



One World Trade Center, 85th floor

New York, NY 10007

Test Report No: RJ9570F-1 Date: July 30, 2024

SAMPLE ID: The test samples are identified as: Plastic sheets reportedly made of recycled

polymers of styrene.

SAMPLING DETAIL: Test Samples were submitted to the Laboratory directly by the client. No sampling or

sample preparations were observed by QAI staff.

DATE OF RECEIPT: Samples were received on July 18, 2024.

TESTING PERIOD: July 29, 2024.

AUTHORIZATION: Proposal #: 24MM06211 dated and signed on June 25, 2024 by Alex Podoinitsyn.

TEST REQUESTED: The submitted sample was tested for flammability in accordance with the procedures

outlined in ASTM E648-19ae1 "Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source". The foregoing test

procedure is comparable to NFPA No. 253.

TEST RESULTS: <u>Critical Radiant Heat Flux, Watts/cm²</u>

0.48

Standard deviation = 1.17 Coefficient of variation = 0.02%

For detailed test results see page 2.

Prepared By

Victor A Peinado Fire Lab Supervisor

Victor A Prince

Signed for and on behalf of QAI Laboratories, Inc.

Jason Friedrich, P.E. Engineering Manager



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PREPARATION DETAILS AND CONDITIONING: Test samples were submitted by the client to QAI Laboratories in pieces, 10" wide by 42" long. Prior to clamping the floor covering system in the mounting frame (Figure 1.), the specimens were conditioned at $21 \pm 3^{\circ}$ C and a relative humidity of $50 \pm 5\%$ for a minimum of 48 hours.

TEST PROCEDURE: The test chamber (Figures 2 and 3) was pre-heated for one and a half hours and the radiant panel black body temperature verified to be within 5° C of the temperature established during calibration. The pilot burner was ignited, and the specimen inserted into the chamber. After a five-minute pre-heat, the pilot burner flame was placed in contact with the specimen for five minutes, and then removed. The test was continued until all flaming ceased. The distance burned was measured and converted to Critical Radiant Heat Flux at flame out.

TEST RESULTS:

Specimen Number	Burn Distance Centimeters	Critical Radiant Heat Flux, Watts/cm ²
1.	38	0.55
2.	43	0.45
3.	42	0.45
Average	41	0.48

OBSERVATIONS: Surface charring was observed during the test periods.

REQUIREMENTS: The NFPA "Life Safety Code" provides the following classification for regulating interior flooring materials in specified occupancies:

CLASS I - Includes materials which have a minimum Critical Radiant Flux of 0.45 watts/cm².

CLASS II - Includes materials which have a minimum Critical Radiant Flux of 0.22 watts/cm².

Examples of the requirements for application of interior flooring material in exits and corridors for specified occupancies are listed below.

Health Care Centers Class I in new facilities and for newly installed flooring materials in existing facilities.

<u>Child Care Centers</u> Class I or II in both new and existing facilities.

Hotels and Dormitories Class I or II in both new and existing facilities.

Apartments Class I or II in both new and existing facilities.

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Note: "The test results relate to the behavior of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use."

Diagram

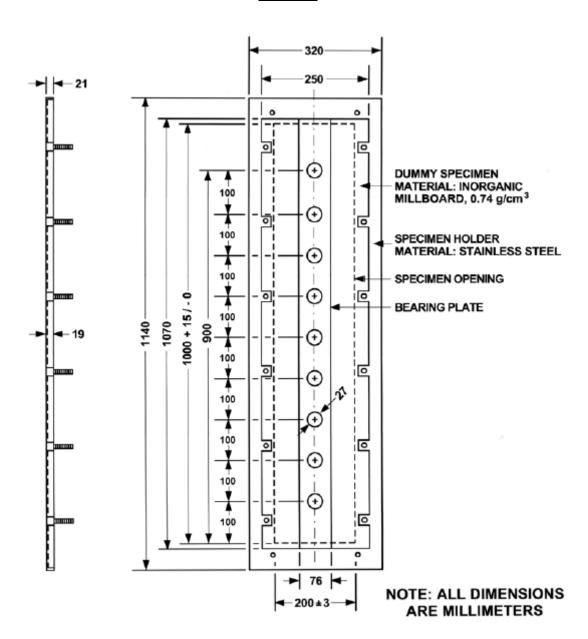


Figure 1.Test Specimen Holder used during test.

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Diagram

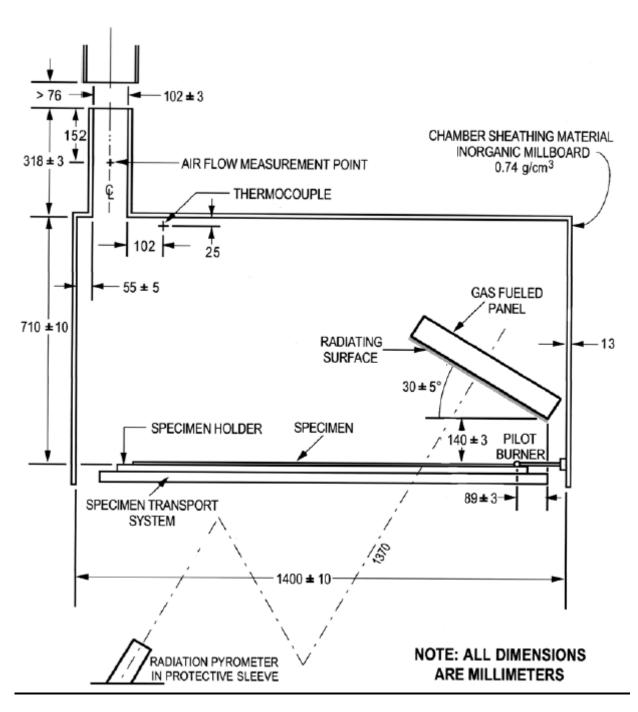


Figure 2.Test Chamber Dimensions and Specimen Location.

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Diagram

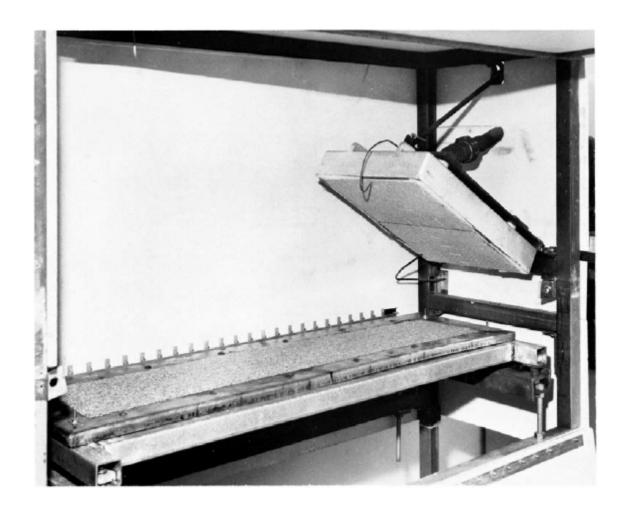


Figure 3. Test Chamber with wall removed to show radiant heat panel.

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Photograph



Photo 1:

Tested sample, Plastic sheets made of recycled polymers of styrene.

<<<END OF REPORT>>>

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