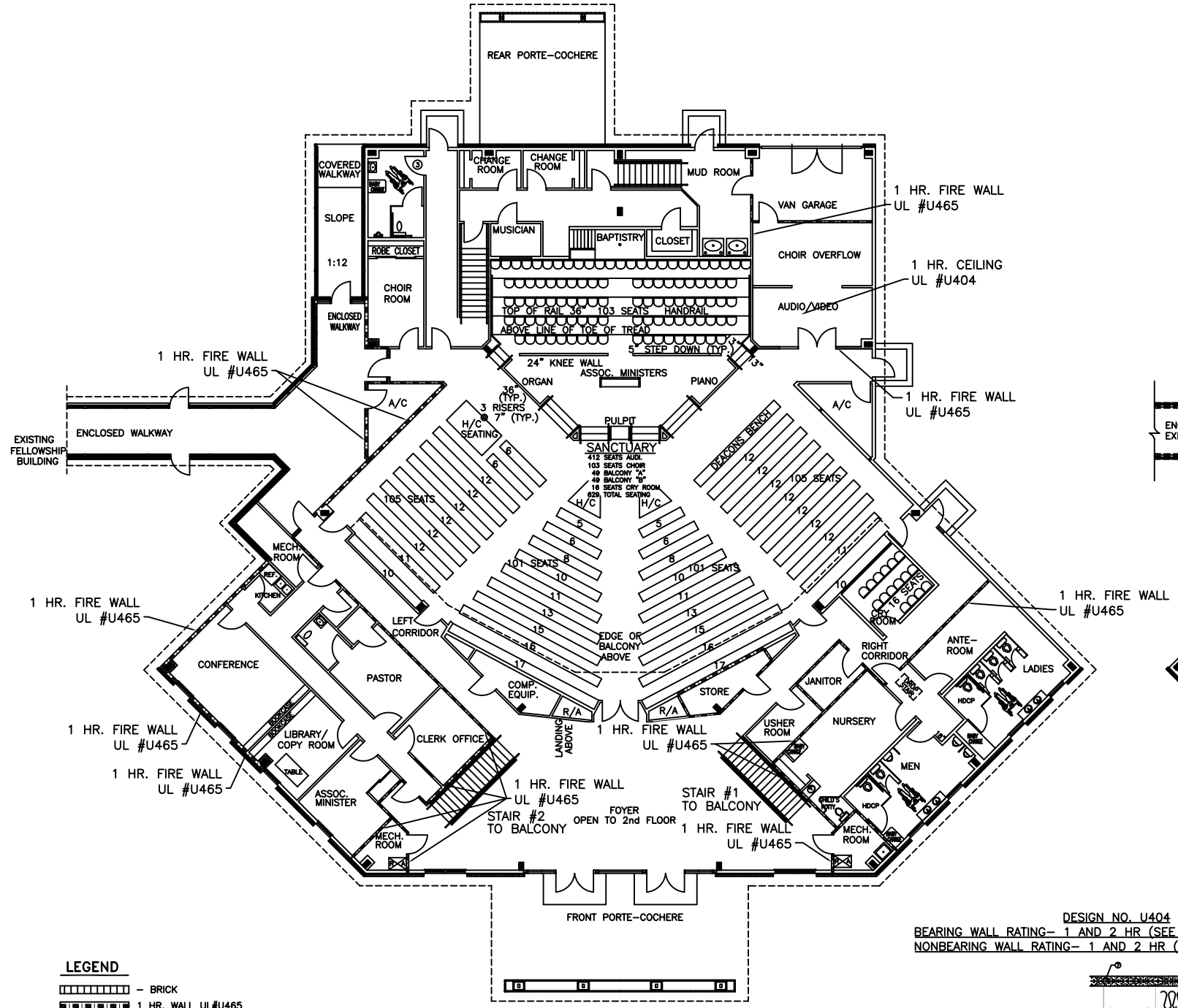
