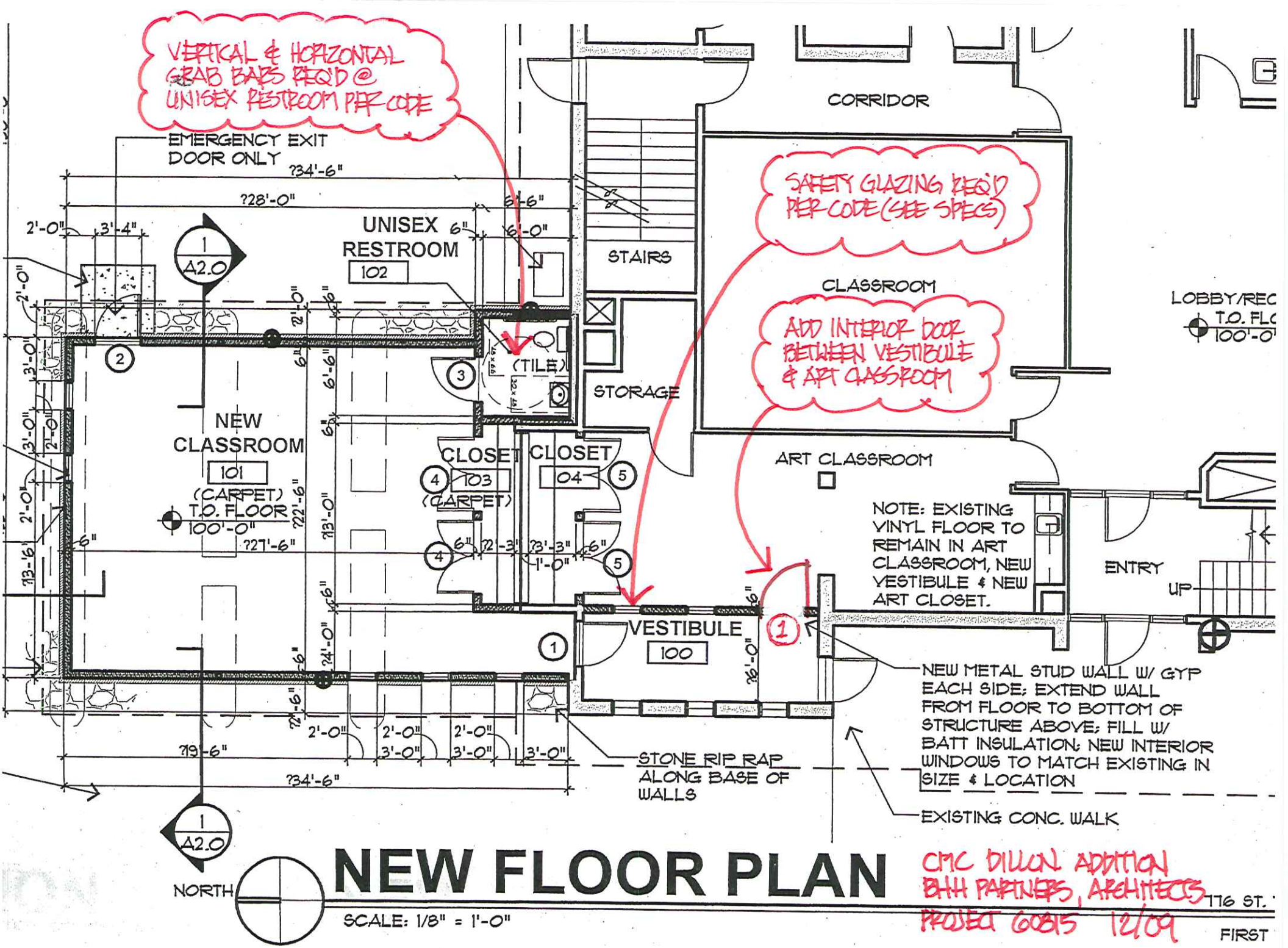
