

# Heat-Flo

HEATING PRODUCTS

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

Saves over CAD 85 on materials and at least 25% on labor.

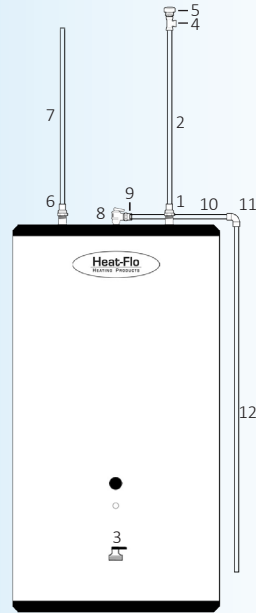
### Indirect Water Heater Piping Comparison Example

#### Assumptions:

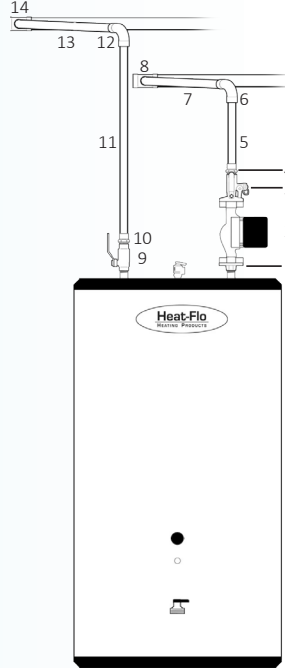
- The installation is a typical residential installation in a basement. The installing contractor does not want to get on his hands and knees and connect piping to fittings that are low on the tank, and does not want to run piping along the floor.
- The domestic cold and hot water are piped to floor 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 CAD 85.60 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

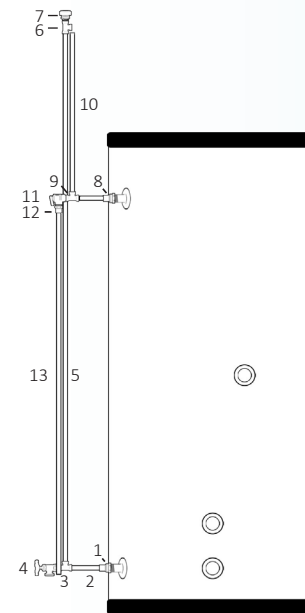


Boiler Piping

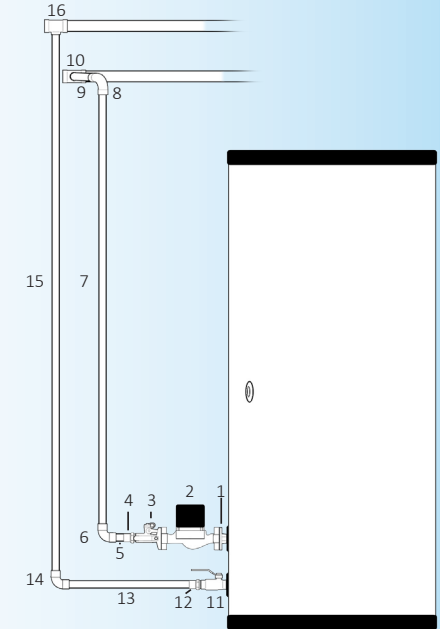


### Typical Side-Connect Indirect Water Heater

Domestic Piping



Boiler Piping



#### Heat-Flo HF-40 Indirect

Cold Piping	QTY.	Cost
1 3/4" Female Adapter	1	CAD 3.02
2 3/4" Cu Tubing*	34"	CAD 6.08
3 Drain Valve (Factory-Installed)	1	CAD 0.00
4 3/4" Cu Tee (C X F X C)	1	CAD 16.43
5 Watts 1/2" Vacuum Relief	1	CAD 17.93

Hot Piping	QTY.	Cost
6 3/4" Female Adapter	1	CAD 3.02
7 3/4" Cu Tubing*	34"	CAD 6.08