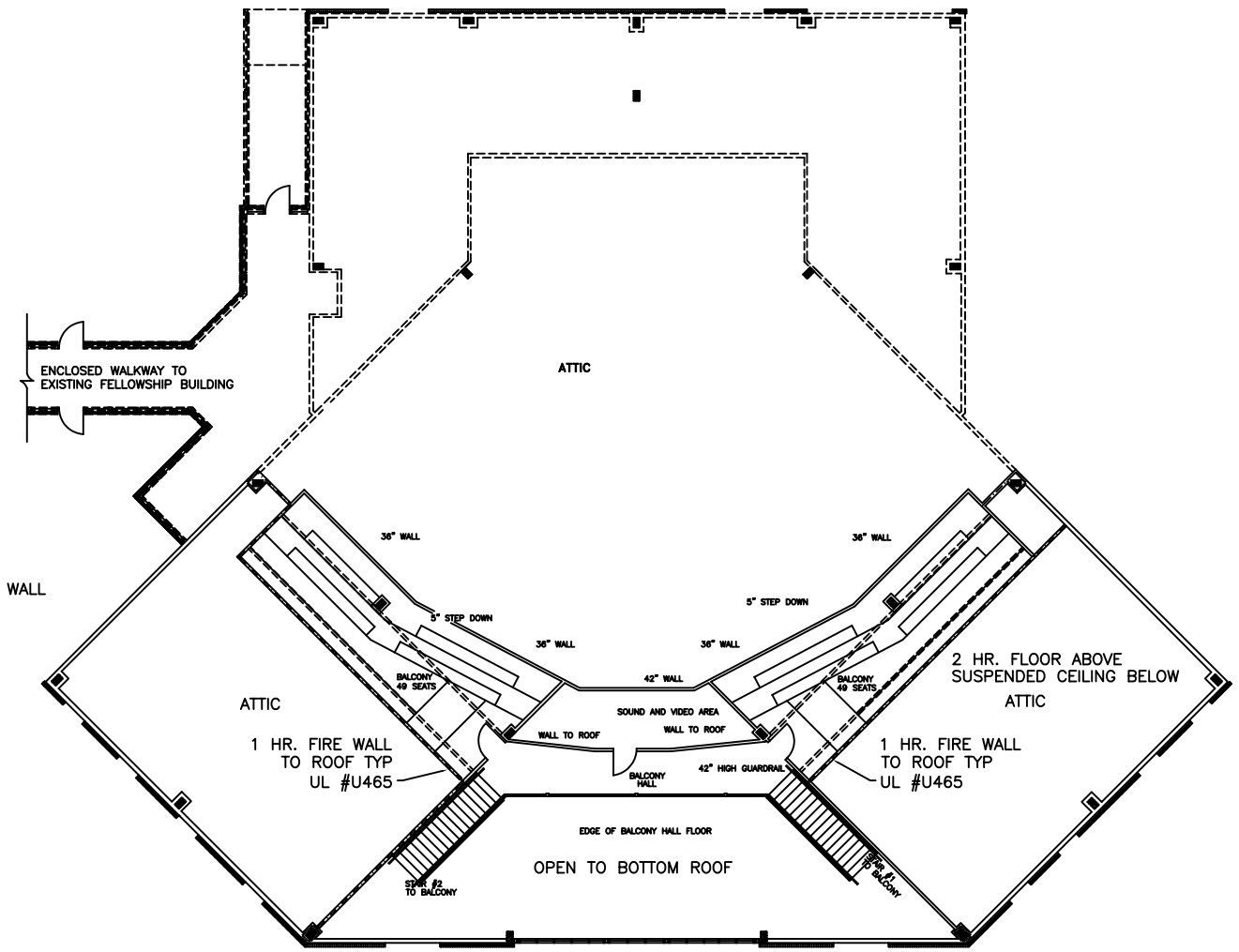


