



**FACULTY OF ENGINEERING  
CHULALONGKORN UNIVERSITY**


**TEST RESULT SUMMARY**

The sample in the trademark of "weber.tai 2-in-1" was submitted by the Saint-Gobain weber Co.,Ltd. The series of test and test methods were conducted on October 1, 2010 in accordance with ISO 13007 / European Norms (EN 1348:1997) with details as follows:

**Specification of cementitious adhesives (C)**

Fundamental Characteristics			
1a Normal setting adhesives (C2)			
Characteristics	Requirement	Test Method	Results
Tensile initial adhesion strength	$\geq 1 \text{ N/mm}^2$	EN 1348 § 8.2	PASS
Tensile adhesion strength after water immersion	$\geq 1 \text{ N/mm}^2$	EN 1348 § 8.3	PASS

Regarding to the testing results, it was found that the properties of "weber.tai 2-in-1" are conformed to ISO 13007/ European Norms (EN 1348:1997) test methods as specified. These results certify the adequacy and representative character of test samples only.

  
 (Assist. Prof. Dr. Chatpan Chintanapakdee)

On Behalf of Head of Civil Engineering Department

Tested by :   
 (Dr. Boonchai Sangpetngam)



**FACULTY OF ENGINEERING  
CHULALONGKORN UNIVERSITY**

Type of test : INITIAL ADHESION STRENGTH (EN 1348:1997)

Test specimen : Five (5) specimens of "weber.tai 2-in-1" were prepared in the laboratory.  
The mix proportion of water to "weber.tai 2-in-1" ratio was 25% by weight.

Client : SAINT-GOBAIN WEBER CO., LTD.

Date of test : October 1, 2010


Test method : After finish the preparation, the test units were placed in standard conditions for 27 days.  
Bond the pull head plate to the tile with the high strength epoxy and keep the test units for a further 24 hour in standard condition. Determine the tensile adhesive strength.

Test results :

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

Specimen No.	Width of Specimen (mm)	Length of Specimen (mm)	Area (mm <sup>2</sup> )	Maximum Load (N)	Tensile Adhesion Strength (N/mm <sup>2</sup> )	Remarks
1	50	50	2,500	4,663	1.9	The failure of all specimens occurred at the interface between tile adhesive surface and concrete slab surface
2	50	50	2,500	3,981	1.6	
3	50	50	2,500	3,819	1.5	
4	50	50	2,500	4,168	1.7	
5	50	50	2,500	4,416	1.8	
				Average	1.7	

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

  
 (Assist. Prof. Dr. Chatpan Chintanapakdee)

On Behalf of Head of Civil Engineering Department

Tested by :   
 (Dr. Boonchai Sangpetngam)



**FACULTY OF ENGINEERING  
CHULALONGKORN UNIVERSITY**

Type of test : ADHESIVE STRENGTH AFTER WATER IMMERSION (EN 1348:1997)

Test specimen : Five (5) specimens of "weber.tai 2-in-1" were prepared in the laboratory.  
The mix proportion of water to "weber.tai 2-in-1" ratio was 25% by weight.

Client : SAINT-GOBAIN WEBER CO., LTD.


Date of test : October 1, 2010

Test method : After finish the preparation, the test unite were placed in standard conditions for 7 days and stored in water for 20 days.  
Bond the pull head plate to the tile with the high strength epoxy and keep the test units for a further 24 hour  
in water at the standard temperature. Determine the tensile adhesive strength.

Test results :

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

Specimen No.	Width of Specimen (mm)	Length of Specimen (mm)	Area (mm <sup>2</sup> )	Miximum Load (N)	Tensile Adhesion Strength (N/mm <sup>2</sup> )	Remarks
1	50	50	2,500	2,184	0.9	The failure of all specimens occurred at the interface between tile adhesive surface and concrete slab surface
2	50	50	2,500	2,605	1.0	
3	50	50	2,500	2,952	1.2	
4	50	50	2,500	2,978	1.2	
5	50	50	2,500	3,026	1.2	
				Average	1.1	

  
 (Assist. Prof. Dr. Chatpan Chintanapakdee)

On Behalf of Head of Civil Engineering Department

Tested by :   
 (Dr. Boonchai Sangpetngam)