

SGS Korea Co., Ltd.

Construction Materials Testing Center

Issue No. : CMT2020-1139R1

Address : 20,Dongtansandan 10-gil,Dongtan-myeon, Hwaseong-si, Gyeonggi-do, Korea, 18487
t +82(0)31 669-0600 Fax +82(0)31 646 0888
<https://www.sgsgroup.kr>

1. Applicant

- Company : HANIL CEMENT Co., Ltd.
- Address : 330, Gangnam-daero, Gangnam-gu, Seoul, Korea
- Receipt Date: December 09, 2019

2. Test Purpose : Maintenance of quality

3. Sample Description : REMIGUARD RSP

4. Date of Test : December 16, 2019 ~ February 10, 2020

5. Location of Test : ☒ Permanent Testing Lab ☐ On Site Testing

(address : Concrete / Mortar Laboratory, SGS Korea Co., Ltd, 20 ,Dongtansandan 10-gil, Dongtan-myeon, Hwaseong-si, Gyeonggi-do)

6. Test Results :

No.	Test Items	Units	Test Methods	Results
1	Solid content of cement admixture polymer	%	KS F 4042 : 2012	99.7
2	Flexural strength	3 days		7.1
		7 days		8.4
		28days		9.7
3	Compressive strength	3 days		24.1
		7 days		37.5
		28days		47.1
4	Bond strength	Standard conditions		2.1
		After repeated hot and cold		1.9
5	Alkali Resistance	N/mm ²		42.8
6	Carbonation resistivity	mm		1.8
7	Seepage quantity	g		2.6

※ Mix Proportion = powder : water = 100 : 15.0(weight ratio)

※ Bond Strength Test Conditions : After coating RG-Primer(A) to the base plate on the test specimens produced.

※ This test report supersedes the Report No. CMT2020-1139

-Continued-

Duplicate

Tester : Moon, SeungKwon
Tel : 031-646-0811

문승권

Technical Manager : Kim, DongHoon
Tel : 031-646-0812

김동훈

- Remarks :
- The results shown in this report refer only to the sample(s) submitted by applicant. This test report can not be reproduced or used other than the test purpose stated in above.
 - The authenticity of the test report can be confirmed on the SGS website. (<http://e-checking.kr.sgs.com/construction/>)

May 20, 2020

SGS Korea Co., Ltd.
Construction Materials Testing Center



Page 1 of 2

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

CMT 108-081-109 (01)

SGS Korea Co., Ltd.

20 ,Dongtansandan 10-gil, Dongtan-myeon, Hwaseong-si, Gyeonggi-do, Korea, 18487 t +82(0)31 646 0800 f +82(0)31 646 0888 www.sgs.com

Member of SGS Group(Société Générale de Surveillance)



No.	Test Items		Units	Test Methods	Results
8	Water absorption coefficient		kg/m ² ·h ^{0.5}	KS F 4042 : 2012	0.18
9	Moisture penetration resistance(S _d)		m		1.1
10	Chloride ion penetration resistance		Coulombs		691
11	Length change		%		-0.010
12	5% H ₂ SO ₄	3 days	%	KS M ISO 2812-1 : 2012	1.7
		7 days	%		2.7
		28days	%		2.9

-End-

Duplicate