

PART 1 - GENERAL**1.1 RELATED REQUIREMENTS**

- .1 Section 01 74 19 – Waste Management and Disposal.
- .2 Section 05 50 00 – Metal Fabrications.
- .3 Section 09 51 99 – Acoustical Ceilings for Minor Works.
- .4 Section 09 91 99 – Painting for Minor Works.

1.2 REFERENCE STANDARDS

- .1 ASTM International
 - .1 ASTM C 1396/C 1396M-09a, Standard Specification for Gypsum Wallboard.
 - .2 ASTM C 475/C 475M-02(2007), Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board.
 - .3 ASTM C 514-04(2009) e1, Standard Specification for Nails for the Application of Gypsum Board.
 - .4 ASTM C 645-09a, Standard Specification for Nonstructural Steel Framing Members.
 - .5 ASTM C 754-09a, Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
 - .6 ASTM C 840-08, Standard Specification for Application and Finishing of Gypsum Board.
 - .7 ASTM C 954-10, Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.122 in. (2.84 mm) in Thickness.
 - .8 ASTM C 1002-07, 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.
 - .9 ASTM C 1047-10, Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base.
 - .10 ASTM C 1178/C 1178M-08, Standard Specification for Glass Mat Water-Resistant Gypsum Backing Board.
 - .2 South Coast Air Quality Management District (SCAQMD), California State, Regulation XI. Source Specific Standards
 - .1 SCAQMD Rule 1168-A2005, Adhesives and Sealants Applications.
 - .3 Underwriters' Laboratories of Canada (ULC)
 - .1 CAN/ULC-S102-07, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.
 - .4 Seismic Design Category C : 2009 & 2006 IBC® International Building Code - Section 1613 (2007 CBC California Building Code)
 - .1 American Society of Civil Engineers 7-05: Minimum Design Loads for Buildings and Other Structures.
 - .2 CISCA: Guidelines for Seismic Restraint Direct Hung Suspended Ceiling Assemblies Seismic Zones 0-2.
 - .5 Seismic Design Category C : 2012 IBC® International Building Code - Section 1613 (2010 CBC California Building Code)
 - .1 American Society of Civil Engineers 7-10: Minimum Design Loads for Buildings and Other Structures.
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- .6 CISCA Ceiling Systems Installation Handbook.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for gypsum, framing, sealants and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Shop Drawings:
 - .1 Shop drawings for partitions with seismic bracing must have a seal and signature of a competent engineer recognized or capable of practicing in the Province of Quebec, Canada, and is a member of the OIQ.
- .4 Samples:
 - .1 Submit for review and acceptance of each unit.
 - .2 Samples will be returned for inclusion into work.
 - .3 Submit one (1) 300 x 300 mm size sample of gypsum board and 300 mm long samples of corner and casing beads and insulating strip.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials off ground, indoors, in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store materials inside, level, under cover. Protect from weather, damage from construction operations and other causes, in accordance with manufacturer's printed instructions.
 - .3 Handle materials to prevent damage to edges or surfaces. Protect metal accessories and trim from being bent or damaged.
 - .4 Store and protect partition materials from nicks, scratches, and blemishes.
 - .5 Replace defective or damaged materials with new.
- .4 Waste Management and Disposal:
 - .1 Waste Management and Disposal:
 - .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 19 - Waste Management and Disposal.
 - .2 Package Waste Management: recover packaging waste for reuse and manufacturer reuse of packaging materials such as pallets, crates, boards and other packaging material, in accordance with Section 01 74 19 – WASTE MANAGEMENT AND DISPOSAL.

1.5 INSTALLATION REFERENCES

- .1 Unless otherwise indicated, and more restrictive in documents, execute work in accordance with recommended content in « The Gypsum Construction Handbook CGC », current edition.
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1.6 WARRANTY

- .1 Provide a written warranty on behalf of Owner, certifying that the specified work of this Section will be free of any material and execution defects, for a period of one (1) year from the date of Final Acceptance of Work.

PART 2 - PRODUCTS**2.1 PERFORMANCE DESIGN CRITERIA**

- .1 Partitions : non-combustible construction.

2.2 NON-STRUCTURAL METAL FRAMING

- .1 Non-load bearing channel stud framing: to ASTM C 645, 41, 64, 92 and 152 mm stud size, roll formed from 20 mm thickness hot dipped galvanized steel sheet, for screw attachment of gypsum board. Knock-out service holes at 460 mm centres.
- .2 Floor and ceiling tracks: to ASTM C 645, in widths to suit stud sizes, 32 mm flange height.
- .3 Metal channel stiffener: 19 x 1.4 mm thick cold rolled steel, coated with rust inhibitive coating.
- .4 Uncoupling track: to ASTM A1003 and ASTM A653, in sheets the same thickness as metal framing, suitable width and same size as framing, with a 64 mm high footing for non-structural metal framing.
- .5 Posts must be designed to screw drywall panels, and have openings for conduits, half-perforated and arranged at a maximum of 610 mm on-centre or otherwise indicated in drawings.
- .6 Other profiles including secondary galvanized steel framing « Z » shaped, or other metallic furring shapes, mouldings, concealed fasteners, pieces and all other accessories required to complete work.
- .7 Insulating strip: rubberized, moisture resistant 3 mm thick strip, and same width as tracks, resistant to humidity, with self-sticking adhesive on one face, lengths as required.
- .8 Metal furring channels, suspensions, hanger wires, return pieces and fasteners.
- .9 Steel screw drill : to ASTM C 1002
- .10 Polyethylene: to CAN/CGSB-51.34, type 2.