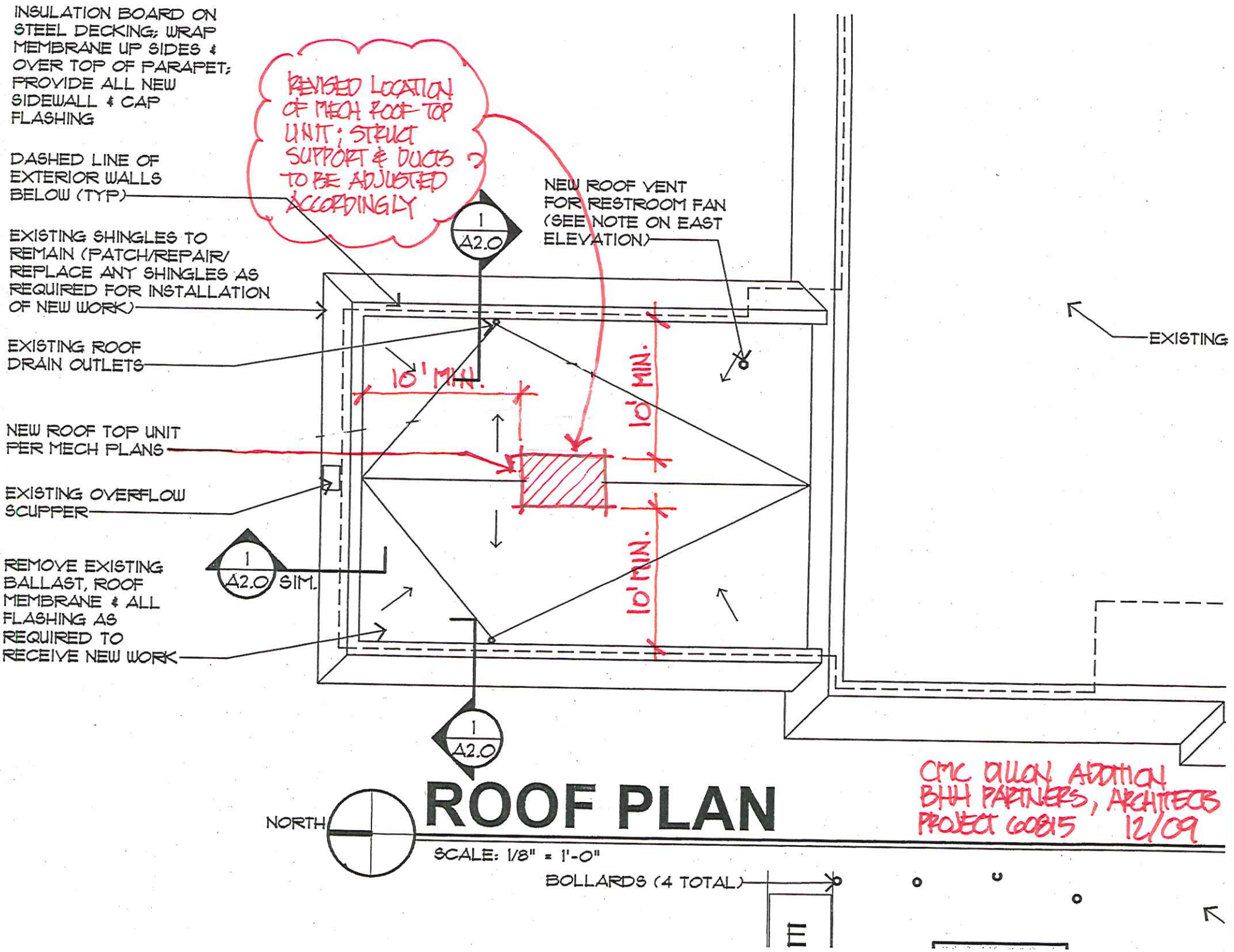
