

## ASTM E162 Radiant Panel Flame Spread Test Apparatus Surface Flammability Tester



# **Description:**

This Radiant Panel Flame Spread Test Apparatus is used to measure and describe the response of materials, products, or assemblies to heat and flame under controlled conditions, but does not by itself incorporate all factors required for fire-hazard or fire-risk assessment of materials, products, or assemblies under actual fire conditions. This machine provides a laboratory procedure for measuring and comparing surface flammability of materials when exposed to a prescribed level of radiant heat energy. Surface flammability is measured by using a vertically mounted propane gas and air fueled radiant heat energy source and a 6 inch by 18 inch test specimen. The Radiant Panel Flame Spread Apparatus measures the surface flammability of building products (ASTM E162) and cellular plastics (ASTM D3675) by using a gas-fired

radiant heat panel. The test result is an index that is determined from the flame spread and heat evolution factors. This index is required in various specifications especially for the mass transit industry (buses and trains).

### Standards:

ASTM E 162: Standard test method for surface flammability of materials using a radiant heat energy source.

ASTM D 3675:Standard Test Method for Surface Flammability of Flexible Cellular Materials Using A Radiant Heat Energy Source

#### Features:

- 1. The Reflector made from cast iron frame, with surface size 305X457mm,working temperature 815°C
- 2. The filter equipped with a fan to supply air to the reflector
- 3. Stainless steel pilot burner assembly, make it fire automatically
- 4. Calibration burner has 1.8mm hole on 16 different angles, and along with the center line.
- 5. To control the surface temperature of the reflector panel, need to set black panel body temperature in the range of 180°Cto 230°C, accuracy of ±5°C,
- 6. Use heat-flow meter(foil disk) to measure the heat radiation condition of radiant panel (0~100kW/m2)
- 7. DAQ(Data Acquisition) system could make test automatically control and measure.

## **Specification:**

Machine size	1,100(W)×900(D)×1,860(H)mm
Control box size	600(W)×750(D)×1600(H)mm
Power	AC 220V, 50/60Hz, 15A
Weight	150kg
Manual	available
Air exhaust	Min 15㎡/min
Tools	propane gas,methane,acetylene, computer