

# THERMOMETRY

## ASTM E162/D3675

### ASTM E162 | ASTM D3675 | UL 94 Radiant Panel Test



#### SCOPE

The ASTM E162/D3675 fire tester is used to measure the surface flammability of materials and products. The specimen is heated by a radiator and then additionally exposed to a flame.

#### PRINCIPLE

The specimen, which is inclined at an angle of 30° to the vertical, is heated by a vertically arranged radiant heater. At the upper edge closer to the radiator surface, the specimen is ignited by a burner.

#### FEATURES

- Gas control and measurement data recording by PC software
- Integrated timer with cable remote control
- Device layout with extensive operator safety
- Pilot flame monitoring of all burners and radiant heaters
- Pneumatic swivel drive pilot burner
- Integrated control cabinet
- Electrical ignition of the radiant heater with automatic start
- Specimen holder holder with linear guide

#### COMPONENTS

- Test bench ASTM E162/D3675 incl. control cabinet, pyrometer and fume stack with 8 Thermocouples
- Specimen holder with backplate
- Calibration board holder with backplate
- PC with preinstalled device software ASTM E162/D3675 and operating system MS Windows 10
- Pilot flame burner ASTM E162 & ASTM D3675
- Calibration burner
- Anemometer
- Manual

#### DIMENSIONS

- Width x depth x height: 1500 mm x 1605/ca. 850 mm\* (Pyrometer unfolded/folded) x 2065 mm\*
- Installation room: Width x depth x height: 2000 mm x 2600 mm x 2315 mm ( Lower edge hood)\*
- Weight: approx. 250 kg\*

#### SUPPLIES

- Electric current 100-230 VAC 50/60 Hz
- Propane / Acetylene / Methane gas, purity  $\geq 2.5$
- Compressed air, oil free

#### FLOW CONTROLLERS & VALVES GASES

- Propane radiant heater: Flow controller electronically operated, 2/2-way solenoid diaphragm valve electric
- Acetylene Pilot flame burner: Flow controller electronically operated, 2/2-way solenoid diaphragm valve electric
- Methane Calibration burner: Flow controller electronically operated, 2/2-way solenoid diaphragm valve electric
- Compressed air: Flow controller electronically operated, Solenoid valve

#### SENSORS

- Thermocouple Type K, Radiant heater
- Thermocouple Type K, Pilot flame burner ASTM E162
- Thermocouple Type K, Pilot flame burner ASTM D3675
- 8 Thermocouples Type K, Fume stack
- Thermocouple Type K, Calibration burner
- Pyrometer radiant heater temperature measurement
- Anemometer handheld

#### TO BE PROVIDED BY THE CUSTOMER

- Fume hood, cross-section min. 662 x 739 mm, with adjustable fan, air velocity approx. 0.5 m/s, height adjustable, lower edge approx. 2315 mm above ground.

#### OPTIONAL ACCESSORIES

- Additional specimen holders
- Pilot flame burners for 3 gases (Acetylene/Propane/Methane)

\* Our products are constantly being further developed. For this reason, the actual dimensions may vary.