FIRST FLOOR FIREWALL PLAN
SCALE: 3/32"=1'-0"

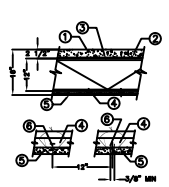


BALCONY FIREWALL PLAN
SCALE: 3/32"=1'-0"

LEGEND

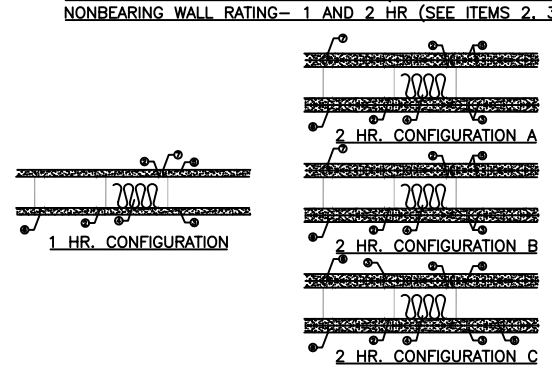
- BRICK
- 1 HR. WALL UL#U465

DESIGN NO. G510
RESTRAINED ASSEMBLY RATING– 1 HR.
UNRESTRAINED ASSEMBLY RATING– 1 HR.



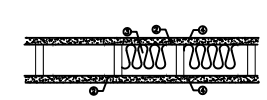
1. NORMAL WEIGHT CONCRETE– CARBONATE OR SILICEOUS AGGREGATE, 150+ OR –3 PCF UNIT WEIGHT, 4000 PSI COMPRESSIVE STRENGTH.
2. METAL LATH– 3/8 IN. RIB, 3.4 LB /SQ YD EXPANDED STEEL; TIED TO EACH JOIST AT EVERY OTHER RIB, AND MIDWAY BETWEEN JOISTS AT SIDE LAP WITH 18 SWG GALV. WIRE.
AS AN ALTERNATE, THE FORM MATERIAL FOR THE CONCRETE MAY BE CORRUGATED STEEL DECK 9/16 IN. DEEP, 28 MSG (MIN) GALV STEEL WELDED TO SUPPORTS 15 IN. O.C. WITH WASHERS. THE CONCRETE THICKNESS SHALL BE MEASURED TO THE TOP PLANE OF THE STEEL DECK.
3. STEEL JOISTS– TYPE 13J4 MIN SIZE; SPACED 24 IN. O.C. AND WELDED TO END SUPPORTS. BRIDGING PROVIDED BY 1/2 IN. DIAMETER STEEL BARS WELDED TO TOP AND BOTTOM CHORDS OF EACH JOIST.
4. FURRING CHANNEL– NO. 25 MSG GALV STEEL, 2 3/8 IN. WIDE BY 7/8 IN. DEEP, SPACED 24 IN. O.C.; EXCEPT AT END JOINTS NOTED BELOW, SECURED TO EACH JOIST WITH A DOUBLE STRAND OF 18 SWG GALV WIRE. ADJOINING LENGTHS OF CHANNELS LAPPED 12 IN. AND TIED TOGETHER WITH TWO DOUBLE STRAND WIRE TIES, ONE AT EACH END OF OVERLAP.
AS AN ALTERNATE, FURRING CHANNELS MAY BE SECURED TO 1 1/2 IN. COLD-ROLLED CHANNELS AT EVERY INTERSECTION WITH DOUBLE STRAND OF 18 SWG GALV WIRE. COLD-ROLLED CHANNELS SPACED 24 IN. O.C. AND SUSPENDED PERPENDICULAR FROM LOWER CHORDS OF JOISTS WITH 8 SWG GALV WIRE SPACED 48 IN. O.C. ALONG CHANNELS.
4A. STEEL FRAMING MEMBERS– (OPTIONAL, NOT SHOWN)– ALTERNATE METHOD TO ATTACH FURRING CHANNELS (ITEM 4) TO JOISTS (ITEM 3). CLIPS SPACED 48 IN. O.C. AND SECURED TO ALTERNATING JOISTS WITH CLIP WASHER INSTALLATION KIT PROVIDED BY MANUFACTURER. ON UNDERSIDE OF BOTTOM CHORD, 1 1/2 IN. DIA X 3/8 IN DEEP, #10 GALV STEEL CLIP WASHER IS PLACED TO SURROUND THE RUBBER INSERT. CLIP ATTACHED TO THE BOTTOM CHORD WITH A 1/4 IN. DIA. ZINC PLATED BOLT INSERTED THROUGH THE CENTER GROMMET AND BETWEEN THE CHORD MEMBERS; DEPTH OF BOLT DETERMINED AS 1 1/2 IN. PLUS THE DEPTH OF THE BOTTOM CHORD OF THE JOIST. FASTENED ON THE TOP SIDE OF THE