# BIG ASS FANS HEATERS REQUIRED CLEARANCES TO COMBUSTIBLES

This document is intended for reference only. The heater must be installed according to the instructions provided in the install guide. All safety guidelines must be followed. If heater installation does not meet these guidelines, contact Big Ass Fans to determine the most appropriate mounting option.

## **Big Ass Fans IRH**

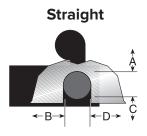
BAF IRH heaters use gas-fired tubes to directly warm occupants and objects via radiant heat transfer. To prevent serious fire hazards, heaters must be mounted at the following minimum distances from combustible objects, including other Big Ass Fans products and building components. The clearance guidelines are also located on the burner label and in the install guide.

#### **General Guidelines**

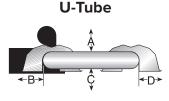
- In locations used for the storage of combustible materials, post signs near the thermostat to specify the maximum stacking height to maintain required clearances from the heater to the combustibles.
- If the radiant tubes must pass through the building structure, ensure there is adequate sleeving and firestop to prevent scorching and/or fire hazard.
- The clearances listed below represent a surface temperature of 90 °F (32 °C) above room temperature. Building materials with a low heat tolerance (plastics, vinyl siding, canvas, tri-ply, etc.) may be subject to degradation. It is the customer's responsibility to ensure that adjacent materials are protected from degradation.

#### **Minimum Distances to Combustibles**

Dimensions shown below are from the surfaces of all tubes and couplings. Clearances B, C, and D can be reduced by 50% after 25 ft (7.5 m) of tubing downstream from where the burner connects to the burner tube. See the install guide for additional guidelines.



Straight Configuration					
	IRH 80 IRH 125 IRH 150 IRH 200				
Α	6 in. (16 cm)	6 in. (16 cm)	6 in. (16 cm)	8 in. (21 cm)	
В	38 in. (97 cm)	46 in. (117 cm)	50 in. (127 cm)	52 in. (133 cm)	
С	65 in. (166 cm)	76 in. (194 cm)	79 in. (201 cm)	96 in. (244 cm)	
D	38 in. (97 cm)	46 in. (117 cm)	50 in. (127 cm)	52 in. (133 cm)	



	U-Tube Configuration					
IRH 80 IRH 125 IRH 150 IRH 200						
Α	6 in. (16 cm)	6 in. (16 cm)	6 in. (16 cm)	8 in. (21 cm)		
В	38 in. (97 cm)	46 in. (117 cm)	50 in. (127 cm)	54 in. (138 cm)		
С	68 in. (173 cm)	78 in. (199 cm)	83 in. (211 cm)	102 in. (260 cm)		
D	37 in. (94 cm)	43 in. (110 cm)	47 in. (120 cm)	51 in. (130 cm)		



## **Big Ass Fans Unit Heaters**

BAF Unit Heaters ignite natural gas in the unit's burner assembly. The flames heat up the heat exchanger and exhaust out the installed venting. To prevent serious fire hazards, heaters must be mounted at the following minimum distances from combustible objects, including other Big Ass Fans products and building components. The clearance guidelines are also located in the install guide.

