

2.2 GYPSUM WALLBOARD FOR WET AREAS: WATER-RESISTANT GYPSUM GACKING BOARD AS DEFINED IN ASTM

1.1. c1396/c1396m; sizes to minimum joints in place

1.2. Application: exposed surfaces at service bay, restrooms, and waste oil storage room.

1.3. Mold resistant: score of 10, when tested in accordance with astm g3273.

1.4. Edges: square

1.5. Exterior sheathing board: as specified in section 06 1000.

1.6. Ceiling board: special sag-resistant gypsum ceiling board as defined in astm d1396/c1396m; sizes to minimize joints in place; ends square cut.

1.7. Application: ceilings, unless otherwise indicated.

1.8. Thickness: ½ inch (13 mm).

1.9. Edges: tapered.

2. Accessories

2.1. Acoustical insulation: as specified in section 07 2100.

2.2. Acoustical sealant: non-hardening, non-skinning, for use in conjunction with gypsum board.

2.3. Finishing accessories: astm c1047, galvanized steel or rolled zinc, unless otherwise indicated.

2.3.1. Types: as detailed or required for finished appearance.

2.3.2. Special shapes: in addition to conventional cornerbead and control joints, provide u-bead at exposed panel edges.

2.3.3. Joint materials: astm c475 and as recommended by gypsum board manufacturer for project conditions.

2.3.4. Screw for attachment to wood members: astm c 514.

2.3.5. Adhesive for attachment to wood: astm c557.

PART 3 Execution

1. Examination

1.1. Verify that project conditions are appropriate for work of this section to commence.

2. Acoustic accessories installation

2.1. Acoustic insulation: place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions...

2.2. Acoustical sealant: install in accordance with manufacturer's instructions.

3. Board installation

3.1. Comply with astm c 840, ga-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.

3.2. Single-layer non-roted: install gypsum board in most economical direction, with ends and edges occurring over firm bearing.

3.3. Installation on wood framing: use screws for attachment of all gypsum board except face layer of non-roted double layer assemblies, which may be installed by means of adhesive lamination.

4. Installation of trim and accessories

4.1. Control joints: place control joints consistent with lines of building spaces and as indicated

4.2. Corner beads: install at external corners, using longest practical lengths.

4.3. Edge trim: install at locations where board abuts dissimilar materials and as indicated.

5. Joint treatment

5.1. Finish gypsum board in accordance with levels defined in astm c840, as follows:

5.1.1. Level 4: walls and ceilings to receive paint finish and finish or wall coverings, unless otherwise indicated.

5.1.2. Level 5: walls and ceilings to receive semi-gloss or gloss paint finish and other areas specifically indicated.

5.1.3. Level 2: in utility areas, behind cabinetry, and on backing board to receive tile finish.

5.1.4. Level 1: fire rated wall areas above finished ceilings, whether or not in accessible in the completed construction.

5.1.5. Level 0: temporary partitions and surfaces indicated to be finished in later stage of project.

5.2. Tape, fill, and sand exposed joints, edges, and corners o produce smooth surface ready to receive finishes.

5.2.1. Feather coats of joint compound so that camber is maximum 1/32 inch (0.8 mm).

5.3. Where level 5 finish is indicated, spray apply high build drywall surfacer over entire surface after joints have been properly treated; achieve a flat and tool mark-free finish.

SECTION 09 5100 – ACOUSTICAL CEILINGS

PART 1 GENERAL

1. Quality assurance

1.1. Field conditions

1.2. Maintain uniform temperature of minimum 60 degrees f (16 degrees c), and maximum humidity of 40 percent prior to, during, and after acoustical unit installation.

PART 2 PRODUCTS

1. Acoustical units

1.1. acoustical units – general: astm e1264, class a

1.1.1. acoustical tile: provide 24" x 24" tegular edge tile

2. Suspension system

2.1. 15/16" standard white color

2.2. Support channels and hangers: galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness requirement specified.

2.3. Perimeter molding: same material and finish as grid

PART 3 EXECUTION

1. Installation – Suspension System

1.1. Install suspension system in accordance with astm c636//c636m, astm e580/e580m, and manufacturer's instructions and as supplemented in this section

1.2. Lay out system to a balanced grid design with edge units no less than 50 percent of acoustical unit size.

1.3. Install light fixture boxes constructed of gypsum board above light fixtures in accordance with fire rated assembly requirements and light fixture ventilation requirements.

