

BERGQUIST BTU CALCULATOR

The following formula is used to determine the BTUs needed to heat a building. This calculation would be for an average uninsulated building. Add more BTU's if the building will have a great deal of heat loss from open windows and doors. Reduce the BTU's if the building is well insulated and weathertight.

$$\text{Cubic feet to be heated}^* \times .133 \times \text{desired temperature rise}^{**} = \text{BTU's/hour}$$

* Cubic feet to be heated... Multiply the length times the width times the height of the area to be heated.

**Desired temperature rise... Subtract the lowest expected outside temperature from the desired inside temperature.

EXAMPLE:

A concrete block building 50 feet wide by 200 feet long with 20 feet from floor to ceiling. All window and door openings are temporarily covered with plastic. The outside temperature is 15° and we want the inside temperature to be 55°.

Cubic feet = 50 x 200 x 20 = 200,000 cubic feet

Temperature rise = 55° - 15° = 40°

BTU's needed: 200,000 x .133 x 40 = 1,064,000 BTU's per hour

Bergquist heaters needed: We recommend four 250,000 BTU convection heaters or three 375,000 BTU forced air heaters to heat this job.

PORTABLE PROPANE HEAT CALCULATOR BTU SIZING

$$\frac{\text{Cubic ft.}}{\text{Cubic ft.}} \times .133 \times \frac{\text{Temperature rise}}{\text{Temperature rise}} = \frac{\text{BTU's needed}}{\text{BTU's needed}}$$

HEATERS NEEDED

$$\frac{\text{BTU's needed}}{\text{BTU's needed}} + \frac{\text{BTU output of heater to be used}}{\text{BTU output of heater to be used}} = \frac{\text{Number of heaters needed}}{\text{Number of heaters needed}}$$

FUEL LOAD - GALLONS PER DAY

$$\frac{\text{Number of heaters}}{\text{Number of heaters}} \times \frac{\text{BTU output of heaters}}{\text{BTU output of heaters}} \times \frac{\text{Number of hours used per day}}{\text{Number of hours used per day}} \div 91,000 = \frac{\text{Gallons of LP per day}}{\text{Gallons of LP per day}}$$

FUEL LOAD - POUNDS PER DAY

$$\frac{\text{Number of heaters}}{\text{Number of heaters}} \times \frac{\text{BTU output of heaters}}{\text{BTU output of heaters}} \times \frac{\text{Number of hours used per day}}{\text{Number of hours used per day}} \div 21,000 = \frac{\text{lbs. of LP gas per day}}{\text{lbs. of LP gas per day}}$$



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