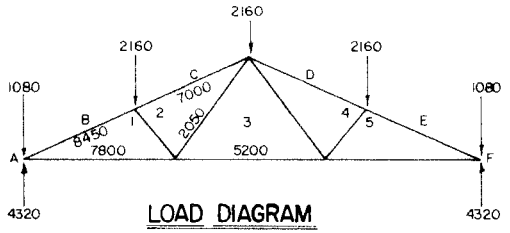
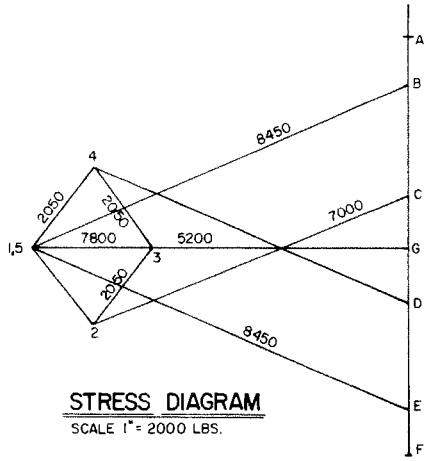


LOAD DIAGRAM

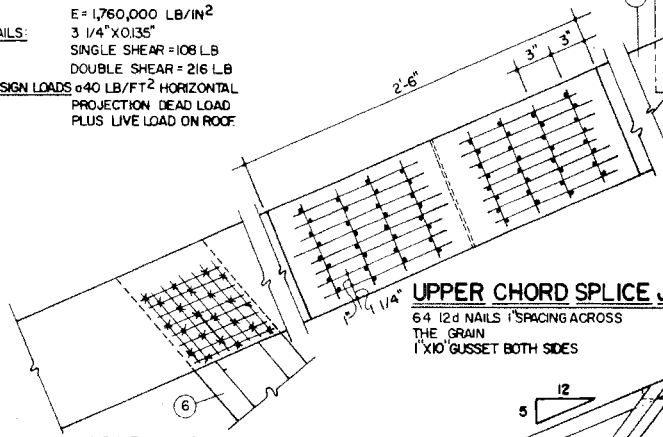


STRESS DIAGRAM

SCALE 1" = 2000 LBS.

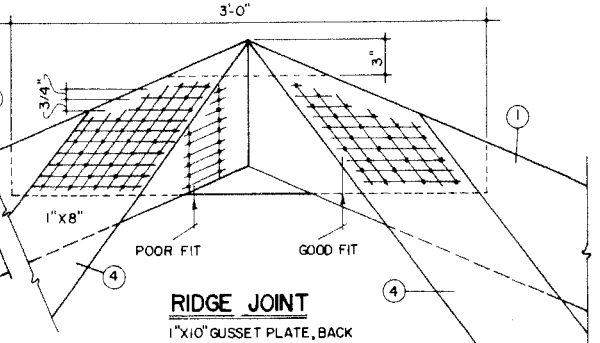
DESIGN NOTES

1. LUMBER: F = 1500 LB/IN^2 + 15 %
   C = 1200 LB/IN^2 +15%
   E = 1,760,000 LB/IN^2
2. NAILS: 3 1/4"X0.135"
   SINGLE SHEAR = 108 LB
   DOUBLE SHEAR = 216 LB
3. DESIGN LOADS 40 LB/FT^2 HORIZONTAL PROJECTION DEAD LOAD PLUS LIVE LOAD ON ROOF



UPPER CHORD SPLICE JOINT

64 12d NAILS 1"SPACING ACROSS THE GRAIN
1"X10" GUSSET BOTH SIDES

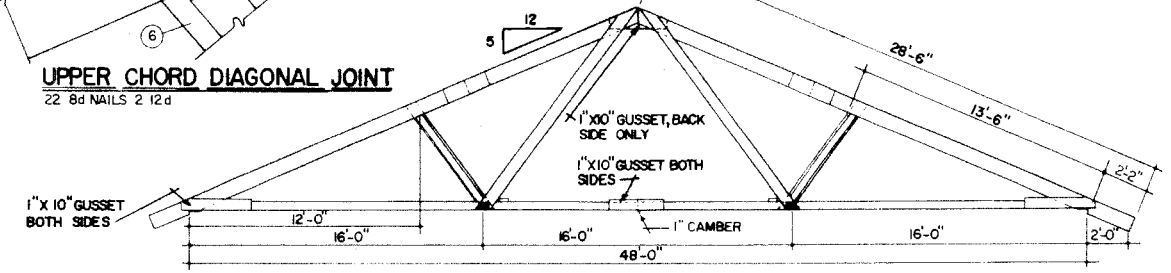


RIDGE JOINT

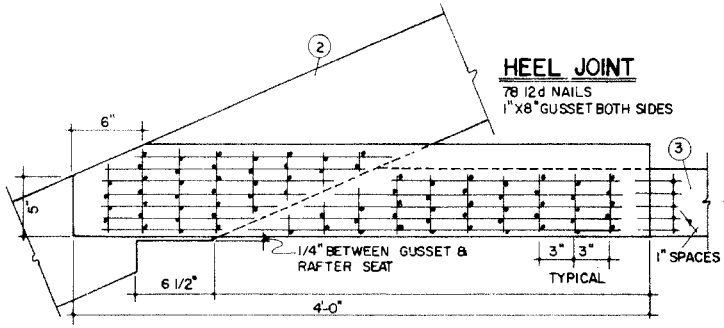
1"X10" GUSSET PLATE, BACK SIDE ONLY.
34 12d & 15 8d EACH SIDE OR
24 12d NAILS EACH SIDE IF RAFTERS ARE IN GOOD BEARING

