SECTION 00 0101
PROJECT TITLE PAGE

PROJECT MANUAL
FOR
IDAS - IVH DISPATCH BUILDING REPAIR

OWNER:

Iowa Department of Administrative Services
1305 E Walnut Street, 3rd Floor
Des Moines, Iowa 50319

PROJECT NUMBER: 2240002630

PROJECT LOCATION

IVH Dispatch Building Repair
1301 Summit Street
Marshalltown, Iowa 50158

ARCHITECT/ENGINEER:

Shive-Hattery, Inc.
4125 Westown Parkway, Suite 100
West Des Moines, Iowa 50266

ISSUED FOR:

Issued for Construction: August 05, 2024

END OF SECTION

SECTION 00 0105

CERTIFICATIONS PAGE

STATE OF IOWA

	I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly Licensed Architect under the laws of the State of Iowa. **Printed or typed name:** Phillip J. Parrott 08-05-2024 **Signature** **Date** License Expires: 6-30-2025 Pages, Sheets, or Divisions covered by this Seal: Sections 04 0100, 04 2000, 07 9000, and 09 9113

END OF SECTION

SECTION 00 0110
TABLE OF CONTENTS

PROCUREMENT AND CONTRACTING REQUIREMENTS

END OF SECTION

SECTION 04 0100
MAINTENANCE OF MASONRY

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Replacement of brick units.

B. Repointing mortar joints.

C. Repair of damaged masonry.

1.2 RELATED REQUIREMENTS

A. Section 04 2000 - Unit Masonry: Brick masonry units.

B. Section 04 2000 - Unit Masonry: Mortar and grout.

1.3 REFERENCE STANDARDS

A. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures; 2022, with Errata (2024).

PART 2 PRODUCTS

2.1 MORTAR MATERIALS

A. Conform to requirements of Section 04 2000.

2.2 MASONRY MATERIALS

A. Brick: Section 04 2000.

PART 3 EXECUTION

3.1 REBUILDING

A. Cut out damaged and deteriorated masonry with care in a manner to prevent damage to any adjacent remaining materials.

B. Support structure as necessary in advance of cutting out units.

C. Build in new units following procedures for new work specified in other section(s).

D. Mortar Mix: Colored and proportioned to match existing work.

E. Install built in masonry work to match and align with existing, with joints and coursing true and level, faces plumb and in line. Build in all openings, accessories and fittings.

3.2 REPOINTING

A. Cut out loose or disintegrated mortar in joints to minimum 1/2 inch (6 mm) depth or until sound mortar is reached.

B. Use power tools only after test cuts determine no damage to masonry units will result.

C. Do not damage masonry units.

D. When cutting is complete, remove dust and loose material by brushing.

E. Premoisten joint and apply mortar. Pack tightly in maximum 1/4 inch (6 mm) layers. Form a smooth, compact concave joint to match existing.

F. Moist cure for 72 hours.

END OF SECTION

SECTION 04 2000
UNIT MASONRY

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Clay facing brick.

B. Mortar and grout.

C. Reinforcement and anchorage.

D. Accessories.

1.2 RELATED REQUIREMENTS

A. Section 07 9000-Joint Sealants: Sealing control.

1.3 REFERENCE STANDARDS

A. ASTM A951/A951M - Standard Specification for Steel Wire for Masonry Joint Reinforcement; 2022.

B. ASTM C91/C91M - Standard Specification for Masonry Cement; 2023.

C. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar; 2018.

D. ASTM C150/C150M - Standard Specification for Portland Cement; 2022.

E. ASTM C216 - Standard Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale); 2023.

F. ASTM C270 - Standard Specification for Mortar for Unit Masonry; 2019a, with Editorial Revision.

G. ASTM C404 - Standard Specification for Aggregates for Masonry Grout; 2024.

H. ASTM C476 - Standard Specification for Grout for Masonry; 2023.

I. ASTM C1019 - Standard Test Method for Sampling and Testing Grout for Masonry; 2020.

J. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures; 2022, with Errata (2024).

1.4 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data: Provide data for masonry units, fabricated wire reinforcement, mortar, masonry accessories, anchors, and flashings.

