1. LIST OF WORK REQUIRING SPECIAL INSPECTION
(PER LACBC & CBC CHAPTER 17, SECTIONS 1704, 1705 & 1707)

- ☒ SOILS COMPLIANCE PRIOR TO FOUNDATION INSPECTION
- ☒ STRUCTURAL CONCRETE OVER 2500 PSI
- ☐ PRESTRESSED CONCRETE
- ☐ STRUCTURAL MASONRY
- ☒ DESIGNER SPECIFIED
- ☐ FIELD WELDING
- ☐ HIGH STRENGTH BOLTING
- ☒ EXPANSION/EPOXY ANCHORS
- ☒ SPRAYED-ON FIREPROOFING

SEISMIC-FORCE-RESISTING SYSTEMS		
SYSTEM	COMPONENT	TYPE OF SPECIAL INSPECTION
☒ HARDY PANELS/FRAMES	BOLTS & WOOD SCREWS	PERIODIC
☒ WOOD SHEAR WALLS	NAILING, SILL BOLTING & HOLDOWN ANCHORS	PERIODIC
☒ WOOD DIAPHRAGM	NAILING	PERIODIC

2. NAME(S) OF INDIVIDUAL(S) OR FIRM(S) RESPONSIBLE FOR THE SPECIAL INSPECTIONS LISTED ABOVE:

A. _____

B. _____

C. _____

3. DUTIES OF THE SPECIAL INSPECTORS FOR THE WORK LISTED ABOVE:

A. _____

_____

B. _____

_____

C. _____

_____

CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A WIND OR SEISMIC FORCE RESISTING SYSTEM/COMPONENT LISTED ABOVE SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE LADBS INSPECTORS AND THE OWNER PRIOR TO THE COMMENCEMENT OF THE WORK ON SUCH SYSTEM OR COMPONENT PER SEC 1706.1

SPECIAL INSPECTION PROGRAM | 5

EARTH MATERIAL PARAMETERS	FOUNDATION BEARING MATERIALS	UNDISTURBED NATURAL SOIL
	FOUNDATION BEARING PRESSURES/PILE SKIN FRICTION	2000 PSF
	COEFFICIENT OF FRICTION [1]	0.3
	PASSIVE EARTH PRESSURE (EFP)	300 PCF
	MAXIMUM PASSIVE EARTH PRESSURE	3000 PSF
CONVENTIONAL CONTINUOUS FOOTING DESIGN	MINIMUM FOUNDATION WIDTH	12 INCHES
	MIN. EMBEDMENT DEPTH INTO BEARING MATERIAL	24 INCHES
INDEPENDENT (PAD) FOOTING DESIGN	MINIMUM FOUNDATION DIMENSIONS (WIDTHxLENGTH)	24in X 24in
	MINIMUM EMBEDMENT DEPTH INTO BEARING MATERIAL	24 INCHES

NOTES:
(1)WHEN COMBINING FRICTIONAL RESISTANCE AND PASSIVE PRESSURE, THE PASSIVE PRESSURE COMPENET SHOULD BE REDUCED BY ONE-THIRD.

NOTES:

1. NEWLY COMPACTED FILL IS TO COMPACTED TO AT LEAST 90 PERCENT OF THE MAXIMUM DENSITY, AT MOISTURE CONTENT THAT IS AT THE OPTIMUM MOISTURE CONTENT OR UP TO THREE PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT.
2. FOR AREAS TO BE PAVED, THE UPPER 12 INCHES OF SOIL GRADE SHOULD BE REMOVED AND RE-COMPACTED TO A MINIMUM OF 95% OF THE RELATIVE DRY DENSITY.
3. EXCAVATIONS FOR FOUNDATIONS SHOULD BE CLEANED OF ALL LOOSE OR UNSUITABLE MATERIAL AND DEBRIS PRIOR TO PLACEMENT OF CONCRETE. FOUNDATION EXCAVATIONS SHALL BE OBSERVED BY THE PROJECT GEOLOGIST/ENGINER PRIOR TO PLACING FORMS OR REINFORCING STEEL.
4. GARAGE SLABS SHOULD BE POURED SEPARATELY FROM THE PERIMETER FOOTINGS AND A POSITIVE SEPARATION WITH EXPANSION JOINT MATERIAL SHOULD BE CONSIDERED. TWO-CAR GARAGE SLABS SHOULD MINIMALLY BE QUARTERED WITH SAW CUTS OR EXPANSION JOINTS APPROXIMATELY ONE-THIRD THE SLAB THICKNESS IN DEPTH. THREE CAR GARAGE SLABS SHOULD BE SIMILARLY DIVIDED INTO SIXTHS.
5. A 4-INCH THICK BASE OF 1/2 INCH OR LARGER CLEAN AGGREGATE SHALL BE PROVIDED FOR THE PROPOSED SLAB ON GRADE.
6. A VAPOR BARRIER SHALL BE PROVIDED IN DIRECT CONTACT WITH CONCRETE FOR THE PROPOSED SLAB ON GRADE.

FOUNDATION DESIGN | 6

(E) – EXISTING
(N) – NEW
A.B. – ANCHOR BOLT
ABV. – ABOVE
ARCH. – ARCHITECTURAL
BLW – BELOW
BLKG. – BLOCKING
BM – BEAM
BOTT. – BOTTOM
BTWN – BETWEEN
CJ – CEILING JOIST
CB – CEILING BEAM
CP – COMPLETE PENETRATION
CLR – CLEAR, CLEARANCE
CMU – CONCRETE MASONRY UNIT
COL. – COLUMN
CONC. – CONCRETE
CONN. – CONNECTION
CONT. – CONTINUOUS
DBL – DOUBLE
DIAG. – DIAGONAL
DRP. – DROP
DWG – DRAWING
DB – DROPPED BEAM
E.F. – EA. FACE
E.W. – EACH WAY
EA. – EACH
E.S. – EACH SIDE
EMBED. – EMBEDMENT
EQ. – EQUAL
EXIST. – EXISTING
FDN – FOUNDATION
FLR – FLOOR
FJ – FLOOR JOIST
FLB – FLUSH BEAM
FLH. – FLUSH
F.O.S. – FACE OF STUD
FRMG – FRAMING
GA. – GAUGE
FTG – FOOTING
HORIZ. – HORIZONTAL
HSS – HOLLOW STRUCTURAL SECTION
HGR – HANGER
KP – KING POST
KS – KING STUD(S)
LLH – LONG LEG HORIZONTAL
LLV – LONG LEG VERTICAL
H.R. – HARD ROCK
LT.WT. – LIGHTWEIGHT
MAX. – MAXIMUM
MECH. – MECHANICAL
MIN. – MINIMUM
NS/FS – NEAR SIDE/FAR SIDE
NTS – NOT TO SCALE
O.C. – ON CENTER
O.H. – OPPOSITE HAND
OPN'G – OPENING
OPP. – OPPOSITE
PA/P.A. – POST ABOVE
PB/P.B. – POST BELOW
P.P. – PARTIAL PENETRATION
PLW/P.W. – PLYWOOD
RB – RIDGE BEAM
R.J. – ROOF JOIST
RR/R.R. – ROOF RAFTER
REINF. – REINFORCEMENT
REQ'D – REQUIRED
SCHED. – SCHEDULE
SHT'G – SHEATHING
SIM. – SIMILAR
SPECS. – SPECIFICATIONS
SPCG – SPACING
SQ. – SQUARE
STIFF. – STIFFENER
STGR – STRINGER
STL – STEEL
SYM. – SYMMETRICAL
T&B – TOP AND BOTTOM
THK. – THICK
TOC – TOP OF CONCRETE
TOF – TOP OF FOOTING
TOS – TOP OF STEEL
TMR – TRIMMER
TYP. – TYPICAL
TS – TUBE STEEL
U.N.O. – UNLESS NOTED OTHERWISE
VERT. – VERTICAL
V.I.F. – VERIFY IN FIELD
W/ – WITH
W.P. – WORK POINT
WT. – WEIGHT
WWF – WELDED WIRE FABRIC

SYMBOLS:
ø – ROUND, DIAMETER
℄ – PLATE
℄ – CENTERLINE
∠ – ANGLE
– POUNDS

ABBREVIATIONS | 10

WOOD:

1. ALL LUMBER USED FOR STRUCTURAL PURPOSES SHALL BE "DOUGLAS FIR LARCH". ALL MEMBERS, 2" TO LESS THAN 3" THICK SHALL BE "NO. 2" GRADE OR BETTER. ALL MEMBERS 3½" OR GREATER SHALL BE NO. 1 GRADE STRUCTURAL. STUD FRAMING SHALL BE "NO. 2" GRADE OR BETTER.
2. ALL PLYWOOD USED FOR STRUCTURAL PURPOSES SHALL CONFORM TO PRODUCT STANDARD PS 1-95 "SHEATHING & SINGLE FLOOR," EXPOSURE I. PLYWOOD MAY BE SUBSTITUTED WITH OSB OF SAME OR GREATER GRADE.
3. ALL RAFTERS GREATER THAN 8" IN DEPTH SHALL HAVE 2x3 CROSSBRIDGING, 2x SOLID BLOCKING, OR EQUIVALENT METAL CROSSBRIDGING PLACED BETWEEN THEM IN A CONTINUOUS LINE. THE DISTANCE BETWEEN LINES OF BRIDGING OR BETWEEN BRIDGING AND END BEARING SHALL NOT EXCEED 10'-0".
4. BOLT HOLES IN WOOD SHALL BE 1/16" LARGER IN DIAMETER THAN NOMINAL BOLT SIZE. MEMBERS REQUIRING LAG BOLTS SHALL BE PREDRILLED WITH HOLES EQUAL TO APPROXIMATELY 70% OF THE BOLT SHANK DIAMETER. REFER TO DETAIL 10/S-1.0 FOR LAG BOLT INSTALLATION.
5. CUT WASHERS SHALL BE USED UNDER THE HEADS OF ALL BOLTS AND WASHERS BEARING ON WOOD.
6. INDIVIDUAL PLYWOOD SHEETS SHALL NOT BE LESS THAN 2'-0" IN THE LEAST DIMENSION NOR LESS THAN 8 SQUARE FEET IN AREA. USE FULL SHEETS WHEREVER POSSIBLE.
7. HORIZONTAL FRAMING MEMBERS SHALL NOT BE NOTCHED OR DIPPED IN ANY MANNER UNLESS SPECIFICALLY DETAILED, OR AS APPROVED BY THE ARCHITECT/ ENGINEER.
8. ALL WOOD FRAMING CONNECTORS SHALL BE "STRONG-TIE" SERIES AS MANUFACTURED BY THE SIMPSON CO. OR EQUAL. MANUFACTURERS BROCHURES OR CATALOGS, INDICATING EACH TYPE OF CONNECTOR AND ITS ALLOWABLE WORKING LOAD VALUE SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO INSTALLATION. EACH TYPE OF CONNECTOR AND ITS LOAD VALUE SHALL HAVE AN APPROVAL BY THE INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS. (CITY OF LOS ANGELES RR#: 25711, 25712, 25713, 25714, 25716, 25718, 25719, 25720, 25725, 25726, 25800, 25801, 25802, 25803, 25804, 25806, 25807, 25814, 25818, 25827, 25828, 25851).
9. ALL NAILS SHALL BE COMMON WIRE NAILS, UNLESS NOTED OTHERWISE. FOR MINIMUM NAILING, SEE SCHEDULE 6/S-1.2, AND TABLE 23-II-B-1 OF THE UNIFORM BUILDING CODE.
10. PRE-BORE HOLES FOR NAILS WHERE MEMBERS TEND TO SPLIT.
11. REFER DETAIL 4/S-4.2 NOTE 6 FOR MACHINE APPLIED NAILING REQUIREMENTS.
12. RETIGHTEN SILL BOLT NUTS BEFORE CLOSING IN STUD WALLS.
13. WHEREVER BOLTS ARE SPECIFIED, THERE SHALL BE A MINIMUM OF TWO (2) BOLTS EACH PIECE WITH ONE (1) BOLT LOCATED WITHIN 12" OF END OF EACH PIECE.
14. SILLS RESTING ON CONCRETE WHICH ARE 1'-6" OR LESS ABOVE THE GROUND SHALL BE PRESSURE TREATED DOUGLAS FIR, OR FOUNDATION GRADE REDWOOD.
15. REFER TO DETAIL 8/S-4.1 FOR TYPICAL SHEAR WALL CONSTRUCTION.
16. ALL STUDS AND HEADERS SHALL BE GRADE MARKED.
17. ALL EXPOSED BOLTS, PROTRUDING THROUGH THE NUT OVER 1/4" SHALL BE CUT BACK TO FACE OF NUT AND GROUND OR FILED SMOOTH.
18. EXPOSED WOOD SCREWS SHALL BE FLAT HEAD AND COUNTERSUNK.
19. PLACE SOLID BLOCKING BETWEEN JOISTS OR RAFTERS AT ALL SUPPORTS. BLOCKING TO BE IN ONE PIECE AND SAME SIZE AS JOIST OR RAFTERS, UNLESS NOTED OTHERWISE ON THESE DRAWINGS.
20. STEEL MEMBERS HAVING MORE THAN ONE BOLT INTO A WOOD MEMBER SHALL BE DRILLED AS FOLLOWS: HOLES IN WOOD SHALL BE DRILLED USING STEEL PLATES AS TEMPLATES. WHERE THICKNESS OF WOOD MEMBERS EXCEEDS 5-1/2" AND STEEL PLATES ARE USED ON BOTH SIDES OF WOOD MEMBER, FIELD DRILL ONE SIDE PLATE USING THE OTHER PLATE AND WOOD MEMBERS AS TEMPLATE.
21. ALL PARTITION WALLS PARALLEL TO JOISTS SHALL BE SUPPORTED BY DOUBLE FLOOR JOIST. ALL PARTITION WALL PERPENDICULAR TO FLOOR JOISTS SHALL BE SUPPORTED OVER 4x4 BLOCKING WITH "Z' CLIP EACH END.
22. ALL PARALLEL STRAND LUMBER (PSL) SHALL BE 2.0E, 2900Fb BY TRUS JOIST MACMILLAN (ICC# 1387, LARR #25202). ALL MICROLLAM LAMINATED VENEER LUMBER (LVL) SHALL BE 1.9E, 2600Fb BY TRUS JOIST MACMILLAN. (ICC #1384, COLA RR #25202). ALL TJI FLOOR JOISTS SHALL BE BY TRUS JOIST MACMILLAN (ICC #1153, COLA RR #25538).
23. PROVIDE FIRE BLOCKING IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, (AT 10' INTERVALS BOTH VERTICAL AND HORIZONTAL), AND IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, BETWEEN ATTIC AND CHIMNEY CHASE.
24. BEARING WALLS STUDS CANNOT BE NOTCHED MORE THAN 25% OF THEIR WIDTH. BORED HOLES CANNOT HAVE A DIAMETER GREATER THAN 40% OF THE STUD WIDTH.
25. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING. FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANEL EDGES. PLYWOOD SPANS SHALL CONFORM WITH TABLE 2304.7.
26. ALL DIAPHRAGM AND SHEAR WALL NAILING SHALL UTILIZE COMMON NAILS WITH FULL HEADS.
27. ALL BOLTS HOLES SHALL BE DRILLED 1/32" TO 1/16" OVERSIZED.
28. GLUE LAM BEAMS MUST BE FABRICATED IN A LADBS LICENSED SHOP, AND SHALL BE OF D/F No.1 LAMINATION AND GRADE PER PLAN. ALL GLUE LAM BEAMS SHALL BE 24F-V8.

WOOD NOTES | 10

GENERAL NOTES:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND TO CROSS-CHECK DETAILS AND DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH RELATED DRAWINGS. FLOOR AND WALL OPENINGS, SLEEVES, VARIATIONS IN THE STRUCTURAL SLAB ELEVATIONS, AND OTHER ARCHITECTURAL, MECHANICAL, AND ELECTRICAL REQUIREMENTS MUST BE COORDINATED BEFORE THE CONTRACTOR PROCEEDS WITH CONSTRUCTION.
2. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE AND SAFETY OF WORKMEN DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO BRACING OR SHORING FOR CONSTRUCTION LOADS OF FRAMING MEMBERS OR CANTILEVER MEMBERS OR EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR STRUCTURAL ENGINEER DO NOT INCLUDE INSPECTION OF THESE ITEMS AND DOES NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES FOR THE PERFORMANCE OF THE WORK.
3. THE ARCHITECT WILL INTERPRET THE INTENT OF THE DOCUMENTS IN CASE OF POSSIBLE CONFLICT OR DISCREPANCY.
4. DETAILS NOTED AS TYPICAL ON STRUCTURAL SHEETS SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE.
5. WHERE NO SPECIFIC DETAIL IS SHOWN, THE FRAMING OR CONSTRUCTION SHALL BE IDENTICAL OR SIMILAR TO THAT INDICATED FOR LIKE CASES OF CONSTRUCTION ON THIS PROJECT.
6. THE DEPTH, EXTENT, AND LOCATION OF ALL FLOOR DEPRESSIONS, ELEVATED AREAS, OR OTHER IRREGULARITIES SHALL BE COORDINATED WITH THE ARCHITECTURAL OR APPLICABLE DRAWINGS. THE STRUCTURAL DRAWINGS DO NOT NECESSARILY INDICATE ALL OF THESE ITEMS.
7. STRUCTURAL PLANS INDICATE ONLY THE APPROXIMATE LOCATION OF MECHANICAL, ELECTRICAL AND OTHER EQUIPMENT, AS WELL AS RELATED AUXILIARY FRAMING NECESSARY TO SUPPORT SUCH GEAR. THE FINAL POSITIONING OF THESE ITEMS IS DEPENDENT UPON THE EQUIPMENT SELECTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WORK BETWEEN SUBCONTRACTORS AND CRAFTS IN THIS REGARD, AND PROVIDING NECESSARY DIMENSIONS IN A TIMELY MANNER TO ALL PARTIES AND DETAILERS INVOLVED.
8. WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE 2016 CALIFORNIA BUILDING CODE, AS AMENDED BY THE CITY OF JURISDICTION.
9. (E) INDICATES EXISTING. OTHER STRUCTURAL MEMBERS WITHOUT ANY PRECEDING NOTATION OR SHOWN AS (N) INDICATES A NEW MEMBER.
10. MINIMUM MANDATORY FIRE PROTECTION REQUIREMENT FOR STRUCTURAL FIELD WELDING: PROVIDE PORTABLE FIRE EXTINGUISHER AT POINT OF WELDING WORK. KEEP EXTINGUISHER IN READY CONDITION AT ALL TIMES DURING WELDING ACTIVITY.
11. DESIGN PARAMETERS:

DESIGN CODE: CALIFORNIA BUILDING CODE 2016 EDITION
ROOF LIVE LOAD: 20 PSF. (REDUCIBLE)
ROOF DEAD LOAD: 19 PSF. (WITH SOLAR PANEL)
ROOF DECK LIVE LOAD: 60 PSF
ROOF DECK DEAD LOAD: 19 PSF
ROOF LIVE LOAD: 20 PSF
ROOF DEAD LOAD: 14 PSF
FLOOR LIVE LOAD: 40 PSF
FLOOR DEAD LOAD: 17 PSF
FLOOR DECK LIVE LOAD: 60 PSF
FLOOR DECK DEAD LOAD: 22 PSF

EARTHQUAKE DESIGN DATA:

a) SEISMIC IMPORTANCE FACTOR= 1.0
OCCUPANCY CATEGORY= II
b) Ss= 0.666 S1= 1.876
c) SITE CLASS= D (DEFAULT)
d) SDS= 1.500 SD1= 0.755
e) SEISMIC DESIGN CATEGORY= D
f) BASIC SEISMIC-FORCE-RESISTING SYSTEM(S)= WOOD STRUCTURAL SHEAR PANELS
g) DESIGN BASE SHEAR = 19.4K (STRENGTH)
TOTAL WEIGHT OF BUILDING = 64.58K
h) SEISMIC RESPONSE COEFFICIENT(S), Cs = 0.300 (STRENGTH)
i) RESPONSE MODIFICATION FACTOR(S), R = 6.5
j) ANALYSIS PROCEDURE USED= EQUIVALENT LATERAL LOAD
k) REDUNDANCY FACTOR USED= 1.3
l) DESIGN LOAD BEARING VALUE OF SOIL= 1500 PSF FOR PAD/COLUMN FOOTINGS (W/ ⅓ INCREASE)
WIND: 100 MPH EXPOSURE "C"

12. PLAN AND DETAILS SHALL NOT BE SCALED. DIMENSIONS AND LOCATION OF STRUCTURAL MEMBERS AND ELEMENTS SHALL BE OBTAINED FROM OR COORDINATED WITH ARCHITECTURAL DRAWINGS, OR AS NOTED ON PLAN AND DETAILS.
13. THE ENGINEER'S PROFESSIONAL RESPONSIBILITY WITH RESPECT TO THE PROJECT IS LIMITED TO THE WORK DESCRIBED ON THESE DRAWINGS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE BUILDING, AS WELL AS FOR INSPECTIONS AND SHOP DRAWINGS TO ASSURE CONSTRUCTION OF THE WORK IS IN COMPLIANCE WITH THESE DRAWINGS AND SPECIFICATION. CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONJUNCTION WITH THIS PROJECT EXCEPT FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE ENGINEER.
14. CONTRACTORS RESPONSIBLE FOR THE CONSTRUCTION OF A WIND OR SEISMIC FORCE RESISTING SYSTEM/COMPONENT LISTED IN THE "STATEMENT OF SPECIAL INSPECTION" SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE CITY DEPARTMENT OF BUILDING AND SAFETY INSPECTORS AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON SUCH SYSTEM OR COMPONENT PER SEC. 1706.1
15. STRUCTURAL OBSERVATIONS AND/OR INSPECTIONS BY OUR ENGINEERS ARE STRICTLY FOR GENERAL CONFORMANCE OF THE STRUCTURAL INFORMATION CONTAINED ON OUR STRUCTURAL DRAWINGS. OTHER INFORMATION SHOWN ON THE STRUCTURAL DRAWINGS AS ARCHITECTURAL, MECHANICAL, CIVIL, SURVEYING, AND ANY OTHER OBTAINED FROM OTHER CONSULTANTS SHALL BE CHECKED BY THE RESPECTIVE CONSULTANT. OUR FIELD OBSERVATIONS DO NOT INCLUDE INSPECTION OF DIMENSIONAL ARCHITECTURAL INFORMATION (LOCATION, LENGTH, THICKNESS, DEPRESSION, AND ELEVATION) OF WALLS, FLOORS, AND BUILDING STRUCTURE.
16. STRUCTURAL DETAILS AND NOTES PART OF THESE DRAWINGS DO NOT INCLUDE ANY ROOFING OR WATERPROOFING SPECIFICATIONS. ROOFING AND WATERPROOFING REQUIREMENTS ARE NOT PART OF THE SCOPE OF THIS WORK. ROOFING AND/OR WATERPROOFING SPECIFICATIONS SHALL BE OBTAINED FROM ARCHITECTURAL DWGS, MECHANICAL DWGS, AND/OR WATERPROOFING CONSULTANT IF NECESSARY.
17. ALL THE INFORMATION INCLUDED ON THESE DRAWINGS IS OF STRUCTURAL ENGINEERING NATURE IN ACCORDANCE WITH THE STANDARD OF CARE IN THE COMMUNITY. NO ENGINEERING SERVICES OR INFORMATION SUCH AS ARCHITECTURAL, GEOTECHNICAL, CIVIL, WATER/MOISTURE PROOFING, MECHANICAL, AND ELECTRICAL OR FIRE PROTECTION IS INCLUDED ON THIS DRAWINGS. IF SUCH SERVICES ARE REQUIRED, A QUALIFIED LICENSED ENGINEER IN ANY OF THESE FIELDS, OTHER THAN STRUCTURAL, OR LICENSED ARCHITECT SHALL BE RETAINED.
18. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. IF CLARIFICATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
19. ROOF/FLOOR TRUSSES, FREE STANDING BLOCK WALLS, POOL, ELEVATOR, AND SOLAR PANELS AND SITE PREP. ARE UNDER SEPARATE PERMITS.
20. THE DESIGN OF THIS STRUCTURE AND ITS FOUNDATION ELEMENTS HAS BEEN BASED ON THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER OF RECORD, OR STANDARD ENGINEERING PRACTICE. THE STRUCTURE AND ITS ELEMENTS MAY EXPERIENCE DIFFERENTIAL SETTLEMENT, VERTICAL AND/OR HORIZONTAL DISPLACEMENT DUE TO VERTICAL LOAD AND/OR SOIL PRESSURE. THE STRUCTURAL DESIGN OF THIS STRUCTURE IS INTENDED TO MINIMIZE THE AFOREMENTIONED LONG TERM DISPLACEMENTS, BUT NOT TO ELIMINATE THEM. THE ABOVE-MENTIONED DISPLACEMENTS MAY CAUSE VISIBLE CRACKS OR DAMAGE ON SOME OF THE ELEMENTS AND MATERIALS OF THE BUILDING OR STRUCTURE.
21. STRUCTURAL DRAWINGS AND DETAILS ARE SUBJECT TO CHANGE DURING CITY AGENCIES REVIEW. PURCHASING OF MATERIALS AND/OR CONSTRUCTION BEFORE CITY APPROVED DOCUMENTS ARE OBTAINED ARE AT THE GENERAL CONTRACTOR'S OWN RISK. GENERAL CONTRACTOR SHALL REVIEW ALL PLANS AND DETAILS BEFORE BEGINNING CONSTRUCTION FOR CLARITY OF STRUCTURAL DRAWINGS INTENT. GENERAL CONTRACTOR SHALL CONTACT STRUCTURAL ENGINEER AFTER REVIEW OF DRAWINGS IN A TIMELY MANNER FOR PROPOSED REVISIONS OR SUBSTITUTIONS BEFORE PURCHASING OF MATERIALS OR INITIATING CONSTRUCTION. STRUCTURAL DETAILS MAY BE REVISED DURING CONSTRUCTION TO FACILITATE MEMBERS CONNECTIONS PER EXISTING FIELD CONDITIONS, AND/OR AS SUGGESTED PER GENERAL CONTRACTOR AFTER INITIAL AFOREMENTIONED REVIEW OF CONSTRUCTION DOCUMENTS. A MINIMUM 10% ALLOWANCE OF CONSTRUCTION COST SHALL BE SET FOR POSSIBLE REVISIONS TO STRUCTURAL DETAILS AFTER GENERAL CONTRACTOR'S DRAWINGS REVIEW.