2. Installation – Acoustical Units

2.1. Install acoustical units in accordance with manufacturer's instructions.

2.2. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.

2.3. Lay directional patterned units with pattern parallel to longest room axis.

SECTION 09 2210 – STUCCO

PART 1 – GENERAL

1. SUMMARY

A. THIS SECTION SPECIFIES THE CONSTRUCTION OF ALL SYNTHETIC STUCCO WORK INCLUDING INSTALLATION OF FOAM SHEATHING, SCRATCH COAT, WIRE LATH, SYNTHETIC STUCCO MIXTURE, CONTROL JOINTS, FIBERBOARD, WEATHER RESISTIVE BARRIER BUILDING PAPER, FASTENERS, SILICONE CAULKING, DRIP SCALED MOLDINGS, FLASHING, AND TRIM.

B. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY TO FURNISH, TRANSPORT, AND INSTALL ALL STUCCO WORK, AS INDICATED ON THE DRAWINGS, IN ACCORDANCE WITH LOCAL CODES AND STANDARDS, OR AS SPECIFIED HEREIN. THIS WORK SHALL INCLUDE BUT NOT BE LIMITED TO MIXING AND APPLICATION OF SYNTHETIC STUCCO AND ACCESSORIES, AND ASSOCIATED TROWELING, CURING, PATCHING, REPAIRING, CLEANING, AND SEALING.

C. COORDINATE DELIVERY WITH OTHER WORK TO AVOID DELAY. ALL WORK SHALL BE COORDINATED WITH OTHER SECTIONS.

1.2. SUBMITTALS

A. SUBMITTALS SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS 01330, AND 01600.

B. PRODUCT DATA: FOR EACH TYPE OF MATERIAL AND PRODUCT INDICATED.

1. SUBMIT CATALOG DATA WHICH INCLUDES SPECIFICATION AND INSTALLATION DETAILS.

2. INSTALLATION INSTRUCTIONS AND RECOMMENDATION OF MANUFACTURER SHALL BE SPECIFIED FOR THIS APPLICATION.

C. SHOP DRAWINGS:

1. CLEARLY SHOW LAYOUT, DESIGNATION, NUMBER, TYPE, LOCATION AND MATERIALS REQUIRED.

2. SUBMIT MANUFACTURER'S CERTIFICATE THAT MATERIALS MEET SPECIFICATION REQUIREMENTS.

3. SUBMIT MANUFACTURER'S PRINTED INSTRUCTIONS FOR INSTALLATION OF SYNTHETIC STUCCO AND ASSOCIATES MATERIALS, PROPORTION MIXES, AND INSTALLATION INSTRUCTIONS FOR FACTORY PREPARED FINISH MATERIALS.

D. MOCKUPS: PROVIDE 8' X 8' MOCKUPS AS REQUIRED BY SECTION 01400.

E. SAMPLES FOR REVIEW IN ACCORDANCE WITH SECTIONS 01330 AND 01600.

1. PROVIDE (4) 12" X 12" SAMPLES (AND MANUFACTURER'S LITERATURE) IN ACCORDANCE WITH SECTION 01330 FOR ALL WORK UNDER THIS SECTION.

2. SAMPLES SHALL BE PROVIDED FOR ARCHITECT'S APPROVAL, AND WHEN APPROVED, SHALL BECOME THE STANDARD FOR ALL WORK.

3. EACH SAMPLE SHALL SHOW COLOR, TEXTURE AND WORKMANSHIP OF FINISHED WORK.

4. CONSTRUCT SUCCESSIVE PANELS, IF NECESSARY, UNTIL APPROVED.

F. MATERIAL CERTIFICATES FOR EACH TYPE OF PRODUCT INDICATED, INCLUDE STATEMENTS OF MATERIAL PROPERTIES INDICATING COMPLIANCE WITH REQUIREMENTS, STANDARDS, AND TYPE DESIGNATIONS WITHIN STANDARDS. INCLUDE MATERIAL TEST REPORTS SUBSTANTIATING COMPLIANCE WITH REQUIREMENTS.

