

**Table 7**  
**Minimum fastening requirements**  
(See Clauses 8.2.5, 9.4, 10.4, 10.7.2.1, 12.2.1, 12.3.1.2, 12.3.2, 13.3.1, and 13.7.)

Construction detail	Minimum length of nails (mm (in))	Minimum number or maximum spacing of fasteners
Foundation wall framing (nails)		
Bottom wall plate to wood footing plate	76 (3)	600 mm (24 in) centres
Bottom wall plate to wall stud (end nail)	76 (3)	2 each stud
(toe nail)	63 (2-1/2)	3 each stud
Top wall plate to stud (end nail)		
— 38 x 140 mm (2 x 6 in) stud	89 (3-1/2)	3 each stud
— 38 x 184 mm (2 x 8 in) stud	89 (3-1/2)	4 each stud
Plate to plate nailing for doubled top plates		
— 38 x 140 mm (2 x 6 in) stud	76 (3)	2 each stud space
— 38 x 184 mm (2 x 8 in) stud	76 (3)	3 each stud space
Horizontal wall blocking to wall stud	76 (3)	2 each end of each block
Floor framing (nails)		
End wall blocking to floor joists	76 (3)	400 mm (16 in) centres
Full depth end wall blocking to floor joists (end nail)	76 (3)	2 each end of each block
Suspended floors — floor joist to ledger and to top plate of interior bearing support (toe nail)	76 (3)	2 per joist
Ledger strip to wall stud	89 (3-1/2)	3 each stud
Floor attachment to foundation wall (nails and framing straps)		
Floor joists and blocking at top of foundation wall to top wall plate (toe nail)		
— 38 x 140 mm (2 x 6 in) wall plate	89 (3-1/2)	3 per joist or per block
— 38 x 184 mm (2 x 8 in) wall plate	89 (3-1/2)	4 per joist or per block
In addition, framing straps are required where backfill height exceeds a) 1500 mm (5 ft) with sleeper or slab floor; or b) 2000 mm (6 ft-6 in) with suspended wood floor.	76 (3)	1 framing strap at every stud, with 3 nails into floor header and 3 nails into inner face of foundation wall stud

(Continued)

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S406-14

Specification of permanent wood foundations for housing and small buildings

Table 7 (Concluded)

Construction detail	Minimum length of nails (mm (in))	Minimum number or maximum spacing of fasteners
Wall sheathing and subfloor (nails or staples)		
— Nails	51 (2)	150 mm (6 in) centres along edges and 300 mm (12 in) centres along intermediate supports
— Staples	51 (2)	100 mm (4 in) centres along edges and 200 mm (8 in) centres along intermediate supports
Framing around windows (framing anchors)		
In addition to normal nailing requirements, framing anchors are required where backfill height exceeds 1200 mm (4 ft), at sill plate to — cripple studs	51 (2)	1 framing anchor at each point, nailed as required by manufacturer.
— Jack studs	51 (2)	2 framing anchors at each point, nailed as required by manufacturer.
Additional Nailing		
Rim joist, trimmer joist or blocking to sill plate or top wall plate — toe nail	82	150 mm (6 in) on centre
Bottom wall plate or sole plate to floor joists, rim joists or blocking	82	150 mm (6 in) on centre
Sheathing to wall framing for uniform backfill height	63	150 mm (6 in) centres along edges and 300 mm (12 in) centres along intermediate supports

## Notes:

- 1) \*Table 7 applies for sheathing to wall framing nailing when backfill height is uniform. When backfill height is not uniform, per the Note to Clause 4.3, Table 7 shall apply.
- 2) Nails used in Table 7 shall have minimum diameters of:
- 2.84 mm for 51 mm long nails;
  - 3.25 mm for 63 mm long nails;
  - 3.66 mm for 76 mm long nails; and
  - 4.06 mm for 89 mm long nails.

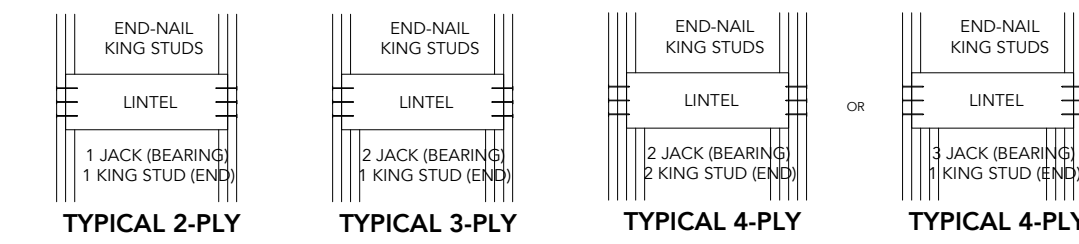
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## LINTEL DIAGRAM



## FOOTING SCHEDULE

FF-1	FF-2	FF-3	FF-4	FF-5
16" x 8" STRIP FOOTING	18" x 8" STRIP FOOTING	20" x 8" STRIP FOOTING	22" x 8" STRIP FOOTING	24" x 8" STRIP FOOTING

PROVIDE 2-15M CONT. BARS THROUGHOUT FOOTING W/ MIN. 2-10" CONCRETE COVER TOP, UNLESS NOTED OTHERWISE

## LINTEL SCHEDULE

L0	L1	L2	L3	L4
2" x 4" WOOD LINTEL	2.2" x 6" WOOD LINTEL	2.2" x 8" WOOD LINTEL	2.2" x 10" WOOD LINTEL	2.2" x 12" WOOD LINTEL

PROVIDE NAILING PATTERN @ 16" O.C. W/ HEADS OF NAILS ON INTERIOR SIDE TOP.

## WOOD BEAM SCHEDULE

B1	B2	B3	B4	B5	B6	B7	B8
3-2" x 6" WOOD BEAM	4-2" x 6" WOOD BEAM	3-2" x 8" WOOD BEAM	4-2" x 8" WOOD BEAM	3-2" x 10" WOOD BEAM	4-2" x 10" WOOD BEAM	3-2" x 12" WOOD BEAM	4-2" x 12" WOOD BEAM

## PAD FOOTING SCHEDULE

PF-1	PF-2	PF-3	PF-4	PF-5	PF-6	PF-7
24" x 24" x 12" PAD FOOTING	30" x 30" x 16" PAD FOOTING	36" x 36" x 18" PAD FOOTING	42" x 42" x 20" PAD FOOTING	48" x 48" x 24" PAD FOOTING	66" x 66" x 30" PAD FOOTING	84" x 84" x 36" PAD FOOTING

PROVIDE 15M BARS EACH WAY @ 12" O.C. TOP AND BOTTOM UNLESS NOTED OTHERWISE

## STEEL LINTEL SCHEDULE

S1	S2	S3	S4	S5	S6
3 1/2" x 3 1/2" x 3/8" STEEL LINTEL	4" x 3 1/2" x 3/8" STEEL LINTEL	5" x 3 1/2" x 3/8" STEEL LINTEL	5" x 3 1/2" x 3/8" STEEL LINTEL	6" x 4" x 3/8" STEEL LINTEL	7" x 4" x 3/8" STEEL LINTEL

PROVIDE NAILING PATTERN @ 16" O.C. W/ HEADS OF NAILS ON INTERIOR SIDE TOP.

## LEDGER BOARD SCHEDULE

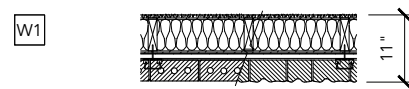
L0	L1	L2	L3	L4
2" x 4" WOOD LEDGER	2.2" x 6" WOOD LEDGER	2.2" x 8" WOOD LEDGER	2.2" x 10" WOOD LEDGER	2.2" x 12" WOOD LEDGER

## SOIL

FOUNDATIONS TO BEAR ON NATURAL UNDISTURBED SOIL. BEARING SOIL CAPACITY OF 75 kPa MIN. TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. INFORM THE DESIGNER OR ENGINEER OF ANY DISCREPANCIES PRIOR TO FORMING OF FOOTINGS

## WALL SCHEDULE - COMPLIANCE PACKAGE ZONE 1 OF 3.1.11. OBC

THE THERMAL VALUES IDENTIFIED IN THE ENERGY EFFICIENCY DESIGN SUMMARY (EEDS) FORM SHALL GOVERN OVER THOSE IN THE ARCHITECTURAL DRAWING SET IF ANY DISCREPANCIES EXIST.



## STONE/BRICK VENEER WALL CONSTR.

- 50MM (2") NATURAL STONE / BRICK VENEER OR AS PER PRODUCT MANUFACTURER WITH LATHE AND MORTAR AS PER MANUFACTURER RECS.
- 25MM (1") CONTINUOUS RSI 0.88C1 (RSC1) RIGID FOAM BOARD INSULATION
- TYVEK AIR BARRIER OR APPROVED EQUAL (SHEATHING PAPER)
- 13MM (5/8") EXTERIOR GRADE PLYWOOD SHEATHING
- 38MM x 140MM (1-1/2" x 5-1/2") WOOD STUDS @ 406MM (1'-4") O.C.
- RSI 1.87 (R22) INSULATION IN VOID SPACE B/W WOOD STUDS
- 6 MIL POLYETHYLENE VAPOUR BARRIER OR APPROVED EQUAL
- 13MM (5/8") GYPSUM WALL BOARD INTERIOR FINISH

## 2" X 4" INTERIOR PARTITION

- 13MM (5/8") GYPSUM WALL BOARD
- 38MM x 89MM (2" x 4") @ 400MM (1'-4") O.C. BEARING PARTITIONS TO BE 38MM x 89MM (2" x 4") @ 400MM (1'-4") O.C. FOR TWO (2) STOREYS
- 13MM (5/8") GYPSUM WALL BOARD

## 2" X 4" INTERIOR STRAPPING

- 13MM (5/8") GYPSUM WALL BOARD
- 38MM x 89MM (2" x 4") @ 400MM (1'-4") O.C.
- 13MM (5/8") GYPSUM WALL BOARD

## 2" X 4" INTERIOR PARTITION AT FOUNDATION WALL (INSULATED)

- 13MM (5/8") GYPSUM WALL BOARD
- 38MM x 89MM (2" x 4") @ 400MM (1'-4") O.C.
- 8" STRUCTURAL INSULATED PANELS (SIP)
- 6 MIL POLYETHYLENE VAPOUR BARRIER OR APPROVED EQUAL
- 13MM (5/8") GYPSUM WALL BOARD INTERIOR FINISH

## 2" X 4" INTERIOR STRAPPING

- 13MM (5/8") GYPSUM WALL BOARD
- 38MM x 89MM (2" x 4") @ 400MM (1'-4") O.C.
- 13MM (5/8") GYPSUM WALL BOARD













## 2" X 6" INTERIOR PARTITION

- 13MM (5/8") GYPSUM WALL BOARD
- 38MM x 140MM (2" x 6") @ 400MM (1'-4") O.C. BEARING PARTITIONS TO BE 38MM x 140MM (2" x 6") @ 400MM (1'-4") O.C. FOR TWO (2) STOREYS
- 13MM (5/8") GYPSUM WALL BOARD

## 2" X 3" INTERIOR PARTITION AT FOUNDATION WALL (INSULATED)

- 13MM (5/8") GYPSUM WALL BOARD
- 38MM x 64MM (2" x 3") @ 400MM (1'-4") O.C.
- 140MM (5-1/2") CONTINUOUS RSI 3.52C1 (R20C1) BATT INSULATION
- GRADE DAMPROOF W/ BLDG. PAPER UP TO GRADE LEVEL