UPPER CHORD DIAGONAL JOINT

22 8d NAILS 2 12d

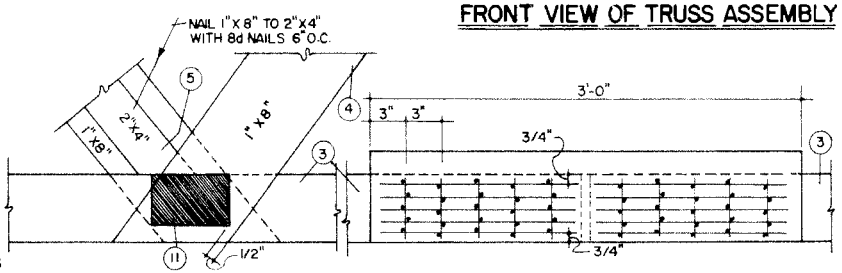


FRONT VIEW OF TRUSS ASSEMBLY



HEEL JOINT

78 12d NAILS
1"X8" GUSSET BOTH SIDES

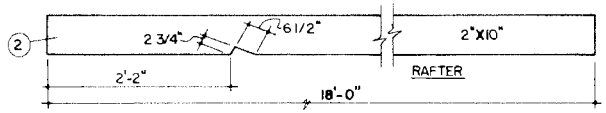


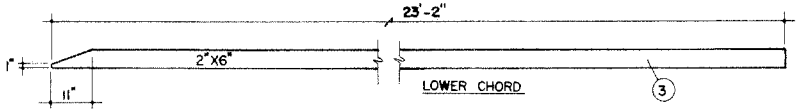
LOWER CHORD-DIAGONAL JOINT

21 12d NAILS 4 METAL GUSSETS

CENTER SPLICE JOINT

50 12d NAILS, 1" X 8" GUSSET BOTH SIDES



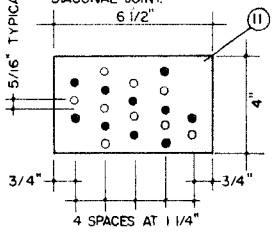


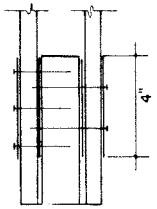
NOTES & SPECIFICATIONS

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 NAILS OR EQUIVALENT.
5. DRIVE ALL NAILS FROM THE FRONT EXCEPT THOSE SHOWN AS x.
6. MAKE AND USE A NAILING TEMPLATE FOR LOCATING ALL NAILS.
7. MINIMUM END GRAIN NAIL SPACING, ALL MEMBERS 2 1/2"-3"
8. MINIMUM EDGE GRAIN NAIL SPACING, ALL MEMBERS 3/4"-1"

METAL GUSSET PLATE (22 GA.)

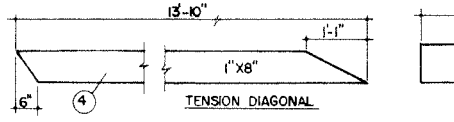
SCALE 3"=1'-0", FOR LOWER CHORD DIAGONAL JOINT.

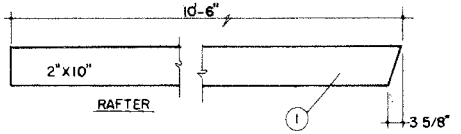


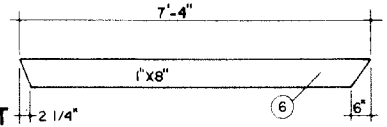


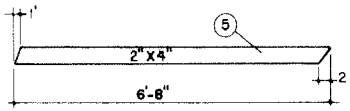
SECTION THRU LOWER CHORD-DIAGONAL JOINT

SCALE 3"=1'-0"









COMPRESSION DIAGONALS

LSU AgCenter Research & Extension

48' NAILED TRUSS 5 IN 12 SLOPE, 4'-0" SPACING

MASS. '67	EX. 6008	SHEET 1 OF 1

Disclaimer

This site makes available conceptual plans that can be helpful in developing building layouts and selecting equipment for various agricultural applications. These plans do not necessarily represent the most current technology or construction codes. They are not construction plans and do not replace the need for competent design assistance in developing safe, legal and well-functioning agricultural building system. The LSU Agriculture Center, the Mid-West Plan Service, the United States Department of Agriculture and none of the cooperating land-grant universities warranty these plans.