

# Heat-Flo

HEATING PRODUCTS

## INDIRECT WATER HEATER PIPING COMPARISON: 40-Gallon Unit

Saves over \$65 on materials and at least 25% on labor.

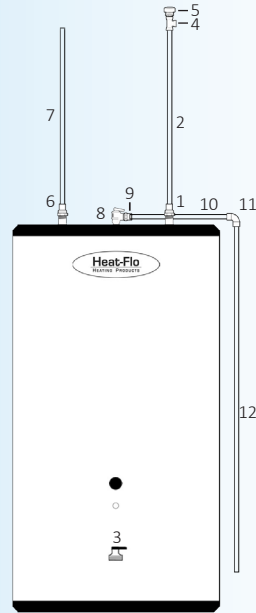
### Indirect Water Heater Piping Comparison Example

#### Assumptions:

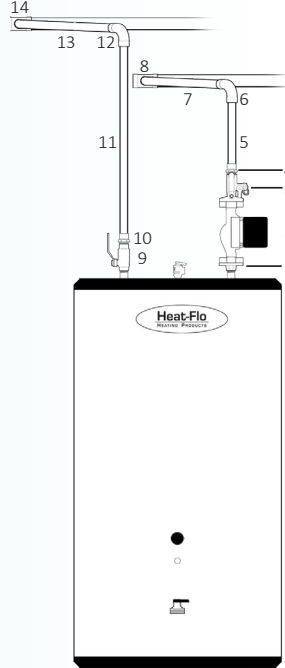
- The installation is a typical residential installation in a basement. The installing contractor does not want to get on his hands and knees and connect piping to fittings that are low on the tank, and does not want to run piping along the floor.
- The domestic cold and hot water are piped to floor joints that are 78" off the floor.
- The boiler supply and return headers are 66" and 72" off the floor, either hanging from the floor joists or mounted on the wall behind the equipment.
- The top connect unit is a Heat-Flo indirect with easy-to-install piping on top. The T+P valve and the drain valve are both factory-installed.
- The side-connect unit is typical of most side-connect units with fittings low on the tank and require the T+P valve and the drain valve to be installed with extra "do-it-yourself" parts.
- Installing a Heat-Flo unit vs. a typical side-connect unit saves \$65.84 on material costs. In addition, the top-connect unit requires 25% less threaded joints, solder joints, and tube cuts.

