

SECTION 271110 - WALL LININGS FOR COMMUNICATION ROOMS

PART 1 - GENERAL

1.1 DEFINITIONS

- A. Communications Backboard: Finished plywood surface (wall lining) installed over a finished wall and used for the purpose of wall attachment/mounting of a wide-variety of communications and electronic security products.

1.2 SYSTEM DESCRIPTION

- A. Wall lining shall be installed around the entire perimeter of each communication room, except where otherwise detailed on the Drawings.
 - 1. Wall lining materials shall be installed behind wall-mounted Communications, Audio Visual and Security products, except as otherwise approved in advance by the Designer.
 - 2. Wall linings shall provide a solid reusable and fire-retardant surface for mounting of active and passive electronic products.
 - 3. Linings shall be attached to and supported by a wall structure in such manner as to be capable of fully supporting the load of products attached to it.
 - 4. Linings shall be applied over the standard painted drywall, brick and/or block wall materials as may be present within the space.
 - 5. Linings shall be installed in addition to and shall not take the place of standard wall-finish materials.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated in the Work include, but are not limited to:
 - 1. Georgia-Pacific.
 - 2. Weyerhaeuser.
 - 3. Sherwin-Williams.
 - 4. PPG Industries, Inc.
 - 5. Benjamin Moore.
 - 6. Hy-Tech Thermal Solutions.
 - 7. Hilti Corporation.
 - 8. Red Head.

2.2 WALL LININGS

- A. Plywood:

1. 3/4" AC-grade plywood.
2. 4-foot wide x 8-foot tall x 3/4-inch thick.

2.3 FINISHES:

A. Paint:

1. Color: White.
2. Self-priming design.
3. 30-Year manufacturer warranty.
4. ASTM E-84/UL 723 Class A-B fire-retardant.

2.4 HARDWARE:

A. Anchoring Hardware:

1. Material: Steel.
2. Finish: Rust preventative permanent outer coating.
3. Lag-type hex-head bolts for attachment to wood framed walls.
4. Lag-type hex-head bolts with expandable metal anchors for attachment to CMU construction.
5. Machine-thread hex-head bolts and expandable machine threaded concrete anchors for attachment to concrete walls.
6. Molly bolt or similar type all-metal machine threaded permanent anchor assembly for anchoring to metal stud framing.
7. Steel washers and lock washers between bolt head and wall lining.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Wall Linings:

1. Install plywood directly over and against the finished wall surfaces, without use of standoffs, and without leaving a gap between the plywood and wall.
2. Line the entire interior surface of each communication room, starting each wall with a full-size sheet at the left edge of each wall and progressing to the right, unless otherwise detailed on the drawings.
3. Utilize full standard-size sheets. Where the sheets need to be cut down to fit within the available mounting space, cut a single sheet down to fit the opening. Do not use multiple partial-size sheets where a full-size sheet, or where a single sheet cut down from a full-size sheet shall suffice.
4. Mount sheet with the highest grade side (e.g., A-side) outward facing into the space.
5. Attach sheets securely to the walls using horizontally arrayed columns of (at least) three bolts (top, middle, and bottom). Spacing of bolt columns shall be such as to secure the backboard directly to wall studs or other structural wall members.

Each full-size sheet shall be supported by not less than two (2) columns of bolts. Horizontal spacing between bolts used for a single sheet shall not exceed 24 inches. The minimum number of bolts per sheet shall not be less than one (1) bolt for every 5.33sq/ft of plywood surface area, but not less than four (4) bolts.

6. Set mounting hardware flush and smooth with the finished surface of the plywood.
7. Install plywood plumb and level.
8. Install the bottom of edge of the plywood beginning at 1/2 inch above the baseboard or 6 inches above the finished floor (whichever is lower).
9. Where plywood must mount over devices such as AC switches, outlets, fire-alarm devices and the like, the backboard shall be cut to permit the entire device to be revealed plus an additional margin of 1/4 inch on each side of the device. Openings shall be plumb and level.

B. Painting:

1. Paint the front and rear surfaces of the wall linings using fire-retardant paint.
2. Paint the edges of lining, including edges of the lining that abut other segments of the lining or another surface.
3. Paint the edges of the lining that result from cutouts around obstacles.
4. Paint the hardware used to secure the lining to the wall. Use the same color used to paint the lining.
5. Apply minimum of two coats of fire-retardant paint. Apply additional coats as recommended by the paint manufacturer to achieve specified fire-retardant rating.

END OF SECTION 271110