HIGH INTENSITY GAS-FIRED INFRARED HEATERS

Concentrate heat only where needed with NDUSTRIA™ energy efficiency, high-intensity infrared heaters

- Compact design with honeycomb shape ceramic provides a higher concentration of radiant heat
- Inputs from 30,000 to 160,000 Btu/hr
- Can be mounted from 0° 35°
- 100% gas shut-off for safety control
- Industrial grade aluminized steel construction for increased longevity
- Ideal for spot heating or areas of high heat-loss
- Ideal for replacement of existing gas-fired high intensity heaters
- Must be mechanically or gravity vented





Heater Construction

- Modular, heavy duty aluminized steel constructed burner head and venturi
- Stainless steel ceramic tile retainer assembly
- Corrosion resistant construction

Radiant Surface

- Honeycomb shape design ceramic ideal for maximizing radiant output concentration of radiant heat
- Surface temperature up to 1,800° F
- 5-Year Limited Warranty on Emitter Tiles

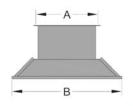
Reflector

- Highly reflective aluminum reflectors
- Added bends for increase rigidity

Electrical / Mounting

- Easy-to-install chain mounting
- 120 Volt Electrical Supply (0.4 Amp Draw)

End View Dimensions



Model	А	В	
GG30 GG33 GG35 GG40	9"	15 3/4"	
GG60 GG66 GG70 GG80	14 7/8"	21 5/8"	
GG100 GG120	20 3/4"	27 1/2"	
GG132 GG140 GG160	26 5/8"	33 3/8"	

Mounting Height

NDUSTRIA™ ceramic heaters may be mounted at various heights and angles, according to the results desired. Please consult your NDUSTRIA™ representative for your radiant heating requirements.

Observe all required clearances to combustibles shown above.

Combustion Air and Ventilation

Combustion air and venting requirements for all gas-fired heating equipment must be provided per National Fuel Gas Code NFPA54, CAN B149 or the authority having jurisdiction over the installation. Indirect vented ceramic heaters require a minimum ventilation flow of 4 CFM per 1000 Btu per hour of total installed heater capacity on natural gas by either gravity or power ventilation (4.18 CFM per 1000 Btu per hour on propane).

For more ventilation information, consult the ASHRAE handbooks, local codes, and the Ndustria™ Installation Manual. Building exhaust openings for indirect vented applications always must be located above the level of the heaters and inlet air openings always must be located below the level of the heaters.

For Your Safety

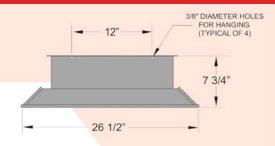
OPERATE Ndustria MINFRARED HEATERS WITH PROPER CARE AND OBSERVE ALL SAFETY PRECAUTIONS. Carefully follow the printed installation, operation, and cleaning intructions furnished with these heaters. Follow the instructions on the nameplate of each heater and use in accordance with National, State, and Local Codes or the authority having jurisdiction. Adequate ventilation always must be provided in accordance with the codes.





Model	Gas	Gas Input Type BTU/HR	Number of Burners	Burner Pressure	Supply F (Water	Minimum Mounting	
	1 ype			(Water Column)	Min	Max	Height (ft)
GG30	NAT	33,000	1	6"	7"	14"	11
GG33	LP	33,000	1	10"	11"	14"	11
GG35	NAT	35,000	1	6"	7"	14"	12
GG40	NAT	40,000	1	6"	7"	14"	12
GG60	NAT	65,000	2	6"	7"	14"	13
GG66	LP	66,000	2	10"	11"	14"	13
GG70	NAT	70,000	2	6"	7"	14"	13
GG80	NAT	80,000	2	6"	7"	14"	14
GG100	NAT	100,000	3	6"	7"	14"	15
GG100	LP	99,000	3	10"	11"	14"	15
GG120	NAT	120,000	3	6"	7"	14"	16
GG132	LP	132,000	4	10"	11"	14"	17
GG140	NAT	140,000	4	6"	7"	14"	17
GG160	NAT	160,000	4	6"	7"	14"	18

Side View Dimensions



Minumum Recommended Mounting Heights						
Model	Horizontal	35° Angle				
GG30 GG33	11'	10'				
GG35 GG40	12'	11'				
GG60 GG66 GG70	13'	12'				
GG80	14'	13'				
GG100	15'	14'				
GG120	16'	15'				
GG132 GG140	17'	16'				
GG160	18'	17'				

Minimum Clearances To Combustibles

		Horizontal		35° Angle				
Model	Si	Sides Cei		Below	Below	Front	Rear (35°)	Angle Mtg.
			Ceiling	Standard Reflector	Standard Reflector	Standard Reflector		(degree)
GG30 GG35 GG33 G	G40	30"	36"	72"	72"	36"	30"	0 min/ 35 max
GG60 GG70 GG66 G	G80	48"	48"	98"	98"	48"	36"	0 min/ 35 max
GG100 GG120		48"	64"	128"	128"	60"	48"	0 min/ 35 max
GG132 GG160 GG14	40	60"	64"	136"	136"	64"	48"	10 min/ 35 max

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