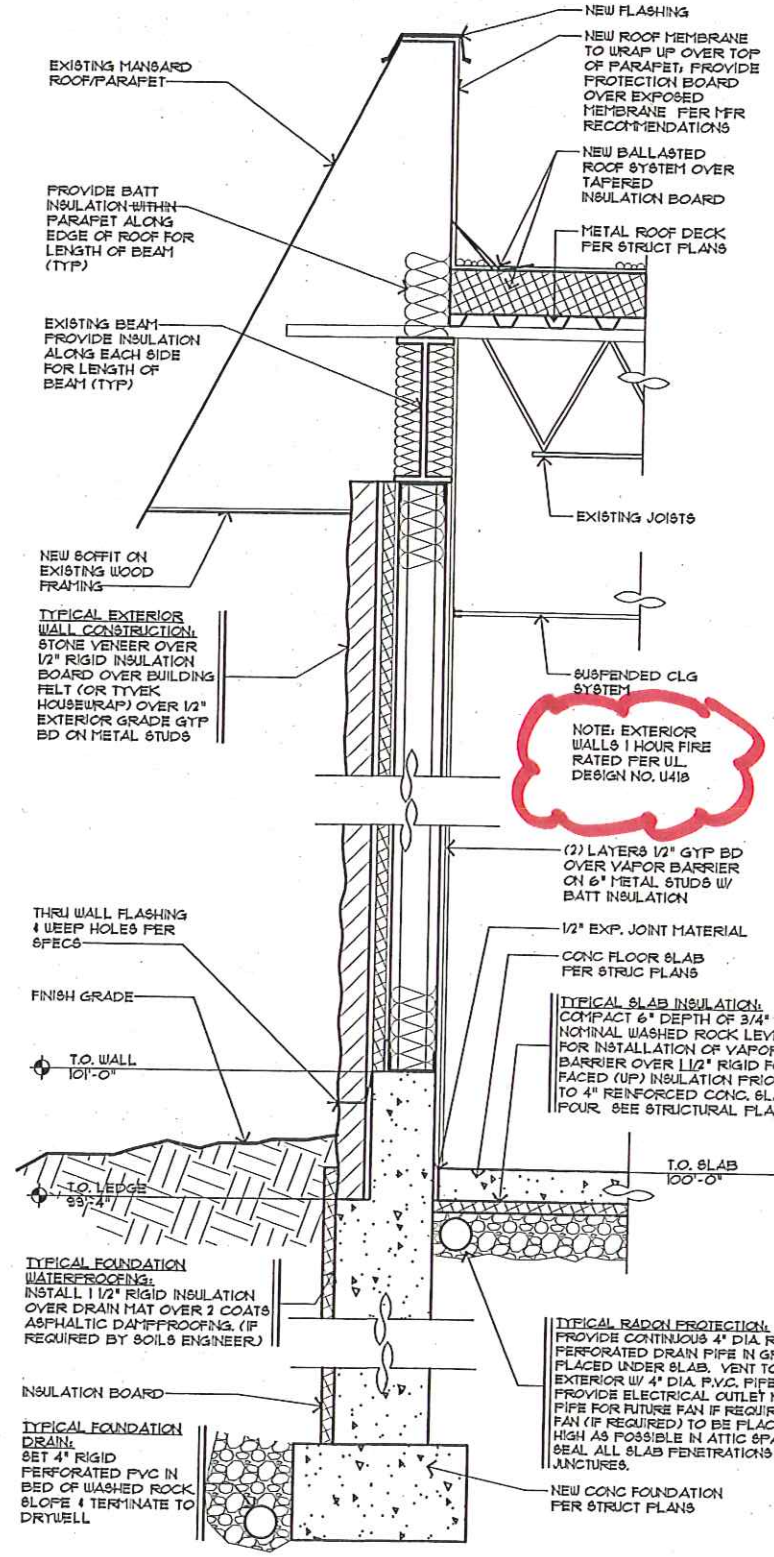


