TEST REPORT

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ASTM E648-14c
Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source

Taizhou Huali Plastic Co. Ltd.
PVC Flooring – Click 150*1220*3.2*0.3mm

Project No. 102082970SAT-002A rev1

Issued: April 13, 2015
Revised: May 5, 2015

EVALUATION CENTER
Intertek Testing Services NA Inc.
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Prepared for:
Taizhou Huali Plastic Co. Ltd.
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TEST REPORT

Sample Received: April 2, 2015
(This specimen was received in good condition.)

Test Date: April 10, 2015

Sample Conditioning: 69.8±5.4°F and 50±5% relative humidity

Sample Identification
ID: PVC Floor Tile

Description
PVC Flooring - Click 150*1220*3.2*0.3mm

Sample Preparation
The samples were sent directly by the client. Samples were not independently selected for testing by Intertek.

Environmental Conditions: 73°F and 55-56% r.h.

This Test Witnessed by: n/a

Test Overview
This procedure provides a way of measuring *critical radiant flux* (the level of incident radiant heat energy on floor-covering systems at the most distant flame-out point, reported as W/cm^2) of horizontally mounted attic floor insulation exposed to a flaming ignition source while being exposed to radiant heat energy from a panel with approximately a 30° angle from the horizontal. The radiant flux ranges from 1.07 W/cm^2 at the 100 mm mark to 0.12 W/cm^2 at the 900 mm mark.

Test Procedure
At least three specimens shall be tested. The specimens are conditioned at 69.8 ± 5.4°F and a relative humidity of 50 ± 5 % for a minimum of 48 hours. Following the ASTM E648-14c calibration procedures, the first specimen was loaded into the test chamber. After a 5 minute pre-heat time, the pilot flame was placed into contact with the specimen at the 0 mm mark. This pilot flame is to remain in contact with the specimen for 5 minutes, then removed. If the specimen does not propagate flame during the 5 minute pilot flame contact, then the test is terminated. For specimens that do propagate flame, the test is continued until the flame goes out. The distance to the farthest flame-out point is noted, which is then used to determine the critical radiant flux, based on a radiant heat energy flux profile curve of the apparatus obtained during calibration.

Test Results

ASTM E 648

Specimen	1	2	3
Maximum Distance (mm)	155	170	160
Time to Max. Distance (min.)	10:10	10:29	10:25
Critical Radiant Flux (W/cm^2)	0.99	0.97	0.98
Time to All Flame Out(min.)	10:10	10:29	10:25

***Data below 100mm is not available. (Radiant Flux at 100mm =1.07 W/cm sq.)*
It is not part of the test standard procedure to record radiant flux values below 100mm.
**No ignition*

Observations (min: sec)

Run No.	Smoking	Discolored	Ignition
1	1:14	2:33	5:01
2	2:42	2:41	5:01
3	1:55	2:10	5:01

Average Critical Radiant Flux (W/cm2)= 0.98

Standard deviation = 0.01

Coefficient of variation = 1.02

Theodore Salazar
Technician Team Leader

April 13, 2015

Reviewed and approved:

Jason De La Cruz
Project Engineer

April 13, 2015

REVISION SUMMARY

DATE	SUMMARY
04/13/2015	Original Issue. No Revisions.
05/05/2015	Added “Co. Ltd.” To company name. Added “Click” to product name. Revised COV to 1.02