1 GENERAL

1.01 RELATED SECTIONS

.1 Section 01 33 00 - Submittal Procedures.

.2 Section 01 00 10 - Waste Management and Disposal.

.3 Section 07 92 00 - Sealants.

.4 Section 09 91 99 - Painting.

1.02 REFERENCES

.1 American Society for Testing and Materials International (ASTM)
- .1 ASTM C1396/C1396M-14a, Standard Specification for Gypsum Board.
- .2 ASTM C475/C475M-15, Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board.
- .3 ASTM C840-17, Standard Specification for Application and Finishing of Gypsum Board.
- .4 ASTM C1002-16, Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs.
- .5 ASTM C1047-14a, Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base.
- .6 ASTM C1178/C1178M-13, Standard Specification for Coated Glass Mat Water-Resistant Gypsum Backing Panel.
- .7 ASTM C1629/C1629M-15, Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels.
- .8 ASTM D1037-12, Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials.

.2 Gypsum Association.

1.03 DESIGN REQUIREMENTS

.1 Partition assemblies to be non-combustible construction, sound and fire resistance rated where applicable.

1.04 SUBMITTALS

.1 Provide submittals in accordance with Section 01 33 00 – Submittal Procedures.

.2 Submit test reports from approved independent testing laboratory certifying partition system complies with sound transmission rating and fire-resistance rating as specified.

1.05 STORAGE AND HANDLING

.1 Store materials inside, level, under cover. Protect from weather, damage from construction operations and other causes, in accordance with manufacturer's printed

instructions.

.2 Handle materials to prevent damage to edges or surfaces. Protect metal accessories and trim from being bent or damaged.

1.06 WASTE MANAGEMENT AND DISPOSAL

.1 Separate and recycle waste materials in accordance with Section 01 00 10 – General Instructions.

2 PRODUCTS

2.01 GYPSUM BOARD

.1 Standard board: to ASTM C36/C36M Type X, thickness as indicated, 1200 mm wide x maximum practical length, ends square cut, edges tapered.

.2 Steel drill screws: to ASTM C1002.

.3 Casing beads, corner beads, control joints and edge trim: to ASTM C1047, metal, zinc-coated by hot-dip process, 0.5 mm base thickness, perforated flanges, one piece length per location.

.4 Joint compound:
.1 Standard board: to ASTM C 475, asbestos-free.

.5 Drywall furring and resilient channels: 0.5 mm core thickness galvanized steel channels for screw attachment of gypsum board.

2.02 ACCESSORIES

.1 Acoustical insulation and sealant: type recommended by manufacturer to achieve STC rating specified..

3 EXECUTION

3.01 ERECTION OF GYPSUM BOARD AND ACCESSORIES

.1 Do application and finishing of gypsum board in accordance with ASTM C840 except where specified otherwise.

.2 Install steel framing members to receive screw-attached gypsum board in accordance with ASTM C754 except where specified otherwise.

.3 Install metal furring channels to existing steel girts and steel framing as indicated, to receive new gypsum board.

.4 Erect hangers and runner channels for suspended gypsum board ceilings in accordance with ASTM C840 except where specified otherwise.

.5 Frame with furring channels, perimeter of openings for access panels, light fixtures, diffusers, grilles.

.6 Install 19 x 64 mm furring channels parallel to, and at exact locations of steel stud partition header track.

.7 Furr for gypsum board faced vertical bulkheads within and at termination of ceilings.

.8 Install wall furring for gypsum board wall finishes in accordance with ASTM C840, except where specified otherwise.

.9 Install gypsum boards in direction that will minimize number of end-butt joints. Stagger end joints at least 250 mm.

3.02 APPLICATION

.1 Do not apply gypsum board until bucks, anchors, blocking, sound attenuation, electrical and mechanical work are approved.

.2 Apply gypsum board to metal furring or framing using screw fasteners. Maximum spacing of screws 300 mm on centre.

3.03 INSTALLATION

.1 Erect accessories straight, plumb or level, rigid and at proper plane. Use full length pieces where practical. Make joints tight, accurately aligned and rigidly secured. Mitre and fit corners accurately, free from rough edges. Secure at 150 mm on centre.

