WALL TYPES

1 x 2 HOOD FURRING
5/8" GYPSUM BOARD

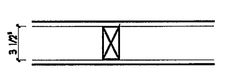
FD 01 WITH 5/8" GYPSUM BOARD

2 x 4 HOOD STUDS
2" SOUND INSULATION
5/8" GYPSUM BOARD

FS 30 WITH SOUND INSULATION

FS 31 WITH OUT SOUND INSULATION

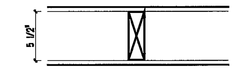
TYPICAL INTERIOR NON-BEARING WALL



5/8" GYPSUM BOARD
2 x 4 HOOD STUDS
5/8" GYPSUM BOARD

WD 30

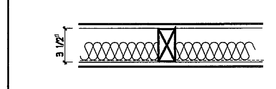
TYPICAL INTERIOR BEARING WALL



5/8" GYPSUM BOARD TYPE 'X'
2 x 6 HOOD STUDS
5/8" GYPSUM BOARD TYPE 'X'

WD 50

TYPICAL INTERIOR NON-BEARING WALL

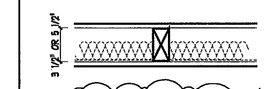


5/8" GYPSUM BOARD
2 x 4 HOOD STUDS
2 1/2" SOUND INSULATION
5/8" GYPSUM BOARD

NS 30 WITH 2 1/2" SOUND INSULATION

NS 31 WITH 3 1/2" R-13 BATT INSULATION

TYPICAL INTERIOR BEARING WALL



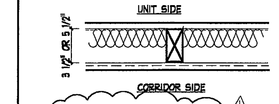
5/8" GYPSUM BOARD, TYPE 'X'
2 x 4 HOOD STUDS (ALT. 2x6 WD STUDS)
5/8" GYPSUM BOARD, TYPE 'X'

1 HOUR RATED UL DESIGN U 305

NS 30 WITHOUT INSULATION

NS 31 WITH 2 1/2" SOUND INSULATION
STC 46 ISSN-1700725

TYPICAL PARTITION TYPE BETWEEN UNIT AND CORRIDOR



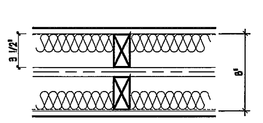
5/8" GYPSUM BOARD, TYPE 'C'
RESILIENT CHANNELS
3" SOUND INSULATION
2 x 4 HOOD STUDS
5/8" GYPSUM BOARD, TYPE 'C'

1 HOUR RATED BASED ON UL DESIGN U 311
STC 50 - GA FILE NO.: HP 3240

NS 32

NS 33 5 1/2" (2 x 6) WOOD STUDS

UNIT SEPARATION WALL

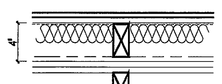


5/8" GYPSUM BOARD, TYPE 'X'
1/8" THERMO-PLY (SEE STRUCT. DRWGS. FOR LOCATION)
2 1/2" SOUND INSULATION
1" AIR SPACE
2 x 4 WOOD STUDS
2 1/2" SOUND INSULATION
1/8" THERMO-PLY (SEE STRUCT. DRWGS. FOR LOCATION)
5/8" GYPSUM BOARD, TYPE 'X'

1 HOUR RATED BASED ON GA FILE HP 3370
STC 57 TL75-53 HT75

NS 50

TYPICAL STAIR WALL



1/2" GYPSUM BOARD
5/8" GYPSUM BOARD, TYPE 'X'
2 1/2" SOUND INSULATION
2 x 4 HOOD STUDS
1/2" AIR SPACE
5/8" GYPSUM BOARD, TYPE 'X' 2 LAYERS
2 x 4 HOOD STUDS
1/8" THERMO-PLY
5/8" GYPSUM BOARD, TYPE 'X' 2 LAYERS

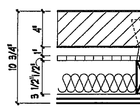
NS 61 2 HOUR RATED BASE ON UL DESIGN U 301
STC 54

TYPICAL STAIR WALL

5/8" GYPSUM BOARD, TYPE 'X' 2 LAYERS
2 1/2" SOUND INSULATION
2 x 4 HOOD STUDS
1/8" THERMO-PLY (SEE STRUCTURAL DRAWINGS)
5/8" GYPSUM BOARD, TYPE 'X' 2 LAYERS