## DRAWING LEGEND

	FLOOR DRAIN		C.M. CARBON MONOXIDE ALARM
	BEAM LOCATION		S.A. SMOKE ALARM
	MECHANICAL EXHAUST FAN		BEAM CALL OUT
	STEEL COLUMN		WALL TAG
	I-JOIST SECTION		CONSTRUCTION NOTE
	WOOD STUD / BUILT UP BEAM		FRAMING CALL OUT

## STEEL COLUMN SCHEDULE

C1	C2	C3
90MM (3-1/2") DIA. x 4.73MM (0.187") NON-ADJUSTABLE STEEL COLUMN W/ 150MM x 150MM x 9.5MM (6" x 6" x 3/8") STEEL TOP AND 120MM x 250MM x 12.5MM (4-7/8" x 10" x 1/2") BOTTOM PLATE W/ 2-15MM (5/8") x 300MM (1'-0") LONG x 50MM (2") HOOK ANCHORS, FIELD WELD COLUMN TO BASE	90MM (3-1/2") DIA. x 4.73MM (0.187") NON-ADJUSTABLE STEEL COLUMN W/ 150MM x 150MM x 9.5MM (6" x 6" x 3/8") STEEL TOP AND 120MM x 250MM x 12.5MM (4-7/8" x 10" x 1/2") BOTTOM PLATE W/ 2-15MM (5/8") x 300MM (1'-0") LONG x 50MM (2") HOOK ANCHORS, FIELD WELD COLUMN TO BASE	90MM (3-1/2") DIA. x SINGLE TUBE ADJUSTABLE STEEL COLUMN CONFORMING TO CAN/CSSB-7.2M x W/ 150MM x 150MM x 9.5MM (6" x 6" x 3/8") STEEL TOP AND 120MM x 250MM x 12.5MM (4-7/8" x 10" x 1/2") BOTTOM PLATE W/ 2-15MM (5/8") x 300MM (1'-0") LONG x 50MM (2") HOOK ANCHORS, FIELD WELD COLUMN TO BASE

ADJUSTABLE STEEL POSTS TO BE VERIFIED FOR LOAD BEARING CAPACITY BY ENGINEER OR DESIGNER PRIOR TO INSTALLATION

## WOOD POST SCHEDULE

P1	P2	P3	P4	P5	P6	P7
2-2" x 4" BUILT-UP WOOD POST	3-2" x 4" BUILT-UP WOOD POST	4-2" x 4" BUILT-UP WOOD POST	2-2" x 6" BUILT-UP WOOD POST	3-2" x 6" BUILT-UP WOOD POST	4-2" x 6" BUILT-UP WOOD POST	5-2" x 6" BUILT-UP WOOD POST

## CONSTRUCTION NOTE SCHEDULE

- ALL CODE REFERENCES ARE REFERENCED FROM PART 9 OF THE 2017 O.B.C.
1. WEEPER TILE  
100 MM (4") DIA. WEEPER TILE W/ 150 MM (6") MIN. CRUSHED GRANULAR FILL.
  2. POURED CONCRETE BASEMENT SLAB  
125 MM (5") 25 MPa (3600 psi) POURED CONCRETE SLAB C/W 6% W.W. M.C.A.W. 6 MIL. POLY. VAPOUR BARRIER OVER 2" RIGID INSULATION ON 150 MM (6") CRUSHED GRANULAR FILL.
  3. POURED CONCRETE GARAGE SLAB  
125 MM (5") 32 MPa (4640 psi) POURED CONCRETE SLAB W/ 5-8% AIR ENTRAINMENT AND 6% W.W. M.C.A.W. 6 MIL. POLY. VAPOUR BARRIER OVER 2" RIGID EXTERIOR POLYETHYLENE DPM INSULATION, 150MM (4") CONCRETE GRANULAR FILL W/ COMPACTED SUB-BASE OR COMPACTED NATIVE FILL. SLOPE TO FRONT OF GARAGE MIN. 1%.
  4. COLD STORAGE PORCH SLAB - FOR A MAX. 2500 MM (8'-3") PORCH DEPTH  
130 MM (5-1/8") 32 MPa (4640 psi) CONCRETE SLAB W/ 5-8% AIR ENTRAINMENT. REINFORCE W/ 15M BARS @ 150MM (6") O.C. EACH WAY IN BOTTOM THIRD OF SLAB, 6-10MM x 410MM (24" x 24") DOWELS @ 406MM (1'-4") O.C. ANCHORED IN PERIMETER FOUNDATION WALLS. SLOPE SLAB MIN. 1% FROM DOOR.
  5. SILL PLATE  
38MM x 89MM (2" x 4") SILL PLATE W/ 13MM (1/2") DIA. 200MM (8") LONG ANCHOR BOLTS @ 150MM (6") O.C. INTO CONCRETE FOUNDATION WALL @ 2400MM (7'-10") O.C. PROVIDE CALLING OR 25MM (1") MIN. MINERAL WOOL B/W SILL PLATE AND TOP OF CONCRETE FOUNDATION WALL. USE NON-SHRINK GROUT TO LEVEL SILL PLATE WHERE REQUIRED.
  6. WOOD IN CONTACT WITH CONCRETE  
WOOD FRAMING MEMBERS THAT ARE NOT PRESSURE TREATED AND IN CONTACT WITH CONCRETE THAT IS LESS THAN 50MM (2") ABOVE GRADE OR CONCRETE SLAB SHALL BE PROTECTED WITH A MIL. POLYETHYLENE FILM OR 10 MIL. (0.001 IN.) 5B ROLL ROOFING DAMPROOFING BETWEEN WOOD AND CONCRETE.
  7. BEAM BEARING  
PROVIDE BEAM POCKET OR 200MM x 250MM (8" x 10") POURED CONCRETE W/ WALL MIN. BEARING @ 150MM (6") O.C. TO BE 100MM (3'-10").
  8. FOUNDATION WALL REDUCTION  
WHERE THE TOP OF A FOUNDATION WALL IS REDUCED IN THICKNESS TO PERMIT THE INSTALLATION OF FLOOR JOISTS, THE REDUCED SECTION SHALL BE NOT MORE THAN 300MM (1'-4") AND NOT LESS THAN 50MM (2") THICK.
  9. EXPOSED FLOOR TO EXTERIOR  
PROVIDE RSI 5.46 (R18) INSULATION, 6 MIL. POLY. VAPOUR BARRIER AND CONT. TYVEK AIR BARRIER W/ PREF. SOFFIT.
  10. FLOOR CONSTRUCTION  
PROVIDE 3/8" SUBFLOOR SHEATHING SCREWED AND GROUTED TO FLOOR JOISTS. ALL FLOOR IN RESIDENTIAL OCCUPANCIES TO BE FINISHED AND/OR WATER RESISTANT AS PER 9.10.1.1 AND 9.10.1.2. REFER TO 9.20.4 FOR CEILING. PROVIDE 15MM (5/8") x 10" x 2" CROSS BRACING OR SOILD BLOCKING @ 2100MM (6'-11") MAX. ALL JOISTS TO BE STRAPPED W/ 19MM x 4MM (1" x 3/8") @ 2100MM (6'-11") O.C. UNLESS A PANEL TYPE CEILING FINISH IS APPLIED.
  11. EXTERIOR/INTERIOR STAIRS  
AT LEAST ONE STAIR BETWEEN EACH FLOOR LEVEL WITHIN A DWELLING UNIT, AND EXTERIOR STAIRS AND REQUIRED DOT STAIRS SERVING A SINGLE DWELLING UNIT, SHALL HAVE A WIDTH OF NOT LESS THAN 800MM (2'-6") MINIMUM HEIGHT OVER STAIRS AND LANDINGS WITHIN DWELLING UNITS SHALL BE 1900MM (6'-3"). THE VERTICAL HEIGHT BETWEEN ANY LANDINGS SHALL NOT EXCEED 3700 MM (12'-2").  
MAX. RISE: 200MM (7-7/8")  
MAX. RUN: 150MM (5-7/8")  
MAX. RISE: 210M (6'-11")  
MAX. TREAD: 350MM (1'-1")  
MIN. TREAD: 235 (9'-11")  
ANGLED STAIRS SHALL HAVE AN AVERAGE RUN OF NOT LESS THAN 200MM (7-7/8") AND A MIN. RUN OF 150MM (5-7/8")
  12. PRECAST STEPS  
PRECAST CONCRETE STEP NOT MORE THAN 2 RISERS SHALL BE INSTALLED ON GRADE.
  13. EXTERIOR/INTERIOR GUARDS  
INTERIOR GUARDS: 900MM (2'-11") MIN. EXTERIOR GUARDS: 900MM (2'-11") MIN. FOR A GRADE DIFFERENCE LESS THAN 1800 MM (6'-0"). 100MM (3'-4") MIN. NO LESS THAN 25% OF THE REQUIRED OPENINGS LOCATED AT THE TOP OF SPACE AND NO LESS THAN 25% LOCATED AT THE BOTTOM OF THE SPACE.  
HANDRAILS AT LANDINGS TO HAVE A MIN. HEIGHT OF 900MM (2'-11"). HANDRAILS AT STAIRS TO HAVE A MIN. HEIGHT OF 900MM (2'-11"). MIN. ONE HANDRAIL SHALL BE PROVIDED WITH STAIRS HAVING A WIDTH LESS THAN 1000MM (3'-3"). TWO HANDRAILS SHALL BE PROVIDED WITH STAIRS HAVING A WIDTH GREATER THAN 1000MM (3'-3").
  14. TWO STOREY VOLUME SPACES  
PROVIDE 2-38MM x 140MM (2-2" x 4") SPRUCE NO. 2 CONTINUOUS STUDS @ 300MM (1'-0") O.C. FOR BRICK AND REINFORCED FOR ROOFING. 19MM (3/4") PLYWOOD GRADE PLYWOOD SHEATHING. PROVIDE SOLID WOOD BLOCKING BETWEEN WOOD STUDS @ 1200MM (4'-0") O.C. VERTICALLY.  
FOR HORIZONTAL DISTANCES NOT EXCEEDING 200MM (7'-6"), PROVIDE 38MM x 140MM (2" x 4") WOOD STUDS @ 406MM (1'-4") O.C. C/W 3-38MM x 184MM (3-2" x 8") CONT. HEADER AT GROUND FLOOR CEILING LEVEL. TOP NAILS @ 150MM (6") O.C. B/W, BOTTOM PLATES AND HEADERS.
  15. INTERIOR GARAGE PARTITION  
13MM (1/2") GYPSUM WALL BOARD ON INTERIOR PARTITION AND CEILING BETWEEN HOUSE AND GARAGE. PROVIDE RSI 3.4 (R22) IN WALLS AND RSI 5.4 (R18) IN CEILING. TAPE, SEAL AND STRUCTURALLY SUPPORT ALL JOINTS IN ORDER TO BE GAS TIGHT.
  16. INTERIOR GARAGE MAIN DOOR  
DOOR AND FRAME TO BE GAS PROOFED. DOOR TO BE EQUIPPED W/ SELF CLOSING DEVICE AND WEATHER STRIPPING.
  17. DRYER EXHAUST  
CAPPED DRYER EXHAUST VENTED TO EXTERIOR. DUCTS SHALL CONFORM TO PART 9 OF THE O.B.C.
  18. MECHANICAL EXHAUST FAN  
MECHANICAL EXHAUST FAN VENTED TO EXTERIOR TO PROVIDE AT LEAST ONE AIR CHANGE PER HOUR. PROVIDE DUCT SCREEN AS PER 9.20.1.2.
  19. DIRECT VENT FURNACE TERMINAL  
DIRECT VENT FURNACE TERMINAL MIN. 900 MM (2'-11") FROM A GAS REGULATOR, MIN. 300MM (1'-0") ABOVE FINISHED GRADE, AWAY FROM ALL OPENINGS AND AWAY FROM EXHAUST AND INTAKE VENTS. HRV INTAKE TO BE MIN. 1800MM (6'-0") FROM ALL EXHAUST TERMINALS. REFER TO LOCAL GAS UTILIZATION CODE.
  20. DIRECT VENT GAS FIREPLACE  
DIRECT VENT GAS FIREPLACE VENT TO BE A MIN. OF 300MM (1'-0") ABOVE FINISHED GRADE. FIREPLACE TO COMPLY WITH CANULC-S410M "FACTORY BUILT FIREPLACES" INSTALLED WITH EXHAUST AS PER MANUFACTURER'S SPECIFICATIONS.
  21. ATTIC ACCESS HATCH  
500MM x 700MM (1'-8" x 2'-4") ATTIC ACCESS HATCH W/ WEATHERSTRIPPING AND RSI 10.56 (R40) RIGID INSULATION BAKING.
  22. EXPOSING BUILDING FACE  
EXTERIOR WALLS TO HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 60 MIN WHERE LIMITING DISTANCES ARE LESS THAN 1200MM (3'-11") WHERE THE LIMITING DISTANCE IS LESS THAN 400MM (1'-11"). THE EXPOSING BUILDING FACE SHALL BE CLAD IN NON-COMBUSTIBLE MATERIAL. INSTALL MIN. 15.9MM TYPE X GYPSUM BOARD INSIDE.
  23. STUD WALL REINFORCEMENT  
PROVIDE WOOD BLOCKING REINFORCEMENT TO STUD WALLS FOR FUTURE GRAB BAR INSTALLATION IN MAIN BATHROOM AS PER ORC 9.2.3. GRAB BAR TO BE 800MM x 900MM (2'-0" x 2'-0") A-T-F. BEHIND TOILET AND BOWEN (P) A-T-F. ON THE WALL OPPOSITE TO THE ENTRANCE TO THE BATHROOM OR SHOWER.
  24. CONSTRUCTION JOINT  
PROVIDE ONE ROW OF 10M DOWELS SPACED 16" O.C. VERTICALLY. SET DOWELS 1" IN 5" DRILLED HOLES FILLED WITH EPOXY RESIN IN EXISTING FOUNDATION WALL. ALLOW FOR 1" JOINT PROJECTION INTO PROPOSED WALL. WATERPROOF AND SEAL JOINT ON EXTERIOR FACE OF CONCRETE FOUNDATION WALL.
  25. ROOF CONSTRUCTION  
PREF. STANDING SEAM METAL ROOF (24 GAUGE), 15MM (1/2") PLYWOOD SHEATHING WITH 1" CLIPS ON APPROVED PRE-ENGINEERED WOOD TRUSSES OR CONVENTIONAL FRAMING AS PER PLAN. PROVIDE APPROVED DRAINAGE PROTECTION EXTENDING 90MM (3/4") FROM EDGE OF ROOF AND MIN. 300MM (1'-0") BEYOND INNER FACE OF EXTERIOR WALL. PROVIDE 38MM x 89MM (2" x 4") TRUSS BRACING @ 1800MM (6'-0") O.C. @ BOTTOM CHORD.
  26. ROOF INSULATION  
RSI 10.56 (R40) RSI 5.46 (R18) FOR CEILING WITHOUT ATTIC SPACE ROOF INSULATION AND APPROVED 6 MIL. POLY. VAPOUR BARRIER, 184MM (6") INTERIOR DRYWALL FINISH OR APPROVED EQUAL.
  27. STEP FOOTINGS  
POURED CONCRETE STEP FOOTINGS TO HAVE A MIN. HORIZONTAL STEP OF 400MM (1'-11 5/8") VERTICAL STEP TO HAVE MAX. 400MM (1'-11 5/8") STEP ON FIRM SOIL.
  28. ROOF VENTILATION  
ROOF VENTILATION AS PER 9.19.1.  
VENT AREA SHALL BE NO LESS THAN 1/300 OF THE INSULATED CEILING AREA.  
WHERE THE ROOF SLOPE IS LESS THAN 1 IN 6 OR IN ROOF AREAS THAT ARE CONSTRUCTED WITH ROOF JOISTS, THE UNSTRUCTURED VENT AREA SHALL BE NO LESS THAN 1/150 W/ NO LESS THAN 25% OF THE REQUIRED OPENINGS LOCATED AT THE TOP OF SPACE AND NO LESS THAN 25% LOCATED AT THE BOTTOM OF THE SPACE.  
NO LESS THAN 40MM OF SPACE SHALL BE PROVIDED BETWEEN TOP OF INSULATION AND UNDERSIDE OF ROOF SHEATHING. FULL 60 SQ IN OF NET FREE VENTILATING AREA (NFA) PER VENT.
  29. FLAT ROOFS  
CONFORMING TO C.G.S.B. 37-GP-56M "MEMBRANE, MODIFIED, BITUMINOUS, PREFABRICATED, AND REINFORCED FOR ROOFING". 19MM (3/4") PLYWOOD SHEATHING WITH 1" CLIPS, ROOF FRAMING AS PER PLAN W/ PREF. ALUM. R.W.L.
  30. SLAB THICKENING  
SLAB UNDER LOAD BEARING WALLS SUPPORTING STAIR LANDINGS TO BE THICKENED TO 12" WITH 16" BOTTOM AND ANGELED MAX 45° TO HORIZONTAL SLAB.

