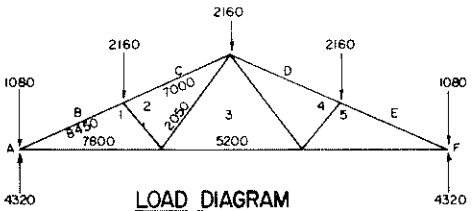
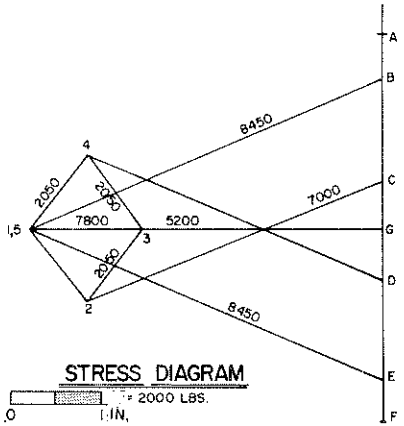


LOAD DIAGRAM

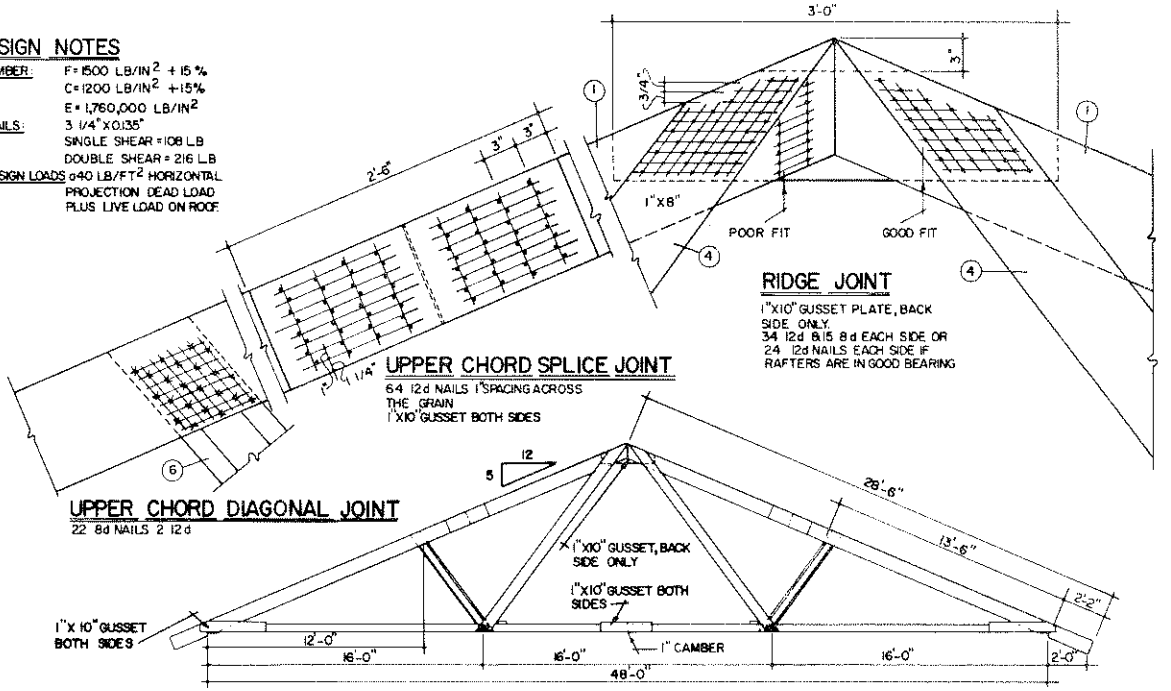
DESIGN NOTES

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



STRESS DIAGRAM

= 2000 LBS.
0 1 IN.