2.3 GYPSUM BOARD

- .1 Standard board: to ASTM C 1396/C 1396M regular, 13 mm thick and Type X, 16 mm thick, 1200 mm wide x maximum practical length, ends square cut, edges tapered.
 - .2 Joint filler: to ASTM C 475, asbestos-free.
 - .3 Casing beads, corner beads, control joints and edge trim: to ASTM C 1047, PVC and/or Zinc, 0.5 mm base thickness, perforated flanges, one piece length per location.
 - .4 Staggered metallic profile bracing at 2 400 mm o/c maximum, designed to brace partitions attached to suspended seismic type ceiling system. Bracing must be calculated by a structural engineer, member of the OIQ.
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2.4 ACCESSORIES

- .1 Ceiling hatch, upward opening, primed with steel finish, door must be insulated with 25 mm fiberglass, an aluminum frame with threaded rod for fastening and adjustment. The frame must be designed to receive gypsum. Equipped with hinges, handle and spring lever. Dimensions indicated in drawings.

PART 3 - EXECUTION

3.1 EXAMINATION

- .1 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for product installation in accordance with manufacturer's written instructions prior to partition installation.
 - .1 Visually inspect substrate in presence of Departmental Representative.
 - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied [and after receipt of written approval to proceed from Departmental Representative.

3.2 ERECTION OF FRAMING

- .1 Install steel framing members to receive screw-attached gypsum board in accordance with ASTM C 754 except where specified otherwise.
 - .2 All current gypsum board system manufacturer recommendations must be respected, unless otherwise indicated in plans and specifications.
 - .3 Align partition tracks at floor and ceiling and secure at 600 mm on centre maximum.
 - .4 Place studs vertically at 406 mm on centre and maximum of 50 mm from abutting walls, and at each side of openings and corners. Position studs in tracks at floor and ceiling. Cross brace steel studs as required to provide rigid installation to manufacturer's instructions.
 - .5 Erect metal studding to tolerance of 1:1000.
 - .6 Co-ordinate simultaneous erection of studs with installation of service lines. When erecting studs ensure web openings are aligned.
 - .7 Include two studs extending from floor to ceiling at each side of openings wider than stud centres specified. Secure studs together, 50 mm apart using column clips or other approved means of fastening placed alongside frame anchor clips.
 - .8 Install heavy gauge single jamb studs at openings.
 - .9 Erect track at head of door/window openings and sills of sidelight/window openings to accommodate intermediate studs. Secure track to studs at each end, in accordance with manufacturer's instructions. Install intermediate studs above and below openings in same manner and spacing as wall studs.
 - .10 Include 40 mm stud or furring channel secured between studs for attachment of fixtures behind lavatory basins, toilet and bathroom accessories, and other fixtures including grab bars and towel rails, attached to steel stud partitions.
 - .11 Install steel studs or furring channel between studs for attaching electrical and other boxes.
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- .12 Extend partitions to ceiling height except where indicated.
- .13 Maintain clearance under beams and structural slabs to avoid transmission of structural loads to studs. Use double track slip joint.
- .14 Install continuous insulating strips to isolate studs from uninsulated surfaces.
- .15 Install insulating strip under studs and tracks around perimeter of sound control partitions.

3.3 ERECTION OF GYPSUM BOARD AND ACCESSORIES

- .1 Do application and finishing of gypsum board in accordance with ASTM C 840 except where specified otherwise.
- .2 Erect hangers and runner channels for suspended gypsum board ceilings in accordance with ASTM C 840 except where specified otherwise.
- .3 Support light fixtures by providing additional ceiling suspension hangers within 150 mm of each corner and at maximum 600 mm around perimeter of fixture.
- .4 Frame with furring channels, perimeter of openings for access panels, light fixtures, diffusers, and grilles.
- .5 Install 19 x 64 mm furring channels parallel to, and at exact locations of steel stud partition header track.
- .6 Furr for gypsum board faced vertical bulkheads within and at termination of ceilings.
- .7 Furr above suspended ceilings for gypsum board fire and sound stops and to form plenum areas as indicated.
- .8 Install wall furring for gypsum board wall finishes in accordance with ASTM C 840, except where specified otherwise.
- .9 Install gypsum boards in direction that will minimize number of end-butt joints. Stagger end joints 250 mm minimum.
- .10 Screw only one (1) gypsum board thickness on framing components or on furring channels. Screws to be at 300 mm on-centre.
- .11 Do not install damaged or humid gypsum board panels.

3.4 TAPE AND JOINT FILLER

- .1 Strictly respect manufacturer's recommendations.
 - .2 Use only paper joint tape and setting-type joint compound for taped layer from the same manufacturer as gypsum boards and in accordance with manufacturer's requirements. Use standard joint compound all-purpose ready to use for the second and third layers (do not use a light compound).
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3.5 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 using contact adhesive for full length.
- .2 Install insulating strips continuously at edges of gypsum board and casing beads abutting metal window and exterior door frames, to provide thermal break.
- .3 Install access doors to electrical and mechanical fixtures specified in respective sections.
 - .1 Rigidly secure frames to furring or framing systems.
- .4 Finish face panel joints and internal angles with joint system consisting of joint compound, joint tape and taping compound installed according to manufacturer's directions and feathered out onto panel faces.
- .5 Finish corner beads, control joints and trim as required with two coats of joint compound and one coat of taping compound, feathered out onto panel faces.
- .6 Fill screw head depressions with joint and taping compounds to bring flush with adjacent surface of gypsum board so as to be invisible after surface finish is completed.
- .7 Completed installation to be smooth, level or plumb, free from waves and other defects and ready for surface finish.

3.6 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 00 - Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 00 - Cleaning.

3.7 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by partition installation.

END OF SECTION
