

# Webstone

**VALVE INNOVATION**

**HYDRO-CORE™**



**PATENTED  
TECHNOLOGY**

THE **CORE** OF ANY  
PROFESSIONAL **HYDRONIC**  
INSTALLATION





# A REVOLUTIONARY APPROACH TO HYDRONIC INSTALLATIONS

Combine a forged brass manifold and components to streamline boiler and secondary loop installations.

- Eliminates costly field fabrication
- Avoids precise calculations
- Simplifies future maintenance
- Minimizes leak paths
- Shaves hours off every installation
- All with EXPERT looking results
- GUARANTEED FOR LIFE

## DESIGNED SPECIFICALLY FOR NEAR BOILER LOOPS:

Numerous kits are available to provide solutions for these popular boiler styles.

### Floor Standing Side Mount Boilers



### Floor Standing Top Mount Boilers



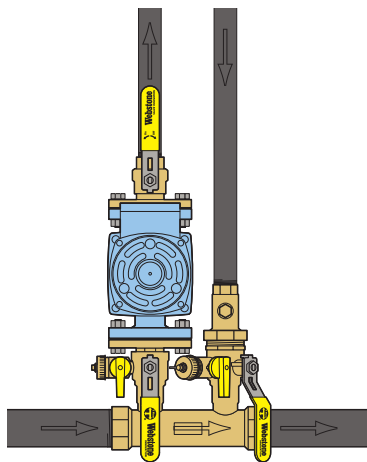
### Wall Hung Boilers



### Wall Hung Boilers w/ Integral Pump



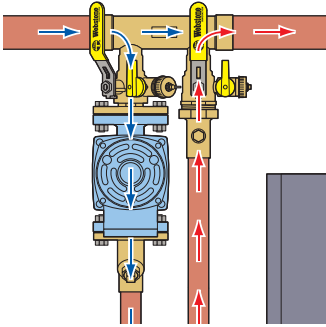
## SECONDARY CIRCUIT LOOPS:



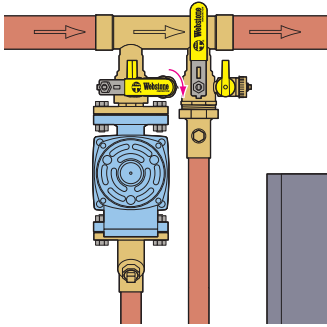
The Hydro-Core Manifold can be used anywhere a secondary circuit loop is required in a hydronic system.

# ADVANTAGES

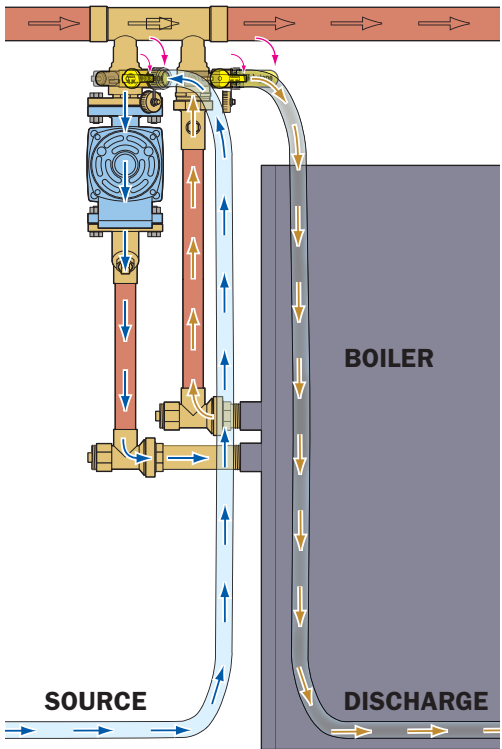
### Precise Spacing for Hydraulic Separation



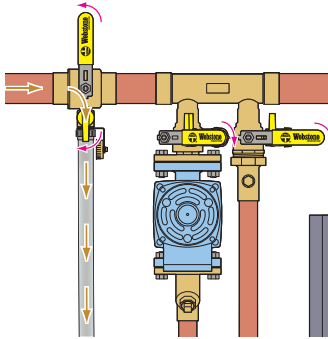
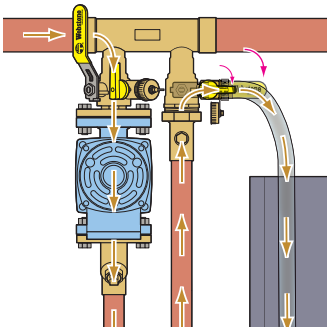
### Simplifies Pump Isolation



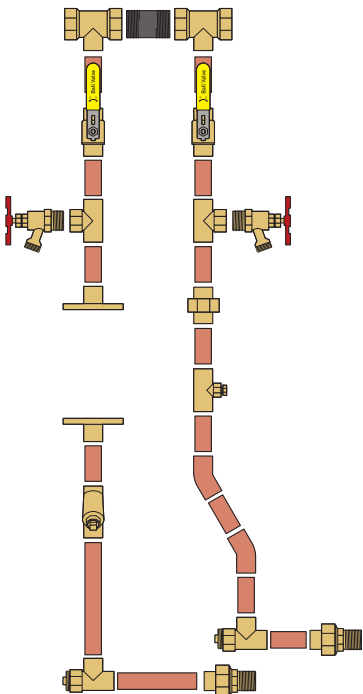
### Easily Purge, Fill, or Descale\* a Boiler or Secondary Hydronic Loop



### Simplifies System Purging Through the Boiler Outside the Boiler



\*Descaling may not be recommended for all boilers. Consult boiler manufacturer for details.



## HYDRO-CORE™ COMPLETE NEAR BOILER PIPING KITS

## SAVES LABOR, SPACE, AND LEAK PATHS

	FIELD FABRICATED INSTALLATION	HYDRO-CORE™ COMPLETE NEAR BOILER PIPING KIT
COMPONENTS:	34	5
LEAK PATHS:	32	3
LABOR:	4.8 hours	27 minutes

