

- (3) Two (2) safety shutoff valves in series, maximum five seconds closing time.
- (4) One (1) electronic flame safeguard pilot control providing a separately supervised and proven pilot, 100 percent shutoff manual reset. Flame failure response time shall not exceed the control manufacturer's specifications.

Direct-spark ignition is allowed only when approved by the Authority Having Jurisdiction and then only when used on number 2 or lighter oil.

- (5) Two (2) controls, one operating and one high limit, activated by temperature or pressure, as appropriate.
- (6) All burners relying on mechanical means to provide air for combustion must have actual proof-of-air interlock device.
- (7) Power burners must include proven prepurge of at least sixty (60) seconds at high-fire damper settings.

This prepurge must occur before every burner cycle, regardless of reason.

- (8) Installations with dampered combustion air openings must prove damper open position before trial for burner ignition.
- (9) Vent dampers and flue dampers must be properly interlocked to prevent burner ignition unless safely open.
- (10) One (1) high-oil or liquid-fuel pressure interlock, reset from flame safeguard or manually.
- (11) If hot water or steam, one (1) low water cutoff.
- (12) An atomizing medium proving switch.
- (13) A low-oil-temperature switch for oil or liquid fuel requiring preheating.
- (14) A high-oil-temperature interlock for oil or liquid fuel requiring preheating.
- (15) The burner oil pump must automatically not operate or rotate while the alternate fuel is firing.
- (16) A pressure-relief valve must be provided between safety shutoff

valves and between pump and safety valves if an integral valve is used with a pump.

- (17) A separate relief device is required on each transfer pump.
- (C) 1,000,000 to 2,499,999 Btu/h input per burner (more than 7.0 to 17.5 gallons per hour)
- (1) One (1) approved manual shutoff valve lever handle.
 - (2) One (1) approved fuel oil filter, installed on the supply piping.
 - (3) Two (2) safety shutoff valves in series with a combined flame failure response and valve closing time not to exceed five (5) seconds with strainer directly before the valves.
 - (4) Programmed electronic flame safeguard including proven low fire start, manual reset lockout, 100 percent shutoff (both pilot and main burner), and a separately supervised and proven pilot.

Note:

Flame-sensing systems utilizing a UV scanner must prove pilot and interrupt ignition spark prior to main burner valves being energized.

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- (7) Power burners must include proven prepurge of at least sixty (60) seconds at high fire damper settings. This prepurge must occur before every burner cycle, regardless of reason.
- (8) Installations with dampered combustion air openings must prove damper open position before trial for burner ignition.
- (9) Vent dampers and flue dampers must be properly interlocked to prevent burner ignition unless safely open.
- (10) One (1) high-oil or liquid-fuel pressure interlock, reset from flame safeguard or manually.
- (11) If hot water or steam, two (2) low water cutoffs.