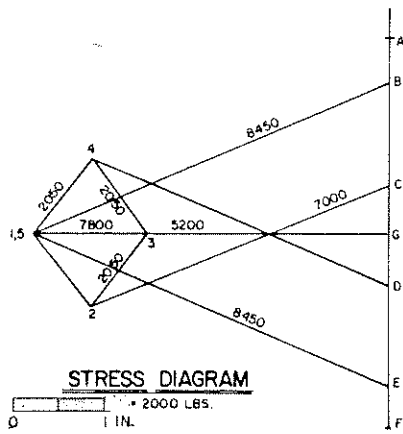


**LOAD DIAGRAM**



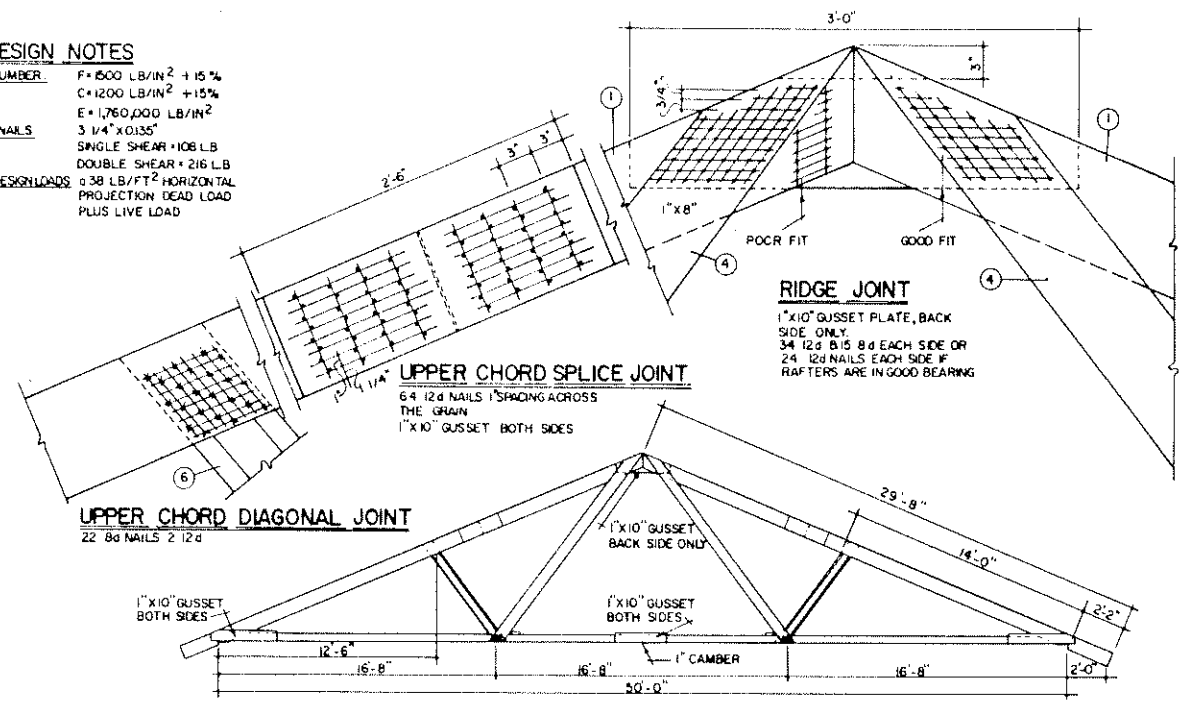
**STRESS DIAGRAM**

**DESIGN NOTES**

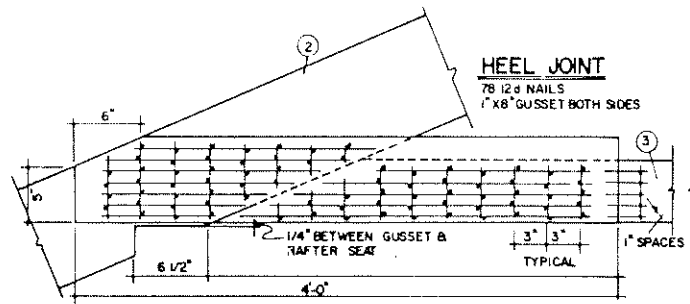
1. LUMBER: F = 500 LB/IN<sup>2</sup> + 15%  
 C = 1200 LB/IN<sup>2</sup> + 15%  
 E = 1,760,000 LB/IN<sup>2</sup>