NS 62 2 HOUR RATED BASE ON UL DESIGN U 301
STC 54

TYPICAL EXTERIOR BEARING STAIR WALL WITH FACE BRICK

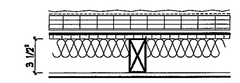


4" FACE BRICK WITH MASONRY TIES
AIR SPACE
1/2" EXT. GYPSUM SHEATING
1/8" THERMO-PLY (SEE STRUC. DRWGS. FOR LOCATION)
2 x 4 OR 2 x 6 OR 2 x 8 WOOD STUDS
R-13 BATT INSULATION
VAPOR BARRIER
5/8" GYPSUM BOARD, TYPE 'X', 2 LAYERS

TOP & BOTTOM OF WALL EFFECTIVELY FIRESTOPPED

NS 72 2 HOUR RATED BASE ON UL DESIGN U 302
STC 54

EXTERIOR BEARING WALL WITH EXTERIOR INSULATION FINISH SYSTEM

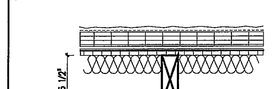


INSULATION SYSTEM FINISH
ON REINFORCING MESH
EMBEDDED IN BASE COAT
ON MEPS INSULATION BOARD
1/2" EXTERIOR GRADE PLYWOOD OR 7/16 OSB
2 x 4 HOOD STUDS
3 1/2" R-13 BATT INSULATION
VAPOR BARRIER
5/8" GYPSUM BOARD, TYPE 'X'

1 HOUR RATED UL DESIGN U026
PROVIDE STC 39 MIN @ ALL EXT. WALLS

NS 33 NS 34

EXTERIOR BEARING WALL WITH EXTERIOR INSULATION FINISH SYSTEM

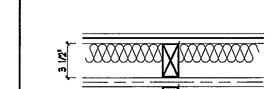


EXTERIOR INSULATION FINISH SYSTEM
1/2" EXTERIOR GRADE PLYWOOD OR 7/16 OSB
2 x 6 HOOD STUDS
3 1/2" R-13 BATT INSULATION
VAPOR BARRIER
5/8" GYPSUM BOARD, TYPE 'X'

1 HOUR RATED UL DESIGN U354
PROVIDE STC 39 MIN @ ALL EXT. WALLS

NS 50

TYPICAL BEARING WALL BETWEEN BALCONY

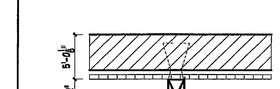


5/8" GYPSUM BOARD, TYPE 'X'
1/8" THERMO-PLY (SEE STRUCT. DRWGS. FOR LOCATION)
2 x 4 OR 2 x 6 OR 2 x 8 WOOD STUDS
R-13 BATT INSULATION
VAPOR BARRIER
5/8" GYPSUM BOARD, TYPE 'X'

1 HOUR RATED BASED ON GA FILE HP 3370
STC 57 TL75-53 HT75

NS 62

TYPICAL EXTERIOR BEARING WALL WITH FACE BRICK

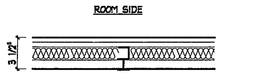


4" FACE BRICK WITH MASONRY TIES
AIR SAPACE
BUILDING PAPER
1/8" THERMO-PLY (SEE STRUC. DRWGS. FOR LOCATION)
2 x 4 OR 2 x 6 OR 2 x 8 WOOD STUDS
R-13 BATT INSULATION
VAPOR BARRIER
5/8" GYPSUM BOARD, TYPE 'X'

1 HOUR RATED BASED ON UL DESIGN U 026
PROVIDE STC 39 MIN @ ALL EXT. WALLS

NS 71

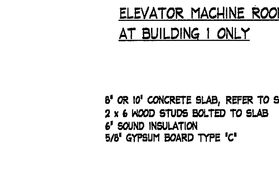
TYPICAL SHAFT WALL



1/2" GYPSUM BOARD - TYPE X - 2 LAYERS
1" SOUND INSULATION
2 1/2" C-H METAL STUD W/ J RUNNERS
AT FLOOR AND CEILING
1" SHAFT LINER
2 HOUR RATED SHAFT WALL
U OF C 4/25/75 /UL DESIGN U438
STC 54 ISSN 750502

SS 20

TYPICAL 2 HR RATED PARTY WALL



5/8" GYPSUM BOARD
2 - 2 x 4 HOOD STUDS
2 - 1" GYPSUM LINER PANELS
METAL "H" STUDS
2 x 4 HOOD STUDS
1" SOUND INSULATION
3 1/2" BATT INSULATION
5/8" GYPSUM BOARD

