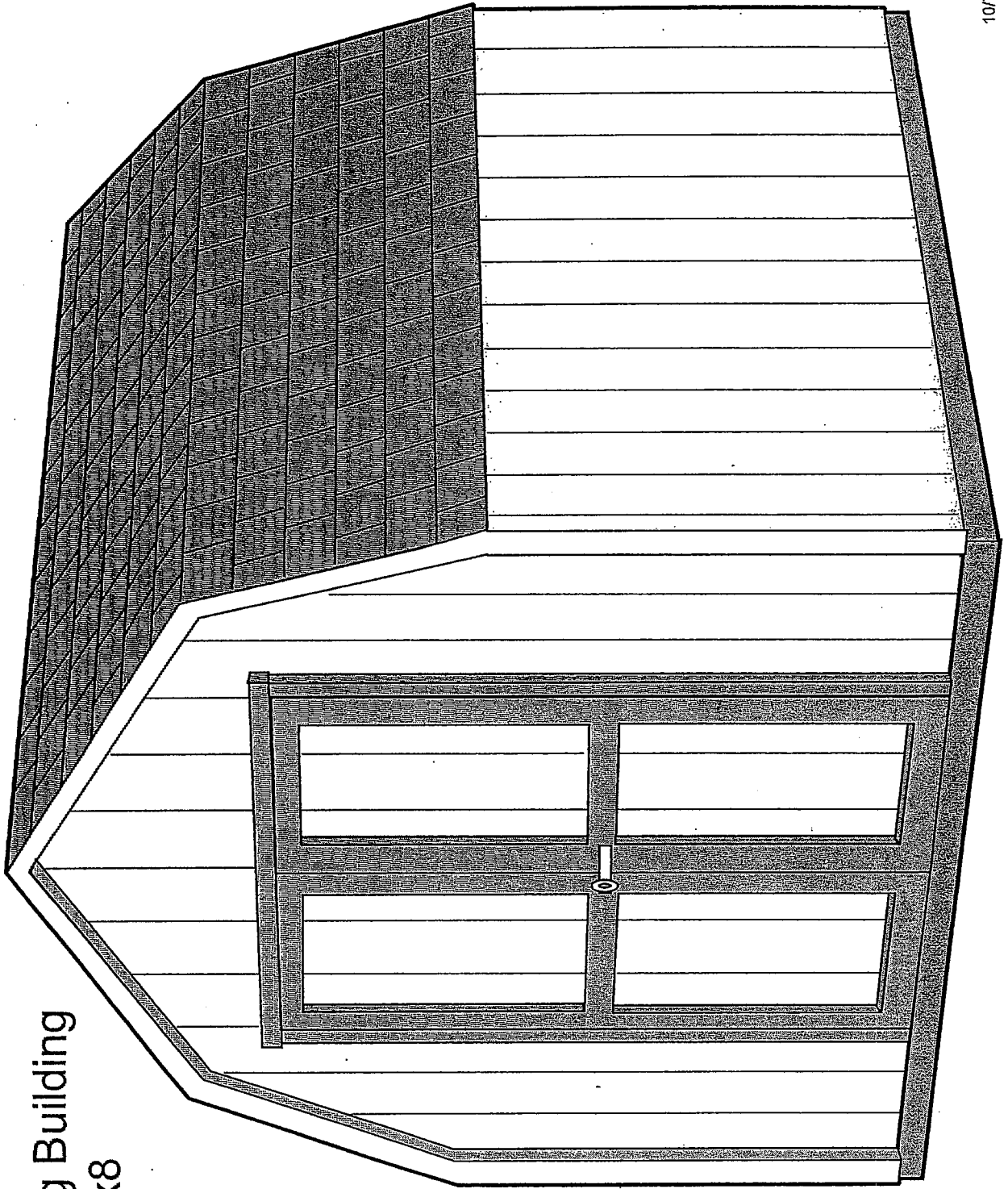
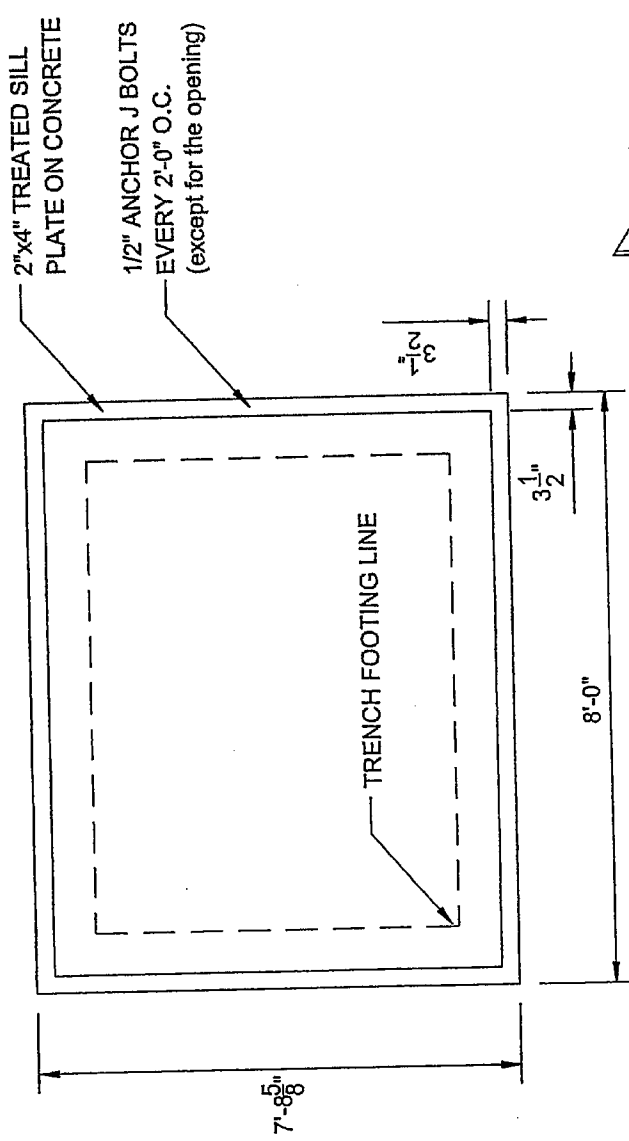


