

Eclipse Cross-Flow Recuperators

Model CFR080

Version 1

Parameter		Specification*
Recuperator	Maximum Input	8.0 MM BTU/hr (2350 kW)
	Maximum Exhaust Temperature with No Combustion Air	1800°F (1000°C)
	Maximum Exhaust Temperature with 2,500 scfh Combustion Air	2100°F (1150°C)
	Air Pressure Drop at Maximum Input	7" w.c. (18 mbar)
	Exhaust Pressure Drop at Maximum Input	0.7" w.c. (1.7 mbar)
	Weight of Recuperator	900 lbs (408 kg)
Eductor	Suction at Maximum Input at Eductor Inlet	0.8" w.c. (2 mbar)
	Entrainment Air Volume at Maximum Input	64,000 scfh (1800 Nm ³ /hr)
	Entrainment Air Pressure at Eductor Inlet at Maximum Input	19" w.c. (48 mbar)
	Weight of Eductor	302 lbs (137 kg)

* See Design Guide 530 for application specific operational limitations.

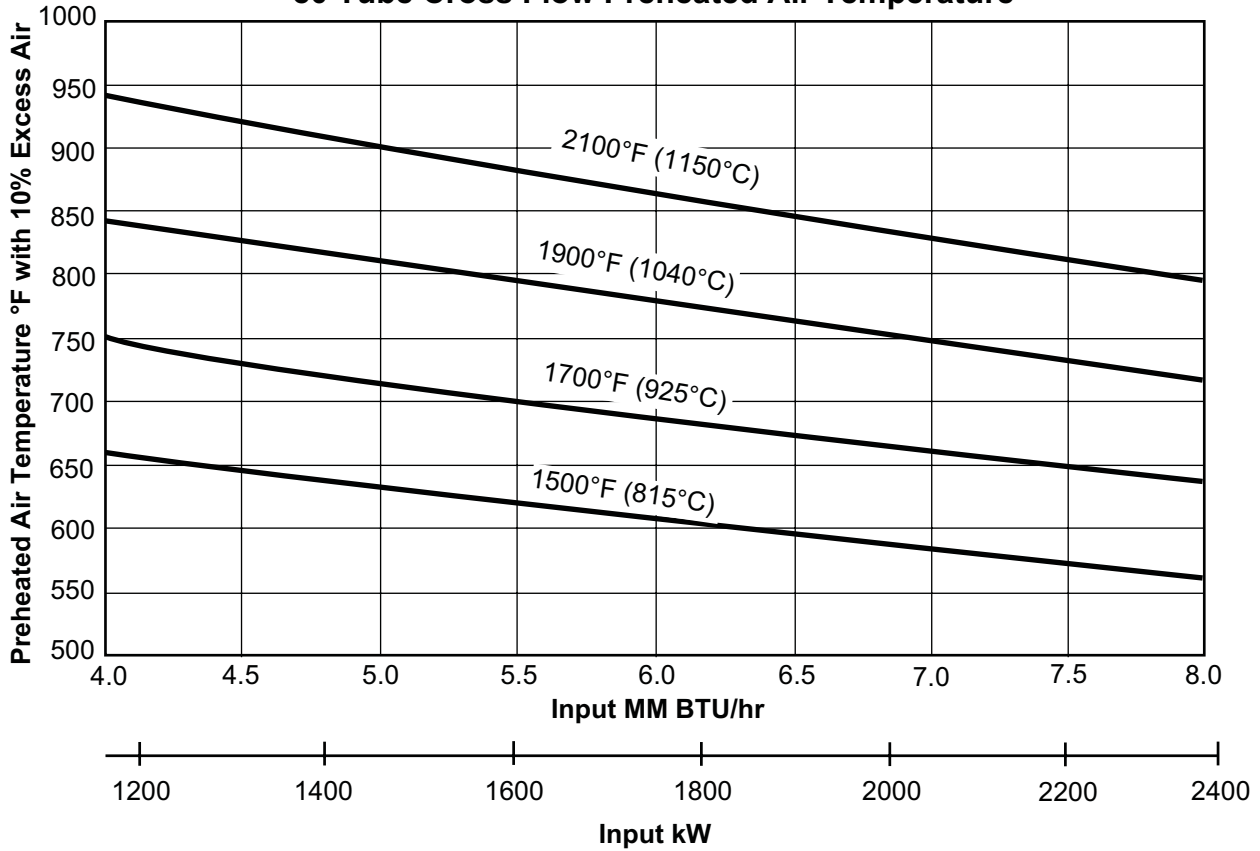
- All inputs based upon gross calorific values.
- Eclipse reserves the right to change the construction and/or configuration of our products at any time without being obligated to adjust earlier supplies accordingly.

