

Mechanical Requirements

Forced Air Furnace Retrofit

Master Requirement MEC 103

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Applications for forced air furnace retrofit systems must include:

- Heat Load Worksheet
- Heating Appliance Selection Worksheet
- Completed Gas Permit Application

The following are dwelling heat load factors BTU/ft² method based on a 55^oF winter design temperature that may be used for all retrofit installations.

Dwelling Characteristics	Infiltration Rate/Hour		
	½	1	1 ½
• Older homes with little to no insulation. Walls/ceiling R-4. Likely 1950 – 1965	28	30	35
• Homes with some insulation, R-7 ½ “batt or reflective surface. Likely 1966 – 1975	22	24	28
• Homes with R-7 to R-10 walls and R-12 to R-20 ceiling. Single pane glass. Likely 1976 - 1985	19	21	25
• Homes with R-12 walls, R-28 ceiling, double pane glass. Likely 1986 – 1995	17	19	22
• Homes with R-20 walls, R-40 ceiling, double pane glass. 1995 to current	16	18	20