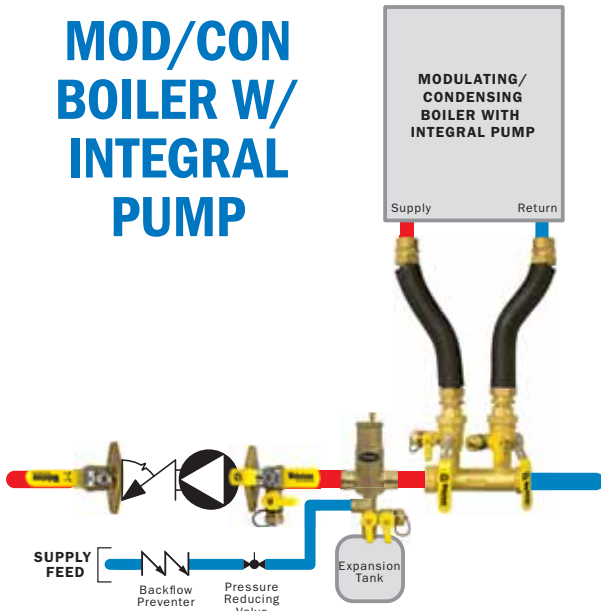
COMPONENTS AND SAVINGS VARY BY KIT

# HYDRO-CORE™

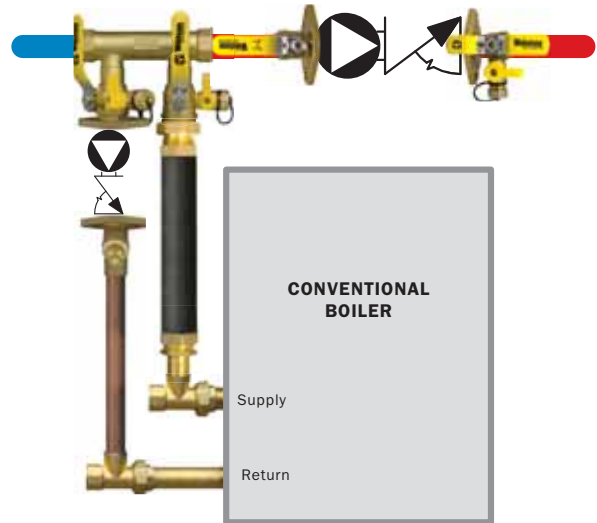
## APPLICATIONS

The Webstone Hydro-Core™ system streamlines the installation, performance and maintenance of a variety of boiler systems. *Hydro-Core is the core of any professional hydronic installation.*