2 HOUR RATED UL DESIGN U 336 (SIMILAR)

MS 63

6 OR 8" OR 12" CONCRETE MASONRY UNITS

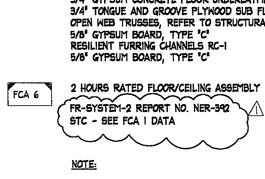
2 HOURS RATED WALL
UL DESIGN - U905/U906

MD 01 W/8" CMU

MD 02 W/12" CMU

MD 03 W/6" CMU

TYPICAL

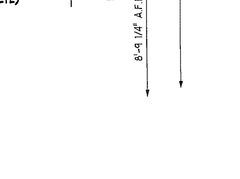


10" OR 12" CONCRETE WALL

2 HOURS RATED WALL
SIMILAR TO UL DESIGN U-900L

CO 12

TYPICAL

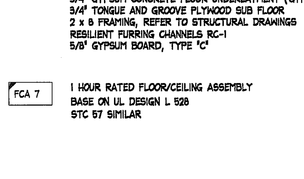


PROTECTION BOARD
WATERPROOF MEMBRANE
10" OR 12" CONCRETE WALL

2 HOURS RATED WALL
SIMILAR TO UL DESIGN U-900L

CO 13

TYPICAL



4" FACE BRICK
8" CONCRETE WALL

2 HOURS RATED WALL
SIMILAR TO UL DESIGN U-900L, SIMILAR

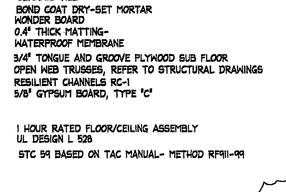
CO 14

TYPICAL

2 x 4 HOOD STUDS
5/8" GYPSUM BOARD

FD 32 WITH OUT SOUND INSULATION

TYPICAL SHAFT WALL



ROOM SIDE

2 - 5/8" GYPSUM BOARD - TYPE X - 2 LAYERS
2 x 4 HOOD STUDS
2 - 5/8" GYPSUM BOARD - TYPE X - 2 LAYERS
2 HOUR RATED SHAFT WALL
UL DESIGN U301

SS 21

WALL TYPE SYMBOL KEY LEGEND

FS 30

1ST LETTER INDICATES STRUCTURAL MATERIAL
F STEEL FURRING/WOOD FURRING
S STEEL STUD
C CONCRETE
N MASONRY
P PRECAST
K CURTAIN WALL

2ND LETTER INDICATES INSULATION TYPE
O NONE
S SOUND INSULATION
B BATT INSULATION
R BOARD INSULATION

CORNER SHADING INDICATES FIRE RATING
1 CORNER 1 HOUR
2 CORNERS 2 HOURS
3 CORNERS 3 HOURS
4 CORNERS 4 HOURS

NUMBER INDICATES VARIATIONS

F	00 - 09	1"	WOOD FURRING
	10 - 19	1 1/2"	METAL STUD
	20 - 29	2 1/2"	METAL STUD
	30 - 39	3 1/2"	METAL STUD
	40 - 49		METAL STUD
	50 - 59	6"	METAL STUD
W	00 - 09	3/4"	WOOD STUD
	10 - 19	1 1/2"	WOOD STUD
	20 - 29	2 1/2"	WOOD STUD
	30 - 39	3 1/2"	WOOD STUD
	40 - 49		WOOD STUD
	50 - 59	6"	WOOD STUD
	60 - 69	CHASE	WOOD STUD
	70 - 79	BRICK	WOOD STUD
	80 - 89	SPLIT CMU	WOOD STUD
	90 - 99	PRECAST	WOOD STUD
C	00 - 09		CONCRETE WALL
	0 - 19	MASONRY	CONCRETE WALL
	70 - 79	BRICK	CONCRETE WALL
M	00 - 09		MASONRY WALL
	10 - 19	MASONRY	MASONRY WALL
	70 - 79	BRICK	MASONRY WALL

FIRE AND SOUND TEST NUMBERS BASED ON FOLLOWING:

- FIRE RESISTANCE DIRECTORY 1993 EDITION BY UL (UNDERWRITERS LAB.INC)
- FIRE RESISTANCE SOUND CONTROL DESIGN MANUAL 13TH EDITION 1986 BY GYPSUM ASSOCIATIONS
- USG DRYWALL / STEEL FRAMED SYSTEMS SYSTEM FOLDER SA-923, 1992 EDITION BY UNITED STATES GYPSUM COMPANY

