufacturer's full range of available selections.
- D. Vertical Surface Type: Wilsonart Type 335HW.
 - 1. Sheet thickness: 0.028 inch nominal (0.79 mm).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision, Grade VGS, High Wear.
 - 3. Pattern: ____.
 - 4. Finish: ____.

- 5. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 6. Patterns and Finishes: Indicated on drawings.



- 7. Patterns and Finishes: Selected from manufacturer's full range of available selections.
- E. Postforming Type: Wilsonart Type 350HW.
 - 1. Sheet thickness: 0.039 inch nominal (0.99 mm).
 - 2. Exceeding performance requirements of NEMA LD 3 current revision, Grade HGP, High Wear.
 - 3. Pattern: ____.
 - 4. Finish: ____

NOTE: If pattern and finish are not specified in the two sentences above, indicate location of information or method of selection below.

- 5. Patterns and Finishes: Specified in SCHEDULE Article of this section.
- 6. Patterns and Finishes: Indicated on drawings.
- 7. Patterns and Finishes: Selected from manufacturer's full range of available selections.

2.10 MOLDINGS

- A. Acceptable Product: Wilsonart[®] Decorative Edges and Wilsonart[®] Edgeband.
- B. Bevel Profile Edge Molding Style ___.
 - A-Face: _____ surfacing material, _____ pattern, ____ finish.
 B-Face: _____ pattern, ___ finish.

NOTE: Include the following for Style XD only, otherwise delete.

- 3. C-Face: _____ pattern, __ finish.
- C. Cascade Profile Edge Molding Style
 - A-Face: _____ surfacing material, _____ pattern, ____ finish.
 B-Face: _____ pattern, ___ finish.

NOTE: Include the following for Style XD only, otherwise delete.

3. C-Face: _____ pattern, __ finish.

- D. Crescent Profile Edge Molding Style
 - 1. A-Face: ______ surfacing material, _____ pattern, _____ finish.
 - 2. B-Face: _____ pattern, __ finish.

NOTE: Include the following for Style XD only, otherwise delete.

- 3. C-Face: _____ pattern, __ finish.
- E. Backsplash Style BS.
 - 1. A-Face: ______ surfacing material, _____ pattern, _____ finish.
 - 2. B-Face: _____ pattern, __ finish.

NOTE: Include the following for Style SS only, otherwise delete.

3. C-Face: _____ pattern, __ finish

NOTE: If product types are not specified in the paragraphs above, indicate location of information or method of selection below.

F. Edgeband:_____Width_____Thickness_____Pattern____

- G. Furnish types indicated on drawings.
- H. Furnish types indicated on approved shop drawings required in Section 06 4100, Architectural Woodwork.
- I. Furnish types specified in SCHEDULE Article of this section.

2.11 ACCESSORY MATERIALS

- A. Contact Adhesive:
 - 1. Non-postforming:
 - a. Wilsonart[®] 1730/1731 Low VOC Contact Adhesive.
 - b. Wilsonart[®] 730/731 Contact Adhesive, Low VOC canister.
 - 2. Postforming:

- a. Wilsonart[®] H2O Contact Adhesive, water-based.
 - Water-resistant, non-staining bond for common high pressure laminate (HPL) applications.
- B. Cold Press PVA Adhesives

b.

- 1. Wilsonart[®] 3100 PVA Adhesive: For bonding decorative laminate to wood products.
- 2. Wilsonart[®] 3105 PVA Adhesive: High solids, for bonding decorative laminate to wood products.
- 3. Wilsonart[®] 3116 PVA Adhesive: For bonding decorative laminate to wood products and bonding paper-backed products.
- C. Hot Press PVA Adhesives
 - 1. Wilsonart[®] 3131 PVA Adhesive: High solids for bonding decorative laminates to wood products.
 - 2. Wilsonart[®] 3132 PVA Adhesive: High solids for bonding decorative laminates to wood products.
- D. Postforming and Pinch Rolling PVA Adhesives
 - 1. Wilsonart[®] 3000/3001 PVA Adhesive: High solids for bonding decorative laminate to wood products and postforming applications.

2.12 ADHESIVE APPLICATION EQUIPMENT

- Manual Spray:
 - 1. Binks
 - 2. Devilbiss
- B. Automatic Spray:
 - 1. Binks
 - 2. Devilbiss

PART 3 - EXECUTION

Α.

3.1 EXAMINATION

- A. Examine surfaces for conditions that would adversely affect the performance of the decorative or edge performance.
- B. Surfaces to be adhesively bonded should be clean, dry and free of any dust, loose paint, wax, moisture, dirt, grease, oil, rust, or other contaminants.

3.2 PREPARATION

- A. Surface preparation: Precondition surfacing materials and surfaces to receive surfacing materials in accordance with manufacturer's printed installation instructions.
- B. Allow substrates to acclimate to room temperature for 48 hours before bonding.

3.3 INSTALLATION

A. Install materials in accordance with AWS (Architect Woodwork Standards) and requirements of Section 06 4100, Architectural Woodwork.

3.4 SPRAY APPLICATIONS

- A. Comply with adhesive manufacturers printed installation instructions.
- B. Apply adhesive uniformly to both surfaces and cover each surface a minimum of 80%.
- C. Apply two coats of adhesive to porous surfaces. 100% coverage is recommended for edges.
- D. Apply uniform downward pressure (30-40 psi minimum) across the entire bonded surface.

3.5 BRUSH APPLICATIONS

- A. Comply with adhesive manufacturers printed installation instructions.
- B. Apply adhesive with a brush or solvent-resistant medium nap roller. Apply adhesive uniformly to both surfaces and cover each surface 100%.
- C. Provide two coats of adhesive on porous surfaces. Double coat edges.

- D. Apply uniform downward pressure (30-40 psi minimum) across the entire bonded surface.
- 3.6 HAND APPLICATIONS
 - A. Comply with adhesive manufacturers printed installation instructions
- 3.7 CLEANING AND PROTECTION
 - A. Clean decorative plastic laminate in accordance with manufacturer's care and maintenance instructions.
 - B. Protect installed product and finish surfaces from damage during construction.

3.8 SCHEDULE

Note: Schedule of plastic laminates used in project may be inserted here if not shown on drawings or in Finish Schedule.

END OF SECTION