8' Marco Series Gambrel Building

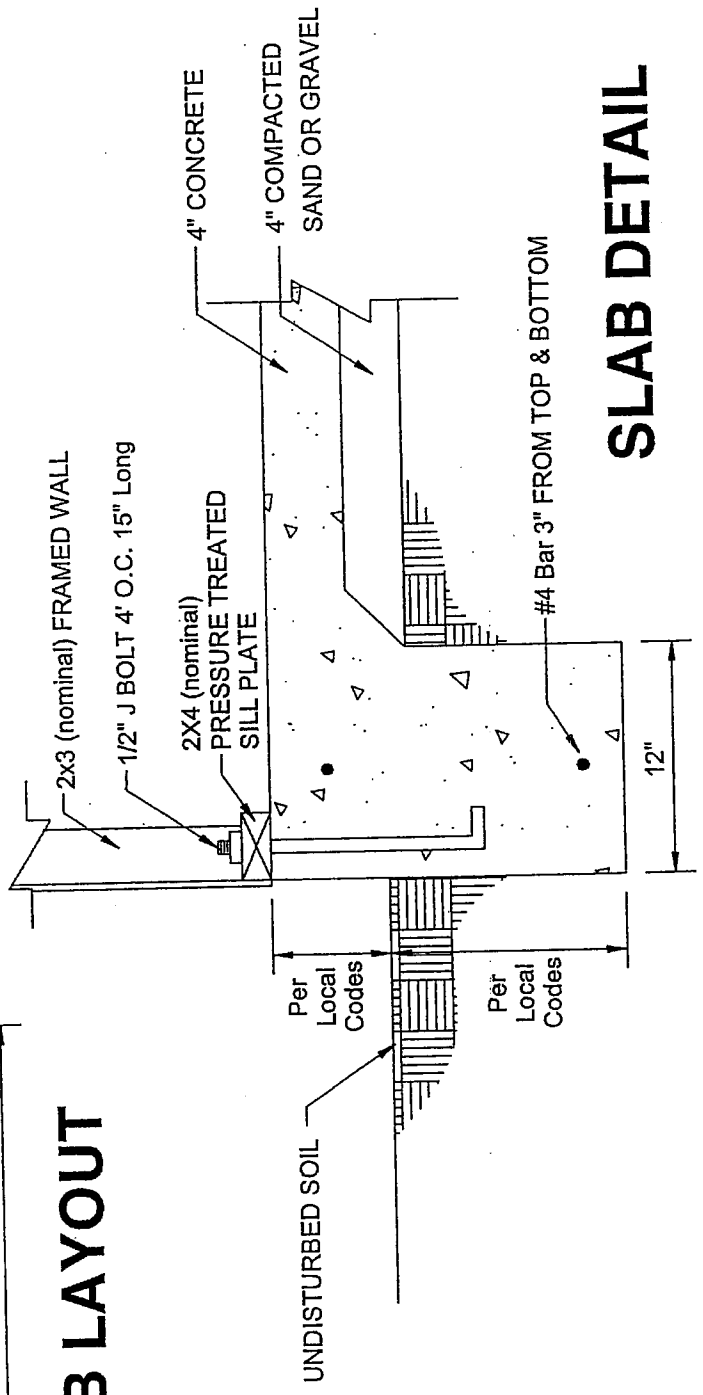
Engineering Building
Plans for 8x8



10/7/03



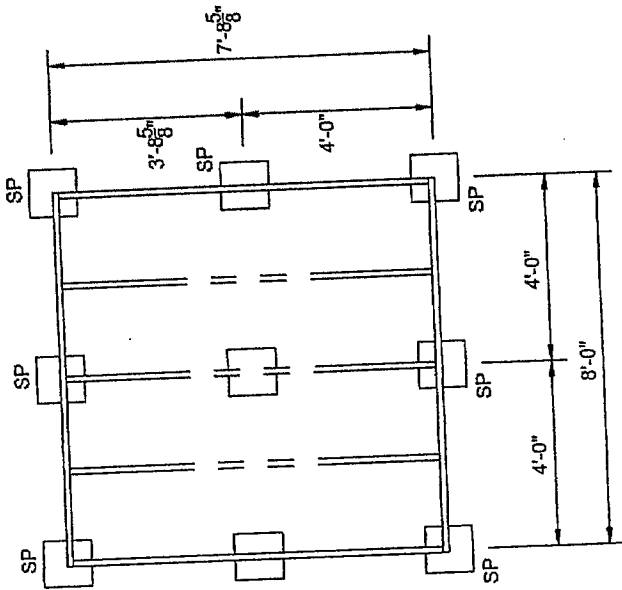
SLAB LAYOUT



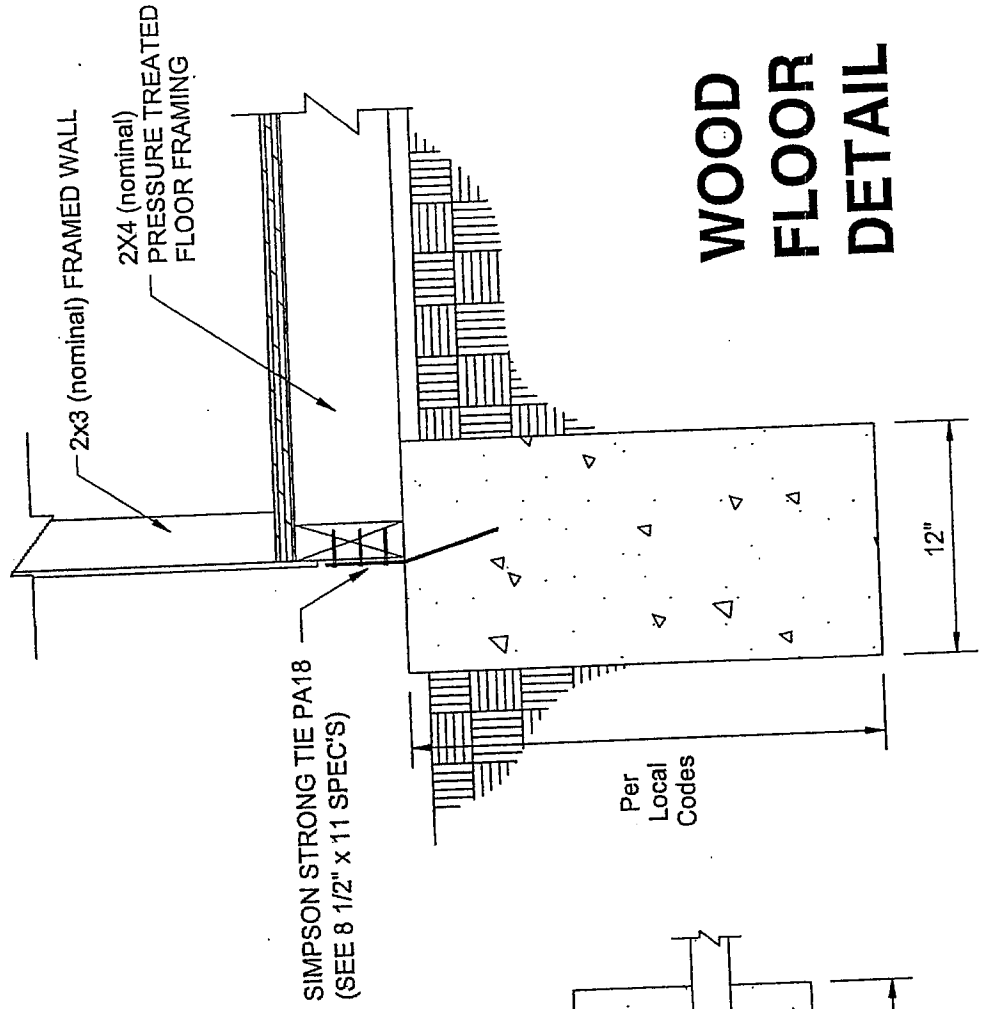
SLAB DETAIL

NOTE:

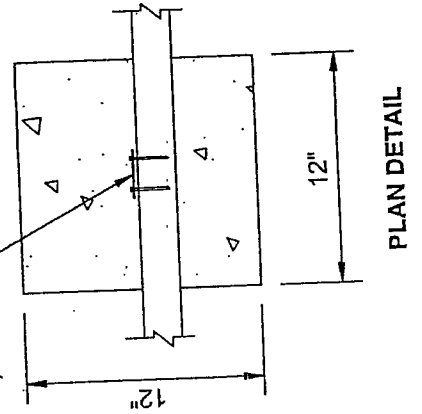
1.) ONLY THE PIERS INDICATED WITH SP ARE REQUIRED TO HAVE SIMPSON STRONG TIES

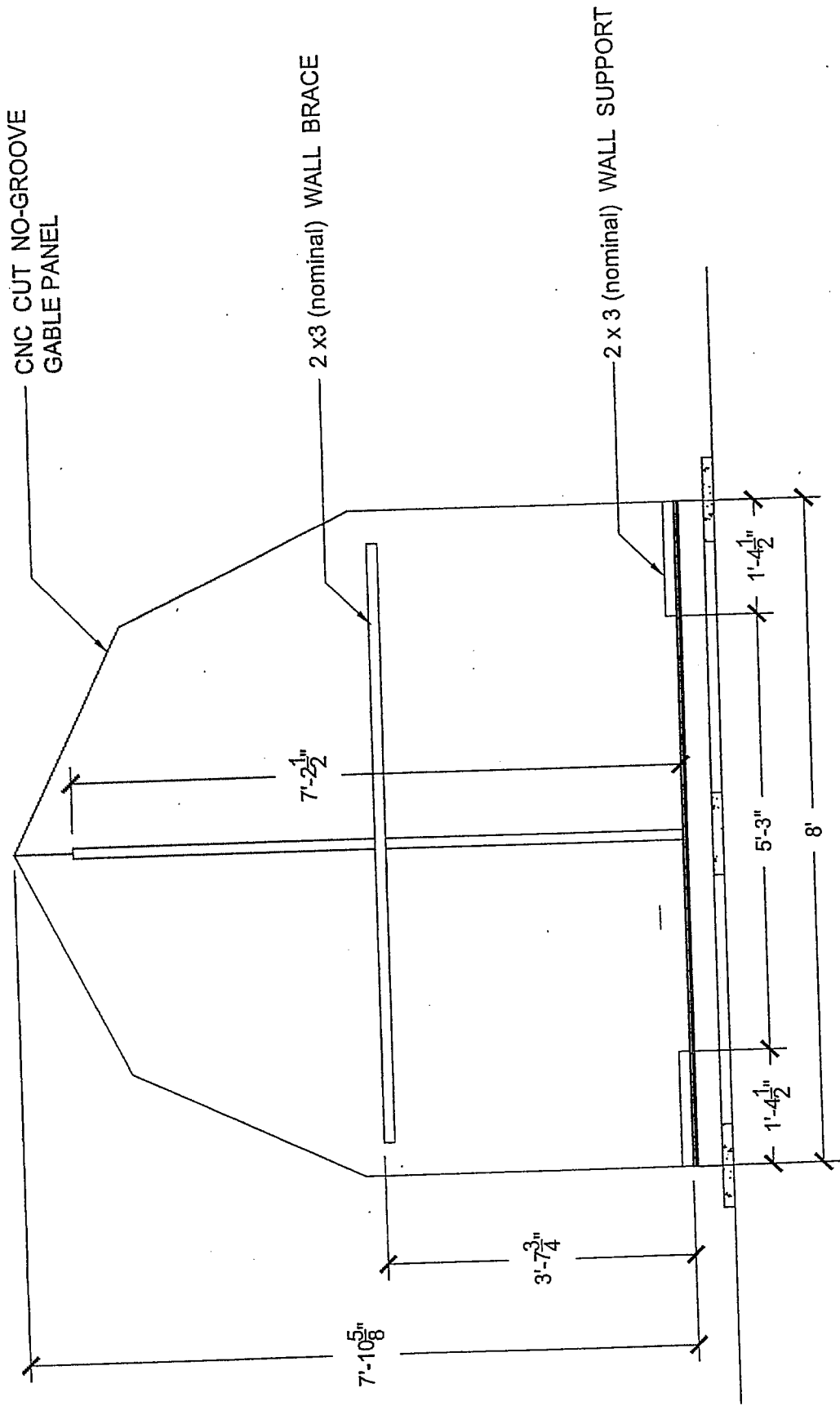


WOOD FLOOR LAYOUT

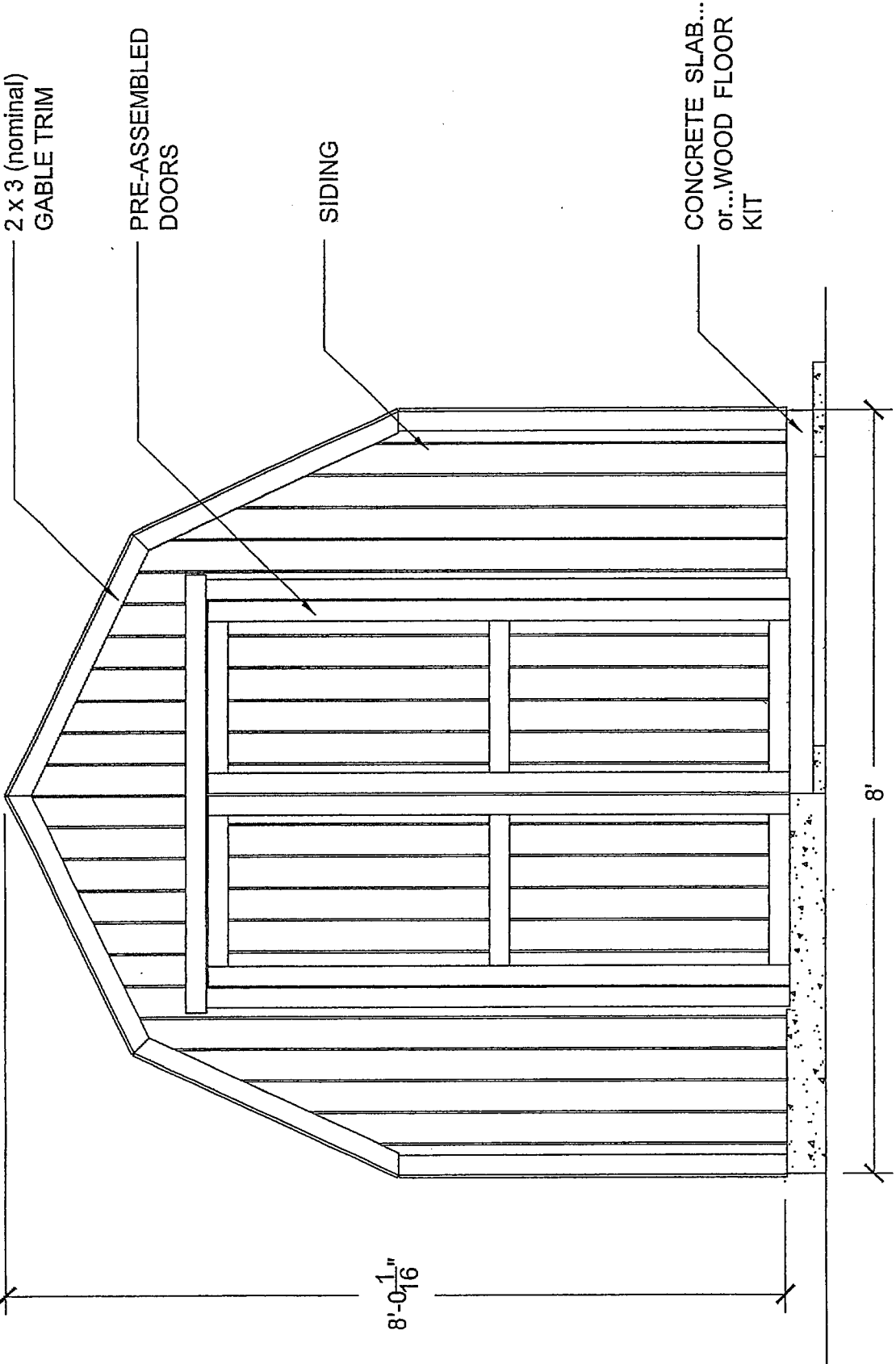


SIMPSON STRONG TIE PA18
(SEE 8 1/2" x 11 SPECS)