SPECIAL INSPECTION BY A DEPUTY INSPECTOR IS REQUIRED FOR THE FOLLOWING ITEMS:
SPECIAL INSPECTION: (PER LACBC CHAPTER 17, SECTION 1701.5)

- ☒ FIELD WELDING
- ☒ STRUCTURAL CONCRETE WITH f'c GREATER THAN 2500 PSI.
- ☒ EXPANSION/EPOXY ANCHORS & OTHER HIGH STRENGTH BOLTING
- ☐ SPRAYED ON FIREPROOFING
- ☐ HIGH STRENGTH MASONRY
- ☐ HIGH-LIFT GROUTING
- ☒ PRE-STRESSED CONCRETE
- ☒ LATERAL FORCE RESISTING FRAMES
- ☐ PILLING, DRILLED PIERS, CAISSONS AND CONNECTING GRADE BEAMS
- ☒ PREFAB SHEAR WALL ANCHOR BOLT
- ☒ SHEAR WALL TYPES 3 THRU 8

GENERAL NOTES & SHEET INDEX | 16

REVISIONS: 1 2 4 5

MATERIALS

- CAST-IN PLACE CONCRETE
- CONCRETE BLOCK
- EARTH
- PLYWOOD SHEATING

SYMBOLS

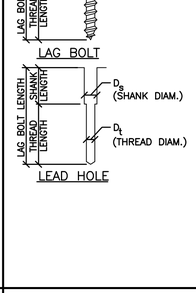
- NUMBER REFERENCE / SECTION OR DETAIL / SHEET REFERENCE
- NUMBER REFERENCE / FULL HEIGHT SECTION / SHEET REFERENCE
- NUMBER REFERENCE / WALL ELEVATION / SHEET REFERENCE
- FINISH ELEVATION

LEGEND | 13

CONCRETE:

1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS PER DETAIL 15/S-1.1
2. LOCATION OF ALL CONSTRUCTION JOINTS SHALL BE APPROVED BY ARCHITECT OR STRUCTURAL ENGINEER.
3. NO PIPES OR DUCTS SHALL BE PLACED ON STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED. SEE MECHANICAL AND/OR ELECTRICAL DRAWINGS FOR LOCATION OF SLEEVES THROUGH WALLS AND FLOORS.
4. ALL REINFORCING STEEL DOWELS, ANCHOR BOLTS, HOLDOWNS, AND OTHER INSERTS SHALL BE SECURED IN POSITION PRIOR TO POURING CONCRETE.
5. ALL CONCRETE SHALL BE ROCK CONCRETE CONFORMING TO A.S.T.M. C33, EXCEPT LIGHTWEIGHT CONCRETE, AS NOTED ON THE DRAWINGS, SHALL CONFORM TO A.S.T.M. C330. CEMENT SHALL BE TYPE II CONFORMING TO A.S.T.M. C150.
7. EXISTING CONCRETE SURFACES RECEIVING CONCRETE SHALL BE HEAVY SANDBLASTED OR CHIPPED TO A SOUND SURFACE AND TO A 1/4" AMPLITUDE ROUGHNESS.
8. FLOOR SHALL BE MONITORED BY TRANSIT LEVEL OR LASER DURING CONCRETE PLACEMENT TO MAINTAIN LEVEL FLOOR TO WITHIN 1/4" APPROXIMATELY.
9. THE QUANTITIES OF MATERIALS SHALL BE CERTIFIED BY A LICENSED WEIGHTMASTER AND SUBMIT COPY OF WEIGHTMASTER CERTIFICATE.
10. REFER TO ACHITECT'S DETAIL DRAWINGS FOR SPECIAL FINISHES, AND ALL MOULDS, GROOVES, REVEALS, CHAMFERS, CLIPS, GROUNDS, ORNAMENTS, AND OTHER INSERT TO BE CAST IN CONCRETE.

CONCRETE NOTES | 14



DIAM. "D"	LEAD HOLE	
	D_S	D_t
1/4"ø	1/4"ø	3/16"ø
3/8"ø	3/8"ø	1/4"ø
1/2"ø	1/2"ø	5/16"ø
5/8"ø	5/8"ø	7/16"ø
3/4"ø	3/4"ø	1/2"ø

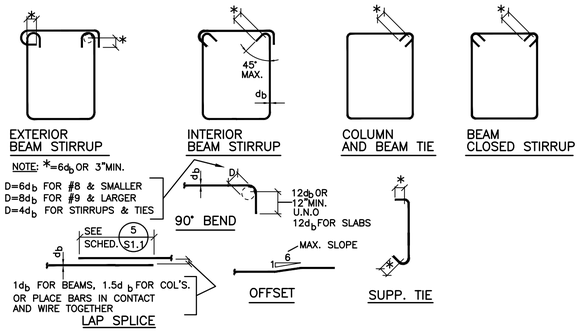
NOTE:
1. ALL LAG BOLTS SHALL BE INSTALLED IN PRE-DRILLED LEAD HOLE.
2. LAG BOLTS SHALL BE TURNED BY A HAND WRENCH OR BY A POWER TORQUE WRENCH.
3. LAG BOLTS SHALL NOT BE HAMMERED!!
4. WHERE FULL THREADED BOLTS ARE INDICATED PROVIDE LEAD HOLE FOR DIAM. "D FOR FULL DEPTH.
5. PROVIDE WASHER UNDER HEAD FOR BOLT HEAD IN CONTACT WITH WOOD.

LAG BOLTS | 15

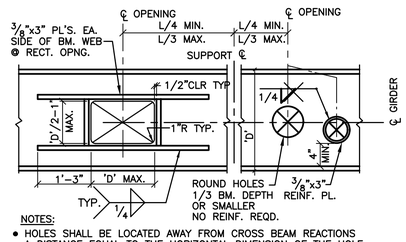
REINFORCING STEEL:

1. REINFORCING STEEL SHALL BE A.S.T.M. A-615 GRADE 60, ASTM A706 FOR WELDED REBAR & GRADE BEAM & PILE REINF.
2. REINFORCING BARS MAY BE SPLICED WITH A LAP INDICATED ON "EMBEDMENT AND SPLICE SCHEDULES" THIS SHEET 6/S1.1, UNLESS OTHERWISE NOTED ON THESE DRAWINGS. ALL SPLICE LOCATIONS SHALL BE CLEARLY SHOWN ON SHOP DRAWINGS AND APPROVED BEFORE FABRICATION
3. DOWELS SHALL BE PROVIDED AT ALL POUR JOINTS AND SHALL BE THE SAME SIZE AND SPACING AS REINFORCING DIRECTLY BEYOND POUR JOINTS, UNLESS NOTED OTHERWISE.
4. ALL REINFORCING STEEL SHALL BE SUPPORTED IN CONFORMANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION".
5. INSTALLATION OF REINFORCING STEEL SHALL HAVE SPECIAL INSPECTION.
6. CLEARANCE BETWEEN PARALLEL BARS IN A LAYER SHALL BE NOT LESS THAN 1", NOR 1" BAR DIA., NOR 1-1/2 x MAX. AGGREGATE SIZE. BARS IN SECOND LAYER SHALL BE DIRECTLY ABOVE BARS IN FIRST LAYER, MIN. DISTANCE BETWEEN LAYERS = 1".

REINFORCING STEEL NOTES | 1

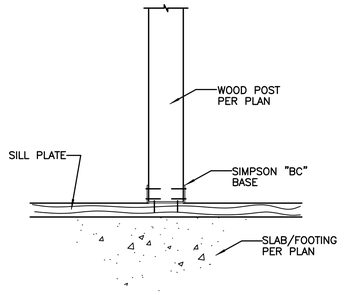


REBAR BENDING AND SPLICE | 2



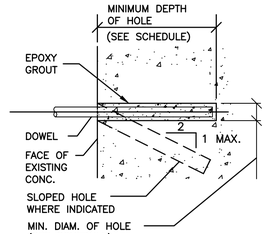
NOTES:
- HOLES SHALL BE LOCATED AWAY FROM CROSS BEAM REACTIONS A DISTANCE EQUAL TO THE HORIZONTAL DIMENSION OF THE HOLE 1'-6" MIN.
- HOLE LOCATIONS SHALL BE SUBMITTED FOR APPROVAL TO THE STRUCTURAL ENGINEER.

TYP. STL BM PENETRATION | 5



POST TO SILL CONNECTION | 6

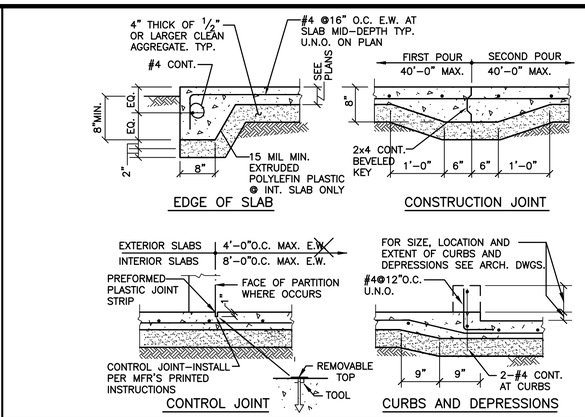
PROCEDURE:
1. DRILL HOLE OF PROPER DIAMETER AND DEPTH USING A CARBIDE TIPPED DRILL OR CORING BIT. AVOID ANY EXISTING REINFORCING STEEL BY RELOCATING HOLE SLIGHTLY.
2. CLEAN HOLE THOROUGHLY BY VACUUM OR AIR PRESSURE.
3. MAKE SURE THAT HOLE IS DRY AND CLEAN BEFORE GROUTING.
4. PLACE EPOXY GROUT IN HOLE WITH CAULKING GUN OR SIMILAR EQUIPMENT. STARTING AT BOTTOM, FILL HOLE APPROX. 2/3 FULL.
5. COAT DOWEL WITH SAME EPOXY GROUT AND INSERT INTO HOLE, FORCING MATERIAL AROUND THE SIDES OF THE BAR AND COMPLETELY FILLING ALL VOIDS.
6. PROVIDE SUPPORT FOR DOWEL BY TYING TO REBAR OR OTHER ELEMENT UNTIL GROUT HAS CURED.
7. EPOXY GROUT SHALL BE: HILTI HIT RE500 (ICC ESR-2322) (LARR #25700) OR SIMPSON SET-XP (ICC ESR-2508) (LARR #25744)
8. SPECIAL INSPECTION REQUIRED.
9. USE EPOXY GROUT PER THIS DETAIL UNLESS GROUT TYPE INDICATED ON DETAIL.



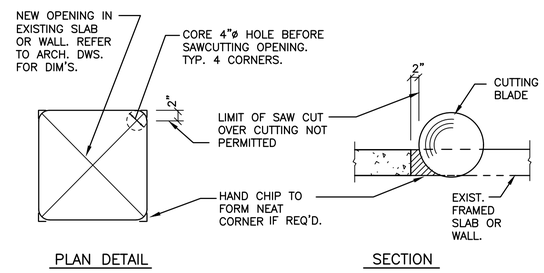
BOLT SIZE	BIT. DIA.	MIN. DEPTH U.N.O.
3/8"	7/16"	2.43
1/2"	9/16"	2.81
5/8"	3/4"	3.14
3/4"	7/8"	3.44
7/8"	1"	3.71
1"	1 1/8"	4.0
1 1/4"	1 3/8"	5.0

BAR SIZE	BIT. DIA.	MIN. DEPTH U.N.O.
#3	1/2"	2.43
#4	5/8"	2.81
#5	3/4"	3.14
#6	7/8"	3.44
#7	1"	3.71
#8	1 1/8"	4.00
#9	1 3/8"	4.50
#10	1 1/2"	5.00

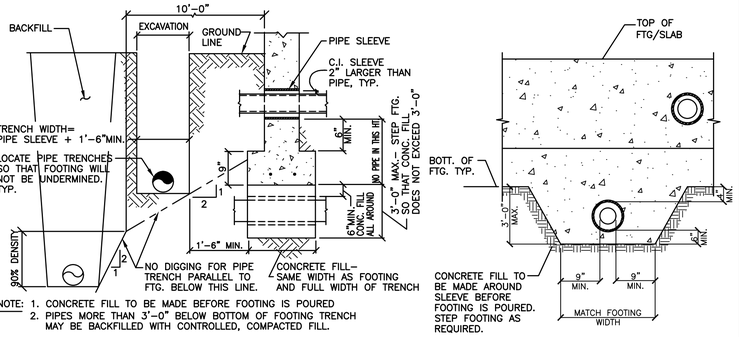
EPOXY BOLT/REBAR | 7



SLAB ON GRADE | 4

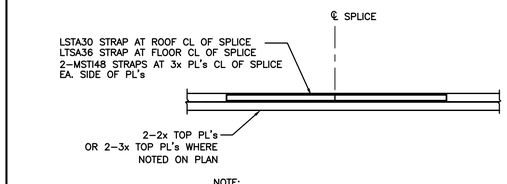


SAWCUT IN SLAB OR WALL | 8



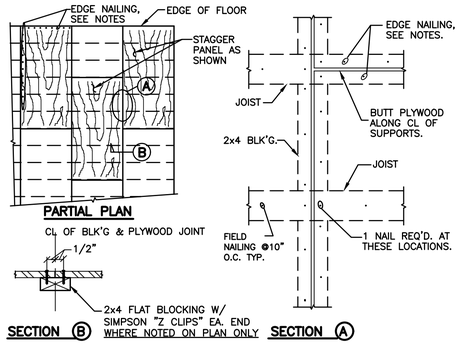
NOTE: 1. CONCRETE FILL TO BE MADE BEFORE FOOTING IS POURED
2. PIPES MORE THAN 3'-0" BELOW BOTTOM OF FOOTING TRENCH MAY BE BACKFILLED WITH CONTROLLED, COMPACTED FILL.

PIPE AT CONCRETE FOOTING | 9



NOTE:
1. PREDRILL HOLES TO AVOID PLATE SPLITTING IF NECESSARY.

TOP PLATE SPLICE | 10



PLYWOOD FLOOR CONSTRUCTION:

MATERIAL:

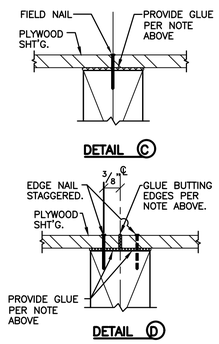
PLYWOOD: 3/4" MIN. (SEE PLAN) "SHEATHING & SINGLE-FLOOR" (T&G) PLYWOOD, (40/30) CONFORMING TO U.S. PRODUCT STD PS1-95

NAILS: 10d COMMON, RING OR SPIRAL SHANK, FULL HEAD
BOUNDARY NAIL: @ 4" O.C. U.N.O. ON PLAN
EDGE NAIL: @ 6" O.C. U.N.O. ON PLAN
FIELD NAIL: @ 12" O.C.

ADHESIVE: CONFORM TO AMERICAN PLYWOOD ASSOCIATION SPECIFICATION AFG-01. ADHESIVE SHALL BE CERTIFIED AS CONFORMING BY A TESTING AGENCY ACCEPTED BY THE FEDERAL HOUSING ADMINISTRATION. IN ACCORDANCE WITH PROCEDURES GIVEN IN HUD-FHA USE OF MATERIALS BULLETIN UM-60.

EXECUTION:
1. APPLY A BEAD OF GLUE ABOUT 1/4 INCH IN DIAMETER TO ALL CONTACT/BEARING SURFACES. ON WIDE AREAS APPLY GLUE IN SERPENTINE PATTERN.
2. APPLY TWO BEADS OF GLUE ON JOISTS WHERE PANEL ENDS BUTT.
3. APPLY GLUE PROGRESSIVELY TO BUTTING EDGES OF PANELS AND INTO GROOVED EDGES OF TOUNGE AND GROOVE PANELS AS WORK PROCEEDS.
4. COMPLETE NAILING OF EACH PANEL BEFORE GLUE SETS.

SEE NOTES 3, 4, 5, 6, & 7 IN DETAIL 6/S-4.1



PLYWOOD FLOOR SHEATHING | 12

GR. 60 REBAR SPLICE AND EMBED- SCHEDULE A																				
BAR#	CONC. f'c =2500PSI					BAR#	CONC. f'c =3000PSI					BAR#	CONC. f'c =4000PSI				
	SPLICE		EMBEDMENT				SPLICE		EMBEDMENT				SPLICE		EMBEDMENT		
	TOP	CONTACT	OTHER	TOP	OTHER		TOP	CONTACT	OTHER	TOP	OTHER		TOP	CONTACT	OTHER	TOP	OTHER
3	46	35	23	23	18	3	42	32	21	21	16	3	36	28	18	18	14
4	61	47	31	31	24	4	56	43	28	28	22	4	48	37	25	25	19
5	76	59	39	39	30	5	69	53	36	36	27	5	60	46	31	31	24
6	91	70	47	47	36	6	83	64	43	43	33	6	72	55	37	37	28
7	133	102	68	68	53	7	121	93	62	62	48	7	105	81	54	54	42
8	152	117	78	78	60	8	139	107	71	71	55	8	120	92	62	62	47
9	171	132	88	88	68	9	156	120	80	80	62	9	135	104	69	69	53
10	190	146	98	98	75	10	174	134	89	89	68	10	150	116	77	77	59
11	209	161	107	107	83	11	191	147	98	98	75	11	165	127	85	85	65

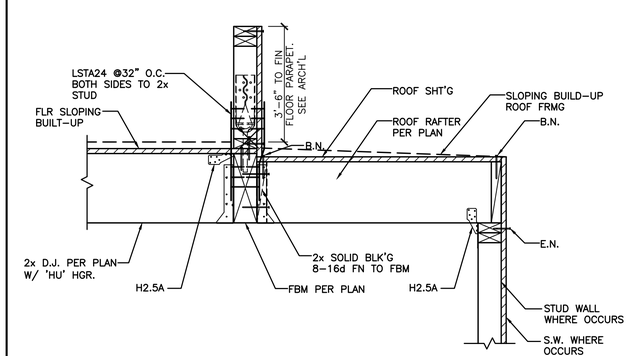
REBAR SPLICE & EMBED NOTES:
1. SPLICE AND EMBEDMENT LENGTHS ARE IN INCHES. SPLICES ARE CLASS "B".
2. "OTHER" SPLICE LENGTH MAY BE USED IF BARS ARE SPACED AT 2ϕ CLEAR OR GREATER & MIN. CLEAR COVER OF d_b.
3. TOP BARS REFER TO HORIZONTAL BARS WITH MORE THAN 12" CONCRETE PLACED BELOW DURING A POUR. OTHER BARS ARE BOTTOM OR VERTICAL BARS.
4. WHERE REQUIRED EMBEDMENT CANNOT BE OBTAINED WITH STRAIGHT BARS PROVIDE 180° OR 90° STANDARD HOOK.

5. SCHEDULE IS FOR REGULAR WEIGHT CONCRETE. INCREASE LENGTHS BY 30% FOR LIGHT-WEIGHT CONCRETE. (IN ADDITION TO AFOREMENTIONED FACTORS)
6. LAP SPLICE FOR MASONRY SHALL BE 48 BAR DIAMETERS.

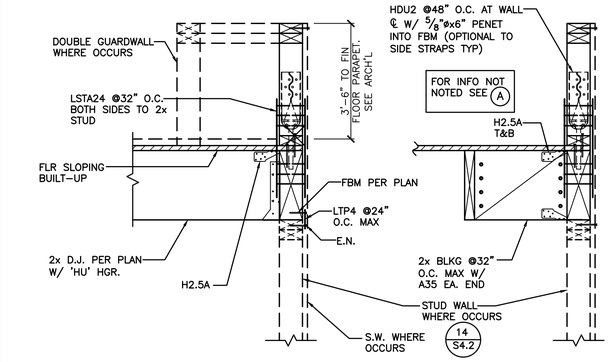
MIN. CONCRETE COVERAGE OF REBAR- SCHEDULE B	
FOOTINGS	3"
FORMED SURFACE IN CONTACT W/EARTH	2"
WALLS- EXTERIOR FACE	1 1/2"
WALLS- INTERIOR FACE	1"
SLABS	1" U.N.O.