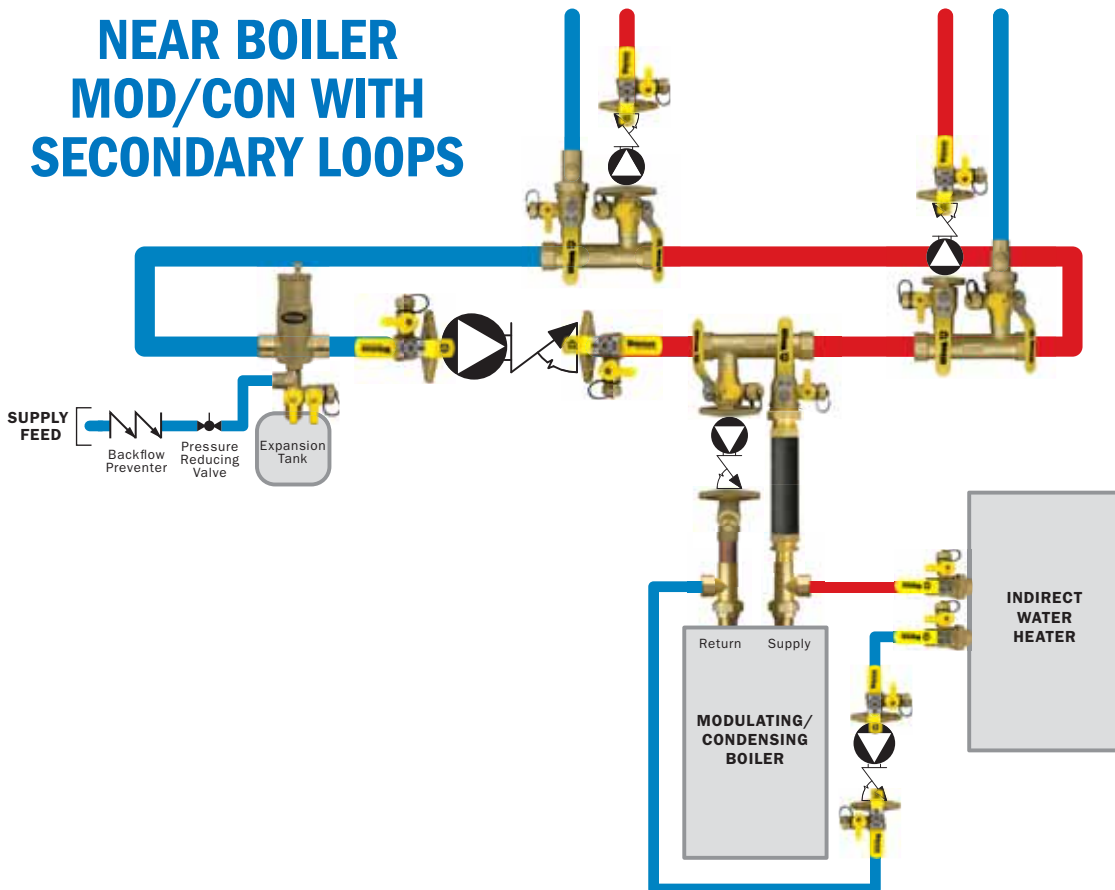
### MOD/CON BOILER W/ INTEGRAL PUMP



### CAST IRON/CONVENTIONAL

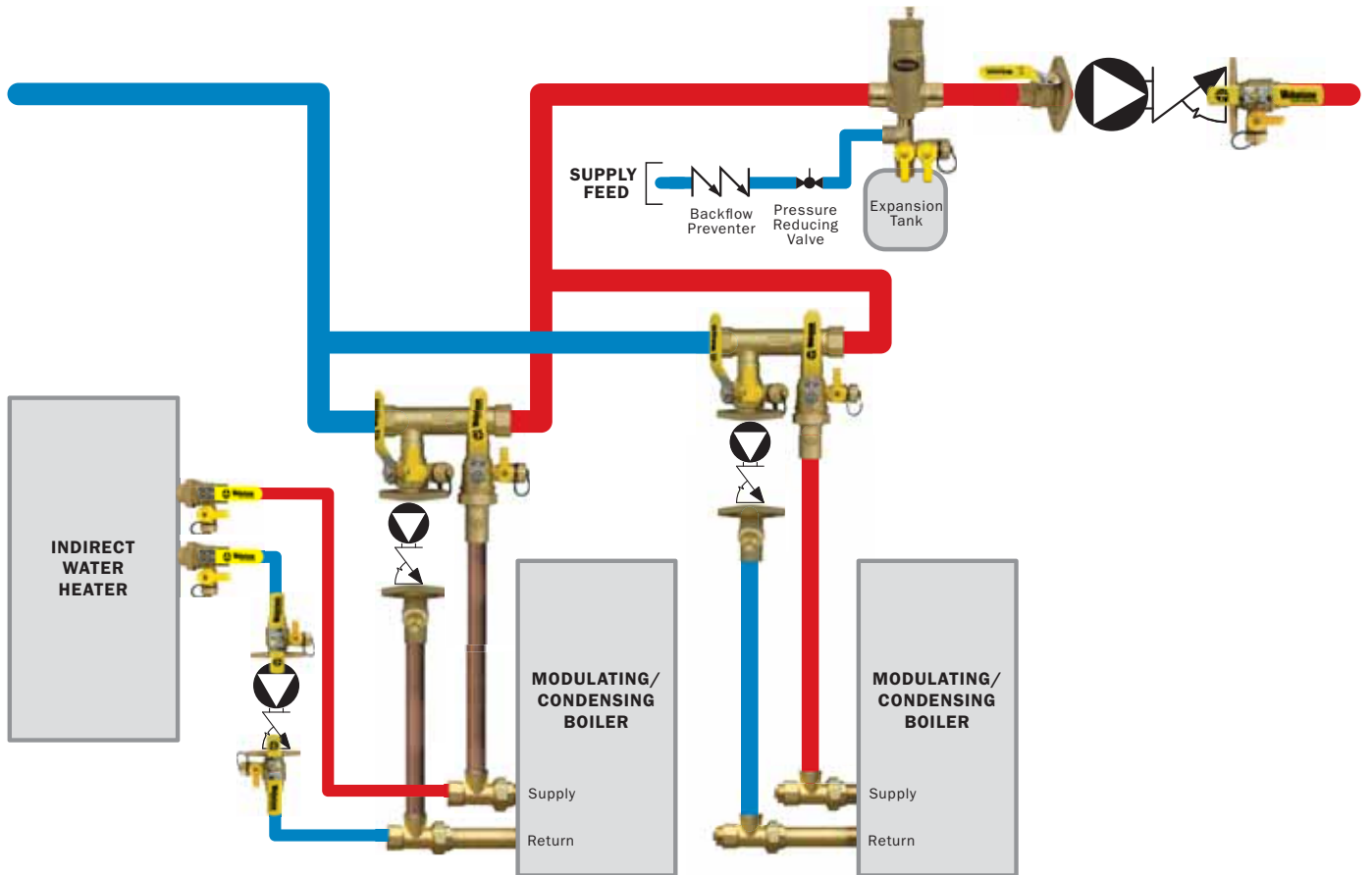


### NEAR BOILER MOD/CON WITH SECONDARY LOOPS

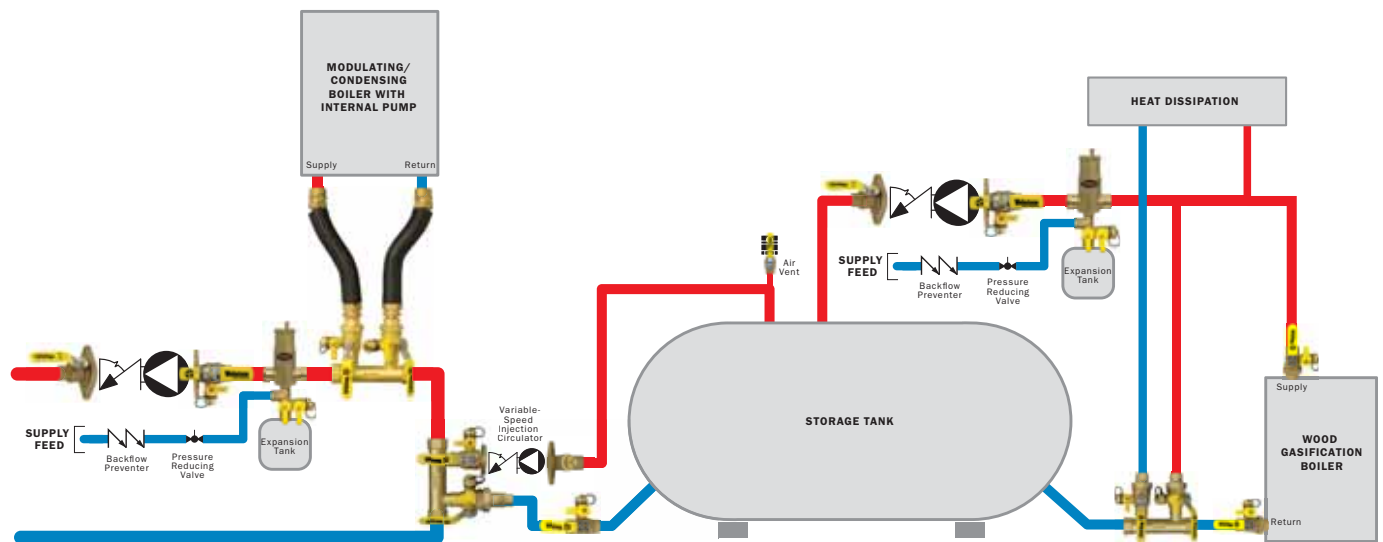




## TWO BOILERS IN PARALLEL



## MULTIPLE HEAT SOURCES



**SAVE COMPONENTS, SPACE & LABOR**

# HYDRO-CORE<sup>TM</sup>

## MANIFOLD

Webstone's patented manifold is the core of the Hydro-Core system.

