



RITE DURAFIN™ BOILER SUGGESTED SPECIFICATION



The boiler shall have a rated capacity of _____ BTUH input @ _____ feet elevation. The boiler shall be a Section IV hot water heating boiler, ASME stamped for 160 PSIG and registered with The National Board.

The boiler and burner shall be shipped completely assembled as a package and shall meet the latest requirements of UL 795, UL 726, ASME CSD-1, ANSI Z21.13, NFPA 70 and ASHRAE 90.1.

Boiler efficiency shall be minimum 85% as measured by a stack analyzer and 84% thermal (fuel-to-water) with return water temperatures between 135° (minimum) and 230° F.

The heat exchanger shall have over 7 square feet per boiler horsepower of heating surface. Tube replacement or cleaning shall require “zero” inches of maintenance clearance*. There shall be no more than ____ (22, 36, 55 or 66) total boiler tubes. The tubes shall be rolled into header boxes with the rear header box having an expansion joint to allow the tubes to expand and contract freely. There shall be no minimum or maximum water flow rate required through the heat exchanger. A flow switch shall not be required. The headplates shall be hinged, insulated and provided with hose end ball valves for draining. Boiler tubes shall be available from more than one source. The pressure vessel shall carry a 25 year warranty against “thermal shock” and tube erosion.

No part of the burner shall be physically located under the boiler tubes. The burner shall be mounted on a hinged door that allows full access into the combustion chamber without requiring any electrical disconnection.

The combustion chamber shall be sealed to operate up to .15 inches of water column. A manometer shall be provided to show the overfire pressure. The combustion chamber (furnace) heat release shall not exceed 81,000 BTUH per cubic feet. There shall be 2” flame observation ports at the front and rear of the boiler. The boiler shall be provided with a stack thermometer.

The burner panel shall have a red strobe warning light to indicate that the return water temperature is too low and the boiler is condensing. The following energy management system features shall be provided: start-stop, dry contacts to indicate the burner is firing, dry contacts to indicate an alarm condition.

The boiler shall be designed for Seismic 4 zone installation. The boiler _____ (shall or shall not) be optionally designed for outdoor installation. The boiler _____ (shall or shall not) be optionally constructed as a partial take-a-part (tubes rolled and boiler hydrotested). The boiler _____ (shall or shall not) be optionally constructed as a full take-a-part (tubes not rolled, partial data report and field ASME hydrotest required).

*Except for D300 and D500.