

CABIN



BUNSEN BURNER – AGAIN & AGAIN (2021)

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IAMFTF – Virtual



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 test-side 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