NEW FLOOR PLAN

CMC DILLON ADDITION
BHH PARTNERS, ARCHITECTS
PROJECT 60815 12/09

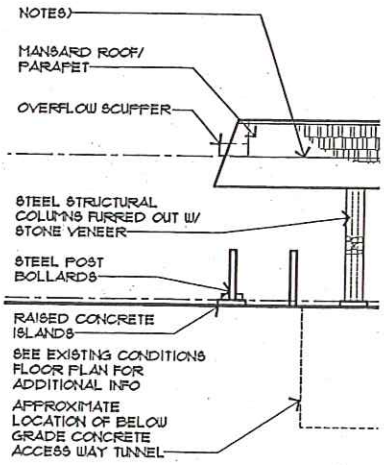

INSULATION BOARD ON STEEL DECKING; WRAP MEMBRANE UP SIDES & OVER TOP OF PARAPET; PROVIDE ALL NEW SIDEWALL & CAP FLASHING
REVISED LOCATION OF MECH ROOF TOP UNIT; STRUCT SUPPORT & DUCTS TO BE ADJUSTED ACCORDINGLY
DASHED LINE OF EXTERIOR WALLS BELOW (TYP)
NEW ROOF VENT FOR RESTROOM FAN (SEE NOTE ON EAST ELEVATION)
1 A2.0
EXISTING SHINGLES TO REMAIN (PATCH/REPAIR/ REPLACE ANY SHINGLES AS REQUIRED FOR INSTALLATION OF NEW WORK)
EXISTING ROOF DRAIN OUTLETS
EXISTING
10' MIN.
10' MIN.
10' MIN.
NEW ROOF TOP UNIT PER MECH PLANS
EXISTING OVERFLOW SCUPPER
1 A2.0 SIM.
REMOVE EXISTING BALLAST, ROOF MEMBRANE & ALL FLASHING AS REQUIRED TO RECEIVE NEW WORK
1 A2.0
NORTH
ROOF PLAN
SCALE: 1/8" = 1'-0"
BOLLARDS (4 TOTAL)
E
CMC DILLON ADDITION
BHH PARTNERS, ARCHITECTS
PROJECT 60815 12/09



WALL SECTION

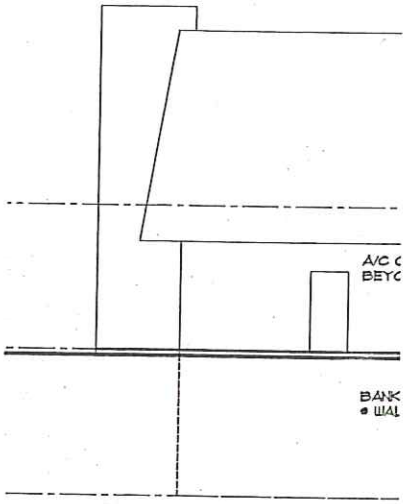
1 / A-2.0

SCALE: 1" = 1'-0"



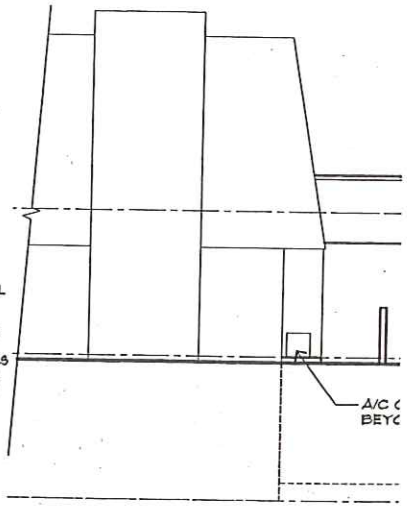
EXISTING CONDI

SCALE: 1/8" = 1'-0"