G. FIELD QUALITY CONTROL TEST AND INSPECTION REPORTS.

1.3. QUALITY ASSURANCE

A. COMPLY WITH APPLICABLE REQUIREMENTS OF ASTM C 926 AS APPLICABLE; AND PLASTER, METAL FRAMING SYSTEM, LATH MANUAL, LATEST EDITION.

B. COMPLY WITH THE MATERIAL AND INSTALLATION REQUIREMENTS IDENTIFIED IN ICC ESR-1607.

C. BUILDING DEPARTMENT INSPECTION IS REQUIRED ON WIRE LATH INSTALLATION PRIOR TO APPLICATION OF THE COATING, AND PER LOCAL CODE REQUIREMENTS.

D. ALLOWABLE TOLERANCES: MAXIMUM DEVIATION FROM TRUE PLANE OF 1/8" IN 10'-0" AS MEASURED BY STRAIGHT EDGE PLACED AT ANY LOCATION ON SURFACE.

E. INSTALLER QUALIFICATION: EXPERIENCE IN PERFORMING WORK OF THIS SECTION, SPECIALIZING IN INSTALLATION OF WORK SIMILAR TO THAT REQUIRED FOR THIS PROJECT, EMPLOYING WORKERS WHO ARE SKILLED IN THIS AREA OF WORK, AND WHOSE PROJECTS HAVE A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE.

F. MANUFACTURERS SHALL MEET THE INDUSTRY STANDARDS AND CODES FOR THE MATERIALS IDENTIFIED ON THE DRAWINGS AND IN THE SPECIFICATIONS HEREIN.

G. CERTIFICATION: PRODUCT CERTIFICATES SIGNED BY MANUFACTURER, CERTIFYING MATERIALS COMPLY WITH SPECIFIED PERFORMANCE CHARACTERISTICS, CRITERIA, AND PHYSICAL REQUIREMENTS.

H. MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION SHALL BE DELIVERED AND STORED WITH THE MATERIALS.

1. TESTING: AS REQUIRED BY THE LATEST INDUSTRY CODES AND STANDARDS.

J. WARRANTY:

1. MANUFACTURER'S WARRANTY: SUBMIT, FOR OWNER'S ACCEPTANCE, MANUFACTURER'S STANDARD WARRANTY DOCUMENT EXECUTED BY AUTHORIZED COMPANY OFFICIAL. MANUFACTURER'S WARRANTY IS IN ADDITION TO, AND NOT A LIMITATION OF, OTHER RIGHTS OWNER MAY HAVE UNDER CONTRACT DOCUMENTS.

2. WARRANTY PERIOD: FIVE (5) YEARS COMMENCING ON DATE OF SUBSTANTIAL COMPLETION.

3. ADDITIONAL REQUIREMENTS FOR PRODUCT WARRANTIES ARE INCLUDED IN SECTION 01600.

1.4. DELIVERY, STORAGE AND HANDLING

A. DELIVER ALL PRODUCTS IN THEIR ORIGINAL, UNOPENED, UNDAMAGED PACKAGES, CONTAINERS OR BUNDLES, WITH IDENTIFICATION LABELS INTACT, AND BEARING THE NAME OF THE MANUFACTURER AND THE BRAND.

B. KEEP STUCCO AND ALL OTHER CEMENTITIOUS MATERIALS DRY UNTIL READY FOR USE, KEEPING THEM OFF THE GROUND, AND AWAY FROM DAMP WALLS AND SURFACES. REMOVE DAMAGED OR DETERIORATED MATERIALS FROM THE PREMISES.

1.5. PROJECT CONDITIONS

A. APPLY MATERIAL (WESTERN 1-KOTE) WHEN THE AMBIENT AIR TEMPERATURE IS BETWEEN 40 DEG F AND 110 DEG F.

B. IF FREEZING TEMPERATURES ARE EXPECTED WITHIN 24 HOURS AFTER APPLICATION, PRECAUTIONS SHOULD BE TAKEN TO PROTECT WALLS, (TEXTING, HEATERS) ETC.

