

**SGS Korea Co., Ltd.**

Construction Materials Testing Center

Issue No. : CMT2020-1141R1

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## 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 AC-RHD

## 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	99.8
2	Flexural strength	3 days		7.7
		7 days		9.0
		28days		10.8
3	Compressive strength	3 days		25.1
		7 days		38.4
		28days		47.3
4	Bond strength	Standard conditions		2.1
		After repeated hot and cold		1.9
5	Alkali Resistance	N/mm <sup>2</sup>		45.6
6	Carbonation resistivity	mm		1.8
7	Seepage quantity	g		1.9

※ 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. CMT2020-1141

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

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

- Remarks :
1. 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.
  2. 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

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No.	Test Items	Units	Test Methods	Results
8	Water absorption coefficient	kg/m <sup>2</sup> ·h <sup>0.5</sup>	KS F 4042 : 2012	0.11
9	Moisture penetration resistance(S <sub>d</sub> )	m		1.0
10	Chloride ion penetration resistance	Coulombs		612
11	Length change	%		-0.008
12	Rust resistance	%	KS F 2561 : 2013	98.7

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&lt;Rust resistance test Mix Table&gt;

Division	Cement (kg)	Standard Sand (kg)	Water (kg)	NaCl (%)
Plain	1	2.45	0.485	(C+S)×0.4
REMIGUARD AC-RHD	1	-	0.15	REMIGUARD AC-RHD x0.4

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