BOTTOM CHORD WITH A SECOND CLIP WASHER PLACED OPEN SIDE UP, AND A 1/4 IN. ZINC PLATED "HYLOC" NUT. FURRING CHANNELS ARE FRICTION FITTED INTO CLIPS. ENDS OF ADJOINING CHANNELS ARE OVERLAPPED 8 IN. AND TIED TOGETHER WITH DOUBLE STRAND OF NO. 18 SWG GALV STEEL WIRE NEAR EACH END OF OVERLAP. ADDITIONAL CLIPS REQUIRED TO HOLD FURRING CHANNEL THAT SUPPORTS THE WALLBOARD BUTT JOINTS, AS DESCRIBED IN ITEM 5.
PAC INTERNATIONAL, INC. TYPE RSIC-1.
5. GYPSUM BOARD– 5/8 IN. THICK, ATTACHED WITH THE LONG DIMENSION AT RIGHT ANGLES TO FURRING CHANNELS. WALLBOARD AT END JOINTS SECURED TO AN ADDITIONAL FURRING CHANNEL WIRE-TIED TO THE JOISTS AND PLACED OVER THE JOINT AND EXTENDING A MINIMUM OF 4 IN. BEYOND THE JOINT AT EITHER END AND WIRE-TIED TO THE BAR JOINT NOT MORE THAN 16 IN. FROM EITHER END. SIDE JOINTS OF WALLBOARDS TO OCCUR MIDWAY BETWEEN JOISTS. PAPER TAPE AND CEMENT JOINT TREATMENT NOT REQUIRED FOR RATING.
WHEN STEEL FRAMING MEMBERS (ITEM 4A) ARE USED, WALLBOARD BUTT JOINTS SHALL BE STAGGERED MIN 2 FT. WITHIN THE ASSEMBLY, AND OCCUR BETWEEN THE MAIN FURRING CHANNELS. EDGE JOINTS MAY OCCUR BENEATH THE JOISTS.
AT THE WALLBOARD BUTT JOINTS, EACH END OF THE GYPSUM BOARD SHALL BE SUPPORTED BY A SINGLE LENGTH OF FURRING CHANNEL EQUAL TO THE WIDTH OF THE WALLBOARD PLUS 6 IN. ON EACH END. THE FURRING CHANNELS SHALL BE SPACED APPROXIMATELY 3 1/2 IN. O.C. AND BE ATTACHED TO THE UNDERSIDE OF THE JOIST WITH ONE RSIC-1 CLIP AT EACH END OF THE CHANNEL. GYPSUM BOARD ATTACHED TO THE FURRING CHANNELS USING 1 IN. LONG TYPE S BUGLE-HEAD STEEL SCREWS SPACED 8 IN. O.C. ALONG BUTTED END JOINTS AND 12 IN. O.C. IN THE FIELD OF THE BOARD. WALLBOARD JOINTS COVERED WITH PAPER TAPE AND JOINT COMPOUND.
AMERICAN GYPSUM CO.– TYPES AGX-S.
BPB AMERICA, INC.– TYPE FRP-1, PRO ROC TYPE C, OR PRO ROC TYPE X.
G-P GYPSUM CORP.– SUB OF GEORGIA-PACIFIC CORP.– TYPES S OR C.
LAFARGE NORTH AMERICA, INC.– TYPES LGFC-C, LGFC-C/A.
6. WALLBOARD SCREW– NO. 6 PHILLIPS FLATHEAD, SELF-TAPPING, SHEET METAL SCREWS 1 IN. LONG SPACED 1/2 IN. FROM EDGES AND 12 IN. O.C. SCREWS SHALL BE DRIVEN NO FARTHER THAN FLUSH WITH THE EXPOSED SURFACE OF THE WALLBOARD. WALLBOARD ON EACH SIDE OF END JOINT ATTACHED TO THE 4 IN. OVERHAP OF FURRING CHANNEL WITH ONE ADDITIONAL SCREW.
NOTE: *BEARING THE UL CLASSIFICATION MARKING.

