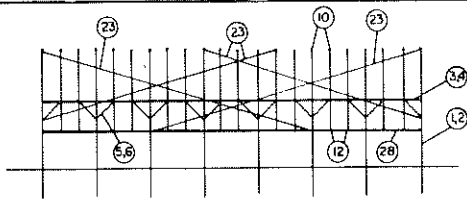


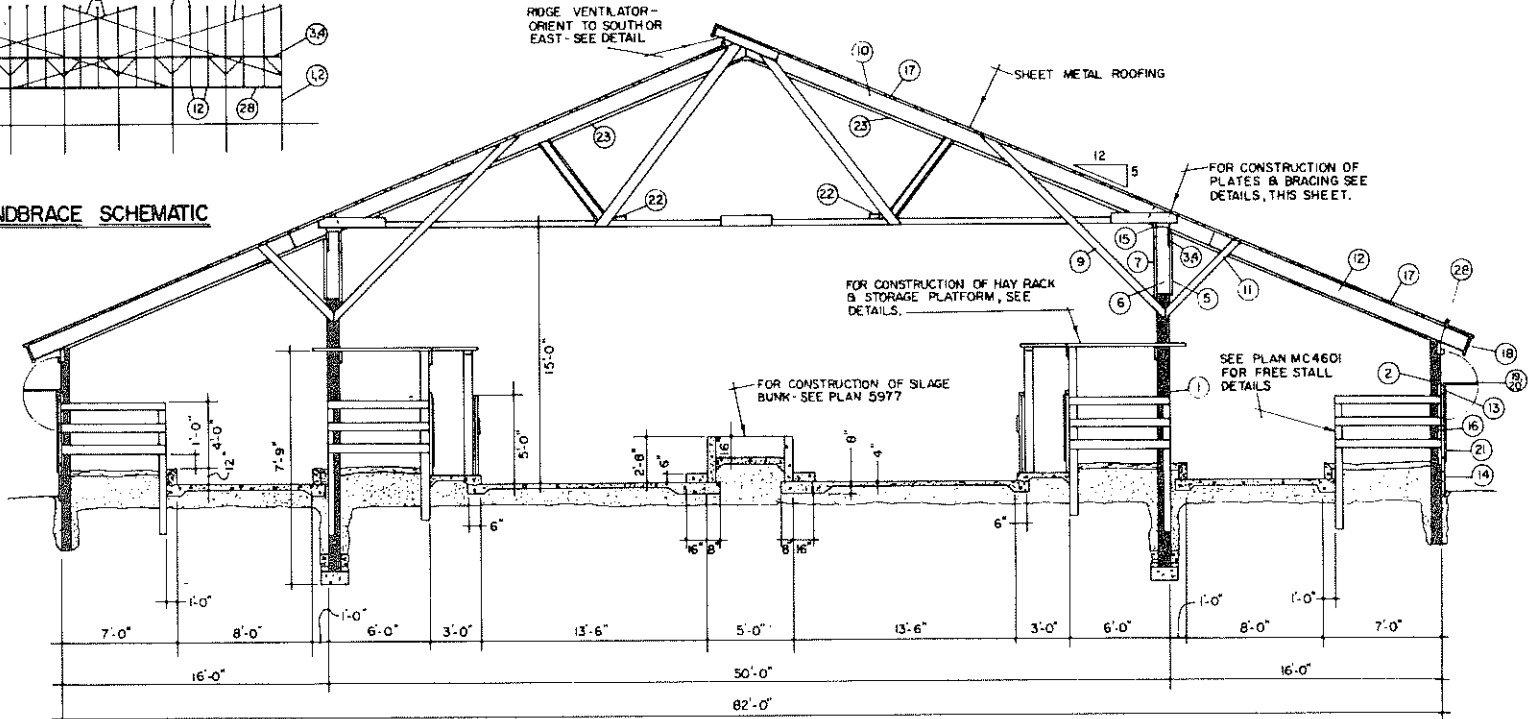
NOTES:

1. THIS SYSTEM PROVIDES FOR SPLIT HERD OPERATION, REGARDLESS OF SIZE (BY DIVIDING ALONG THE CENTER FEED BUNK) WITH HAY AND SILAGE FEEDING.
2. AS THE SYSTEM IS EXPANDED FEED SPACE WILL BE IN DIRECT PROPORTION TO THE NUMBER OF ANIMAL HOUSED.
3. THIS DESIGN IS FOR A COLD ENVIRONMENT WITH NATURAL VENTILATION USING ROOF VENTILATORS; DROP DOWN PANELS IN THE NORTH WALL, AND SOUTH FRONT OPEN ABOVE THE ANIMALS HEADS.
4. SELF-UNLOADING WAGON FEEDING IS PROVIDED FOR BY HAVING ONE DRIVE THROUGH FEED ALLEY.
5. ALL CONCRETE SHOULD BE AIR ENTRAINED, 4 - 6% AIR BY VOLUME.

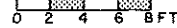
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LOOSE HOUSING SYSTEM COVERED FREE-STALL		
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WINDBRACE SCHEMATIC

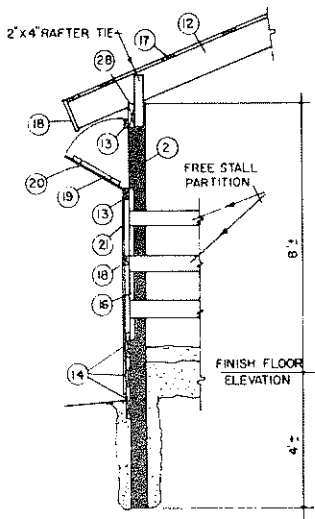


CROSS SECTION

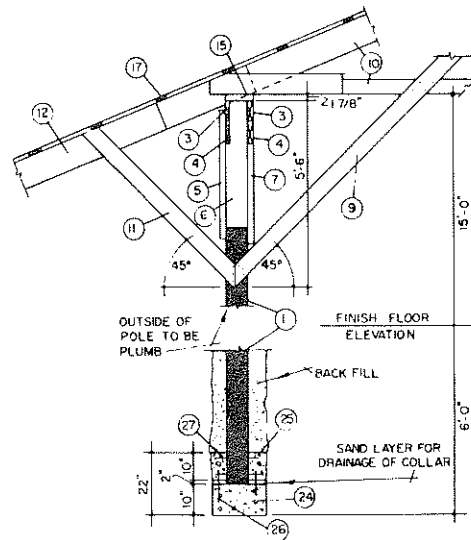
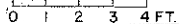


NOTES & PIECE LIST

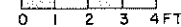
- 1 7" TOP DIAMETER X 20' PRESSURE TREATED POLE, 12" O.C.
- 2 6" TOP DIAMETER X 12' PRESSURE TREATED POLE, 12" O.C.
- 3 2" X 6" X 16" PLATE (LET OUTER PLATES INTO POLE FACE JOIN)
- 4 2" X 10" X 16" PLATE PLATES AT TRUSS TIE # 8
- 5 2" X 6" X 5'-7" KNEE BRACE MEMBER
- 6 2" X 8" X 5'-5" KNEE BRACE MEMBER NOTCHED INTO POLE & CUT TO FIT BETWEEN PLATES
- 7 2" X 6" X 3'-0" SCAB UNDER INNER PLATES
- 8 2" X 6" TRUSS TIE 4'-0" O.C. BETWEEN POLES
- 9 2" X 6" X 15'-6" WIND BRACE 12'-0" O.C.
- 10 50' SPAN TRUSS 4'-0" O.C., 40 LB./FT²
- 11 2" X 6" X 6'-6" WIND BRACE 12' O.C.
- 12 2" X 10" X 20' RAFTER 4'-0" O.C. CONSTRUCTION GRADE DOUGLAS FIR
- 13 2" X 6" X 12" WALL GIRTS 2' O.C.
- 14 2" X 12" X 12" PRESSURE TREATED PLANK
- 15 2" X 4" X 8" TRUSS SEAT
- 16 2" X 6" X 4'-6" STALL NAILER AT EACH STALL.
- 17 2" X 4" X 12" PURLIN, 2' O.C.
- 18 1" X 12" FASCIA
- 19 1" X 4" DROP DOWN WINDOW FRAMING
- 20 2" PLASTIC PANEL WINDOW
- 21 PLYWOOD (EXTERIOR) OR VERTICAL BOARD SIDING
- 22 LONGITUDINAL WINDBRACE
- 23 2" X 6" WINDBRACE NAILED UNDER TRUSSES & RAFTERS START UNDER RIDGE AT 10' WALLS.
- 24 20" DIAMETER X 10" THICK FOOTING UNDER EACH INTERNAL POLE
- 25 20" DIAMETER X 10" THICK CONCRETE COLLAR
- 26 #3 (3/8" X 1'-3") REINFORCING ROD 4 PER FOOTING
- 27 60d NAILS (8 PER POLE) DRIVE 2 1/2" INTO POLE BEFORE SETTING.
- 28 2" X 12" X 12" PLATE LET INTO POLE