MATERIAL STRENGTH/PROPERTIES- SCHEDULE C							
ITEM	CONCRETE		REBAR GRADE		SPEC. INSP.	MAX. SLUMP @ APPLICATION POINT	MAX. W/C RATIO
	TYPE	STRENGTH (PSI)	A-615 GR. 60	A-185 MESH	YES		
SLAB-ON-GRADE	ROCK	2500	•			4"	0.45
WALLS/CURBS	ROCK	2500	•			4"	0.55
GRADE BM	ROCK	3000	A706			4"	0.55
FOOTINGS	ROCK	2500	•			4"	0.55

CONCRETE & REBAR SCHEDULE | 14



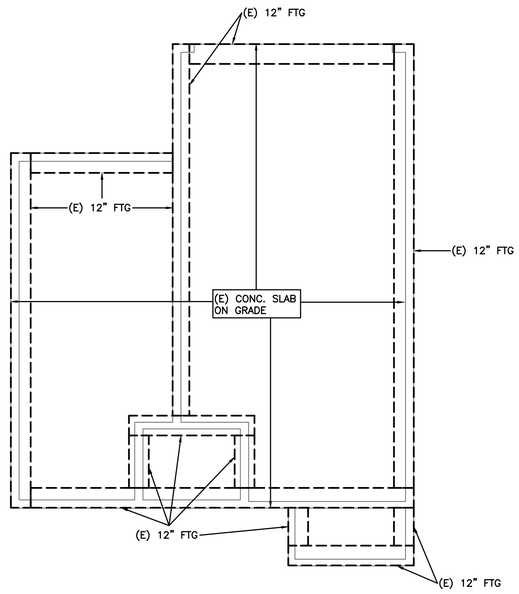
GUARDWALL WALL CONN. DETAIL | 15



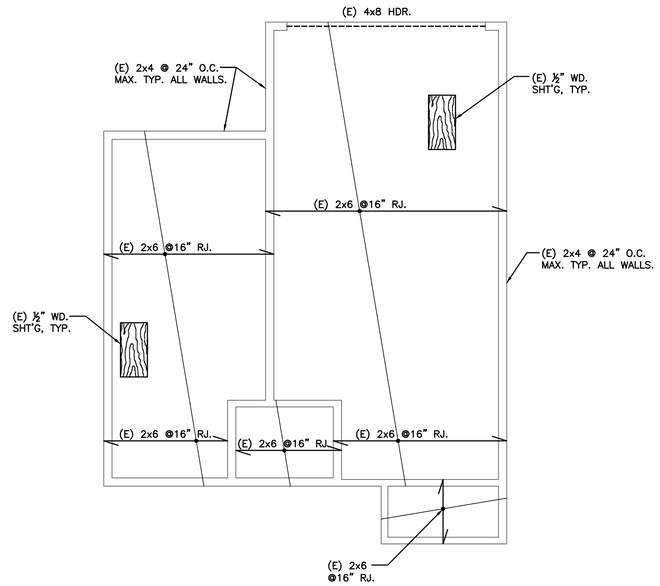
GURDWALL WALL CONN. DETAIL | 16

REVISIONS:

ARCHITECTURAL PLAN INFORMATION AND DIMENSIONS WHICH APPEAR AS HALF-TONE BACKGROUND ON STRUCTURAL DRAWINGS ARE ONLY FOR GENERAL REFERENCE. ALL SUCH BACKGROUND DATA MUST BE VERIFIED OR CONFIRMED WITH PERTINENT HARD-LINE ARCHITECTURAL AND CIVIL/GRADING PLANS BOUND IN THIS SET, AND MAY NOT BE USED DIRECTLY FOR BIDDING, CONSTRUCTION, OR LAYOUT PURPOSES.



EXISTING FOUNDATION PLAN



EXISTING FIRST FLOOR ROOF FRAMING PLAN

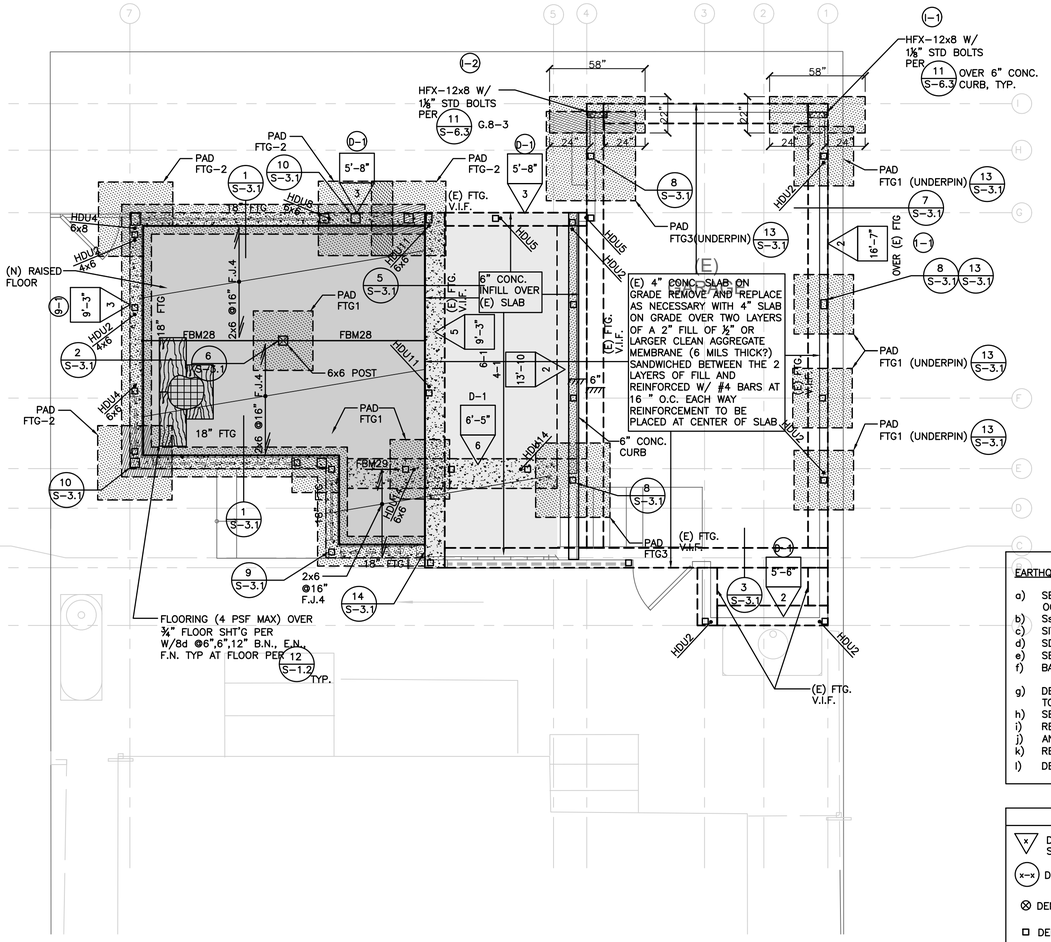
NOTE:

ALL FIELD CONDITIONS SHALL BE VERIFIED IN FIELD BY GENERAL CONTRACTOR BEFORE WORK BEGINS. ANY DEVIATION FROM THESE DRAWINGS SHALL BE NOTIFIED TO ARCHITECT/ENGINEER IN A TIMELY MANNER FOR REVISIONS OF CONSTRUCTION DOCUMENTS.

1/4"=1'-0"

0 1' 5' 15'

REVISIONS: 1 2 3 4 5



CONTRACTOR NOTE:

CONTRACTORS RESPONSIBLE FOR THE CONSTRUCTION OF A WIND OR SEISMIC FORCE RESISTING SYSTEM/COMPONENT LISTED IN THE "STATEMENT OF SPECIAL INSPECTIONS" (S1.1) SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE LADBS INSPECTORS AND THE OWNER PRIOR TO COMMENCEMENT OF WORK ON SUCH SYSTEM OR COMPONENT.

THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN:
1) ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS;
2) ACKNOWLEDGEMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL;
3) PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, THE METHOD AND FREQUENCY OF REPORTING AND DISTRIBUTION OF THE REPORTS; AND
4) IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION.

SHEARWALL NOTE:
AT SHEARWALL NUMBERS 3 TO 8, FOUNDATION SILL PLATES AND ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL BE NOT LESS THAN A SINGLE 3x NOMINAL OR LARGER MEMBER.

HOLD-DOWN NOTES:

1. HOLD-DOWNS SHALL BE TIGHTENED JUST PRIOR TO COVERING THE WALL FRAMING.

2. HOLD-DOWN HARDWARE MUST BE SECURED IN PLACE WITH TEMPLATE PRIOR TO FOUNDATION INSPECTION.

3. HOLD-DOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS ON OPPOSITE.

FRAMING SCHEDULE (U.N.O.)

2x6 F.J. @16" O.C.

2x6 DECK JOISTS @16" O.C.

NOTE:
SEE SHEETS S-2.1 FOR POST SIZES & LOCATION

ARCHITECTURAL PLAN INFORMATION AND DIMENSIONS WHICH APPEAR AS HALF-TONE BACKGROUND ON STRUCTURAL DRAWINGS ARE ONLY FOR GENERAL REFERENCE. ALL SUCH BACKGROUND DATA MUST BE VERIFIED OR CONFIRMED WITH PERTINENT HARD-LINE ARCHITECTURAL AND CIVIL/GRADING PLANS BOUND IN THIS SET, AND MAY NOT BE USED DIRECTLY FOR BIDDING, CONSTRUCTION, OR LAYOUT PURPOSES.

NOTES:

1. SEE ARCH'L DRAWINGS FOR DIMENSION & ELEVATIONS AND OTHER INFORMATION NOT NOTED

2. INDICATES SHEAR WALL, SEE PLAN
INDICATES TYPE OF SHEAR PANEL PLAN
INDICATES MIN. LENGTH OF WALL SHEAR PANEL

3. FOR SLAB ON GRADE DETAILS, SEE 4 S-1.2

4. PLATE WASHERS ARE REQUIRED FOR ALL HOLD-DOWNS PER 16 S-3.1 AND ALL FOUNDATION BOLTS PER 12 S-4.1

5. POWER-DRIVEN FASTENERS SHALL NOT BE USED TO ANCHOR SILL PLATES EXCEPT AT INTERIOR NONBEARING WALLS NOT DESIGNED AS SHEAR WALLS.

6. FASTENERS (NAILS AND ANCHOR BOLTS) IN PRESSURE TREATED WOOD SILL PLATES SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL MATERIALS UNLESS PRESSURE TREATED SILL IS TREATED WITH BORATE CHEMICAL.

7. NEW FOUNDATIONS SUPPORTING WOOD SHALL EXTEND AT LEAST 8 INCHES ABOVE ADJACENT FINISH GRADE & 6" ABOVE ADJACENT FINISH SLAB.

8. INDICATES NEW WALL FTG OR PAD FOOTING. ALL WALL FOOTINGS SHALL BE CENTERED ON WALL ABOVE, U.N.O. ON PLAN OR DETAILS. ENLARGE WALL FTG. AT HOLDOWNS AS REQ'D PER 16 S-3.1

9. HOLD-DOWN HARDWARE MUST BE SECURED IN PLACE PRIOR TO FOUNDATION INSPECTION

10. HOLDOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS; AND HOLD-DOWNS SHALL BE FINGER TIGHT AND 1/2 WRENCH TURN JUST PRIOR COVERING THE WALL FRAMING. CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE STEEL PLATE WASHERS IN ACCORDANCE WITH TABLE 2305.5 OF THE LA BUILDING CODE.

11. ALL FIELD CONDITIONS SHALL BE VERIFIED IN FIELD BY GENERAL CONTRACTOR BEFORE WORK BEGINS. ANY DEVIATION FROM THESE DRAWINGS SHALL BE NOTIFIED TO ARCHITECT/ENGINEER IN A TIMELY MANNER FOR REVISIONS OF CONSTRUCTION DOCUMENTS.

12. ALL PAD FOOTINGS SHALL BE LOCATED CENTERED ON POST/COLUMNS ABOVE.

13. ALL BOLT HOLES SHALL BE DRILLED 1/32 TO 1/16" OVERSIZED.

14. STRUCTURAL OBSERVATION BY THE ENGINEER OR ARCHITECT OF RECORD IS REQUIRED IN ACCORDANCE WITH WITH LA MGD110.

15. IF ADVERSE SOIL CONDITIONS ARE ENCOUNTERED, A SOILS INVESTIGATION REPORT MAY BE REQUIRED.

16. SHOT PINS SHALL BE HILTI LOW VELOCITY X-U UNIVERSAL POWER DRIVEN FASTENERS, ICC ES-2269, LARR #25675. MAXIMUM SPACING SHALL BE 16" O.C. AT BEARING AND NON-BEARING WALLS.

17. FOUNDATION SILLS AND PLATES SHALL BE NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD

18. A 4-INCH THICK BASE OF 1/2 INCH OR LARGER CLEAN AGGREGATE SHALL BE PROVIDED FOR THE PROPOSED SLAB ON GRADE.

19. A VAPOR BARRIER SHALL BE PROVIDED IN DIRECT CONTACT WITH CONCRETE FOR THE PROPOSED SLAB ON GRADE.

20. SHORE EXISTING FLOOR/ROOF FRAMING AS REQUIRED DURING CONSTRUCTION OF NEW FRAMING.

21. ALL PERIMETER BASEMENT WALLS ARE NOT TO BE BACKFILLED UNTIL THE FLOOR SLABS ARE POURED AND CURED OR FLOOR FRAMING IS COMPLETED.

22. POST GRAPHIC ON PLAN MAY NOT SHOW ACTUAL SIZE. SEE BEAM SCHEDULE OR PLAN CALL-OUT FOR POSTS SIZE.

23. A COPY OF THE LOS ANGELES RESEARCH REPORT(S) AND/OR CONDITIONS OF LISTING SHALL BE MADE AVAILABLE AT THE JOB SITE

24. FOR CRAWL SPACE ACCESS OPENINGS, PLACE AS REQ'D BY ARCH'L DRAWINGS AND BUILDING CODE.

26. DENOTES CRAWL SPACE ACCESS OPENING PLACE AS REQ'D BY ARCH'L DRAWINGS AND BUILDING CODE.

27. DO NOT CUT OR DAMAGE EXISTING FOUNDATION MEMBERS TO REMAIN AS PART OF THE NEW BUILDING/STRUCTURE SHOWN AS (E) ON PLAN, UNLESS DEMOLITION OF THESE MEMBERS IS CLEARLY INDICATED ON PLAN/OR DETAILS.

28. THE SOIL ENGINEER IS TO APPROVE THE KEY BOTTOM AND LEAVE A CERTIFICATE ON THE SITE FOR THE GRADING INSPECTOR. THE GRADING INSPECTOR IS TO BE NOTIFIED BEFORE ANY GRADING BEGINS AND, FOR BOTTOM INSPECTION, BEFORE FILL IN PLACED. FILL MAY NOT BE PLACED WITHOUT APPROVAL OF THE GRADING INSPECTOR.

29. ALL CONCENTRATED DRAINAGE SHALL BE CONVEYED TO THE STREET VIA NON-EROSIVE DEVICES.

30. EXCAVATIONS SHALL BE MADE IN COMPLIANCE WITH CAL/OSHA REGULATIONS.

EARTHQUAKE DESIGN DATA:

a) SEISMIC IMPORTANCE FACTOR=1.0
OCCUPANCY CATEGORY= II
b) Ss= 0.666 S1= 1.876
c) SITE CLASS= D
d) SDS= 1.500 SD1= 0.755
e) SEISMIC DESIGN CATEGORY= D
f) BASIC SEISMIC-FORCE-RESISTING SYSTEM(S)= WOOD STRUCTURAL SHEAR PANELS HARDY PANELS
g) DESIGN BASE SHEAR= 19.4 K
TOTAL WEIGHT OF BUILDING= 64.58 K
h) SEISMIC RESPONSE COEFFICIENT(S), Cs= 0.300
i) RESPONSE MODIFICATION FACTOR(S), R= 6.5
j) ANALYSIS PROCEDURE USED= EQUIVALENT LATERAL LOAD
k) REDUNDANCY FACTOR USED= 1.3
l) DESIGN LOAD BEARING VALUE OF SOIL= 1500 PSF (W/ ⅓ INCREASE)

LEGEND

- DENOTES SW PER PLAN SCHED. SEE DETAIL FOR CONSTR.
- DENOTES SHEAR LINE
- ⊗ DENOTES HOLDOWN ABOVE TO BEAM
- □ DENOTES POST ABOVE
- ⊠ DENOTES POST FROM ABOVE TO CONTINUE TO FOUNDATION (SEE S2.2 FOR SIZES)
- ■ INDICATES STEEL TUBE OR PIPE COLUMN
- HFX DENOTES HARDY FRAME PER S-5.0 (ICC ESR-2089, LARR #25759)
- HDU DENOTES SIMPSON HOLDOWN W/ 1/4"x2.5 SCREWS PER MANUF. SPECS. (ICC ESR-2330, LARR #25720)
- TDS DENOTES SIMPSON TIE-DOWN SYSTEM PER 25/S1. (ICC ESR-2320 LARR# 25643)
- FBM DENOTES BEAM FLUSHED
- DBM DENOTES DROPPED BEAM BELOW FLOOR/ROOF JOISTS.

HARDY PANEL:
HFX-12x8(1 1/8"øHS) : INDICATES HARDY PANEL (LARR #25759, ICC ESR-2089)
INDICATES HIGH STRENGTH END BOLTS A449 OR A490.
INDICATES DIAM. OF END BOLTS
INDICATES NOMINAL HEIGHT. SEE MANUF. SPEC'S. VERIFY REQUIRED HEIGHT WITH FIELD CONDITIONS AND CONSTRUCTIONS DETAILS.
INDICATES LENGTH

FOR ADDITIONAL INFORMATION, SEE HFX-1, HFX-2, HFX-3 AND HFX-4

SPECIAL INSPECTION: (PER LACBC CHAPTER 17, SECTION 1701.5)

SPECIAL INSPECTION BY A DEPUTY INSPECTOR IS REQUIRED FOR THE FOLLOWING ITEMS:
- ☒ FIELD WELDING
- ☒ STRUCTURAL CONCRETE WITH f'c GREATER THAN 2500 PSI.
- ☒ EXPANSION/EPOXY ANCHORS & OTHER HIGH STRENGTH BOLTING
- ☐ SPRAYED ON FIREPROOFING
- ☐ HIGH STRENGTH MASONRY
- ☐ HIGH-LIFT GROUTING
- ☐ PRE-STRESSED CONCRETE
- ☒ LATERAL FORCE RESISTING FRAMES
- ☐ PILLING, DRILLED PIERS, CAISSONS AND CONNECTING GRADE BEAMS
- ☒ PREFAB SHEAR WALL ANCHOR BOLT
- ☒ SHEAR WALL TYPES 3 THRU 8

FOOTING TYPE	FOOTING MINIMUM WIDTH	FOOTING MINIMUM DEPTH
1-STORY	12"	12"
2-STORY	16"	18"
3-STORY	18"	24"

NOTE:
1. FOOTING DEPTH FOR (N)FTG'S ONLY SHALL BE 24" DEEP MIN. AT EXPANSIVE SOIL.
2. UNDERPIN EXISTING FOOTING AS REQUIRED PER

FOOTING SCHEDULE (U.N.O.)

FTG1	3'-0" SQ.x1'-6" DEEP FTG W/(4) #5 REBAR E.W. @ BOTT.
FTG2	3'-9" SQ.x1'-6" DEEP FTG W/(5) #5 REBAR E.W. @ BOTT.
FTG3	4'-6" SQ.x1'-6" DEEP FTG W/(6) #5 REBAR E.W. @ BOTT.

BEAM SCHEDULE (U.N.O.)

BEAM TYPE	SIZE	POST SUPPORT	REMARKS
FBM27	6x8	4x6	–
FBM28	6x8	4x6	–

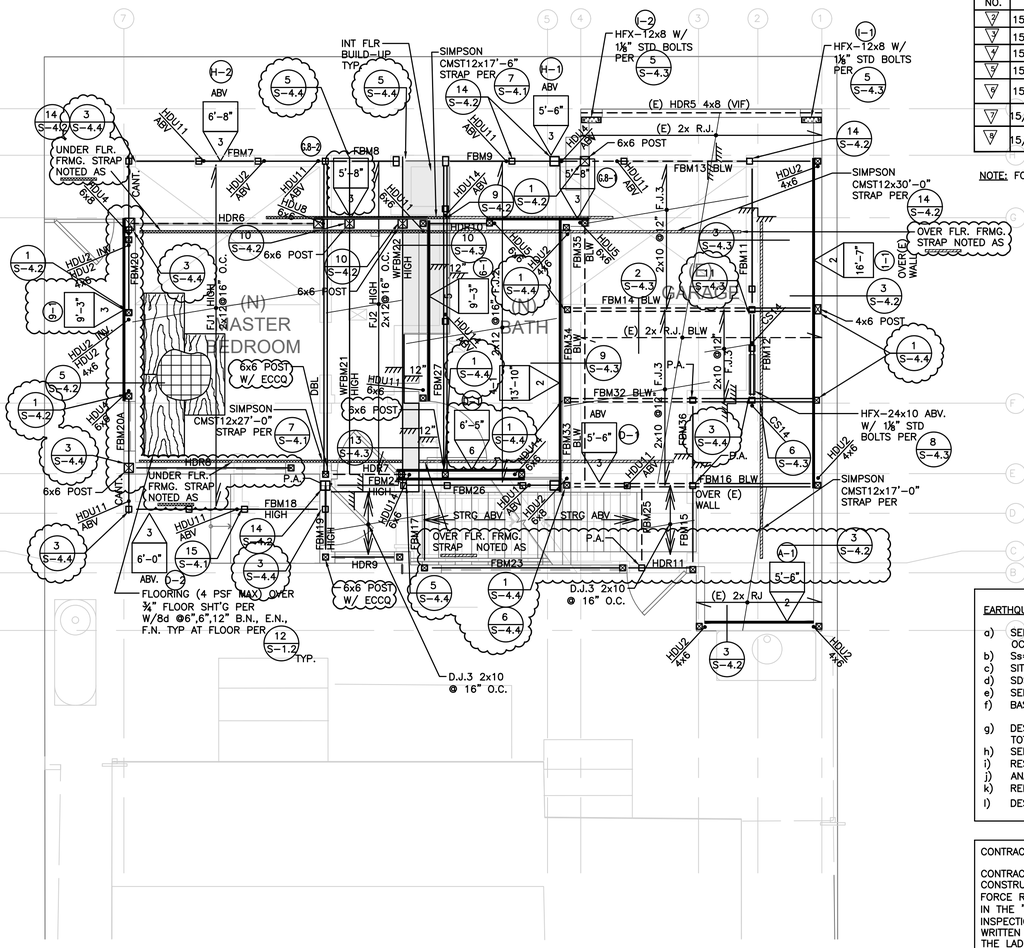
NOTE:
WHERE POST SIZES CARRYING MULTIPLE BEAMS CONFLICT, USE LARGER SIZE PER TABLE.