EXISTING CONDI

SCALE: 1/8" = 1'-0"



EXISTING CONDIT

SCALE: 1/8" = 1'-0"

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BHH PARTNERS, ARCHITECTS
PROJECT 00815 12/09

Fire Resistance Ratings - ANSI/UL 263 (BXUV)–*Continued*

with 1 in. long Type S self-drilling, self-tapping bugle head steel screws spaced 24 in. OC. Face layer installed horizontally to steel studs with 1-5/8 in. long Type S self-drilling, self-tapping bugle head steel screws spaced 24 in. OC, staggered 12 in. from base layer screws. Additionally, Type G screws to be installed at the center of each stud cavity, 1-1/2 in. from both sides of the horizontal joint. For the 1/2 in. thick and 5/8 in. thick boards, the Type G screw length shall be 1-1/4 in. and 1-1/2 in. long, respectively.

JAMES HARDIE GYPSUM INC —1/2 in. thick Type Max"C", 5/8 in. thick Type Max"C" or 5/8 in. thick Type Fire X

Systems B and D

Gypsum panels, nom 1/2 or 5/8 in. thick, 48 in. wide, applied vertically to steel studs with 1 in. long Type S self-drilling, self-tapping bugle head steel screws spaced 12 in. OC. Vertical joints on opposite sides of wall staggered a min of 24 in.

JAMES HARDIE GYPSUM INC —1/2 in. thick Type Max"C", 5/8 in. thick Type Max"C" or 5/8 in. thick Type Fire X

Systems E and F

Gypsum panels, nom 5/8 in. thick, 48 in. wide, applied vertically with edges centered over studs, with 1 in. long Type S self-drilling, self-tapping bugle head steel screws spaced 12 in. OC.

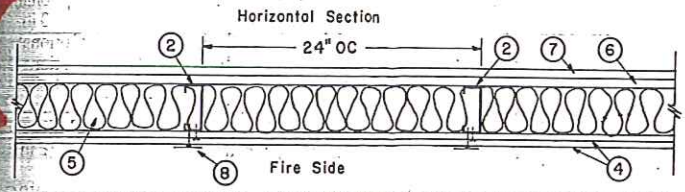
JAMES HARDIE GYPSUM INC —Type Fire X or Max"C"

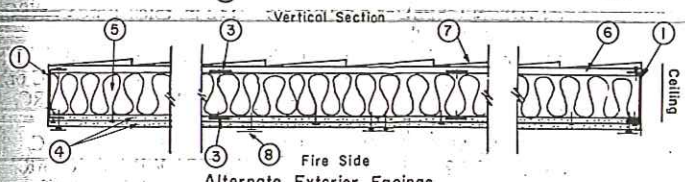
5. **Joint Tape and Compound** —
(Not shown) — Joints covered with joint compound and paper or mesh tape. Screw heads covered with joint compound.

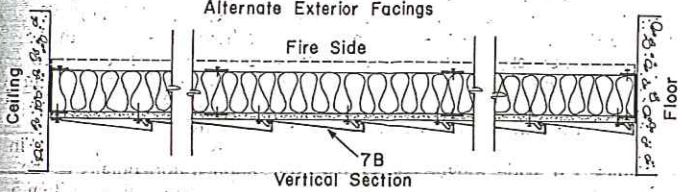
*Bearing the UL Classification Marking

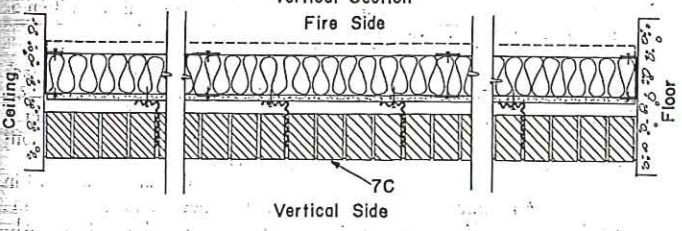
Design No. U418

(Exposed to Fire on Interior Face Only)
Bearing Wall Rating — 45 Min., 1 or 2 HR.
(See Item 4)

