### **DIVISION 9**

## SECTION 9B GYPSUM DRYWALL AND TILE BACKER BOARD

9B.01 GENERAL: Comply with all of the Contract Documents.

9B.02 SCOPE OF WORK: Refer to "Division Scope of Work"

### 9B.03 WORK NOT INCLUDED

- A. The following items are excluded from the work of this Section:
  - 1. Stud Framing Section 6A.
  - 2. Thermal and Acoustic Insulation Section 7A.
  - 3. Furnishing Access Doors Section 15A, 15B.

#### 9B.04 MATERIALS

- A. Gypsum Board: comply with Federal Specifications SS-L-30D in 48" width and in such lengths as will result in a minimum of joints. Gypsum board shall be 5/8" thick, type III, grade X, class 1. Rating shall be printed on face of board by the manufacturer. All gypsum board to have tapered edges. Manufacturers shall be members of the Gypsum Association.
- B. Tile Backer Board: Aggregate Portland cement board with vinyl coated, woven glass fiber mesh in back and front surfaces. Size shall be 5/8" thick, 36" wide and in such lengths as will result in a minimum of joints. Edges square cut and finished smooth. Tile backer board shall be "Durok" as manufactured by Durabond Division of United States Gypsum Industries Inc. or approved equal as determined by Architect/Engineer.
- C. Core Board (for fireproofing of duct shafts and branches): Special fire-resistant core board with multi-layered green paper facing, treated to resist moisture penetration. Each panel shall be 1" thick. Core board (liner panel) shall be as manufactured by U.S. Gypsum or approved equal as determined by Architect/Engineer.
- D. Joint System: (Gypsum Board)
  - 1. Reinforcing Tape: Provide a strong cross fibered paper tape with minimal longitudinal stretch, spark perforated. Tape shall meet ASTM C475 and Federal Specifications SS-J-570a-Type 11.
  - 2. Joint Compound: Provide a ready mixed vinyl based compound containing no asbestos. Compound shall meet ASTM C475 and Federal Specifications SS-J-570a-Type 1.

- E. Joint System: (Tile Backer Board)
  - 1. Reinforcing Joint Tape: Provide 2" wide "Imperial" Glass fiber, Open weave Tape, Type P.
  - 2. Joint tape shall be embedded with Organic Adhesive Type 1, "Durabond" D-2001 meeting ANSI A136 Type 1 requirements.
- F. Fasteners: (Gypsum Board)
  - 1. For fastening gypsum wallboard in place on metal studs and metal channels, use flat head screws, shouldered, specially designed for use with power driven tools, not less than 1" long, with self-tapping threads and self- drilling points.
  - 2. For fastening gypsum wallboard in place on wood, use 1 1/4" type W bugle head screws, or use annular ring type nails complying with ASTM C514 and of the length required by governmental agencies having jurisdiction.
- G. Fasteners: (Tile Backer Board)
  - 1. For fastening tile backer board in place on metal studs and metal channels, use 1 1/4" Type S or S-12 screws spaced 8" o.c.
  - 2. For fastening tile backer board in place on wood studs use 1 1/2" galvanized roofing nails spaced 8" o.c.
- H. Metal Trim: (Gypsum Board)
  - 1. Form from zinc coated steel not lighter than 26 gauge, complying with Federal Specifications QQ-S-775, Type 1, class D or E.
  - 2. Casing Beads;
    - a. Provide channel shapes with an exposed wing, and with a concealed wing not less than 7/8" wide.
    - b. The exposed wing may be covered with paper cemented to the metal, but shall be suitable for joint treatment.
  - 3. Corner Beads: Provide angle shapes with wings not less than 7/8" wide and perforated for nailing and joint treatment, or with combination metal and paper wings bonded together, not less than 1 1/4" wide and suitable for joint treatment.
  - 4. Edge Beads for use at perimeter of Ceilings;

- a. Provide angle shapes with wings not less than 3/4" wide.
- b. Provide concealed wing perforated for nailing, and exposed wing edge folded flat.
- c. Exposed wing may be factory finished in white color.

# I. Metal Furring Channel:

- 1. Metal furring channel shall be galvanized steel, face width 1 3/8", depth 7/8" length as required.
- J. Metal studs where required shall be 25 gauge galvanized steel and sized as per drawings or as required by the manufacturer.
- K. Shaft Wall: (Chimney Shaft 2 hour rating)
  - 1. 1" sheetrock brand gypsum liner panels set between 4" steel C-H studs 24" o.c. One side 3/4" sheetrock brand gypsum panels Ultracode Core, other side 3" Thermafiber SAFB. Panels vertically applied and screwed attached 8" o.c. perimeter, and 12" o.c. in field. Joints staggered and finished. Perimeter caulked. UL Design U492.

#### 9B.05 INSTALLATION

#### A. Gypsum Wallboard:

- 1. Install all gypsum wallboard in accordance with manufacturer's recommendations.
- 2. All drywall shall be erected plumb, level, square, straight and true. All joints on exposed surfaces shall be flush and tight, neatly cut, and fit around openings for the work of other trades so as to leave no open joints or gaps. Screw and nails shall be spaced 6" on edges and 12" in field. Dry wall shall be installed horizontally with joints staggered.
- 3. Drywall laminating construction where indicated on the drawings shall be installed as item 2. Contractor is responsible to inspect the existing wall condition to receive laminating drywall finish properly.

