ADORE FLOORS

TEST REPORT

REPORT NUMBER
171212009SHF-BP-3-R1

ISSUE DATE
2018/1/24

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2018/4/20

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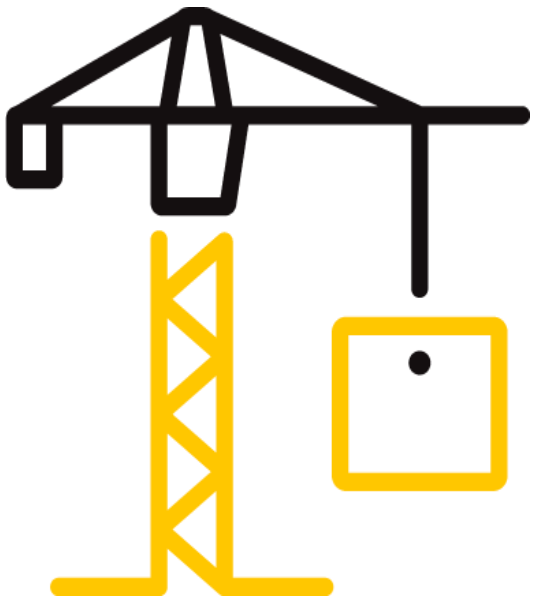

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Test Report

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Applicant: Adore Floors

Applicant Address: Adore House, Lower Penkridge Road, Acton Trussell, Stafford, U.K.

Attn: Arlene

SUBJECT: Performance testing
Name 1: Regent (Sovereign – Monarch – Viceroy – Record 30)
Name 2: Regent Solid Rigid Core

Dear Sir,
This test report represents the results of our evaluation of the above referenced product(s) to the requirements contained in the following standards:

TEST METHODS AND STANDARDS
Refer to the next following Pages.

SAMPLE ID	MODEL	SPECIFICATION
S171212009SHF.004	Sovereign	1220*181*6.0mm

SAMPLE RECEIEVED: 2017/12/11
TESTED FROM: 2017/12/12 TO 2018/1/24

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Test Items, Method and Results：

Test Item: Volatile organic compounds content analysis
Test Method: With reference to
ISO 16000-3:2011 Indoor air - Part 3: Determination of formaldehyde and other carbonyl compounds in indoor air and test chamber air - Active sampling method;
ISO 16000-6:2011 Indoor air - Part 6: Determination of volatile organic compounds in indoor and test chamber air by active sampling on Tenax TA® sorbent, thermal desorption and gas chromatography using MS or MS/FID;
ISO 16000-9:2006 Indoor air - Part 9: Determination of the emission of volatile organic compounds from building products and furnishing - Emission test chamber method;
ISO 16000-11:2006 Indoor air - Part 11: Determination of the emission of volatile organic compounds from building products and furnishing - Sampling, storage of samples and preparation of test specimens.

Test Procedure:
The sample was tested in the emission test chamber. After 7 days, chamber air samples were collected. Samples analyzed for individual VOCs and TVOC were collected on sorbent tubes Tenax TA, and were detected by Automatic Thermal Desorption-Gas Chromatography/Mass Spectrometric (ATD-GC/MS). Samples analyzed for aldehydes were collected on DNPH cartridge, and were detected by High Performance Liquid Chromatography-Diode-Array Detector (HPLC-DAD).

Test condition:
Chamber type：1.0 m^3 stainless steel chamber
Climatic conditions: 23°C, 50% R.H
Air exchange：0.5 h^{-1}
Loading factor：0.803 m^2/m^3
Sampling：Tenax TA & DNPH cartridge

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Test result:

1. Volatile Organic Compounds (VOC) Emission

The emission of the substances was classified according to a scale with 4 classes of Exposure Concentrations ranging from A^+ to C. A^+ indicating a very low emission level and C is a high level emission. The results of the tested sample after 7 days are shown in Table 1.

Table 1 Results of VOC Emission of target chemicals after 7 days

Testing compound	CAS No.	Limit values of emission classes (1) ($\mu g/m^3$)				Chamber concentration ($\mu g/m^3$)	Predicted concentrati-on ($\mu g/m^3$)(2)	Emission classes
		A^+	A	B	C			
Formaldehyde# (3)	50-00-0	<10	<60	<120	>120	ND (4)	< 2.5 (5)	A^+
Acetaldehyde# (3)	75-07-0	<200	<300	<400	>400	ND (4)	< 2.5 (5)	A^+
Toluene	108-88-3	<300	<450	<600	>600	37.5	18.7	A^+
Tetrachloroethyl-ene	127-18-4	<250	<350	<500	>500	ND (4)	< 1 (5)	A^+
Xylene	1330-20-7	<200	<300	<400	>400	ND (4)	< 1 (5)	A^+
1,2,4-trimethylbenzene	95-63-6	<1000	<1500	<2000	>2000	ND (4)	< 1 (5)	A^+
1,4-dichlorobenzene	106-46-7	<60	<90	<120	>120	ND (4)	< 1 (5)	A^+
Ethylbenzene	100-41-4	<750	<1000	<1500	>1500	ND (4)	< 1 (5)	A^+
2-butoxyethanol	111-76-2	<1000	<1500	<2000	>2000	ND (4)	< 1 (5)	A^+
Styrene	100-42-5	<250	<350	<500	>500	ND (4)	< 1 (5)	A^+
TVOC* (3)	—	<1000	<1500	<2000	>2000	37.5	18.7	A^+

Note:

(1) Limited values were specified by client.

(2) Predicted concentration was calculated from the emission rate obtained from chamber concentration by model room (volume 30 m^3, floor surface area 12 m^2, air exchange rate 0.5 h^{-1}) specified by client.

(3) # = indicates aldehydes identified and quantified by DNPH derivatization and HPLC/DAD analysis.

* = TVOC means sum of the concentrations of all identified and unidentified VOCs between and including n-hexane through n-Hexadecane (i.e., C_6-C_{16}) as measured by the GC/MS TIC method and expressed as a toluene equivalent value.

(4) Detection limit of chamber concentration:

for # aldehydes = 5 $\mu g/m^3$; for other individual compound = 2 $\mu g/m^3$; for TVOC = 20 $\mu g/m^3$

ND = Not detected

(5) Reporting limit of predicted concentration:

for # aldehydes = 2.5 $\mu g/m^3$; for other individual compound = 1 $\mu g/m^3$; for TVOC = 5 $\mu g/m^3$

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Test photo:

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APPENDIX: SAMPLE RECEIVED PHOTO

REPORT AUTHORIZED

When signed with physical or electronic signature, the contents of this report have been prepared and approved per Intertek's quality process in accordance with ISO 17025.

Name: Sally Xie
Title: Reviewer

Name: Evyn Cui
Title: Project Engineer

Revision:

NO.	DATE	CHANGES	AUTHOR	REVIEWER
171212009SHF-BP-3	2018/1/24	First issue	Evyn Cui	Sally Xie
171212009SHF-BP-3-R1	2018/4/20	Added name 1 on Page 2 as per client's requirement	Evyn Cui	Sally Xie