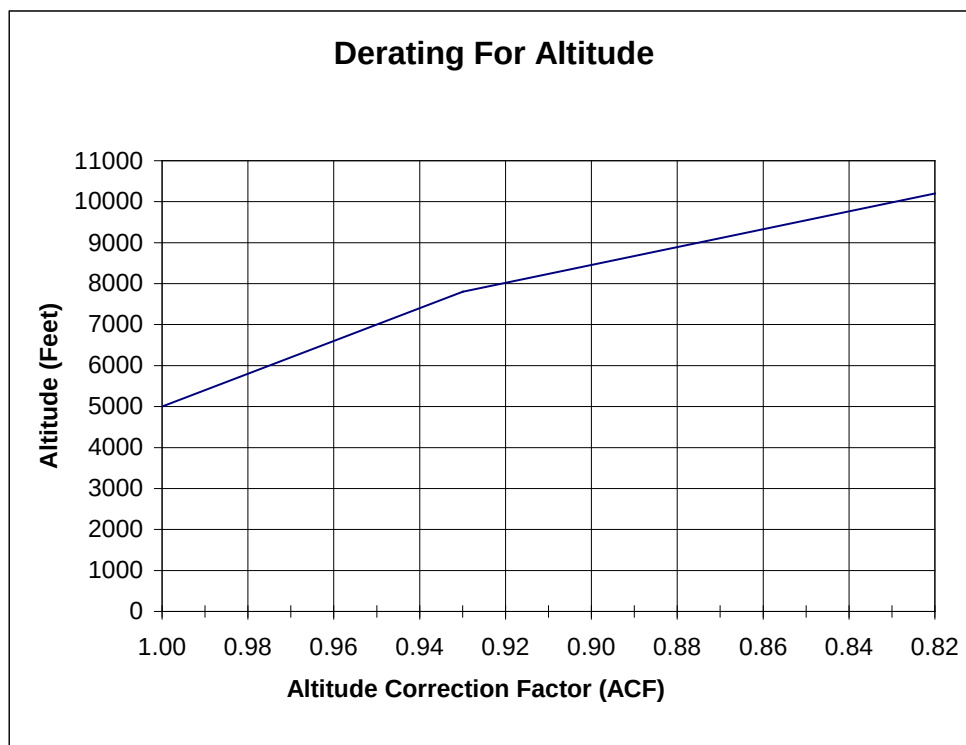


Due to the reduced density of air at higher altitudes, the output of the Modulex Boilers must be de-rated at elevations 5000 feet and above. In addition, in order to operate a Modulex Boiler above 5000 ft, combustion air fan speeds must be reprogrammed and gas valve orifices must be changed. Please contact your local AERCO Sales Representative for details.

The following illustration determines the Altitude Correction Factor (ACF) to be applied to de-rate the Modulex Boilers. The ACF values are based on 950 BTU/cu.ft. gas BTU content. The ACF should be multiplied by the BTU/H input at sea level to determine the corrected input. For installations with lower gas BTU content, multiply the ACF by (Actual gas BTU content / 950). Sizing of the equipment is then performed utilizing the corrected input multiplied by the full load efficiency.



Examples:

- A) Modulex 454 Boiler applied at an altitude of 7,000 ft and the gas BTU content is 850 BTU/cu.ft.

$$\begin{aligned} & \text{ACF} * (\text{Actual gas BTU content} / 950) * 3,000,000 \text{ BTU/H input} \\ & = .95 * (850 / 950) * 454,000 \text{ BTU/H input} = \underline{386,000 \text{ BTU/H corrected input}} \\ & 386,000 \text{ BTU/H} * .86 \text{ (86\% full load efficiency)} = \underline{332,000 \text{ BTU/H corrected output}} \end{aligned}$$

- B) Modulex 1060 Boiler applied at an altitude of 10,000 ft and the gas BTU content is 850 BTU/cu.ft.

$$\begin{aligned} & .83 \text{ ACF} * (850 / 950) * 1,060,000 \text{ BTU/H input} = \underline{787,000 \text{ BTU/H corrected input}} \\ & 787,000 \text{ BTU/H} * .86 \text{ (86\% full load efficiency)} = \underline{677,000 \text{ BTU/H corrected output}} \end{aligned}$$