GENERAL NOTES FOR TYPES OF WALLS

A. EXTERIOR WALL WOOD STUDS @ PLATES, SPACING AS NOTED ON DRAWINGS

B. INTERIOR WALL PARTITION WOOD STUDS:

1. INTERIOR PARTITION WOOD STUDS SPACED AT MAXIMUM OF 24" ON CENTER (O.C.)
2. AT CHASES WHICH EXCEED 15" IN WITH, USE NEXT SIZE STUD SPACED 12", 16" OR 24" O.C. AS REQUIRED. WHEN FIXTURES ARE MOUNTED ON CHASED WALL; USE 4" WOOD STUDS MAINTAIN FIRE AND ACOUSTICAL INTEGRITY OF PARTITION IN WHICH CHASED WALLS ARE LOCATED.

C. MASONRY WALLS:

1. 4" CMU 100% SOLID.

D. FIRE RATED WALLS:

1. WHEN NON-RATED FIRE WALLS INTERSECT FIRE RATED WALLS; CARRY CONSTRUCTION OF RATED WALLS THROUGH.
2. IF RATED WALL OCCURS BEHIND PLUMBING FIXTURES; INSTALL TYPE X GYPSUM BEFORE FIXTURES.
3. EXTEND HOOD STUD FIRE RATED PARTITIONS FROM FLOOR SLAB TO UNDERSIDE OF FLOOR OR ROOF DECK ABOVE AND COVE WITH TYPE X GYPSUM BOARD FULL HEIGHT. SEAL AT TOP AND BOTTOM.
4. PROVIDE FIRESTOPPING AT PENETRATION OF FIRE RATED WALLS.
5. CUTOUTS FOR ELECTRICAL OUTLETS ON OPPOSITE SIDES OF FIRE RATED WALLS IN SAME STUD SPACE NOT ALLOWED.

E. SOUND INSULATED WALLS:

1. PROVIDE CONTINUOUS 2 1/2" SOUND INSUL. IN STUD WALLS ENCLOSING MECHANICAL ROOMS.
2. PROVIDE CONTINUOUS 2 1/2" OR 3 1/2" SOUND INSUL. IN TENANT SEPARATION WALLS.
3. PROVIDE CONTINUOUS 2 1/2" SOUND INSUL. IN WALLS SEPARATING UNITS.
4. STAGGER CUT-OUTS FOR ELECTRICAL SWITCHES AND OUTLETS TO ALLOW SOUND INSULATION TO PASS AROUND BOXES AT SOUND INSULATED WALLS.

F. BLOCKING:

1. PROVIDE FIRE RETARDANT SOLID WOOD BLOCKING BEHIND GYPSUM BOARD IN STUDS WALLS FOR ATTACHMENT OF BATHROOM ACCESSORIES, STAIR RAILINGS, SPECIAL TRIM DETAILS, WALL CABINETS AND OTHER WALL MOUNTED ITEMS.
2. PROVIDE BLOCKING FOR FUTURE INSTALLATION OF GRAB BARS AT ALL UNITS.

GENERAL NOTES:

1- REFER TO DRAWING A7-02 FOR UL DESIGN ASSEMBLIES

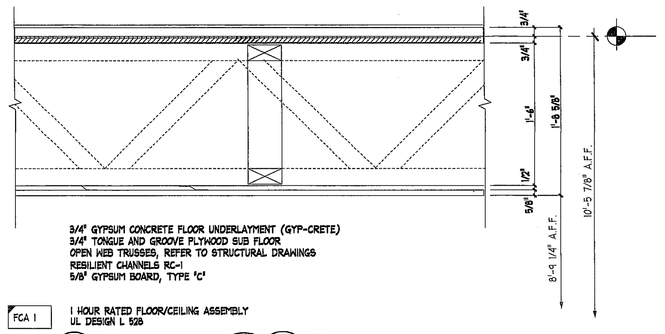
2- REFER TO STRUCTURAL DRAWINGS FOR THERMO-PLY SHEATHING LOCATON AND SPECIFICATIONS, TYPICAL

3- REFER TO STRUCTURAL DRAWINGS FOR STUDS SPECIFICATIONS, SPACING AND DIMENSIONS, TYPICAL.

