

19.5° OUTSIDE

UNIT SUPPLY TEMP 160° (SAT TO 60% CAPACITY)

OVER AN HOUR PERIOD OF OBSERVED TIME - CALLS FOR HEAT
LASTING 10 MINUTES WITH 10 MINUTES "REST" BETWEEN.

ASSUMING THE BURNER RUNNING CONSTANT FOR THE
10 MINUTES - THAT'S 50% DUTY CYCLE.

160° (NOT FIGURING ANY DELTA) ASSUMING 1 GPM = 430 BTU (PER SLANT IN
BUILDER'S GRAD & SPEC SHEET)

$430 \text{ BTU} \times 54 \text{ LF} = 23,220 \text{ BTU PER HR} \times 50\% \text{ DUTY CYCLE}$
 $= 11,610 \text{ BTU ACTUALLY RADIATED IN THE HOUR.}$

$11,610 \text{ BTU} \div 1,152 \text{ SF} = 10.08 \text{ BTU/HR/SF AT } 19.5^\circ$

$70^\circ - 19.5^\circ \approx 50^\circ \text{ DIFFERENTIAL}$

TO FIGURE 70° DIFFERENTIAL (0° OUTSIDE)

$\text{DIVIDE } 70 \text{ BY } 50 = 1.40$

$\text{MULTIPLY } 10.08 \text{ BTU} \times 1.40 = 14.112 \text{ (TO FIND BTU PER SF}$
 $\text{AT } 0^\circ \text{ F)}$

$14.112 \text{ BTU/SF} \times 1152 \text{ SF} = 16,257 \text{ BTU/HR @ } 0^\circ$