

Eclipse Single-Ended Radiant Tube Burners

Worksheet Edition 7.16

Version 5

Customer P.O. _____
 Customer _____
 Customer Signature _____
 Date _____

Eclipse S.O. / Quote _____
 Eclipse Rep _____
 Eclipse Rep Signature _____
 Date _____

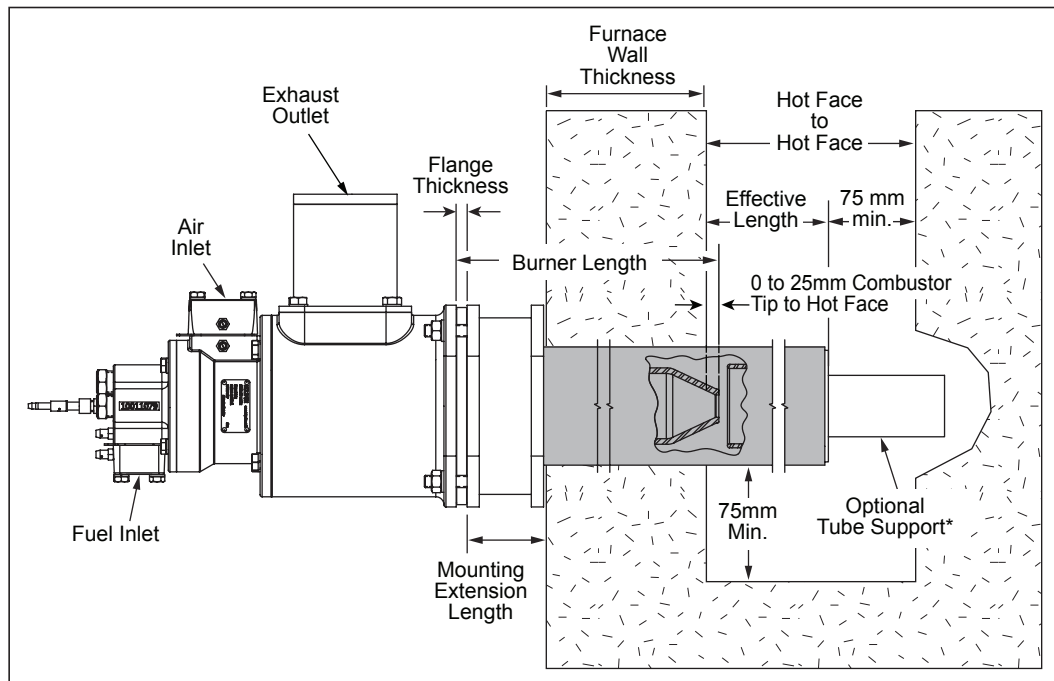


Figure 1.

NOTICE

- Quote # and Revision Level must be provided
- For more information or recommendations see Design Guide 325 or Datasheet 325

1. Hot Face to Hot Face Dimension _____ (mm)
 Less Effective Length _____ (mm)
 = Tube to Wall Gap (75 mm min.) _____ (mm)

2. Burner Length _____ (mm)
 (see corresponding Datasheet 325 for dimensions)
 Less Furnace Wall Thickness _____ (mm)
 Less Flange Thickness _____ (mm)
 = Mounting Extension Length _____ (mm)
 (Mounting extensions are available from 50mm to 250mm in 25mm increments)

3. Chamber Temperature _____ °F
(contact Eclipse for chamber temperatures above 1750°F)

4. Gas Inlet

- 0 90 180 270

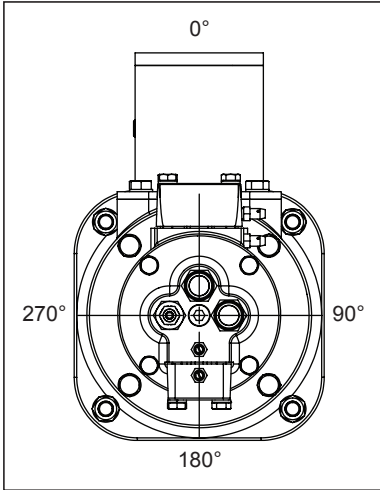
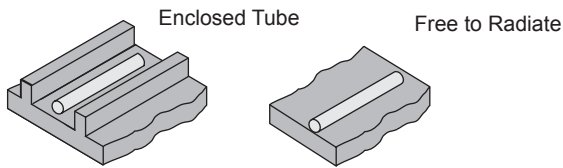


Figure 2.

5. Tube Type

- Enclosed Free



6. Tube Options

- Ceramic Outer Tube
 - Vertical
 - Horizontal
- Metallic Outer Tube
 - Vertical
 - Horizontal
- Optional Tube Support
(for horizontal metallic only)

7. Flux (refer to Figure 3) _____ Btu/h per in²

8. Model

- 450 600 800

9. Surface Area = OD (inches) x 3.142 x

$$\frac{\text{Effective Length (mm)}}{25.4} = \text{_____ in}^2$$

10. Operating Input _____ Btu/h (HHV)

11. Net Tube Output = (Flux) x (Surface Area)
= _____ Btu/h (HHV)

12. Maximum Input (gross) = $\frac{\text{Net Tube Output}}{0.7 \text{ (efficiency estimate)*}}$
= _____ Btu/h

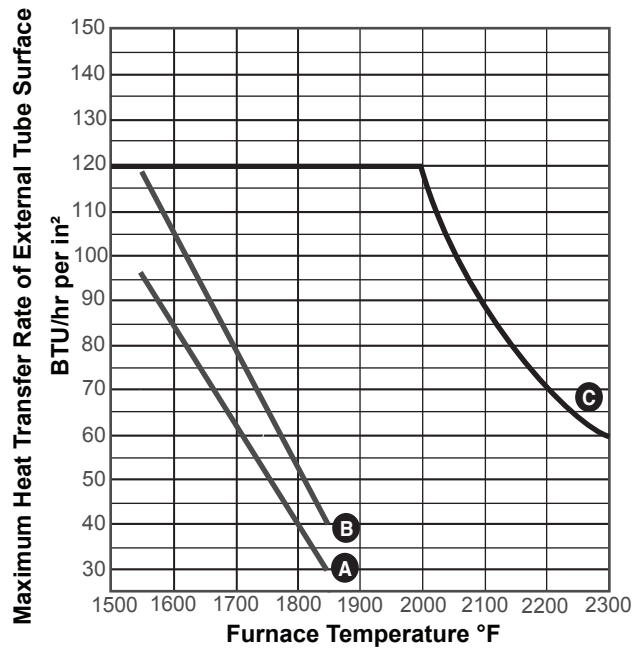
13. Fuel Type

- Natural Gas Other (contact Eclipse)

14. Flame Safety

- None UV Scanner (Natural Gas Only)

*See Datasheet 325 for actual efficiency



- A** Metallic outer tube, enclosed on three sides.
- B** Metallic outer tube, free to radiate.
- C** Ceramic outer tube

Figure 3. Recommended Flux