WOOD NOTES:

GENERAL:

1. All framing lumber shall be No.2 Southern Pine unless noted otherwise.
2. All plywood shall be structural APA rated panels, Exposure I, conforming to Product Standard PS-1.
3. Standard cut washers shall be used under head and nuts against wood.
4. The anchors for plates shall be placed 8" from the end of a plate and at intervals noted on the plans.
5. Do not notch bottoms of wood members. Obtain architect/engineer approval for any holes in all wood members other than those required for structural assembly. Holes through sills, plates, studs, and double plates in interior bearing and shear walls shall not exceed 1/3 of the plate width and shall be bored holes placed in the center of the stud or plate. Notching is not permitted.
6. Nailed connections shall conform to Table 2304.9.1 of the International Building Code.
7. End distance, edge distance and spacing of nails shall be such to avoid splitting of the wood.
8. Nailing not noted shall be at least two nails at all contact points.
9. When headers are not shown, Table 2308.9.5 through 2308.9.6 of the International Building Code shall apply.

BEAMS:

1. Beams shall be comprised of solid sawn Southern Pine lumber unless noted otherwise. The size and grade of each beam shall be as shown on the plan.
2. Individual members comprising beams shall be adequately bonded together to act as a single unit.
3. All beams shall be supported by (3) - 2x4 No.2 or better Douglas Fir studs unless noted otherwise.
4. All beams shall be adequately anchored to prevent lateral and/or in-plane displacement.

STUD WALLS:

1. Studs shall be 2x6 No.2 Douglas Fir or better unless noted otherwise.
2. Stud spacing shall be 16" O.C. unless noted otherwise.
3. All studs shall have blocking at the midpoint unless noted otherwise. Blocking shall consist of solid sawn lumber of the same size as the studs being blocked.

PLYWOOD SHEAR WALLS:

1. OSB panels shall be placed with long dimensions parallel to wall studs.
2. Nailing schedule: (unless otherwise noted)
   A. 10d @ 4" O.C. at panel edges and framed openings.
   B. 10d @ 6" O.C. at intermediate studs and blocking.
3. Shear wall locations shall be as shown on the plan.

PLYWOOD ROOF DECK:

1. OSB panels to be placed with long dimensions perpindicular to supports.
2. Provide double 2x shaped blocking along main ridge lines, valleys and all hip ridges.
3. Nailing schedule:
   A. 8d @ 6" O.C. around roof perimeter at eave, gable ends, and at each side of main ridge lines and valleys.
   B. 8d @ 6" O.C. at all other panel edges.
   C. 8d @ 12" O.C. in panel field @ each rafter.

PARALLAM BEAMS:

1. All members shall be manufactured in accordance with US Department of Commerce voluntary standard PS 56-73, AITC standard 117-79, National Service, Inc. (NES) report number NER-292, or CC MC report number 111161-R, and other AITC standards.
2. Parallam beams shall be manufactured from strands of wood fiber and shall be coated with exterior type adhesive (phenol,(formaldehyde)) and oriented to the length of the member. Use parallam beams by Trusjoist McMillian or equal.
3. Parallam shall have the following properties:
   Flexural Stress, f_t = 2,900 psi
   Tension Parallel to Grain, f_t = 2,400 psi
   Compressive Strength, f_c = 2,900 psi
   Horizontal Shear, f_v = 210 psi
   Modulus of Elasticity, E = 2,000,000 psi
4. The parallam wood fabricator shall furnish shop drawings, unless noted otherwise, for review by the architect/engineer before fabrication.

ROOF TRUSSES:

1. Roof Trusses shall be designed to support the following loads:
   Top Chord Live Load = 20 psf
   Top Chord Dead Load = 15 psf
   Bottom Chord Live Load = 10 psf
   Bottom Chord Dead Load = 10 psf
2. Roof Truss dimensions and spacing shall be per manufacturer's recommendations.
3. Roof Truss manufacturer shall provide all bracing requirements for trusses, both temporary and permanent.
4. Do not place concentrated loads atop the trusses until all specified bracing has been installed and the sheathing permanently nailed in place. Specifically avoid stacking bundles of plywood atop unsheathed trusses. Lift plywood sheets individually onto roof only as required during sheathing.
5. Specified mechanical equipment shall be placed in the attic only upon completion of the entire roof structural system.
6. Truss manufacturer shall check system design of all members against the net uplift forces created by the basic wind speed as indicated on the structural drawings.