C. DURING PERIODS OF EXCESSIVE HEAT AND WIND, ADDITIONAL CURING MUST BE PROVIDED.

D. WHERE STUCCO IS A COMPONENT OF AN ASSEMBLY FOR WHICH A FIRE RESISTIVE RATING IS SHOWN OR REQUIRED, PROVIDE STUCCO COMPLYING WITH UL DESIGN ASSEMBLIES SHOWN ON DRAWINGS.

E. COLD WEATHER REQUIREMENTS:

1. DO NOT USE FROZEN MATERIALS IN STUCCO MIXES.

2. DO NOT APPLY STUCCO TO FROZEN SURFACES OR SURFACES CONTAINING FROST.

3. DO NOT APPLY STUCCO WHEN AMBIENT TEMPERATURE IS LESS THAN 40 DEG F.

F. HOT WEATHER REQUIREMENTS:

1. PROTECT STUCCO FROM UNEVEN AND EXCESSIVE EVAPORATION DURING HOT, DRY WEATHER. SEE MANUFACTURER'S RECOMMENDATIONS.

G. EXERCISE EXTREME CARE AND PROVIDE NECESSARY FORMS OF PROTECTION FOR PROTECTING FINISH WORK OF OTHER TRADES DURING STUCCO OPERATION (IN PARTICULAR DOOR AND WINDOW UNITS) FROM BEING STAINED, TARNISHED OR OTHERWISE DAMAGED FOR WORK UNDER THIS SECTION. MASK MATERIALS TO PROTECT SAME.

PART 2 – PRODUCTS

2.1. ACCEPTABLE MANUFACTURERS

A. PROVIDE SYNTHETIC STUCCO MATERIALS AS PROVIDED BY ONE OF THE FOLLOWING MANUFACTURERS:

1. DRYVIT

2. USG

3. STO

4. ARCHITECT APPROVED EQUAL.

2.2. ACCEPTABLE MATERIALS

A. PRODUCTS MUST COMPLY WITH THE REQUIREMENTS IDENTIFIED IN ICC ESR-1607, AND AS RECOMMENDED BY THE APPROVED MANUFACTURER

B. WESTERN 1-KOTE OR ARCHITECT APPROVED SYNTHETIC STUCCO MATERIALS SHALL BE A PORTLAND CEMENT MIXTURE: ASTM C150, TYPE I OR II, FIBER REINFORCED MODIFIED PORTLAND CEMENT PLASTER: ICC ESR-1607

C. SAND: MUST CONFORM TO REQUIREMENTS OF ASTM C144 AND ICC 1607 "WESTERN 1-KOTE".

D. HYDRATED LIME: ASTM C207, TYPE S, IF REQUIRED BY STUCCO MANUFACTURER.

E. APPROVED COLOR PIGMENTS MAY BE ADDED TO THE STUCCO MIX IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

F. 1" TONGUE AND GROOVE FOAM BOARD: MUST BE ICC LISTED:

1. (EPS) NOMINAL 1.5 LBS PER CUBIC FOOT, CLASS I FLAME SPREAD CLASSIFICATION, AND SMOKE DEVELOPED RATING NOT EXCEEDING 450.

2. (XEPS) 1.6 LBS PER CUBIC FOOT DENSITY CLASS I FLAME SPREAD RATING, AND SMOKE DEVELOPED RATING NOT EXCEEDING 450.

G. PLYWOOD: MINIMUM 5/8" THICK EXTERIOR GRADE.

H. WEATHER RESISTIVE GRADE D BUILDING PAPER: (ASPHALT SATURATED FELT) COMPLYING WITH UL STANDARD 85-A-1983.

I. GYPSUM SHEATHING BOARD: COMPLY WITH ASTM C79-92.

J. LATH: WOVEN WIRE OR EXPANDED METAL LATH WITH ICC LISTING.

1. MINIMUM 20 GA. 1" GALVANIZED STEEL WOVEN-WIRE FABRIC. LATH MUST SELF FURRED WITH LATH.

a. MAXIMUM TOTAL COATING THICKNESS IS 1/2"

b. FURRING MUST BE PROVIDED AT MAXIMUM 6" INTERVALS EACH WAY. THE CRIMPS MUST FURR THE BODY OF THE LATH A MINIMUM OF 1/8" FROM THE SUBSTRATE AFTER INSTALLATION.

c. WIRE LATH SHOULD BE FASTENED WITH NAILS OR STAPLES THAT ALLOW 1" PENETRATION INTO WOOD STUD.

