



(Registered Copy)

# TEST REPORT

68, Gajaeul-ro, Seo-gu, Incheon, 404-817 Rep. of KOREA

TEL 82-32-5709-700 FAX 82-32-575-5613

Report No : TAS-018791

Receipt Date : Mar.24.2015

Client : Oh Jang-Soo

Test Completion Date : Apr.07.2015

LG HAUSYS Co., Ltd

(Yeouido-dong, One IFC)10, Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, Korea

Sample : Artificial stone (Volcanics)

## TEST RESULTS

TEST ITEM	UNIT	SAMPLE	RESULT	TEST METHOD
Specific Gravity((23/23) °C)	-	-	1.667	ASTM D792-13(Method A)
Rockwell Hardness(HRM)	-	-	86	ASTM D785-08(Procedure A)
Barcol Hardness	-	-	68	ASTM D2583-13a
Tensile Strength	MPa	-	28.2	ASTM D638-10(*)
Tensile Modulus of Elasticity	GPa	-	9.94	ASTM D638-10(*)
Flexural Strength	MPa	-	41.7	ASTM D790-10(**)
Flexural Modulus of Elasticity	GPa	-	9.09	ASTM D790-10(**)
Izod Impact Strength	J/m	-	14	ASTM D256-10(Method A)
Water Absorption(24 h Immersion)	%	-	0.03	ASTM D570-98(2010)e1
Appearance(Discoloration) After Heat Resistance(170±2)	-	-	No Defects	By The Client
Hot Water Resistance Test	-	-	No Defects	JIS K 6902 : 2007
Deflection Temperature Under Load(1.82 MPa)	°C	-	103	ASTM D648-07(Method B)
Thermal Expansion	1/°C	-	2.6×10 <sup>-5</sup>	JIS K 6911 : 1995

- Next Page -

*Cho Hyeong-gil*

Prepared by Cho Hyeong-gil  
Tel: +82-32-570-9737  
E-mail: gil@ktr.or.kr

*You Seok*

Reviewed by You Seok  
Technical Manager  
E-mail: youseok@ktr.or.kr

Registered copy date: May.19.2015

Apr.07.2015

## Korea Testing & Research Institute

President

*Choi Hyeongk'*



QR Code to verify genuineness



YOUR PARTNER FOR THE BEST QUALITY

(Registered Copy)

# TEST REPORT

68, Gajaeul-ro, Seo-gu, Incheon, 404-817 Rep. of KOREA

TEL 82-32-5709-700 FAX 82-32-575-5613

Report No : TAS-018791

Receipt Date : Mar.24.2015

Client : Oh Jang-Soo

Test Completion Date : Apr.07.2015

LG HAUSYS Co., Ltd

(Yeouido-dong, One IFC)10, Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, Korea

Sample : Artificial stone (Volcanics)

## TEST RESULTS

TEST ITEM	UNIT	SAMPLE	RESULT	TEST METHOD
Pencil Hardness(Mitsu bishi pencil)	-	-	9H	KS M ISO 15184 : 2013

\* Specimen: Type I, Speed of Testing: 5 mm/min(Modulus: 1 mm/min)

\*\* Speed of Testing: 5.1 mm/min, Support Span: 190 mm

\* USAGE : QUALITY CONTROL

NOTE : 1. The test results on this test report are only limited to the samples and sample names provided by the customer and KTR does not guarantee the quality of all products of the customer, and you can confirm the authenticity of the test report online ([www.ktr.or.kr](http://www.ktr.or.kr)) or by using the QR code.  
2. This test report shall not be used for public relation, advertisement, lawsuit and any other purposes outside the scope of its defined usage.  
3. This test report includes the test result performed in accordance with the test method suggested by the client.  
4. Only original copy (including certified copy) of the test report is valid - electronic copy (hard and/or soft) is for your reference only.

*Cho Hyeong-gil*

Prepared by Cho Hyeong-gil  
Tel: +82-32-570-9737  
E-mail: gil@ktr.or.kr

*You Seok*

Reviewed by You Seok  
Technical Manager  
E-mail: youseok@ktr.or.kr

Registered copy date: May.19.2015

Apr.07.2015

## Korea Testing & Research Institute

President

*Choi Hyeongk'*



QR Code to verify genuineness

2 of Total 2 Page(s)