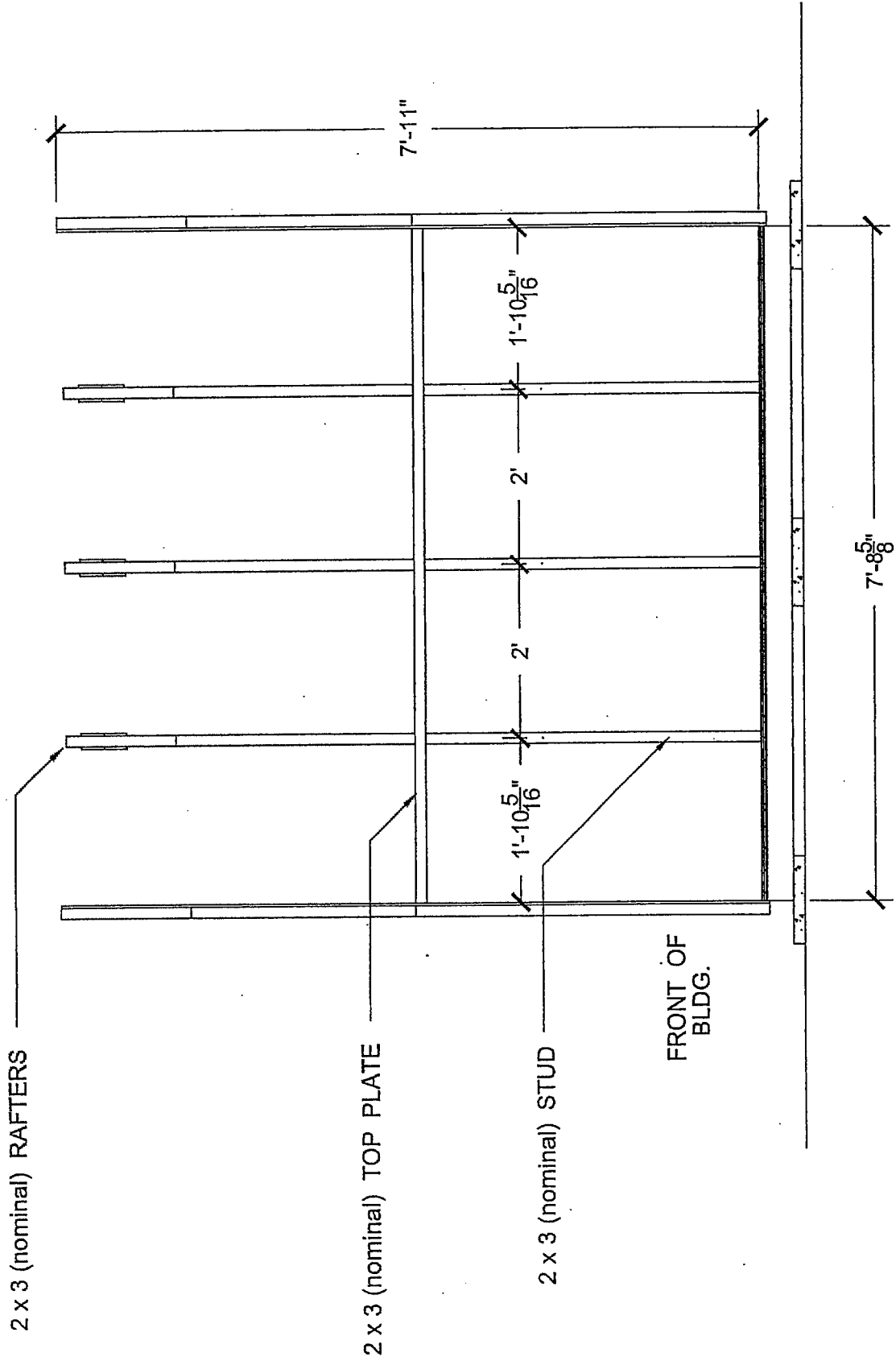




BACK WALL FRAMING



FRONT ELEVATION



SIDE FRAMING

(2) 3/8" GUSSETS ... Fastened
With (10) 2" Nails & (2) Beads
Of Exterior Wood Glue

2 x 3 (nominal) RAFTERS
3/8" ROOF PANEL

SECURE TRUSSES with (2) 3"-16d
NAILS TOE-NAILED INTO TOP PLATE

2 x 3 (nominal) TOP PLATE

2 x 3 (nominal) STUD

SIDING

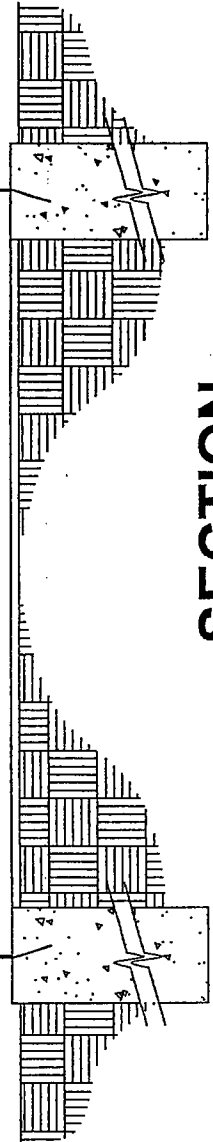
WOOD FLOOR WITH
APPROVED ANCHORS

5 3/4" - 12"
ROOF PITCH

7'-2 1/2"

7'-7"

7'-11 5/16"



SECTION

NOTES: 1) The Roof System of this 8 ft. wide Gabrel style building has a live load capacity of 35 PSF. The equivalent ground snow load per ANCE 7-97 is 68 PSF which exceeds the 16.2 PSF pressure for a 110 mph wind per ASCE 7-97.
 2) This plan supplements assembly instructions.

STRUCTURAL ANALYSIS:

f b = 1200 PSC
 f v = 80 psi
 Sx 2"x3" = 1.56 in Area = 3.75 in

DEAD LOAD:

Max Rafter Moment = fb Sx/12=156 ft.lb.
 Max Rafter Shear = 80x3.75=300 lb.
 Max Stud Moment = 156 ft. lb.

ROOF SYSTEM:

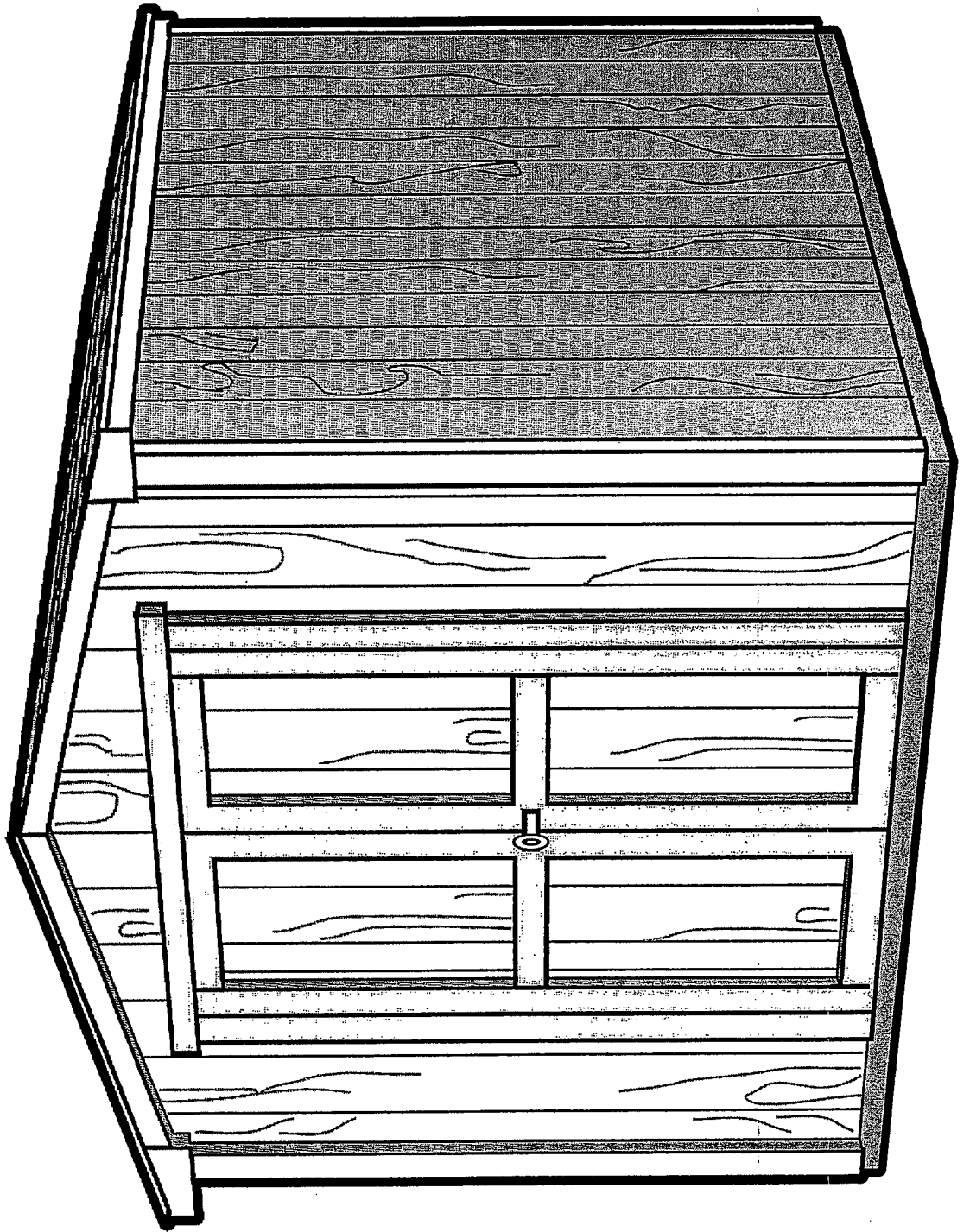
1) Rafters 2x3@2'cc w=8M/L2 = 78PLF=39 PSF-4
 2) Rafter Shear w=2V/L = 150 PLF=75 PSF-4
 3) Sheathing w=49PSF-4=45psf
 4) Ground Snow Load: Ref ASCE 7-97
 Ps=35PSF I=0.8
 Cs=0.95 Ce=0.8
 Ct=1.2 Pf=35/0.95=36PSF
 Pg=PF/7CeCtI=68 PSF Ground Snow Capacity

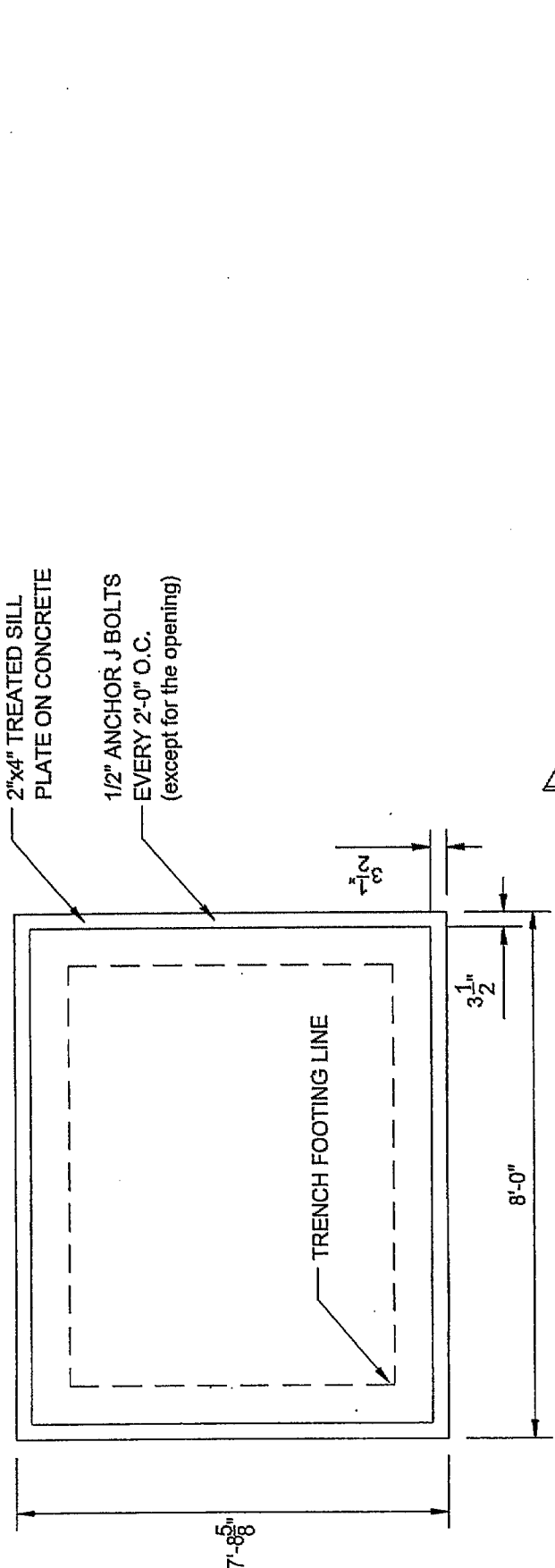
WALL SYSTEM:

1) Studs 2x3@24"cc L=3.3ft. w=8M/L2=114PLF=57 PSF
 2) Wind Loading V = 110 mph EXP 1
 Kz=0.37 Gh=1.65 GCpl=-0.25
 I=0.95 Cp=0.8
 Velocity Pressure=8Z=.00256Kz(IV) =10.3PSF
 Design Pressure=P=qfGhCp-(qhGCpl)=16.2PSF
 ok<57PSF

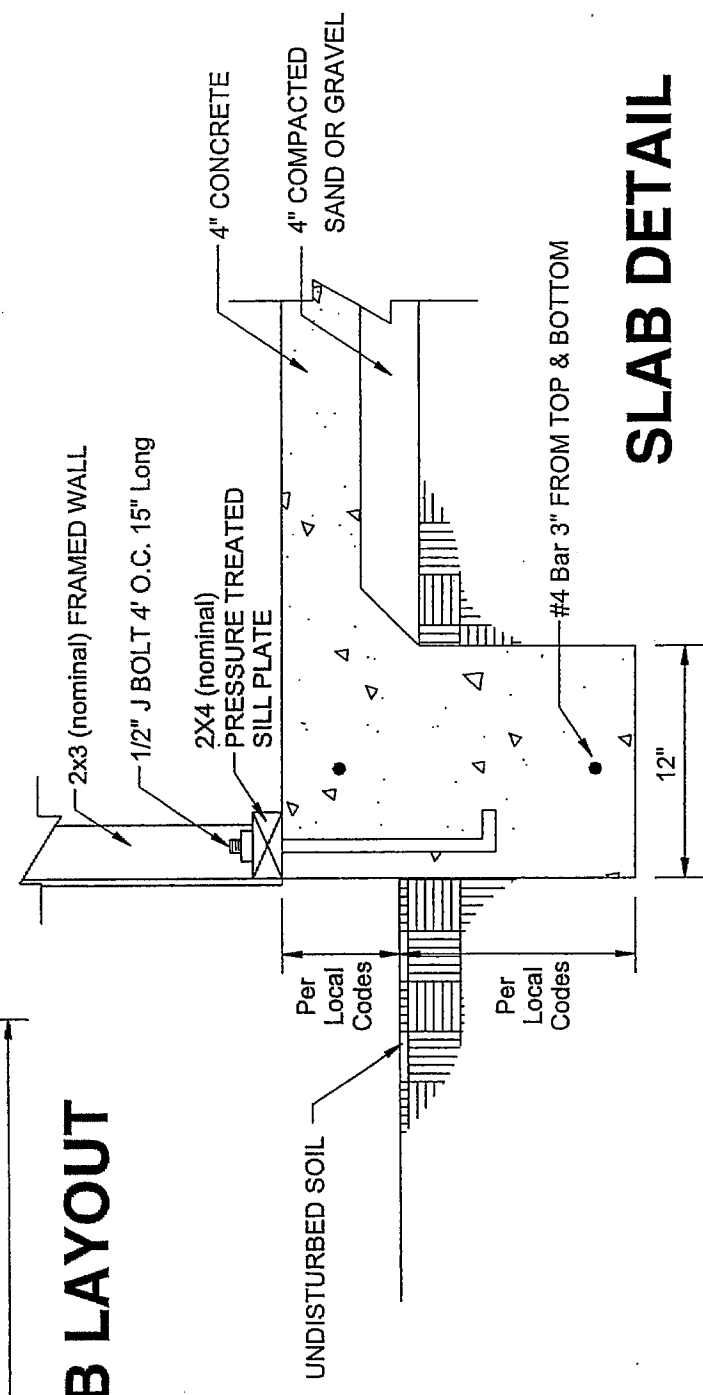
8' Marco Series Gable Building

Engineering Building
Plans

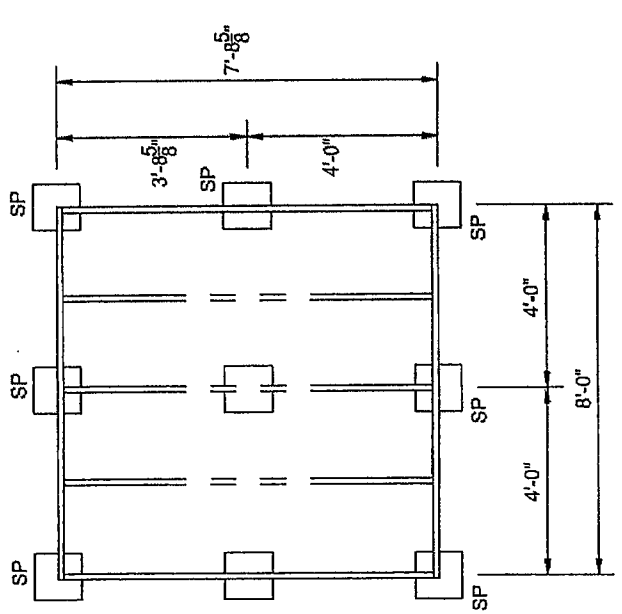




SLAB LAYOUT

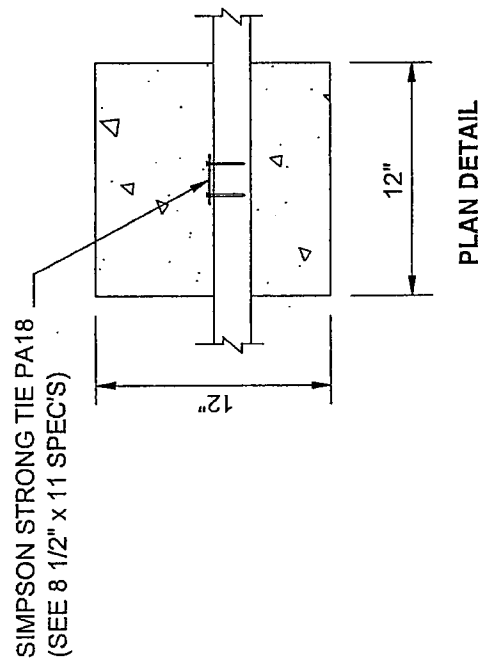
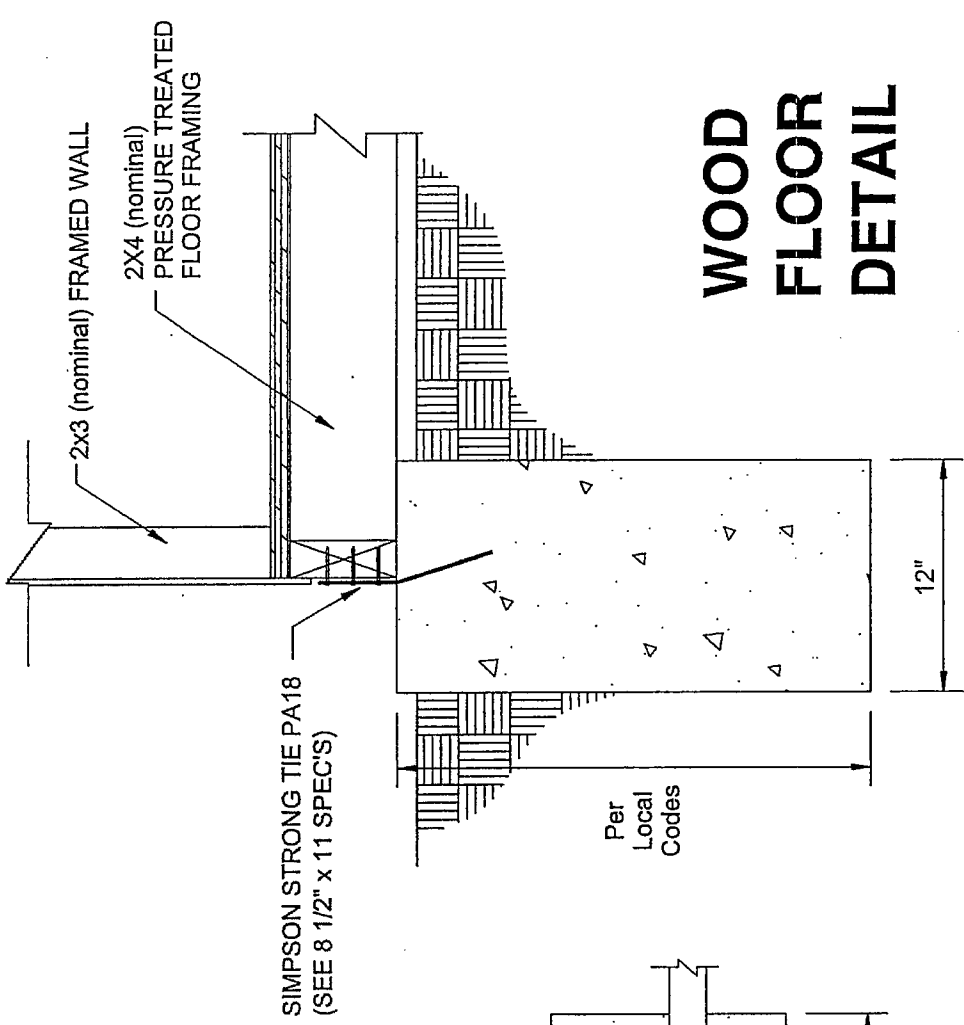