Percent Fuel Savings at Given Furnace Exhaust Temperatures and Combustion Air Preheat Temperatures (10% Excess Air)

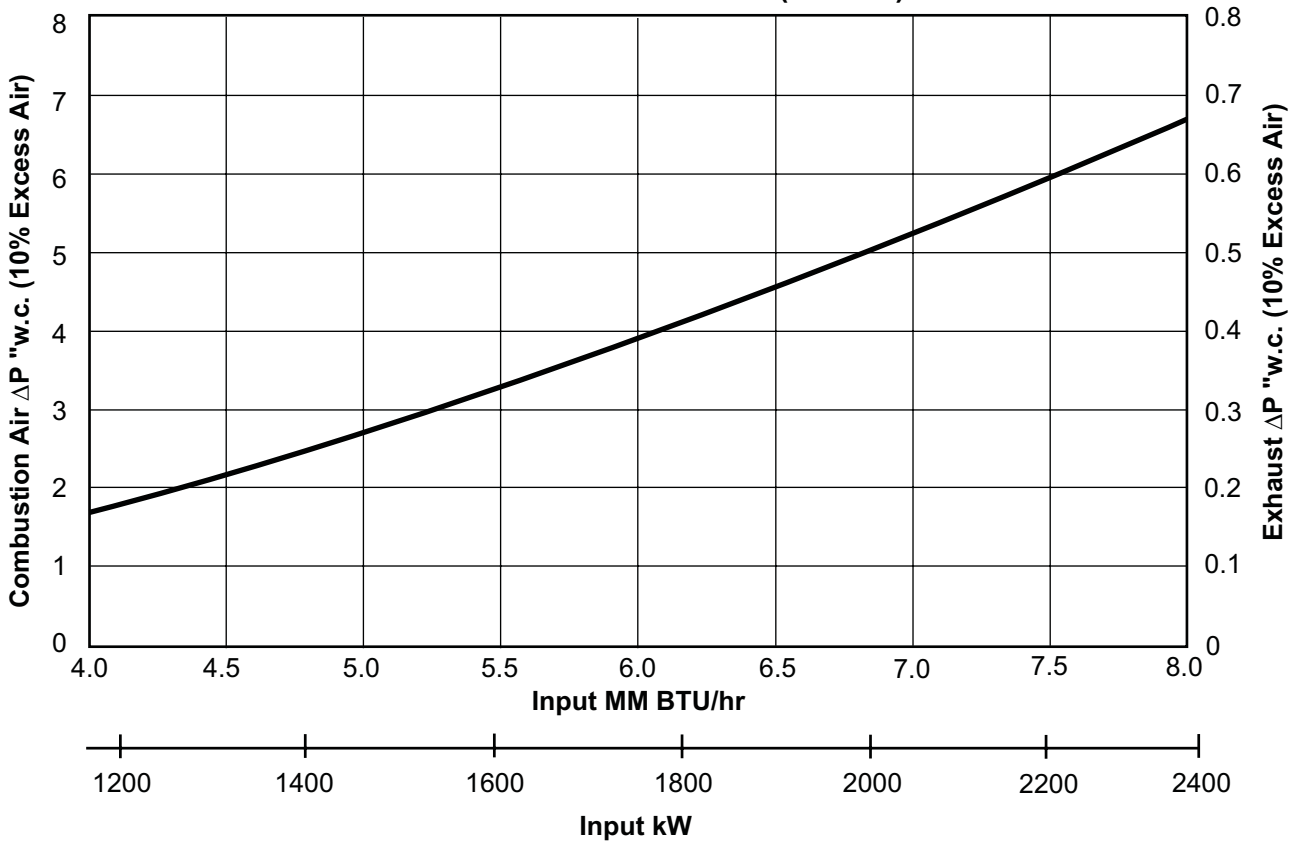
Furnace Exhaust Temperature °F (°C)	Preheated Air Temperature, °F (°C)				
	700 (370)	800 (425)	900 (480)	1000 (540)	1100 (590)
2400 (1315)	29%	32%	35%	38%	41%
2200 (1200)	26%	29%	31%	34%	36%
2000 (1090)	23%	26%	28%	31%	33%
1800 (980)	21%	23%	26%	28%	31%
1600 (870)	19%	22%	24%	26%	28%
1400 (760)	18%	20%	22%	24%	26%
1200 (650)	17%	19%	21%	23%	25%
1000 (540)	15%	18%	20%	-	-