#### **General Guidelines and Install Location**

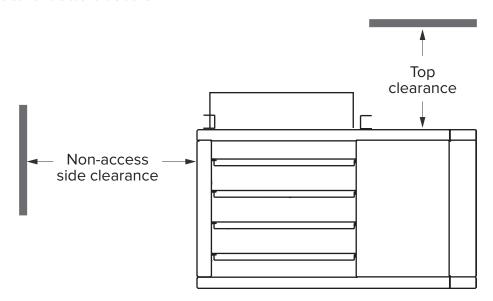
- In locations used for the storage of combustible materials, post signs near to specify the maximum stacking height to maintain required clearances from the heater to the combustibles.
- The clearances listed below represent a surface temperature of 90 °F (32 °C) above room temperature. Building materials with a low heat tolerance (plastics, vinyl siding, canvas, tri-ply, etc.) may be subject to degradation. It is the customer's responsibility to ensure that adjacent materials are protected from degradation.
- Unit heaters should be located 8 to 12 ft (2.4 to 3.7 m) above the floor and should always be arranged to blow toward or along exposed wall surfaces if possible. Where two or more units are installed in the same room, a general scheme of air circulation should be maintained for best results.
- Suspended heaters are most effective when located as close to the working zone as possible. However, avoid directing the discharged air directly on the room occupants.
- Partitions, columns, counters, or other obstructions should be taken into consideration when locating the unit heater so that a minimum quantity of airflow will be deflected by such obstacles.
- When the heaters are located in the center of the space, the air should be discharged toward the exposed walls. In large areas, heaters should be installed to discharge air along exposed walls with extra units provided to discharge air in toward the center of the area.
- Where infiltration of cold air is excessive, such as at entrance doors and shipping doors, install the heater so that it discharges directly toward the source of cold air from a distance of 15 to 20 ft (4.6 to 6.1 m).

#### **Minimum Distances to Combustibles**

Input (kBtu/h)	Тор	Flue Connector	Access Panel <sup>1</sup>	Non-Access Side	Bottom <sup>2</sup>	Rear <sup>3</sup>
45 to 125	6 in. (152 mm)	6 in. (152 mm)	18 in. (457 mm)	24 in. (610 mm)	1 in. (25 mm)	18 in. (457 mm)
150 to 400	14 in. (356 mm)	6 in. (152 mm)	18 in. (457 mm)	24 in. (610 mm)	1 in. (25 mm)	18 in. (457 mm)

<sup>&</sup>lt;sup>1</sup> Access panel clearance is required for service clearance to controls.

<sup>&</sup>lt;sup>3</sup> Rear clearance is measured from the back of the blower.





<sup>&</sup>lt;sup>2</sup> Suspend the heater so that the bottom is a minimum of 5 ft (1.5 m) above the floor.

# **Big Ass Fans Electric Heaters**

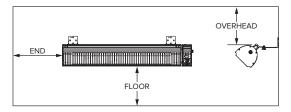
BAF electric infrared heaters produce radiant heat that directly warms occupants and objects. To prevent serious fire hazards, heaters must be mounted at the following minimum distances from combustible objects, including other Big Ass Fans products and building components. The clearance guidelines are also located on the product nameplate and in the install guide.

#### **General Guidelines**

- Combustible materials such as furniture, pillows, bedding, papers, clothes, curtains, etc. should be kept at least 6 ft (1.8 m) from the front of the heater and away from the sides and rear.
- Do not direct the radiant part of the heater toward the ceiling.
- The heater must not be recessed.
- See the install guide for additional guidelines.

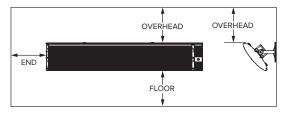
#### Obsidian® Wall Mount Minimum Distances to Combustibles

Model	Floor	Overhead	End
BAFCF15120B	6 ft. 7 in. (2 m)	12 in. (305 mm)	18 in. (457 mm)
BAFCF30240B	0.6 (2.4)	42 :- (205)	40 in (457 mass)
BAFCF60240B	8 ft (2.4 m)	12 in. (305 mm)	18 in. (457 mm)



### **Vesper® Wall Mount Minimum Distances to Combustibles**

Floor (USA)	Floor (Canada)	Overhead	End
6 ft 7 in.	8 ft	8 in.	18 in.
(2 m)	(2.4 m)	(203 mm)	(457 mm)



## **Vesper Ceiling Mount Minimum Distances to Combustibles**

Floor (USA)	Floor (Canada)	Overhead	End	Side
6 ft 7 in.	8 ft	4 in.	18 in.	24 in.
(2 m)	(2.4 m)	(102 mm)	(457 mm)	(610 mm)

