



Bunsen Burner Temperature

Fire Test Handbook (II), Chapter 1, Flame Temperature

Par. 1.6 Does not require a flame temperature when using methane gas, but the attached sample data sheet requires a flame temperature is recorded. (Consistent with Handbook III).

Recommend:

- 1/ Update Handbook II and note temperature fields on the sample data sheet are optional when using methane.
- 2/ Many have considered what proof is necessary to show that the test gas is methane. Suggest:
 - Provide C of C from supplier that gas is at least 99% methane OR
 - Measure flame temperature with each new methane bottle before use to confirm exceeds minimum temperature requirements.



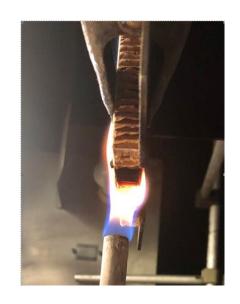
Bunsen Burner Worse-Face Burn Length

For substrates over .25" thick, the Bunsen burner flame positioned on the test face wraps around to also impact the non-tested face creating a burn length on both faces.

Which burn length should be recorded for the test results? Recommendation: Measure the burn length on both faces and record the worse-case burn length. Typically the tested face is the worse-face.

What about after-flame time?

Recommendation: After-flame time is measured to when the last flame extinguishes. It doesn't matter the flame's location (test face, bottom or non-test face).





Bunsen Burner Test Configuration



Ensure both sides of a panel construction will meet the intended testside test. This may require more test configurations to ensure both sides of the panel can meet the same test requirement.

Example, do not create a test specimen that must be tested on the test side to a 60-second vertical burn with a rub-strip on the non-test face that is only intended to meet a 12-second vertical burn. The rubstrip on the non-test side may cause a failure during the 60-second test.



What to think of bringing up topics like these?

Nobody thinks..



Everyone Thinks