K. FASTENERS: IN ACCORDANCE WITH STUCCO MANUFACTURER'S WRITTEN RECOMMENDATIONS.

L. BONDING AGENT: REQUIRED TO BE APPLIED DIRECTLY TO THE BASE COAT AS TIME REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS ALLOW.

M. TRIMS: VARIOUS TRIMS SUCH AS WEEPS, CASING BEADS, AND EXPANSION JOINTS, TYPE OF TRIM VARIES WITH APPLICATION, SUBSTRATE AND THICKNESS OR PLASTER. PROVIDE TRIM AS RECOMMENDED BY MANUFACTURER.

N. ACRYLIC FINISH COAT AND PRIMER: AS RECOMMENDED BY THE SYNTHETIC STUCCO MANUFACTURER, SUCH AS 100% PURE ACRYLIC COPOLYMER WITH INTEGRAL COLOR AND TEXTURE AGGREGATE.

O. COLOR FINISH COAT WHERE APPLICABLE SHALL BE FACTORY MIXED AND APPLIED IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS. COLOR AND TEXTURE TO BE PER ARCHITECT APPROVED SAMPLE PANEL.

PART 3 – EXECUTION

3.1. INSPECTION

A. MAKE A DETAILED INSPECTION OF ALL AREAS AND SURFACES TO BE ENCLOSED OR COVERED BY THE WORK OF THIS SECTION, AND MAKE ARRANGEMENTS FOR SATISFACTORY CORRECTION OR ALL DEFECTIVE WORKMANSHIP OR MATERIALS THAT MIGHT AFFECT THE WORK HEREIN.

3.2. STUCCO APPLICATION

A. INSTALL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTION, AND LOCAL CODES AND STANDARDS. WHERE THERE IS A CONFLICT WITH THE INSTRUCTIONS INCLUDED HEREIN, THE MORE STRINGENT REQUIREMENTS SHALL BE USED.

B. APPLY WEATHER RESISTIVE BARRIER.

C. WHERE INDICATED OVER CONCRETE OR MASONRY, APPLY BROWN COAT DIRECTLY OVER CONCRETE OR MASONRY, PROPORTIONED AS SPECIFIED BELOW.

1. DAMPEN SURFACE EVENLY TO OBTAIN UNIFORM SUCTON.

2. APPLY TO AN APPROXIMATE THICKNESS OF 3/8".

3. BRING SURFACE TO A TRUE, EVEN SURFACE BY FLOATING OR RODDING, AND LEAVE ROUGH READY TO RECEIVE FINISH COAT.

4. CURE FOR SEVEN (7) DAYS BY KEEPING MOIST.

D. APPLY FINISH COAT NOT SOONER THAN SEVEN (7) DAYS AFTER THE APPLICATION OF THE PRECEDING COAT.

1. BEFORE APPLYING, DAMPEN THE SURFACE OF THE PRECEDING COAT EVENLY TO OBTAIN UNIFORM SUCTON.

2. WHEN APPLYING THE FINISH, PLAN WORK SO THAT THE ENTIRE WALL CAN BE COMPLETED AT ONE TIME TO ELIMINATE FINISHING MARKS.

3. IF NOT PRACTICAL, USE A CORNER, DOOR OR WINDOW AS BREAKING POINT.

4. THE THICKNESS OF THE FINISH COAT SHALL BE SUFFICIENT TO SECURE THE SPECIFIED TEXTURE AND TOTAL THICKNESS OF STUCCO SHALL BE AT LEAST 5/8" AND MAXIMUM 3/4".