1.5 QUALITY ASSURANCE

A. Comply with provisions of TMS 402/602, except where exceeded by requirements of Contract Documents.

B. Comply with the requirements of the Brick Institute of America Technical Notes. This specification and the drawings are intended to reflect the general provisions of the BIA technical notes. Any discrepancies between these specifications, the details and/or any provisions of the BIA Technical Notes shall not relieve the contractor from his responsibility to comply with the most stringent requirements of the contract documents.

C. Source Limitations for Masonry Units: Obtain exposed masonry units of a uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, through one source from a single manufacturer for each product required.

1.6 MOCK-UPS

A. Construct a masonry wall as a mock-up panel sized 4 feet (1.2 m) long by 6 feet (1.8 m) high; include mortar and reinforcement in mock-up.

B. Locate as indicated on drawings.

C. Include toothing in of new brick with existing.

D. Mock-up may remain as part of work if accepted.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver, handle, and store masonry units by means that will prevent mechanical damage and contamination by other materials. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.

B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.

C. Store aggregates where grading and other required characteristics can be maintained, and contamination avoided.

D. Deliver pre-blended, dry mortar mix in moisture-resistance containers designed for lifting and emptying into dispensing silo. Store pre-blended, dry mortar mix in delivery containers on elevated platforms, under cover, and in a dry location or in a metal dispensing silo with weatherproof cover.

E. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

PART 2 PRODUCTS

2.1 MASONRY UNITS, GENERAL

A. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to exceed tolerances and to contain chips, cracks, or other defects exceeding limits stated in the standard. Do not use units where such defects, including dimensions that vary from specified dimensions by more than the stated tolerances, will be exposed in the completed Work or will impair the quality of completed masonry.

2.2 BRICK UNITS

A. Manufacturers:

1. Belden Brick: www.beldenbrick.com/#sle.
2. Endicott Clay Products Co: www.endicott.com.

3. McAvoy Brick, St. Davids, www.McAvoybrick.com, basis of design.
4. Sioux City Brick: www.siouxcitybrick.com.
5. Substitutions: See section 01 6000 - Product Requirements.

B. Facing Brick: ASTM C216, Type FBS Smooth, Grade SW.

1. Color and texture: Match color and texture of existing brick.
2. Nominal size: Match size of existing brick.
3. Special shapes: Molded units as required by conditions indicated, unless standard units can be sawn to produce equivalent effect.

2.3 MORTAR AND GROUT MATERIALS

A. Masonry Cement: ASTM C91/C91M, Type S.

1. Colored Mortar: Premixed cement as required to match existing mortar color and texture.

B. Portland Cement: ASTM C150/C150M, Type I; color as required to produce approved color sample.

C. Portland Cement-Lime Mix: Package blend of Portland cement complying with ASTM C150/C150M, Type I; and hydrated lime complying with ASTM C207, Type S

D. Mortar Aggregate: ASTM C144.

1. Colored-Mortar Aggregates: Natural sand or crushed stone of color necessary to produce required mortar color.

E. Grout Aggregate: ASTM C404.

F. Water: Clean and potable.

2.4 REINFORCEMENT AND ANCHORAGE

A. Manufacturers:

1. Hohmann & Barnard, Inc; 130 Truss Reinforcement: www.h-b.com/#sle.
2. WIRE-BOND: www.wirebond.com/#sle.
3. Substitutions: See Section 01 6000 - Product Requirements.

B. Reinforcing Steel: ASTM A615/A615M, Grade 60 - 60,000 psi (420 MPa), deformed billet bars; uncoated.

C. Multiple Wythe Joint Reinforcement: ASTM A951/A951M.

1. Type: Truss.
2. Material: ASTM A1064/A1064M steel wire, hot dip galvanized after fabrication to ASTM A153/A153M Class B.
3. Size: 0.1483 inch (3.8 mm) side rods with 0.1483 inch (3.8 mm) cross rods; width as required to provide not more than1 inch (25 mm) and not less than 5/8 inch (16 mm) of mortar coverage on each exposure.

2.5 MORTAR AND GROUT MIXES

A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures, unless otherwise indicated.

1. Do not use calcium chloride in mortar or grout.

2. Limit cementitious materials in mortar to portland cement-lime mortar unless otherwise indicated.

B. Preblended Dry Mortar Mix: Furnish dry mortar ingredients in form of a pre-blended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.

C. Colored Mortar: Proportion selected pigments and other ingredients to match Architect/Engineer's sample, without exceeding manufacturer's recommended pigment-to-cement ratio.