Specifications

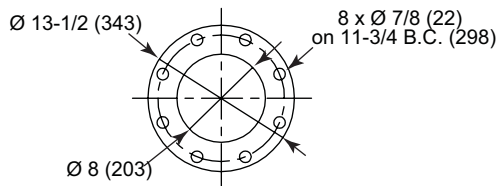
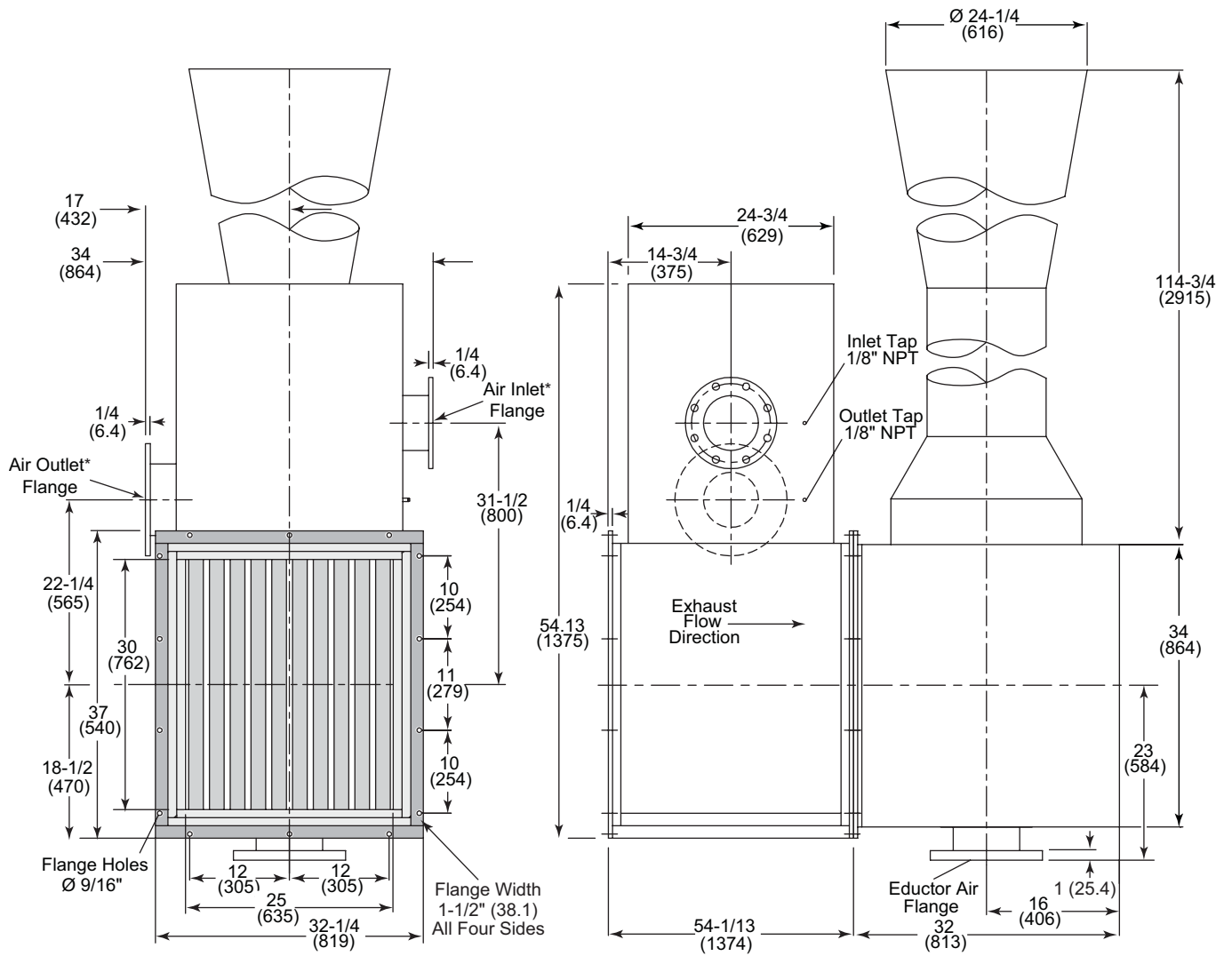
80 Tube Cross Flow Preheated Air Temperature



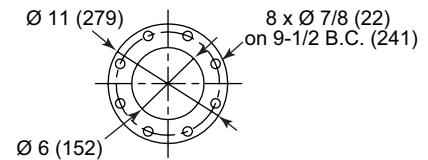
ΔP 80 Tube Cross Flow with 1900°F (1040°C) Exhaust



Dimensions in inches (mm)



AIR OUTLET FLANGE / EDUCTOR AIR FLANGE



AIR INLET FLANGE

* NOTE: The air inlet and outlet can be relocated to the opposite side by reversing the CrossFlow recuperator. This will not affect the recuperator performance.



Offered By:

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