

# NATURAL OR PROPANE GAS-FIRED WATER BOILERS

• Side Wall Venting

Chimney Venting



An ISO 9001-2000 Certified Company



# **XEB SERIES** NATURAL OR PROPANE GAS-FIRED WATER BOILERS

## Efficiency as High as 84.4%

The XEB Water Boiler by Dunkirk offers the best combination of heating comfort, efficiency, reliability... and affordability, making it one of America's Hottest Boiler Values.

## **Heating Efficiency**

With its high efficiency, an XEB hot water boiler is an outstanding choice for performance and low operating cost.

## **Electronic Ignition**

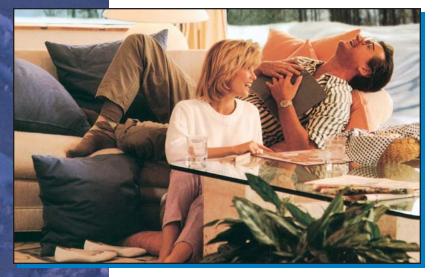
Pilot is lit automatically and stays lit only when needed, eliminating fuel waste.

## **Induced Draft Fan**

This component pulls flue gases through the boiler and safely exhausts them. It also increases heating efficiency by allowing only the proper mixture of air and gas to be burned. Permanently lubricated ball bearings in the fan motor, provide maintenance free operation.

## **Pressure Switch**

This safety device shuts down boiler operation should the exhaust vent ever get blocked.



## Titanium Burners

Dunkirk's exclusive high-tech titanium composite burners resist corrosion and oxidation while withstanding more



heat than conventional stainless steel or aluminized burners. They provide superior strength and longevity and are backed by a full 3-year warranty, triple the industry standard.

### Cast Iron Sections & Push Nipples

Dunkirk utilizes cast iron to construct the boiler's heat exchanger to provide heat transfer, reliability and strength. Since like



materials expand and contract in the same proportion during heating and cooling, cast iron push nipples and sections produce stronger, more water-tight seals than steel push nipples or rubber gaskets.

## **Easy Installation & Venting**

Surprisingly compact, the XEB Water Boiler fits in tight spaces and is supplied assembled, with controls that are accessible and completely wired. Venting through chimney is standard, or the XEB may be side-wall vented with stainless steel vent pipe.

## **Easy Maintenance**

Dunkirk's exclusive "isolating valves" on circulators eliminate the need to drain the system, making replacement quick and easy. Controls are easily accessible without having to remove the jacket, and our standard controls are readily available, making Dunkirk Boilers easy to service.

## **Dunkirk Quality**

Since 1928, American-made Dunkirk Boilers have been leading the industry in value and reliability with innovative designs and premium quality components. Assured performance has placed Dunkirk quality at the top

in trusted reliability (99.91%\*). Every gas boiler we manufacture is test fired prior to shipment. This boiler is certified by CSA in the United States and Canada; heat exchangers by ASME; and efficiency ratings by the Hydronics Institute.



## Strongest Warranty in the Industry

Dunkirk backs all of its residential cast iron water boilers with a full twenty year warranty covering the entire heat exchanger. Most competitor's warranties cover heat exchanger sections only and most are pro-rated making the homeowner financially responsible.





#### **FEATURES & BENEFITS**

#### **Induced Draft Fan**

Allows flue gases to be pulled through the boiler and safely exhausted through a chimney or side-wall vent.

#### Baked Enamel Steel Jacket

Factory installed insulation keeps off-cycle heat losses to a minimum in an attractive and compact package.

#### **Cast Iron Quality**

Provides efficient heat transfer, reliability and strength.

#### Electronic Pilot Ignition

Electronic ignition automatically lights the pilot only when needed, eliminating fuel waste.

#### **Titanium Burners**

Dunkirk's exclusive burners provide greater resistance to corrosion and oxidation. Withstands 15% more heat than conventional burners from competitive units.



#### **Full Port Isolation Valve**

Full Port Isolation Ball Valves offer a full 1-1/4" passage to maximize boiler water flows. An exterior handle clearly indicates the valve position. The ball valves allow the boiler piping to be switched from threaded pipe to copper piping, without the need for additional fittings, saving the installer valuable time!



#### **Aquastat Control**

The brain of the boiler... controls the operation of the burner system, fuel delivery, circulator, and inducer fan. It also monitors water temperature to ensure safe, reliable operation.

#### **Pressure Switch**

Shuts down boiler operation should the vent ever get blocked.

#### **Isolation Valves**

Exclusive components that are part of the circulating pump eliminates the need to drain the system when replacing the pump therefore reducing service time.

#### **Circulating Pump**

Included with the boiler, circulates hot water throughout the system to provide heat quickly and evenly. (Pump ships loose for field mounting).