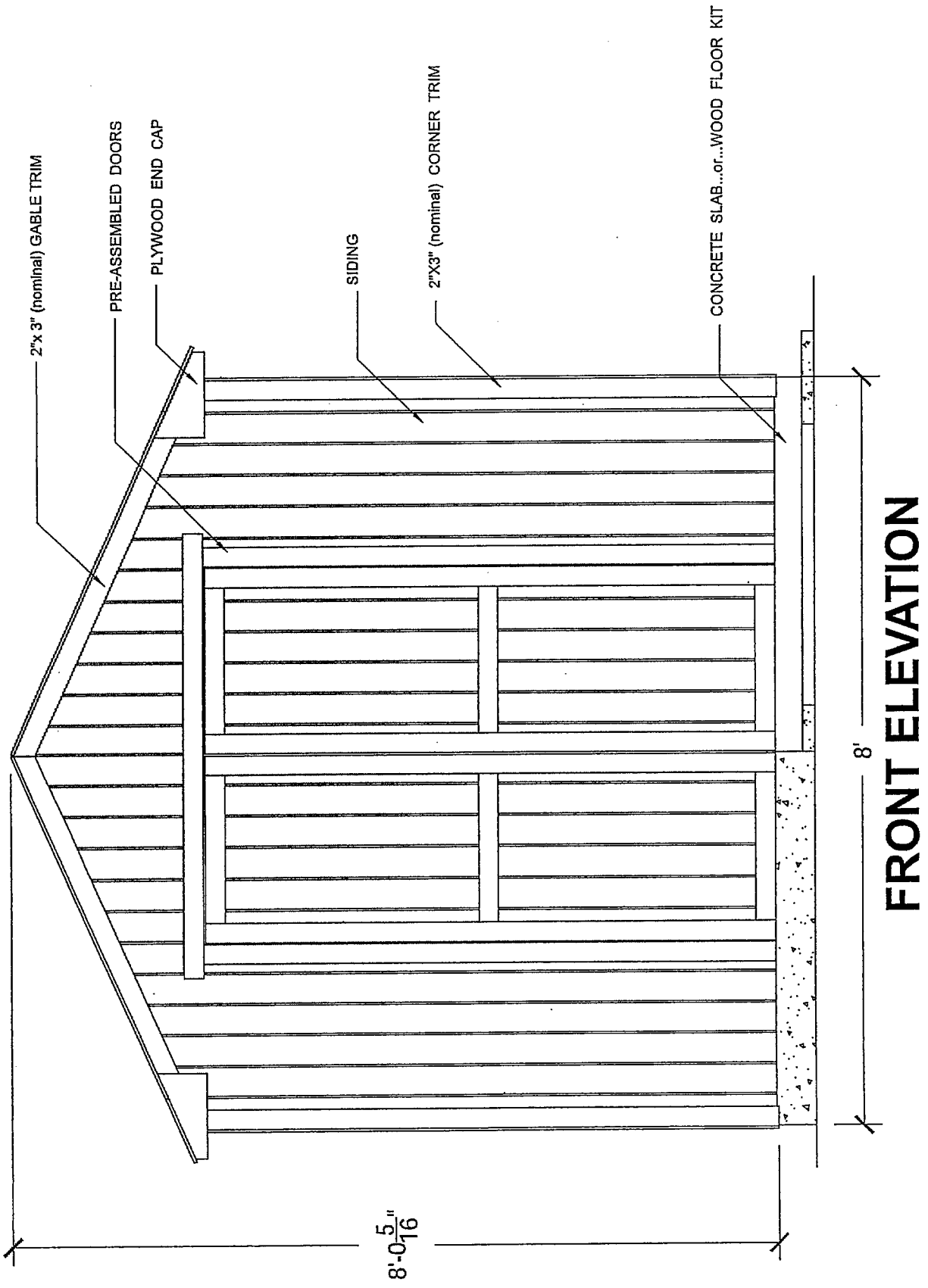
SLAB DETAIL

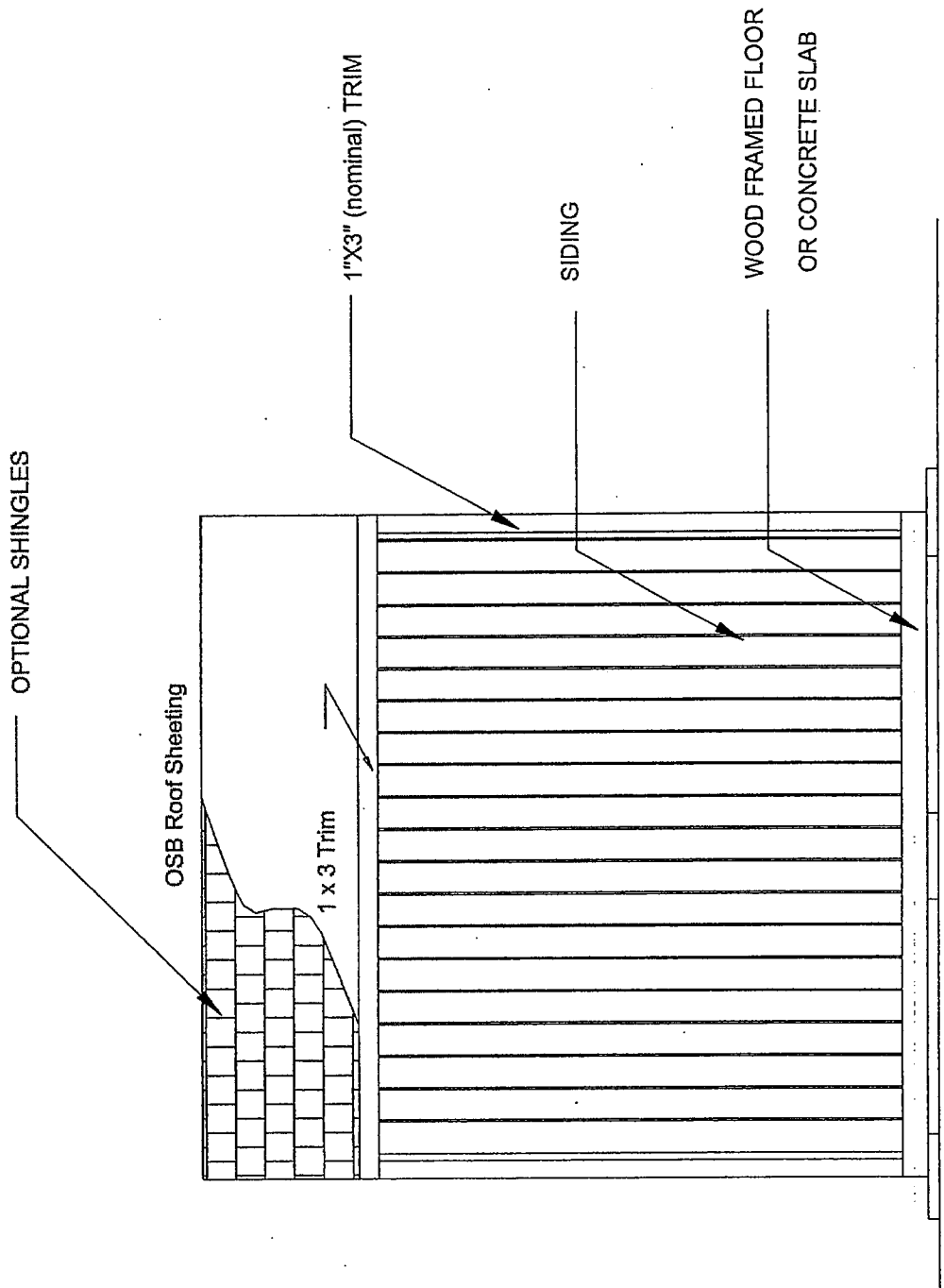


WOOD FLOOR LAYOUT

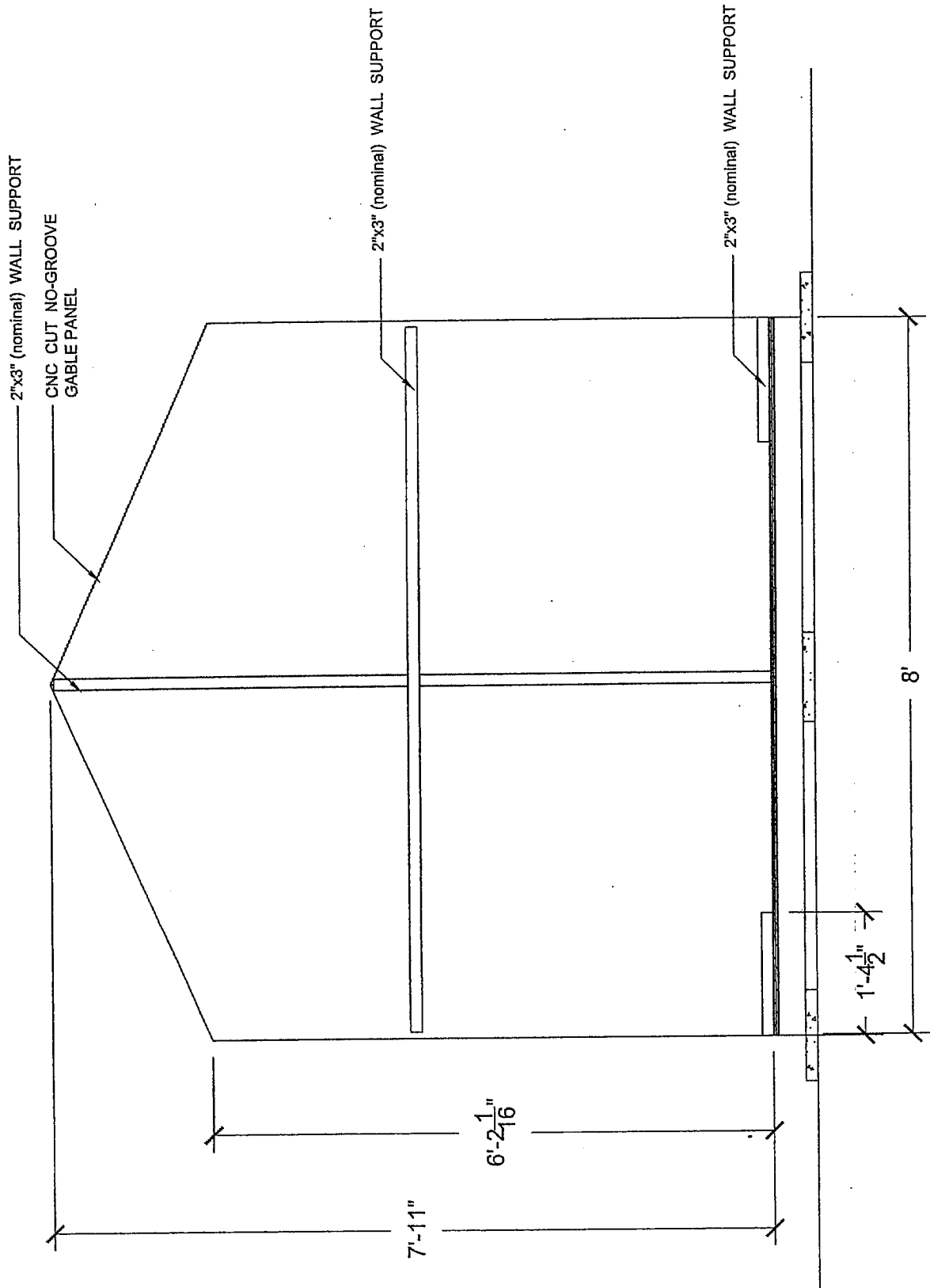
NOTE:
 1.) ONLY THE PIERS INDICATED WITH SP ARE
 REQUIRED TO HAVE SIMPSON STRONG TIES



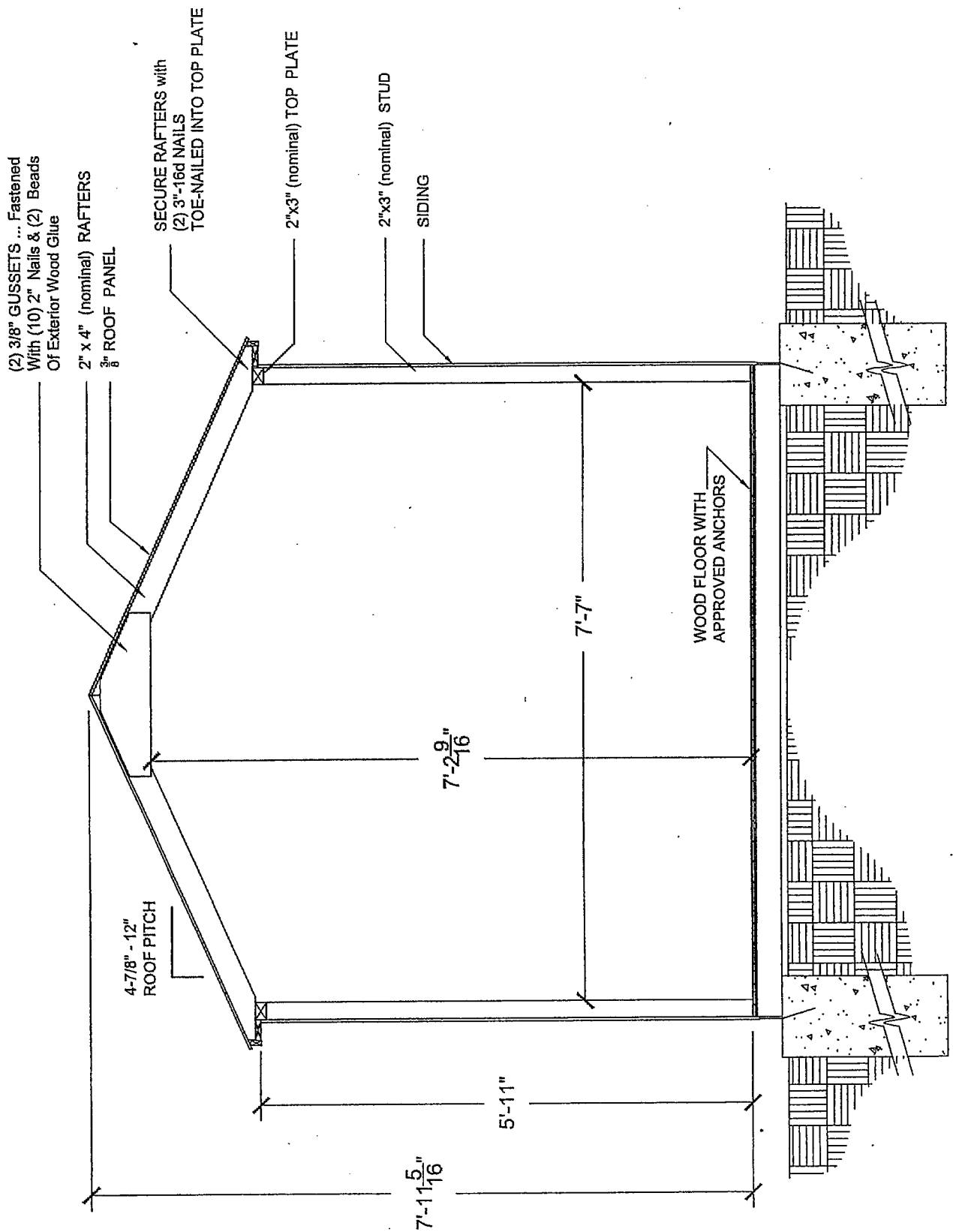




LEFT ELEVATION



BACK WALL FRAMING



SECTION DETAIL

NOTES: 1) The Roof System of this 8 ft. wide Gable style building has a live load capacity of 45 PSF. The equivalent ground snow load per ANCE 7-98 is 88 PSF which exceeds the 17.3 PSF pressure for a 110 mph wind per ASCE 7-98.
 2) This plan supplements assembly instructions.