### Heat-Flo HF-40 Indirect Water Heater

Domestic Piping

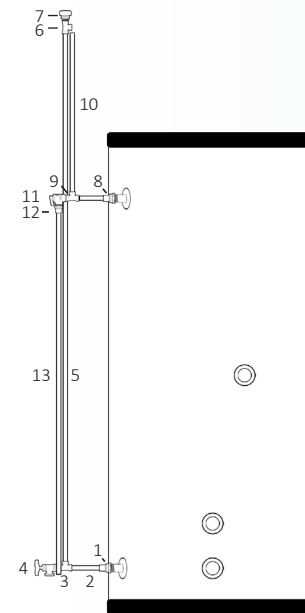


Boiler Piping

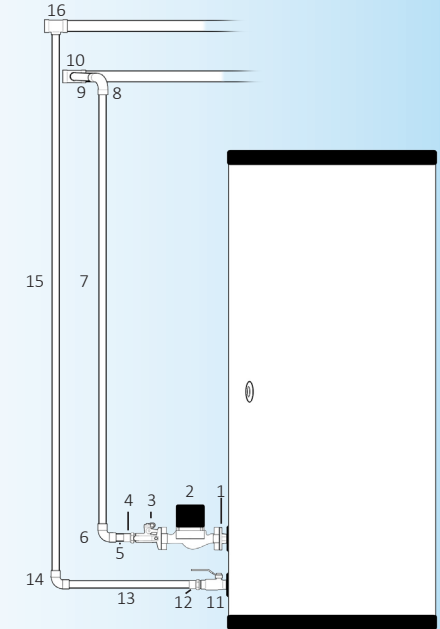


### Typical Side-Connect Indirect Water Heater

Domestic Piping



Boiler Piping



#### Heat-Flo HF-40 Indirect

Cold Piping		
	QTY.	Cost
1 3/4" Female Adapter	1	\$2.32
2 3/4" Cu Tubing*	34"	\$4.68
3 Drain Valve (Factory-Installed)	1	\$0.00
4 3/4" Cu Tee (C X F X C)	1	\$12.64
5 Watts 1/2" Vacuum Relief	1	\$13.79
Hot Piping		
6 3/4" Female Adapter	1	\$2.32
7 3/4" Cu Tubing*	34"	\$4.68
T & P Valve Piping		
8 T & P Valve (Factory-Installed)	0	\$0.00
9 3/4" Male Adapter	1	\$1.79
10 3/4" Cu Tubing**	11"	\$1.11
11 3/4" 90 deg. Elbow	1	\$1.14
12 3/4" Cu Tubing**	38"	\$3.83
<b>Total Cost</b>		<b>\$48.29</b>

Supply Piping		
	QTY.	Cost
1 Taco 110-252F 1" Flange	0.5	\$5.06
2 Pump, Taco 007-F5-71FC	1	\$85.07
3 Shutoff w/ Purge, Webstone 50414	1	\$34.28
4 1" Male Adapter	1	\$4.57
5 1" Cu Tubing**	14.5"	\$2.36
6 1" 90 Deg. Elbow	1	\$2.80
7 1" Cu Tubing**	16"	\$2.60
8 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	\$7.99
Return Piping		
9 Shutoff Valve, 1" IPS, Wat LFFBV-3C	1	\$12.24
10 1" Male Adapter	1	\$4.57
11 1" Cu Tubing**	28"	\$4.55
12 1" 90 Deg. Elbow	1	\$2.80
13 1" Cu Tubing**	12"	\$1.95
14 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	\$7.99
<b>Total Cost</b>		<b>\$178.83</b>

#### Typical Side-Connect Indirect

Cold Piping		
	QTY.	Cost
1 3/4" Female Adapter	1	\$2.32
2 3/4" Cu Tubing*	3"	\$0.41
3 3/4" Cu Tee (C X F X C)	1	\$12.64
4 Drain Valve	1	\$7.25
5 3/4" Cu Tubing**	72"	\$9.90
6 3/4" Cu Tee (C X F X C)	1	\$12.64
7 Watts 1/2" Vacuum Relief	1	\$13.79
Hot Piping		
7 3/4" Female Adapter	1	\$2.32
8 3/4" Cu Tubing*	3"	\$0.41
9 3/4" Cu Tee (C X F X C)	1	\$12.64
10 3/4" Cu Tubing*	32"	\$4.40
T&P Piping		
11 T&P Valve (Watts 100XL8)	1	\$15.29
12 3/4" Male Adapter	1	\$1.79
13 3/4" Cu Tubing**	40"	\$4.03
<b>Total Cost</b>		<b>\$99.84</b>

Supply Piping		
	QTY.	Cost
1 Taco 110-252F 1" Flange	0.5	\$5.06
2 Pump, Taco 007-F5-71FC	1	\$85.07
3 Shutoff w/ Purge, Webstone 50414	1	\$34.28
4 1" Male Adapter	1	\$4.57
5 1" Cu Tubing**	3"	\$0.49
6 1" 90 Deg. Elbow	1	\$2.80
7 1" Cu Tubing**	55"	\$8.94
8 1" 90 Deg. Elbow	1	\$2.80
9 1" Cu Tubing**	8"	\$1.30
10 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	\$7.99
Return Piping		
11 Shutoff Valve, 1" IPS, Wat LFFBV-3C	1	\$12.24
12 1" Male Adapter	1	\$4.57
13 1" Cu Tubing**	3"	\$0.49
14 1" 90 Deg. Elbow	1	\$2.80
15 1" Cu Tubing**	72.25"	\$11.74
16 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	\$7.99
<b>Total Cost</b>		<b>\$193.12</b>

NOTE: Material costs are typical contractor prices as of 03/15/2016.