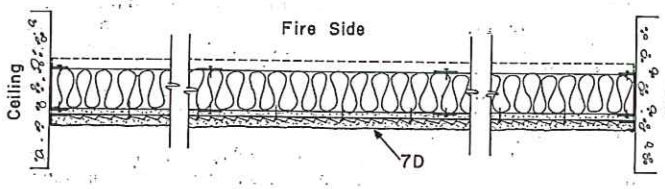


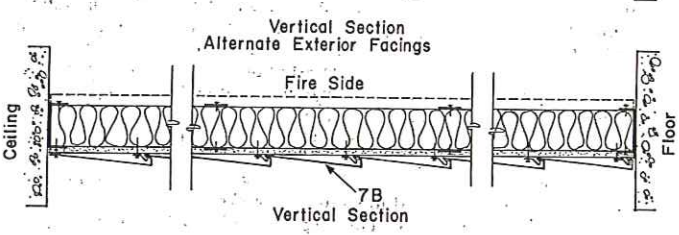






Fire Resistance Ratings - ANSI/UL 263 (BXUV)–*Continued*





1. **Floor and ceiling tracks** — Channel shaped, 3-5/8 in. or 5-5/8 in. wide with 1-1/2 in. flanges. Fabricated from No. 18 GSG galv steel. Attached to floor and ceiling with fasteners spaced 24 in. O.C.
2. **Steel Studs** — C-shaped, fabricated from min No. 18 GSG (0.051 in. thick) galv steel, 3-1/2 in. or 5-1/2 in. wide with 1-1/2 in. flanges and 1/2 in. returns (stiffening flanges.) Min yield strength 40,000 psi. See Ill. 12 of Report R7760-1, -2 dated Dec. 11, 1975 or Ill. 15 of Report R7760-3, -4 dated Aug. 23, 1976 for tables containing max allowable axial loads. Report Ills. available from U. S. Steel Corp., Rm. 1846, 600 Grant St., Pittsburgh, PA 15230.
3. **Steel Strapping** — Flat stock, 2 in. wide, fabricated from No. 18 GSG galv steel. Located horizontally and attached to both sides of the studs at the third points using one No. 6-20 by 1/2 in. self-drilling steel screw at each intersection.
4. **Wallboard Gypsum*** — Any classified gypsum wallboard with beveled, square, or tapered edges. The thickness, number of layers and method of attachment of the wallboard for the 2 Hr, 1 Hr, and 45 Min ratings are:
2 Hr Rating Three layers of 1/2 in. thick wallboard applied vertically. Inner layer attached to the studs and tracks with 1 in. long, 0.142 in. diam, Type S-12 bugle head screws spaced 12 in. O.C. Middle layer

SEE WALL SECTION 1/A-2.0

CMC DILLON ADDITION
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PROJECT 600815 12/09

Fire Resistance Ratings - ANSI/UL 263 (BXUV)–*Continued*

attached to the inner layer of wallboard with 1-1/2 in. long, 0.210 in. diam, Type G bugle head screws spaced 12 in. OC and to the end studs with 1-7/8 in. long, 0.118 in. diam, Type S-12 bugle head screws spaced 12 in. OC. Outer layer attached to studs and tracks with 1-7/8 in. long, 0.118 in. diam, Type S-12 bugle head screws spaced 12 in. OC and into the wallboard with 1-1/2 in. long 0.210 in. diam Type G screws spaced 12 in. OC. Middle layer of wallboard edge joints staggered 2 ft from joints of inner and lower layer.