DETAIL AT OUTER POLES



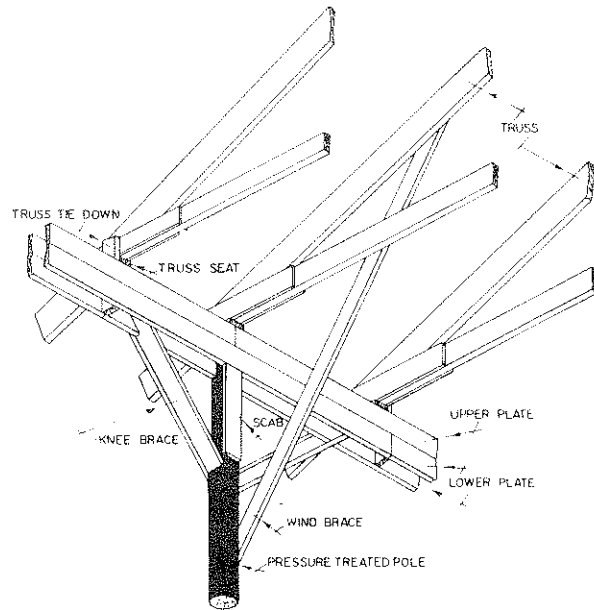
DETAILS AT INNER POLES



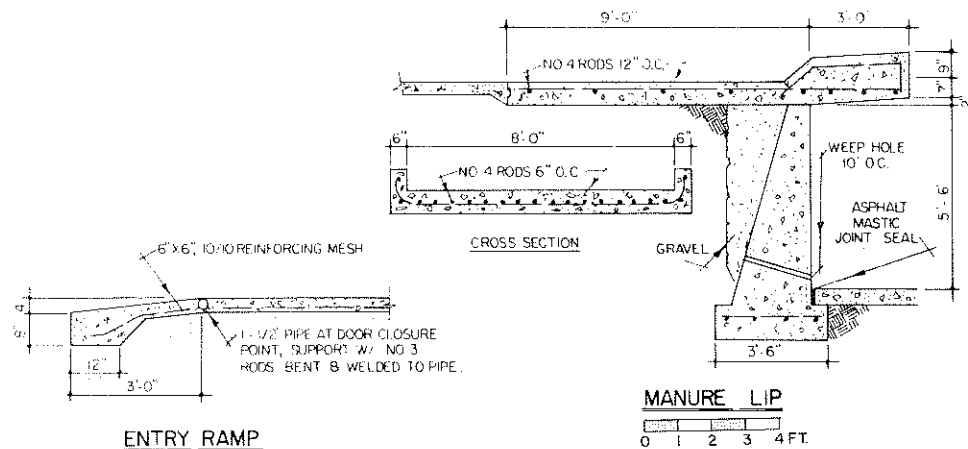
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**LOOSE HOUSING SYSTEM
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MASS. '67 EX. 6031 SHEET 2 OF 4

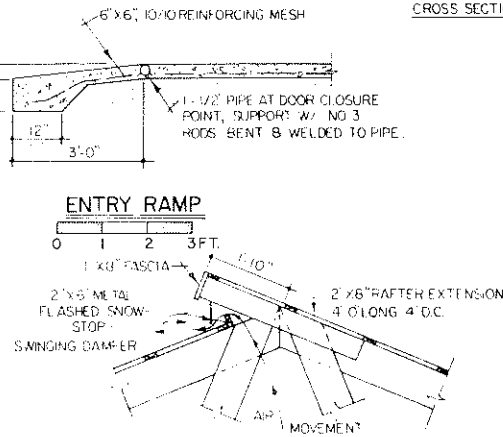


STRUCTURAL FRAMING PICTORIAL



MANURE LIP

0 1 2 3 4 FT.