STRUCTURAL ANALYSIS:

f b = 1200 PSC
 f v = 80 psi
 Sx 2"x3" = 1.56 in Area = 3.75 in
 Dead Load = 4 PSF (Roof)
 Max Rafter Moment = fb Sx/12=306 ft.lb.
 Max Rafter Shear = 80x3.75=300 lb.
 Max Stud Moment = 156 ft. lb.

WALL SYSTEM:

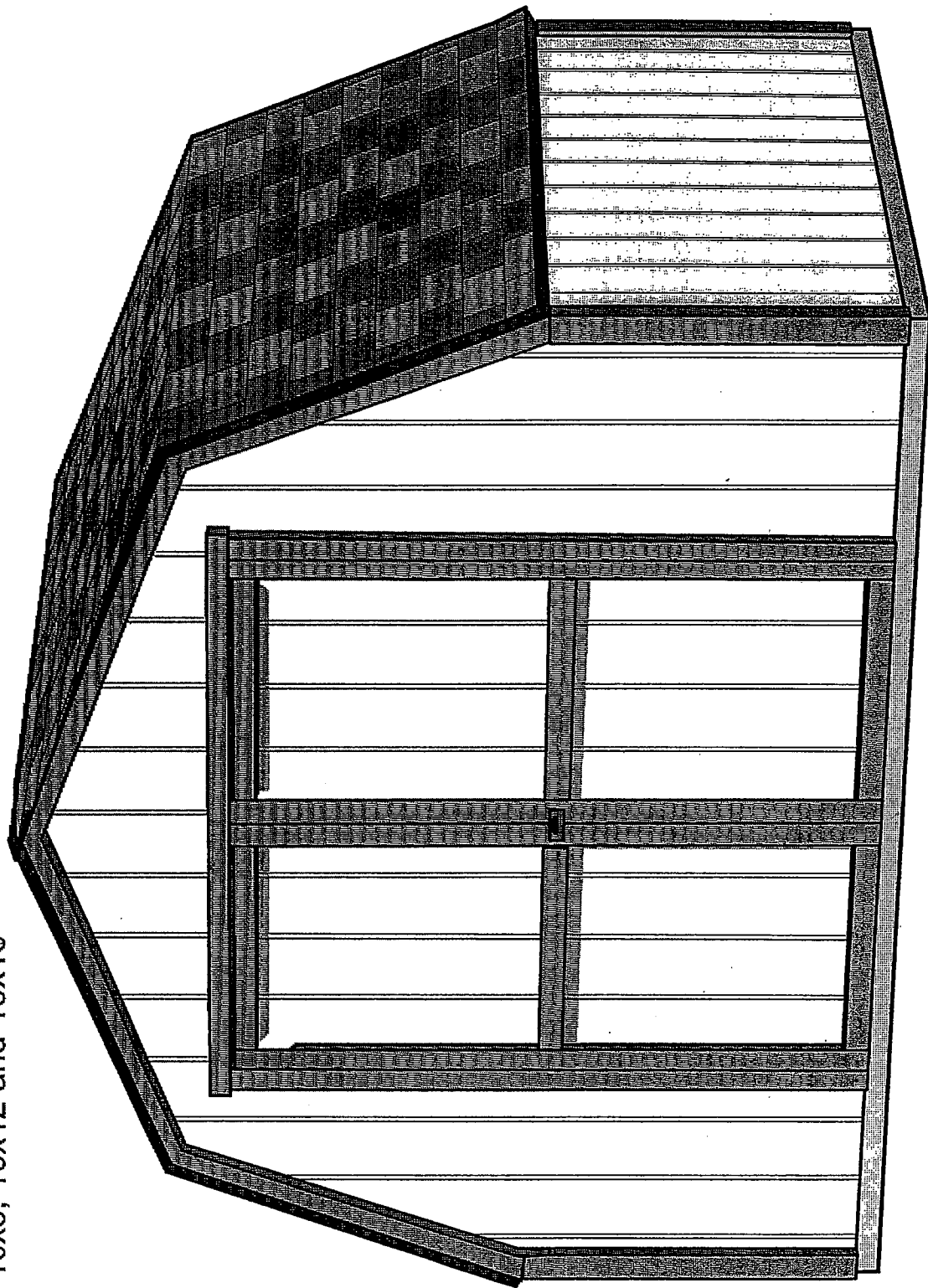
1) Studs 2x3@24"cc L=3.3ft. w=8M/L2=114PLF=57 PSF
 2) Wind Loading V = 110 mph EXP 1
 Kz=0.37 Gh=1.65 GCpl=-0.25
 I=0.95 Cp=0.8
 Velocity Pressure=8z=.00256Kz(V) =10.3PSF
 Design Pressure=P=qfGhCp-(qhGCpl)=16.2PSF
 ok<57PSF

ROOF SYSTEM:

1) Rafters 2x4@2'cc w=8M/L2 = 76PLF=45 PSF-4
 2) Rafter Shear w=2V/L = 117 PLF=92 PSF-4
 3) Sheathing w=45PSF-4=45psf
 4) Ground Snow Load: Ref ASCE 7-98
 Ps=45PSF I=0.8
 Cs=0.95 Ce=0.8
 Ct=1.2 Pf=45/0.95=47.4PSF
 Pg=PF/.7CeCtI=88 PSF Ground Snow Capacity

10' Marco Series Gambrel Building

Engineering Building
Plans for 10x8, 10x12 and 10x16

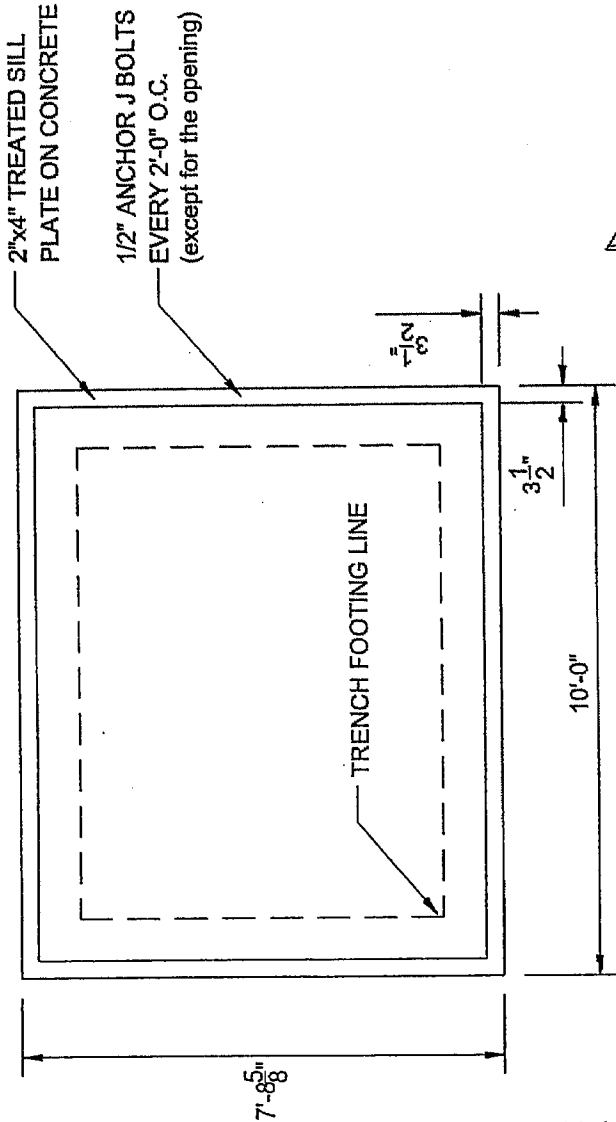


10'x12'

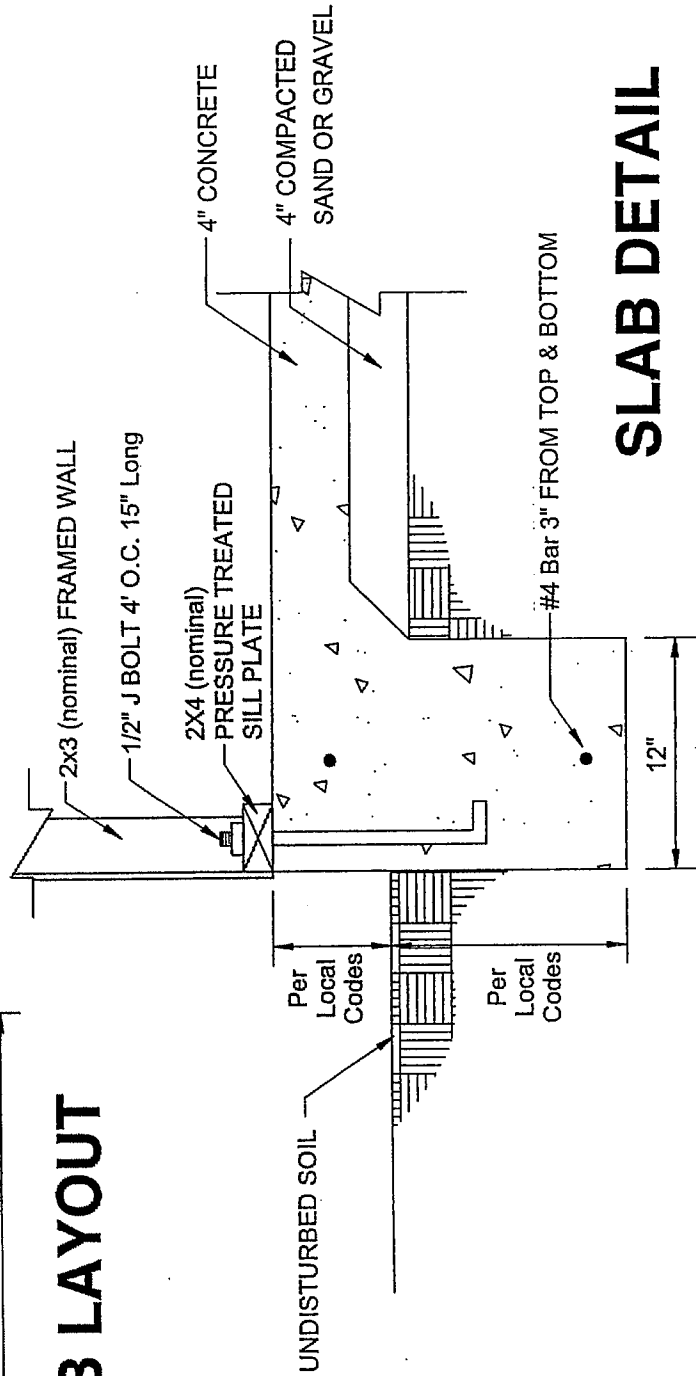
Slab size is 10' x 11' 8-5/8"