* **1 Hr Rating** Two layers of 1/2 in. thick wallboard applied horizontally or vertically. Inner layer attached to studs and tracks with 1 in. long, 0.142 in. diam Type S-12 bugle head screws spaced 12 in. OC beginning 6 in. from the edge. Outer layer attached to the studs and tracks with 1-5/8 in. long, 0.142 in. diam, Type S-12 bugle head screws spaced 12 in. OC beginning 1 in. from the edge. In addition, the outer layer to be attached to the inner layer at the joints with 1-1/2 in. long, 0.210 in. diam Type G bugle head screws spaced 24 in. OC located between studs.

45 Min Rating One layer of 5/8 in. thick wallboard applied horizontally or vertically. Attached to studs and tracks with 1 in. long, 0.142 in. diam Type S-12 bugle head screws spaced 12 in. OC beginning 6 in. from edges.

See Wallboard, Gypsum (CKNX) Category for names of manufacturers.

5. **Batts and Blankets*** — 3-1/2 in. thick, 2 ft wide, glass fiber batts. Inserted between each stud to fill the wall cavity.
   CERTAINTEED CORP
   JOHNS MANVILLE INTERNATIONAL INC
   OWENS-CORNING FIBERGLAS CORP
6. **Gypsum Sheathing** — One layer of nominal 1/2 in. thick exterior sheathing, applied vertically and secured to the studs and runner tracks with 1 in. long, 0.142 in. diam, Type S-12 bugle head screws spaced 12 in. OC along the studs and the runner tracks.
7. **Exterior Facings** —

7A. **Aluminum Siding** — Horizontal lap type 9 in. wide fabricated from 0.019 in. thick or 0.024 in. thick painted aluminum. Interior face of 0.019 in. thick siding lined with 3/8 in. thick unbonded insulation material. Attached to the studs with 1-7/8 in. long, 0.118 in. diam steel screws spaced 9 in. OC along the studs. A starter strip to be fastened to floor runner with 0.118 in. diam screws spaced 12 in. OC.

7B. **Steel Siding** — Same description as above (No. 17 GSG) gauge 0.017 in. thick.

7C. **Brick Veneer** — Any type 4 in. wide brick. Metal ties used as every fourth course spaced 24 in. OC horizontally. Fastened to steel studs through gypsum sheathing with one No. 6-20 steel screw per tie. One inch air space provided between veneer and gypsum sheathing.

7D. **Stucco** — Portland cement type — 3/4 in. min thickness. Metal lath or mesh base attached to studs with No. 6-20 steel screws. "T-Nails," or staples approved by local building codes. Spaced 6 in. OC max and driven through gypsum sheathing.

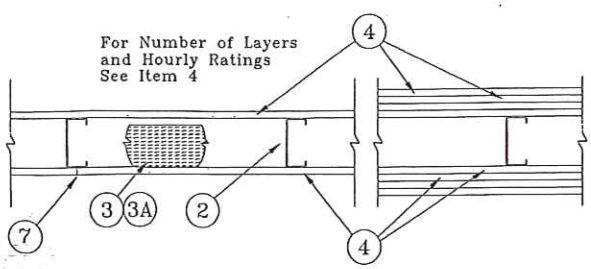
7E. **Mineral and Fiberboards** — Exterior hard board paneling, chemically treated, with primed or finished face, 7/16 in. thick by 48 in. wide. Attached to studs with 1-7/8 in. long bugle-head TEK fasteners 16 in. OC. at the intermediate supports. Or, exterior lap siding, chemically treated, 7/16 in. thick by 8 in. or 12 in. wide. Attached to studs with 1-7/8 in. long, bugle-head Type TEK fasteners at each lap. Panels lapped minimum 1 in.
   MASONITE CORP —Type FT

8. **Joint Tape and Compound** — Vinyl or casein, dry or premixed joint compound applied in two coats to joints and screw heads. Perforated paper tape, 2 in. wide, embedded in first layer of compound over all joints.