5. TEXTURE AND COLOR OF FINISH SHALL MATCH APPROVED SAMPLE.

6. SAND FINISH.

3.3. CURING

A. KEEP EACH COAT OF STUCCO DAMP FOR AT LEAST 72 HOURS (BROWN COAT SEVEN (7) DAYS) AFTER APPLICATION.

B. MOISTENING OF EACH COAT SHALL BEGIN AS SOON AS THE STUCCO HAS HARDENED SUFFICIENTLY SO AS NOT TO BE INJURED.

C. APPLY WATER IN A FINE SPRAY.

1. AVOID SOAKING THE WALL.

2. APPLY ONLY AS MUCH WATER AS CAN BE READILY ABSORBED.

3. PROTECT STUCCO FROM UNEVEN AND EXCESSIVE EVAPORATION DURING HOT, DRY WEATHER AND ALSO FROM STRONG BLASTS OF WIND.

3.4. PATCHING

A. STUCCO CONTAINING CRACKS, BLISTERS, PITS OR DISCOLORATION WILL NOT BE ACCEPTABLE.

B. REMOVE SUCH STUCCO AND REPLACE WITH STUCCO CONFORMING TO THE REQUIREMENTS OF THIS SPECIFICATION.

C. PATCHING INHERENTLY DEFECTIVE WORK WILL BE PERMITTED ONLY WHEN APPROVED AND SUCH PATCHING SHALL MATCH EXISTING WORK IN TEXTURE AND COLORS.

D. REPAIR ALL DEFECTS AFTER OTHER TRADES HAVE FINISHED THEIR WORK.

3.5. ASSEMBLIES

A. 1-1/2" WEEP SCREEDS AND CASING BEADS SHALL BE INSTALLED TO MATCH THE THICKNESS OF THE FOAM AND PLASTER.

B. WEEP SCREEDS AND PLASTER TRIMS TO PROTECT EXPOSED SHEATHING ENDS MUST BE INSTALLED FOR ALL WALL ASSEMBLIES.

3.6. METAL TRIM

A. WHERE STUCCO TERMINATES AGAINST DISSIMILAR MATERIALS, INSTALL CASING BEADS, PROVIDE CONTINUOUS SILICON CAULK.

B. INSTALL EXPANSION JOINTS IN THE STUCCO FIELD AS INDICATED, OR, WHERE NOT INDICATED, INSTALL JOINTS TO CREATE PANELS NO LARGER THAN 144 SQ. FT. WITH NO DIMENSION EXCEEDING 18'-0" OR A LENGTH TO WIDTH RATIO OF 2-1/2 TO 1.

C. WHERE EXPANSION JOINTS ARE PLACED PARALLEL TO FRAMING MEMBERS, INSTALL JOINTS SO THAT NONE ARE MORE THAN 4' AWAY FROM A FRAMING MEMBER.

3.7. FINISH COAT

A. THE DRYVIT FINISH (A READY-MIXED, ACRYLIC-BASED WALL COATING) IS APPLIED DIRECTLY OVER THE ONE-KOTE STUCCO ONLY AFTER THE STUCCO COAT HAS THOROUGHLY DRIED. DRYVIT FINISHES SHALL BE APPLIED BY SPRAYING, ROLLING, OR TROWLING USING A STAINLESS STEEL TROWEL, DEPENDING ON FINISH SPECIFIED. GENERAL RULES FOR APPLICATION OF DRYVIT FINISHES ARE AS FOLLOWS:

1. USING A CLEAN, RUST FREE, HIGH SPEED MIXER, THOROUGHLY STIR THE DRYVIT FINISH TO A UNIFORM CONSISTENCE (SMALL AMOUNTS OF CLEAN WATER MAY BE ADDED TO AD WORKABILITY).

2. AVOID APPLICATION IN DIRECT SUNLIGHT.

3. FINISH SHALL BE APPLIED IN A CONTINUOUS APPLICATION, ALWAYS WORKING TO A WET EDGE.

4. WEATHER CONDITIONS WILL BE A FACTOR IN THE APPLICATION OF THE FINISH, AS WELL AS DRYING TIME.

5. FINISH MAY BE APPLIED OVER CAULK JOINTS, BUT NEVER OVER EXPANSION JOINTS.

B. ALL DRYVIT MATERIALS DESCRIBED SHOULD NEVER BE APPLIED IF AMBIENT AND SURFACE TEMPERATURES CANNOT BE KEPT ABOVE 38 DEG F DURING APPLICATION AND DRYING PERIOD.

C. PRIOR TO INSTALLATION, THE WALL SHALL BE FREE OF RESIDUAL MOISTURE.

D. THE STORED MATERIALS SHOULD BE PROTECTED FROM SUN AND FROST.

SECTION 09 9000 – PAINTING AND COATING

PART 1 GENERAL

1. Section includes

1.1. Surface preparation.

1.2. Field application of paints and other coatings.

1.3. Scope: finish all interior and exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated, including the following:

1.3.1. Both sides and edges of plywood backboards for electrical and telecom equipment before installation, unless otherwise indicated.