CONCRETE NOTES:

GENERAL:

1. All concrete shall have a minimum 28 day compressive strength, (f_c'), of 3,000 psi for footings and 4,000 psi for slabs.
2. All concrete work shall conform to the latest ACI specifications.
3. Coarse aggregate for concrete shall not contain lignite, steel, or other materials that may be detrimental to the concrete.
4. Fly ash in concrete mix shall not be permitted.
5. Horizontal construction joints shall be permitted only where shown on the structural drawings. Horizontal or near horizontal joints shall be prepared by roughening the surface in an approved manner so that the aggregate is exposed uniformly, leaving no laitance, loosened particles, or damaged concrete.
6. Contractor shall verify dimensions and locations of all openings, pipe sleeves, curbs, etc., as required by other trades before concrete is placed.
7. Pipes or conduit placed in foundation and slabs shall not be placed closer than 3 diameters on center. Aluminum conduits shall not be placed in concrete.
8. All footings shall bear on firm, undisturbed soil or an approved select fill material compacted to at least 95% of optimum density as determined by the Standard Compaction Test, ASTM D-698.
9. The design bearing capacity, q_s =1,500 psf.
10. Location of slotted inserts, weld plates and all other items to be embedded in concrete shall be coordinated with architectural and mechanical drawings.

REINFORCEMENT:

1. All reinforcing steel shall conform to ASTM-615, Grade 60, f_y=60 ksi.
2. Minimum cover on all reinforcing steel shall be 3".
3. All reinforcing bars splices shall be lap splices with a minimum overlap of 30".
4. All reinforcing steel shall be fabricated and placed per the latest edition of the ACI Building Code (ACI-318).
5. All reinforcement shall be securely held in place while placing concrete. If required, additional bars or stirrups shall be provided by the contractor to support all bars.
6. Reinforcing bars shall not be welded, unless specifically noted on the drawing, as being welded, welded reinforcement shall conform to ASTM A-706.
7. Provide corner bars in all walls and at wall intersections to match size and spacing of horizontal bars in those walls.

WELDED WIRE FABRIC:

1. All welded wire fabric shall conform to the latest edition of ASTM-185, Specifications for Welded Wire Fabric for Concrete Reinforcement.
2. All laps in welded wire fabric shall be one mesh plus 2 inches at splice.
3. Welded wire fabric shall be provided in flat sheets. Roll wire shall not be permitted.

BUILDING CODE: 2012 INTERNATIONAL BUILDING CODE

GRAVITY LOADS:
LIVE LOADS:
FLOOR.....100 psf
ROOF.....20 psf

DEAD LOADS:
MISC.....ACTUAL WEIGHTS OF MATERIALS
ROOF.....15 psf

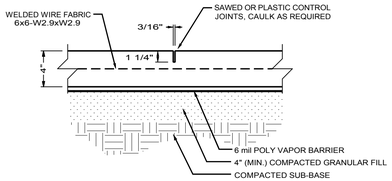
LATERAL LOADS:
WIND:
BASIC WIND SPEED.....115 mph
EXPOSURE CATEGORY.....C

SEISMIC:
SEISMIC USE GROUP.....Group I
SEISMIC IMPORTANCE FACTOR.....Ie=1.0
SPECTRAL RESPONSE COEFFICIENTS.....S_{DS} = 1.679
S_{D1} = 0.951
SITE CLASS.....D (ASSUMED)
SEISMIC DESIGN CATEGORY.....E
BASIC SEISMIC FORCE RESISTING SYSTEM.....PLYWOOD SHEAR WALLS W/ LOAD BEARING WOOD STUDS
DESIGN BASE SHEAR.....0.258 w
ANALYSIS PROCEDURE.....EQUIVALENT LATERAL FORCE (SIMPLIFIED)