*Bearing the UL Classification Marking

Design No. U419

Non Bearing Wall Ratings — 1, 2, 3 or 4 Hr (See Items 3 & 4)



1. **Floor and Ceiling Runners** — (Not shown) — Channel shaped, fabricated from min 25 MSG (min 20 MSG when Item 4A is used) corrosion-protected steel, min width to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max.
2. **Steel Studs** — Channel shaped, fabricated from min 25 MSG (min 20 MSG when Item 4A is used) corrosion-protected steel, min width as indicated under Item 4, min 1-1/4 in. flanges and 1/4 in. return, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.
3. **Batts and Blankets*** — (Required as indicated under Item 4) — Mineral wool batts, friction fitted between studs and runners. Min nom thickness as indicated under Item 4. See **Batts and Blankets (BKNV or BZJZ) Categories** for names of Classified companies.

3A. **Batts and Blankets*** — (Optional) — Placed in stud cavities, any glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See **Batts and Blankets (BKNV or BZJZ) Categories** for names of Classified companies.

4. **Wallboard, Gypsum*** — Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers for the 1 hr, 2 hr, 3 hr and 4 hr ratings are as follows:

Wallboard Protection on Each Side of Wall

Rating	Min Stud Depth	No. of Layers & Thkns of Panel	Min Thkns of Insulation (Item 3)
1	3-1/2	1 layer, 5/8 in. thick	Optional
1	2-1/2	1 layer, 1/2 in. thick	1-1/2 in.
1	1-5/8	1 layer, 3/4 in. thick	Optional
2	1-5/8	2 layers, 1/2 in. thick	Optional
2	1-5/8	2 layers, 5/8 in. thick	Optional
2	3-1/2	1 layer, 3/4 in. thick	3 in.
3	1-5/8	3 layers, 1/2 in. thick	Optional
3	1-5/8	2 layers, 3/4 in. thick	Optional
3	1-5/8	3 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 1/2 in. thick	Optional
4	2-1/2	2 layers, 3/4 in. thick	2 in.

CANADIAN GYPSUM COMPANY —1/2 in. thick Type C, WRC or IP-X2; 5/8 in. thick Type SCX, SHX, WRX, IP-X1, AR, C, WRC or IP-X2; 3/4 in. thick ULTRACODE or Type IP-X3
UNITED STATES GYPSUM CO —1/2 in. thick Type C, WRC or IP-X2; 5/8 in. thick Type SCX, SHX, WRX, IP-X1, AR, C, WRC, FRX-G or IP-X2; 3/4 in. thick ULTRACODE or Type IP-X3
YESO PANAMERICANO S A DE C V —1/2 in. thick Type C, WRC or IP-X2; 5/8 in. thick Type SCX, SHX, WRX, IP-X1, AR, C, WRC or IP-X2; 3/4 in. thick ULTRACODE or Type IP-X3.

4A. **Wallboard, Gypsum*** — (As an alternate to Item 4) — 5/8 in. thick gypsum panels, installed as described in Item 4 with Type S-12 steel screws. The length and spacing of the screws as specified under Item 5.
   CANADIAN GYPSUM COMPANY —Type FRX
   UNITED STATES GYPSUM CO —Type FRX

4B. **Wallboard, Gypsum*** — (As an alternate to Items 4 and 4A) — 5/8 in. thick, 2 ft. wide, tongue and groove edge, applied horizontally as the outer layer to one side of the assembly. Secured as described in Item 5. Joint covering (Item 7) not required.
   UNITED STATES GYPSUM CO —Type SCX.

5. **Fasteners** — (Not shown) — Type S or S-12 steel screws used to attach panels to studs (Item 2) or furring channels (Item 6). **Single layer systems:** 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontally, or 12 in. OC when panels are applied vertically. Two layer systems: First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer. **Three-layer systems:** First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. **Four-layer systems:** First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Fourth layer- 2-5/8 in. long for 1/2 in. thick panels or 3 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below.