T & P Valve Piping	QTY.	Cost
8 T & P Valve (Factory-Installed)	0	CAD 0.00
9 3/4" Male Adapter	1	CAD 2.33
10 3/4" Cu Tubing**	11"	CAD 1.44
11 3/4" 90 deg. Elbow	1	CAD 1.48
12 3/4" Cu Tubing**	38"	CAD 4.98

**Total Cost** CAD 62.78

Supply Piping	QTY.	Cost
1 Taco 110-252F 1" Flange	0.5	CAD 6.58
2 Pump, Taco 007-F5-71FC	1	CAD 110.59
3 Shutoff w/ Purge, Webstone 50414	1	CAD 44.56
4 1" Male Adapter	1	CAD 5.94
5 1" Cu Tubing**	14.5"	CAD 3.06
6 1" 90 Deg. Elbow	1	CAD 3.64
7 1" Cu Tubing**	16"	CAD 3.38
8 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	CAD 10.39

Return Piping	QTY.	Cost
9 Shutoff Valve, 1" IPS, Wat LFFBV-3C	1	CAD 15.91
10 1" Male Adapter	1	CAD 5.94
11 1" Cu Tubing**	28"	CAD 5.92
12 1" 90 Deg. Elbow	1	CAD 3.64
13 1" Cu Tubing**	12"	CAD 2.54
14 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	CAD 10.39

**Total Cost** CAD 232.47

**TOTAL MATERIAL COSTS: CAD 295.25**

#### Typical Side-Connect Indirect

Cold Piping	QTY.	Cost
1 3/4" Female Adapter	1	CAD 3.02
2 3/4" Cu Tubing*	3"	CAD 0.54
3 3/4" Cu Tee (C X F X C)	1	CAD 16.43
4 Drain Valve	1	CAD 9.43
5 3/4" Cu Tubing**	72"	CAD 12.87
6 3/4" Cu Tee (C X F X C)	1	CAD 16.43
7 Watts 1/2" Vacuum Relief	1	CAD 17.93

Hot Piping	QTY.	Cost
7 3/4" Female Adapter	1	CAD 3.02
8 3/4" Cu Tubing*	3"	CAD 0.54
9 3/4" Cu Tee (C X F X C)	1	CAD 16.43
10 3/4" Cu Tubing*	32"	CAD 5.72

T&P Piping	QTY.	Cost
11 T&P Valve (Watts 100XL8)	1	CAD 19.88
12 3/4" Male Adapter	1	CAD 2.33
13 3/4" Cu Tubing**	40"	CAD 5.24

**Total Cost** CAD 129.79

Supply Piping	QTY.	Cost
1 Taco 110-252F 1" Flange	0.5	CAD 6.58
2 Pump, Taco 007-F5-71FC	1	CAD 110.59
3 Shutoff w/ Purge, Webstone 50414	1	CAD 44.56
4 1" Male Adapter	1	CAD 5.94
5 1" Cu Tubing**	3"	CAD 0.63
6 1" 90 Deg. Elbow	1	CAD 3.64
7 1" Cu Tubing**	55"	CAD 11.62
8 1" 90 Deg. Elbow	1	CAD 3.64
9 1" Cu Tubing**	8"	CAD 1.69
10 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	CAD 10.39

Return Piping	QTY.	Cost
11 Shutoff Valve, 1" IPS, Wat LFFBV-3C	1	CAD 15.91
12 1" Male Adapter	1	CAD 5.94
13 1" Cu Tubing**	3"	CAD 0.63
14 1" 90 Deg. Elbow	1	CAD 3.64
15 1" Cu Tubing**	72.25"	CAD 15.26
16 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	CAD 10.39

**Total Cost** CAD 251.06

**TOTAL MATERIAL COSTS: CAD 380.85**

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

\*3/4" Cu Tubing at CAD 2.15/ Ft type L    \*\*1" Cu Tubing at CAD 3.22/ Ft. type L

\*\*3/4" Cu Tubing at CAD 1.57/ Ft. type M    \*\*\*1" Cu Tubing at CAD 2.54/ Ft. type M

# Heat-Flo

HEATING PRODUCTS

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

Saves over CAD 125 on materials and at least 25% on labor.

