

**Part 1 General**

**1.1 RELATED SECTIONS**

- .1 Section 01 74 19 – Construction Waste Management And Disposal
- .2 Section 08 31 16 – Access Panels
- .3 Section 09 22 00 – Supports for Gypsum Board

**1.2 REFERENCES**

- .1 American Society for Testing and Materials International (ASTM):
  - .1 ASTM C475/C475M-02(2007) – Specification for Joint Compound and Joint Tape for Finishing Gypsum Board
  - .2 ASTM C840-08 – Specification for Application and Finishing of Gypsum Board
  - .3 ASTM C1047-10a – Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer
  - .4 ASTM C1396/C1396M-09a – Standard Specification for Gypsum Board
  - .5 ASTM C1629/C1629M-06 – Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels
- .2 Canadian General Standards Board (CGSB):
  - .1 CAN/CGSB-71.25-M88 – Adhesive, for Bonding Drywall to Wood Framing and Metal Studs
- .3 Wall and Ceiling Contractors of British Columbia:
  - .1 Wall and Ceiling Specification Standards Manual, hereinafter (in this Section) is referred to as the Standards Manual.

**1.3 QUALITY ASSURANCE**

- .1 For gypsum board work, use the Standards Manual, together with authorized additions and amendments, as a reference standard.
- .2 In event of conflict, between requirements specified in this Section and requirements specified in Standards Manual, the most stringent requirements apply.

**1.4 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver materials in original packages, containers or bundles bearing manufacturers brand name and identification.
- .2 Store materials inside, level, under cover. Keep dry. Protect from weather, other elements and damage from construction operations and other causes.

- .3 Handle gypsum boards to prevent damage to edges, ends or surfaces. Protect metal accessories and trim from being bent or damaged.

## **1.5 SITE ENVIRONMENTAL REQUIREMENTS**

- .1 Maintain temperature minimum 10 degrees C, maximum 21 degrees C for 48 hours prior to and during application of gypsum boards and joint treatment, and for at least 48 hours after completion of joint treatment.
- .2 Apply board and joint treatment to dry, frost free surfaces.
- .3 Ventilate building spaces as required to remove excess moisture that would prevent drying of joint treatment material immediately after its application.

## **1.6 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate and recycle waste materials in accordance with Section 01 74 19.
- .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
- .3 Collect and separate for disposal paper, plastic, corrugated cardboard, and other packaging material in appropriate on-site bins for recycling in accordance with Waste Management Plan.
- .4 Divert unused gypsum, metal materials and wood materials from landfill to appropriate recycling facility.
- .5 Do not dispose of unused caulking materials into sewer systems, into lakes, streams, onto ground or in other locations where it will pose health or environmental hazard.

## **Part 2 Products**

### **2.1 MATERIALS**

- .1 Abuse resistant gypsum board: to ASTM C1629/C1629M; acceptable products:
  - .1 Sheet Abuse-Resistant Gypsum Panels manufactured by CGC.
  - .2 ProRoc manufactured by CertainTeed.
  - .3 Touch Rock manufactured by Georgia-Pacific.
- .2 Joint tape: to ASTM C475/C475M; type recommended for gypsum board finishing.
- .3 Joint compounds: to ASTM C475/C475M; bedding and finishing types recommended for gypsum board finishing.
- .4 Corner beads, casing beads and accessories: to ASTM C1047; galvanized steel type with Z180 coating as recommended for gypsum board application and to suit applications; casing beads to be type which provides filler finish.
- .5 Fasteners: standard drywall screws; rust resistant; of size to suit application and to rigidly secure gypsum board related accessories in place.

- .6 Anchors: steel sleeve type when securing to concrete substrates; toggle type when securing to masonry.
- .7 Adhesive: commercially available proprietary product to CAN/CGSB-71.25-M, to suit application.
- .8 Security mesh: flattened expanded mesh; minimum 10 gauge plain steel construction; 19 mm size with 23.4 mm SWD and 52.8 mm LWD; 1.8 mm x 2.6 mm strand.

## **Part 3 Execution**

### **3.1 BOARD INSTALLATION**

- .1 Install board in accordance with applicable ASTM Standards and as recommended by Standards Manual. Conform to most stringent requirements of these reference documents. In ULC referenced assemblies, install board to comply with the referenced assemblies.
- .2 Install all boards so as to form surfaces that are plumb, level and straight in all directions, with a maximum allowable tolerance of 1:1200.
- .3 All gypsum board surfaces are to be flush where they occur in the same plain, unless otherwise noted or detailed.
- .4 Do not apply gypsum board until bucks, anchors, blocking, sound attenuation, electrical and mechanical work are accepted.
- .5 Apply single and double layer gypsum board to metal furring or framing using screw fasteners. Maximum spacing of screws 300 mm on centre.
  - .1 Single-Layer Application:
    - .1 Apply gypsum board on walls prior to application of ceilings.
    - .2 Apply gypsum board vertically or horizontally, providing sheet lengths that will minimize end joints.
  - .2 Double-Layer Application:
    - .1 Install gypsum board for base layer and exposed gypsum board for face layer.
    - .2 Offset joints between layers at least 400 mm.
- .6 Apply single layer gypsum board to concrete block surfaces using laminating adhesive.
  - .1 Comply with gypsum board manufacturer's recommendations.
  - .2 Brace or fasten gypsum board until fastening adhesive has set.
  - .3 Mechanically fasten gypsum board at top and bottom of each sheet.
- .7 Locate edge or end joints over supports. Stagger vertical joints over different studs on opposite sides of wall.

- .8 Cut and fit boards around electrical boxes and recessed equipment to tolerances required to cover junctions with standard cover plates. Verify depth of recessed electrical boxes to allow flush cover plate installation, with maximum 3 mm depression of box from gypsum board surfaces.

### **3.2 SECURITY MESH INSTALLATION**

- .1 Between layers of gypsum board, install security mesh.
  - .1 Provide full coverage over wall areas, from floor to ceiling and wall corner to wall corner.
  - .2 Provide full coverage over ceiling areas, from wall to wall.
- .2 Install security mesh taut across face of first layer of gypsum board.
- .3 Make cutouts for mechanical and electrical services and devices penetrating walls and ceilings.

### **3.3 ACCESSORIES INSTALLATION**

- .1 Place 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 Place corner beads at all external corners.
- .3 Place casing beads where gypsum board butts a dissimilar material or finish.
- .4 Install access doors to electrical and mechanical fixtures specified in respective sections. Rigidly secure frames to furring or framing systems.

### **3.4 FINISHING**

- .1 Finish gypsum board in accordance with applicable ASTM Standards and as recommended by Standards Manual. Conform to most stringent requirements of these reference documents.
- .2 As a minimum, finish gypsum board to the following levels of finishing, per Standards Manual:
  - .1 Surfaces that are permanently concealed by suspended ceilings: level 1.
  - .2 All other surfaces: Level 4.
- .3 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.
- .4 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.
- .5 Sand lightly to remove burred edges and other imperfections. Avoid sanding adjacent surface of board.

- .6 Completed installation to be smooth, level or plumb, free from waves and other defects and ready for surface finish.
- .7 Remove ridges by light sanding or wiping with damp cloth.
- .8 Provide protection that ensures gypsum drywall work will remain without damage or deterioration at time of substantial completion.

**END OF SECTION**