SPRINKLER SYSTEM INFORMATION

THE SPRINKLER SYSTEM WILL BE MONITORED BY A LISTED, LOCAL CENTRAL STATION AND WILL COMPLY WITH NFIPA, STATE AND LOCAL REQUIREMENTS

FLOOR CEILING ASSEMBLIES



3/4" GYPSUM CONCRETE FLOOR UNDERLAYMENT (GYP-CRETE)
3/4" TONGUE AND GROOVE PLYWOOD SUB FLOOR
OPEN WEB TRUSSES, REFER TO STRUCTURAL DRAWINGS
RESILIENT CHANNELS RC-1
5/8" GYPSUM BOARD, TYPE 'C'

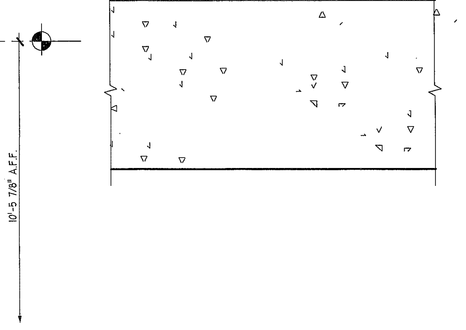
FCA 1 1 HOUR RATED FLOOR/CEILING ASSEMBLY
UL DESIGN L 528

STC INFORMATION

1. CUSHIONED VINYL	STC 57	AS PER REPORT ASTM E-366-90
	FIC 53	MAXXON TEST NO: 6-442-2
2. HARDWOOD FLOOR	FSTC 53	AS PER MILE LAB. TEST 3-17-2000
	FIC 47	AS PER MILE LAB. TEST 3-17-2000
3. CARPET W/ 1/2" PAD	STC 58	MAXXON TEST NO.: 6-462-5
	IIC 74	MAXXON TEST NO.: 6-462-3

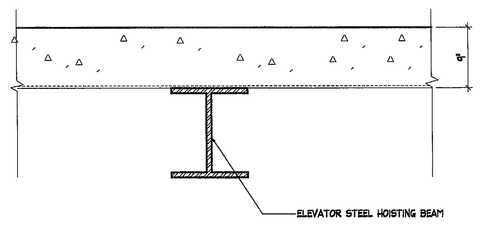
NOTE: ANY HVAC OPENING/PENETRATIONS SHALL COMPLY WITH BOCA CODE, SECTION 713.4

SEE DETAILS SHEETS A1-07, A1-08 FOR PIPE PENETRATIONS.



8" OR 10" CONCRETE SLAB, REFER TO STRUCTURAL DRAWINGS

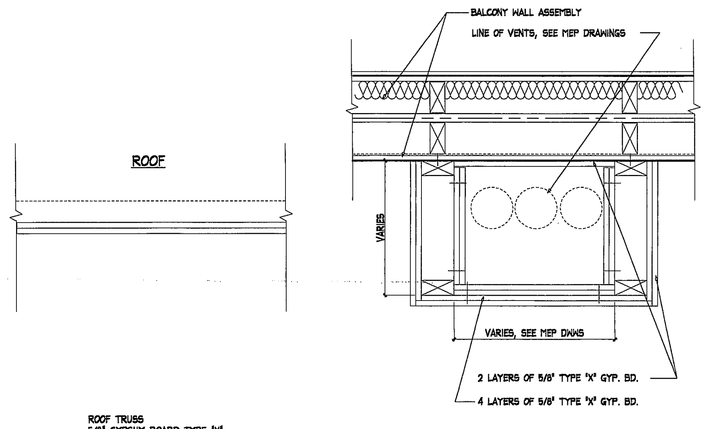
FCA 2 2 HOUR RATED FLOOR/CEILING ASSEMBLY
UL DESIGN J 4000



ELEVATOR SHAFT

2 1/2" CONCRETE DECK
1 1/2" CORRUGATED STEEL DECK
STEEL HOISTING BEAM, REFER TO STRUCTURAL DRAWINGS

FCA 3 1 HOUR RATED FLOOR/CEILING ASSEMBLY
UL DESIGN N 709

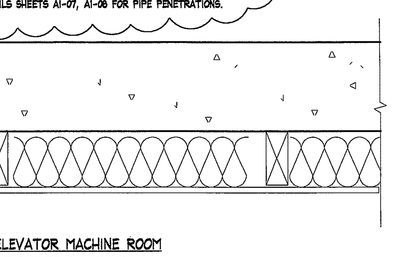


ROOF TRUSS
5/8" GYPSUM BOARD TYPE 'X'
5/8" GYPSUM BOARD TYPE 'X'