## GENERAL NOTES

- ALL CODE REFERENCES ARE REFERENCED FROM PART 9 OF THE 2017 O.B.C.
- TRUSSES  
FOR RENOVATION PROJECTS WHERE PROPOSED ROOF TRUSSES ARE INTENDED TO ALIGN WITH EXISTING ROOF COUNTERS, TRUSSES TO CONFORM ALL DIMENSIONS WITH REGARDS TO TRUSS DESIGN.
- WINDOWS  
ALL WINDOW SIZES ON DRAWINGS REFER TO FINISHED DIMENSIONS. PLEASE REFER TO WINDOW MANUFACTURER'S SPECIFICATIONS FOR ALL REQUIRED ROUGH OPENING SIZES.
- MINIMUM BEDROOM WINDOW (O.B.C. 9.7.1.3.1)  
AT LEAST ONE BEDROOM WINDOW ON A GIVEN FLOOR IS TO HAVE MIN. 0.5 SQ. M. UNOBSTRUCTED GLAZED OR OPENABLE AREA WITH MIN. CLEAR WIDTH OF 380 MM (1'-3").
- BEDROOMS SHALL HAVE A MINIMUM UNOBSTRUCTED GLASS AREA OF 5% OF AREA SERVED AS PER TABLE 9.7.2.3.
- WINDOW GUARDS (O.B.C. 9.7.1.4.2)  
A GUARD IS REQUIRED WHERE THE TOP OF THE WINDOW SILL IS LOCATED LESS THAN 800MM (2'-6") ABOVE FINISHED FLOOR AND THE DISTANCE FROM THE FINISHED FLOOR TO THE ADJACENT GRADE IS GREATER THAN 1800 MM (5'-11").
- WINDOW OVER STAIRS AND LANDINGS (9.7.5.3)  
A GUARD IS REQUIRED WHERE THE TOP OF THE WINDOW SILL IS LOCATED LESS THAN 900MM (2'-11") ABOVE THE SURFACE OF THE TREAD, RAMP OR LANDING.
- LUMBER  
ALL LUMBER SHALL BE SPRUCE NO. 2 GRADE, UNLESS NOTED OTHERWISE.
- STUDS SHALL BE STUD GRADE SPRUCE, UNLESS NOTED OTHERWISE.
- LUMBER EXPOSED TO THE EXTERIOR OR TO SPACE NO. 2 GRADE PRESSURE TREATED OR CDX, UNLESS NOTED OTHERWISE.
- ALL LAMINATED VENEER LUMBER (LVL) BEAMS, GIRDER TRUSSES, AND METAL HANGER CONNECTIONS SHALL BE PERMANENTLY FRAMING TO BE DESIGNED AND CERTIFIED BY TRUSS MANUFACTURER.
- LVL BEAMS SHALL BE 3.0 W5 MICRO-LAM LVL (RB-2800 PSI MIN) OR EQUIVALENT. EACH PLY OF LVL WITH 89 MM (3-1/2") LONG COMMON WIRE NAILS @ 325 (1'-0") C.C. STAGGERED IN 3 ROWS FOR GREATER DEPTHS AND FOR 4 PLY MEMBERS ADD 13 MM (1/2") DIA. GALVANIZED BOLTS BOLTED AT MID-DEPTH OF BEAM @ 915 MM (3'-0") O.C.
- PROVIDE TOP MOUNT BEAM HANGERS TYPE "SC-L" MANUFACTURED BY AGA CONNECTION CO. OR EQUAL FOR ALL LVL BEAM TO BEAM CONNECTIONS UNLESS NOTED OTHERWISE.
- JOIST HANGERS: PROVIDE METAL HANGERS FOR ALL JOISTS AND BUILT-UP WOOD MEMBERS INTERSECTING FLUSH BUILT-UP WOOD MEMBERS.
- WOOD FRAMING NOT TREATED WITH WOOD PRESERVATIVE, OR IN CONTACT WITH CONCRETE SHALL BE SEPARATED FROM THE CONCR. BY AT LEAST 2 MIL. POLYETHYLENE FILM NO. 60 (0.001 IN.) 5B ROLL ROOFING OR OTHER DAMPROOFING MATERIAL, EXCEPT WHERE THE WOOD MEMBER IS AT LEAST 150MM (6") ABOVE THE GROUND.
- TERMITE AND DECAY PROTECTION  
IN LOCATIONS WHERE TERMITES ARE KNOWN TO OCCUR, CLEARANCE BETWEEN STRUCTURAL WOOD ELEMENTS AND THE FINISHED GROUND LEVEL, DIRECTLY FROM THEM SHALL BE NOT LESS THAN 40MM (1-3/4") AND ALL SIDES OF SUPPORTING ELEMENTS SHALL BE VISIBLE TO INSPECTION.
- STRUCTURAL WOOD ELEMENTS SUPPORTED BY WOOD ELEMENTS IN CONTACT WITH THE GROUND OR OVER EXPOSED BASE SOIL SHALL BE PRESURE TREATED WITH CHEMICAL THAT IS TOXIC TO TERMITES.
- STEEL  
STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA-G40-21 GRADE 300W. HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO CAN/CSA-G40-21 GRADE 350W CLASS "H".
- REINFORCING STEEL SHALL CONFORM TO CSA-G30-18M GRADE 40R.
- SMOKE ALARM (REFER O.B.C. 9.10.19)  
SMOKE ALARMS CONFORMING TO CANULC-5531, "SMOKE ALARMS" SHALL BE INSTALLED IN EACH DWELLING UNIT AND IN EACH SLEEPING ROOM NOT WITHIN A DWELLING UNIT (9.10.1.1).  
THE SOUND PATTERNS OF SMOKE ALARMS SHALL MEET THE TEMPORAL PATTERN OF ALARM SIGNALS, OR BE A COMBINATORIAL PATTERN OF TEMPORAL PATTERN AND VOICE RELAY (9.10.19.2).  
SMOKE ALARMS INSTALLED SHALL BE INSTALLED SO THAT THERE IS AT LEAST ONE SMOKE ALARM INSTALLED ON EACH STORY, INCLUDING BASEMENTS. THEY SHALL BE INSTALLED IN EACH SLEEPING ROOM, AND IN A LOCATION BETWEEN THE SLEEPING ROOMS AND THE REMAINDER OF THE STORY. A SMOKE ALARM SHALL BE INSTALLED IN THE HALLWAY.  
WHERE MORE THAN ONE SMOKE ALARM IS REQUIRED IN A DWELLING UNIT, THE