D. Grout: ASTM C476; consistency required to fill completely volumes indicated for grouting; fine grout for spaces with smallest horizontal dimension of 2 inches (50 mm) or less; coarse grout for spaces with smallest horizontal dimension greater than 2 inches (50 mm).

E. Admixtures: Add to mixture at manufacturer's recommended rate and in accordance with manufacturer's instructions; mix uniformly.

F. Mixing: Thoroughly mix ingredients using mechanical batch mixer in accordance with ASTM C270.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive masonry.

B. Verify that related items provided under other sections are properly sized and located.

C. Verify that built-in items are in proper location, and ready for roughing into masonry work. Verify rough-in locations for piping systems and verify actual locations of piping connections.

D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Direct and coordinate placement of metal anchors supplied for installation under other sections.

B. Provide temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent bracing.

3.3 COLD AND HOT WEATHER REQUIREMENTS

A. Comply with requirements of TMS 402/602 or applicable building code, whichever is more stringent.

3.4 COURSING

A. Establish lines, levels, and coursing indicated. Protect from displacement.

B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.

C. Brick Units:

1. Bond: Match bond of existing brick.
2. Coursing: Match coursing of existing brick
3. Mortar Joints: Match profile of existing mortar joint.

3.5 INSTALLATION, GENERAL

A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and where possible, at other locations.

B. Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges.

C. Lay concealed masonry with all units in a wythe in running bond. Bond and interlock each course of each wythe at corners. Do not use units with less than nominal 4 inch (100 mm) horizontal face dimensions at corners or jambs.

D. Build chases and recesses to accommodate items specified in this and other Sections.

E. Leave openings for equipment to be installed before completing masonry including installing required lintels. After installing equipment, complete masonry to match the construction immediately adjacent to opening.

F. Stopping and Resuming Work: Stop work by racking back units in each course from those in course below; do not tooth. When resuming work, clean masonry surfaces that are to receive mortar, remove loose masonry units and mortar, and wet brick if required before laying fresh masonry.

G. Wetting of Brick: Wet brick before laying if initial rate of absorption exceeds 30 g/30 sq in per minute when tested per ASTM C67/C67M. Allow nits to absorb water so they are damp but not wet at time of laying.

H. Fill cores in hollow CMUs with grout 24 inch (600 mm) 24 inches (600 mm) under bearing plates, beams, lintels, posts, and similar items unless otherwise indicated.

1. Fill cores in hollow concrete masonry units with grout so there is a minimum of twice the embedment length of solid concrete around all expansion bolts, expansion flush anchors, and bolts installed in masonry.

3.6 PLACING AND BONDING

A. Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other work.

B. Buttering corners of joints or excessive furrowing of mortar joints is not permitted.

C. Remove excess mortar and mortar smears as work progresses.

D. Interlock intersections and external corners.

E. Do not shift or tap masonry units after mortar has achieved initial set. Where adjustment must be made, remove mortar and replace.

F. Perform job site cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.

G. Tooling: Joints shall be struck flush, and, after mortar has set to thumbprint hard, tool joints with a tool which compacts mortar and presses excess mortar out of joint rather than dragging it out. Joints shall be made with a straight clean line. Joints shall be the following:

1. Provide concave joints at all locations not indicated otherwise.

2. Provide raked raked joints at exposed interior scored concrete masonry, except where other joints are specified.

3. Cut mortar joints flush where wall tile is scheduled, resilient base is scheduled, or inside masonry wall cavities.

3.7 GROUTED COMPONENTS

A. Reinforce bond beams with 2, No. 5 (M16) bars, 1 inch (25 mm) from bottom web.

B. Lap splices minimum as indicated on drawings.

C. Support and secure reinforcing bars from displacement. Maintain position within 1/2 inch (13 mm) of dimensioned position.

D. Place and consolidate grout fill without displacing reinforcing.

E. At bearing locations, fill masonry cores with grout for a minimum 12 inches (300 mm) either side of opening.

3.8 FIELD QUALITY CONTROL

A. An independent testing agency will perform field quality control tests, as specified in Section 01 4000 - Quality Requirements.

B. Testing and Inspecting: Owner will engage special inspectors to perform tests and Inspections and prepare reports. Allow inspectors access to scaffolding and work areas, as needed to perform tests and inspections. Retesting of materials that fail to comply with specified requirements shall be done at s expense.