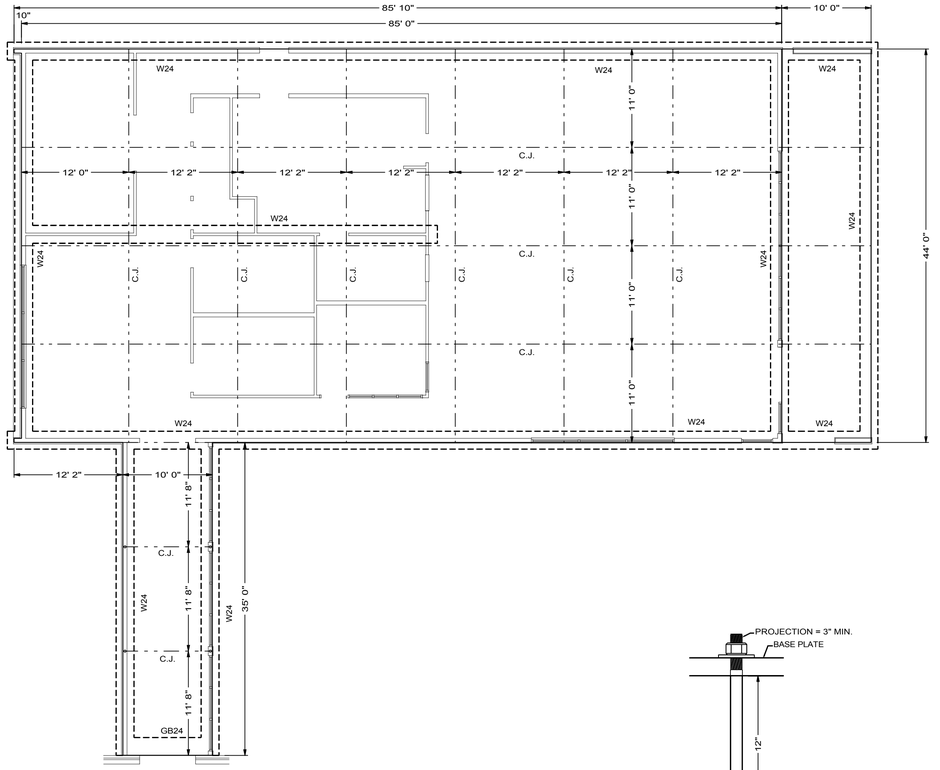
STRUCTURAL DESIGN APPROACH
FOUNDATION SYSTEM:
THE FOUNDATION CONSISTS OF REINFORCED CONCRETE CONTINUOUS FOOTINGS WITH REINFORCED CONCRETE SPREAD FOOTINGS AT HEAVY POINT LOADS.

WALLS:
THE STRUCTURE UTILIZES WOOD FRAMING WITH LOAD BEARING STUD WALLS.

LATERAL STABILITY:
LATERAL STABILITY IS PROVIDED BY THE ROOF DECK ACTING AS A DIAPHRAGM SPANNING BETWEEN SHEAR TRANSFER ELEMENTS WITH PLYWOOD SHEAR WALLS.



SLAB CONTROL JOINT DETAIL

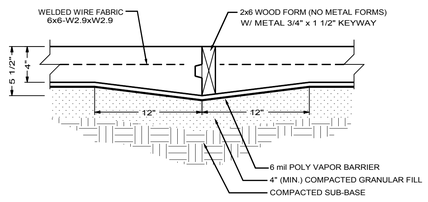


FOUNDATION PLAN

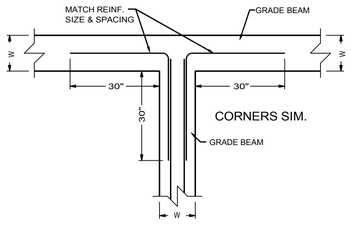
SCALE 1/8"=1'

TYPICAL ANCHOR BOLT

N.T.S.

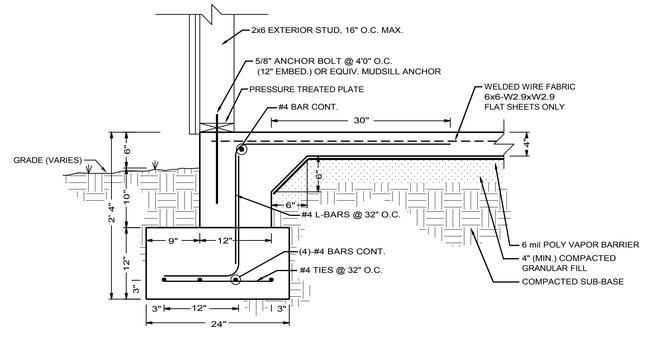


SLAB CONSTRUCTION JOINT DETAIL



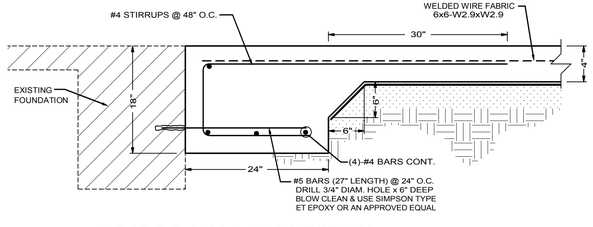
PLAN
REINFORCEMENT INTERSECTION

SCALE 1/2"=1'