### B. Joint Treatment: (Gypsum Board)

1. A uniform thin layer of joint compound shall be applied over the joint to be reinforced, approximately 3" to 4" wide. The tape shall be centered over the joint and embedded into the compound leaving sufficient compound under the tape

to provide proper bond. Inside corners and wall angles shall be reinforced with the tape folded to conform to the angle and embedded into the compound. A skim coat of compound shall be applied immediately after embedding tape. Excessive compound shall be cleaned from the surface of the wallboard. After compound has been allowed to dry thoroughly, the tape shall be covered with joint compound spread evenly over the tape and sufficiently beyond each side of the tape to permit a smooth feathered edge. After the previous coat is thoroughly dry, another coat of joint compound shall be applied with a slight smooth uniform crown over the joint. The edge of this coat shall be feathered beyond the preceding coat. Compound shall be sanded smooth.

- 2. All depressions at screw heads shall receive three coats of joint compound, neatly feathered and sanded smooth.
- 3. All external corners shall have 1 1/8" x 1 1/8" corner beads. All internal and external angles formed by the intersection of either wallboard surfaces or other surfaces shall be treated with metal trim and/or joint tape and joint treatment compound.

#### C. Tile Backer Board:

- 1. After tub, shower pan or receptor is installed, place temporary 1/4" spacer strips around lip of fixture. Precut board to required sizes and make necessary cut outs. Fit ends and edges closely but not forced together.
- 2. Install board abutting top of spacer strip. Fasten boards to wood studs spaced maximum 16" o.c. with 1 1/2" galvanized roofing nails spaced 8" o.c. Fasten boards to steel studs spaced maximum 16" o.c. with 1 1/4" Type S or S-12 screws spaced 8" o.c.

## D. Joint Treatment: (Tile Backer Board)

1. Apply 2" glass fiber tape over joints and corners and embed with mortar or adhesive used to set tile as per manufacturers recommendations.

### E. Fireproofing:

- Install all core board in accordance with manufacturer's recommendations.

#### 1. Vertical duct shaft;

- All core boards shall be erected plumb, level, square, straight and true. All joints on exposed surfaces shall be flush and tight, neatly cut, and fit around duct or branch for the work of other trades so as to leave no open joints or gaps. Screw and nails shall be spaced 6" on edges and 12" in field.

- One layers of core board and two layers of 5/8" fire rated gypsum board shall be installed over  $\frac{1}{2}$ " metal channel framing, where 2 hours fire rating is required.

## 2. Horizontal duct branch;

- Where branch ducts extend through fire rated partitions, two layers of core boards are required to extended the full length to the register and/or fire dampers. The core boards to enclose the horizontal duct shall be installed as item 1.
- The installation shall be complied with the fire damper requirements of the building code of the city of New York, and the fire damper section of Specification 15A.09 AD.

#### F. Miscellaneous:

- 1. All work under this section shall be properly coordinated with the work of other sections. No partitions or ceilings shall be covered until all necessary and required tests and inspections have been made and approvals given for electrical, plumbing and/or mechanical work.
- 2. Partitions between apartments and public hall and apartments, the gypsum board of walls shall be extended to underside of sub-flooring for fire-stopping as required by Code.
- 3. Caulking shall be applied in two (2) continuous 3/8" diameter beads as recommended by the manufacturer to achieve acoustic ratings where required to seal inter- sections with adjoining structure and other partitions.
- 4. In cold weather and during installation of gypsum board and tile backer board, temperatures within the building shall be maintained within the range of 55° to 70°F. Adequate ventilation shall be provided to carry off excess moisture.
- 5. The Contractor for this Section shall inspect all grounds, all concrete, masonry, or other surfaces to receive drywall finish before beginning his work and shall report to the Architect/Engineer any defects in such work which might, in his opinion, affect the satisfactory execution and stability of the work. Starting of work means acceptance of conditions.
- 6. All scaffolding necessary for the proper execution of the work of this Section shall be provided for under this Section. Scaffolding shall be constructed and maintained in strict conformity with the local laws and regulations governing the same. Scaffolding shall be so erected as to interfere as little as possible with the work of other Sections.

- 7. Drywall finish with defects of such character as will mar the appearance of finished work, or which is otherwise defective, will be rejected and shall be removed and replaced at no expense to the Owner. All partitions shall be plumb and straight.
- 8. Dry wall shall be installed at partitions, walls, and ceilings in accordance with the manufacturer's instructions by skilled workmen. All joints shall be taped, spackled and sanded, nail holes or there indentations shall be filled and sanded flush and smooth, in conformance with manufacturer's requirements.
- 9. All work under this Section shall be properly coordinated with the work of other Sections. No partitions or ceilings shall be covered until all necessary and required tests and inspections have been made and approvals given for electrical, plumbing and/or mechanical work.

#### 9B.06 GUARANTEES

A. Guarantee all items of work furnished and installed under this Section for (1) one year, in addition to manufacturer's standard warranties. All guarantees to be from the date, when **Final Certificate of Occupancy** is issued from Department of Buildings.

**END OF SECTION**