- Combines 17 Components
- Eliminates 16 Leak Paths
- GUARANTEED FOR LIFE

**PRO-CONNECT.<sup>TM</sup>**  
**PRESS**

Compatible with popular press tools



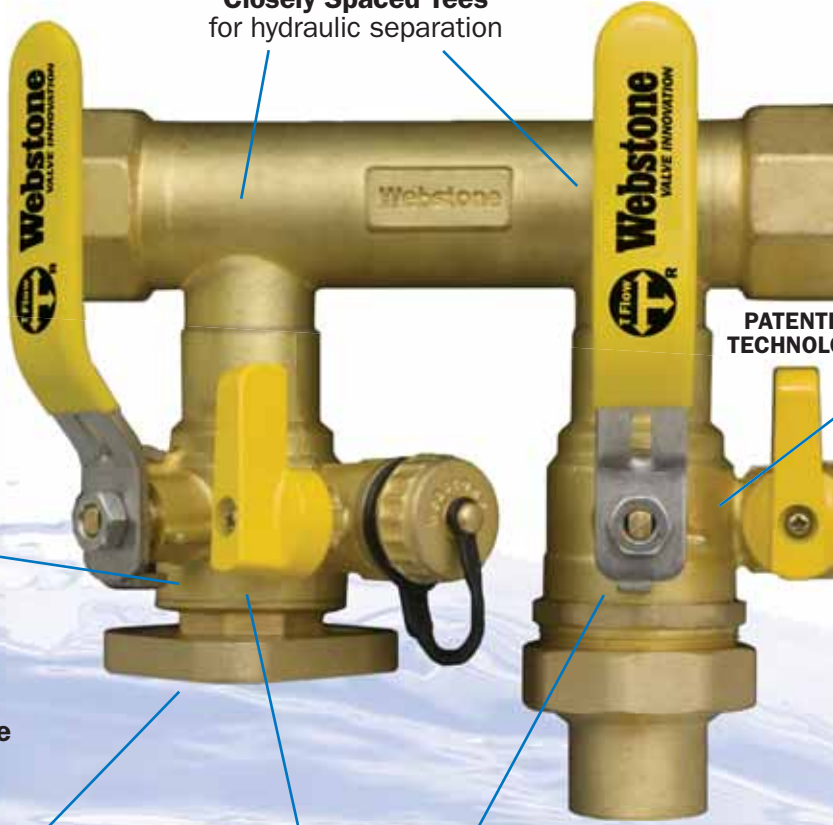
**Webstone Isolator<sup>®</sup>**  
with Rotating  
Flange & Drain



**Snug-Fit Rotating Flange**  
Provides greater control  
during installation



**Precision-Crafted  
Closely Spaced Tees**  
for hydraulic separation



**Webstone  
Ball Drain<sup>™</sup>**

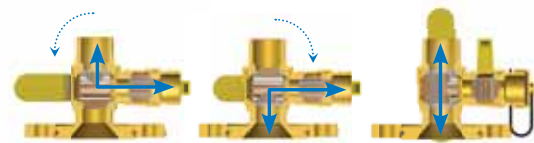


**PATENTED  
TECHNOLOGY**

**Fully-Insulated Body**



**T-Flow Ball for Compact Design**  
Directs flow into either the boiler  
or purge drain



**HYDRO-CORE<sup>TM</sup>**  
**UNION CONNECTION**

Available in three  
distinct styles to  
meet your needs

## FLANGE OPTIONS



**Flange Right**



**Flange Left**



**No Flange  
Double Ball Drain**



**Connection Only**

Included with every  
Hydro-Core Manifold



**With 1/4"  
Plugged Pressure  
Gauge Port**



**With Multiple  
Device Ports**

(2) 3/4" Plugged 3/4" FIP ports  
Includes 3/4" to 1/4" FIP  
Pressure Gauge adapter

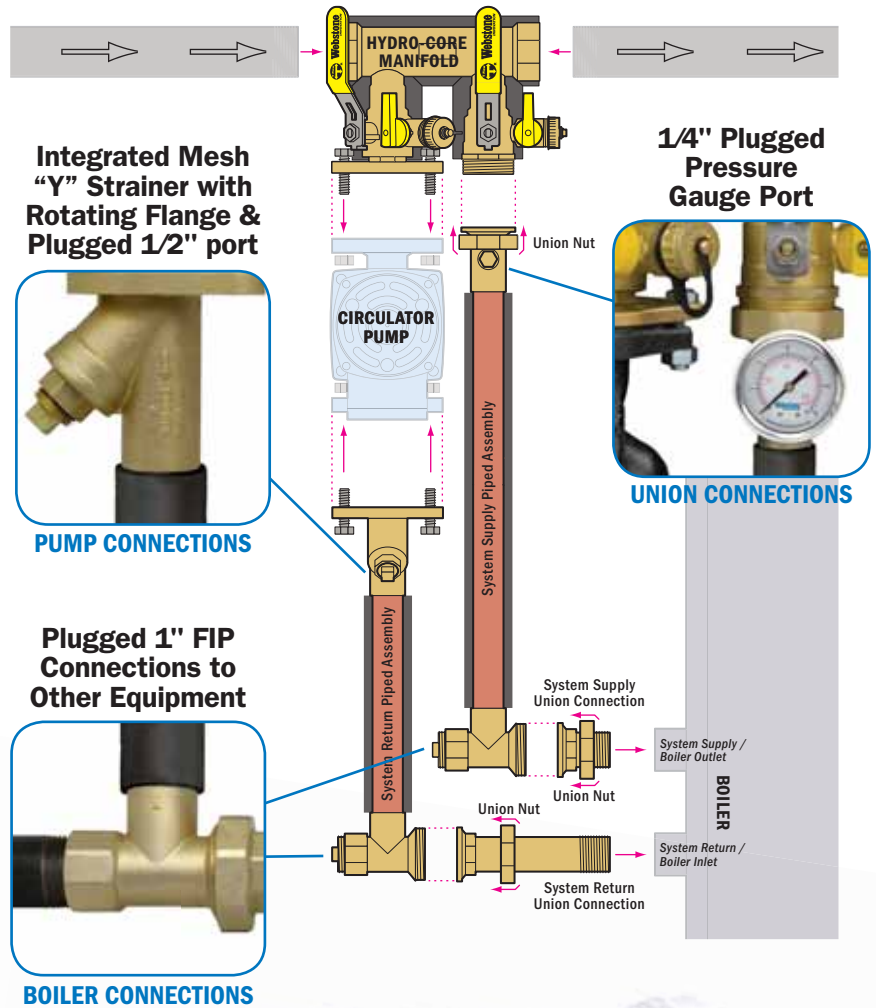
# NEAR BOILER PIPING INNOVATIONS



## COMPLETE NEAR BOILER PIPING KITS

A fully-fabricated solution, kits include everything necessary for a successful installation; leaving the installer to provide only the pump. Available for a wide array of boilers. *Features vary by kit.*

- Your choice of **Press**, FIP or SWT Manifold
- Press connections compatible with popular press tools
- Fully fabricated & insulated supply & return lines assembled with copper or **HYDRO-CORE FLEX** tubing
- Outfitted with connections for your specific boiler
- integrated mesh “Y” strainer with rotating flange & plugged 1/2” port in strainer cap for installation of drain valve
- Plugged 1/4” pressure gauge port on select kit models
- Plugged FIP ports for connection to other equipment. i.e. indirect water heater, heat exchanger, pressure relief valve, etc.
- Accommodates common circulator pumps (measuring 6½” in length)



- Included in select Complete Near Boiler Piping Kits
- Assembled with flexible stainless steel tubing
- Tubing may be cut for installations in close quarters



Flex Pipe Conforms to NSF/ANSI 61, ASTM A 312/312M, IAMPO IGC-233 PATENTS PENDING

	3/4"	1"	1 1/4"
Inner Diameter	0.83"	1.03"	1.26"
Operating Temperature	212°	212°	212°
Max Cold Working Pressure	176 PSI	147 PSI	110 PSI