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

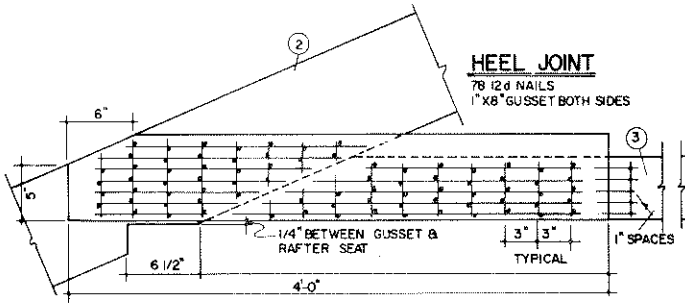
UPPER CHORD SPLICE JOINT

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

UPPER CHORD DIAGONAL JOINT

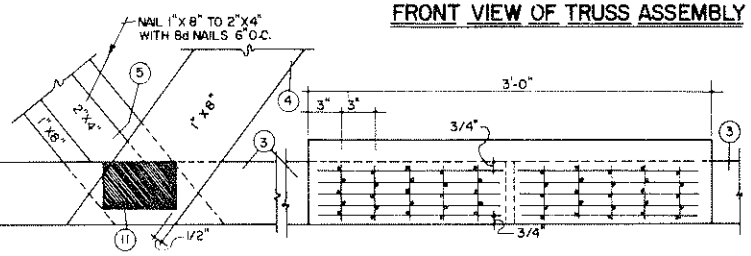
22 8d NAILS 2 12d

FRONT VIEW OF TRUSS ASSEMBLY



HEEL JOINT

78 12d NAILS
1"X8" GUSSET BOTH SIDES



LOWER CHORD-DIAGONAL JOINT

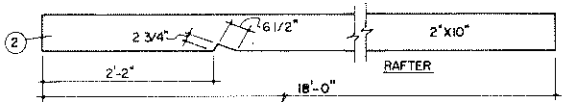
21 12d NAILS 4 METAL GUSSETS

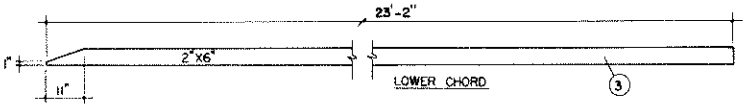
CENTER SPLICE JOINT

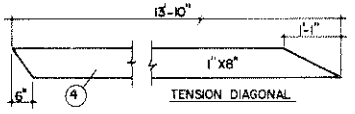
50 12d NAILS, 1" X 8" GUSSET BOTH SIDES

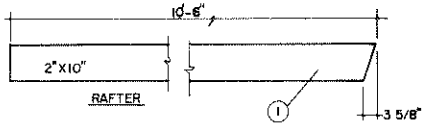
NOTES & SPECIFICATIONS

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 ⊥.
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"

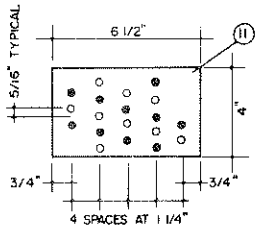


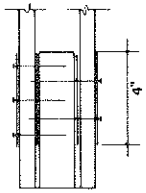




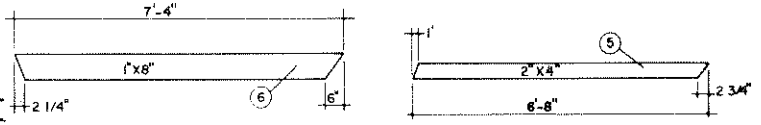


METAL GUSSET PLATE (22 GA.)





SECTION THRU LOWER CHORD-DIAGONAL JOINT



COMPRESSION DIAGONALS

COOPERATIVE EXTENSION WORK IN
AGRICULTURE AND HOME ECONOMICS
DEPARTMENT OF AGRICULTURAL ENGINEERING
UNIVERSITY OF MARYLAND
AND
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

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

MASS. '67	EX. 6008	SHEET 1 OF 1