





**FACULTY OF ENGINEERING  
CHULALONGKORN UNIVERSITY**

**Type of test** Compressive Strength (EN12808-3)

**Test specimen** Five (3) specimens in cube shape were cast in the laboratory.  
The mix proportion of water to “Cementitious gouts (Weber. Color Power)” ratio was 33% by weight.

**Client** Saint-Gobain Weber Co., Ltd.


**Date of Test** July 15, 2014

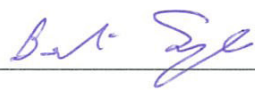
**Test of method** After mixing them thoroughly, the specimen were cast to the standard molds having a size of 40x40x40 mm. The specimens are cured for 24 hours in molds, then, stripped and cured in the room temperature until conducting the test.

**Test Results** The compressive strength of specimens at the age of 28 days are shown as follows.

Specimen No.	Width of Sample W (cm)	Length of Sample L (cm)	Thickness of Sample H (cm)	Maximum Load P (kgf)	Compressive Strength P/(WL) (kgf/cm <sup>2</sup> )	Remarks (Specimen weight in gram, g )
1	3.99	4.00	4.02	2,120	132.83	
2	4.00	4.02	4.12	3,110	193.41	
3	4.00	4.03	4.10	3,030	187.97	
				Average	171.40	

Note: These results certify the adequacy and representative character of test sample only.

  
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 (Assoc. Prof. Dr. Tirawat Boonyatee)

Tested by :   
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 (Assist. Prof. Dr. Boonchai Sangpetngam)

On Behalf of Head of Civil Engineering Department



**FACULTY OF ENGINEERING**  
**CHULALONGKORN UNIVERSITY**

**Type of test** Flexural Strength (EN12808-3)

**Test specimen** Five (3) specimens in cube shape were cast in the laboratory.  
The mix proportion of water to “Cementitious gouts (Weber. Color Power)” ratio was 33% by weight.

**Client** Saint-Gobain Weber Co., Ltd.

**Date of Test** July 15, 2014

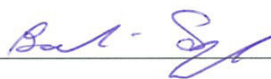
**Test of method** After mixing them thoroughly, the specimen were cast to the standard molds having a size of 40x40x160 mm. The specimens are cured for 24 hours in molds, then, stripped and cured in the room temperature until conducting the test.

**Test Results** The compressive strength of specimens at the age of 28 days are shown as follows.

Specimen No.	Width of Sample b (cm)	Length of Sample l (cm)	Thickness of Sample h (cm)	Maximum Load P (kgf)	Flexural Strength Sf (kgf/cm <sup>2</sup> )	Remarks Sf=3PL/2bh <sup>2</sup> , L=10 cm.
1	3.99	16.11	4.00	168	39.47	
2	4.03	16.10	4.12	222	48.68	
3	4.00	16.08	4.10	174	38.82	
				Average	42.32	

Note: These results certify the adequacy and representative character of test sample only.

  
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Tested by :   
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**FACULTY OF ENGINEERING  
CHULALONGKORN UNIVERSITY  
MATERIAL TESTING LABORATORY**

**Type of test** Water absorption of cementitious grouts (ISO 9001-2008 and BSEN12808-5)

**Client** Saint-Gobain Weber Co., Ltd.

**Test product** Tile Grout (Weber. Color Power) – cementitious tile grout, provided by the client

**Type of grout** Cementitious grout

**Test procedure** Each specimen was weighed 28 days after mixing. Weight increment of each specimen was measured 30 min and 240 min after placing them vertically with the 40-mm x 40-mm end face submerged in 5 mm deep water.

**Date of Test** July 15, 2014


**Test conditions** Temperature =30°C , Relative humidity =66%

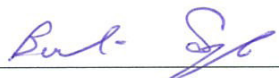
**Test Results**

(The test results are good only for the specimens tested.)

Specimen No.	Weight of Dry Specimen, g	Weight of Specimen, g		Water Absorption, g	
		After 30-min immersion	After 240-min immersion	After 30-min immersion	After 240-min immersion
1	366.50	369.60	374.40	3.10	7.90
2	387.90	389.70	392.30	1.80	4.40
3	383.80	385.80	389.20	2.00	5.40

Average=            2.30            5.90

  
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Type of test : SHRINKAGE TEST (EN 12808-4)  
 Test specimen : Three (3) specimens in prism shape were cast in the laboratory.  
 The mix proportioning of water to "weber.color power" ratio was 33% by weight.  
 Client : SAINT-GOBAIN WEBER CO., LTD.  
 Date of test : July 15, 2014  
 Test results : The shrinkage of specimens at the age of 28 days are shown as follows.


(The test results are good only for those specimens tested.)

Specimen No.	Initial Length (mm)	Final Length (mm)	Drying shrinkage of specimen (mm/m)
1	150.50	147.10	2.13
2	154.40	151.10	2.09
3	153.80	149.80	2.50

Note: This results certify the adequacy and representative character of the test samples only.

  
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 (Assoc. Prof. Dr. Tirawat Boonyatee)

On Behalf of Head of Civil Engineering Department

Tested by :   
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 (Assist. Prof. Dr. Boonchai Sangpetngam)



**TCNA TEST REPORT NUMBER:** TCNA-1025-18 **PAGE:** 1 OF 3

**TEST REQUESTED BY:** Saint-Gobain Weber Co, Ltd.

**TEST METHOD:** ANSI A118.6 Specification for Standard Cement Grouts for Tile Installation

This specification describes the test methods and minimum requirements for standard cementitious grouts. Grouts meeting this specification may or may not contain polymers.

**TEST SUBJECT MATERIAL:** Identified by client as: “webercolor power”

**TEST DATE:** 11/20/2018 – 12/18/2018

**TEST PROCEDURE NOTES:**

- Sample prep: The grout was mixed at a liquid to powder ratio of 35:100 parts by weight per the client’s instruction
- All samples were set up and cured according to ANSI A118.6.

**TEST RESULTS:**

Test Designation	Test Description	Evaluation	ANSI A118.6 Specification	
			Sanded	Unsanded
4.3	Linear Shrinkage	0.27%	< 0.20%	< 0.30%
	Shrinkage based on initial bar length			
	Shrinkage based on 1 day specimen length*	0.10%		
4.4	Water Absorption 50% R.H. to Immersion	16%	< 10%	< 18%
4.5	Compressive Strength	748 psi 3065 psi	500 psi min. 3000 psi min.	500 psi min. 3000 psi min.
	1-Day 28-day			
4.6	Tensile Strength 28-Day	452 psi	300 psi min.	250 psi min.
4.7	Flexural Strength 28-day	952 psi	500 psi min.	500 psi min.

**COMMENTS:** The client requested that the shrinkage based on both the length of the initial bar length and based on the 1 day specimen length be reported.



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