

## **Part 1 General**

### **1.1 RELATED SECTIONS**

- .1 Section 08 11 00 – Metal Doors and Frames.
- .2 Section 09 22 16 – Non-Structural Metal Framing.
- .3 Section 09 31 00 – Thin-Set Ceramic Tiling.
- .4 Section 09 65 00 – Resilient Flooring.

### **1.2 REFERENCES**

- .1 American Society for Testing and Materials (ASTM).
  - .1 ASTM A123/A123M-09, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
  - .2 ASTM C840-08, Standard Specification for Application and Finishing of Gypsum Board.
  - .3 ASTM C954-10, 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 0.112 in. (2.84 mm) in Thickness.
  - .4 ASTM C1186-08, Standard Specification for Flat Non-Asbestos Fiber-Cement Sheets.
  - .5 ASTM C1280-09, Standard Specification for Application of Gypsum Sheathing Board.
  - .6 ASTM C1396/C1396M-09a, Standard Specification for Gypsum Board.
  - .7 ASTM D3273-00(2005), Standard Test Method for Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
- .2 Gypsum Association (GA).
  - .1 GA 216-07, Application and Finishing of Gypsum Panel Products.
  - .2 GA 253-07, Application of Gypsum Sheathing.
- .3 Underwriters Laboratories of Canada (ULC).
  - .1 CAN/ULC S101-07, Standard Methods of Fire Endurance Tests of Building Construction and Materials.
  - .2 CAN/ULC S102-10, Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.

### **1.3 DELIVERY, STORAGE, AND HANDLING**

- .1 Deliver all materials to site in the manufacturer's original packaging and standard commercial containers. Packaging to contain manufacturer's name, product name and identification number and other related information.

- .2 Provide and maintain dry, off-ground weatherproof storage protected from exposure to extreme temperatures, moisture conditions, construction activity, and direct sunlight in strict accordance with manufacturer's recommendations.
- .3 Handle gypsum boards to prevent damage to edges, ends or surfaces. Protect metal accessories and trim from being bent or damaged.
- .4 Cleaning and Waste Management in accordance with Section 01 74 00.

## **Part 2 Products**

### **2.1 MANUFACTURERS**

- .1 Acceptable Products.
  - .1 Fire-rated Water/Mould-Resistant Gypsum Board.
    - .1 CGC Fiberock® Aqua-Tough™ Tile Backerboard.
    - .2 Georgia-Pacific DensGuard® Tile Backer.
  - .2 Cement Board Sheathing (roof curbs).
    - .1 CGC Durock® Cement Board.
    - .2 Custom Building Products Wonderboard Concrete Backboard.
    - .3 Unifix Unipan Lightweight Concrete Backerboard.

### **2.2 MATERIALS**

- .1 Fire-rated Water/Mould-resistant Gypsum Board: to ASTM C1396/C1396M and ASTM D3273, 16 mm thick unless otherwise indicated, 1220 mm wide x maximum practical length, ends square factory cut, edges tapered, water resistant through core, paintable surface.
- .2 Cement Board Sheathing (roof curbs): to ASTM C1186, Portland cement board with fully embedded alkali resistant glass-fibre mesh facing, indicated thickness, 1220 mm wide x maximum practical length, ends square factory cut.

### **2.3 ACCESSORIES**

- .1 Fasteners for Gypsum Board Sheathing: self drilling screws to ASTM C954.
- .2 Fasteners for Cement Board Sheathing: 32 mm No. 8 x 9.5 mm HD self-drilling corrosion resistant (stainless steel or galvanized to ASTM A123/A123M) wafer head screws in accordance with ASTM C1186, unless otherwise recommended by cement board manufacturer.
- .3 Access Doors (to mechanical and electrical systems): in accordance with Mechanical and Electrical Divisions.

### **Part 3 Execution**

#### **3.1 INSTALLATION**

- .1 Fire-rated Water/Mould-resistant Gypsum Board.
  - .1 Apply gypsum board in accordance with ASTM C840, ASTM C1280, GA 216, and GA 253.
  - .2 Do not apply gypsum board until bucks, anchors, blocking, electrical and mechanical work is complete and reviewed.
  - .3 Apply gypsum board to metal framing using screw fasteners. Spacing and length of fasteners in accordance with manufacturer's written instructions.
  - .4 At locations to receive ceramic tile in accordance with Sections 09 31 13, use wet mastic or modified thin-set mortar instead of joint compound.
  
- .2 Cement Board Sheathing (roof curbs).
  - .1 Install cement board sheathing to wood framing using screw fasteners in accordance with ASTM C1186.
  - .2 Space fasteners 150 mm o.c. at perimeter and 150 mm o.c. along intermediate framing.
  - .3 Locate fasteners not less than 10 mm from edges and ends of sheathing panels.
  - .4 Length of fasteners in accordance with ASTM C1186.
  - .5 Fasteners must be driven so as to bear tight against and flush with surface of sheathing. Fasteners must NOT be countersunk.

END OF SECTION