

to the radiant panel surface at this point must be 7½ inches $\pm\frac{1}{8}$ (191 mm ± 3). Prior to igniting the radiant panel, ensure that the calorimeter face is clean and that there is water running through the calorimeter.

(2) Ignite the panel. Adjust the fuel/air mixture to achieve 1.5 BTUs/ft²-second $\pm 5\%$ (1.7 Watts/cm² $\pm 5\%$) at the “zero” position. If using an electric panel, set the power controller to achieve the proper heat flux. Allow the unit to reach steady state (this may take

up to 1 hour). The pilot burner must be off and in the down position during this time.

(3) After steady-state conditions have been reached, move the calorimeter 2 inches (51 mm) from the “zero” position (first hole) to position 1 and record the heat flux. Move the calorimeter to position 2 and record the heat flux. Allow enough time at each position for the calorimeter to stabilize. Table 1 depicts typical calibration values at the three positions.

TABLE 1—CALIBRATION TABLE

Position	BTU's/ft ² sec	Watts/cm ²
“Zero” Position	1.5	1.7
Position 1	1.51–1.50–1.49	1.71–1.70–1.69
Position 2	1.43–1.44	1.62–1.63

(4) Open the bottom door, remove the calorimeter and holder fixture. Use caution as the fixture is very hot.

(f) *Test Procedure.* (1) Ignite the pilot burner. Ensure that it is at least 2 inches (51 mm) above the top of the platform. The burner must not contact the specimen until the test begins.

(2) Place the test specimen in the sliding platform holder. Ensure that the test sample surface is level with the top of the platform. At “zero” point, the specimen surface must be 7½ inches $\pm\frac{1}{8}$ inch (191 mm ± 3) below the radiant panel.

(3) Place the retaining/securing frame over the test specimen. It may be necessary (due to compression) to adjust the sample (up or down) in order to maintain the distance from the sample to the radiant panel (7½ inches $\pm\frac{1}{8}$ inch (191 mm ± 3) at “zero” position). With film/fiberglass assemblies, it is critical to

make a slit in the film cover to purge any air inside. This allows the operator to maintain the proper test specimen position (level with the top of the platform) and to allow ventilation of gases during testing. A longitudinal slit, approximately 2 inches (51mm) in length, must be centered 3 inches $\pm\frac{1}{2}$ inch (76mm ± 13 mm) from the left flange of the securing frame. A utility knife is acceptable for slitting the film cover.

(4) Immediately push the sliding platform into the chamber and close the bottom door.

(5) Bring the pilot burner flame into contact with the center of the specimen at the “zero” point and simultaneously start the timer. The pilot burner must be at a 27° angle with the sample and be approximately ½ inch (12 mm) above the sample. See figure 7. A stop, as shown in figure 8, allows the operator to position the burner correctly each time.