1.3.2. Exposed surfaces of steel lintels and ledge angles.

1.4. Do not paint or finish the following items:

1.4.1. Items fully factory-finished unless specifically so indicated; materials and products having factory-applied primers are not considered factory finishes.

1.4.2. Items indicated to receive other finishes

1.4.3. Items indicated to remain unfinished

1.4.4. Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment.

1.4.5. Non-metallic roofing and flashing.

1.4.6. Stainless steel, anodized aluminum, bronze, terme, and lead items.

1.4.7. Floors, unless specially so indicated.

1.4.8. Ceramic and other tiles.

1.4.9. Brick, architectural concrete, cast stone, integrally colored plaster and stucco.

1.4.10. Glass.

1.4.11. Acoustical materials, unless specifically so indicated.

1.4.12. Concealed pipes, ducts, and conduits.

2. DEFINITIONS

2.1. Conform to astm d16 for interpretation of terms used in this section.

3. DELIVERY, STORAGE, AND HANDLING

3.1. Deliver products to site in sealed and labeled container; inspect to verify acceptability.

3.2. 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.

3.3. 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.

4. FIELD CONDITIONS

4.1. Do not apply material when surface ad ambient temperature are outside temperature ranges required by the manufacturer's instructions.

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

4.3. Do not apply exterior coating during rain or snow, or when relative humidity is outside the humidity range specified in manufacturer's instructions.

4.4. Minimum application temperature for latex paints: 45 degrees f (7 degrees c) for interior; 50 degrees f (10 degrees c) for exterior, unless required otherwise by manufacturers' instructions.

4.5. Minimum application temperature for varnish finishes: 65 degrees f (18 degrees c) for interior or exterior, unless required otherwise by manufacturer's instructions.

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

PART 2 PRODUCTS

1. MANUFACTURERS

1.1. Provide all paint and coating products used in any individual system from the same manufacturer, no exceptions.

1.2. Primer sealers: same manufacture as topcoats.

1.3. Block filler: same manufacturer as topcoats.

1.4. Substitutions: see section 01 6000 – product requirements.

2. PAINTS AND COATINGS – GENERAL

2.1. paints and coatings: ready mixed, unless intended to be a field-catalyzed coating.

2.1.1. Provide paints and coatings 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.

2.1.2. 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.

2.1.3. For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish as base color

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

2.1.5. Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in manufacturer's product instructions.

2.2. Primers: where the manufacturer offers options on primers for a particular substrate, use primer categorized as "best by the manufacturer."

2.3. Volatile organic compound (voc) content:

2.3.1. Provide coatings that comply with the most stringent requirements specified in the following:

2.3.1.1. 40 cfr 59, subpart d--national volatile organic compound emission standards for architectural coatings.

2.3.1.2. Architectural coatings voc limits of authority having jurisdiction

2.3.2. Determination of voc content: testing and calculation in accordance with 40 cfr 59, subpart d (epa method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.

2.4. Chemical content: the following compounds are prohibited:

2.4.1. Aromatic compounds: in excess of 1.0 percent by weight of total aromatic compounds (hydrocarbon compounds containing one or more benzene rings).

2.4.2. Acrolein, acrylonitrile, antimony, benzene, butyl benzy phthalate, cadmium, di (2-ethylhexyl) phthalate, di-n-butyl phthalate, di-n-octyl phthalate, 1,1,2-dichlorobenzene, diethyl phthalate, dimethyl phthalate, ethylbenzene, formaldehyde, hexavalent chromium, isophorone, lead, mercury, methyl ethyl ketone, methyl isobutyl ketone, methylene chloride, naphthalene, toluene (methylbenzene), 1,1,1-trichloroethane, vinyl chloride.

2.5. Flammability: comply with applicable code for surface burning characteristics.

2.6. Sheens: provide the sheens specified; where sheen is not specified, sheen will be selected later by architect from the manufacturer's full line.