### Indirect Water Heater Piping Comparison Example

#### Assumptions:

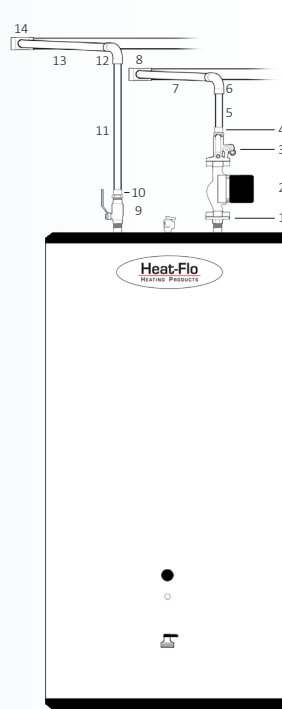
- The installation is a typical residential installation in a basement. The installing contractor does not want to get on his hands and knees and connect piping to fittings that are low on the tank, and does not want to run piping along the floor.
- The domestic cold and hot water are piped to floor 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 CAD 126.40 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

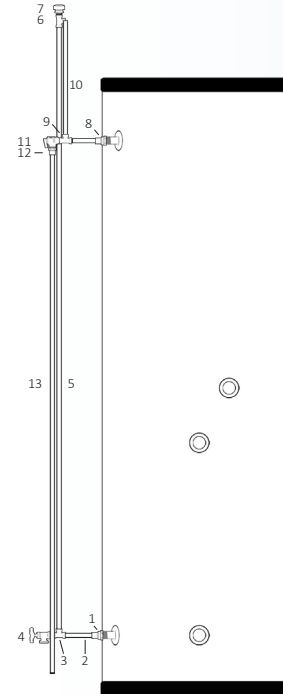


#### Boiler Piping

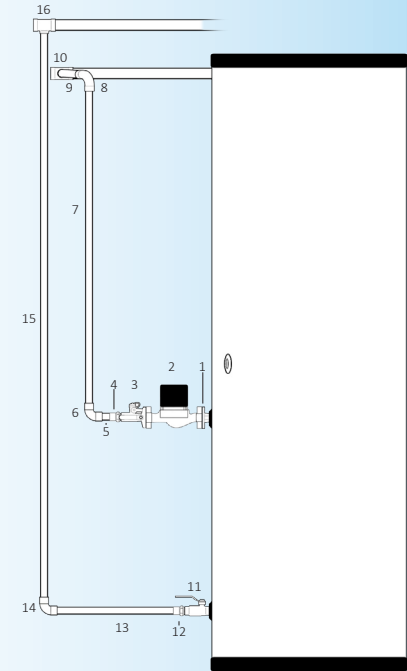


### Typical Side-Connect Indirect Water Heater

#### Domestic Piping



#### Boiler Piping



#### Heat-Flo HF-80 Indirect

##### Cold Piping

	QTY.	Cost
1" Female Adapter	1	CAD 6.93
1" Cu Tubing**	24"	CAD 6.45
Drain Valve (Factory-Installed)	1	CAD 0.00
1" Cu Tee (C X F X C)	1	CAD 30.71
Watts LFN36M1 1/2" Vacuum Relief	1	CAD 17.93

##### Hot Piping

1" Female Adapter	1	CAD 6.93
1" Cu Tubing**	24"	CAD 6.45

##### T & P Valve Piping

T & P Valve (Factory-Installed)	0	CAD 0.00
3/4" Male Adapter	1	CAD 2.33
3/4" Cu Tubing**	14"	CAD 1.84
3/4" 90 deg. Elbow	1	CAD 1.48
1 3/4" Cu Tubing**	48"	CAD 6.29