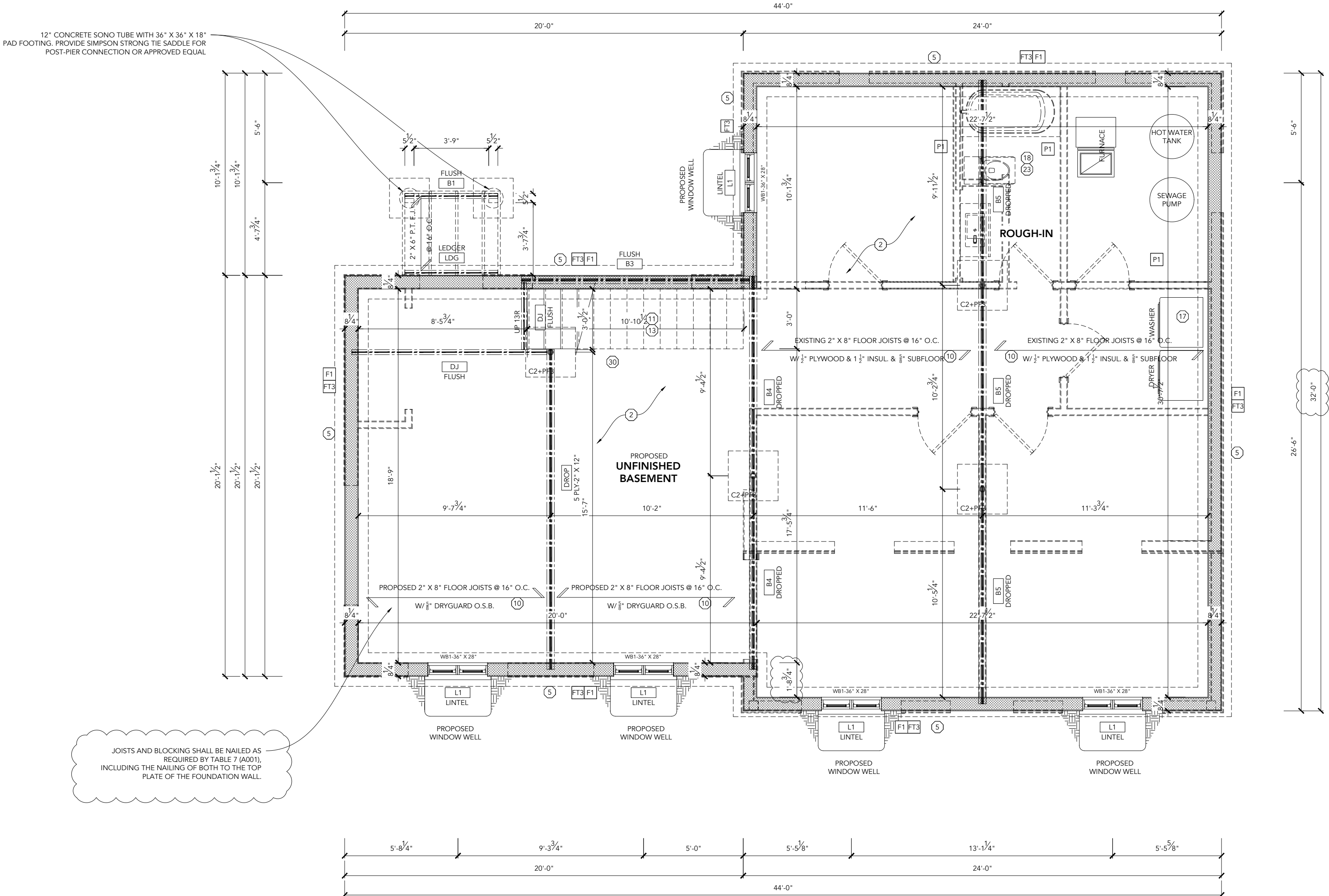
NOTE:  
CONTRACTOR TO ENSURE THAT THERE ARE ADEQUATE SUPPORT POSTS (AS PER TABLES A & B.35 OF THE O.B.C.) AT THE ENDS OF GIRDER TRUSSES AND SUPPORTING UNITS.

NOTE:  
LANDSCAPE AND EXTERIOR WALKWAYS AS PER LANDSCAPE DESIGNER OR OWNER'S SPECIFICATIONS.

NOTE:  
ALL BATHROOMS TO BE CONSTRUCTED WITH WATER RESISTANT GYPSUM WALL BOARD.

NOTE:  
ALL PRE-ENGINEERED BEAMS, UNITS AND TRUSSES TO BE CONFIRMED BY SUPPLIER. REFER TO MANUFACTURER SPECIFICATIONS FOR DETAILS.

NOTE:  
■ S.A.  
SMOKE ALARM (REFER O.B.C. 9.10.19.1).  
SMOKE ALARMS CONFORMING TO CAN/ULC-5531, "SMOKE ALARMS", SHALL BE INSTALLED IN EACH DWELLING UNIT AND IN EACH SLEEPING ROOM NOT WITHIN A DWELLING UNIT (9.10.19.1.1).  
THE SOUND PATTERNS OF SMOKE ALARMS SHALL MEET THE TEMPORAL PATTERN OF ALARM SIGNALS, OR BE A COMBINATION OF TEMPORAL PATTERN AND VOICE RELAY (9.10.19.2.2).  
SMOKE ALARMS INSTALLED SHALL BE INSTALLED SO THAT THERE IS AT LEAST ONE SMOKE ALARM INSTALLED ON EACH STOREY, INCLUDING BASEMENTS. THEY SHALL BE INSTALLED IN EACH SLEEPING ROOM AND IN A LOCATION BETWEEN THE SLEEPING ROOMS AND THE REMAINDER OF THE STOREY. A SMOKE ALARM SHALL BE INSTALLED IN THE HALLWAY.  
WHERE MORE THAN ONE SMOKE ALARM IS REQUIRED IN A DWELLING UNIT, THE SMOKE ALARMS SHALL BE WIRED SO THAT THE ACTIVATION OF ONE ALARM WILL CAUSE ALL ALARMS WITHIN THE DWELLING UNIT TO SOUND (9.10.19.5.1).  
SMOKE ALARM SHALL HAVE A VISUAL COMPONENT AS REQUIRED BY OBC 9.10.19.1.2).  
■ C.M.  
CARBON MONOXIDE ALARMS (REFER TO O.B.C. 9.33.4).  
WHERE A FUEL BURNING APPLIANCE IS INSTALLED IN A SUITE OF A RESIDENTIAL OCCUPANCY, A CARBON MONOXIDE ALARM SHALL BE INSTALLED ADJACENT TO EACH SLEEPING AREA IN THE SUITE.  
AN ALARM SHALL BE INSTALLED ADJACENT TO EACH SLEEPING AREA IN EVERY SUITE OF RESIDENTIAL OCCUPANCY THAT IS ADJACENT TO THE SERVICE ROOM OR STORAGE GARAGE.  
INSTALL ALARMS AT MANUFACTURER'S RECOMMENDED HEIGHT, OR IN THE ABSENCE OF SPECIFIC, ON OR NEAR THE CEILING.  
A CARBON MONOXIDE ALARM SHALL BE PERMANENTLY CONNECTED TO AN ELECTRICAL CIRCUIT AND SHALL HAVE NO DISCONNECT SWITCH BETWEEN THE OVERCURRENT DEVICE AND THE CARBON MONOXIDE ALARM. ALL CARBON MONOXIDE ALARMS ARE TO BE INTERCONNECTED SO THAT ITS ACTIVATION WILL ACTIVATE ALL ALARMS WITHIN THE SUITE.  
ALARMS SHALL BE EQUIPPED SO THAT IT IS AUDIBLE WITHIN BEDROOMS WHEN THE INTERVENING DOORS ARE CLOSED AND CONFORM TO CAN/CSA-6.19, "RESIDENTIAL CARBON MONOXIDE ALARMING DEVICES", OR UL 2034, "SINGLE AND MULTIPLE STATION CARBON MONOXIDE ALARMS".



NOTE:  
CONTRACTOR TO ENSURE THAT THERE ARE ADEQUATE SUPPORT POSTS (AS PER TABLES A & B AS OF THE O.B.C.) AT THE ENDS OF GIRDER TRUSSES AND SUPPORTING LINTELS

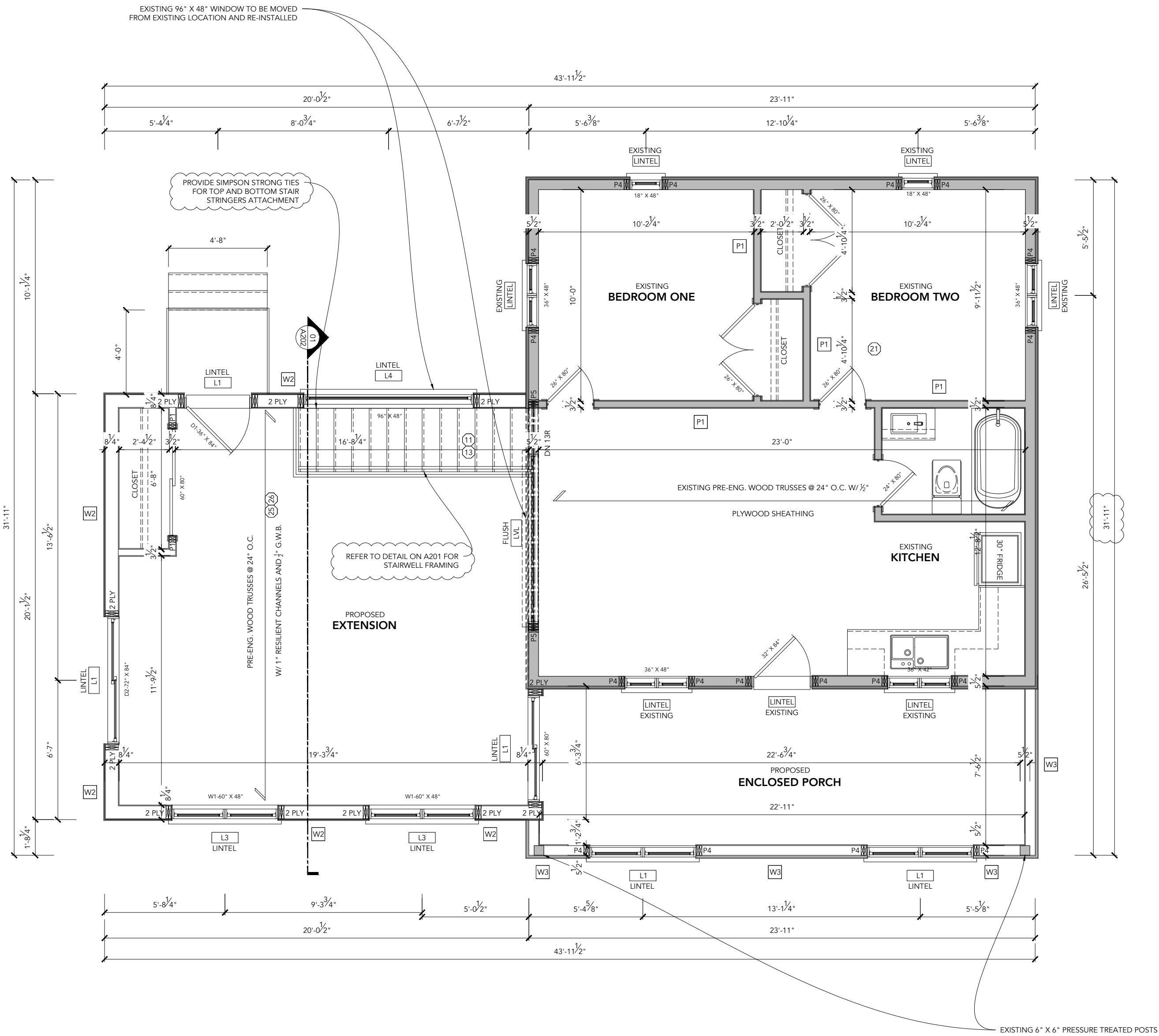
NOTE:  
LANDSCAPE AND EXTERIOR WALKWAYS AS PER LANDSCAPE DESIGNER OR OWNER'S SPECIFICATIONS