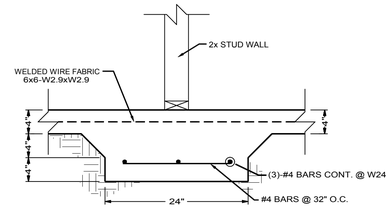
EXTERIOR STRIP FOOTING SECTION

SCALE 1"=1'



GRADE BEAM & CONNECTION
TO EXISTING (GB24)

SCALE 1"=1'



INTERIOR FOOTING (W24)

SCALE 1"=1'

3/22/17

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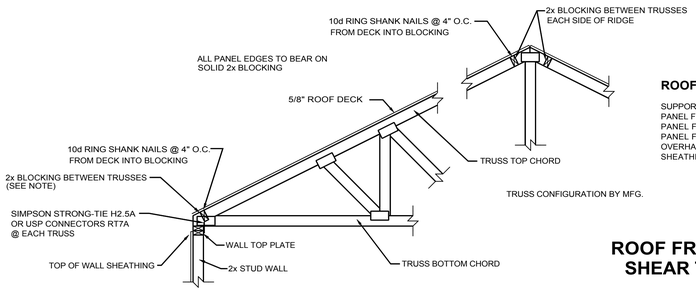


TRUSS CONFIGURATION BY MFG.

NOTE: SOLID 2x BLOCKING BETWEEN TRUSSES @ EXTERIOR WALL MUST EXTEND FROM ROOF DECKING DOWN TO TOP PLATE. CONNECT BLOCKING TO TOP PLATE WITH SIMPSON STRONG-TIE RBC ROOF BOUNDARY CLIPS @ 12" O.C.

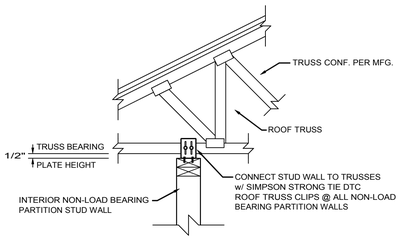
ROOF SHEATHING FASTENING SCHEDULE

SUPPORTED PANEL ENDS & EDGES	6" O.C.
PANEL FIELD	6" O.C.
PANEL FIELD WITHIN 4' OF RIDGE	4" O.C.
PANEL FIELD WITHIN 6' OF EAVE	4" O.C.
OVERHANGS (EAVES)	3" O.C.
SHEATHING TO GABLE ENDWALL	3" O.C.

ALL NAILS TO BE 10d RING SHANK

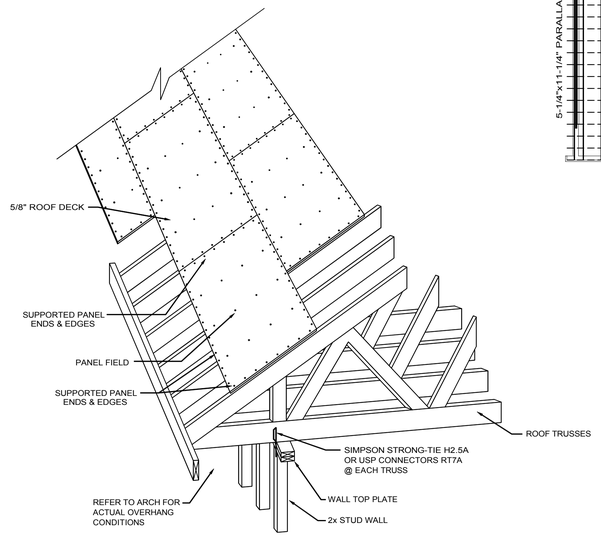
ROOF FRAMING, SHEATHING & SHEAR TRANSFER ELEMENT

SCALE 1/2"=1'