N

1/4"=1'-0"

0 1' 5' 15'

REVISIONS: 1 2 3 4 5



SHEAR WALL SCHEDULE

NO.	MATERIAL	2-SIDES (9)	BLOCKED	3x Frmg	NAILING (5)(7) Size	Edge	Field (1)	SHEAR TRANSFER Bottom Sill (SDS¼x6 LAGS)	Top Plate (LTP4 (3))	Mud Sill (5/8"ø A.B.)	VALUE (STGR) plf
3	15/32" Struct. No. 1 Ply	No	Yes	No	10d	6"	12"	12"	24"	24" (8)	544#/'
4	15/32" Struct. No. 1 Ply	No	Yes	Yes (4)	10d	4"	12"	12"	16"	16" (8)	816#/'
5	15/32" Struct. No. 1 Ply	No	Yes	Yes (4)	10d	3"	12"	9"	12"	16" (8)	1064#/'
6	15/32" Struct. No. 1 Ply	No	Yes	Yes (4)	10d	2"	12"	7"	9"	16" (8)	1392#/'
7	15/32" Struct. No. 1 Ply	Yes (9)	Yes	Yes (4)	10d	4"	12"	6"	7"(1-side) 15"(2-sides)	3/4"ø @ 16" o.c.	1632#/'
7	15/32" Struct. No. 1 Ply	Yes (9)	Yes	Yes (4)	10d	3"	12"	4" (6)	6"(1-side) 12"(2-sides)	3/4"ø @ 12" o.c.	2128#/'
8	15/32" Struct. No. 1 Ply	Yes (9)	Yes	Yes (4)	10d	2"	12"	3" (6)	4"(1-side) 9"(2-sides)	3/4"ø @ 12" o.c.	2784#/'

NOTE: FOR ADDN'L INFO SEE (2 / S4.1)

LEGEND

- (V) DENOTES SW PER PLAN SCHED. ON PLAN SEE DETAIL 16/S-4.1 FOR CONSTR.
- (x-x) DENOTES SHEAR LINE
- □ DENOTES POST ABOVE TO BEAM
- ⊠ DENOTES POST FROM ABOVE TO CONTINUE TO FOUNDATION (SEE S2.3 FOR SIZES)
- ■ INDICATES STEEL TUBE OR PIPE COLUMN
- HFX DENOTES HARDY FRAME PER PLAN (ICC ESR-2089) (LARR #25759)
- HDU DENOTES SIMPSON HOLDOWN W/ ¼x2.5 SCREWS PER MANUF. SPECS. (ICC ESR-2330, LARR #25720)
- TDS DENOTES SIMPSON TIE-DOWN SYSTEM PER 25/S1. (ICC ESR-2320 LARR# 25643)
- HDR DENOTES HEADER
- RBM: ROOF BEAM
- HBM: HIP BEAM
- VBM: VALLEY BEAM
- DBM: DROPPED BEAM
- FBM: FLUSH BEAM
- LBM: DENOTES LANDING BEAM
- STGR: DENOTES STRINGER
- DFJ: DOUBLE FLOOR JOIST UNDER WALL ABOVE
- LJ: LANDING JOIST
- T.J.: TRELLIS JOIST

BEAM SCHEDULE (U.N.O.)

BEAM TYPE	SIZE	POST SUPPORT	REMARKS
FBM7	7x11.25 PSL	4x6	–
FBM8	4x12	4x6	–
FBM9	7x11.25 PSL	4x6	–
FBM10	4x8 (V.I.F.)	4x6	–
FBM11	6x10	4x6	–
FBM12	(2)7x9.25 PSL	6x6	3/S-4.4
FBM13	7x9.25 PSL	4x6	–
FBM14	(2) 7x9.25 PSL	6x6	3/S-4.4
FBM15	4x10	4x6	–
FBM16	(2)5.25x9.25 PSL	6x6	3/S-4.4
FBM17	4x10	4x6	–
FBM18	3.5x11.25 PSL	4x6	–
FBM19	5.25x9.25 PSL	4x6	–
FBM20	7x11.25 PSL	6x8	–
FBM20A	7x11.25 PSL	6x8	–
WFBM21	W10x33	6x6	W/ 2x NLR
WFBM22	W10x33	6x6	W/ 2x NLR
FBM23	6x8	4x6	–
FBM24	4x12	4x6	–
FBM25	4x10	4x6	–
FBM26	3.5x11.25 PSL	4x6	–
FBM27	(2)7x11.25 PSL	4x6	1/S-4.4
FBM32	(2)7x11.25 PSL	6x6	3/S-4.4
FBM33	4x10	4x6	–
FBM34	4x10	4x6	–
FBM35	4x10	4x6	–
FBM36	4x10	4x6	–
HDR6	6x10	6x6	–
HDR7	6x8	4x6	–
HDR8	6x8	4x6	–
HDR9	6x8	4x6	–
HDR10	6x8	4x6	–
HDR11	6x8	4x6	–

NOTE:
WHERE POST SIZES CARRYING MULTIPLE BEAMS CONFLICT, USE LARGER SIZE PER TABLE.

HILLSIDE CONSTRUCTION NOTES

1. NUTS OF THE PRIMARY AND SECONDARY ANCHORS FASTENERS SHALL BE FINGER TIGHT WITH ½" WRENCH TURN PRIOR TO INSPECTION AND COVERING.
2. POWER-DRIVEN FASTENERS SHALL NOT BE USED TO ANCHOR SILL PLATES EXCEPT AT INTERIOR NONBEARING WALLS NOT DESIGNED AS SHEAR WALLS.
3. EXTERIOR ANCHOR BOLTS AND POST BASES SHALL BE GALVANIZED AND EACH ANCHOR BOLTS SHALL HAVE AT LEAST TWO GALVANIZED NUTS ABOVE THE BASE PLATE.
4. THE TOP OF EXTERIOR PEDESTALS MUST BE SLOPED FOR POSITIVE DRAINAGE.
5. ALL MAIN FOOTING AND GRADE BEAM REINFORCEMENT STEEL SHALL BE BENT INTO THE INTERSECTING FOOTING AND FULLY DEVELOPED AROUND EACH CORNER AND INTERSECTION.
6. CONTINUOUS INSPECTION BY A LOS ANGELES CITY LICENSED DEPUTY INSPECTOR IS REQUIRED FOR ALL STRUCTURAL CONNECTIONS, FOOTINGS, GRADE BEAMS AND RETAINING WALLS DURING INSTALLATION.
7. STRUCTURAL OBSERVATION BY THE ENGINEER OR ARCHITECT OF RECORD IS REQUIRED IN ACCORDANCE WITH LA INFORMATION BULLETIN P/BC 2008-024. COMPLETE ATTACHED FORM.
8. ALL FOOTINGS OR GRADE BEAMS EXTEND ACROSS A DESCENDING SLOPE, THE STEM WALL, GRADE BEAM, OR FOOTING SHALL EXTEND UP TO A MINIMUM 18 INCHES ABOVE THE HIGHEST ADJACENT GRADE.
9. ALL WOOD FRAMED WALLS, INCLUDING NON-BEARING WALLS, WHEN RESTING ON A FOOTING, FOUNDATION, OR GRADE BEAM STEM WALL, SHALL BE SUPPORTED ON WOOD SILL PLATES BEARING ON A LEVEL SURFACE.

EARTHQUAKE DESIGN DATA:

a) SEISMIC IMPORTANCE FACTOR=1.0
OCCUPANCY CATEGORY= II
b) Ss= 0.666 S1= 1.876
c) SITE CLASS= D
d) SDS= 1.500 SD1= 0.755
e) SEISMIC DESIGN CATEGORY= D
f) BASIC SEISMIC-FORCE-RESISTING SYSTEM(S)= WOOD STRUCTURAL SHEAR PANELS HARDY PANELS
g) DESIGN BASE SHEAR= 19.4 K
TOTAL WEIGHT OF BUILDING= 64.58 K
h) SEISMIC RESPONSE COEFFICIENT(S), Cs= 0.300
i) RESPONSE MODIFICATION FACTOR(S), R= 6.5
j) ANALYSIS PROCEDURE USED= EQUIVALENT LATERAL LOAD
k) REDUNDANCY FACTOR USED= 1.3
l) DESIGN LOAD BEARING VALUE OF SOIL= 1500 PSF (W/ ⅓ INCREASE)

CONTRACTOR NOTE:

CONTRACTORS RESPONSIBLE FOR THE CONSTRUCTION OF A WIND OR SEISMIC FORCE RESISTING SYSTEM/COMPONENT LISTED IN THE "STATEMENT OF SPECIAL INSPECTIONS" (S1.1) SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE LADBS INSPECTORS AND THE OWNER PRIOR TO COMMENCEMENT OF WORK ON SUCH SYSTEM OR COMPONENT.

THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN:
1) ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS;
2) ACKNOWLEDGEMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL;
3) PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, THE METHOD AND FREQUENCY OF REPORTING AND DISTRIBUTION OF THE REPORTS; AND
4) IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION.

CEILING JOIST SCHEDULE

MAXIMUM SPAN	MIN. JOIST SIZE
9.5 FEET	2x4 AT 16" O.C.
13 FEET	2x6 AT 24" O.C.
14.5 FEET	2x6 AT 16" O.C.
19 FEET	2x8 AT 16" O.C.
22 FEET	2x10 AT 16" O.C.

HEADER SCHEDULE 2x4 WALL U.N.O.

L=4'-0"	4x6
4'-0" to < 6'-0"	4x8
6'-0" to < 8'-0"	4x10
8'-0" to < 10'-0"	4x12
10'-0" to < 12'-0"	4x14

HEADER SCHEDULE 2x6 WALL U.N.O.

L=4'-0"	6x6
4'-0" to < 6'-0"	6x8
6'-0" to < 8'-0"	6x10
8'-0" to < 10'-0"	6x12
10'-0" to < 12'-0"	6x14

FRAMING SCHEDULE (U.N.O.)

- 2x12 F.J. @16" O.C.
- 2x10 DECK JOISTS @ 16" O.C.
- 2x6 RAFTERS @16" O.C.
- CEILING JOISTS PER SCHEDULE
- 2x12 @12" O.C. STRINGER
- CALIFORNIA FRAMING

FRAMING NOTES:

1. FASTENERS IN PRESERVATIVE TREATED WOOD OR FIRE RETARDANT TREATED WOOD SHALL BE OF HOT DIPPED ZINC COATED GALVANIZED STEEL OR STAINLESS STEEL.

2. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING. FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANEL EDGES. PLYWOOD SPANS SHALL CONFORM WITH TABLE 2304.7.

3. SOLID BLOCKING SHALL BE PROVIDED AT ALL HORIZONTAL JOINTS OCCURRING IN BRACED WALL PANELS.

SHEARWALL NOTE:

AT SHEARWALL NUMBERS (3) TO (8), FOUNDATION SILL PLATES AND ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL BE NOT LESS THAN A SINGLE 3x NOMINAL OR LARGER MEMBER.

EARTHQUAKE DESIGN DATA:

a) SEISMIC IMPORTANCE FACTOR=1.0
OCCUPANCY CATEGORY= II
b) Ss= S1=
c) SITE CLASS= D
d) SDS= SD1=
e) SEISMIC DESIGN CATEGORY= D

SPECIAL INSPECTION: (PER LACBC CHAPTER 17, SECTION 1701.5)

SPECIAL INSPECTION BY A DEPUTY INSPECTOR IS REQUIRED FOR THE FOLLOWING ITEMS:

- ☒ FIELD WELDING
- ☒ STRUCTURAL CONCRETE WITH f'c GREATER THAN 2500 PSI.
- ☒ EXPANSION/EPOXY ANCHORS & OTHER HIGH STRENGTH BOLTING
- ☐ SPRAYED ON FIREPROOFING
- ☐ HIGH STRENGTH MASONRY
- ☐ HIGH-LIFT GROUTING
- ☐ PRE-STRESSED CONCRETE
- ☒ LATERAL FORCE RESISTING FRAMES
- ☐ PILLING, DRILLED PIERS, CAISSONS AND CONNECTING GRADE BEAMS
- ☒ PREFAB SHEAR WALL ANCHOR BOLT
- ☒ SHEAR WALL TYPES (3) THRU (8)

HARDY PANEL:

HFX-12x8(1⅛"ØHS) : INDICATES HARDY PANEL (LARR #25759, ICC ESR-2089)
- INDICATES HIGH STRENGTH END BOLTS A449 OR A490.
- INDICATES DIAM. OF END BOLTS
- INDICATES NOMINAL HEIGHT. SEE MANUF. SPEC'S. VERIFY REQUIRED HEIGHT WITH FIELD CONDITIONS AND CONSTRUCTIONS DETAILS.
- INDICATES LENGTH

FOR ADDITIONAL INFORMATION, SEE HFX-1, HFX-2, HFX-3 AND HFX-4

ARCHITECTURAL PLAN INFORMATION AND DIMENSIONS WHICH APPEAR AS HALF-TONE BACKGROUND ON STRUCTURAL DRAWINGS ARE ONLY FOR GENERAL REFERENCE. ALL SUCH BACKGROUND DATA MUST BE VERIFIED OR CONFIRMED WITH PERTINENT HARD-LINE ARCHITECTURAL AND CIVIL/GRADING PLANS BOUND IN THIS SET, AND MAY NOT BE USED DIRECTLY FOR BIDDING, CONSTRUCTION, OR LAYOUT PURPOSES.

NOTES:

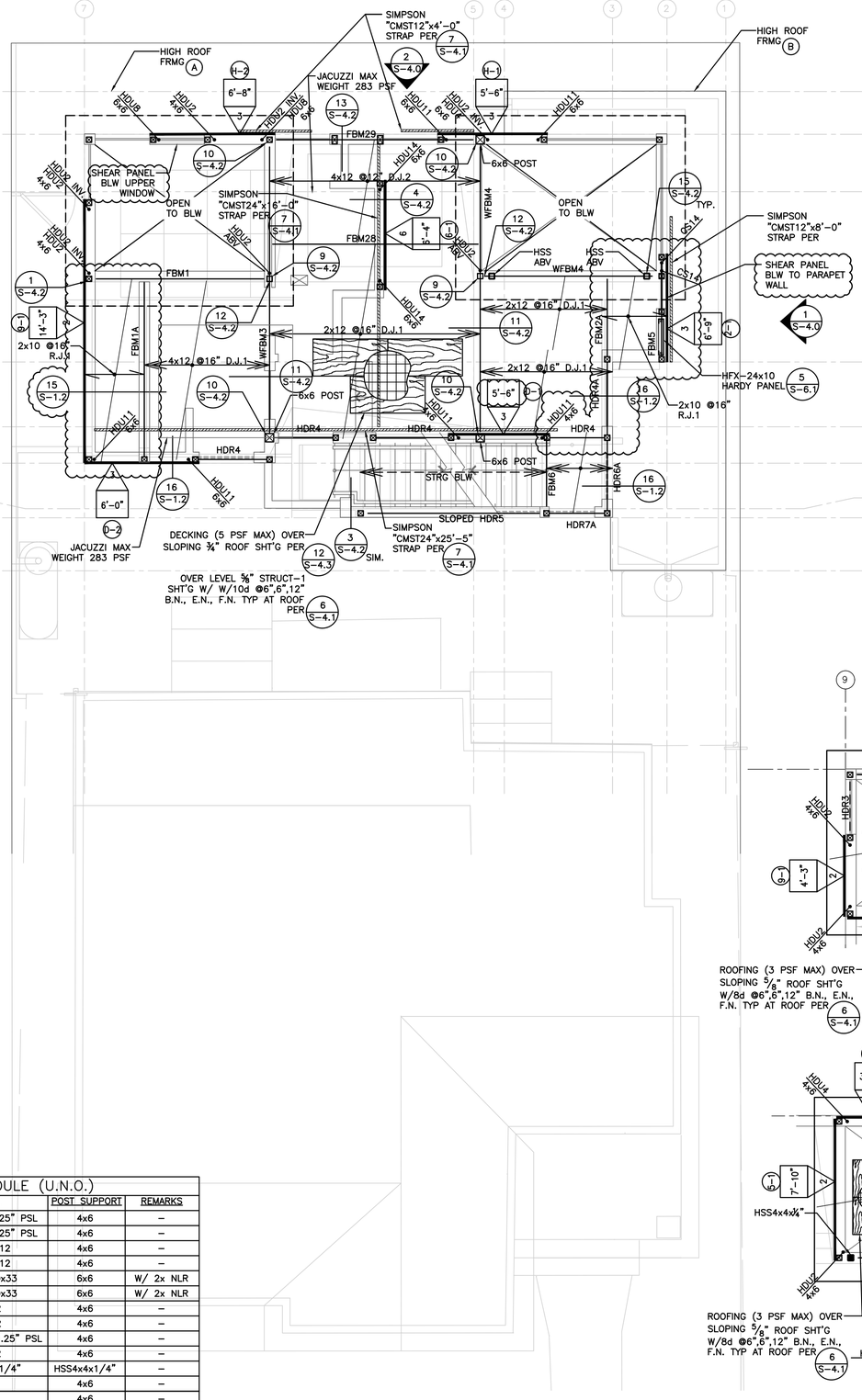
1. SEE ARCHITECTURAL DRAWINGS FOR FINISH FLOOR ELEVATION, DIMENSIONS AND OTHER INFORMATION NOT SHOWN.
2. INDICATES WALL SHEAR PANEL; INDICATES TYPE OF WALL SHEAR PANEL PER PLAN SCHED.; INDICATES LENGTH OF WALL SHEAR PANEL.
3. INDICATES FLOOR WALL PER PLAN; INDICATES MIN. WALLS OR ROOF LINE ABOVE FLOOR FRAMING
4. HOLDOWN BOLTS SHALL BE 'RE-TIGHTENED JUST PRIOR TO COVERING THE WALL FRAMING.
5. INDICATES SIMPSON STRAP OVER FLOOR SHEATHING AT BEAM OR 4x4 BLOCKING BELOW (7 / S-4.1)
6. FOR TYPICAL WOOD FRAMING DETAILS SEE S4 SHEETS
7. FOR WALL TOP PLATES SPLICE DETAIL SEE (10 / S-1.2)
8. PROVIDE DOUBLE FLOOR JOIST UNDER BEARING PARTITION WALLS PARALLEL TO JOIST & BLW BATHROOM TUB. PROVIDE 4x4 BLKG. W/"Z"-CLIP UNDER PARTITION WALLS PERPENDICULAR TO FLOOR JOIST
9. ALL 2x FLOOR JOISTS SHALL BE CONNECTED TO BMS. WITH SIMPSON "LB" OR "LUS" HANGERS. ALL RAFTER SHALL BE CONNECTED TO RIDGE BEAMS WITH SIMPSON "LB" OR "LUS" HANGERS, AND TO VALLEY/HIP BEAMS WITH SIMPSON "LSU" HANGERS. U.N.O. ON PLAN OR SECTIONS.
10. INDICATES DIRECTION OF SPAN OF JOISTS PER PLAN.
11. FOR BM./GIRDER TO POST CONN. DETAIL SEE (1 / S-4.2)
12. FOR BM. TO GIRDER CONN. DETAIL SEE (13 / S-4.1) U.N.O. TYP
13. FOR STAIR FRAMING DETAILS SEE
14. ALL INTERIOR WALLS SHALL BE 2x4 MIN. @16" O.C. MAX. STUD WALLS U.N.O. ON PLAN. ALL EXTERIOR WALLS SHALL BE 2x4 MIN. @16" O.C. MAX. STUD WALL. 12'-0" OR HIGHER WALLS SHALL BE OF 2x6 MIN. @16" EXTERIOR FRAMING. SEE ARCH. DWG'S FOR WALL DIMENSIONS. ALL PLUMBING WALLS SHALL BE 2x6 MIN. @16" O.C. STUD WALLS.
15. USE DOUBLE JOISTS & DOUBLE BLOCKING AT F.A.U. AND ATTIC ACCESS LOCATIONS.
16. ALL FIELD CONDITIONS SHALL BE VERIFIED IN FIELD BY GENERAL CONTRACTOR BEFORE WORK BEGINS. ANY DEVIATION FROM THESE DRAWINGS SHALL BE NOTIFIED TO ARCHITECT/ENGINEER IN A TIMELY MANNER FOR REVISIONS OF CONSTRUCTION DOCUMENTS.
17. RIP TOP OF 2x DECK JOISTS (2" MAX.) TO ALLOW FOR F.F. SLOPING PER ARCH. DRAWINGS OR BUILD-UP FLR PER (12 / S-4.3)
18. FOR HEADER TYPE INFORMATION SEE PLAN NOTES.
19. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING. FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANEL EDGES. PLYWOOD SPANS SHALL CONFORM WITH TABLE 2304.7.
20. ALL BOLT HOLES SHALL BE DRILLED 1/32 TO 1/16" OVERSIZED.
21. HOLDOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS; AND HOLD-DOWNS SHALL BE FINGER TIGHT AND 1/2 WRENCH TURN JUST PRIOR COVERING THE WALL FRAMING. CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE STEEL PLATE WASHERS IN ACCORDANCE WITH TABLE 2305.5 OF THE LA BUILDING CODE.
22. SHORE EXISTING FLOOR/ROOF FRAMING AS REQUIRED DURING CONSTRUCTION OF NEW FRAMING.
23. ALL DIAPHRAGM AND SHEAR WALL NAILING SHALL UTILIZE COMMON NAILS OR GALVANIZED BOX. ALL DIAPHRAGM NAILING OVER 2x WF BM NAILER SHALL BE 10d x1½" NAILS.
24. NAILERS OVER STEEL BEAMS SHALL BE 1½" TIMBER STRAND LSL 1.3E BY I-LEVEL OR EQUAL.
25. SPLICE ALL EXTERIOR & PERIMETER WALL TOP Ⓟ's FOR WALL TOP PLATES SPLICE DETAIL SEE (10 / S-1.2)
26. SLOPE WF ROOF/FLOOR FRMG AS REQUIRED TO MATCH SLOPE PER ARCH. DWGs
27. PROVIDE MAXIMUM SIZE OF RECTANGULAR BEAM PENETRATION AT BOTH ENDS OF ALL INTERIOR STEEL BEAMS PER (5 / S-1.2)
28. PROVIDE RECESSED FLOOR FRAMING AT BATHROOMS. SEE ARCHITECTURAL DWGS FOR FLOOR FINISH THICKNESS. MAXIMUM 2" RECESS.
29. DENOTES FLOOR SHTG RECESS/DEPRESSION (2" MAX). SEE ARCHITECTURAL DWGS.
30. POST GRAPHIC ON PLAN MAY NOT SHOW ACTUAL SIZE. SEE BEAM SCHEDULE OR PLAN CALL-OUT FOR POSTS SIZE.
31. A COPY OF THE LOS ANGELES RESEARCH REPORT(S) AND/OR CONDITIONS OF LISTING SHALL BE MADE AVAILABLE AT THE JOB SITE
34. PROVIDE RECESSED FLOOR FRAMING AT BATHROOMS. SEE ARCHITECTURAL DWGS FOR FLOOR FINISH THICKNESS. MAXIMUM 2" RECESS.