10'x16'

Slab size is 10' x 15' 8-5/8"



SLAB LAYOUT

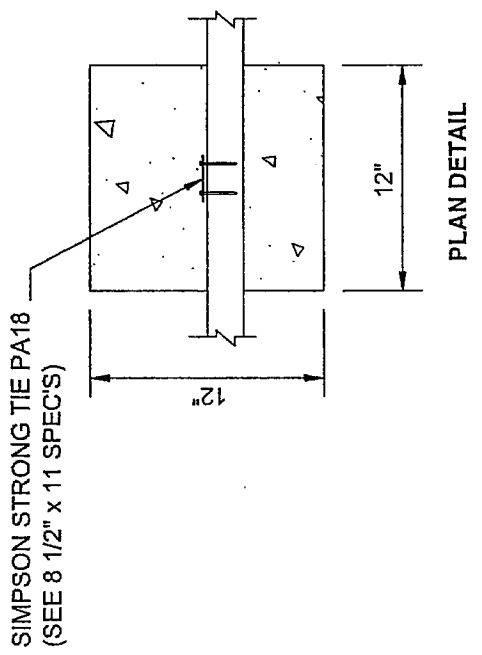
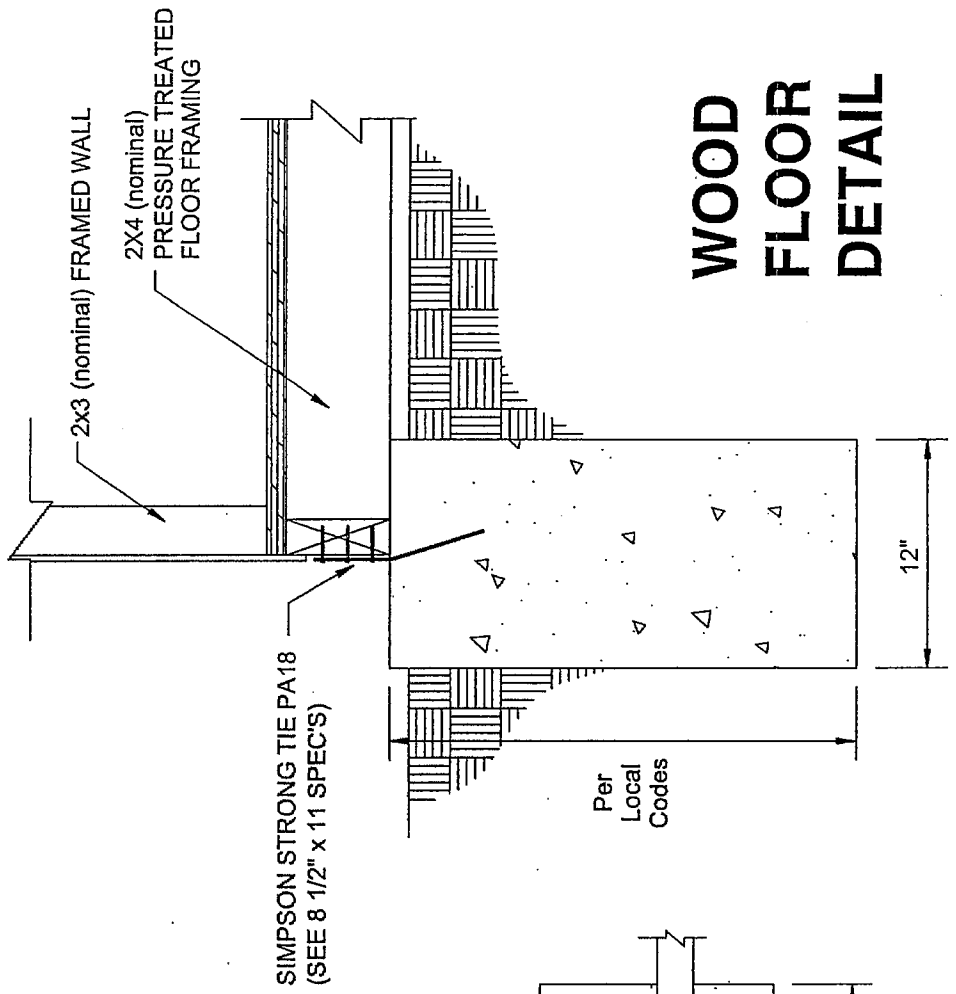
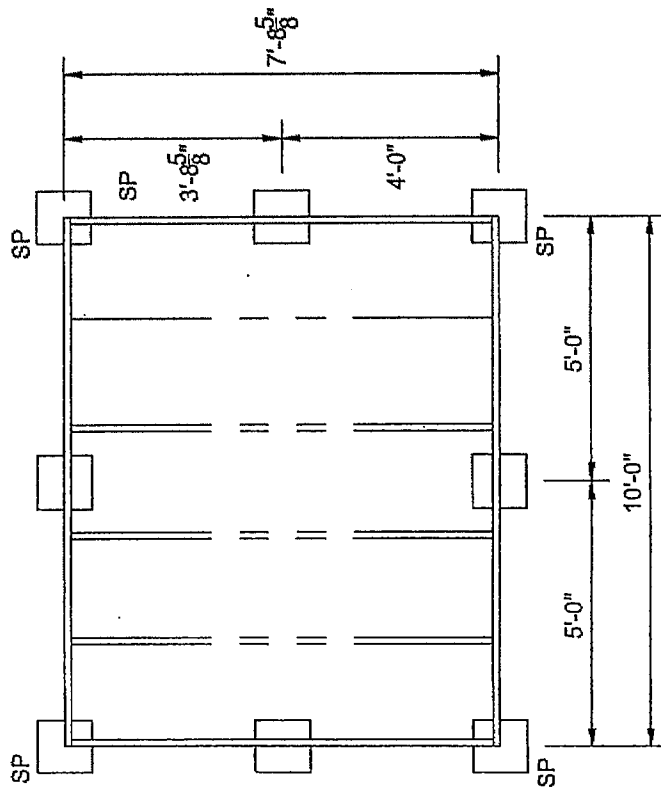