.2 Install casing beads where gypsum board butts against surfaces having no trim concealing junction and where indicated. Seal joints with sealant.

.3 Install insulating strips continuously at edges of gypsum board and casing beads abutting metal window and exterior door frames, to provide thermal break.

.4 Install access doors to electrical and mechanical fixtures specified in respective sections.
- .1 Rigidly secure frames to furring or framing systems.

3.04 FINISHING

.1 Gypsum Board Finish: finish gypsum board walls and ceilings to following levels in accordance with Gypsum Association levels of gypsum board finish:
- .1 Levels of finish:
  - .1 Level 2: for concealed gypsum board walls and ceilings
  - .2 Level 4: for exposed gypsum board walls and ceilings

.2 Completed installation to be smooth, level or plumb, free from waves and other defects and ready for surface finish

END OF SECTION

1 GENERAL

1.01 RELATED SECTIONS

.1 Section 01 33 00 - Submittal Procedures.

.2 Section 01 00 10 - Waste Management and Disposal.

.3 Section 01 00 10 - Closeout Submittals.

1.02 REFERENCES

.1 Master Painters Institute (MPI)
  .1 MPI Architectural Painting Specifications Manual, 2004.

.2 South Coast Air Quality Management District (SCAQMD), California State
  .1 SCAQMD Rule 1113 January 2007, Architectural Coatings
  .2 SCAQMD Rule 1168 January 2005, Adhesives and Sealants Applications

1.03 SUBMITTALS

.1 Submittals in accordance with Section 01 33 00 - Submittal Procedures

.2 Product Data:
  .1 Submit product data and instructions for each paint and coating product to be used.

1.04 CLOSEOUT SUBMITTALS

.1 Provide operation and maintenance data in accordance with Section 01 00 10 – General Instructions.

1.05 STORAGE AND HANDLING

.1 Storage and Protection:
  .1 Provide and maintain dry, temperature controlled, secure storage.
  .2 Store materials and supplies away from heat generating devices.
  .3 Store materials and equipment in well ventilated area within temperature as recommended by manufacturer.

1.06 WASTE MANAGEMENT AND DISPOSAL

.1 Separate and recycle waste materials in accordance with Section 01 00 10 – General Instructions.

1.07 SITE CONDITIONS

.1 Lighting: Provide minimum lighting level of 323 Lux on surfaces to be painted.

.2 Temperature, Humidity and Substrate Moisture Content Levels:
- .1 Apply paint finishes when ambient air and substrate temperatures at location of installation can be satisfactorily maintained during application and drying process, within MPI and paint manufacturer's prescribed limits.
- .2 Test concrete, masonry and plaster surfaces for alkalinity as required.
- .3 Apply paint to adequately prepared surfaces, when moisture content is below paint manufacturer's prescribed limits.

.3 Additional application requirements:
- .1 Apply paint finish in areas where dust is no longer being generated by related construction operations or when wind or ventilation conditions are such that airborne particles will not affect quality of finished surface.

2 PRODUCTS

2.01 VOC REQUIREMENTS

.1 Except for indicated alkyd formulations, all other formulas to conform to SCAQMD

2.02 MATERIALS

.1 Paint materials listed in the MPI Approved Products List (APL) are acceptable for use on this project.

.2 Provide paint materials for paint systems from single manufacturer.

.3 Only qualified products with E3 "Environmentally Friendly" rating are acceptable for use on this project.

.4 Conform to latest MPI requirements for all painting work including preparation and priming.

.5 Materials (primers, paints, coatings, varnishes, stains, lacquers, fillers, thinners, solvents, etc.) in accordance with MPI - Architectural Painting Specification Manual.

2.03 COLOURS

.1 Colour schedule will be based upon selection of 1 base colour.

2.04 MIXING AND TINTING

.1 Perform colour tinting operations prior to delivery of paint to site, in accordance with manufacturer's written instructions.

.2 Use and add thinner in accordance with paint manufacturer's recommendations. Do not use kerosene or similar organic solvents to thin water-based paints.