DESIGN NO. U404
BEARING WALL RATING– 1 AND 2 HR (SEE ITEMS 2, 3 & 5)
NONBEARING WALL RATING– 1 AND 2 HR (SEE ITEMS 2, 3 AND 5)



1. FLOOR AND CEILING RUNNERS– (NOT SHOWN)– CHANNEL SHAPED RUNNERS, 3 1/2 IN. WIDE X 1 1/4 IN. DEEP, FABRICATED FROM MIN 20 MSG (0.0329 IN., MIN. BARE METAL THICKNESS) GALVANIZED STEEL. ATTACHED TO FLOOR AND CEILING WITH STEEL FASTENERS SPACED 24 IN. O.C. MAX.
2. STEEL STUDS– 3 1/2 IN. WIDE, FABRICATED FROM MIN 20 MSG (0.0329 MIN. BARE METAL THICKNESS) GALVANIZED STEEL, SPACED MAX. 16 IN. O.C. FOR BEARING WALLS, STUDS SHALL BE DESIGNED IN ACCORDANCE WITH THE CURRENT EDITION OF THE SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS BY THE AMERICAN IRON AND STEEL INSTITUTE. ALL DESIGN DETAILS ENHANCING STRUCTURAL INTEGRITY OF THE BEARING WALL ASSEMBLY, INCLUDING THE AXIAL DESIGN LOAD OF THE STUDS, SHALL BE AS SPECIFIED BY THE STEEL STUD DESIGNER AND/ OR PRODUCER AND SHALL MEET THE REQUIREMENTS OF ALL LOCAL CODE AGENCIES. STEEL STUDS ATTACHED TO FLOOR AND CEILING RUNNERS WITH 3/8 IN. LONG TYPE S-12 STEEL SCREWS ON BOTH SIDES OF THE STUDS OR BY WELDED OR BOLTED CONNECTIONS DESIGNED IN ACCORDANCE WITH THE AISA SPECIFICATIONS. FOR NONBEARING WALLS, STUDS TO BE CUT 3/8 IN TO 3/4 IN. LESS THAN ASSEMBLY HEIGHT AND FRICTION-FITTED INTO FLOOR AND CEILING RUNNERS.
3. CEMENTITIOUS BACKER UNITS– 1/2 IN. OR 5/8 IN. THICK, APPLIED VERTICALLY OR HORIZONTALLY WITH VERTICAL JOINTS CENTERED OVER STUDS. FASTENED TO STUDS AND RUNNERS WITH CORROSION RESISTANT, CHAMFERED, BUGLE-HEAD WAFER HEAD SCREWS WITH A MINIMUM HEAD DIAMETER OF .400 INCH. HORIZONTAL JOINTS NEED NOT BE BACKED BY FRAMING.
1-HR. SYSTEM– SCREWS SHALL BE MIN. 1 1/4 INCH LONG AND SPACED A MAX OF 8 IN. O.C. ALL VERTICAL JOINTS STAGGERED ONE STUD CAVITY FROM GYPSUM BOARD VERTICAL JOINTS ON THE OPPOSITE SIDE OF STUDS. HORIZONTAL EDGE JOINTS AND HORIZONTAL BUTT JOINTS ON OPPOSITE SIDES OF STUDS NEED NOT BE STAGGERED.