### DUAL SCALE PRESSURE GAUGE

SOLD SEPARATELY

- 1/4" NPT Center Back Connection
- Stainless Steel
- Liquid Filled
- 2" Dial, 30 PSI

ITEM # 31000 CTN/CASE 1/100



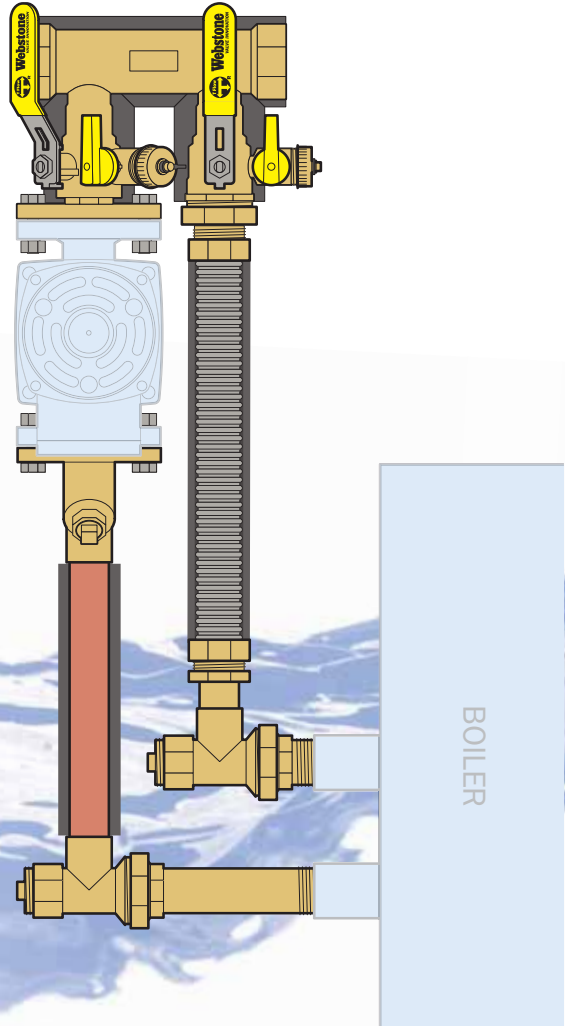
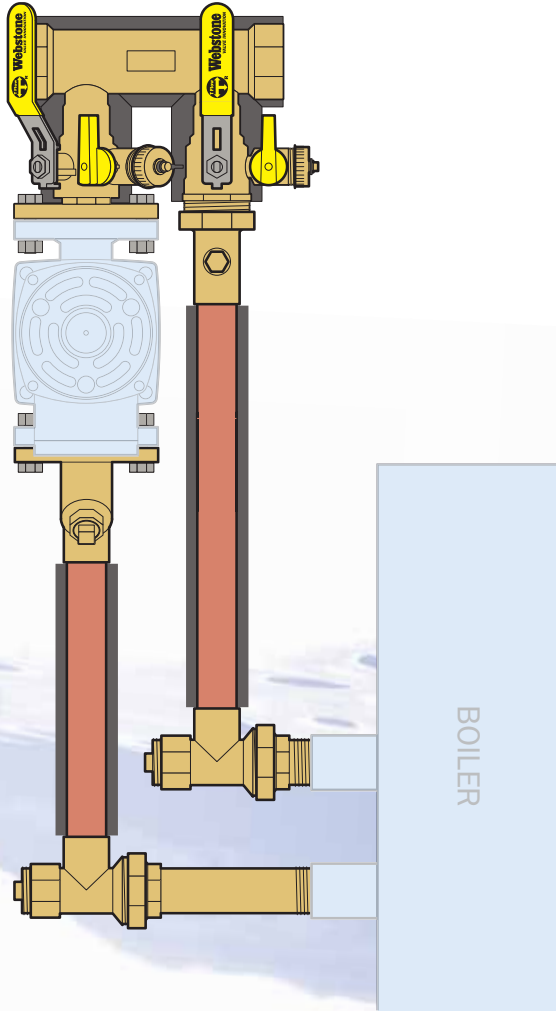
# INSTALLATION SOLUTIONS FOR FLOOR STANDING / SIDE MOUNT BOILERS

**COMPATIBLE WITH SELECT BOILERS FROM:\***

- BURNHAM
- LOCHINVAR

**COMPATIBLE WITH SELECT BOILERS FROM:\***

- HEAT TRANSFER PRODUCTS
- NEW YORK THERMAL NTI



**FEATURES:**

- Choice of **Press**, FIP or SWT Hydro-Core Manifold
- Insulated supply & return lines assembled from one-piece, type-L copper tubing
- Integrated connections for your specific boiler
- Integrated mesh "Y" strainer with rotating flange
- Plugged 1/2" strainer cap port
- Plugged FIP ports

**FEATURES:**

- Choice of **Press**, FIP or SWT Hydro-Core Manifold
- Insulated return line assembled from one-piece, 9 3/4" length type-L copper tubing
- Insulated supply line assembled with 24" length Hydro-Core Flex tubing
- Integrated connections for your specific boiler
- Integrated mesh "Y" strainer with rotating flange
- Plugged 1/2" strainer cap port
- Plugged FIP ports

*Shown Above: 4CC4-080 (includes Flange Right Manifold)*

Press System Piping Connection	IPS System Piping Connection	SWT System Piping Connection
8CC4-080	4CC4-080	5CC4-080
8CC4-105	4CC4-105	5CC4-105
8CC4-150	4CC4-150	5CC4-150
8CC4-210	4CC4-210	5CC4-210

*Shown Above: 4CF4-FS184 (includes Flange Right Manifold)*

Press System Piping Connection	IPS System Piping Connection	SWT System Piping Connection
8CF4-FS184	4CF4-FS184	5CF4-FS184
8CF5-FS185	4CF5-FS185	5CF5-FS185

**SEE [WWW.WEBSTONEVALVES.COM/HYDROCORE](http://WWW.WEBSTONEVALVES.COM/HYDROCORE) FOR A FULL BOILER COMPATIBILITY CHART**

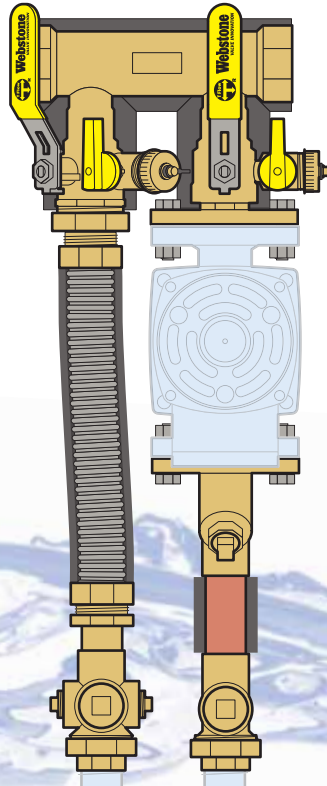
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# INSTALLATION SOLUTIONS FOR FLOOR STANDING / TOP MOUNT BOILERS

