

SGS Korea Co., Ltd.

Construction Materials Testing Center

Issue No. : CMT2020-1123R2

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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 : Hydraulic cement non-shrink grout(GP400)

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	Flow con	sec	KS F 4044 : 2019	29
2	Flow	mm		300 over
3	Time of setting	Initial		5 : 20
		Final		6 : 40
4	Rate of bleeding	%		0.0
5	Length changes (in height)	1 days		0.00
		3 days		0.00
		7 days		0.01
		28days		0.02
6	Compressive strength	1 days		20.7
		3 days		31.4
		7 days		42.8
		28days		53.6
7	Water soluble chloride content	kg/m ³		0.068

※ Mix Proportion ⇨ powder : water = 100 : 16.0(weight ratio)

※ This test report supersedes the Report No. CMT2020-1123R1

-End-

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

문승권

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

Duplicate

- 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

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