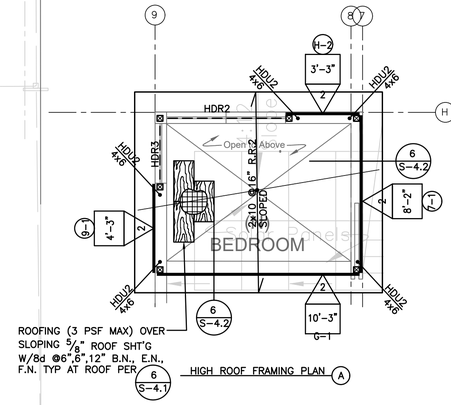
N

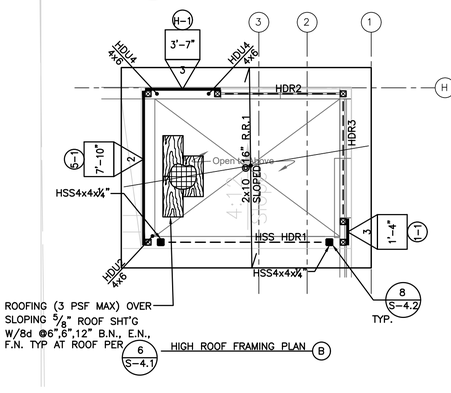
1/4"=1'-0"

0 1' 5' 15'

REVISIONS: 1 2 3 4 5







SHEAR WALL SCHEDULE

DESCRIPTION					NAILING (5)(7)			SHEAR TRANSFER			VALUE (STGR)
								Bottom Sill	Top Plate	Mud Sill	plf
NO.	MATERIAL	2-SIDES (9)	BLOCKED	3x Frmg	Size	Edge	Field (1)	SDS¼x6 LAGS	LTP4 (3)	5/8"ø A.B.	
2	15/32" Struct. No. 1 Ply	No	Yes	No	10d	6"	12"	12"	24"	24" (8)	544#/'
3	15/32" Struct. No. 1 Ply	No	Yes	Yes (4)	10d	4"	12"	12"	16"	16" (8)	816#/'
4	15/32" Struct. No. 1 Ply	No	Yes	Yes (4)	10d	3"	12"	9"	12"	16" (8)	1064#/'
5	15/32" Struct. No. 1 Ply	No	Yes	Yes (4)	10d	2"	12"	7"	9"	16" (8)	1392#/'
6	15/32" Struct. No. 1 Ply	Yes (9)	Yes	Yes (4)	10d	4"	12"	6"	7"(1-side) 15"(2-sides)	3/4"ø @ 16" o.c.	1632#/'
7	15/32" Struct. No. 1 Ply	Yes (9)	Yes	Yes (4)	10d	3"	12"	4" (6)	6"(1-side) 12"(2-sides)	3/4"ø @ 12" o.c.	2128#/'
8	15/32" Struct. No. 1 Ply	Yes (9)	Yes	Yes (4)	10d	2"	12"	3" (6)	4"(1-side) 9"(2-sides)	3/4"ø @ 12" o.c.	2784#/'

NOTE: FOR ADDN'L INFO SEE 2/S4.1

EARTHQUAKE DESIGN DATA:

a) SEISMIC IMPORTANCE FACTOR=1.0
OCCUPANCY CATEGORY= II
b) Ss= 0.666 S1= 1.876
c) SITE CLASS= D
d) SDS= 1.500 SD1= 0.755
e) SEISMIC DESIGN CATEGORY= D
f) BASIC SEISMIC-FORCE-RESISTING SYSTEM(S)= WOOD STRUCTURAL SHEAR PANELS HARDY PANELS
g) DESIGN BASE SHEAR= 19.4 K
TOTAL WEIGHT OF BUILDING= 64.58 K
h) SEISMIC RESPONSE COEFFICIENT(S), Cs= 0.300
i) RESPONSE MODIFICATION FACTOR(S), R= 6.5
j) ANALYSIS PROCEDURE USED= EQUIVALENT LATERAL LOAD
k) REDUNDANCY FACTOR USED= 1.3
l) DESIGN LOAD BEARING VALUE OF SOIL= 1500 PSF (W/ ⅓ INCREASE)

SPECIAL INSPECTION: (PER LACBC CHAPTER 17, SECTION 1701.5)

SPECIAL INSPECTION BY A DEPUTY INSPECTOR IS REQUIRED FOR THE FOLLOWING ITEMS:

- [x] FIELD WELDING
- [x] STRUCTURAL CONCRETE WITH f'c GREATER THAN 2500 PSI.
- [x] EXPANSION/EPOXY ANCHORS & OTHER HIGH STRENGTH BOLTING
- [ ] SPRAYED ON FIREPROOFING
- [ ] HIGH STRENGTH MASONRY
- [ ] HIGH-LIFT GROUTING
- [ ] PRE-STRESSED CONCRETE
- [x] LATERAL FORCE RESISTING FRAMES
- [ ] PILLING, DRILLED PIERS, CAISSONS AND CONNECTING GRADE BEAMS
- [x] PREFAB SHEAR WALL ANCHOR BOLT
- [x] SHEAR WALL TYPES 3 THRU 8

LEGEND

- 3 DENOTES SW PER PLAN SCHED. SEE DETAIL 8/S-4.1 FOR CONSTR.
- x-x DENOTES SHEAR LINE
- ⊗ DENOTES HOLDOWN ABOVE TO BEAM
- □ DENOTES POST ABOVE TO BEAM
- ⊠ DENOTES WOOD POST
- ■ INDICATES STEEL TUBE OR PIPE COLUMN
- HFX DENOTES HARDY FRAME PER S-5.0 (ICC ESR-2089) (LARR #25759)
- HDU DENOTES SIMPSON HOLDOWN W/ ¼x2.5 SCREWS PER MANUF. SPECS. (ICC ESR-2330, LARR #25720)
- DBM: DENOTES DROPPED BEAM BELOW FLOOR/ROOF JOISTS.
- HDR: DENOTES HEADER
- RBM: RIDGE BEAM
- HBM: HIP BEAM
- VBM: VALLEY BEAM
- FBM: FLUSH BEAM
- LBM: DENOTES LANDING BEAM
- TBM: TRELLIS BEAM

SHEARWALL NOTE:
AT SHEARWALL NUMBERS 3 TO 8,
FOUNDATION SILL PLATES AND ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL BE NOT LESS THAN A SINGLE 3x NOMINAL OR LARGER MEMBER.

FRAMING NOTES:

1. FASTENERS IN PRESERVATIVE TREATED WOOD OR FIRE RETARDANT TREATED WOOD SHALL BE OF HOT DIPPED ZINC COATED GALVANIZED STEEL OR STAINLESS STEEL.

2. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING. FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANEL EDGES. PLYWOOD SPANS SHALL CONFORM WITH TABLE 2304.7.

3. SOLID BLOCKING SHALL BE PROVIDED AT ALL HORIZONTAL JOINTS OCCURRING IN BRACED WALL PANELS.

CONTRACTOR NOTE:

CONTRACTORS RESPONSIBLE FOR THE CONSTRUCTION OF A WIND OR SEISMIC FORCE RESISTING SYSTEM/COMPONENT LISTED IN THE "STATEMENT OF SPECIAL INSPECTIONS" (S1.1) SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE LADBS INSPECTORS AND THE OWNER PRIOR TO COMMENCEMENT OF WORK ON SUCH SYSTEM OR COMPONENT.

THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN:
1) ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS;
2) ACKNOWLEDGEMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL;
3) PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, THE METHOD AND FREQUENCY OF REPORTING AND DISTRIBUTION OF THE REPORTS; AND
4) IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION.

FRAMING SCHEDULE (U.N.O.)

- 2x10 RAFTERS @16" O.C.
- 2x12 DECK JOISTS @16" O.C.
- CEILING JOISTS PER SCHEDULE
- CALIFORNIA FRAMING

HEADER SCHEDULE 2x4 WALL U.N.O.

L=4'-0"	4x6
4'-0" to < 6'-0"	4x8
6'-0" to < 8'-0"	4x10
8'-0" to < 10'-0"	4x12
10'-0" to < 12'-0"	4x14

HEADER SCHEDULE 2x6 WALL U.N.O.

L=4'-0"	6x6
4'-0" to < 6'-0"	6x6
6'-0" to < 8'-0"	6x8
8'-0" to < 10'-0"	6x10
10'-0" to < 12'-0"	6x12

CEILING JOIST SCHEDULE

MAXIMUM SPAN	MIN. JOIST SIZE
9.5 FEET	2x4 AT 16" O.C.
13 FEET	2x6 AT 24" O.C.
14.5 FEET	2x6 AT 16" O.C.
19 FEET	2x8 AT 16" O.C.
22 FEET	2x10 AT 16" O.C.

BEAM SCHEDULE (U.N.O.)

BEAM TYPE	SIZE	POST SUPPORT	REMARKS
FBM1	3.5"x11.25" PSL	4x6	–
FBM1A	3.5"x11.25" PSL	4x6	–
FBM2	4x12	4x6	–
FBM2A	4x12	4x6	–
WFBM3	W10x33	6x6	W/ 2x NLR
WFBM4	W10x33	6x6	W/ 2x NLR
FBM5	6x12	4x6	–
FBM6	4x12	4x6	–
FBM28	5.25"x11.25" PSL	4x6	–
FBM29	6x12	4x6	–
HDR1	HSS8x4x1/4"	HSS4x4x1/4"	–
HDR2	6x8	4x6	–
HDR3	6x8	4x6	–
HDR4	6x8	4x6	–
HDR4A	6x8	4x6	–
HDR5	6x8	4x6	–
HDR6A	6x8	4x6	–
HDR7A	6x8	4x6	–

NOTE:
WHERE POST SIZES CARRYING MULTIPLE BEAMS CONFLICT, USE LARGER SIZE PER TABLE.

ARCHITECTURAL PLAN INFORMATION AND DIMENSIONS WHICH APPEAR AS HALF-TONE BACKGROUND ON STRUCTURAL DRAWINGS ARE ONLY FOR GENERAL REFERENCE. ALL SUCH BACKGROUND DATA MUST BE VERIFIED OR CONFIRMED WITH PERTINENT HARD-LINE ARCHITECTURAL AND CIVIL/GRADING PLANS BOUND IN THIS SET, AND MAY NOT BE USED DIRECTLY FOR BIDDING, CONSTRUCTION, OR LAYOUT PURPOSES.

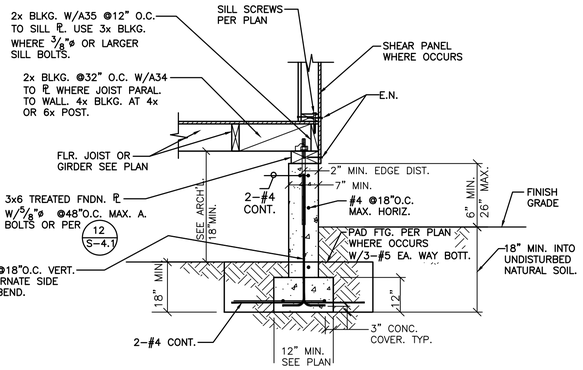
NOTES:

1. SEE ARCHITECTURAL DRAWINGS FOR FINISH FLOOR ELEVATION, DIMENSIONS AND OTHER INFORMATION NOT SHOWN.
2. INDICATES WALL SHEAR PANEL; INDICATES TYPE OF WALL SHEAR PANEL PER PLAN SCHED.; INDICATES MIN. LENGTH OF WALL SHEAR PANEL.
3. INDICATES WALL, PER PLAN; INDICATES ROOF LINE ABOVE FLOOR FRAMING
4. HOLDOWN BOLTS SHALL BE RE-TIGHTENED JUST PRIOR TO COVERING THE WALL FRAMING.
5. INDICATES SIMPSON STRAP OVER ROOF SHEATHING AT BEAM OR 4x4 BLOCKING BELOW 7/S-4.1
6. FOR TYPICAL WOOD FRAMING DETAILS SEE S4 SHEETS
7. FOR WALL TOP PLATES SPLICE DETAIL SEE 10/S-1.2
8. PROVIDE DOUBLE FLOOR JOIST UNDER BEARING PARTITION WALLS PARALLEL TO JOIST & BLW BATHROOM TUB. PROVIDE 4x4 BLKG. W/"Z"-CLIP UNDER PARTITION WALLS PERPENDICULAR TO FLOOR JOIST
9. ALL 2x FLOOR JOISTS SHALL BE CONNECTED TO BMS. WITH SIMPSON "LB" OR "LUS" HANGERS. ALL RAFTER SHALL BE CONNECTED TO RIDGE BEAMS WITH SIMPSON "LB" OR "LUS" HANGERS, AND TO VALLEY/HIP BEAMS WITH SIMPSON "LSU" HANGERS. U.N.O. ON PLAN OR SECTIONS.
10. INDICATES DIRECTION OF SPAN OF JOISTS PER PLAN.
11. FOR BM./GIRDER TO POST CONN. DETAIL SEE 1/S-4.2
12. FOR BM. TO GIRDER CONN. DETAIL SEE 13/S4.1 U.N.O. TYP
13. ALL INTERIOR WALLS SHALL BE 2x4 MIN. @ 16" O.C. MAX. STUD WALLS U.N.O. ON PLAN. ALL EXTERIOR WALLS SHALL BE 2x4 MIN. @16" O.C. MAX. STUD WALL. 12'-0" OR HIGHER WALLS SHALL BE OF 2x6 MIN. @16" EXTERIOR FRAMING. SEE ARCH. DWG'S FOR WALL DIMENSIONS. ALL PLUMBING WALLS SHALL BE 2x6 MIN. @16" O.C. STUD WALLS.
14. USE DOUBLE JOISTS & DOUBLE BLOCKING AT F.A.U. AND ATTIC ACCESS LOCATIONS.
15. ALL FIELD CONDITIONS SHALL BE VERIFIED IN FIELD BY GENERAL CONTRACTOR BEFORE WORK BEGINS. ANY DEVIATION FROM THESE DRAWINGS SHALL BE NOTIFIED TO ARCHITECT/ENGINEER IN A TIMELY MANNER FOR REVISIONS OF CONSTRUCTION DOCUMENTS.
16. FOR HEADER TYPE INFORMATION SEE PLAN NOTES.
17. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING. FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANEL EDGES. PLYWOOD SPANS SHALL CONFORM WITH TABLE 2304.7.
18. ALL BOLT HOLES SHALL BE DRILLED 1/32 TO 1/16" OVERSIZED.
19. HOLDOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS; AND HOLD-DOWNS SHALL BE FINGER TIGHT AND 1/2 WRENCH TURN JUST PRIOR COVERING THE WALL FRAMING. CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE STEEL PLATE WASHERS IN ACCORDANCE WITH TABLE 2305.5 OF THE LA BUILDING CODE.
20. SPLICE ALL EXTERIOR & PERIMETER WALL TOP ℄'s FOR WALL TOP PLATES SPLICE DETAIL SEE
21. SHORE EXISTING FLOOR/ROOF FRAMING AS REQUIRED DURING CONSTRUCTION OF NEW FRAMING. 10/S-1.2
22. ALL DIAPHRAGM AND SHEAR WALL NAILING SHALL UTILIZE COMMON NAILS OR GALVANIZED BOX. ALL DIAPHRAGM NAILING OVER 2x WF BM NAILER SHALL BE 10d x1½" NAILS.
23. NAILERS OVER STEEL BEAMS SHALL BE 1½" TIMBER STRAND LSL 1.3E BY I-LEVEL OR EQUAL.
24. RIP DECK JOIST TO MATCH FLOOR SLOPE PER ARCH'L DWGs, 2" MAX. RIP.
28. SLOPE WF ROOF/FLOOR FRMG AS REQUIRED TO MATCH SLOPE PER ARCH. DWGs
29. PROVIDE MAXIMUM SIZE OF RECTANGULAR BEAM PENETRATION AT BOTH ENDS OF ALL INTERIOR STEEL BEAMS PER 5/S-1.2
30. POST GRAPHIC ON PLAN MAY NOT SHOW ACTUAL SIZE. SEE BEAM SCHEDULE OR PLAN CALL-OUT FOR POSTS SIZE.
31. A COPY OF THE LOS ANGELES RESEARCH REPORT(S) AND/OR CONDITIONS OF LISTING SHALL BE MADE AVAILABLE AT THE JOB SITE

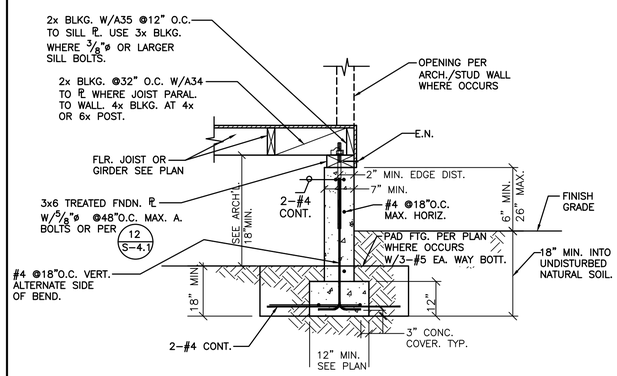
N

1/4"=1'-0"
0 1' 5' 15'

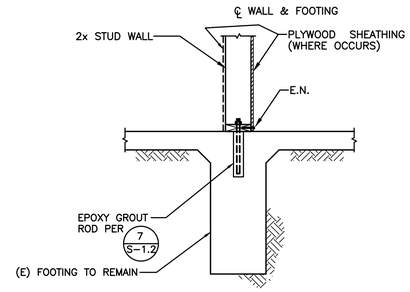
REVISIONS: 1 2 3 4 5



EXTERIOR FOOTING DETAIL | 1

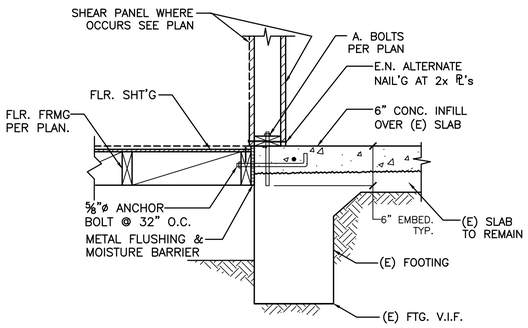


EXTERIOR FOOTING DETAIL @ OPENING | 2

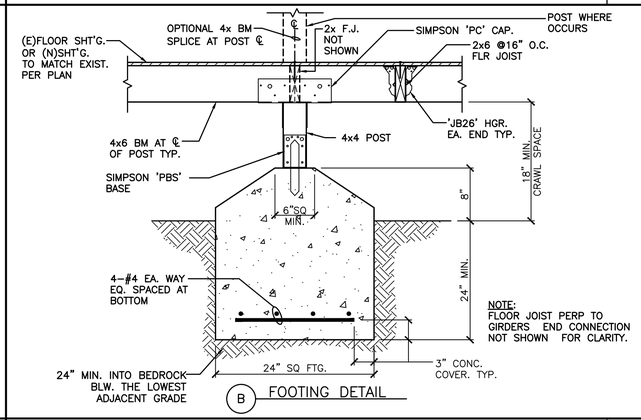


INTERIOR (E) FOOTING DETAIL | 3

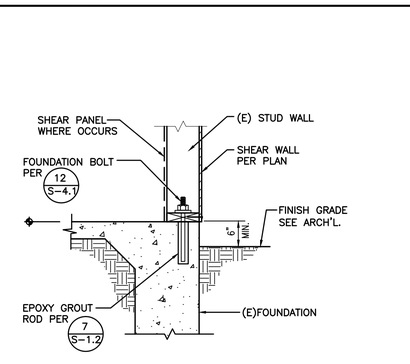
NOT USED | 4



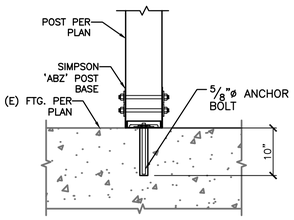
SHEAR WALL CONN. AT (E) EXT. FND. | 5



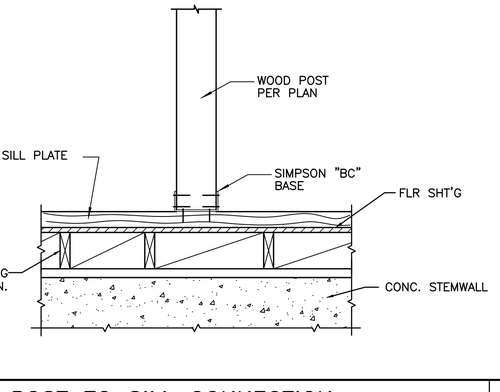
TYP. RAISED FLOOR FRAMING DETAILS | 6



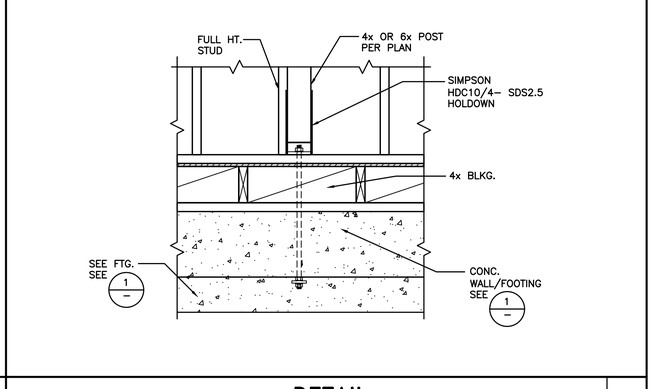
NEW WALL AT EXISTING FOOTING DETAIL | 7



WOOD POST AT (E) FTG. | 8



POST TO SILL CONNECTION | 9



DETAIL | 10

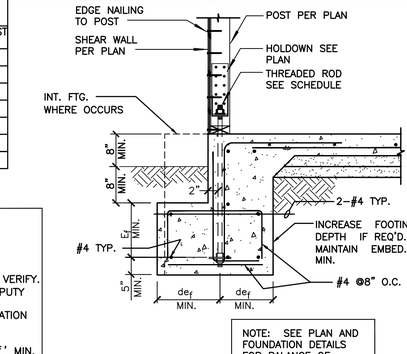
HOLDOWN SCHEDULE

MODEL NO.	BOLT DIA.	℄ WASHER	E_f EMBED	de_f*	MIN POST SIZE
HDU2	5/8"ø	3" SQ	6"	6"	4x4
HDU4	5/8"ø	3" SQ	6"	6"	4x4
HDU5	5/8"ø	3" SQ	6"	6"	4x4
HDU8	7/8"ø	3" SQ.	10"	10"	4x4
HDU11	1"ø	3-1/4" SQ.	12"	12"	4x6
HDU14	1"ø	3-1/2" SQ.	12"	12"	4x6
CTDS	1"ø	3-1/2" SQ.	12"	12"	4x6

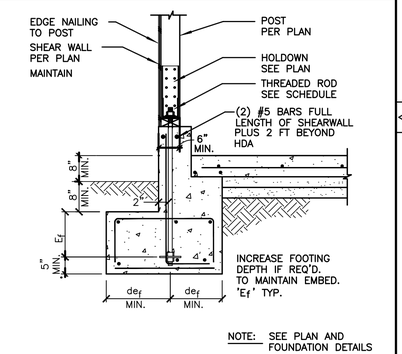
* LENGTH OF FOOTING WITH 2 'de_f' WIDTH SHALL BE 1'-6" MIN. FROM EACH SIDE OF HOLDOWN BOLT.

NOTES:
1. SQUARE WASHERS SHALL BE 1/4" MIN. ROUND WASHERS 1/8" MIN.
2. SIMPSON STRONG TIE ICC #2330 /L.A.R.R. #25720.
3. ROD SHOULD BE ASTM A307 OR A36.
4. TIGHTEN ALL BOLTS PRIOR TO COVERING.
5. BOLT HOLES IN POST TO BE 1/16" LARGER THAN BOLT. INSPECTOR TO VERIFY.
6. SIMPSON "SSTB" ANCHOR BOLTS MAY BE SUBSTITUTED WITH SPECIAL DEPUTY INSPECTION.
7. ALL HOLDOWN HARDWARE IS TO BE SECURE IN PLACE PRIOR TO FOUNDATION INSPECTION.
8. 'de_f' DENOTES MIN. EDGE & END DISTANCE AT FOOTING.
9. FOOTING LENGTH WITH MIN 'de_f' EDGE DISTANCE SHALL BE 3 TIMES 'E_f' MIN.