2-HR. SYSTEM– FOR THE BASE LAYER IN CONFIGURATION B, THE SCREWS SHALL BE MIN. 1 1/4 IN. LONG AND SPACED A MAX. OF 12 IN. O.C. FOR THE FACE LAYERS, SCREWS SHALL BE 1 5/8 IN. LONG AND SPACED A MAX. OF 8 IN. O.C. ALL FACE LAYER JOINTS OFFSET MIN 12 IN. FROM UNDERLYING BASE LAYER JOINTS. JOINTS IN EITHER LAYER NEED NOT BE STAGGERED FROM JOINTS ON THE OPPOSITE SIDE OF THE WALL.
UNITED STATES GYPSUM CO.– DUROCK EXTERIOR CEMENT BOARD.
or DUROCK BRAND CEMENT BOARD.
4. BATTS AND BLANKETS– (OPTIONAL)– MIN. 3 IN. THICK MINERAL WOOL INSULATION BATTS, FRICTION-FITTED BETWEEN STUDS.
THERMAFIBER L. L. C.– TYPE SAFB.
5. GYPSUM BOARD– 5/8 IN. THICK, WITH SQUARE OR TAPERED EDGES, APPLIED VERTICALLY OR HORIZONTALLY WITH VERTICAL JOINTS CENTERED OVER STUDS. HORIZONTAL JOINTS NEED NOT BE BACKED BY FRAMING. FASTENED WITH TYPE S-12 STEEL SCREWS.
1-HR. SYSTEM– FOR VERTICAL APPLICATION, FASTENED TO STUDS AND RUNNERS WITH 1 IN. LONG SCREWS SPACED MAX. 8 IN O.C. AT VERTICAL EDGES AND SPACED 12 IN. O.C. IN THE FIELD. FOR HORIZONTAL APPLICATIONS, FASTENED TO STUDS AND RUNNERS WITH 1 IN. LONG SCREWS SPACED MAX. 8 IN. O.C. VERTICAL JOINTS STAGGERED ONE STUD CAVITY FROM CEMENT BOARD VERTICAL JOINTS ON OPPOSITE SIDE OF STUDS. HORIZONTAL EDGE JOINTS AND HORIZONTAL BUTT JOINTS ON OPPOSITE SIDES OF STUDS NEED NOT BE STAGGERED.
CANADIAN GYPSUM COMPANY– TYPES AR, C, FRX, IP–AR, IP–X1, IP–X2, IPC–AR, SCX, SHX, WRC OR WRX.
UNITED STATES GYPSUM CO.– TYPE AR, C FRX–G, IP–AR, IP–X1, IP–X2, IPC–AR, SCX, SHX, WRC OR WRX.
USG MEXICO S A DE C V.– TYPE AR, C IP–AR, IP–X1, IPC–X2, SCX, SHX, IPC–AR, SCX, SHX, WRC OR WRX.
6. JOINTS– COVERED WITH GLASS FIBER MESH TAPE AND LATEX MODIFIED PORTLAND CEMENT MORTAR OR BASECOAT, TYPE I ORGANIC ADHESIVE.
7. JOINTS– WHEN TAPERED EDGE GYPSUM BOARD IS USED, FACE LAYER JOINTS COVERED WITH JOINT COMPOUND AND PAPER TAPE. AS AN ALTERNATE, GYPSUM VENEER PLASTER MAY BE APPLIED TO THE ENTIRE SURFACE OF CLASSIFIED VENEER BASEBOARD, WITH JOINTS REINFORCED. WHEN SQUARE-EDGE GYPSUM BOARD IS USED, TREATMENT OF JOINTS IS OPTIONAL.
8. VAPOR RETARDER, WATER BARRIER OR WEATHER RESISTIVE BARRIER– (OPTIONAL– NOT SHOWN)– AS REQUIRED.
*BEARING THE UL CLASSIFICATION MARK.