NOTE:  
ALL BATHROOMS TO BE CONSTRUCTED WITH WATER RESISTANT GYPSUM WALL BOARD

NOTE:  
ALL PRE-ENGINEERED BEAMS, LINTELS AND TRUSSES TO BE CONFIRMED BY SUPPLIER, REFER TO MANUFACTURER SPECIFICATIONS FOR DETAILS

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AN ALARM SHALL BE INSTALLED ADJACENT TO EACH SLEEPING AREA IN EVERY SUITE OF RESIDENTIAL OCCUPANCY THAT IS ADJACENT TO THE SERVICE ROOM OR STORAGE GARAGE.  
INSTALL ALARMS AT MANUFACTURER'S RECOMMENDED HEIGHT, OR IN THE ABSENCE OF SPECIFIC, ON OR NEAR THE CEILING.  
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ALARMS SHALL BE EQUIPPED SO THAT IT IS ALLOABLE WITHIN BEDROOMS WHEN THE INTERVENING DOORS ARE CLOSED AND CONFORM TO CAN/CSA-6.19, "RESIDENTIAL CARBON MONOXIDE ALARMING DEVICES", OR UL 2034, "SINGLE AND MULTIPLE STATION CARBON MONOXIDE ALARMS".

NOTE:  
ALL DIMENSIONS ON FLOOR PLAN ARE TO EXTERIOR FACE OF WOOD STUDS UNLESS NOTED OTHERWISE



1/8"=1'-0"  
GROUND FLOOR PLAN

3.1.1.2.A ZONE 1 COMPLIANCE PACKAGE FOR SPACE HEATING			
COMPONENT	THERMAL VALUES	COMPLIANCE PACKAGE A1	
		RSI	R
CEILING WITH ATTIC SPACE	MIN. NOMINAL	10.56	60
	MAX. U	0.096	0.017
	MIN. EFFECTIVE	10.43	59.22
CEILING WITHOUT ATTIC SPACE	MIN. NOMINAL	5.46	31
	MAX. U	0.205	0.036
	MIN. EFFECTIVE	4.87	27.65
EXPOSED FLOOR	MIN. NOMINAL	5.46	31
	MAX. U	0.190	0.034
	MIN. EFFECTIVE	5.25	29.80
WALLS ABOVE GRADE	MIN. NOMINAL	3.87	22
	MAX. U	0.333	0.059
	MIN. EFFECTIVE	3.00	17.03
BASEMENT WALLS	MIN. NOMINAL	3.52	20.6
	MAX. U	0.269	0.047
	MIN. EFFECTIVE	3.72	21.12
BELOW GRADE SLAB ENTIRE SURFACE > 400 mm BELOW GRADE	MIN. NOMINAL	--	--
	MAX. U	--	--
	MIN. EFFECTIVE	--	--
HEATED SLAB OR SLAB ≥ 600 mm BELOW GRADE	MIN. NOMINAL	1.76	10
	MAX. U	0.510	0.090
	MIN. EFFECTIVE	1.96	11.13
EDGE OF BELOW GRADE SLAB ≥ 600 mm BELOW GRADE	MIN. NOMINAL	1.76	10
	MAX. U	1.6	0.28
	MIN. EFFECTIVE	2.5	25
WINDOWS AND SLIDING GLASS DOORS	MAX. U	1.6	0.28
	ENERGY RATING	25	25
	SKYLIGHTS	2.8	0.49
SPACE HEATING EQUIPMENT	MIN. AFUE	96%	96%
	MIN. SRE	75%	75%
	MIN. EF	0.80	0.80
DOMESTIC WATER HEATER	MIN. EF	0.80	0.80
	2	3	3
	COLUMN 1	2	3



SHEET:

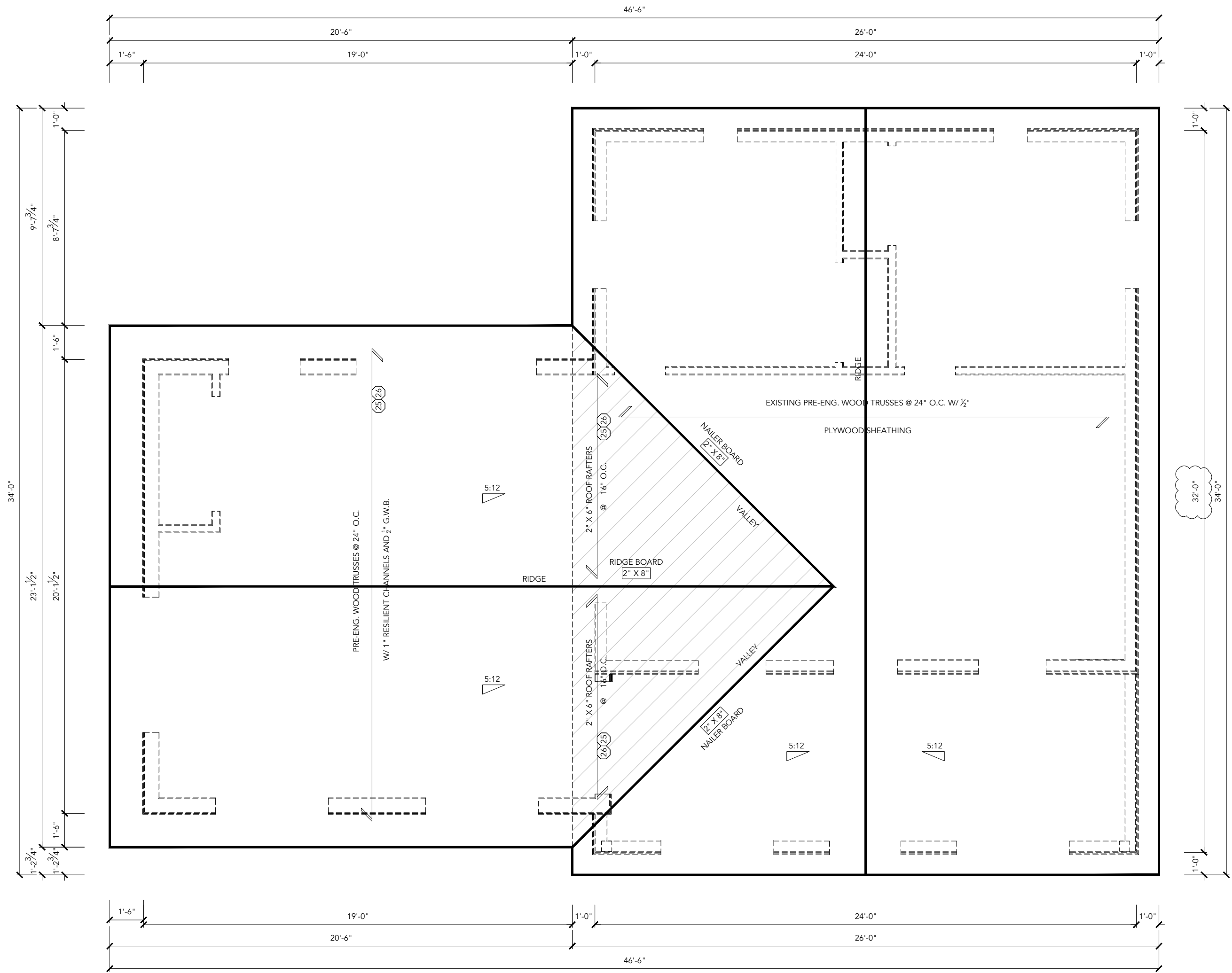
A102

NOTE:  
ALL DIMENSIONS ON ROOF PLAN ARE TO  
EXTERIOR FACE OF PLYWOOD  
SHEATHING UNLESS NOTED OTHERWISE

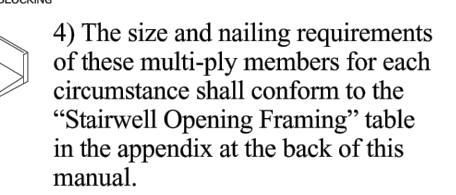
NOTE:  
ALL GABLE ENDS TO BE LADDER FRAMED  
W/ 2" X 6" @ 24" O.C. W/ A 2" X 6" FASCI  
BOARD. CONTRACTOR TO PROVIDE A 2"  
X 4" REVEAL BOARD ON FACE OF FASCI

NOTE:  
HEATED ROOF AREA = 2534.18 SQ. FT.  
REQUIRED VENTING AS PER 9.19.1.2. -  
9.19.1.3. OF THE O.B.C.  
(1/300) = 8.44 - 9

NOTE:  
ALL PRE-ENGINEERED BEAMS, UNTELS  
AND TRUSSES TO BE CONFIRMED BY  
SUPPLIER. REFER TO MANUFACTURER  
SPECIFICATIONS FOR DETAILS