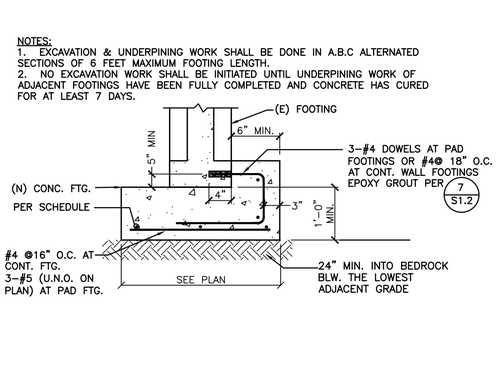
L.A. CITY REQUIREMENTS :
1. APPROVED PLATE WASHERS SHALL BE USED ON HOLDOWN POSTS ON OPPOSITE SIDE OF HOLDOWN. SEE SCHEDULE.



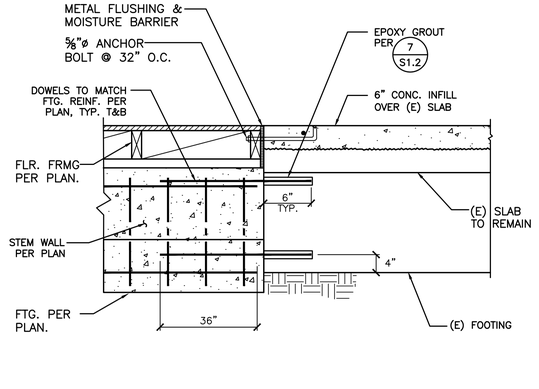
A AT MAIN HOUSE – (N) FND



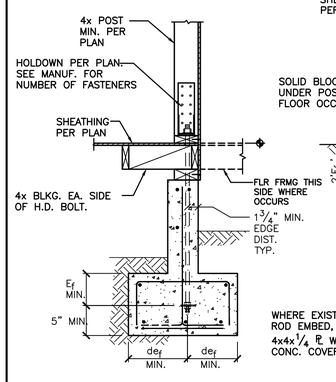
B AT GARAGE – (N) FND



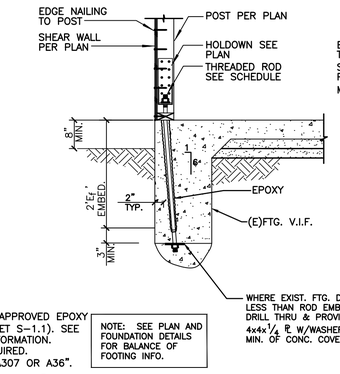
FOOTING UNDERPINING | 13



(N) FTG TO (E) FTG CONN. DETAIL | 14



C AT RAISED FLOOR

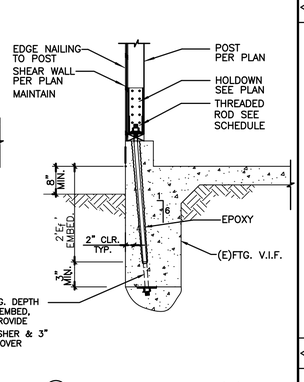


D AT EXISTING RAISED FOOTING

NOTES:
1. SET THREADED ROD w/ APPROVED EPOXY (SEE EPOXY NOTES, SHEET S-1.1). SEE GENERAL NOTES FOR INFORMATION.
2. SPECIAL INSPECTION REQUIRED.
3. ROD SHOULD BE "ASTM A307 OR A36".

NOTE: SEE PLAN AND FOUNDATION DETAILS FOR BALANCE OF FOOTING INFO.

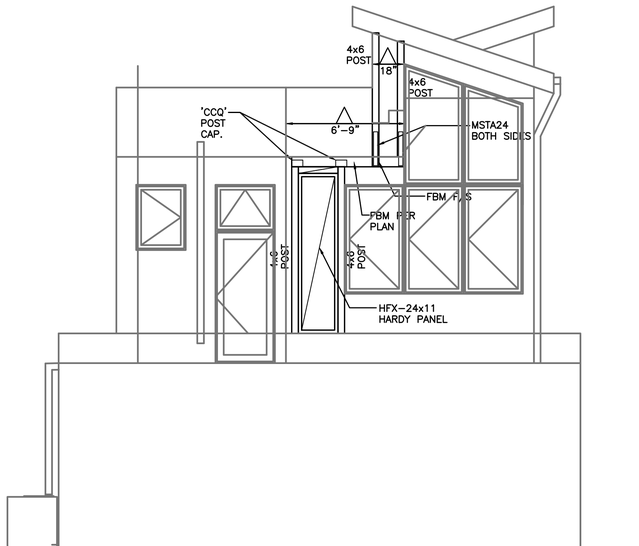
E AT MAIN HOUSE – (E) FND



F AT GARAGE – (E) FND

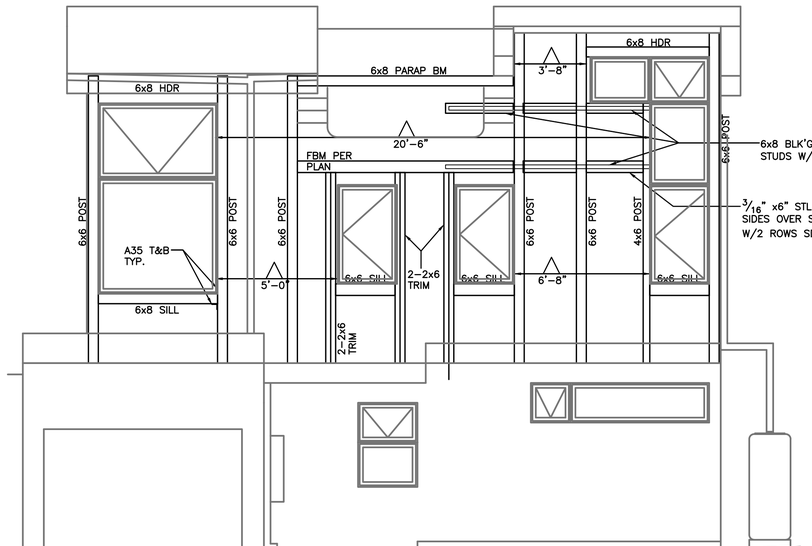
HOLDOWN ANCHOR DETAIL | 16

REVISIONS: 1 2 3 4 5



NOTE: NOT ALL WALL FRAMING OR WALL STUDS SHOWN. ONLY RELEVANT AND NOT-TYPICAL WALL FRAMING SHOWN.

1 WALL FRAMING ELEVATION



NOTE: NOT ALL WALL FRAMING OR WALL STUDS SHOWN. ONLY RELEVANT AND NOT-TYPICAL WALL FRAMING SHOWN.

2 WALL FRAMING ELEVATION

0 2' 4' 8'
Scale: 1/4" = 1'-0"

REVISIONS: 1 2 3 4 5

SHEAR WALL SCHEDULE											
DESCRIPTION					NAILING (5)(7)			SHEAR TRANSFER			VALUE (STGR)
								Bottom Sill	Top Plate	Mud Sill	
NO.	MATERIAL	2-SIDES (9)	BLOCKED	3x Frmg	Size	Edge	Field (1)	SDS¼x6 LAGS	LTP4 (3)	5/8"ø A.B.	plf
▽	3/8" Struct. No. 1 (3-Ply)	No	Yes	No	8d	6"	12"	12"	24"	24" (8)	368#/'
▽	15/32" Struct. No. 1 Ply	No	Yes	Yes (4)	10d	6"	12"	8"	24"	24" (8)	544#/'
▽	15/32" Struct. No. 1 Ply	No	Yes	Yes (4)	10d	4"	12"	6"	16"	16" (8)	816#/'
▽	15/32" Struct. No. 1 Ply	No	Yes	Yes (4)	10d	3"	12"	4"	12"	16" (8)	1064#/'
▽	15/32" Struct. No. 1 Ply	No	Yes	Yes (4)	10d	2"	12"	3"	9"	16" (8)	1392#/'
▽	15/32" Struct. No. 1 Ply	Yes (9)	Yes	Yes (4)	10d	4"	12"	3"	7"(1-side) 15"(2-sides)	¾"ø @ 16" o.c.	1632#/'
▽	15/32" Struct. No. 1 Ply	Yes (9)	Yes	Yes (4)	10d	3"	12"	4" (6)	6"(1-side) 12"(2-sides)	¾"ø @ 12" o.c.	2128#/'
▽	15/32" Struct. No. 1 Ply	Yes (9)	Yes	Yes (4)	10d	2"	12"	3" (6)	4"(1-side) 9"(2-sides)	¾"ø @ 12" o.c.	2784#/'

SHEAR WALL NOTES:

(1) Nailing to studs per plan at 16" o.c. All nails to be common nails.

(2) 16d common nail transfer thru bottom sill or ⅜" dia. lags, see note (6).

(3) "Simpson" LTP4 flat framing anchor.

(4) 3x framing required at all panel edges, and bottom sill plate, except double top-plates. Nails to be staggered. Minimum ½" edge nailing distance at panel ends and edges, ½" edge distance requirements also apply to all plates, posts, and studs.

(5) Nails shall be staggered in two lines along parrallel edges when spacing is 2" on center, or when 10d common nails spaced 3" o.c. penetrate framing more than 1-⅝".

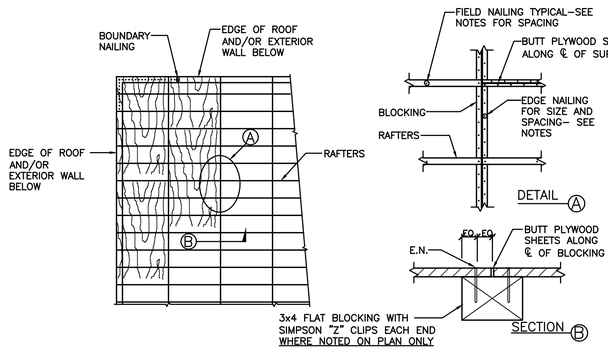
(6) At bottom sill plate floor transfer provide ⅜" dia. lag bolts 3" into blocking below. Pre-drill for all lags.

(7) The use of nail guns for shearwall nailing is subject to a satisfactory jobsite demonstration and approval by the structural engineer of record prior to framing. The approval is subject to continued satisfactory performance. If the nail heads penetrate the outer ply more than would be normal for a hand held hammer, or if the minimum allowable edge distances are not maintained, the performance will be deemed unsatisfactory and will not be approved. Clipped head nails are not permitted.

(8) Approved plate washers, 3"SQ x0.299" ℄ are to be used in lieu of cut washers.

(9) Where panels are applied on both sides of a wall & nail spacing is less than 6" o.c., panel joints shall be offset to fall on different studs. Studs supporting panel edges to be 3x min. Nails on each side of wall shall be staggered to prevent 'stud blow-out'.

SHEARWALL SCHEDULE & NOTES 2



ROOF SHEATHING NOTES:

1. PLYWOOD SHEATHING: U.S. PRODUCT STD. PS 1-95 APA "SHEATHING & SINGLE-FLOOR" RATED SHEATHING EXPOSURE 1. THICKNESS: ½" INCH MIN. SEE PLAN.

2. NAILS FOR PLYWOOD SHEATHING: 8d (FULL HEAD, COMMON WIRE). FIELD NAILING: 12" O.C. EDGE NAILING: 6" O.C. U.N.O. ON PLAN

3. PROVIDE PLYWOOD SHEETS NOT LESS THAN 2'-0" IN LEAST DIMENSION NOR LESS THAN 8'-0" SQ. FEET IN AREA. USE FULL SHEETS WHEREVER POSSIBLE.

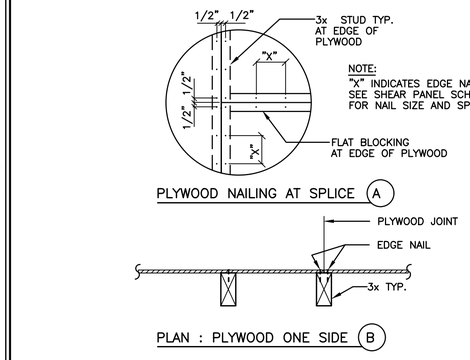
4. PLACE PLYWOOD SHEET WITH FACE PLIES PERPENDICULAR TO JOISTS.

5. COORDINATE JOIST LAYOUT WITH 4'-0" MODULE AS RELATED TO PLYWOOD SHEATHING PATTERN.

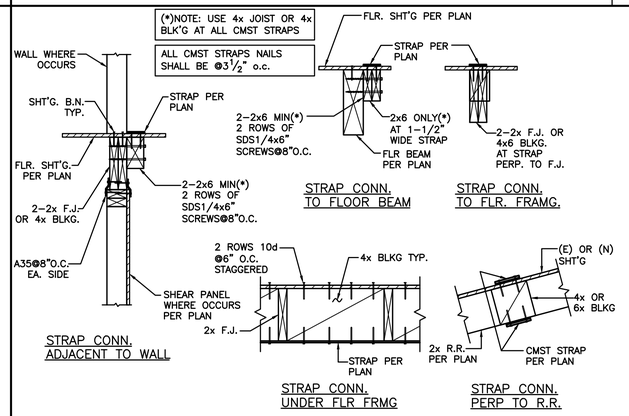
6. MACHINE APPLIED NAILING: THE CONTRACTOR SHALL VERIFY SATISFACTORY INSTALLATION ON THE JOB FOR THE USE OF MACHINE APPLIED NAILS. REMOVE ALL "SHINERS".

7. PREDRILL HOLES FOR NAILING WHEN WOOD TENDS TO SPLIT.

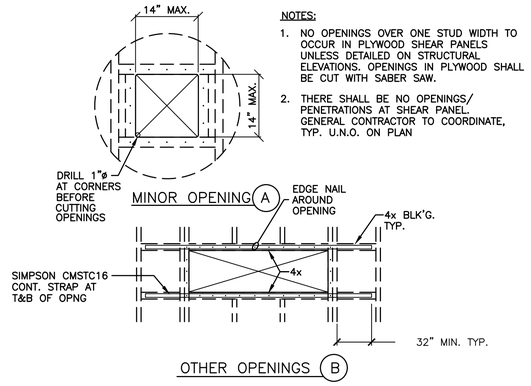
PLYWOOD ROOF SHEATHING 6



NAILING AT SPLICE 3



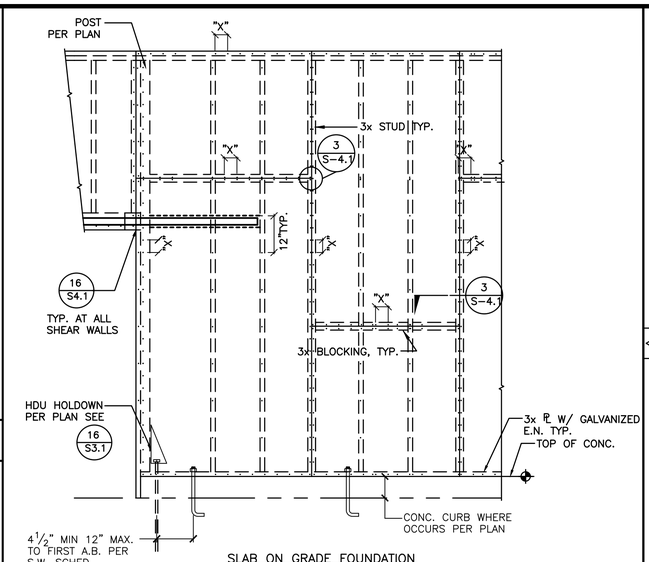
TYPICAL ROOF/FLOOR STRAP CONN. 7



NOTES:

1. NO OPENINGS OVER ONE STUD WIDTH TO OCCUR IN PLYWOOD SHEAR PANELS UNLESS DETAILED ON STRUCTURAL ELEVATIONS. OPENINGS IN PLYWOOD SHALL BE CUT WITH SABER SAW.
2. THERE SHALL BE NO OPENINGS/ PENETRATIONS AT SHEAR PANEL. GENERAL CONTRACTOR TO COORDINATE, TYP. U.N.O. ON PLAN

STUD WALL OPENING 11



SLAB ON GRADE FOUNDATION

NOTES:

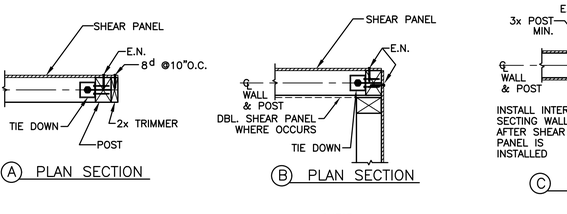
FOR SHEAR WALL SCHEDULE, SEE 2/S-4.1 OR PLAN

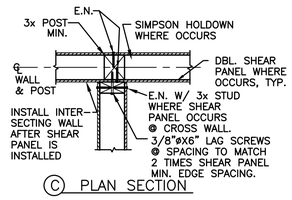
INDIVIDUAL PIECES OF PLYWOOD SHALL BE NOT LESS THAN 2'-0" IN LEAST DIMENSION NOR 8 FT. IN AREA.

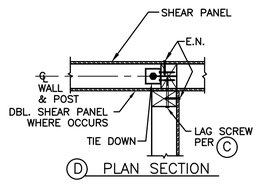
WHERE EDGE NAILING SPACING IS 3" OR LESS, NAILS SHALL BE STAGGERED AT FRAMING RECEIVING ABUTTING PANELS AND SILL PLATE.

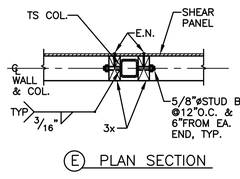
- FOR ADDITIONAL NOTES, SEE S-1.1
- FOR OPENINGS IN PLYWOOD SHEATHING, SEE 11/S-4.1
- FOR NAIL @ SPLICE, SEE 3/S-4.1
- PROVIDE FURRING OR BACKING OF THICKNESS AS REQUIRED TO MAINTAIN A COMMON WALL PLANE AT ALL WOOD STUD WALL SURFACES WHICH ARE ONLY PARTIALLY SHEATHED WITH STRUCTURAL PLYWOOD. COORDINATE AND ADJUST HEAD, JAMB AND SILL DETAILS AS REQUIRED FOR PROPER OVERALL WALL THICKNESS.
- "X"INDICATES EDGE NAILING-SEE SHEAR PANEL SCHEDULE 2/— FOR NAIL SIZE AND SPACING.

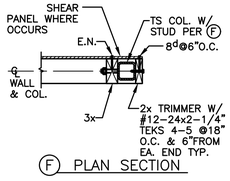
SHEAR WALL CONSTRUCTION 8

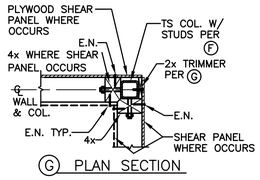


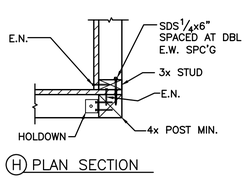




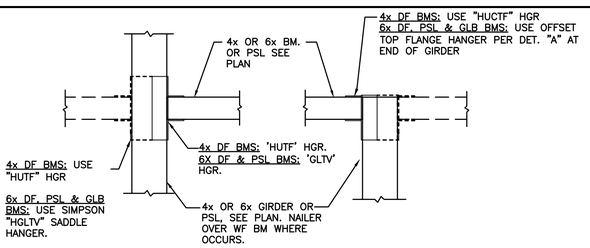








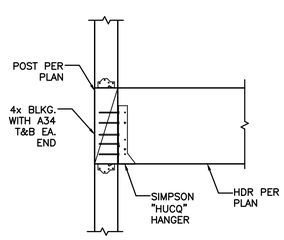
WALL CORNERS & INTERSECTIONS 10



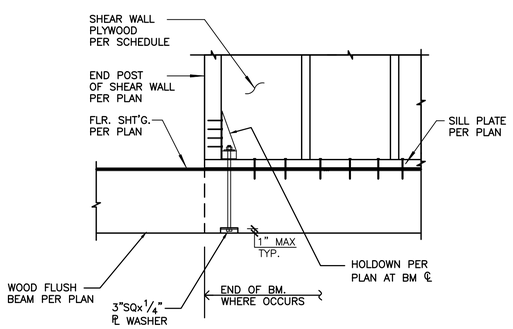
NOTES:

1. USE THIS DETAIL UNLESS HANGER IS CALLED OUT ON PLAN OR DETAIL
2. BEAM SUPPORTING SHEAR WALLS OR HOLDOWNS USE 'MGU-SDS' FOR 9¼" FLR FRMG & 'HGU-SDS' FOR 11¼" OR DEEPER FLR FRMG OR WHERE NOTED ON PLAN AS '✳' . USED OFFSET HANGER AT BEAM END CONNECTIONS.
3. USE CUSTOM HANGERS AT DOUBLE BEAMS SUPPORTS.
4. USE SKEWED HGR AT SKEWED BEAMS PER PLAN WHERE OCCURS

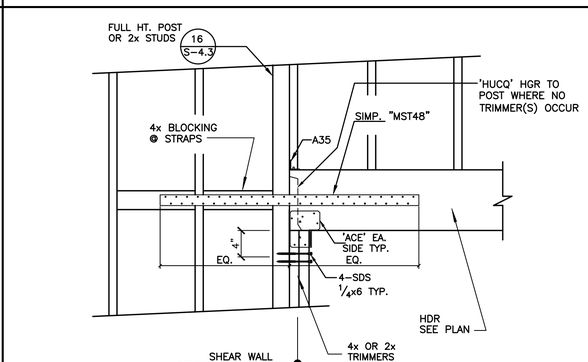
BEAM TO GIRDER CONNECTION 13



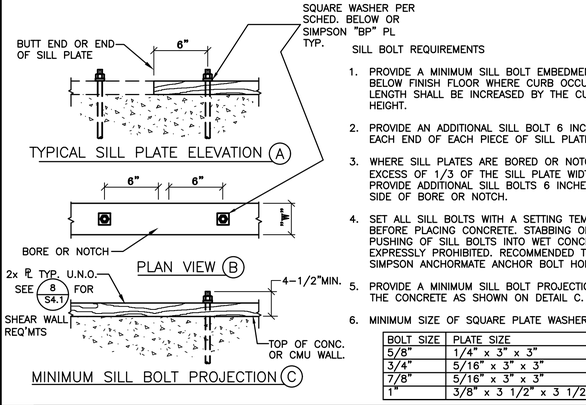
HDR FLUSH W/ POST 14



TYP. HOLDOWN CONN. TO BEAM 15



TYP. HDR CONN. DETAIL 16



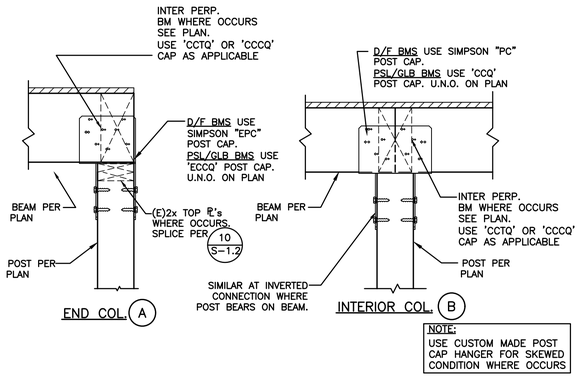
SILL BOLT REQUIREMENTS

1. PROVIDE A MINIMUM SILL BOLT EMBEDMENT OF 7" BELOW FINISH FLOOR WHERE CURB OCCURS A.B. LENGTH SHALL BE INCREASED BY THE CURBED HEIGHT.
2. PROVIDE AN ADDITIONAL SILL BOLT 6 INCHES FROM EACH END OF EACH PIECE OF SILL PLATE.
3. WHERE SILL PLATES ARE BORED OR NOTCHED IN EXCESS OF 1/3 OF THE SILL PLATE WIDTH, PROVIDE ADDITIONAL SILL BOLTS 6 INCHES EACH SIDE OF BORE OR NOTCH.
4. SET ALL SILL BOLTS WITH A SETTING TEMPLATE BEFORE PLACING CONCRETE. STABBING OR PUSHING OF SILL BOLTS INTO WET CONCRETE IS EXPRESSLY PROHIBITED. RECOMMENDED TO USE SIMPSON ANCHORMATE ANCHOR BOLT HOLDER.
5. PROVIDE A MINIMUM SILL BOLT PROJECTION ABOVE THE CONCRETE AS SHOWN ON DETAIL C.
6. MINIMUM SIZE OF SQUARE PLATE WASHERS:

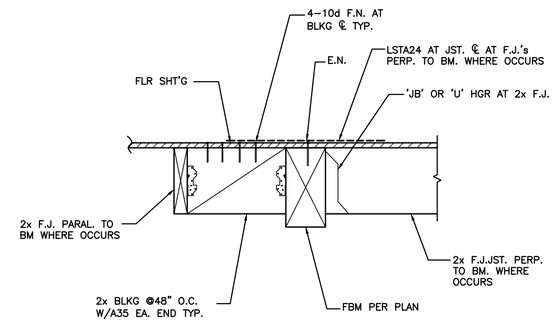
BOLT SIZE	PLATE SIZE
5/8"	1/4" x 3" x 3"
3/4"	5/16" x 3" x 3"
7/8"	5/16" x 3" x 3"
1"	3/8" x 3 1/2" x 3 1/2"

SILL PLATE DETAILS 12

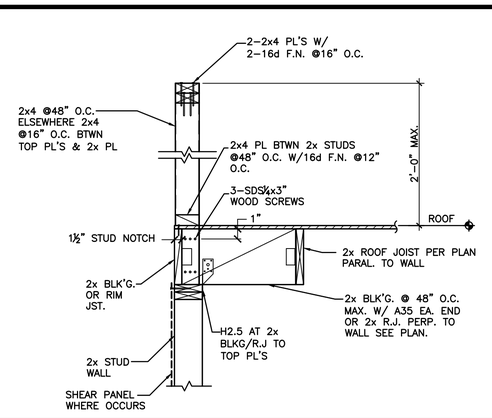
REVISIONS: 1 2 4 5



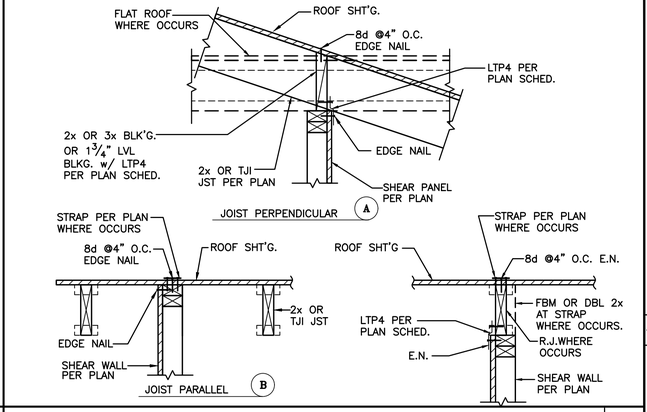
BEAM TO POST CONNECTION | 1



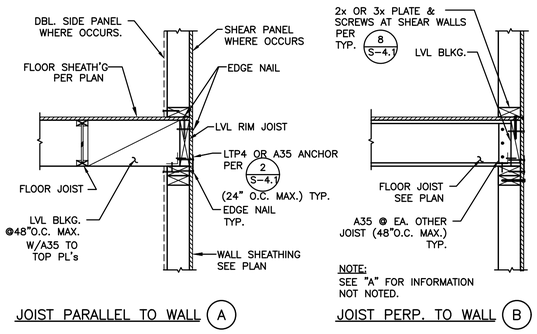
JOIST/BEAM CONN. DETAIL | 2



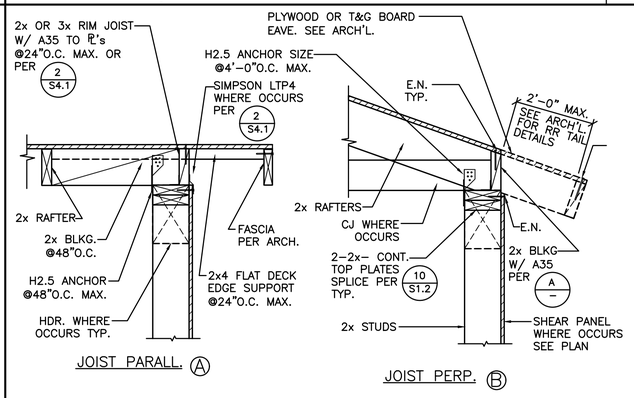
TYP. PARAPET SECTION | 3



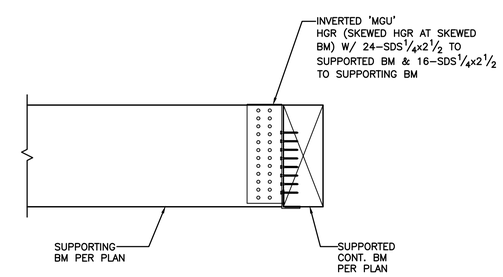
INTERIOR SHEARWALL ROOF TRANSF. | 4



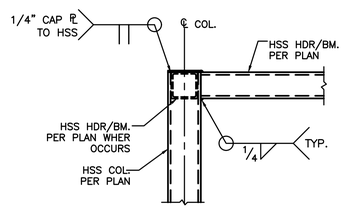
EXTERIOR SHEAR WALL DETAIL | 5



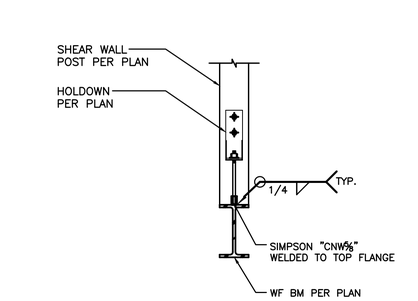
RAFTER TO WALL DETAIL | 6



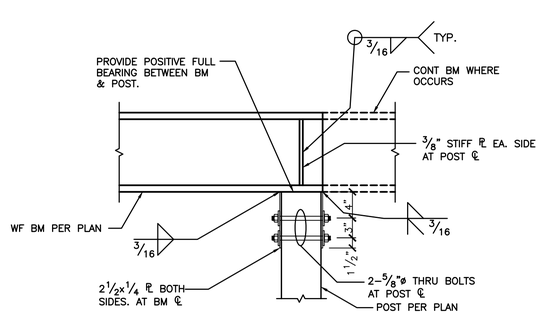
PERIMETER BM CONNECTION DETAIL | 7



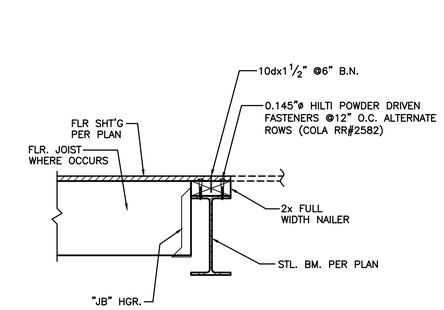
HSS COL TO HSS HDR/BM CONNECTION | 8



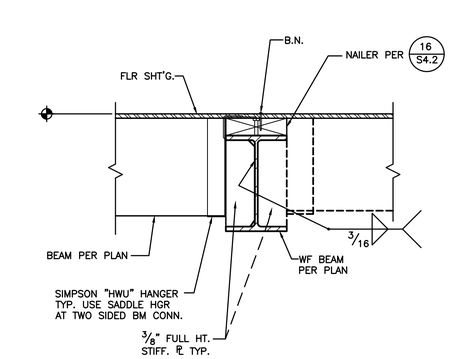
HOLDOWN TO Wx BEAM | 9



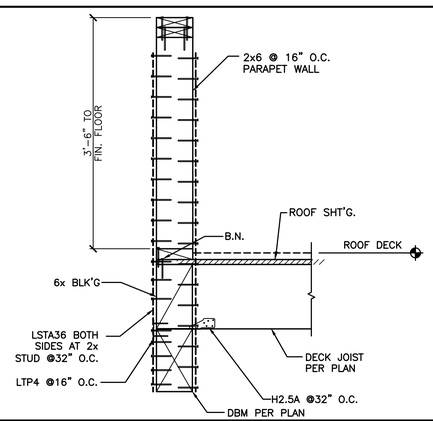
WF BM TO POST CONN DETAIL | 10



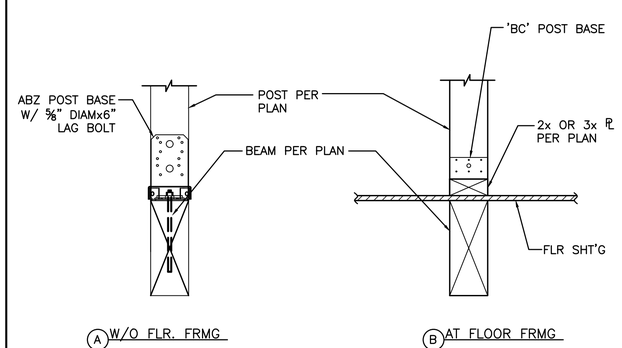
STL. BEAM NAILER DETAIL | 11



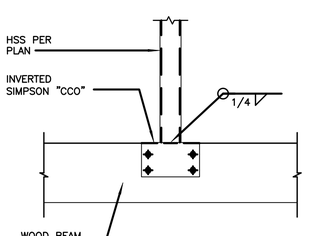
WOOD BM. TO STEEL BM. | 12



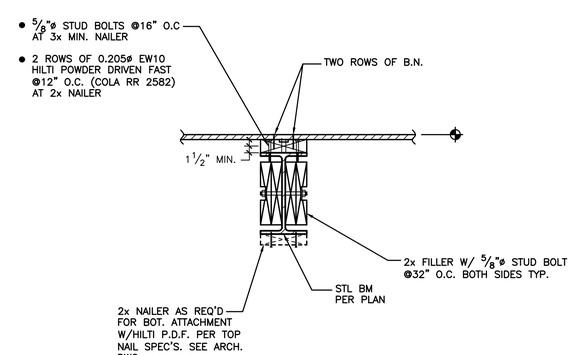
TYP. GUARDWALL DETAIL | 13



WOOD POST TO WOOD BEAM | 14

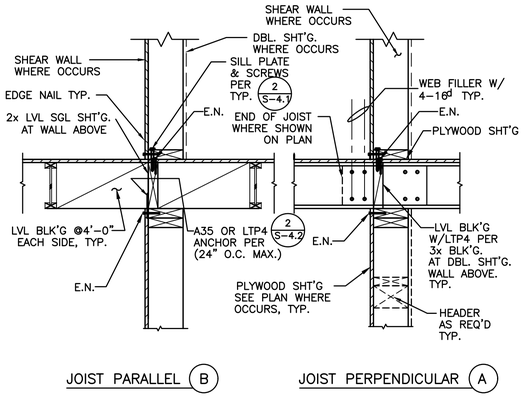


HSS COLUMN TO WOOD BEAM | 15

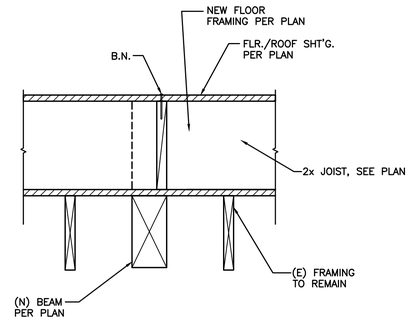


TYP. STL. BM. NAILER DETAIL | 16

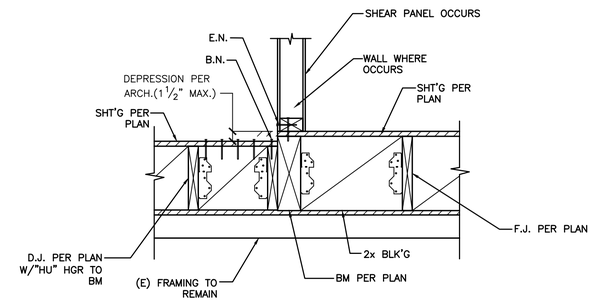
REVISIONS:



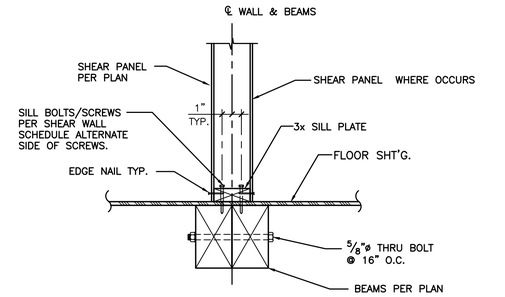
SHEAR WALL AT INTERIOR | 1



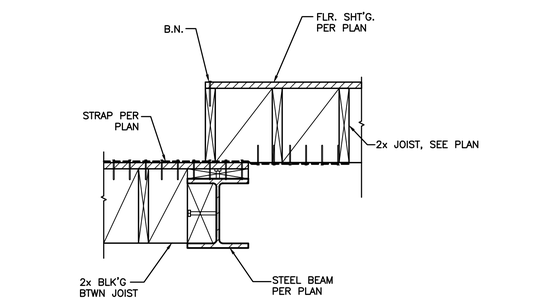
TYP. JOIST TO BEAM DETAIL | 2



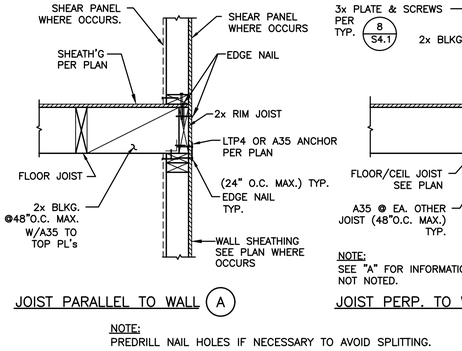
RECESSED FLOOR FRAMING | 3



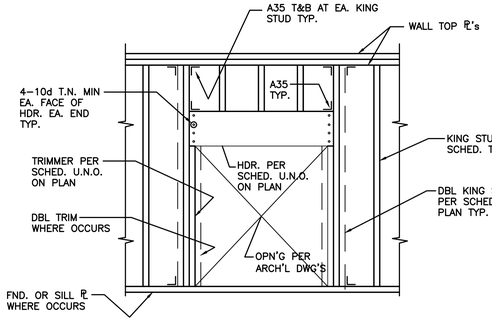
DOUBLE BM. DETAIL | 4



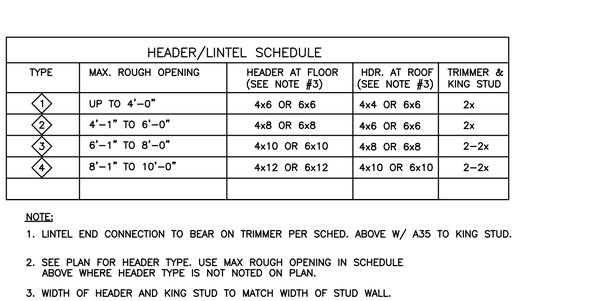
OFFSET HARDY PANEL TOP CONN. | 5



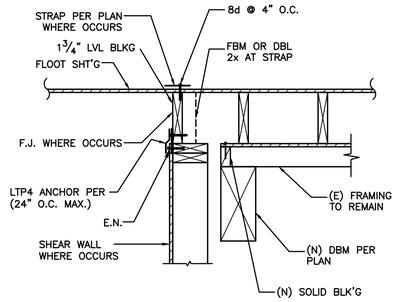
DETAIL | 6



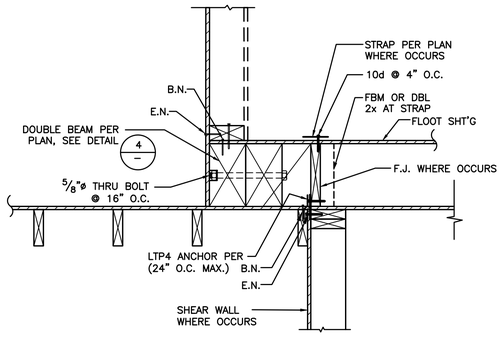
DETAIL | 7



HARDY PANEL CONN. AT FLR FRMG DETAIL | 8

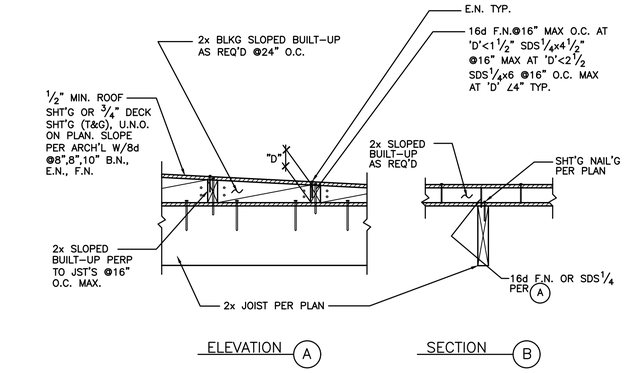


SHEAR WALL AT INTERIOR | 9



SHEAR WALL AT INTERIOR | 10

NOT USED | 11



SLOPING ROOF/DECK BUILT-UP DETAIL | 12

DETAIL | 13

NOTE:
PREDRILL NAIL HOLES IF NECESSARY TO AVOID SPLITTING.

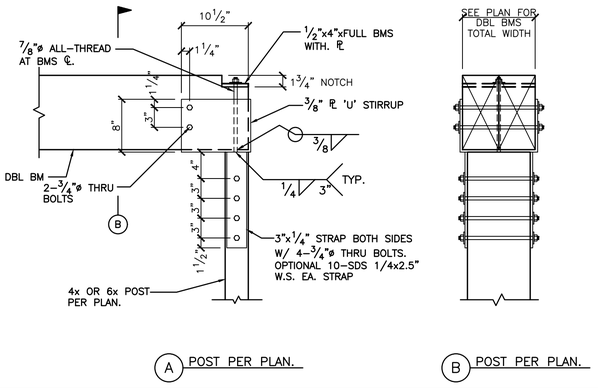
SHAFT EXTERIOR WALL DETAIL | 14

HEADER/LINTEL SCHEDULE				
TYPE	MAX. ROUGH OPENING	HEADER AT FLOOR (SEE NOTE #3)	HDR. AT ROOF (SEE NOTE #3)	TRIMMER & KING STUD
1	UP TO 4'-0"	4x6 OR 6x6	4x4 OR 6x6	2x
2	4'-1" TO 6'-0"	4x8 OR 6x8	4x6 OR 6x6	2x
3	6'-1" TO 8'-0"	4x10 OR 6x10	4x8 OR 6x8	2-2x
4	8'-1" TO 10'-0"	4x12 OR 6x12	4x10 OR 6x10	2-2x

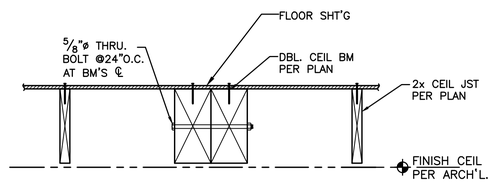
NOTE:
1. LINTEL END CONNECTION TO BEAR ON TRIMMER PER SCHED. ABOVE W/ A35 TO KING STUD.
2. SEE PLAN FOR HEADER TYPE. USE MAX ROUGH OPENING IN SCHEDULE ABOVE WHERE HEADER TYPE IS NOT NOTED ON PLAN.
3. WIDTH OF HEADER AND KING STUD TO MATCH WIDTH OF STUD WALL.

STUD WALL OPENING HEADER DETAIL & SCHEDULE | 16

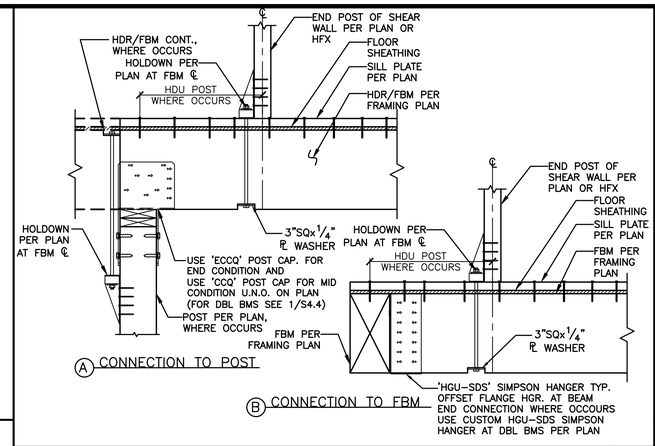
REVISIONS:



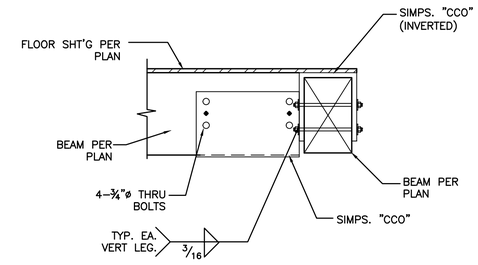
DBL BM – POST CONN. DETAIL | 1



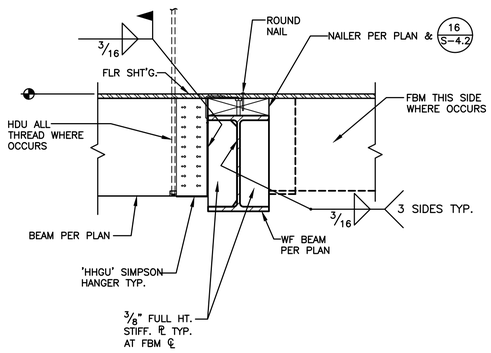
DOUBLE BEAM CONN DETAIL | 2



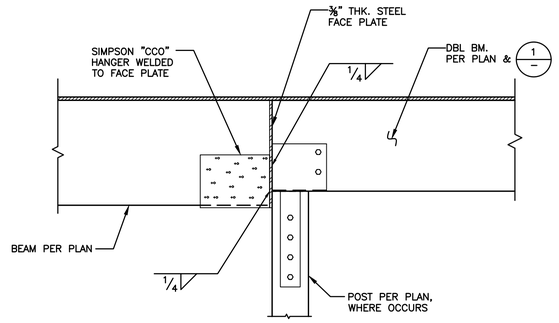
HDU AT HDR/FBM | 3



S.W. BEAM TO BEAM CONN. | 4



WOOD BM. TO STEEL BM. | 5



DETAIL | 6

7

8

9

10

11

12

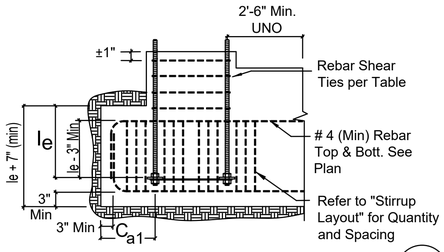
13

14

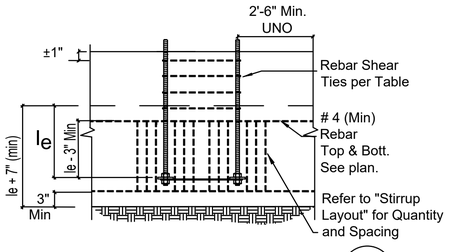
15

16

REVISIONS: 1 2 3 4 5



CURB @ OUTSIDE CORNER 1E

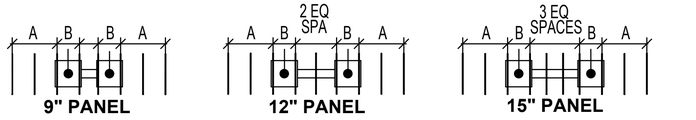


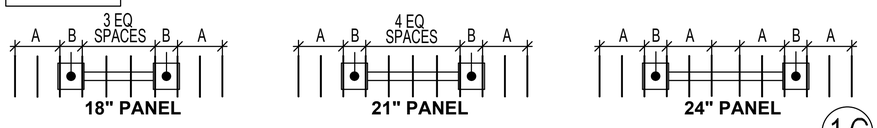
CONTINUOUS FOOTING 1F

KEY

A = 3" o.c.