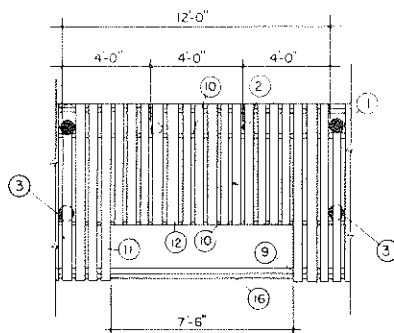


ENTRY RAMP

0 1 2 3 FT.

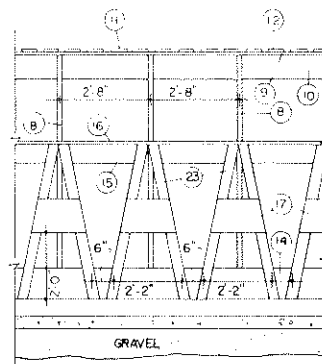
CONTINUOUS RIDGE VENTILATOR

0 1 2 3 FT.



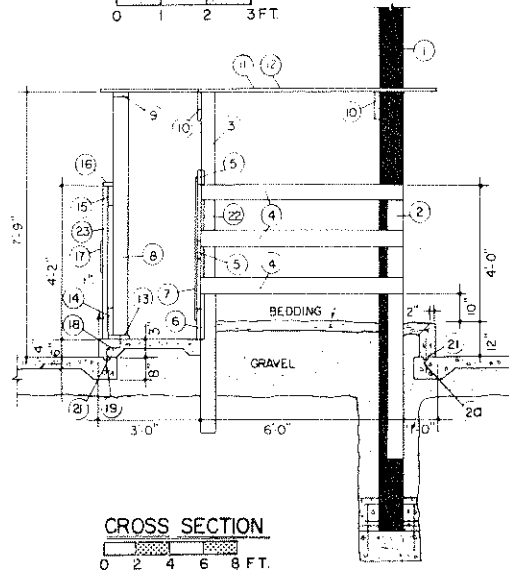
PARTIAL PLAN

0 2 4 6 FT.



FRONT ELEVATION

0 2 4 6 8 FT.



CROSS SECTION

0 2 4 6 8 FT.