### **XEB SERIES FACTORY SUPPLIED EQUIPMENT**

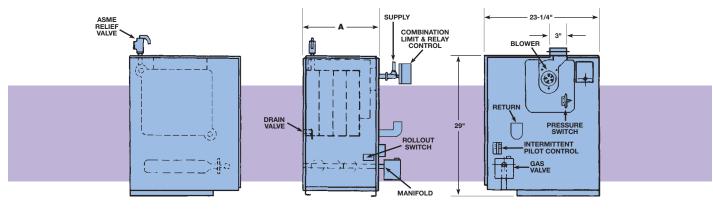
## **STANDARD EQUIPMENT:**

- Assembled boiler with insulated jacket
- Combination high limit control and circulator relay
- 24 volt transformer to power gas control system
- Flame rollout safety shut-off fuse link (rollout switch) with spare fuse link included
- Pressure switch for proving air flow
- Combination pressure/temperature gauge (packed separately)
- 1<sup>1</sup>/<sub>4</sub>" Taco (or Grundfos) circulator pump with isolation (ball) valves (shipped separately for field mounting)
- 3/4" boiler drain valve
- 30 lb. ASME relief valve

- Completely installed and wired gas control system with burners and manifold, consisting of:
  - Titanium composite burners
  - Automatic redundant combination gas valve, 24 volt, with pilot filter
  - Pressure regulator
  - Intermittent Pilot Control, continuous re-try, 100% shut-off for natural & propane gas
  - Combination pilot/burner/ electrode/flame sensor
  - Complete installation instructions

## **OPTIONAL EQUIPMENT:**

- Combustible floor plate 14614031 for 2-5 section; 14614032 for 6 & 7 section
- Tjernlund VH-1-3" side wall vent hood (Sizes 2-3-4-5)
- Tjernlund VH-1-4" side wall vent hood (Sizes 6 & 7)
- Propane gas to natural gas conversion kits
- Natural gas to propane gas conversion kits



LEFT SIDE

FRONT

**RIGHT SIDE** 

## XEB Series Water natural or propane gas-fired hot-water boilers

RATINGS & CAPACITIES						
BOILER MODEL NUMBER	NUMBER OF SECTIONS	AGA INPUT (MBH)††	† DOE HEATING CAPACITY (MBH) ††	I = B = R NET RATING (MBH) ††	WIDTH A	ANNUAL FUEL † EFFICIENCY (AFUE)
XEB-2	2	42.5	36	31	11"	84.4
XEB-3	3	75	63	55	14-1/4"	83.4
XEB-4	4	112.5	94	82	17-1/2"	83.0
XEB-5	5	150	125	109	20-3/4"	82.7
XEB-6	6	187.5	155	135	24"	82.3
XEB-7	7	225	186	162	27-1/4"	82.0

BOILERS ARE EQUIPPED FOR ALL ALTITUDES UP TO 2,000 FEET ONLY UNLESS OTHERWISE SPECIFIED. USA ONLY – FOR ALTITUDES ABOVE 2,000, RATINGS SHOULD BE REDUCED AT THE RATE OF 4% FOR EACH 1,000 FEET ABOVE SEA LEVEL.

4% FOR EACH 1,000 FEET ABOVE SEA LEVEL. CANADA ONLY – BOILERS MAY BE USED AT HIGH ALTITUDES BY USING A CERTIFIED FIELD

CONVERSION KIT, RESULTING IN A 10% DE-RATE. NEW YORK CITY MEA NUMBER 484-84-E VOL. IV.

- The ratings marked Net I=B=R Ratings represent the portion of the heat output that can be applied to heat the radiation or terminal units. The Net I=B=R Ratings shown are based on an allowance of 1.15 in accordance with the factors shown in the I=B=R Code as published by The Hydronics Institute.
- Selection of boiler size should be based upon Net I=B=R Rating being equal to or greater than the calculated heat loss of the building.
- Consult manufacturer before selecting a boiler for installations having unusual piping and pick-up requirements.

**††** MBH = 1,000 Btuh

- Btuh = BRITISH THERMAL UNIT PER HOUR † AFUE AND HEATING CAPACITY ARE BASED UPON D.O.E (DEPARTMENT OF ENERGY) TEST PROCEDURE.
- CONVENTIONAL VENTING THROUGH A LINED CHIMNEY USE 4" FLUE ADAPTER PROVIDED.
- THROUGH THE WALL VENTING SIZES 2-3-4-5 USE 3' STAINLESS STEEL VENT PIPE. SIZES 6-7 USE 4' STAINLESS STEEL VENT PIPE (NOT INCLUDED)

**(SP**∘

- These boilers may be installed on combustible flooring when placed on combustible floor plate.
- These gas-fired boilers are sectional cast iron boilers design certified by CSA in the U.S. and Canada for use with natural gas and propane gas. They are constructed and hydrostatically tested for a maximum working pressure of 50 psi in accordance with A.S.M.E. (American Society of Mechanical Engineers) Boiler And Pressure Vessel Code Section IV standards for cast iron heating boilers. They are capacity rated in accordance with the code of The Hydronics Institute.

**DUNKIRK QUALITY HEATING. AMERICA'S HOTTEST BOILER VALUE!** Dunkirk hydronic boilers lead the industry in value, with premium quality design and componentry. In fact, some of the most respected "brand name" boilers are produced by Dunkirk. These major manufacturers selected Dunkirk hydronic boilers for the same basic reasons you should: superb quality and unmatched value. Just compare our quality to cost ratio, and your boiler choice will become perfectly clear.

Specifications and dimensions are subject to change without notice. Made in America by American Craftsmen.



Since 1928. America's Hottest Boiler Value.

An ISO 9001-2000 Certified Company

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CSA Certified for