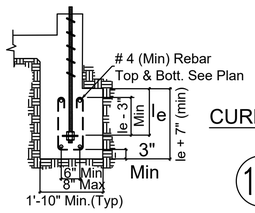
B = 1-1/2" ea Side of HD



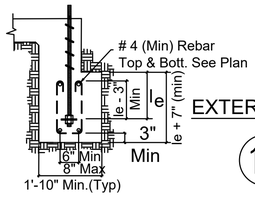


1G

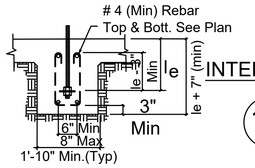
REINFORCED ANCHORAGE STIRRUP LAYOUT – PLAY VIEW 1



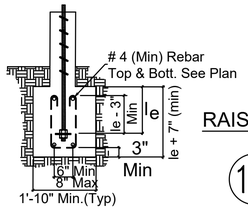
CURB (6"MIN) 1A



EXTERIOR SLAB 1B



INTERIOR SLAB 1C



RAISED FLOOR 1D

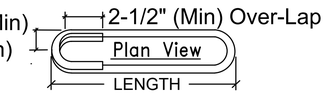
Model	Panel Width (in)	Anchorage [1]	Rod Dia (in)	Rod Grade [2,3]	RA le [4] (in)	RA C_{a1} [5] (in)	RA C_{a2} [6] (in)	Stirrups [9] (ea)	Shear Tie Sz & Spa [7,8]
HFX-9x	9	1-1/8-STD-RA	1-1/8	STD	15	19-3/4	11	8 - # 3	# 3 (min) @ 3-3/4" OC
		1-1/8-HS-RA		HS					
HFX-12x	12	1-1/8-STD-RA		STD				9 - # 3	# 3 (min) @ 4" OC
		1-1/8-HS-RA		HS					
HFX-15x	15	1-1/8-STD-RA		STD		20-5/8		10 - # 4	
		1-1/8-HS-RA		HS					
HFX-18x	18	1-1/8-STD-RA		STD				11- # 4	
		1-1/8-HS-RA		HS					
HFX-21x	21	1-1/8-STD-RA		STD				12 - # 4	# 4 (min) @ 4" OC
		1-1/8-HS-RA		HS					
HFX-24x	24	1-1/8-STD-RA		STD					
		1-1/8-HS-RA		HS					

REINFORCED ANCHORAGE NOMENCLATURE

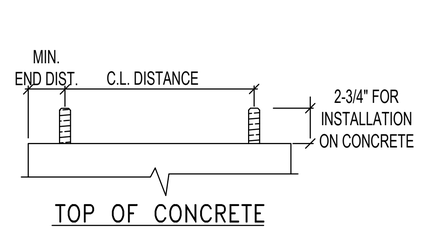
1-1/8 - STD -RA

- RA — REINFORCED ANCHORAGE
- STD — ROD GRADE
- 1-1/8 — ROD DIAMETER

3 = 1-1/2" Rad (Min)
4 = 2" Rad (Min)

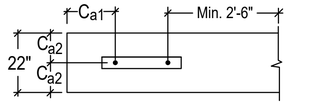


SHEAR TIE DETAIL



TOP OF CONCRETE

Model	Panel Width (in)	MIN. END DIST. (in)	CL. DIST. (in)
HFX-9x	9	1-3/4"	5-1/2"
HFX-12x	12		8-1/2"
HFX-15x	15	2-5/8"	9-3/4"
HFX-18x	18		12-3/4"
HFX-21x	21		15-3/4"
HFX-24x	24		18-3/4"



REINFORCED ANCHORAGE PLAN VIEW

SINGLE HFX FOUNDATION DETAIL

1

1) STD indicates HD rods complying with ASTM F1554 Grade 36 with a Hardy Frame Bolt Brace (HFXBB) installed with double nuts on the embed end.
2) HS indicates HD rods complying with ASTM A193 Grade B7 with a 1/2"x3"x3" (Min) Plate Washer installed with double nuts on the embed end (HFXBB not required).
3) le = length of embedment from the top of footing or grade beam to the top of the HFXBB Bolt Brace (top of the embedded Plate Washer @ HS anchors)
4) Ca1 = distance from HD CL to the end of the footing or grade beam at outside corner conditions.
5) Ca2 = distance from HD CL to both the front and the back face of the footing or grade beam.
6) For Unreinforced and Reinforced, curbs and stemwalls must be 6 inch width (min). For Back to Back Reinforced curbs and stemwalls must be 8 inch width (min) and require supplemental shear reinforcement per ACI-318-11, fc = 2500 psi
7) Shear Ties are Grade 60 (Min) rebar and are required at curbs and stem walls for near edge distance conditions. Stem wall conditions may require additional ties. Shear Ties are not required for installation away from foundation edge, installation on wood framing, or for IRC Braced Wall Panel applications
8) Stirrups are Grade 60 (Min) rebar. See table for size and spacing, see "Stirrup Layout" diagrams for layout pattern with corresponding Panel being installed.

TABLE NOTES 2

HFX–SERIES 78 IN. THRU 13 FOOT

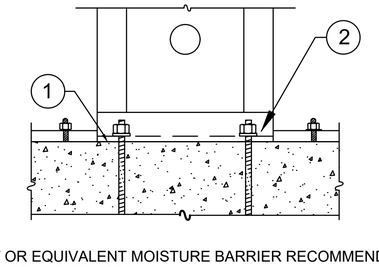
Model Number	Net Height (in)	Depth (in)	Hold Down Diameter [1] (in)	Top Screw Qty [2] (ea)	Screw Qty Available at Edges (ea) [3]
HFX-12,15,18,21 & 24x78	78	3-1/2	1-1/8	9" Width = 5	4
HFX-9x79.5	79-1/2			12" Width = 6	
HFX-12,15,18,21 & 24x8	92-1/4			15" Width = 8	
HFX-9x8	93-3/4				
HFX-12,15,18,21 & 24x9	104-1/4				
HFX-12,15,18,21 & 24x10	116-1/4			18" Width = 10	5
HFX-15,18,21 & 24x11	128-1/4			21" Width = 12	
HFX-15,18,21 & 24x12	140-1/4			24" Width = 14	6
HFX-15,18,21 & 24x13	152-1/4				

BALLOON PANELS

Model Number	Net Height (in)	Depth (in)	Hold Down Diameter [1] (in)	Top Screw Qty [2] (ea)	Screw Qty Available at Edges (ea) [3]
HFX-15,18,21 & 24x14	164-1/4	3-1/2	1-1/8	15" Width = 8	6
HFX-15,18,21 & 24x15	176-1/4			18" Width = 10	
HFX-15,18,21 & 24x16	188-1/4				
HFX-15,18,21 & 24x17	200-1/4			21" Width = 12	7
HFX-15,18,21 & 24x18	212-1/4				
HFX-15,18,21 & 24x19	224-1/4			24" Width = 14	8
HFX-15,18,21 & 24x20	236-1/4				

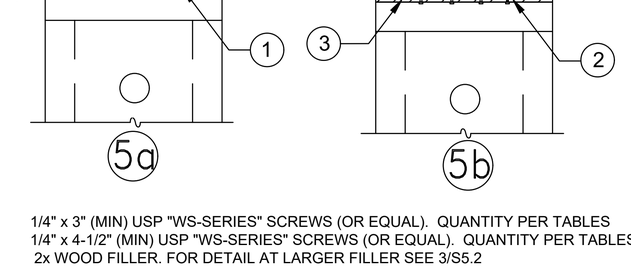
1) Hold down bolts connect to the Panel base with (1 ea) Hardened Round, (2 ea) Round-Flat or (2 ea) SAE Washers below (1 ea) Grade 8 Hex Nut on each rod or as specified by the Building Design Professional.
2) 1/4" diameter USP-WS Series screws (or equal). Length is 3" (minimum) when attached directly to the collector and 4-1/2" (minimum) when installing a 2x filler above the Panel.
3) Adjacent framing with 1/4" diameter screws is required at the edges when installing a 4X filler above or when specified by the Design Professional.

NOTES 3



1. 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL BASE AND CONCRETE.
2. 1 EA. HARDENED ROUND, 2 EA. SAE OR 2 EA. ROUND-FLAT WASHERS AND 1 EA. GRADE 8 HEX NUT AT BOTH ENDS. SEE HFX1 FOR ANCHORAGE.

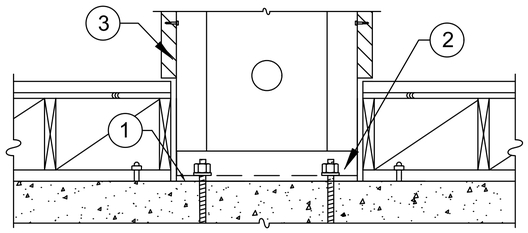
INSTALLATION ON FOUNDATION 4



1. 1/4" x 3" (MIN) USP "WS-SERIES" SCREWS (OR EQUAL). QUANTITY PER TABLES
2. 1/4" x 4-1/2" (MIN) USP "WS-SERIES" SCREWS (OR EQUAL). QUANTITY PER TABLES
3. 2x WOOD FILLER. FOR DETAIL AT LARGER FILLER SEE 3/S5.2

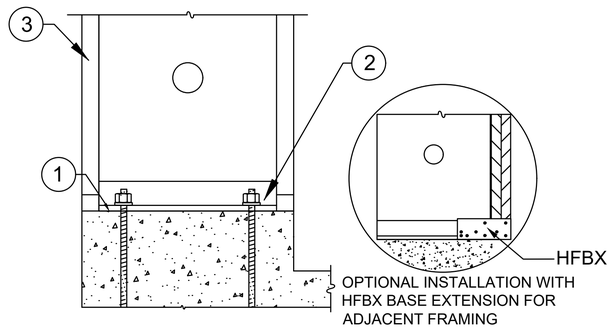
TOP PLATE CONNECTIONS 5

REVISIONS:



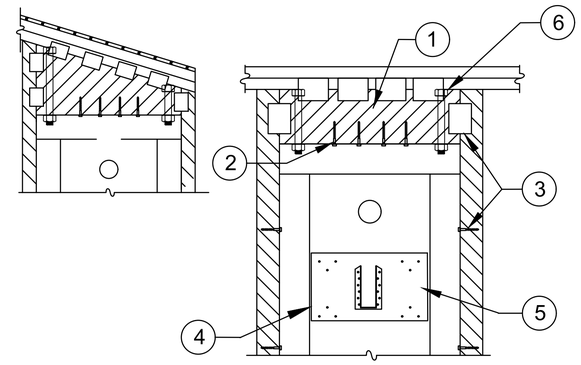
1. 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL BASE AND CONCRETE.
2. 1 EA. HARDENED ROUND, 2 EA. SAE OR 2 EA. ROUND-FLAT WASHERS AND 1 EA. GRADE 8 HEX NUT AT BOTH ENDS. SEE HFX1 FOR ANCHORAGE.
3. ADJACENT FRAMING WITH 1/4" DIAMETER SCREWS IS INSTALLED AT THE EDGES WHEN INSTALLING A 4x FILLER ABOVE OR WHEN NOTED ON PLAN & DETAILS
4. SEE DETAIL

RAISED FLOOR HEAD-OUT 1



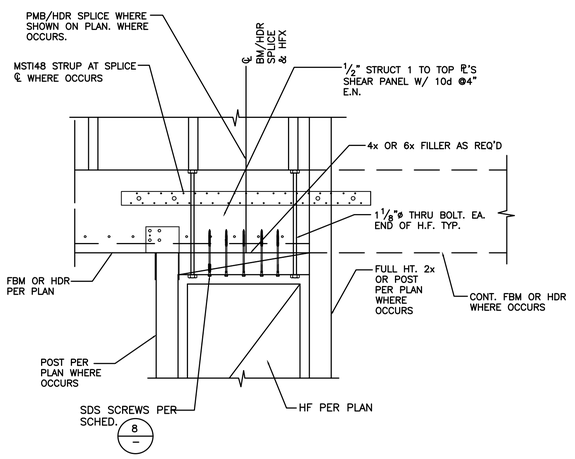
1. 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL BASE AND CONCRETE.
2. 1 EA. HARDENED ROUND, 2 EA. SAE OR 2 EA. ROUND-FLAT WASHERS AND 1 EA. GRADE 8 HEX NUT. SEE HFX1 FOR ANCHORAGE.
3. ADJACENT FRAMING OPTIONAL U.N.O.
4. SEE DETAIL

INSTALLATION ON CURB 2

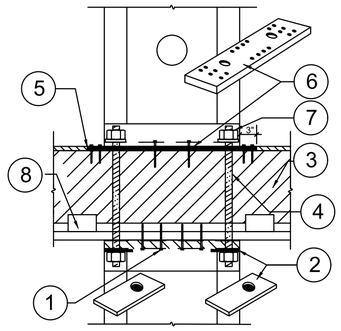


1. 3½" PSL WOOD FILLER WITH SIMPSON LTP4 @8" O.C. CONNECTORS U.N.O. ON PLAN OR DETAILS.
2. 1/4" x 3" (MIN) USP "WS-SERIES" SCREWS (OR EQUAL). QUANTITY PER TABLES
3. ADJACENT FRAMING WITH 1/4" DIAMETER SCREWS @12" O.C. IS INSTALLED AT THE EDGES WHEN INSTALLING A 4x FILLER ABOVE OR WHEN NOTED ON PLAN OR DETAILS
4. OPTIONAL LEDGER PRE-DRILL 3/16" DIA. HOLES, EVENLY SPACED IN FACE OF PANEL AND INSTALL 1/4" DIA. WOOD SCREWS INTO 2x (MIN.) WOOD LEDGER LOCATED IN PANEL CAVITY.
5. CONNECTOR AND ATTACHMENT WHERE NOTED ON PLAN OR DETAILS.
6. THRU END BOLTS WHERE SHOWN ON PLAN OR DETAILS

TOP CONNECTION W/ 4x FILLER 3

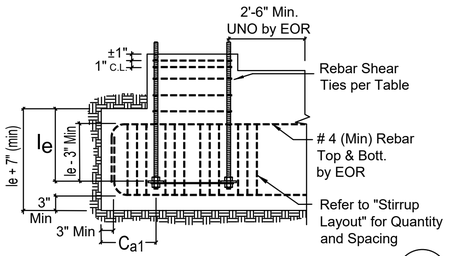


HARDY FRAME® CONN AT HDR./FBM 4

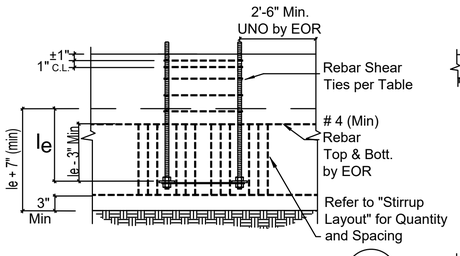


1. 1/4" x 4-1/2" (MIN) USP-WS SCREWS (OR EQUAL) PER TABLE.
2. ***HARDY FRAME*** "STK WASHER" AT TOP OF PANEL WHEN CONNECTING TO HOLD DOWN ABOVE.
3. 4x (MIN) RIM, TABLES SPECIFY ENGINEERED WOOD PRODUCT.
4. ALL THREAD ROD PER PLANS.
5. FLOOR SHEATHING NOTCHED FOR BEARING PLATE (HFXBP).
6. ***HARDY FRAME*** BEARING PLATE (HFXBP) WITH 6 EA.1/4" DIA. x 3" (MIN) USP-WS SCREWS (OR EQUAL) AT EACH END. WHEN MORE THAN 12 EA. SCREWS ARE REQUIRED INSTALL 1/4" x 4-1/2" (MIN) SCREWS THROUGH BASE OF PANEL.
7. 1 EA. HARDENED ROUND, 2 EA. SAE OR 2 EA. ROUND-FLAT WASHERS AND 1 EA. GRADE 8 HEX NUT.
8. LTP CONNECTORS OR EQUAL PER PLAN AND DETAILS

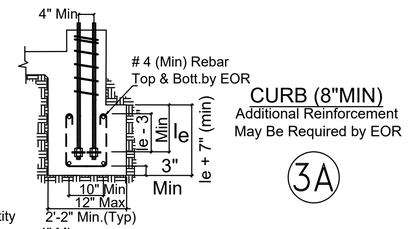
STRAIGHT STACK 5



CURB @ OUTSIDE CORNER (3E)

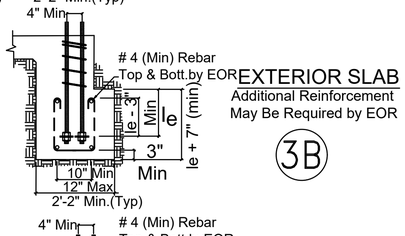


CONTINUOUS FOOTING (3D)



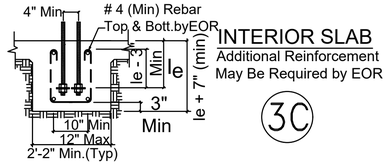
CURB (8"MIN)
Additional Reinforcement
May Be Required by EOR

(3A)



EXTERIOR SLAB
Additional Reinforcement
May Be Required by EOR

(3B)



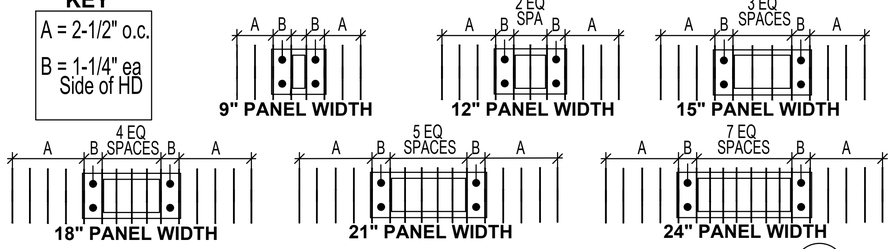
INTERIOR SLAB
Additional Reinforcement
May Be Required by EOR

(3C)

KEY

A = 2-1/2" o.c.

B = 1-1/4" ea Side of HD



BACK TO BACK STIRRUP LAYOUT – PLAN VIEW (3F)

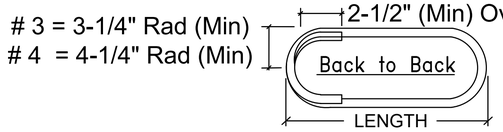
Model	Panel Width (in)	Anchorage [1]	Rod Dia (in)	Rod Grade [2,3]	BB-RA le [4] (in)	BB-RA C_{a1} [5] (in)	BB-RA C_{a2} [6] (in)	Stirrups [9] (ea)	Shear [7,8] Tie Sz & Spa
HFX-9x	9	1-1/8-STD-BB-RA	1-1/8	STD	13	19-3/4	11	8 - # 4	# 3 (min) @ 3-3/4" OC
		1-1/8-HS-BB-RA		HS					
HFX-12x	12	1-1/8-STD-BB-RA		STD	18			11 - # 4	# 3 (min) @ 4" OC
		1-1/8-HS-BB-RA		HS					
HFX-15x	15	1-1/8-STD-BB-RA		STD	20	20-5/8		12 - # 4	# 4 (min) @ 4" OC
		1-1/8-HS-BB-RA		HS					
HFX-18x	18	1-1/8-STD-BB-RA		STD	23			15 - # 4	
		1-1/8-HS-BB-RA		HS					
HFX-21x	21	1-1/8-STD-BB-RA		STD	26			16 - # 4	
		1-1/8-HS-BB-RA		HS					
HFX-24x	24	1-1/8-STD-BB-RA		STD				18 - # 4	
		1-1/8-HS-BB-RA		HS					

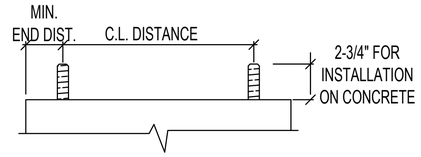
BACK TO BACK REINFORCED ANCHORAGE NOMENCLATURE

1-1/8 - STD -BB - RA

- REINFORCED ANCHORAGE
- "BACK TO BACK" INSTALLATION
- ROD GRADE
- ROD DIAMETER

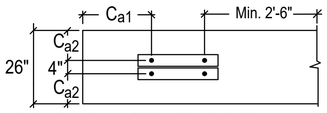
BACK TO BACK REINFORCED ANCHORAGE (3)



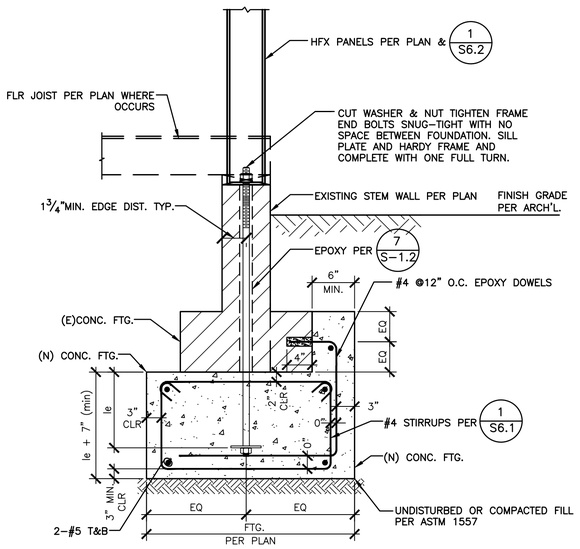


TOP OF CONCRETE

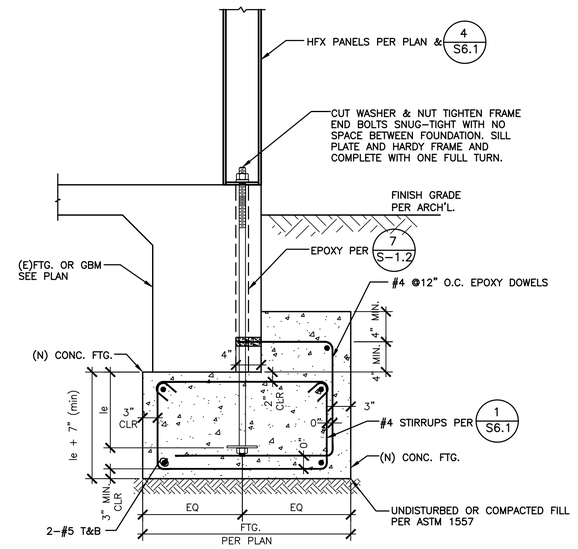
Model	Panel Width (in)	MIN. END DIST. (in)	CL. DIST. (in)
HFX-9x	9	1-3/4"	5-1/2"
HFX-12x	12		8-1/2"
HFX-15x	15	2-5/8"	9-3/4"
HFX-18x	18		12-3/4"
HFX-21x	21		15-3/4"
HFX-24x	24		18-3/4"



BACK TO BACK REINFORCED ANCHORAGE PLAN VIEW (E)



HFX RAISED FLR. FOOTING UNDERPINNING DETAILS | 10



HFX FOOTING UNDERPINNING DETAILS | 11