2.7. Colors: as selected by owner / architect.

3. ACCESSORY MATERIALS

3.1. Accessory materials: provide all primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials required to achieve the finishes specified whether specifically indicated or not; commercial quality.

3.2. Patching material: latex filler.

3.3. Fastener head cover material: latex filler

PART 3 EXECUTION

1. EXAMINATION

1.1. DO NOT BEGIN APPLICATION OF COATINGS UNTIL SUBSTRATES HAVE BEEN PROPERLY PREPARED.

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

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

1.4. If substrate preparation is the responsibility of another installer, notify architect of unsatisfactory preparation before proceeding.

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

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

1.6.1. Gypsum wallboard: 12 percent.

1.6.2. Plaster and stucco: 12 percent.

1.6.3. Masonry, concrete, and concrete unit masonry: 12 percent.

1.6.4. Interior wood: 15 percent, measured in accordance with ASTM D4442.

1.6.5. Exterior wood: 15 percent, measured in accordance with ASTM D4442.

2. PREPARATION

2.1. Clean surfaces thoroughly and correct defects prior to coating application.

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

2.3. Remove or repair existing coatings that exhibit surface defects.

2.4. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.

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

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

2.7. Concrete and unit masonry surfaces to be painted: remove dirt, loose mortar, scale, salt or alkali powder, and other foreign matter. Remove oil and grease with a solution of tri-sodium phosphate; rinse well and allow to dry. Remove stains caused by weathering of corroding metals with a solution of sodium metasilicate after thoroughly wetting with water. Allow to dry.

2.8. Gypsum, board surfaces to be painted: fill minor defects with filler compound. Spot prime defects after repair.

2.9. Plaster surfaces to be painted: fill hairline cracks, small holes, and imperfections with latex patching plaster. Make smooth and flush with adjacent surfaces. Wash and neutralize high alkali surfaces.

2.10. Asphalt, creosote, or bituminous surfaces to be painted: remove foreign particles to permit adhesion of finishing materials. Apply latex based sealer or primer.

2.11. Aluminum surfaces to be painted: remove surface contamination by steam or high-pressure water. Remove oxidation with acid etch and solvent washing. Apply etching primer immediately following cleaning.

2.12. Copper surfaces to be painted: remove contamination by steam, high pressure water, or

solvent washing. Apply vinyl etch primer immediately following cleaning.

2.13. Galvanized surfaces to be painted: remove surface contamination and oils and wash with solvent. Apply coat of etching primer.

2.14. Corroded steel and iron surfaces to be painted: prepare using at least sspc-pc 2 (hand tool cleaning) or sspc- sp 3 (power tool cleaning) followed by sspc-sp 1 (solvent cleaning).

2.15. Uncoaroded uncoated steel and iron surfaces to be painted: remove grease, mill scale, weld spatter, dirt, and rust. Where heavy coatings of scales are evident, remove by and or power tool wire brushing or sandblasting; clean by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Prime paint entire surface; spot prime other repairs.

2.16. Shop-primed steel surfaces to receive opaque finish: wipe off dust and grit prior to priming.

2.17. Interior wood surfaces to receive opaque finish: wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried, sand between coats. Prime concealed surfaces with gloss varnish reduced 25 percent with thinner.

2.18. Interior wood surfaces to receive transparent finish: wipe off dust and grit prior to sealing, seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried, sand between coats. Back prime concealed surfaces before installation.

2.19. 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 caking compound after prime coat has been applied. Back prime concealed surfaces before installation.

2.20. Metal doors to be painted: prime metal door top and bottom edge surfaces.

3. APPLICATION

3.1. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.

3.2. 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.

3.3. Apply products in accordance with manufacturer's instructions.

3.4. Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied.

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

3.6. Apply each coat to uniform appearance

3.7. Dark colors and deep clear colors: regardless of number of coats specified, apply as many coats as necessary for complete hide.

3.8. Sand wood and metal surfaces lightly between coats to achieve required finish.

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

3.10. Wood to receive transparent finishes: tint filler to match wood. Work fillers into the grain before set. Wipe excess from surface.

3.11. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

4. CLEANING

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

5. PROTECTION

5.1. Protect finished coatings until completion of project

5.2. Touch-up damaged coatings after substantial completion.



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SPECIFICATIONS