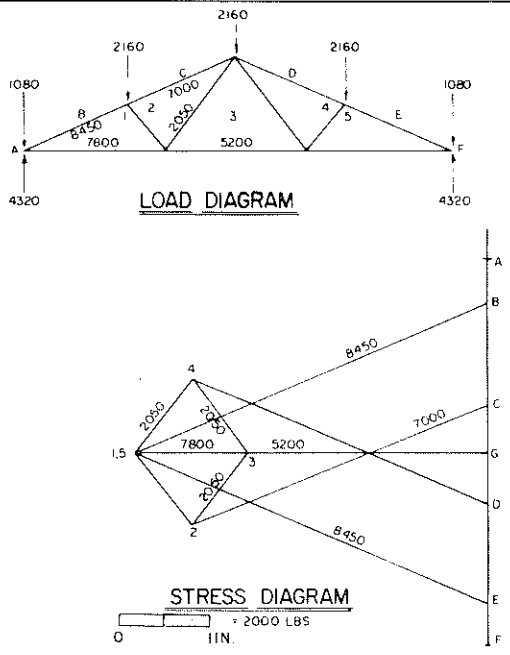
PIECE LIST & NOTES

1. 7" TOP DIAMETER X 20' PRESSURE TREATED POLE, 12" O.C.
2. 5" TOP DIAMETER X 8' PRESSURE TREATED POLE, 4" O.C.
3. 5" TOP DIAMETER X 10' PRESSURE TREATED POLE, 12" O.C.
4. 2" X 6" X 6'-0" STALL PARTITION BOARD
5. 2" X 12" X 12'-0" STALL PARTITION BOARD, 2" O.C.
6. 2" X 12" X 12'-0"
7. 1/2" EXT. PLYWOOD
8. 2" X 6" X 7'-0" RACK & PLATFORM SUPPORT, 2'-8" O.C.
9. 2" X 6" X 16" PLATFORM SUPPORT PLATE
10. 2" X 12" X 12'
11. 2" X 6" X 12" PLATFORM DECKING
12. 2" X 6" X 7'
13. 2" X 8" X 16" RACK & PLATFORM SILL
14. 2" X 10" X 16" HAY RACK MEMBER
15. 2" X 6" X 16", " " "
16. 2" X 4" X 16", " " "
17. 1" X 12" X 9"
18. 1/2" # ANCHOR BOLTS, 4" O.C.
19. #3 (3/8" #) X 10' RE-RODS, 12" O.C.
20. " " " X 12' RE-RODS, 12" O.C.
21. 1" X 2" KEY FORMED WITH OILED 1" X 2"
22. 2" X 6" X 5'-0" INTERMEDIATE STALL SUPPORT
23. 2" X 4" X 4'-8" HAY RACK MEMBER

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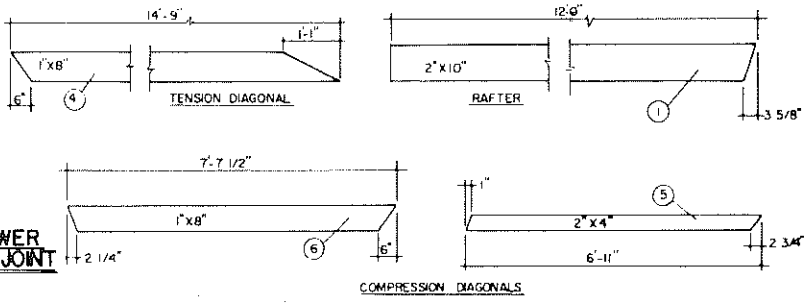
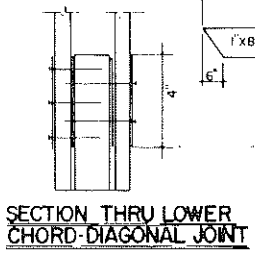
