



Multifamily Facility Management Services

BURNER REPLACEMENT: OIL-FIRED FLAME RETENTION HEAD BURNER

Description:

In some older multifamily and small commercial buildings the boiler has an out-of-date gun-type, oil-fired burner. In these cases, the efficiency of the existing equipment can be improved dramatically by installing a replacement burner with a flame retention head.

Conventional gun-type burners spray oil directly into the combustion chamber. This system does not ensure that the heavier oil droplets have adequate access to oxygen and heat to burn properly. By contrast, a flame retention head causes the oil and air to swirl in the combustion chamber. This causes a partial vacuum in the center of the flame, which in turn draws the flame inward and increases the length of the oil path. The result is that all oil particles burn more completely, releasing more energy in the process.

How to Implement:

A flame retention head burner must be installed by a licensed, qualified contractor familiar with power combustion equipment. Only existing oil burners which have a tested steady state efficiency of less than 75% after all possible tune-up procedures have been completed should be considered for replacement.