**COMPATIBLE WITH SELECT BOILERS FROM:\***

- BRADFORD WHITE • LAARS • PEERLESS • RAYPAK
- SLANT FIN • TRIANGLE TUBE • WEIL-MCLAIN



**FEATURES:**

- Choice of **Press**, FIP or SWT Hydro-Core Manifold
- Insulated return line assembled from one-piece, 4 1/2" length type-L copper tubing
- Insulated supply line assembled with 24" length Hydro-Core Flex tubing
- Integrated connections for your specific boiler
- Integrated mesh "Y" strainer with rotating flange
- Plugged 1/2" strainer cap port
- Plugged FIP ports

*Shown Left: 4CF4L-FT144 (includes Flange Left Manifold)*

Press System Piping Connection	IPS System Piping Connection	SWT System Piping Connection
8CF4L-FT144	4CF4L-FT144	5CF4L-FT144
8CF4R-FT144	4CF4R-FT144	5CF4R-FT144
8CF5-FT245	4CF5-FT245	5CF5-FT245
8CF5-FT2R45	4CF5-FT2R45	5CF5-FT2R45

BOILER



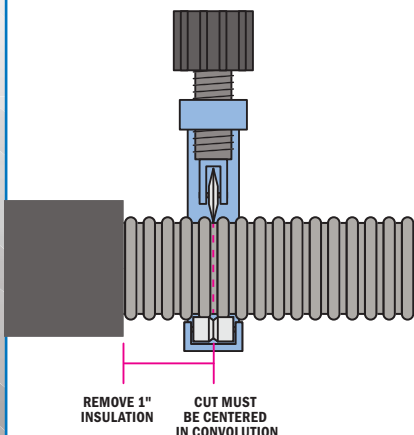
## TO CUT TUBING (IF DESIRED)

The amount of Hydro-Core Flex Piping provided is suitable for wide range of boilers. However, tubing may be cut to suit the needs of your specific installation if so desired. Retaining excess length will not effect the performance of the system.

To Cut Hydro-Core Flex Tubing:

1. Remove end connections.
2. Measure the desired pipe length and mark this point on the insulation.
3. Remove the insulation beyond this mark – **DO NOT CUT THE TUBING.**
4. Measure one inch of exposed pipe above the insulation. This is the cut point.
5. Using a metal tube cutter, cut the tube at the cut point.  
**Cut MUST be centered in a valley between corrugations.**
6. Insert tube into the fitting, then tighten end connections.

For full assembly instructions see [www.webstonevalves.com/instructions/](http://www.webstonevalves.com/instructions/)



SEE [WWW.WEBSTONEVALVES.COM/HYDROCORE](http://WWW.WEBSTONEVALVES.COM/HYDROCORE) FOR A FULL BOILER COMPATIBILITY CHART

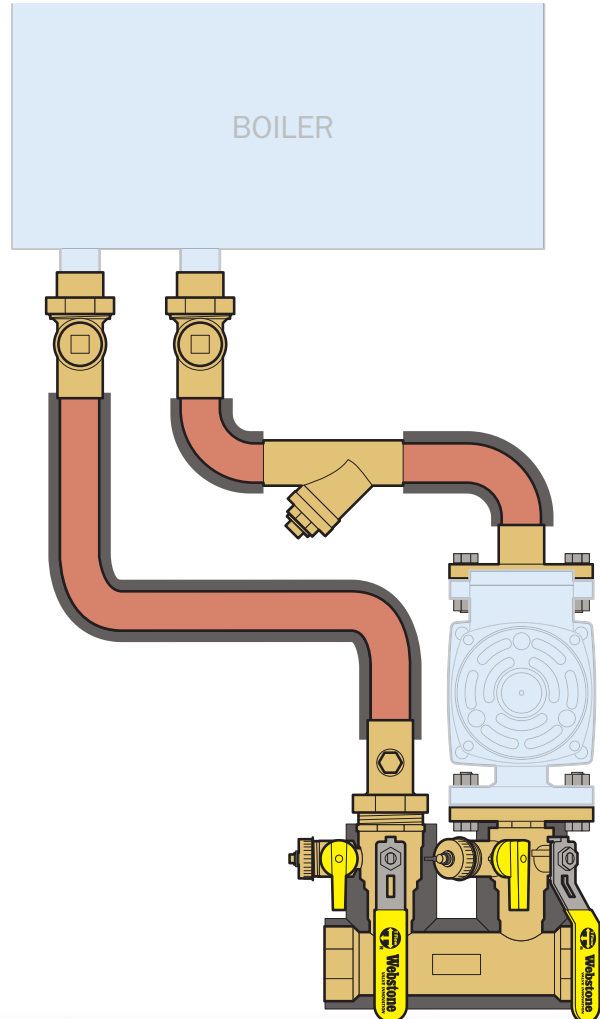
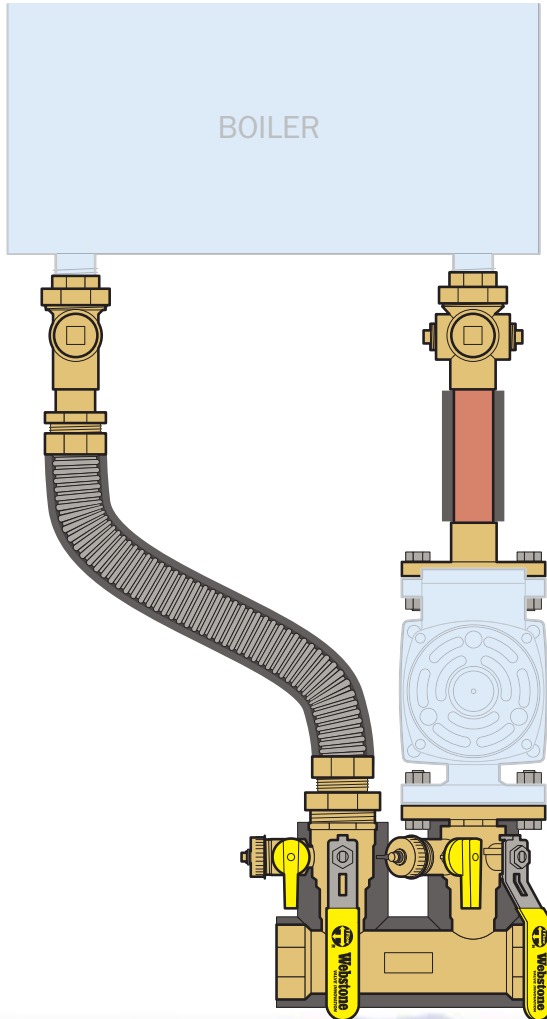
# INSTALLATION SOLUTIONS FOR WALL HUNG BOILERS