C. Grout Test (Compressive Strength): For each mix provided, according to ASTM C1019.

D. Mortar does not need to be tested as they are specified by proportions.

3.9 CLEANING AND REPAIR

A. Remove excess mortar, mortar smears and mortar droppings.

B. Replace defective mortar. Match adjacent work in color and joint profile.

C. Remove and replace masonry units which are loose, chipped, broken, stained or otherwise damaged. Provide new units to match adjoining units and install in fresh mortar and grout pointed and with same mortar color to eliminate evidence of replacement.

D. Prior to end of the standard building guarantee period, all cracked and otherwise defective masonry work shall be repaired.

E. Clean soiled surfaces with cleaning solution. Protect adjacent or dissimilar materials from damage from cleaning activities.

F. Use non-metallic tools in cleaning operations.

G. Contractor shall be responsible for protection of masonry cavity from construction debris and trash. Inspect cavity prior to continuation of wall construction to verify debris has not been dropped or blown-in during breaks or stoppage in work.

3.10 PROTECTION

A. Without damaging completed work, provide protective boards at exposed external corners that are subject to damage by construction activities.

B. Provide sand or pea gravel mulch at base of wall or plastic sheeting up face of finished masonry at base of wall to protect lower masonry from mud, mortar droppings and staining from uncompleted construction operations.

C. Provide protective cover and rigid boards or panels at opening sills to deflect mortar droppings and dropped objects from damaging masonry sills or any other projecting elements.

D. During construction of walls, cover tops of walls and any open sills or headers with waterproof sheeting at the end of each day's work. Cover partially completed masonry when construction is not in progress.

1. Extend cover a minimum of 24 inches down face of both sides of wall and hold cover securely in place.
2. Where 1 wythe of multi-wythe masonry is completed in advance of other wythes, secure cover sheeting down face of higher wythe and a minimum of 24 inches down face of lower or unconstructed wythe and hold securely in place.
3. Direct cavity and masonry wythe covers to drain to exterior of building or when at interior partitions, to unfinished areas whenever possible.

END OF SECTION

THAT SECTION 07 9000
JOINT SEALANTS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Exterior and interior sealants.
2. Joint accessories.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Tremco Sealant/Weatherproofing Division of RPM International, Inc.

B. Dow Corning Corporation.

C. Sonneborn Building Products Division, Rexnord Chemical Products, Inc. (Master Builders).

D. Approved Equivalent prior to bid.

2.2 SILICONE SEALANTS

A. Single Component Silicone: Dow Corning 795 Silicone Building Sealant (design basis), color as selected, at exterior perimeter of windows.

2.3 POLYURETHANE SEALANTS

A. Single Component Non-Sag Polyurethane: Sonneborn Building Products Sonolastic NP 1 (MasterSeal NP 1) (design basis) , color as selected, at locations other than exterior perimeter of windows.

2.4 ACCESSORIES

A. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.

B. Primer: Non-staining type, recommended by sealant manufacturer to suit application.

C. Joint Backing: Closed-cell round foam rod compatible with sealant; oversized 25 to 50 percent larger than joint width; recommended by sealant manufacturer to suit application

D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

E. Masking tape: Non-staining, non-absorbent tape product compatible with joint sealants and adjacent joint surfaces.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify substrate surfaces and joint openings are ready to receive work.

1. Verify joint surfaces are clean and dry.
2. Ensure concrete surfaces are fully cured.

B. Report unsatisfactory conditions in writing to the Architect;

C. Do not proceed until unsatisfactory conditions are corrected.

3.2 PREPARATION

A. Prepare joints in accordance with ASTM C 1193 and manufacturer's instructions.

B. Clean joint surfaces to remove dirt, dust, oils, wax, paints, and other contamination capable of affecting primer and sealant bond.

C. Protect elements surrounding the Work of this section from damage or disfiguration. Apply masking tape to adjacent surfaces when required to prevent damage to finishes from sealant installation.

3.3 EXISTING WORK

A. Mechanically remove existing sealant.

B. Clean joint surfaces of residual sealant and other contaminates capable of affecting sealant bond to joint surface.

C. Allow joint surfaces to dry before installing new sealants.

3.4 SEALANT INSTALLATION

A. Install primer and sealants in accordance with ASTM C 1193 and manufacturer's instructions.

B. Install joint backing to maintain the following joint ratios:

1. Joints up to 1/2 inch (13 mm) Wide: 1:1 width to depth ratio.
2. Joints Greater than 1/2 inch (13 mm) Wide: 2:1 width to depth ratio; maximum 1/2 inch joint depth.

