Applicable design load in pounds per foot equals design load in pounds per square foot times spacing of trusses in feet = ... "W"

TOTAL MOMENT:

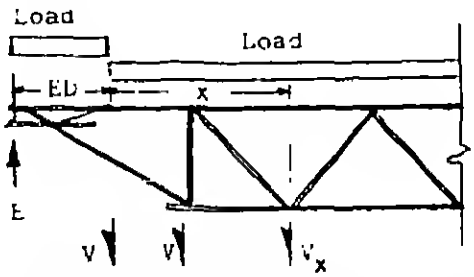
"M" (In inch pounds) = WL^2 x 1.5.

END REACTION:

"R" (In pounds) = "W" x .5 (overall length of truss in feet).

SHEAR:

At first top chord panel in pounds = V = R- (W x ED)

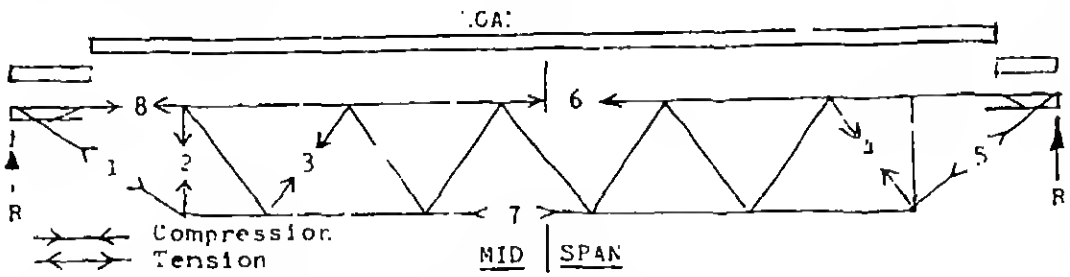


ED = Distance first top chord panel point to truss end.

Shear at other points in pounds = V_x = (R- R" x W)-W (distance to first top chord panel point in feet).

(In no case less than 50% of end reaction "R".)

DESIGNATION OF MEMBERS:



1. End diagonal (long end) tension member
2. First panel vertical (long end) compression
3. Second panel compression diagonal
4. First panel center (short end) compression
5. End diagonal (short end) tension
6. Top chord critical compression member at mid span
7. Bottom chord critical tension member at mid span
8. End top chord compression member (long end)

MATERIALS:

A-36 steel . . . . . 36 ksi minimum yield strength