

Low Intensity Heater Accessory Instruction Sheet

U-Tube Installation Instructions & Specifications (P/N: TF1B)

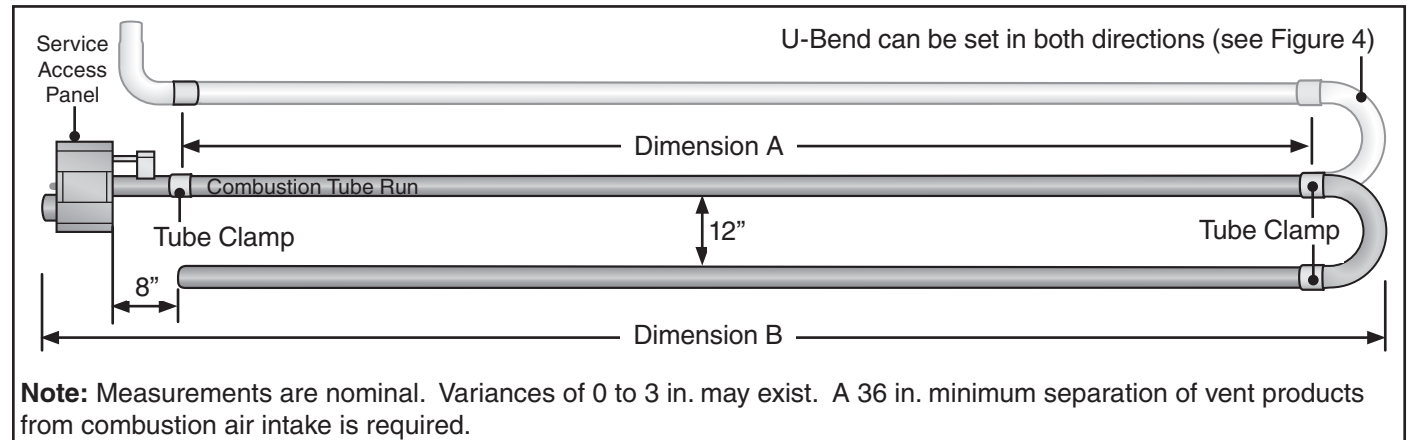
Note: For use with MP, HL3, DX3, DX3L, DET3 or DES3 Series models.

Parts List

- (1) 180° U-tube Fitting (P/N: TF1B)
- (1) 4 in. Tube Clamp (P/N: TP-21B)
- (1) 4 in. Wire Hanger (P/N: TP-19B)
- (2) Reflector End Caps (P/N: TP-105)
- (8) Reflector End Cap Clips (P/N: TP-106)

Note: Reflector fitting (P/N: RU) is not included. Reference warning below.

Figure 1 • Dimensions for Heater Installed with U-tube Fitting (P/N: TF1B)



IMPORTANT! Refer to alternate instructions supplied with the U-tube fitting (P/N: TF1B) regarding baffle assembly instructions. One section of baffle **must** be removed if heater is installed with 4 in. O.D. U-tube accessory fitting (P/N: TF1B).

Chart 1 • Minimum Distance From Burner Control Box to U-Bend (P/N: TF1B)

Model BTU/H Range	Dimension A*
50,000 to 100,000	10 ft.
110,000 to 125,000	15 ft.
130,000 to 175,000	20 ft.
200,000	25 ft.

* When installing a TF1B, the combustion tube run must be greater than or equal to 1/2 the length of the unit (Dimension B).

Chart 2 • Overall Dimensions for Heaters Configured with U-Bend (P/N: TF1B)

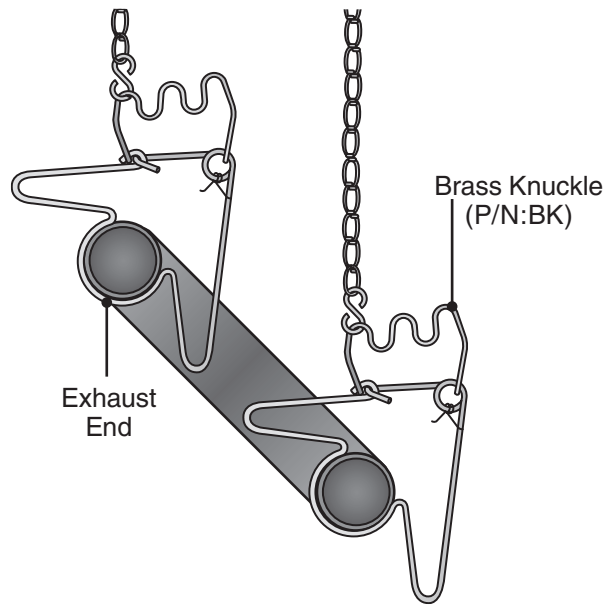
Tube Length	Dimension B	Notes**
20 ft.	13'-1" / 157"	N/A
30 ft.	17'-9" / 213"	Requires P/N: 5EA-SUB**
40 ft.	22'-9" / 273"	N/A
50 ft.	27'-5" / 329"	Requires P/N 5EA-SUB**
60 ft.	32'-5" / 389"	N/A
70 ft.	37'-1" / 445"	Requires P/N 5EA-SUB**
80 ft.	42'-1" / 505"	N/A