DESIGN NO. U465
NONBEARING WALL RATING– 1 HR.



1. FLOOR AND CEILING RUNNERS– (NOT SHOWN)– CHANNEL SHAPED RUNNERS, 3 5/8 IN. WIDE (MIN), 1 1/4 IN. LEGS, FORMED FROM MIN NO. 25 MSG (MIN NO. 20 MSG WHEN ITEM 4C IS USED) GALV STEEL. ATTACHED TO FLOOR AND CEILING WITH FASTENERS SPACED 24 IN. O.C. MAX.
2. STEEL STUDS– CHANNEL SHAPED, 3 5/8 IN. WIDE (MIN.), 1 1/4 IN. LEGS, 3/8 IN. FOLDED BACK RETURNS FORMED FROM MIN. NO. 25 MSG (MIN. NO. 20 MSG WHEN ITEM 4A IS USED) GALV STEEL. SPACED 24 IN. O.C. MAX.
3. BATTS AND BLANKETS– (OPTIONAL)– MINERAL WOOL OR GLASS FIBER BATTS PARTIALLY OR COMPLETELY FILLING STUD CAVITY.
3A. FIBER SPRAYED– AS AN ALTERNATE TO BATTS AND BLANKETS (ITEM 3)– SPRAY APPLIED CELLULOSE INSULATION MATERIAL. THE FIBER IS APPLIED WITH WATER TO COMPLETELY FILL THE ENCLOSED CAVITY IN ACCORDANCE WITH THE APPLICATION INSTRUCTIONS SUPPLIED WITH THE PRODUCT. NOMINAL DRY DENSITY OF 3.0 LB/FT.
US GREENFIBER L. L. C. OCOUAN STABILIZED CELLULOSE INSULATION.
3B. FIBER SPRAYED– AS AN ALTERNATE TO BATTS AND BLANKETS (ITEM 3) AND AND ITEM 3A– SPRAY APPLIED CELLULOSE INSULATION MATERIAL. THE FIBER IS APPLIED WITH WATER TO INTERIOR SURFACES IN ACCORDANCE WITH THE APPLICATION INSTRUCTIONS SUPPLIED WITH THE PRODUCT. APPLIED TO COMPLETELY FILL THE ENCLOSED CAVITY. MINIMUM DRY DENSITY OF 4.3 POUNDS PER CUBIC FOOT.
NU-WOOL CO., INC. CELLULOSE INSULATION.
4. GYPSUM BOARD– 5/8 IN. THICK, 4 FT. WIDE, ATTACHED TO STEEL STUDS AND FLOOR AND CEILING TRACK WITH 1 IN. LONG, TYPE S STEEL SCREWS SPACED 8 IN. O.C. ALONG EDGES OF BOARD AND 12 IN. O.C. IN THE FIELD OF THE BOARD. JOINTS ORIENTED VERTICALLY AND STAGGERED ON OPPOSITE SIDES OF THE ASSEMBLY. WHEN ATTACHED TO ITEM 6 (RESILIENT CHANNELS) OR 6A (FURRING CHANNELS) WALLBOARD IS SCREW ATTACHED TO FURRING CHANNELS WITH 1 IN. LONG, TYPE S STEEL SCREWS SPACED 12 IN. O.C.
AMERICAN GYPSUM CO.– TYPES AG–C, AGX–C.
BEIJING NEW BUILDING MATERIALS CO., LTD. TYPE DRX–1.
BPB OF AMERICA, INC.– TYPES 1, EDGE, PRO ROC TYPE X, PRO ROC TYPE C.
CANADIAN GYPSUM COMPANY– TYPES AR, C, IP–AR, IP–X2, IPC–AR, SCX, SHX, WRC OR WRX.
G–P GYPSUM CORP. SUB OF GEORGIA–PACIFIC CORP.– TYPES S, 9 C, DAP, DD, DA, DGU, DS, GPTSD.
LAFARGE NORTH AMERICA, INC.– TYPES LGFC2, LGFC2A, LGFC6, LGFC6A, LGFC–C, LGFC–C/A.
NATIONAL GYPSUM CO.– TYPES FSK–C, FSK–G, FSW–C, FSW–G, FSW.
NORGIPS A/S– NORFINE XA.
PABCO GYPSUM, DIV OF PACIFIC COAST BUILDING PRODUCTS, INC.– TYPE PG–C.
SIAM GYPSUM INDUSTRY CO., LTD.– TYPE EDX–1.
STANDARD GYPSUM L. L. C.– TYPE SD–C.
TEMPLE–INLAND FOREST PRODUCTS CORP.– TYPE TG–C.
UNITED STATES GYPSUM CO.– TYPE AR, C FRX–G, IP–AR, IP–X2, IPC–AR, SCX, SHX, WRC OR WRX.
USG MEXICO S A DE C V– TYPE AR, C IP–AR, IP–X2, IPC–AR, SCX, SHX, WRC OR WRX.
WESTROC, INC.– TYPE WESTROC FI–ROK OR ABUSE–RESISTANT.
