To Calculate Heat Requirement for Your Room

A good rule of thumb guide to calculate the heat requirement of a given room is:

HEIGHT X WIDTH X DEPTH (in feet) divided by 500

This gives you the kilowatt requirement.

Multiply this result by 3,400

To get the Btu's requirement

This is based on average house insulation with room temperatures of 20°C and an ambient temperature of -1°C. Well-insulated houses could replace the division of 500 with 650. To find the approximate size of the radiators for any particular room, divide the Btu's requirement total as calculated above by 160. This will give you the radiator size in square feet, taking both sides of the radiator into account.

When choosing a stove/boiler combination you should also take the following into account:

Allow 8,000 Btu's for domestic hot water.

Allow an additional 20% of the total Kilowatt or Btu's requirement as calculated above for heat loss in the system.