



CALCULATIONS FOR THE WEIGHT OF THE LADDER TRUSS

SCHEDULE 40 PIPE (OD: 1.5"):

$$21' \text{ PIPE} \times 2 \text{ PIPES} = 42' \times 2.72 \text{ LBS/FT} = 114.24 \text{ LBS}$$

STEEL FLAT BAR (9" x 2" x .25"):

$$(9" \times 2") \times 5 \text{ PLATES} = (90" \times 1\text{FT}/12") \times 10.20 \text{ LBS/FT} = 76.50 \text{ LBS}$$

TOTAL WEIGHT OF THE LADDER TRUSS:

$$114.24 \text{ LBS SCHEDULE 40 PIPE} \\ + 76.50 \text{ LBS STEEL PLATE}$$

$$= 190.74 \text{ LBS}$$

FINAL PROJECT: LITTLE THEATRE LIGHT LADDER RE-RIG
CALCULATIONS: WEIGHT OF THE LADDER TRUSS
DESIGNER: ILIA KEMBLE
DATE REV: 5/15/14
SCALE: 1/4" = 1' - 0"