C. Install bond breaker where joint backing is not used.

D. Apply primer where required for sealant adhesion.

E. Install sealants immediately after joint preparation.

F. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.

G. Joining Silicone and Polyurethane Sealants:

1. Install polyurethane sealants first.
2. Join silicone sealant to polyurethane in accordance with manufacturer's instructions.

H. Tool exposed joint surface concave.

3.5 CLEANING

A. Remove masking tape.

B. Clean adjacent surfaces soiled by sealant installation.

END OF SECTION

SECTION 09 9113
EXTERIOR PAINTING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Surface preparation.

B. Field application of paints.

C. Scope: Finish exterior window surfaces.

D. Do Not Paint or Finish the Following Items:

1. Brick
2. Glass.

1.2 DEFINITIONS

A. Comply with ASTM D16 for interpretation of terms used in this section.

1.3 REFERENCE STANDARDS

A. ASTM D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications; 2024.

B. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Based Materials; 2020.

C. MPI (APL) - Master Painters Institute Approved Products List; Master Painters and Decorators Association; Current Edition.

D. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual; Current Edition.

1.4 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide complete list of products to be used, with the following information for each:

1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
2. MPI product number (e.g. MPI #47).
3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.

C. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches (216 by 279 mm) in size, illustrating range of colors available for each finishing product specified.

1. Where sheen is specified, submit samples in only that sheen.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.

B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

C. Paint Materials: Store at minimum ambient temperature of 45 degrees F (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in ventilated area, and as required by manufacturer's instructions.

1.6 FIELD CONDITIONS

A. Do not apply materials when surface and ambient temperatures are outside the paint product manufacturer's temperature ranges.

B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

C. Provide lighting level of 80 ft candles (860 lx) measured mid-height at substrate surface.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.

2.2 PAINTS AND FINISHES - GENERAL

A. Paints and Finishes: Ready-mixed, unless required to be a field-catalyzed paint.

1. Where MPI paint numbers are specified, provide products listed in Master Painters Institute Approved Product List, current edition available at www.paintinfo.com, for specified MPI categories, except as otherwise indicated.

2. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.

3. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.

4. Supply each paint material in quantity required to complete entire project's work from a single production run.

5. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is described explicitly in manufacturer's product instructions.

B. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Architect/Engineer from the manufacturer's full line.

C. Colors: As indicated on drawings.

2.3 PAINT SYSTEMS - EXTERIOR

A. Paint E-OP - Exterior Surfaces to be Painted, Unless Otherwise Indicated: Including Existing wood windows.

1. Two top coats and one coat primer.
2. Top Coat(s): Exterior Latex.
    a. Products:
        1) PPG Paints Speedhide Exterior Latex, 6-2045XI Series, Satin. (MPI #15)
        2) PPG Paints Acri-Shield Max Exterior Latex, 739-10 Series, Satin. (MPI #15)
        3) Sherwin-Williams Pro Industrial Acrylic, Eg-Shel.
        4) Sherwin-Williams Solo Series, Satin.
        5) Substitutions: See Section 01 6000 - Product Requirements
3. Primer: As recommended by top coat manufacturer for specific substrate.

2.4 ACCESSORY MATERIALS

A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.

B. Patching Material: Latex filler.

C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.

C. Test shop-applied primer for compatibility with subsequent cover materials.

D. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces is below the following maximums:

1. Exterior Wood: 15 percent, measured in accordance with ASTM D4442.

3.2 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or repair existing paints or finishes that exhibit surface defects.

D. Remove hardware and fittings, prior to preparing surfaces for finishing.

E. Seal surfaces that might cause bleed through or staining of topcoat.

F. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.

G. Exterior Wood Surfaces to Receive Opaque Finish: Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior calking compound after prime coat has been applied. Back prime concealed surfaces before installation.

3.3 APPLICATION

A. Exterior Wood to Receive Opaque Finish: If final painting must be delayed more than 2 weeks after installation of woodwork, apply primer within 2 weeks and final coating within 4 weeks.

B. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".

C. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

D. Apply each coat to uniform appearance.

E. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

F. Reinstall hand fittings removed prior to finishing.

3.4 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.5 PROTECTION

A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion.

END OF SECTION