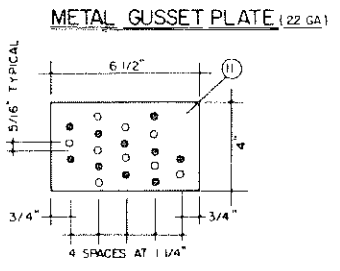
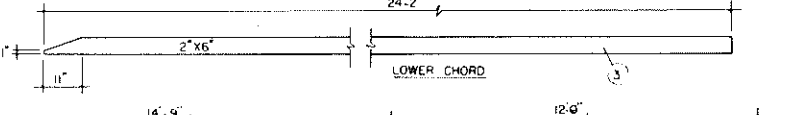
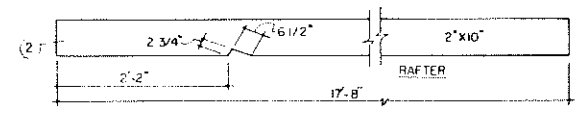
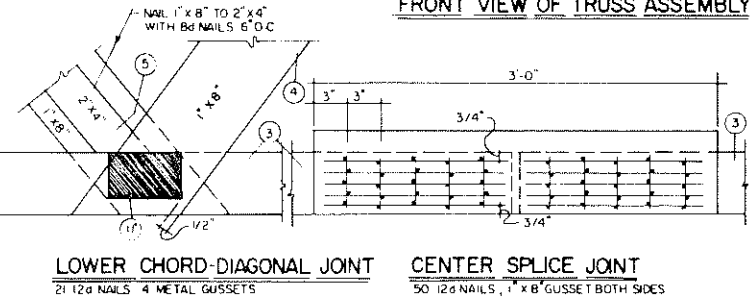
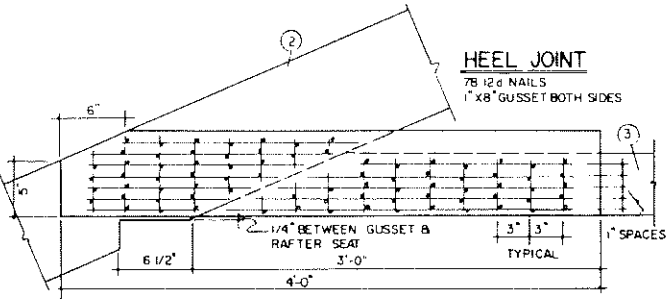
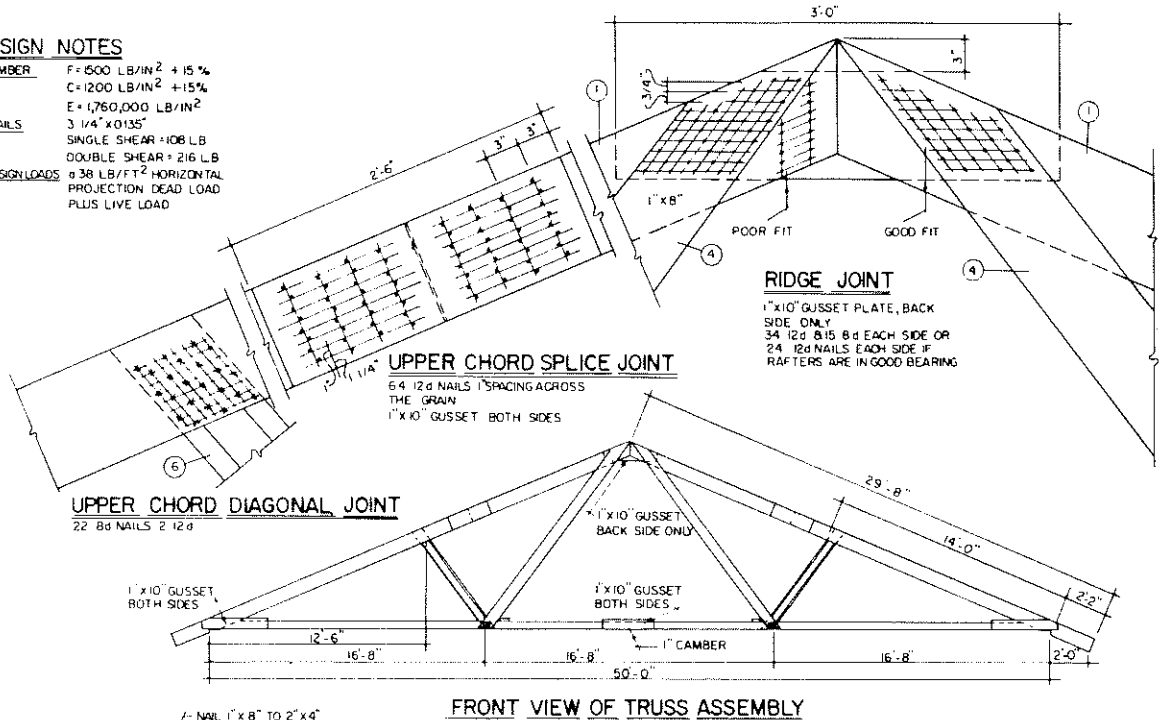
LOOSE HOUSING SYSTEM
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DESIGN NOTES

- 1 LUMBER F = 500 LB/IN² + 15% C = 1200 LB/IN² + 15% E = 1,760,000 LB/IN² 3 1/4" x 0.135"
- 2 NAILS SINGLE SHEAR = 108 LB DOUBLE SHEAR = 216 LB @ 38 LB/FT² HORIZONTAL PROJECTION DEAD LOAD PLUS LIVE LOAD
- 3 DESIGN LOADS



NOTES & SPECIFICATIONS

- 1 LUMBER: CONSTRUCTION GRADE DOUGLAS FIR OR EQUIVALENT
- 2 TRUSSES SPACED 4'-0" ON CENTERS
- 3 CAMBER: 1" AT CENTER SPLICE
- 4 NAILS: USE HARDENED, HELICALLY THREADED SCREW-TITE NAILS OR EQUIVALENT. DRIVE ALL NAILS FROM THE FRONT EXCEPT THOSE SHOWN AS X. MAKE AND USE A NAILING TEMPLATE FOR LOCATING ALL NAILS.
- 5 MINIMUM END GRAIN NAIL SPACING, ALL MEMBERS: 2 1/2"-3"
- 6 MINIMUM EDGE GRAIN NAIL SPACING, ALL MEMBERS: 3/4"-1"

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