** When using the TF1B "U-bend" accessory fitting on 30 ft., 50 ft. or 70 ft. heater models, the 5EA-SUB accessory package is required and may only be ordered at the time of heater production. This option substitutes (1) 10 ft. tube and reflector section with (2) 5 ft. tube and reflector sections. Field corrections require (2)TR-60 packages.

⚠ WARNING

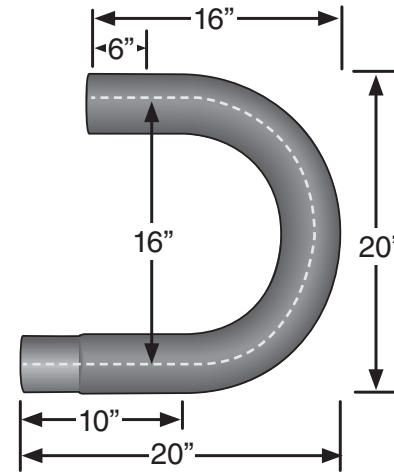
The top Clearance to Combustibles is 18 in. when a U-tube fitting (P/N: TF1B) is installed without a reflector cover.

Figure 2 • 45° Angle Mounting



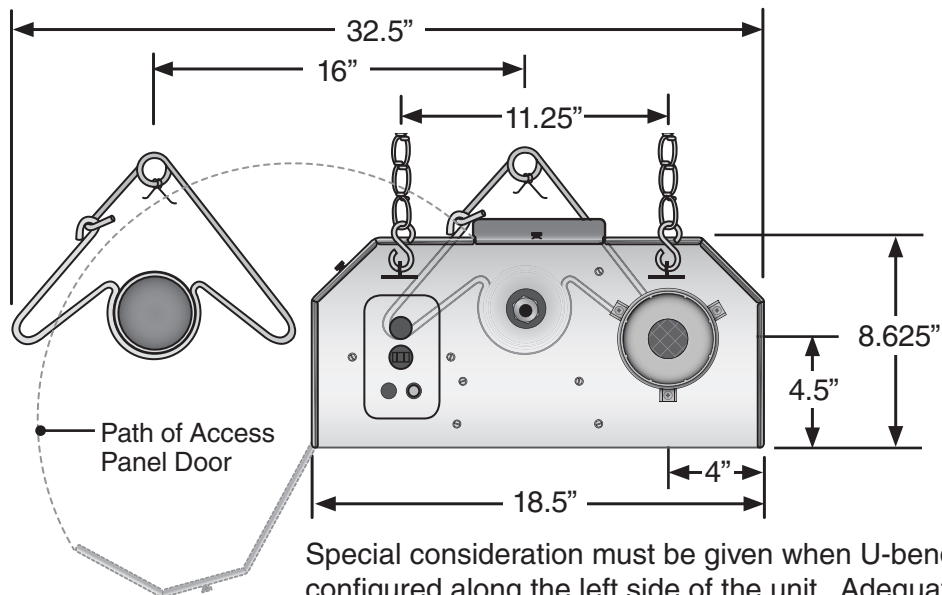
Note: Heaters configured with a TF1B can be mounted at a 15, 30 or 45 degree angle with two suspension points, using two Brass Knuckles (P/N: BK), #1 double-loop chains and S-hooks.

Figure 3 • TF1B U-tube Dimensions



Note: When mounting a heater configured with a U-tube fitting (P/N: TF1B) on a 45° angle, the exhaust end of the heater must be placed higher than the burner end. The burner control box must remain horizontal/level.

Figure 4 • Burner Control Box Dimensions - End View



Special consideration must be given when U-bend is configured along the left side of the unit. Adequate spacing must be provided for the service access panel.

Figure 5 • Burner Control Box Dimensions - Side View