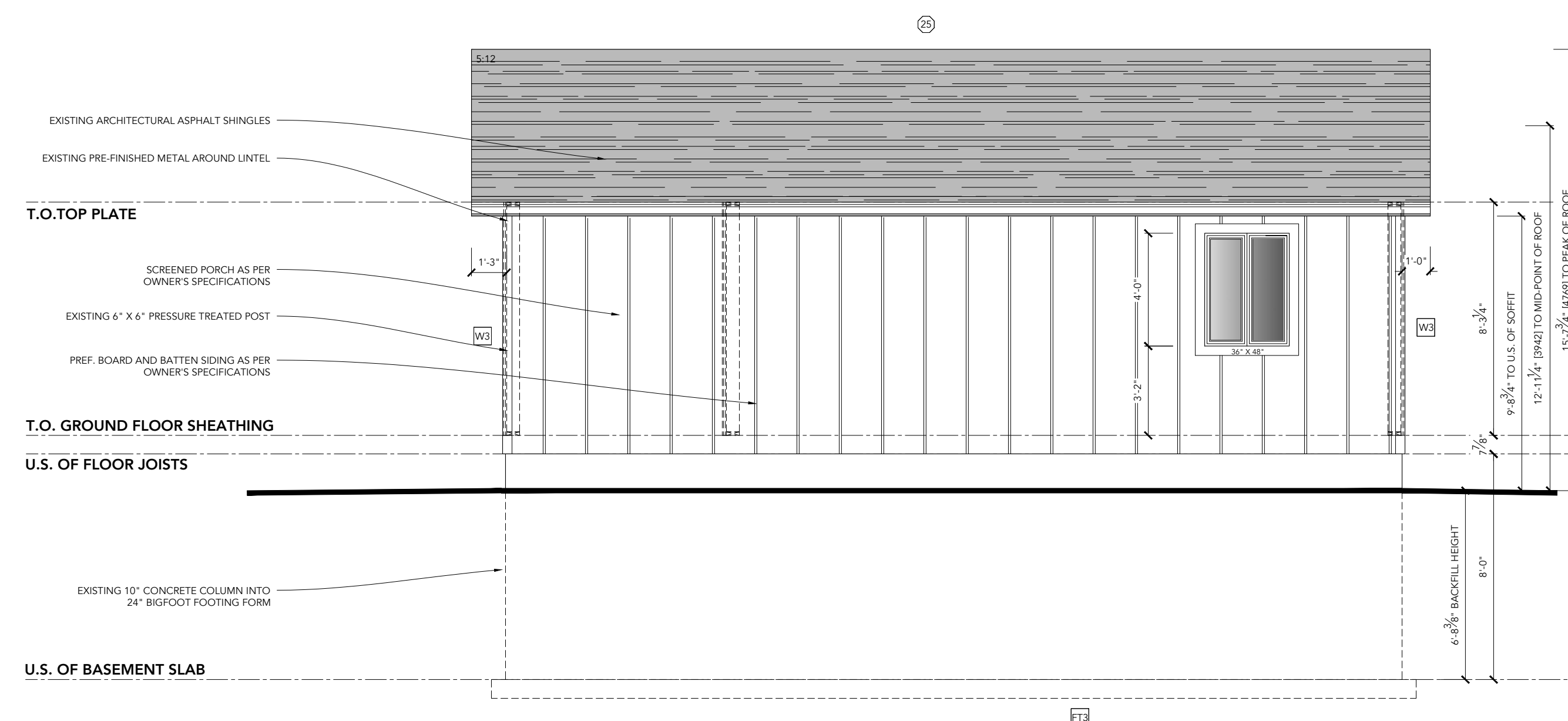




Technical drawings of four window styles with dimensions:

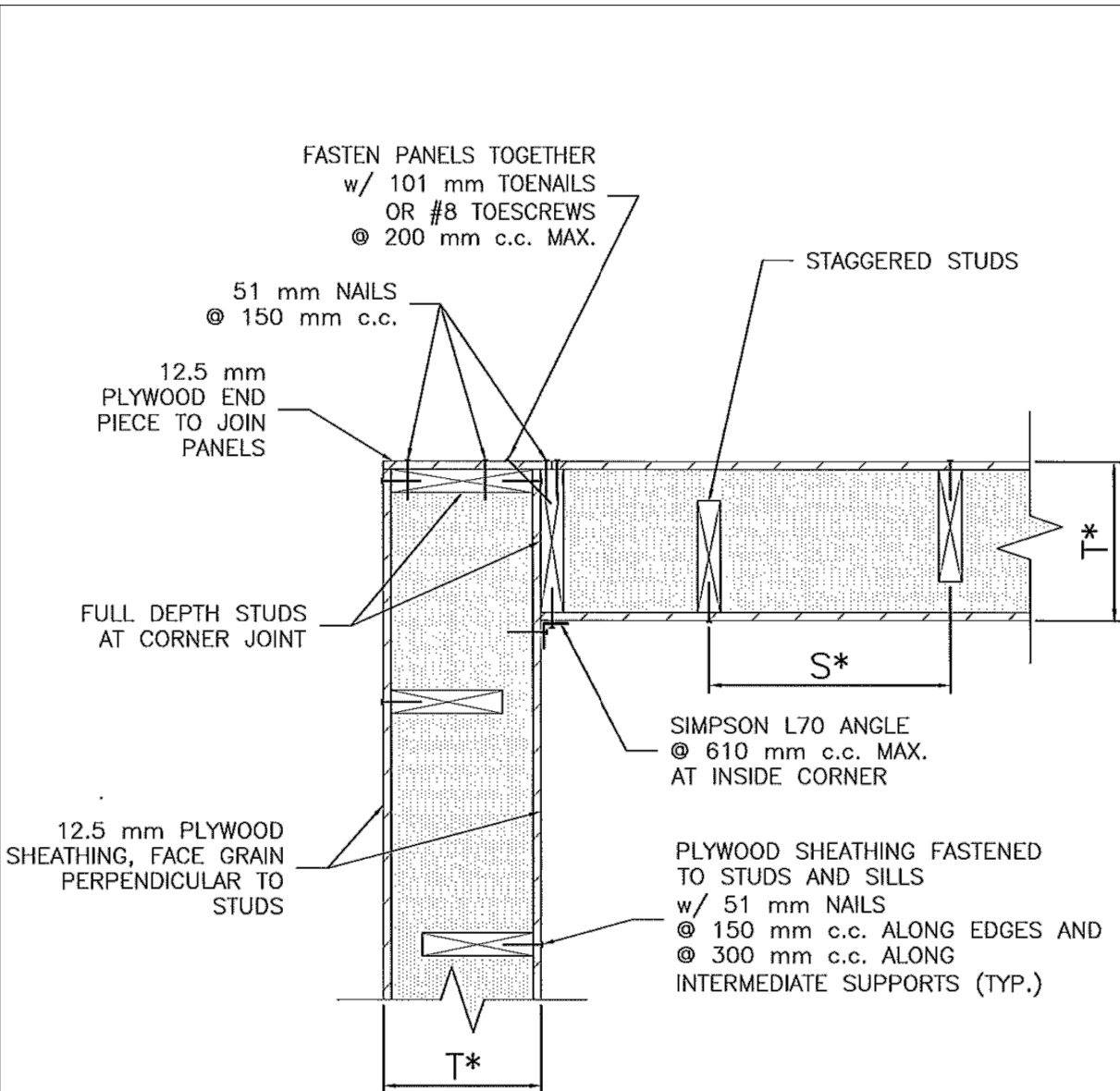
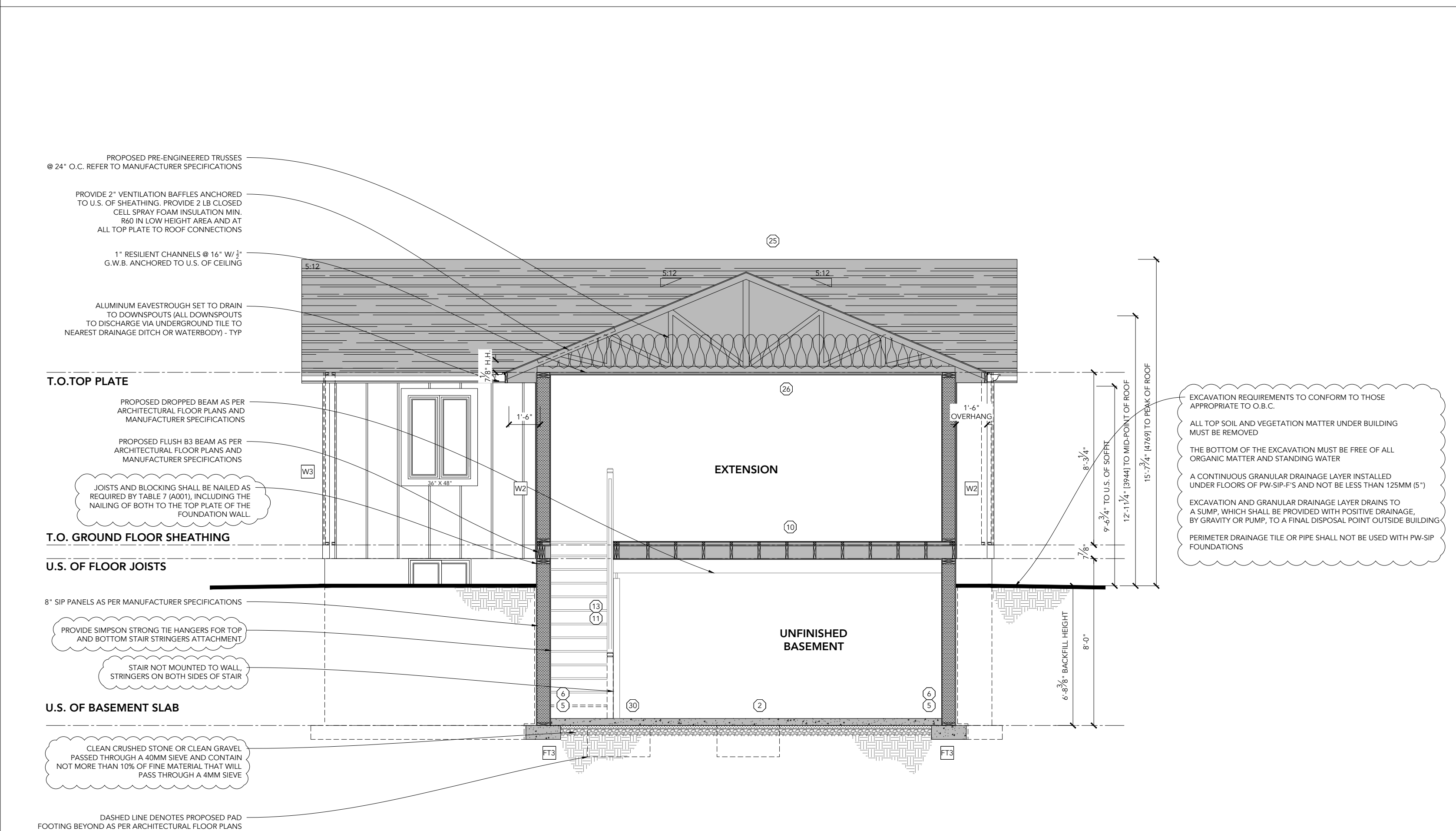
- Double Hung:** Overall width 3'-2", overall height 7'-0". Opening width 2'-6", opening height 6'-0". Sill height 21 1/2" x 84" (DTH 1).
- Double Casement:** Overall width 6'-0", overall height 7'-0". Opening width 3'-0", opening height 6'-0". Sill height 22 1/2" x 84" (DTH 1).
- Double Transom:** Overall width 5'-0", overall height 4'-0". Opening width 2'-6", opening height 2'-6". Sill height 21 1/2" x 84" (DTH 1).
- Double Awning:** Overall width 3'-0", overall height 4'-0". Opening width 1'-6", opening height 1'-6". Sill height 21 1/2" x 28" (DTH 1).