FCA 4 1 HOUR RATED ROOF/CEILING ASSEMBLY
BASED ON FM FC 172 2-25-72

BALCONY MECHANICAL CLOSET
2 HOUR FIRE RATED SHAFT DETAIL

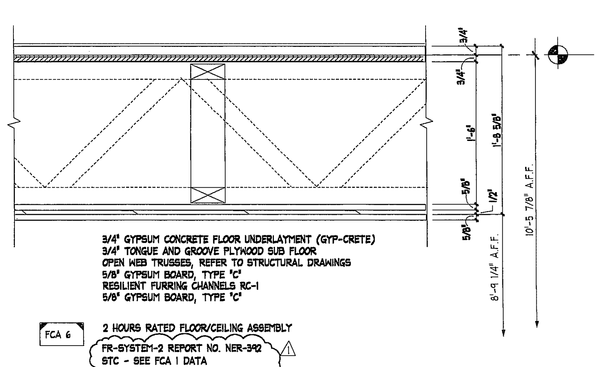
BASED ON UL DESIGN U 301



ELEVATOR MACHINE ROOM
AT BUILDING 1 ONLY

8" OR 10" CONCRETE SLAB, REFER TO STRUCTURAL DRAWINGS
2 x 6 WOOD STUDS BOLTED TO SLAB
6" SOUND INSULATION
5/8" GYPSUM BOARD TYPE 'C'

FCA 5 2 HOUR RATED FLOOR/CEILING ASSEMBLY
BASED ON UL DESIGN J 4000 SIMILAR

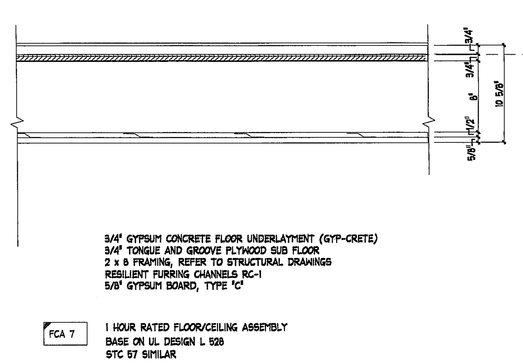


3/4" GYPSUM CONCRETE FLOOR UNDERLAYMENT (GYP-CRETE)
3/4" TONGUE AND GROOVE PLYWOOD SUB FLOOR
OPEN WEB TRUSSES, REFER TO STRUCTURAL DRAWINGS
5/8" GYPSUM BOARD, TYPE 'C'
RESILIENT FURRING CHANNELS RC-1
5/8" GYPSUM BOARD, TYPE 'C'

FCA 6 2 HOURS RATED FLOOR/CEILING ASSEMBLY
FR-S/BTB1-2 REPORT NO. NER-392
STC - SEE FCA 1 DATA

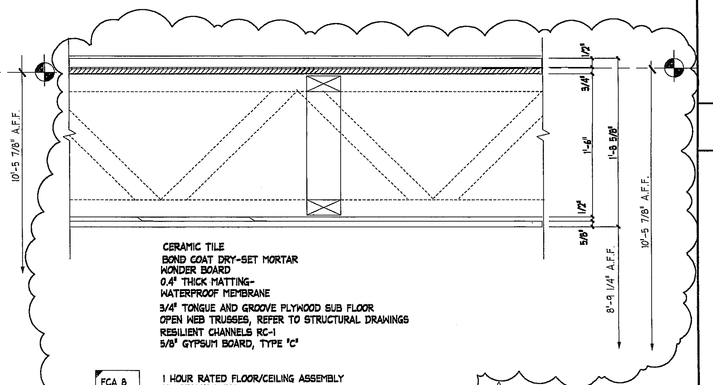
NOTE:

ANY HVAC OPENING/PENETRATIONS SHALL COMPLY WITH BOCA CODE SECTION 713.4.2.3



3/4" GYPSUM CONCRETE FLOOR UNDERLAYMENT (GYP-CRETE)
3/4" TONGUE AND GROOVE PLYWOOD SUB FLOOR
2 x 8 FRAMING, REFER TO STRUCTURAL DRAWINGS
RESILIENT FURRING CHANNELS RC-1
5/8" GYPSUM BOARD, TYPE 'C'