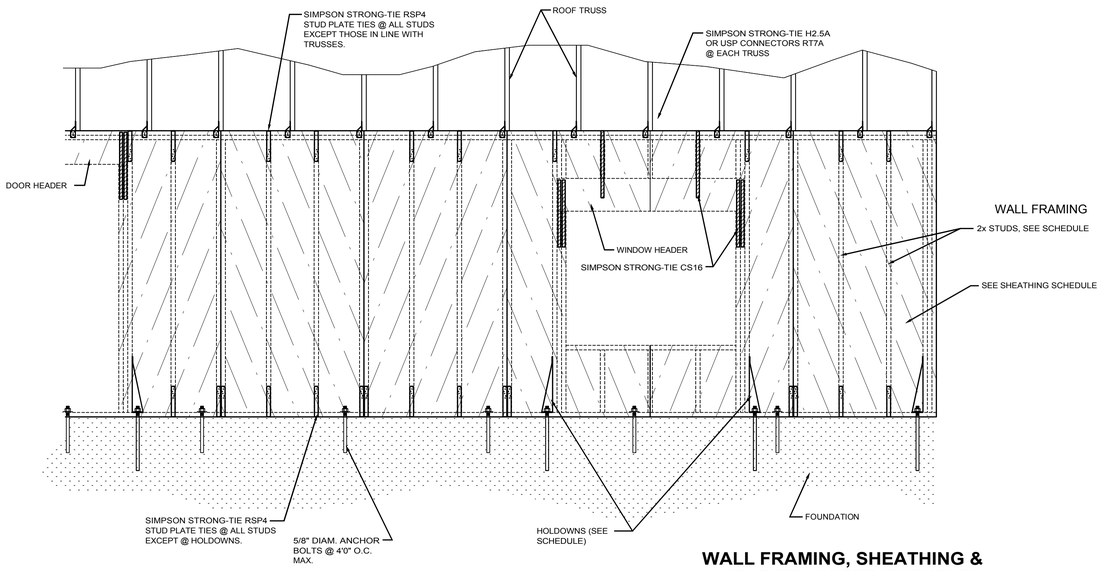


PARTITION WALL TO TRUSS CONNECTION

SCALE 1"=1'

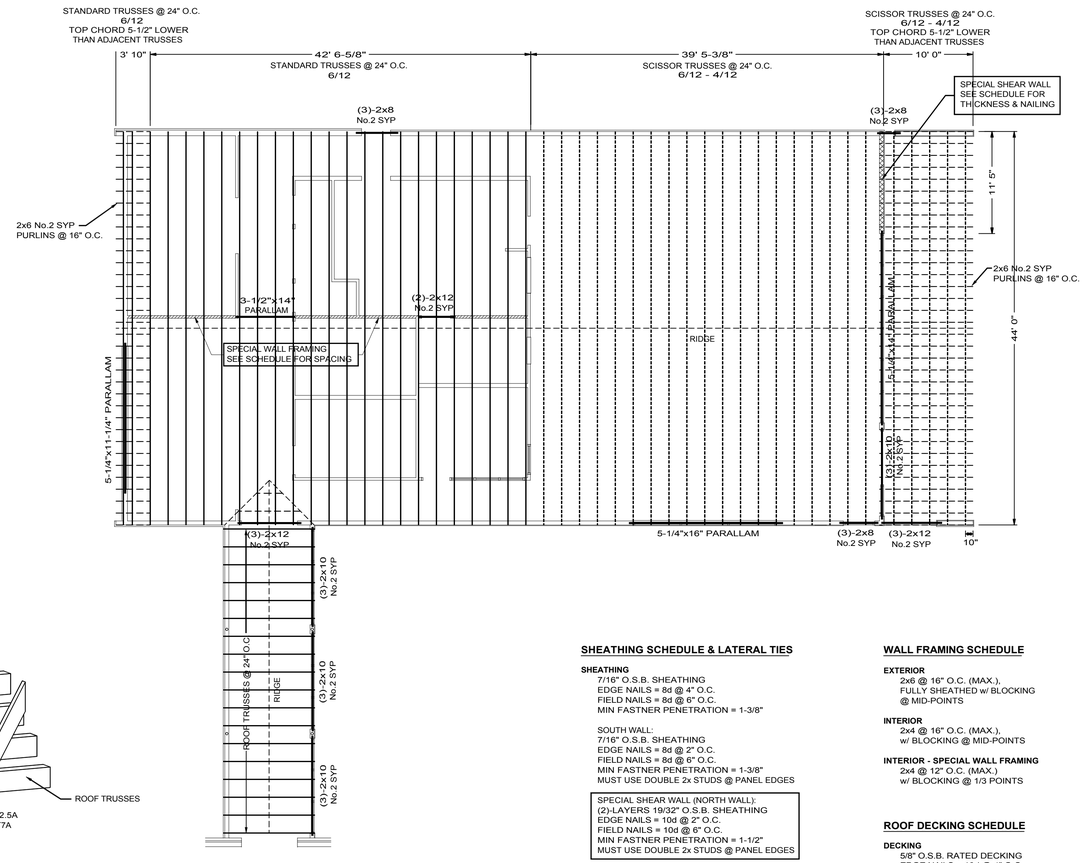


DETAIL OF ROOF DECKING



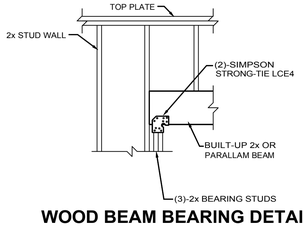
WALL FRAMING, SHEATHING & SHEAR TRANSFER ELEMENT

SCALE 1/2"=1'