2. NAILS: 3 1/4" x 0.135"  
 SINGLE SHEAR = 106 LB  
 DOUBLE SHEAR = 216 LB

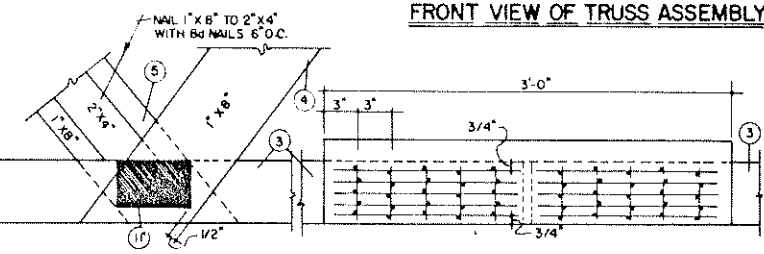
3. DESIGN LOADS: 3.38 LB/FT<sup>2</sup> HORIZONTAL PROJECTION DEAD LOAD PLUS LIVE LOAD



**FRONT VIEW OF TRUSS ASSEMBLY**

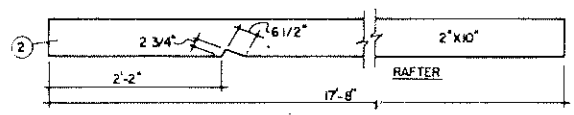


**HEEL JOINT**

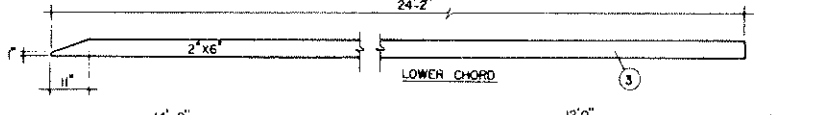


**LOWER CHORD-DIAGONAL JOINT**

**CENTER SPLICE JOINT**

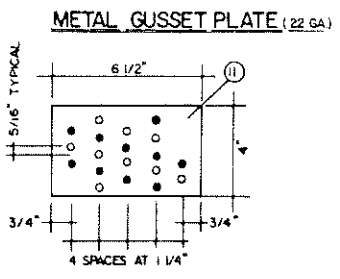


**RAFTER**

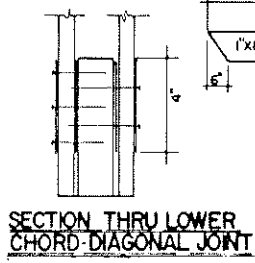


**LOWER CHORD**

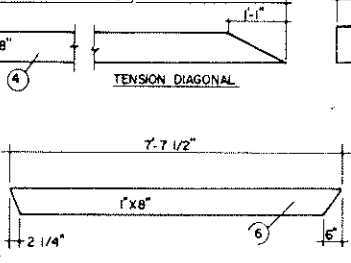
**RAFTER**



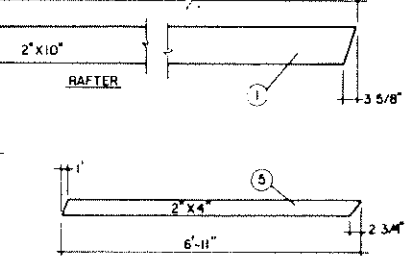
**METAL GUSSET PLATE (22 GA)**



**SECTION THRU LOWER CHORD-DIAGONAL JOINT**



**TENSION DIAGONAL**



**COMPRESSION DIAGONALS**

**NOTES & SPECIFICATIONS**

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

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

**50' NAILED TRUSS**  
**5 IN 12 SLOPE - 4'-0" SPACING**

MASS. '67 EX. 6009 SHEET 1 OF 1