FCA 7 1 HOUR RATED FLOOR/CEILING ASSEMBLY
BASE ON UL DESIGN L 528
STC 57 SIMILAR



CERAMIC TILE
BOND COAT DRY-SET MORTAR
WONDER BOARD
0.4" THICK MATTING-
WATERPROOF MEMBRANE
3/4" TONGUE AND GROOVE PLYWOOD SUB FLOOR
OPEN WEB TRUSSES, REFER TO STRUCTURAL DRAWINGS
RESILIENT CHANNELS RC-1
5/8" GYPSUM BOARD, TYPE 'C'

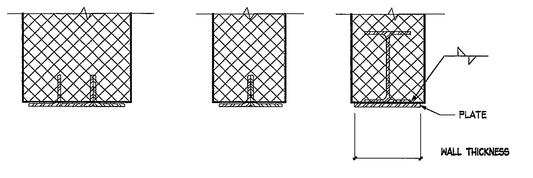
FCA 8 1 HOUR RATED FLOOR/CEILING ASSEMBLY
UL DESIGN L 528
STC 59 BASED ON TAC MANUAL- METHOD RF5II-89

LINTEL SCHEDULE

CLEAR OPENING	LINTEL	REMARCKS
UP TO 5'-0"	L 3 1/2" x 3 1/2" x 5/16"	
OVER 5'-0" TO 6'-0"	L 4" x 3 1/2" x 5/16"	L.L.V.
OVER 6'-0" TO 7'-0"	L 5" x 3 1/2" x 5/16"	L.L.V.
OVER 7'-0" TO 8'-0"	L 6 x 3 1/2" x 3/8"	L.L.V.
OVER 8'-0" TO 10'-0"	WB x 10 + CONT. PLATE	

NOTES:

1- LENGTH OF LINTEL + OPENING + 1'-4" (8" MIN. BEARING EACH END).
2- EXTERIOR LINTELS TO BE GALVANIZED.
3- ALL DOUBLE ANGLES OVER 5'-0" TO BE BOLTED TOGETHER AT MID SPAN.
4- FILL MASONRY SOLID WITH CONCRETE TWO COURSES BELOW BEARING x 1'-4" LONG EACH END.
5- PROVIDE ONE ANGLE FOR EVERY 4' OF MASONRY THICKNESS (UNLESS OTHEWISE NOTE).
6- VERTICAL LEG OF ANGLE TO BE PLACED AGAINST BACK FACE OF MASONRY.



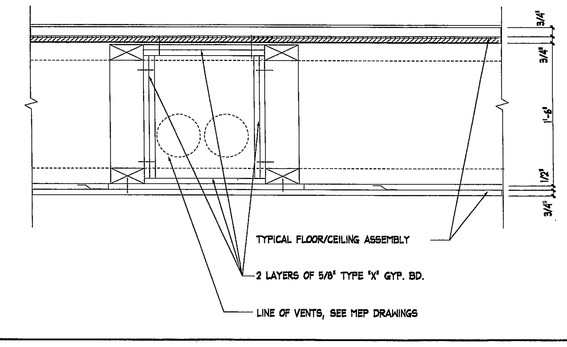
12" WALL 8" WALL WB

TYPICAL LINTEL DETAILS

LINTELS SHOWN SUPPORT MASONRY △ABOVE OPENING ONLY

1 HOUR FIRE RATED VENT CHASE DETAIL

BASED ON UL DESIGN U 305



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GEOTECHNICAL ENGINEER

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COMMONWEALTH OF VIRGINIA
CHRISTIAN JOSEPH LESSARD
4987
ARCHITECT

CHECKED BY :
DATE CHECKED :

NO.	REVISION	DATE
1	COORD. AS PER COUNTY COMMENTS	6/15/00

PLOT TIME: PLOT BY: MOD. TIME: 10/08/99 11:32 AM MOD. BY: clara DWG NAME: P:\JADE\JAD14\Jad14s108.dwg

DRAWING TITLE :
WALL AND FLOOR ASSEMBLIES

PROJECT NAME :
METRO PLACE CONDOS AT DUNN LORING FAIRFAX COUNTY VIRGINIA.

DRAWN BY :	CRC
PROJECT NO. :	JAD-14
DATE :	02/23/00
SCALE :	AS SHOWN

SHEET NO. :
A7-01