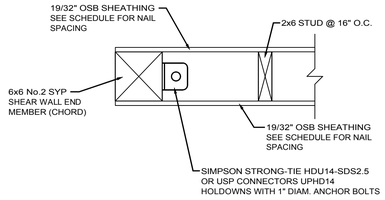
ROOF FRAMING PLAN

SCALE 1/8"=1'



WOOD BEAM BEARING DETAIL

SCALE 1/2"=1'



SPECIAL SHEAR WALL CHORD DETAIL

SCALE 1-1/2"=1'

SHEATHING SCHEDULE & LATERAL TIES

SHEATHING

7/16" O.S.B. SHEATHING
EDGE NAILS = 8d @ 4" O.C.
FIELD NAILS = 8d @ 6" O.C.
MIN FASTNER PENETRATION = 1-3/8"

SOUTH WALL:
7/16" O.S.B. SHEATHING
EDGE NAILS = 8d @ 2" O.C.
FIELD NAILS = 8d @ 6" O.C.
MIN FASTNER PENETRATION = 1-3/8"
MUST USE DOUBLE 2x STUDS @ PANEL EDGES

SPECIAL SHEAR WALL (NORTH WALL):
(2)-LAYERS 19/32" O.S.B. SHEATHING
EDGE NAILS = 10d @ 2" O.C.
FIELD NAILS = 10d @ 6" O.C.
MIN FASTNER PENETRATION = 1-1/2"
MUST USE DOUBLE 2x STUDS @ PANEL EDGES

HOLDOWNS

SIMPSON STRONG-TIE HDU5-SDS2.5
OR USP CONNECTORS PHD4A
HOLDOWNS WITH 5/8" DIAM. ANCHOR BOLTS
@ ALL CORNERS AND BREAKS IN FULL
HEIGHT SHEATHING; MUST BE INSTALLED
WITH MIN. (2) STUDS.

SPECIAL SHEAR WALL (NORTH WALL):
SIMPSON STRONG-TIE HDU14-SDS2.5
OR USP CONNECTORS UPHD14
HOLDOWNS WITH 1" DIAM. ANCHOR BOLTS
@ ALL CORNERS AND BREAKS IN FULL
HEIGHT SHEATHING; MUST BE INSTALLED
WITH 6x6 No.2 SYP CHORDS.

RAFTER TIES

(2)-SIMPSON STRONG-TIE H2.5A
OR (2)-USP CONNECTORS RT7A
@ EACH TRUSS

WALL FRAMING SCHEDULE

EXTERIOR

2x6 @ 16" O.C. (MAX.),
FULLY SHEATHED w/ BLOCKING
@ MID-POINTS

INTERIOR

2x4 @ 16" O.C. (MAX.),
w/ BLOCKING @ MID-POINTS

INTERIOR - SPECIAL WALL FRAMING

2x4 @ 12" O.C. (MAX.)
w/ BLOCKING @ 1/3 POINTS

ROOF DECKING SCHEDULE

DECKING

5/8" O.S.B. RATED DECKING
EDGE NAILS = 10d @ 4" O.C.
FIELD NAILS = 10d @ 12" O.C.
PROVIDE BLOCKING @ ALL PANEL EDGES

ROOF TRUSS DESIGN LOADING

Top Chord Live Load = 20 psf
Top Chord Dead Load = 15 psf
Bottom Chord Live Load = 10 psf
Bottom Chord Dead Load = 10 psf

TRUSS DESIGNER: REFER TO SPECIAL NOTE 3

SPECIAL NOTES:

1. SHEATHING MUST EXTEND TO AND BE ATTACHED TO ROOF DIAPHRAGM CHORD MEMBER (TOP CHORD OF TRUSS OR OR 2x BLOCKING).
2. MUST PROVIDE 2x BLOCKING BETWEEN TRUSSES AT DIAPHRAGM LEVEL (ROOF DECKING). 2x6 OR (2)-2x4 MIN.
3. ENDWALL TRUSS TOP CHORD MUST BE DESIGNED TO RESIST 8,000 lb AXIAL LOAD (ASD).

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