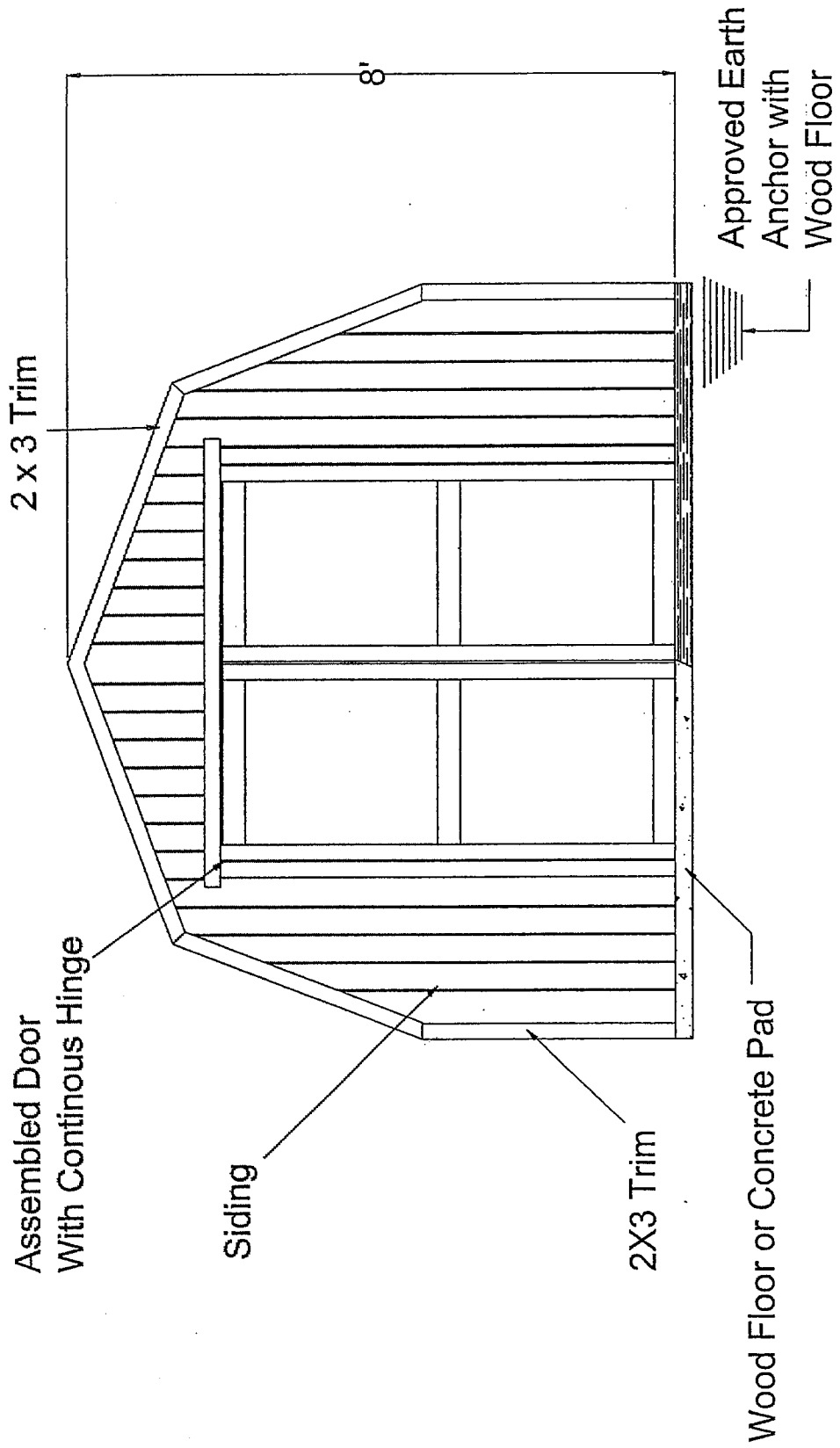
SLAB DETAIL

NOTE:
 1.) ONLY THE PIERS INDICATED WITH SP ARE
 REQUIRED TO HAVE SIMPSON STRONG TIES

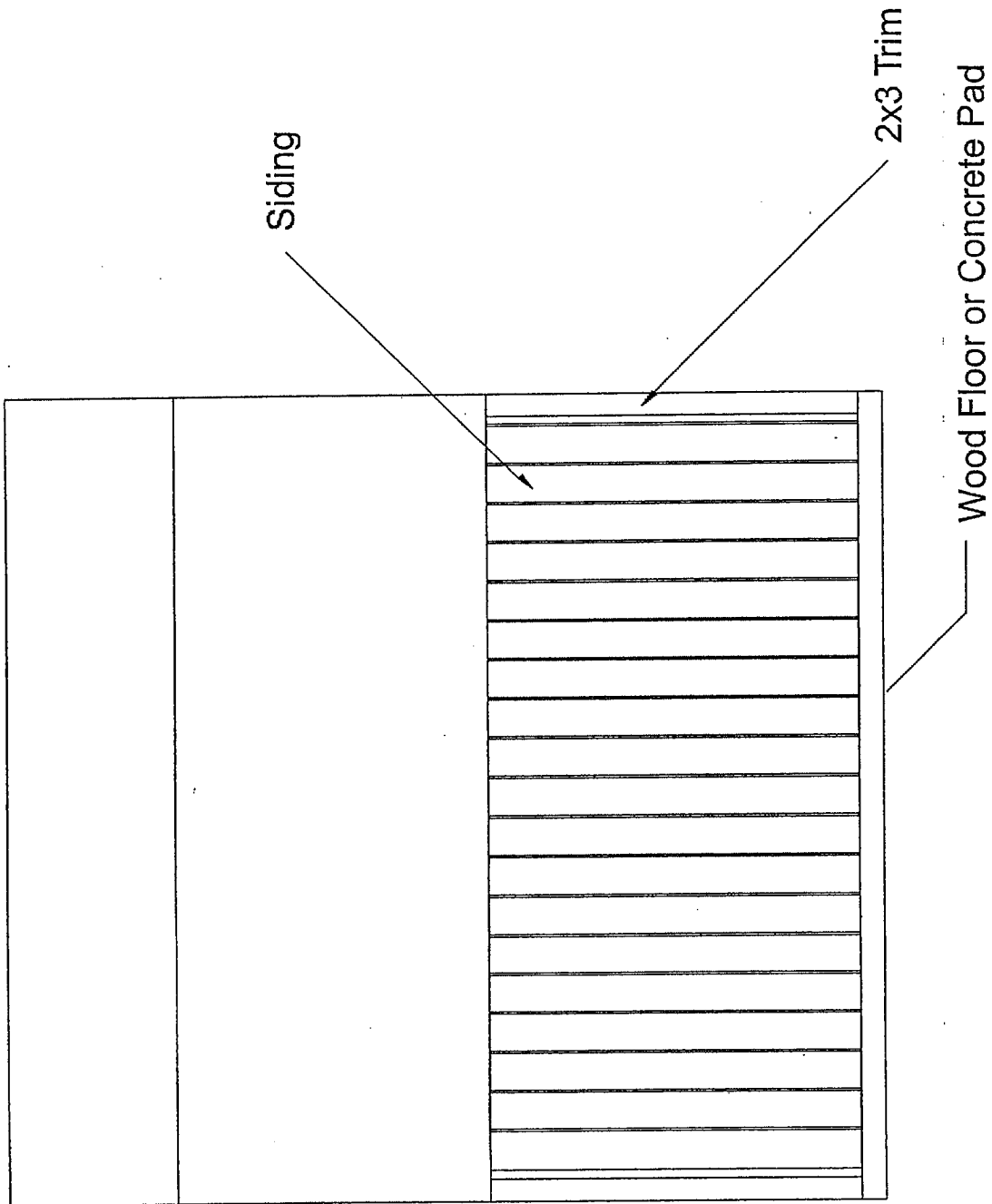
10'x12'
 Wood Floor size is 10' x 11' 8-5/8"

10'x16'
 Wood Floor size is 10' x 15' 8-5/8"

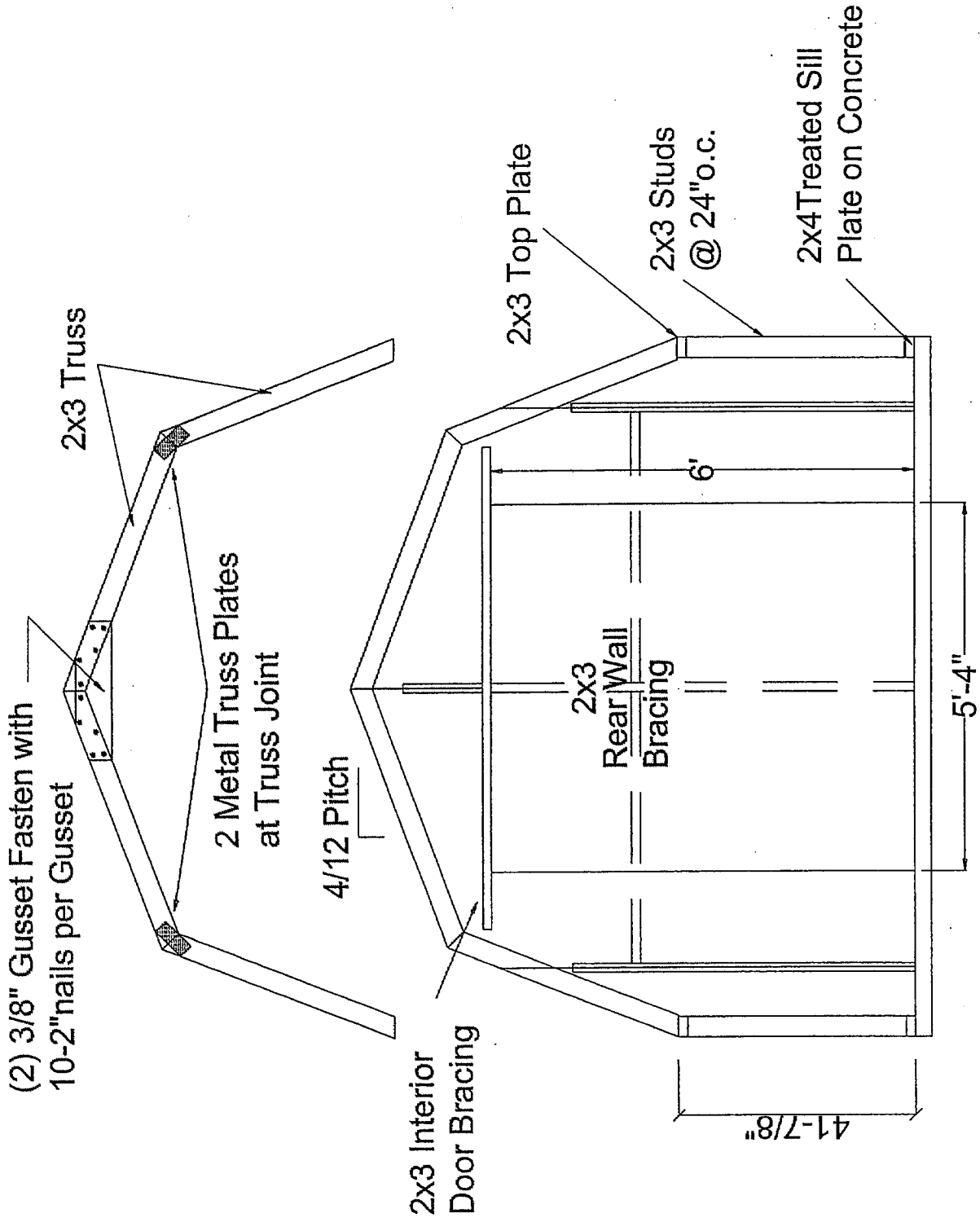




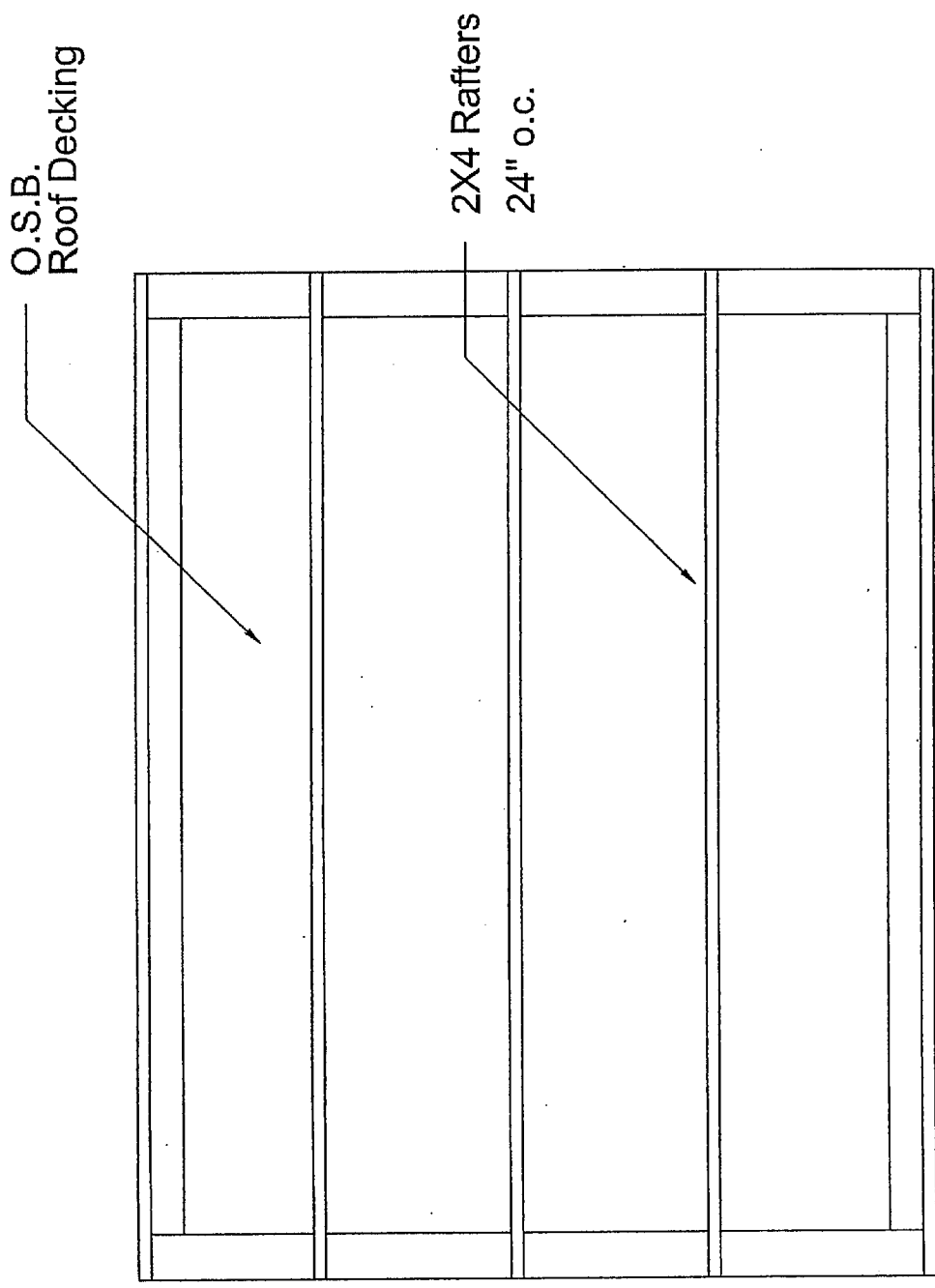
FRONT ELEVATION



LEFT SIDE ELEVATION



FRONT/REAR WALL FRAMING



ROOF FRAMING

NOTES: 1) The Roof System of this 10 ft. wide Gabrel style building has a live load capacity of 35 PSF. The equivalent ground snow load per ANCE 7-97 is 68 PSF which exceeds the 16.2 PSF pressure for a 110 mph wind per ASCE 7-97.

- 2) This plan supplements assembly instructions prepared by Handy Home Products.
- 3) Kits for extending the building in 4 ft. increments are identical in construction to the basic building.

STRUCTURAL ANALYSIS:

f b = 1200 PSC

f v = 80 psi

Sx 2"x3" = 1.56 in Area = 3.75 in

DEAD LOAD:

Max Rafter Moment = fb Sx/12=156 ft.lb.

Max Rafter Shear = 80x3.75=300 lb.

Max Stud Moment = 156 ft. lb.

WALL SYSTEM:

1) Studs 2x3@24" cc L=3.3ft. w=8M/L2=114PLF=57 PSF

2) Wind Loading V = 110 mph EXP 1

Kz=0.37 Gh=1.65 GCpl=-0.25

I=0.95 Cp=0.8

Velocity Pressure=8z=.00256Kz(IV) =10.3PSF

Design Pressure=P=qfGhCp-(qhGCpl)=16.2PSF

ok<57PSF

ROOF SYSTEM:

1) Rafter 2x3@2'cc w=8M/L2 = 78PLF=39 PSF-4

2) Rafter Shear w=2V/L = 150 PLF=75 PSF-4

3) Sheathing w=49PSF-4=45psf

4) Ground Snow Load: Ref ASCE 7-97

Ps=35PSF I=0.8

Cs=0.95 Ce=0.8

Ct=1.2 Pf=35/0.95=36PSF

Pg=PF/1.7CeCtI=68 PSF Ground Snow Capacity

