



Srinakharinwirot University

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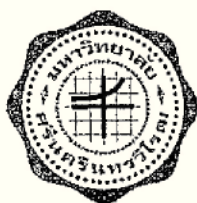
EXECUTIVE SUMMARY

Department of Civil Engineering, Faculty of Engineering, Srinakharinwirot University (SWU) was engaged by Ferro Construction Products Co., Ltd. To conduct the performance test of cementitious tile adhesive. The sample with the trademark of "Ferrocem 524" was submitted by the Ferro Construction Products Co., Ltd. The series of test were detailed in accordance with ISO 13007/European Norms (EN 12004:2001) test methods as follows:

Specification of cementitious adhesives (C)

Fundamental Characteristics			
Normal setting adhesives			
Characteristic	Requirement	Test Method	Results
Tensile adhesion strength	$\geq 0.5 \text{ N/mm}^2$	ISO 13007 part 2 or EN 1348	PASS
Tensile adhesion strength after water immersion	$\geq 0.5 \text{ N/mm}^2$	ISO 13007 part 2 or EN 1348	PASS

CHECKED & APPROVED BY:

DR. ATTASIT SIRIYACHIRAPORN
SENIOR LABORATORY SUPERVISOR
JULY 16, 2013



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CIVIL ENGINEERING LABORATORY

CIVIL ENGINEERING FIELD OF STUDY

DEPARTMENT OF ENGINEERING AND TECHNOLOGY

TYPE OF TEST : ADHESION STRENGTH AFTER WATER IMMERSION (EN 1348:1999)

TEST SPECIMEN Ten (10) specimens of 'Ferrocem 524' were prepared in the civil laboratory.
The mix proportion of water to 'Ferrocem 524' ratio was 24% by weight of product.

CLIENT : Ferro Construction Products Co., Ltd.

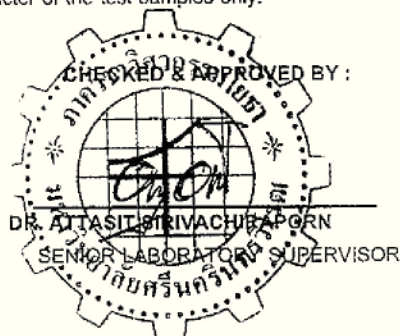
DATE OF TEST : July 15, 2013

TEST METHOD : After finish the preparation, the test units 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 standrad temperature. Determine the tensile adhesive strength.

TEST RESULTS :

Specimen No.	Width of Specimen (mm)	Length of Specimen (mm)	Area (mm ²)	Maximum Load (KN)	Tensile Adhesion Strength (N/mm ²)	Remark
1	50	50	2,500	3.2	1.28	
2	50	50	2,500	3.3	1.32	
3	50	50	2,500	3.0	1.20	
4	50	50	2,500	2.8	1.12	
5	50	50	2,500	3.0	1.2	
6	50	50	2,500	2.6	1.04	
7	50	50	2,500	2.8	1.12	
8	50	50	2,500	3.2	1.28	
9	50	50	2,500	3.0	1.2	
10	50	50	2,500	2.8	1.12	
				Average	1.19	

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





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CIVIL ENGINEERING LABORATORY

CIVIL ENGINEERING FIELD OF STUDY

DEPARTMENT OF ENGINEERING AND TECHNOLOGY

TYPE OF TEST : INITIAL ADHESION STRENGTH (EN 1348:1999)

TEST SPECIMEN Ten (10) specimens of 'Ferrocem 524' were prepared in the civil laboratory.
The mix proportion of water to 'Ferrocem 524' ratio was 24% by weight of product.

CLIENT : Ferro Construction Products Co., Ltd.

DATE OF TEST : July 15, 2013

TEST METHOD : After finish 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 :

Specimen No.	Width of Specimen (mm)	Length of Specimen (mm)	Area (mm ²)	Maximum Load (KN)	Tensile Adhesion Strength (N/mm ²)	Remark
1	50	50	2,500	2.6	1.04	-
2	50	50	2,500	2.4	0.96	
3	50	50	2,500	2.5	1.00	
4	50	50	2,500	2.2	0.88	
5	50	50	2,500	2.4	0.96	
6	50	50	2,500	2.8	1.12	
7	50	50	2,500	2.6	1.04	
8	50	50	2,500	2.4	0.96	
9	50	50	2,500	2.5	1.00	
10	50	50	2,500	2.2	0.88	
				Average	0.98	

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

CHECKED & APPROVED BY :

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