\*3/4" Cu Tubing at \$1.65/ Ft type L      \*1" Cu Tubing at \$2.48/ Ft. type L  
 \*\*3/4" Cu Tubing at \$1.21/ Ft. type M      \*\*1" Cu Tubing at \$1.95/ Ft. type M

**TOTAL MATERIAL COSTS: \$227.12**

**TOTAL MATERIAL COSTS: \$292.96**

# Heat-Flo

HEATING PRODUCTS

## INDIRECT WATER HEATER PIPING COMPARISON: 80-Gallon Unit

Saves over \$100 on materials and at least 25% on labor.

### Indirect Water Heater Piping Comparison Example

#### Assumptions:

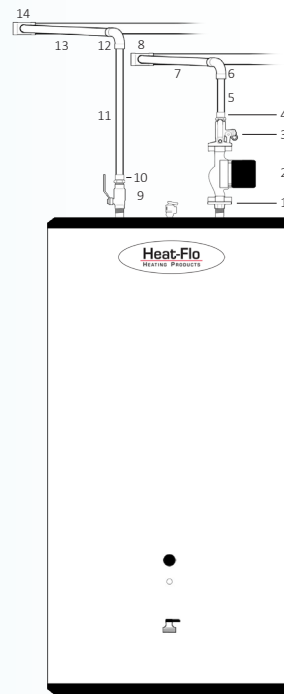
- The installation is a typical residential installation in a basement. The installing contractor does not want to get on his hands and knees and connect piping to fittings that are low on the tank, and does not want to run piping along the floor.
- The domestic cold and hot water are piped to floor joints that are 78" off the floor.
- The boiler supply and return headers are 66" and 72" off the floor, either hanging from the floor joists or mounted on the wall behind the equipment.
- The top connect unit is a Heat-Flo indirect with easy-to-install piping on top. The T+P valve and the drain valve are both factory-installed.
- The side-connect unit is typical of most side-connect units with fittings low on the tank and require the T+P valve and the drain valve to be installed with extra "do-it-yourself" parts.
- Installing a Heat-Flo unit vs. a typical side-connect unit saves \$101.43 on material costs. In addition, the top-connect unit requires 25% less threaded joints, solder joints, and tube cuts.

### Heat-Flo HF-80 Indirect Water Heater

#### Domestic Piping

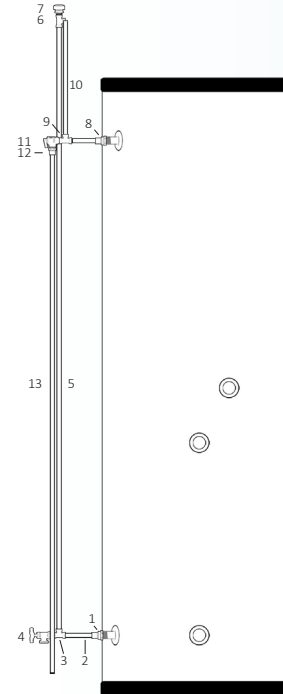


#### Boiler Piping

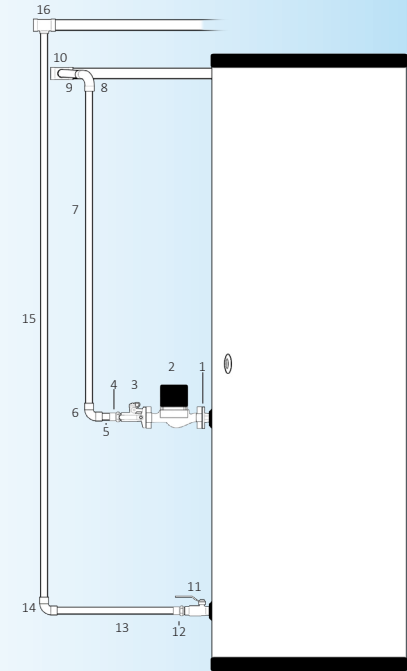


### Typical Side-Connect Indirect Water Heater

#### Domestic Piping



#### Boiler Piping



#### Heat-Flo HF-80 Indirect

##### Cold Piping

	QTY.	Cost
1 1" Female Adapter	1	\$5.33
2 1" Cu Tubing**	24"	\$4.96
3 Drain Valve (Factory-Installed)	1	\$0.00
4 1" Cu Tee (C X F X C)	1	\$23.62
5 Watts LFN36M1 1/2" Vacuum Relief	1	\$13.79

