

May 1, 2024

TO: ICC-ES Evaluation Committee and Interested Parties

SUBJECT: Clarifications to ASTM E136-22 as Referenced in 2024 IBC and IRC (MISC-01-1024)

Dear Colleague:

The intent of this letter is to inform you that ICC-ES will be seeking approval at the October Evaluation Committee Hearing to enforce the clarified conditions of acceptance outlined in the 2022 version of ASTM E136, as referenced in the 2024 IBC and 2024 IRC, to products evaluated under previous versions of the I-Codes. In certain instances, this will prevent evaluation reports from including statements that a product is considered non-combustible under the 2021 and earlier I-Codes and combustible under the 2024 I-Codes.

If approved, a compliance date of January 1, 2025 will be implemented to revise the Evaluation Report(s) and / or Listing(s), as applicable. In the event that an affected report holder applies to update to the 2024 I-Codes, the report would be revised to remove non-combustibility references for all code editions at the completion of the revision project (prior to the compliance date).

In concert with the proposal of this policy, ICC-ES has conducted an internal review of the data on file and has notified the affected report holder(s) of the intended path based on our findings. In the event that ICC-ES becomes aware of additional reports that are affected by this proposal, appropriate action will be taken to revise those reports at that time.

A summary of the differences between the ASTM E136 standard editions is as follows:

ASTM E136-19 (ref. by 2021 IBC)	ASTM E136-22 (ref. by 2024 IBC)
 15.2 If the weight loss of the test specimen is 50 % or less, the material passes the test when the criteria in 15.2.1 and in 15.2.2 are met: 15.2.1 The recorded temperatures of the surface and interior thermocouples do not at anytime during the test rise more than 30°C (54°F) above the stabilized furnace temperature measured at T₂ prior to the test. 15.2.2 There is no flaming from the test specimen after the first 30 s. 15.3 If the weight loss of the specimen exceeds 50 %, the material passes the test when the criteria in 15.3.1 and in 15.3.2 are met: 15.3.1 The recorded temperature of the surface and interior thermocouples do not, at any time during the test, rise above the stabilized furnace temperature measured at T₂ prior to the test. 15.3.2 No flaming from the test specimen is observed at any time during the test. 	 15.2 If the weight loss of an individual test specimen is 50 % or less, that test specimen is considered as having met the individual test specimen criteria when all the criteria in 15.2.1 through 15.2.3 are met: 15.2.1 For the duration of the test, the recorded temperature of the surface thermocouple does not rise more than 30 °C (54 °F) above the stabilized furnace temperature established at T2 prior to the test. 15.2.2 For the duration of the test, the recorded temperature of the interior thermocouple does not rise more than 30 °C (54 °F) above the stabilized furnace temperature established at T2 prior to the test. 15.2.2 For the duration of the test, the recorded temperature of the interior thermocouple does not rise more than 30 °C (54 °F) above the stabilized furnace temperature established at T2 prior to the test. 15.2.3 There is no flaming from the test specimen after the first 30 s. 15.3 If the weight loss of an individual test specimen exceeds 50 %, that test specimen riteria when all the criteria in 15.3.1 Horough 15.3.3 are met: 15.3.1 For the duration of the test, the recorded temperature of the surface thermocouple does not rise above the stabilized furnace temperature established at T2 prior to the test. 15.3.2 For the duration of the test, the recorded temperature of the interior of the test, the recorded temperature of the interior thermocouple does not rise above the stabilized furnace temperature established at T2 prior to the test. 15.3.3 There is no flaming from the test specimen at any time during the test.

Under the versions of ASTM E136 referenced by the 2021 IBC / IRC and earlier codes, the conditions of acceptance state that the interior <u>and</u> surface thermocouples cannot rise more than 30°C above the stabilized furnace temperature. Therefore, the three scenarios described below have been reported as passing tests:

- a. The recorded temperatures of the <u>surface</u> thermocouple did not at anytime during the test rise more than 30°C above the stabilized furnace temperature measured at T2 prior to the test, but the recorded temperatures of the <u>interior</u> thermocouple did.
 - i. Products with data falling under this scenario would no longer be considered noncombustible, and the Evaluation Reports would be revised accordingly for all code editions.
- b. The recorded temperatures of the <u>interior</u> thermocouple did not at anytime during the test rise more than 30°C above the stabilized furnace temperature measured at T2 prior to the test, but the recorded temperatures of the <u>surface</u> thermocouple did.
 - i. Products with data falling under this scenario will no longer be considered noncombustible, and the Evaluation Reports would be revised accordingly for all code editions.
- c. The recorded temperatures of both the interior thermocouple and the surface thermocouple did not at any time during the test rise more than 30°C above the stabilized furnace temperature measured at T2 prior to the test.

Under ASTM E136-22, which is referenced by the 2024 IBC and IRC, the standard has been clarified to evaluate the temperatures of the interior and surface thermocouples compared to the stabilized furnace temperature separately. Therefore, the only scenario that can be reported as a passing test is as follows:

a. The recorded temperatures of both the interior thermocouple and the surface thermocouple did not at any time during the test rise more than 30°C above the stabilized furnace temperature measured at T2 prior to the test.

If you have any questions, please contact me at (800) 423-6587, extension 5270. You may also reach us by e-mail at <u>es@icc-es.org</u>.

Yours very truly,

Eric J Polzin, P.E. Senior Staff Engineer and Manager of Environmental Programs

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