**COMPATIBLE WITH SELECT BOILERS FROM:\***

- BAXI • DUNKIRK • HEAT TRANSFER PRODUCTS
- LOCHINVAR • NAVIEN • NEW YORK THERMAL NTI
- NORITZ • SLANT FIN • TRIANGLE TUBE
- UTICA • VISSMANN

**COMPATIBLE WITH SELECT BOILERS FROM:\***

- LOCHINVAR



**FEATURES:**

- Choice of **Press**, FIP or SWT Hydro-Core Manifold
- Insulated return line assembled from one-piece, 4 1/2" length type-L copper tubing
- Insulated supply line assembled with 24" length Hydro-Core Flex tubing
- Integrated connections for your specific boiler
- Plugged FIP ports

*Shown Above: 4CF4-WH1R44 (includes Flange Right Manifold)*

Press System Piping Connection	IPS System Piping Connection	SWT System Piping Connection
8CF4-WH154	4CF4-WH154	5CF4-WH154
8CF4-WH1R44	4CF4-WH1R44	5CF4-WH1R44
8CF4-WH1R54	4CF4-WH1R54	5CF4-WH1R54
8CF4L-WH144	4CF4L-WH144	5CF4L-WH144
8CF4L-WH144	4CF4L-WH144	5CF4L-WH144
8CF4L-WH144	4CF4L-WH144	5CF4L-WH144
8CF4L-WH144	4CF4L-WH144	5CF4L-WH144
8CF4L-WH144	4CF4L-WH144	5CF4L-WH144
8CF5-WH255††	4CF5-WH255††	5CF5-WH255††
8CF5L-WH245	4CF5L-WH245	5CF5L-WH245
8CF5L-WH245	4CF5L-WH245	5CF5L-WH245

† Supply line assembled with 12" length Hydro-Core Flex tubing

†† Return line assembled from one-piece, 6 1/2" length type-L copper tubing

**FEATURES:**

- Choice of **Press**, FIP or SWT Hydro-Core Manifold
- Insulated supply & return lines assembled from one-piece, type-L copper tubing
- Integrated connections for your specific boiler
- Integrated mesh "Y" strainer
- Plugged 1/2" strainer cap port
- Plugged FIP ports

*Shown Above: 4CC4-WHN (includes Flange Right Manifold)*

Press System Piping Connection	IPS System Piping Connection	SWT System Piping Connection
8CC4-WHN	4CC4-WHN	5CC4-WHN

**SEE [WWW.WEBSTONEVALVES.COM/HYDROCORE](http://WWW.WEBSTONEVALVES.COM/HYDROCORE) FOR A FULL BOILER COMPATIBILITY CHART**

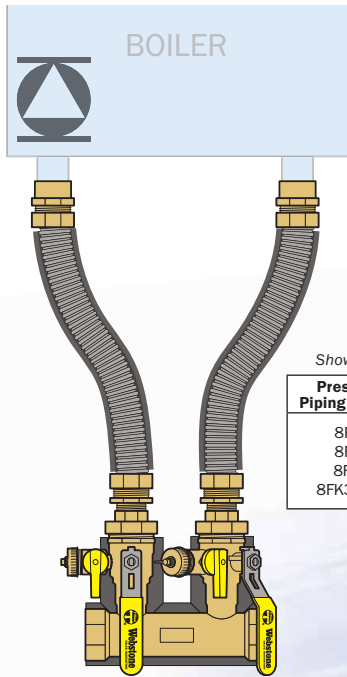
# INSTALLATION SOLUTIONS FOR WALL HUNG BOILERS W/ INTEGRAL PUMP

**COMPATIBLE WITH SELECT BOILERS FROM:\***

- BAXI • BIASI • BOSCH • IBC TECHNOLOGIES
- LAARS • PEERLESS • PENSOTTI • RAYPAK
- SIME • SLANT FIN • UTICA

**COMPATIBLE WITH SELECT BOILERS FROM:\***

- BRADFORD WHITE
- TRIANGLE TUBE

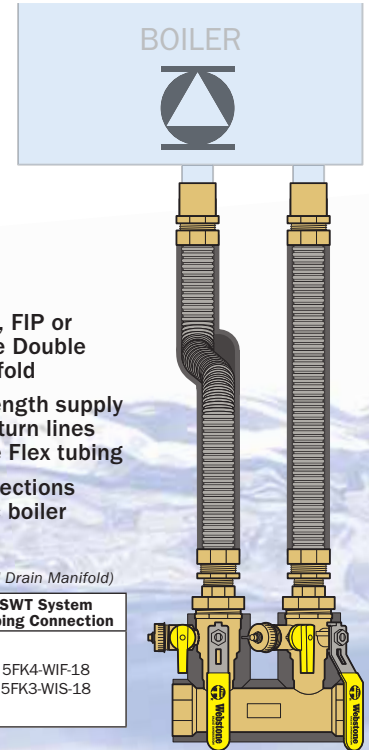


**FEATURES:**

- Choice of **Press**, FIP or SWT Hydro-Core Double Ball Drain Manifold
- Insulated supply & return lines with 12" or 18" length Hydro-Core Flex tubing
- Integrated connections for your specific boiler

Shown Left: 4FK3-WIF (includes Double Ball Drain Manifold)

Press System Piping Connection	IPS System Piping Connection	SWT System Piping Connection
8FK3-WIF	4FK3-WIF	5FK3-WIF
8FK4-WIF	4FK4-WIF	5FK4-WIF
8FK3-WIS	4FK3-WIS	5FK3-WIS
8FK3-WIF-18-2	4FK3-WIF-18-2	5FK3-WIF-18-2



**FEATURES:**

- Choice of **Press**, FIP or SWT Hydro-Core Double Ball Drain Manifold
- Insulated 18" length supply & 12" length return lines with Hydro-Core Flex tubing
- Integrated connections for your specific boiler

Shown Right: 4FK3-WIS-18 (includes Double Ball Drain Manifold)