##### Hot Piping

6 1" Female Adapter	1	\$5.33
7 1" Cu Tubing**	24"	\$4.96

##### T & P Valve Piping

8 T & P Valve (Factory-Installed)	0	\$0.00
9 3/4" Male Adapter	1	\$1.79
10 3/4" Cu Tubing**	14"	\$1.41
11 3/4" 90 deg. Elbow	1	\$1.14
12 3/4" Cu Tubing**	48"	\$4.84

Dom. Piping \$67.17

##### Supply Piping

	QTY.	Cost
1 Taco 110-252F 1" Flange	0.5	\$5.06
2 Pump, Taco 007-F5-71FC	1	\$85.07
3 Shutoff w/ Purge, Webstone 50414	1	\$34.28
4 1" Male Adapter	1	\$4.57
5 1" Cu Tubing**	4.5"	\$0.73
6 1" 90 Deg. Elbow	1	\$2.80
7 1" Cu Tubing**	16"	\$2.60
8 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	\$7.99

##### Return Piping

9 Shutoff Valve, 1" IPS, Wat LFFBV-3C	1	\$12.24
10 1" Male Adapter	1	\$4.57
11 1" Cu Tubing**	12"	\$1.95
12 1" 90 Deg. Elbow	1	\$2.80
13 1" Cu Tubing**	10"	\$1.63
14 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	\$7.99

Boiler Piping \$174.28

**TOTAL MATERIAL COSTS: \$241.45**

#### Typical Side-Connect Indirect

##### Cold Piping

	QTY.	Cost
1 1C X 1-1/2 F Female Adapter	1	\$26.46
2 1" Cu Tubing**	3"	\$0.62
3 1" Cu Tee (C X F X C)	1	\$12.64
4 Drain Valve	1	\$7.25
5 1" Cu Tubing**	71.25"	\$14.73
6 1" 90 Deg. Elbow	1	\$12.64
7 Watts LFN36M1 1/2" Vacuum Relief	1	\$13.79

##### Hot Piping

7 1C X 1-1/2 F Female Adapter	1	\$26.46
8 1" Cu Tubing**	3"	\$0.62
9 1" Cu Tee (C X F X C)	1	\$12.64
10 1" Cu Tubing**	13.25"	\$2.74

##### T&P Piping

11 T&P Valve (Watts 100XL8)	1	\$15.29
12 3/4" Male Adapter	1	\$1.79
13 3/4" Cu Tubing**	58.75"	\$5.92

Dom. Piping \$153.59

##### Supply Piping

	QTY.	Cost
1 Taco 110-252F 1" Flange	0.5	\$5.06
2 Pump, Taco 007-F5-71FC	1	\$85.07
3 Shutoff w/ Purge, Webstone 50414	1	\$34.28
4 1" Male Adapter	1	\$4.57
5 1" Cu Tubing**	3"	\$0.49
6 1" 90 Deg. Elbow	1	\$2.80
7 1" Cu Tubing**	36"	\$5.85
8 1" 90 Deg. Elbow	1	\$2.80
9 1" Cu Tubing**	8"	\$1.30
10 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	\$7.99

##### Return Piping

11 Shutoff Valve, 1" IPS, Wat LFFBV-3C	1	\$12.24
12 1" Male Adapter	1	\$4.57
13 1" Cu Tubing**	3"	\$0.49
14 1" 90 Deg. Elbow	1	\$2.80
15 1" Cu Tubing**	65.5"	\$10.64
16 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	\$7.99

Boiler Piping \$188.94

**TOTAL MATERIAL COSTS: \$342.53**

NOTE: Material costs are typical contractor prices as of 03/15/2016.

\*3/4" Cu Tubing at \$1.65/ Ft. type L      \*1" Cu Tubing at \$2.48/ Ft. type L

\*\*3/4" Cu Tubing at \$1.21/ Ft. type M      \*\*1" Cu Tubing at \$1.95/ Ft. type M