4A. GYPSUM BOARD– (AS AN ALTERNATE TO ITEM 4)– NOM 5/8 THICK 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. HORIZONTAL EDGE JOINTS AND HORIZONTAL BUTT JOINTS ON OPPOSITE SIDES OF STUDS NEED NOT BE STAGGERED OR BACKED. PANELS ATTACHED TO STEEL STUDS AND FLOOR RUNNER WITH 1 IN. LONG TYPE S STEEL SCREWS SPACED 8 IN. O.C. ALONG VERTICAL AND BOTTOM EDGES AND 12 IN. O.C. IN THE FIELD WHEN PANELS ARE APPLIED VERTICALLY.
CANADIAN GYPSUM COMPANY– TYPES AR, C, IP–AR, IP–X2, IPC–AR, SCX, SHX, WRC OR WRX.
UNITED STATES GYPSUM CO.– TYPE AR, C FRX–G, IP–AR, IP–X2, IPC–AR, SCX, SHX, WRC OR WRX.
USG MEXICO S A DE C V– TYPE AR, C, IP–AR, IP–X2, IPC–AR, SCX, SHX, WRC OR WRX.
4B– GYPSUM BOARD– (AS AN ALTERNATE TO ITEMS 4 OR 4A)– NOM 3/4 IN. THICK, 4 FT. WIDE, INSTALLED AS DESCRIBED IN ITEM 4A WITH SCREW LENGTH INCREASED TO 1 1/4 IN.
CANADIAN GYPSUM COMPANY– TYPES AR, IP–AR.
UNITED STATES GYPSUM CO.– TYPES AR, IP–AR.
USG MEXICO S A DE C V– TYPES AR, IP–AR.
4C. GYPSUM BOARD– (AS AN ALTERNATE TO ITEMS 4, 4A AND 4B)– 5/8 IN. THICK GYPSUM PANELS INSTALLED AS DESCRIBED IN ITEM 4A WITH TYPE S–12 STEEL SCREWS. THE LENGTH AND SPACING OF THE SCREWS AS SPECIFIED UNDER ITEM 4A.
5. JOINT TAPE AND COMPOUND– VINYL DRY OR PREMIXED JOINT COMPOUND, APPLIED IN TWO COATS TO JOINTS AND INTERIOR ANGLES. PAPER TAPE 2 IN. WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS. AS AN ALTERNATE, NOMINAL 3/32 IN. THICK GYPSUM VENEER PLASTER MAY BE APPLIED TO THE ENTIRE SURFACE OF CLASSIFIED VENEER BASEBOARD. JOINTS REINFORCED.
6. RESILIENT CHANNEL– (OPTIONAL, NOT SHOWN)– 25 MSG GALV STEEL RESILIENT CHANNELS SPACED VERTICALLY MAX 24 IN O.C., FLANGE PORTION ATTACHED TO EACH INTERSECTING STUD WITH 1/2 IN. LONG TYPE 2–12 PANHEAD STEEL SCREWS. NOT FOR USE WITH TYPE FRX GYPSUM PANELS.
6A. STEEL FRAMING MEMBERS– (NOT SHOWN)– AS AN ALTERNATE TO ITEM 3, FURRING CHANNELS AND RESILIENT SOUND ISOLATION CLIP AS DESCRIBED BELOW.
A. FURRING CHANNELS– FORMED NO. 25 MSG GALV STEEL. 2 3/8 IN. WIDE X 7/8 DEEP, SPACED 24 IN. O.C. PERPENDICULAR TO STUDS. CHANNELS SECURED TO STUDS AS DESCRIBED IN ITEM 6.
B. STEEL FRAMING MEMBERS– USED TO ATTACH FURRING CHANNELS (ITEM 4) TO STUDS (ITEM 1). CLIPS SPACED 48 IN. O.C., AND SECURED TO ALTERNATING STUDS WITH 1 5/8 IN. WAFER OR HEX HEAD TYPE S STEEL SCREW THROUGH THE CENTER GROMMET. FURRING CHANNELS ARE FRICTION FITTED INTO CLIPS.
PAC DOUBLE STRAND RSC– TYPE RSC–1.
*BEARING THE UL CLASSIFICATION MARK.

REVISED: 06–27–06

FIREWALL PLAN

STARLIGHT BAPTIST CHURCH
2100 SECOND STREET
SLIDELL, LOUISIANA

NEW SANCTUARY

DAMMON ENGINEERING. INC.
1095 FLORIDA AVENUE 985-649-5832 SLIDELL, LA. 70458
DAMMONENGINEERING.COM

SCALE:AS NOTED
FILE:
JOB NO.
DATE:05–16–05
SHEET A.12
OF