1/4"=1'-0"  
**FRONT ELEVATION**

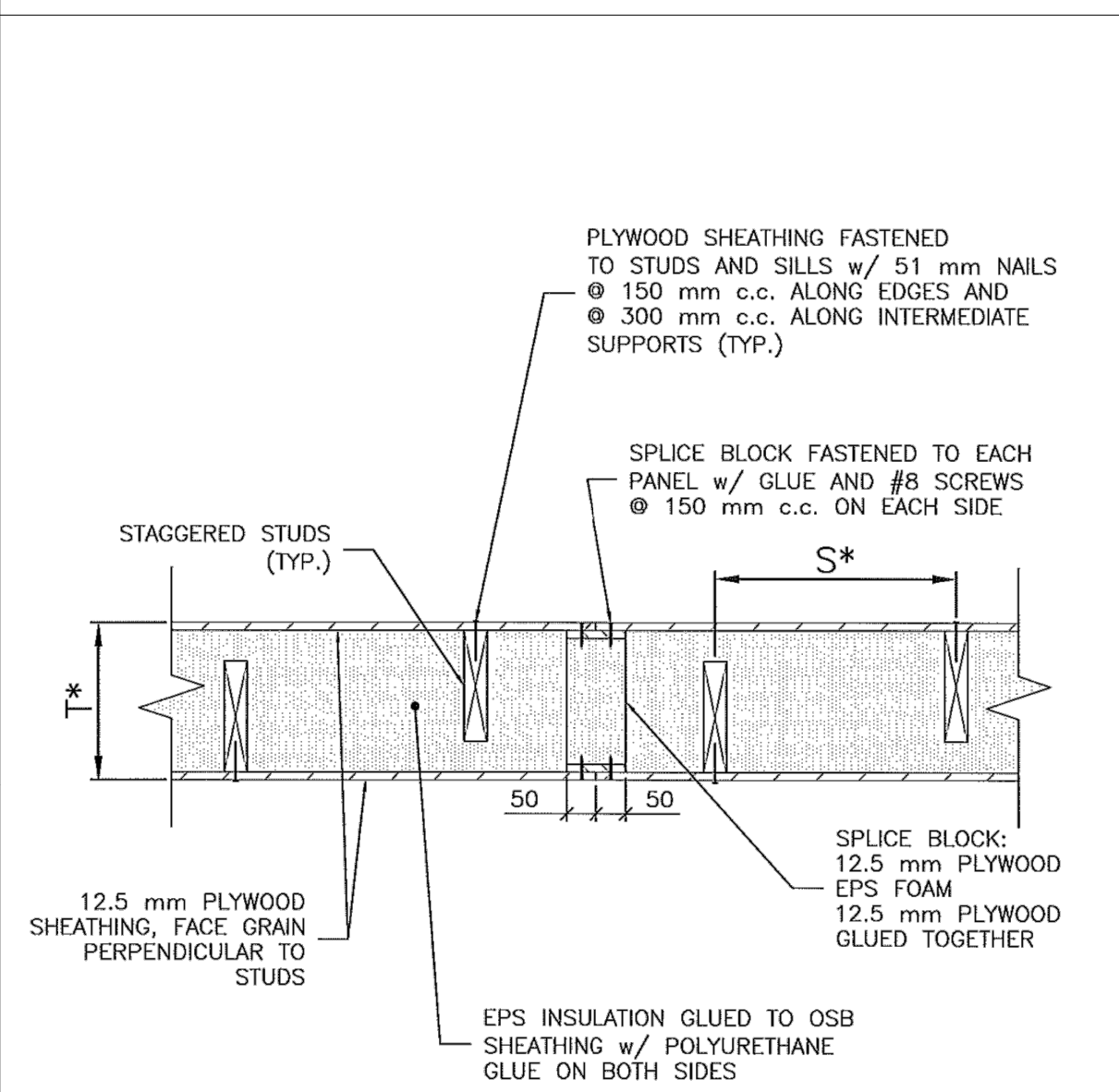




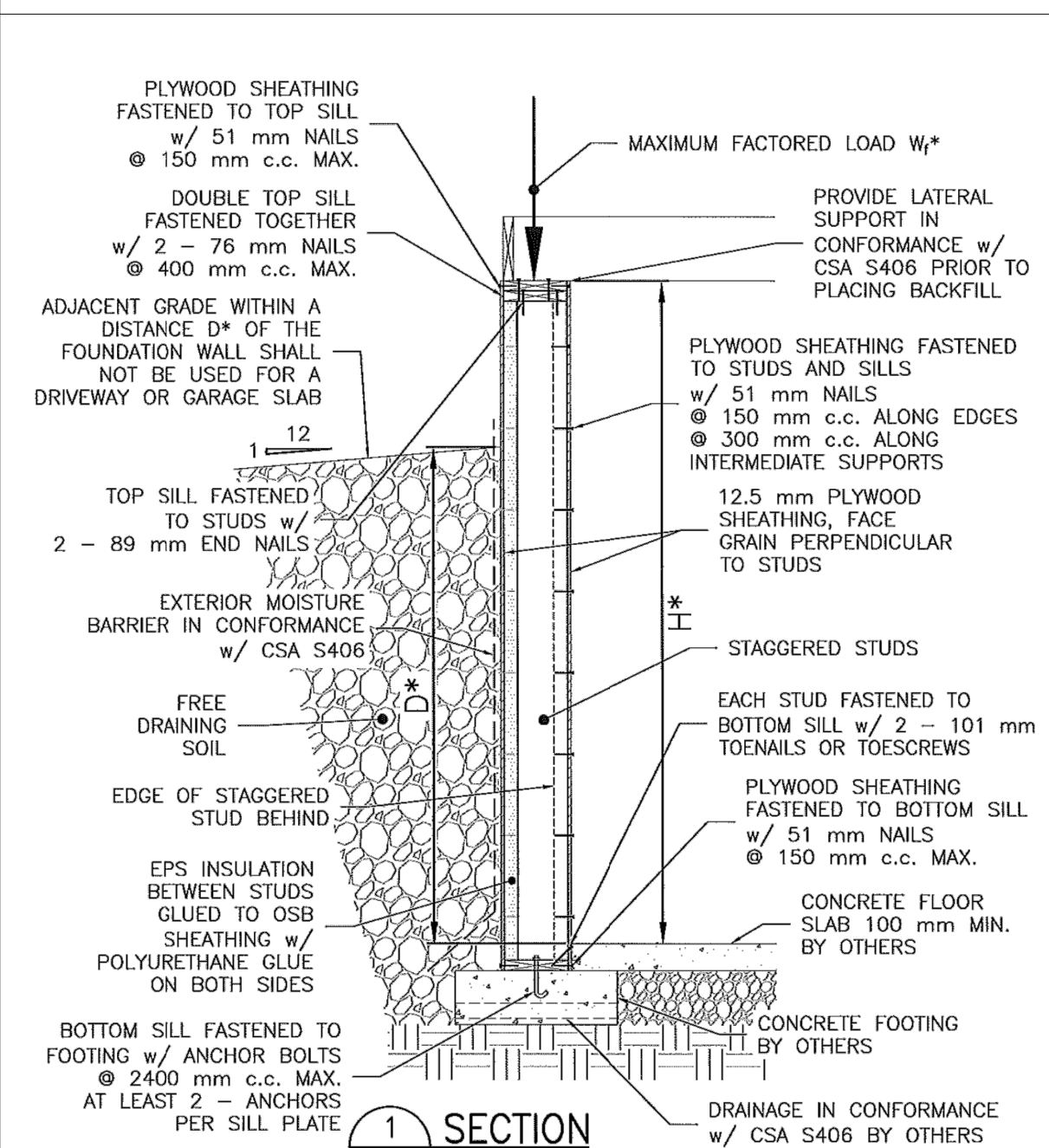
## REAR ELEVATION



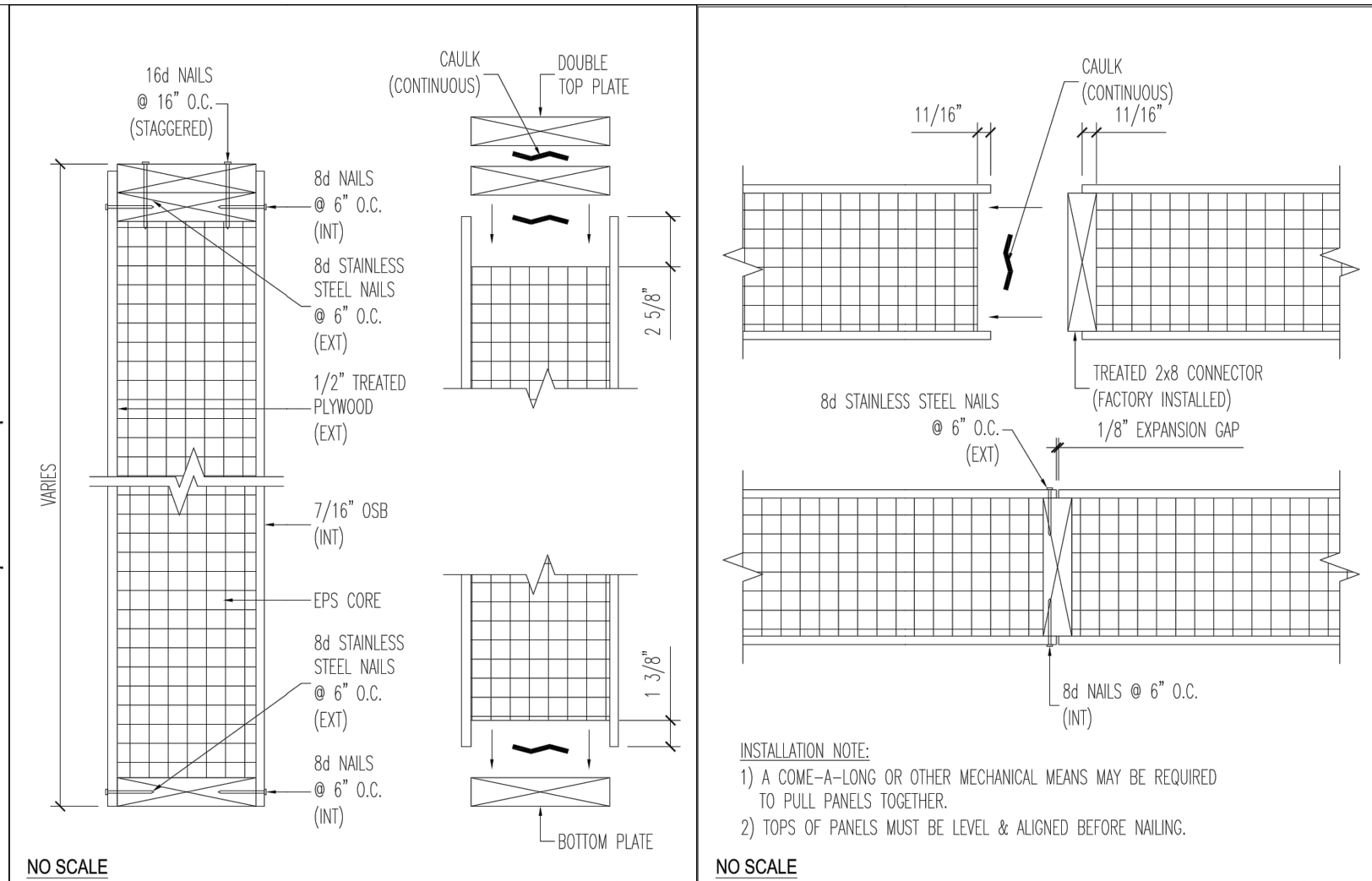
N.T.S.  
**CORNER CONNECTION**



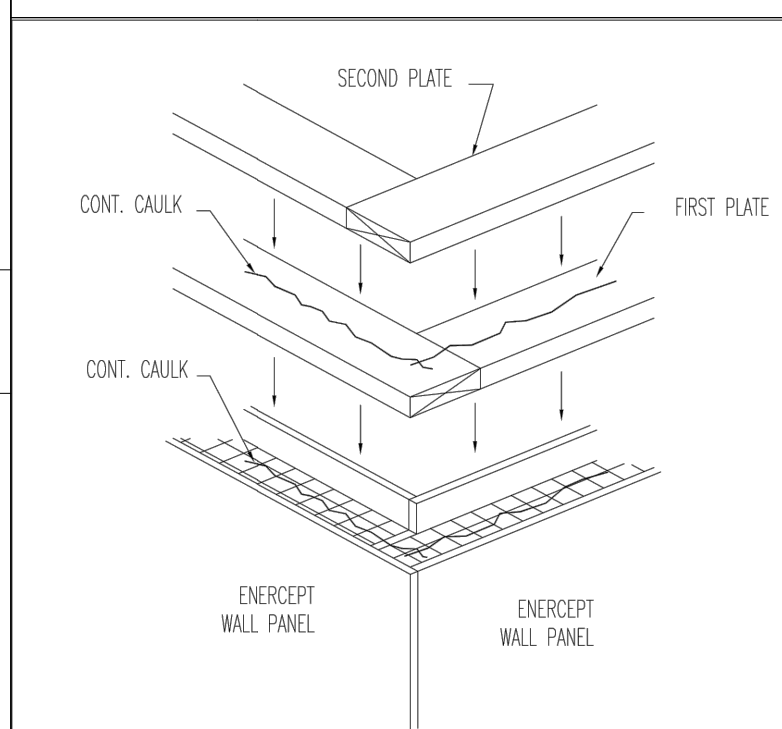
## 1-1/2"x4" PANEL SPLICE



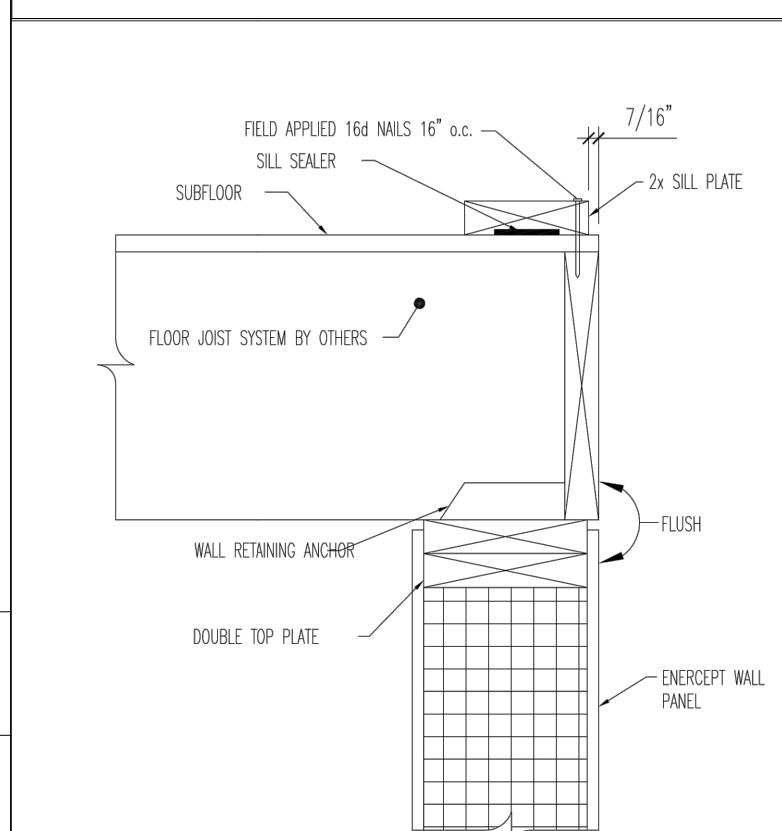
**FOUNDATION AT SLAB**



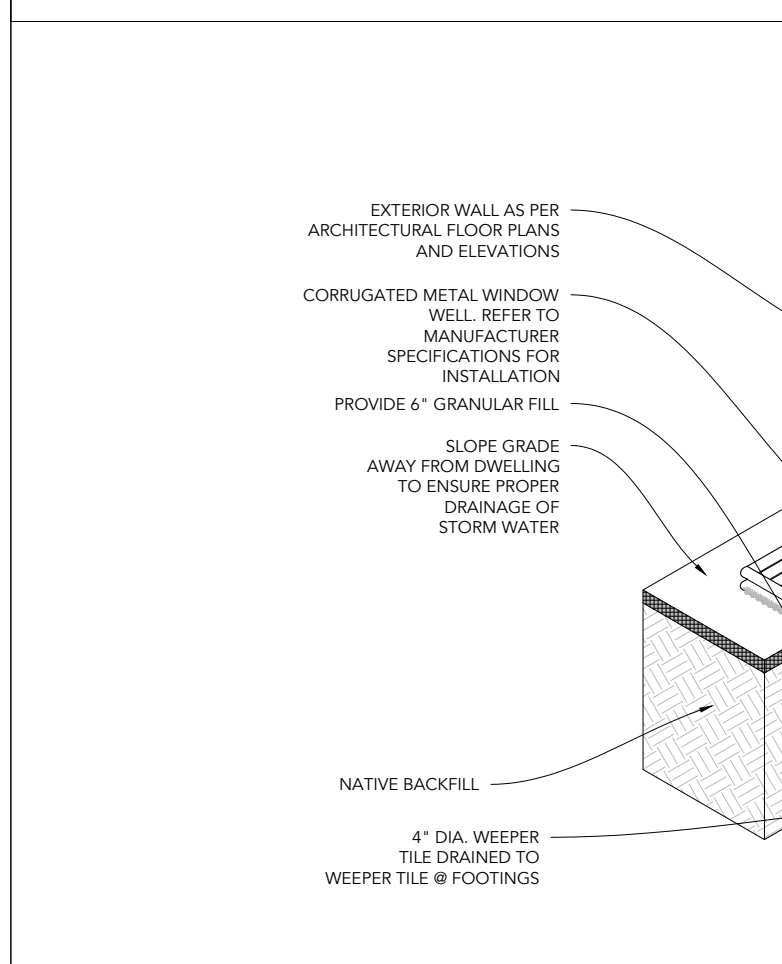
