



**LOAD DIAGRAM**

**STRESS DIAGRAM**

**RAFTER SPLICE JOINT**

**RAFTER DIAGONAL JOINT**

**RIDGE JOINT**

**FRONT ELEVATION OF TRUSS**

**LOWER CHORD-DIAGONAL JOINT**

**CENTER SPLICE JOINT**

**HEEL JOINT**

- DESIGN NOTES**
- LUMBER:**
    - F • 1500 LB/IN<sup>2</sup> + 15%
    - C • 1200 LB/IN<sup>2</sup> + 15%
    - E • 1,760,000 LB/IN<sup>2</sup>
  - NAILS:**
    - 3 1/4" X 0.136"
    - SINGLE SHEAR • 108 LB
    - DOUBLE SHEAR • 216 LB
  - DESIGN LOADS:**
    - 35 LB/FT<sup>2</sup> OF HORIZONTAL PROJECTION
    - DEAD LOAD PLUS LIVE LOAD ON ROOF.
    - 10 LB/FT<sup>2</sup> CEILING LOAD.

- 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 NAILS OR EQUIVALENT
  - DRIVE ALL NAILS FROM THE FRONT EXCEPT THOSE SHOWN AS  $\pi$
  - 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

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

MASS. '67 EX 6007 SHEET 1 OF 1

**MEMBER DETAILS**