.3 Thin paint for spraying in accordance with paint manufacturer's instructions.

.4 Re-mix paint in containers prior to and during application to ensure break-up of lumps, complete dispersion of settled pigment, and colour and gloss uniformity.

2.05 GLOSS/SHEEN RATINGS

.1 Paint gloss/sheen to be defined in accordance with MPI values. Gloss/Sheens to be selected after award of contract. Provide for a total of 3 different gloss/sheens for each painting formula.

2.06 EXTERIOR PAINTING

.1 Galvanized Metal:
- .1 EXT 5.3B - Latex finish.
- .2 Primer: MPI#26 - cementious

2.07 INTERIOR PAINTING

.1 Plaster and gypsum board: gypsum wallboard for walls and ceilings.
- .1 INT 9.2M - Institutional low VOC finish
- .2 Primer: MPI#149 - institutional low odor/VOC

3 EXECUTION

3.01 GENERAL

.1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and data sheet.

.2 Perform preparation and operations for interior painting in accordance with MPI - Architectural Painting Specifications Manual and MPI - Maintenance Repainting Manual except where specified otherwise.

3.02 EXAMINATION

.1 Investigate existing substrates for problems related to proper and complete preparation of surfaces to be painted. Report to Owner’s Representative damages, defects, unsatisfactory or unfavorable conditions before proceeding with work.

.2 Conduct moisture testing of surfaces to be painted using properly calibrated electronic moisture meter, except test concrete floors for moisture using simple "cover patch test". Do not proceed with work until conditions fall within acceptable range as recommended by manufacturer.

3.03 PREPARATION

.1 Protection:
- .1 Protect existing building surfaces and adjacent structures from paint spatters, markings and other damage by suitable non-staining covers or masking. If damaged, clean and restore surfaces as directed by Consultant.
- .2 Protect items that are permanently attached such as Fire Labels on doors and frames.
- .3 Protect factory finished products and equipment.

.2 Surface Preparation:

.1 Remove electrical cover plates, light fixtures, surface hardware on doors, bath accessories and other surface mounted equipment, fittings and fastenings prior to undertaking painting operations. Identify and store items in secure location and re-installed after painting is completed.

.2 Move and cover furniture and portable equipment as necessary to carry out painting operations. Replace as painting operations progress.

.3 Place "WET PAINT" signs in occupied areas as painting operations progress.

.3 Clean and prepare surfaces in accordance with MPI - Architectural Painting Specification Manual specific requirements and coating manufacturer's recommendations.

.4 Prevent contamination of cleaned surfaces by salts, acids, alkalis, other corrosive chemicals, grease, oil and solvents before prime coat is applied and between applications of remaining coats. Apply primer, paint, or pretreatment as soon as possible after cleaning and before deterioration occurs.

.5 Sand and dust between coats as required to provide adequate adhesion for next coat and to remove defects visible from a distance up to 1000 mm.

.6 Clean metal surfaces to be painted by removing rust, loose mill scale, welding slag, dirt, oil, grease and other foreign substances in accordance with MPI requirements.

.7 Touch up of shop primers with primer as specified.

.8 Do not apply paint until prepared surfaces have been inspected by Consultant

3.04 APPLICATION

.1 Conform to manufacturer's application instructions unless specified otherwise.

.2 Apply coats of paint continuous film of uniform thickness. Repaint thin spots or bare areas before next coat of paint is applied.

.3 Allow surfaces to dry and properly cure after cleaning and between subsequent coats for minimum time period as recommended by manufacturer.

.4 Sand and dust between coats to remove visible defects.

.5 Apply minimum one coat of primer and 2 coats of finish colour and gloss/sheen to all areas unless indicated otherwise.

.6 Where clear finishes or stains indicated, apply minimum 2 coats of stain and minimum 3 coats of clear finishing product.

.7 Finish surfaces both above and below sight lines as specified for surrounding surfaces.

3.05 MECHANICAL/ELECTRIC AL EQUIPMENT

.1 Keep existing sprinkler heads free of paint.

END OF SECTION