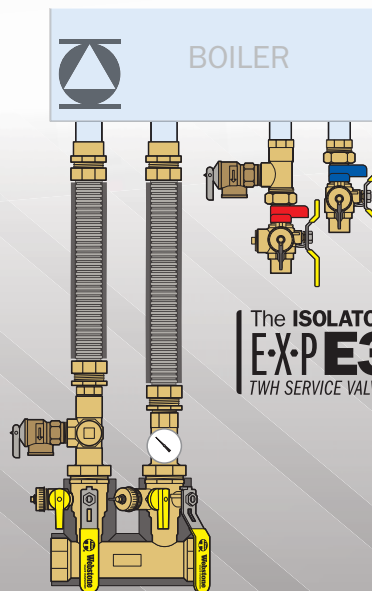
Press System Piping Connection	IPS System Piping Connection	SWT System Piping Connection
8FK4-WIF-18	4FK4-WIF-18	5FK4-WIF-18
8FK3-WIS-18	4FK3-WIS-18	5FK3-WIS-18

## COMBI BOILER SOLUTIONS

**COMPATIBLE WITH SELECT BOILERS FROM:\***

- NAVIEN

A specialty kit designed to accommodate the installation of select combi boilers. Includes a fully fabricated solution for the near boiler piping, and Webstone Isolator® EXP™ series valves for the installation and service of the DHW connections.



**FEATURES:**

- Choice of **Press**, FIP or SWT Hydro-Core Double Ball Drain Manifold
- Insulated supply & return lines assembled from Hydro-Core Flex Tubing
- Integrated connections for your specific boiler
- Plugged FIP ports for connection to other devices
- 1/4" pressure gauge port
- 30 PSI pressure gauge
- 30 PSI pressure relief valve for boiler
- 3/4" IPS Isolator E-X-P E3 service valve kit
- 150 PSI pressure relief valve for DHW

Shown Left: 4FK5-CH (includes Double Ball Drain Manifold)

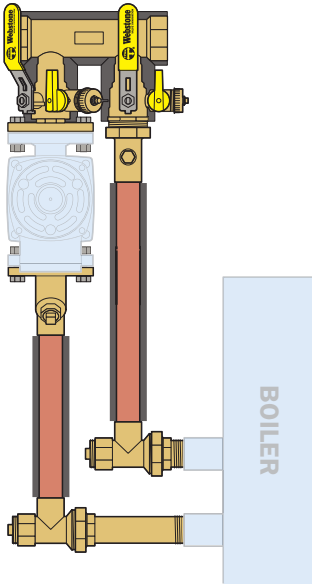
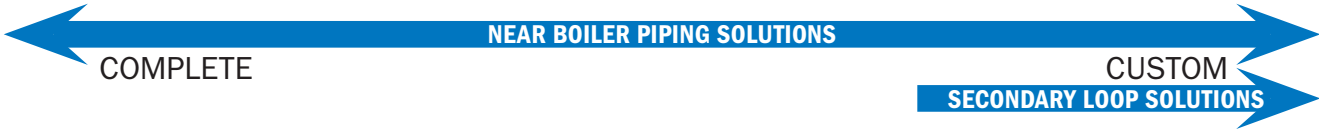
Press System Piping Connection	IPS System Piping Connection	SWT System Piping Connection
8FK5-CH	4FK5-CH	5FK5-CH

SEE [WWW.WEBSTONEVALVES.COM/HYDROCORE](http://WWW.WEBSTONEVALVES.COM/HYDROCORE) FOR A FULL BOILER COMPATIBILITY CHART

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# VERSATILE SOLUTIONS

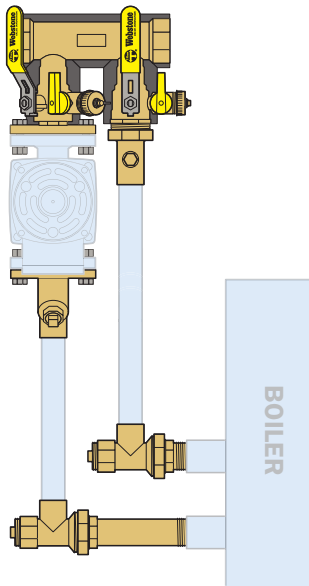
The Hydro-Core system offers varying degrees of simplicity and customization depending on your needs.



## HYDRO-CORE™

### COMPLETE NEAR BOILER PIPING KITS

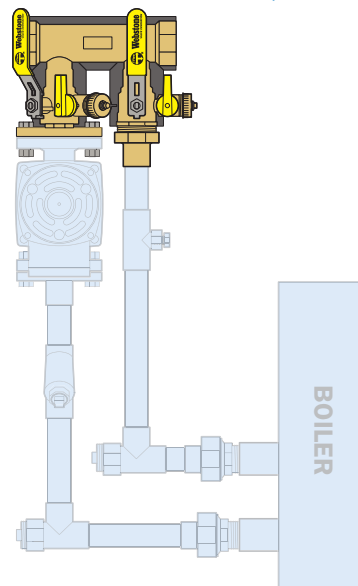
Everything but the pump!  
A complete solution for a wide array of boilers; includes the manifold, piping and all boiler connections.



## HYDRO-CORE™

### NEAR BOILER COMPONENT KITS

Pipe it yourself.  
Utilize Near Boiler Component kits including the manifold, pump connections, and boiler connections.



## HYDRO-CORE™

### MANIFOLD + UNION CONNECTIONS

Utilize the manifold and basic union connection, but complete the rest of the work in the field.



## OR CUSTOMIZE YOUR OWN

Have an unusual set of system requirements or a particularly unique area to work within? Craft your own kit - all Hydro-Core components are available for individual purchase. A solution is available for any given need. Visit [www.webstonevalves.com/hydrocore](http://www.webstonevalves.com/hydrocore) to select your desired components.

**MIX & MATCH** - See [www.webstonevalves.com/HydrocoreParts](http://www.webstonevalves.com/HydrocoreParts) for a complete list of parts and accessories.



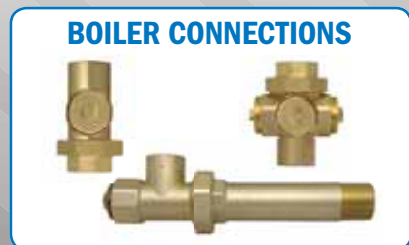
### MANIFOLDS



### UNION CONNECTIONS



### PUMP CONNECTIONS



### BOILER CONNECTIONS

**Webstone**  
VALVE INNOVATION

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P: (800) 225-9529 • F: (800) 336-5133  
[www.webstonevalves.com](http://www.webstonevalves.com)

This content has been provided for the express purpose of demonstrating a product's function in a system and should not be used as a reference for designing or assembling any working installation. The user is solely responsible for ensuring that all products are used and all systems are designed in accordance with all applicable federal, state and local codes.

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