### 8" BASEMENT PANEL DETAIL



## DBLE TOP PLATE INSTALLATION



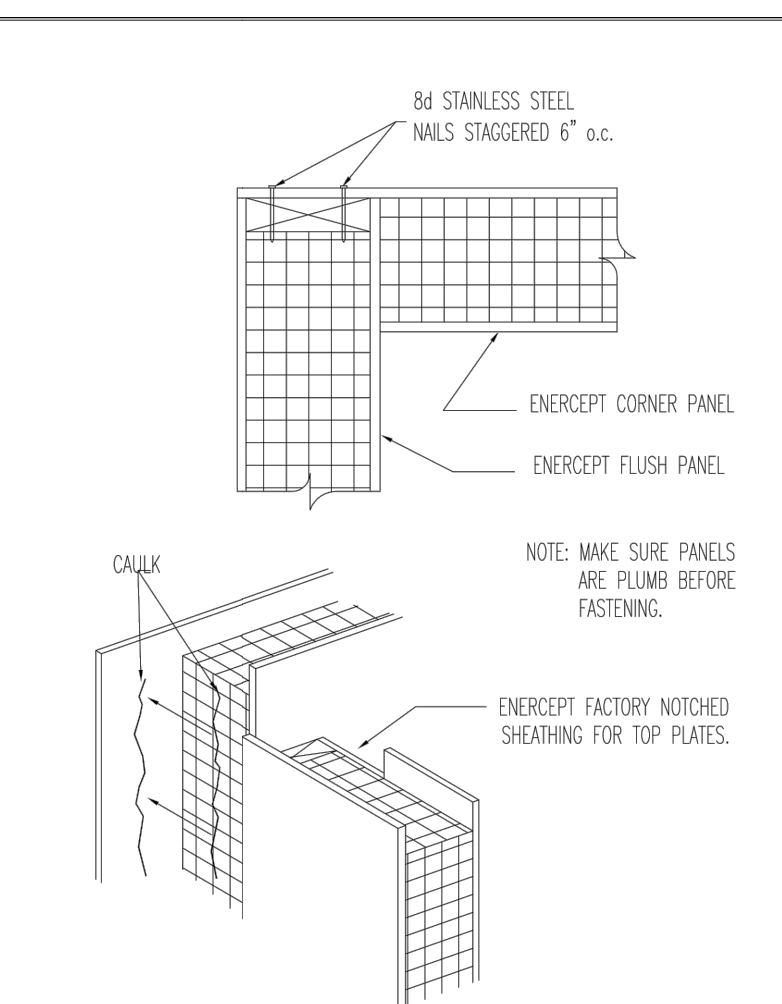
BASEMENT PANEL FLOOR ATTACHMENT



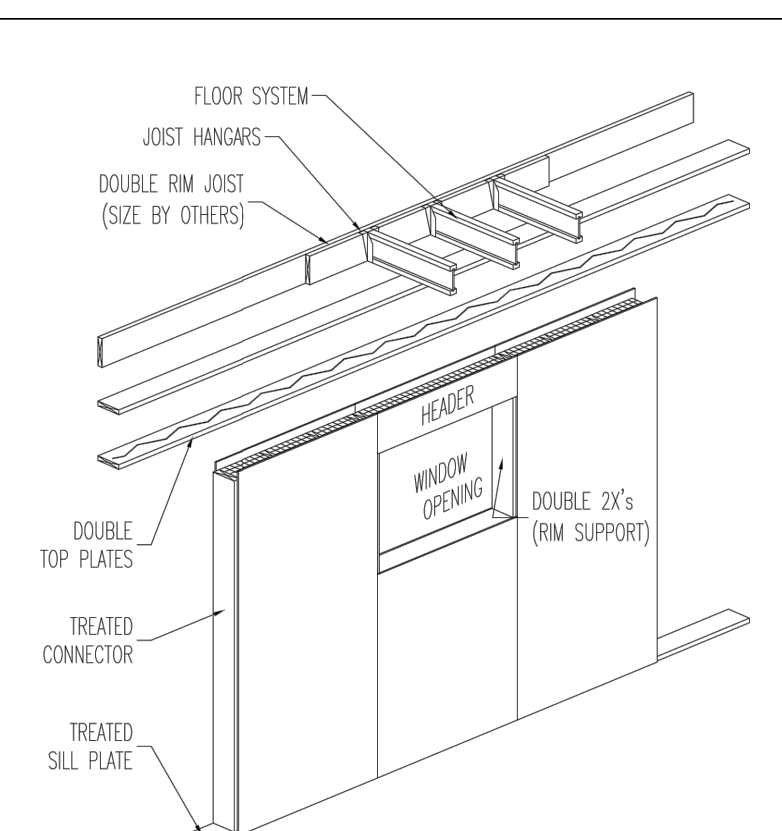
N.T.S.

**WINDOW WELL DETAIL**

### BASEMENT PANEL CONNECTION DETAIL



## CORNER ADJUSTMENT PANEL INSTALLATION



### BASEMENT PANEL HEADER DETAIL