Dom. Piping CAD 87.32

##### Supply Piping

	QTY.	Cost
1 Taco 110-252F 1" Flange	0.5	CAD 6.58
2 Pump, Taco 007-F5-71FC	1	CAD 110.59
3 Shutoff w/ Purge, Webstone 50414	1	CAD 44.56
4 1" Male Adapter	1	CAD 5.94
5 1" Cu Tubing**	4.5"	CAD 0.95
6 1" 90 Deg. Elbow	1	CAD 3.64
7 1" Cu Tubing**	16"	CAD 3.38
8 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	CAD 10.39

##### Return Piping

9 Shutoff Valve, 1" IPS, Wat LFFBV-3C	1	CAD 15.91
10 1" Male Adapter	1	CAD 5.94
11 1" Cu Tubing**	12"	CAD 2.54
12 1" 90 Deg. Elbow	1	CAD 3.64
13 1" Cu Tubing**	10"	CAD 2.11
14 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	CAD 10.39

Boiler Piping CAD 226.56

**TOTAL MATERIAL COSTS: CAD 318.88**

#### Typical Side-Connect Indirect

##### Cold Piping

	QTY.	Cost
1 1C X 1-1/2 F Female Adapter	1	CAD 34.40
2 1" Cu Tubing**	3"	CAD 0.81
3 1" Cu Tee (C X F X C)	1	CAD 16.43
4 Drain Valve	1	CAD 9.43
5 1" Cu Tubing**	71.25"	CAD 19.14
6 1" Cu Tee (C X F X C)	1	CAD 16.43
7 Watts LFN36M1 1/2" Vacuum Relief	1	CAD 17.93

##### Hot Piping

7 1C X 1-1/2 F Female Adapter	1	CAD 34.40
8 1" Cu Tubing**	3"	CAD 0.81
9 1" Cu Tee (C X F X C)	1	CAD 16.43
10 1" Cu Tubing**	13.25"	CAD 3.56

##### T&P Piping

11 T&P Valve (Watts 100XL8)	1	CAD 19.88
12 3/4" Male Adapter	1	CAD 2.33
13 3/4" Cu Tubing**	58.75"	CAD 7.70

Dom. Piping CAD 199.66

##### Supply Piping

	QTY.	Cost
1 Taco 110-252F 1" Flange	0.5	CAD 6.58
2 Pump, Taco 007-F5-71FC	1	CAD 110.59
3 Shutoff w/ Purge, Webstone 50414	1	CAD 44.56
4 1" Male Adapter	1	CAD 5.94
5 1" Cu Tubing**	3"	CAD 0.63
6 1" 90 Deg. Elbow	1	CAD 3.64
7 1" Cu Tubing**	36"	CAD 7.61
8 1" 90 Deg. Elbow	1	CAD 3.64
9 1" Cu Tubing**	8"	CAD 1.69
10 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	CAD 10.39

##### Return Piping

11 Shutoff Valve, 1" IPS, Wat LFFBV-3C	1	CAD 15.91
12 1" Male Adapter	1	CAD 5.94
13 1" Cu Tubing**	3"	CAD 0.63
14 1" 90 Deg. Elbow	1	CAD 3.64
15 1" Cu Tubing**	65.5"	CAD 13.84
16 1-1/4" X 1-1/4" X 1" Tee (C X C X C)	1	CAD 10.39

Boiler Piping CAD 245.62

**TOTAL MATERIAL COSTS: CAD 445.28**

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

\*3/4" Cu Tubing at CAD 2.15/ Ft type L    \*1" Cu Tubing at CAD 3.22/ Ft. type L

\*\*3/4" Cu Tubing at CAD 1.57/ Ft. type M    \*\*1" Cu Tubing at CAD 2.54/ Ft. type M