

K.C.T. Consultancy Services®

Soil Testing and Material Testing

(State & Central Govt. Approved)

Regd. No. : AB/TC/Reg/E-V5294

O.No. AB-Tender-5604-2012

NABL (ISO/IEC : 17025) Accredited

(scope of our accreditation available on www.nabl-india.org)



Ref. No. : KCT/M/14/R/08/005/07

Date : 08/12/14

Test Report

To,
Perlcon Premix Pvt.Ltd.
Ref : Your letter dated 14/10/2014
Sample ID : Block Bond (HD) AAC Block Masonry Mortar

Sub:- Testing of Block Adhesive Sample supplied by you

Dear Sir,

Please find herewith test result of Block Adhesive sample supplied by you

Methodology : Sample of AAC block was prepared for test specimen as per Annexure A and B of IS : 15477. The sample joined with block adhesive after mixing the adhesive with water. The water to adhesive ratio was kept 0.31

The prepared sample tested as per the procedure mentioned in Annexure A and B of IS : 15477

Sr. No.	Description	Test Results	IS : 154 77 Requirement
1	Shear Adhesion in KN		
a	Dry Condition after 24hr.	6.00	Min. 2.50KN
b	Dry Condition after 14 days	18.00	Min. 8.00KN
c	Heat ageing Condition	16.40	Min. 4.00 KN
d	Wet Condition	15.60	Min. 4.00 KN
2	Tensile Adhesion in N		
a	Dry Condition	3125	Min. 750 N
b	Wet Condition	2750	Min.450 N
3	Setting Time in min.		
a	Initial setting time	140.00	-
b	Final setting time	370.00	-
4	Loose Dry Density in gm/cc	1.04	-
5	Wet Density in gm/cc	1.95	-
6	Compressive strength in Mpa after 28days	23.8	-

Remark:- 1) The result confirms the requirement of Indian Standard.

2) The sample used for the testing was supplied by the client along with specification and test was decided to perform as per the Instruction given by the client.

3) Results reflect the properties of samples supplied to us and in the condition when supplied to us.

4) The certificate shall not be used for publicity / Product promotion etc. Results shall not be reproduced except in full.

5) We do not undertake or we shall not bound to participate or appear in any legal - court matter or litigation on any issues what so ever arise before or after submission of this certificate.

6) Sample are used while testing and therefore will not be available for inspection after testing.

Thanking you,

Yours faithfully,

For KCT Consultancy Services.,


(Dr. K.C.Thaker)



LXXVII

Contact : Prof.Dr. K.C. Thaker / Dr. K.K. Thaker

Regd. Office & Lab :- 'KCT HOUSE', Shayona Silver Estate Part-2, B/h. Silver Oak College of Engineering, Nr. Lambda, Beside Auda Water Tank, S.G.Road, Gota, Ahmedabad - 382 481.

Tel. : 079-65103088-89-90, Mobile : 98250 64378, E-mail : kctconser@yahoo.com / kct@kctcs.in, Website : www.kctcs.in

Date: March 30, 2016

To,
Mr. Nimish Desai – Head Marketing (Projects)
Perlcon Premix Pvt. Ltd
302, "Akshay" 53, Shrimali Society
Next to "Vadilal House", Near Mithakali 6 Road Crossing
Navrangpura, Ahmedabad 380 009
Gujarat
079 26441404 / 079 26441325

Sub: Test Report for the sample tested for U-Value

Dear Sir,

Enclosed herewith kindly find the four test report for the sample tested for its U-Value.

Every aspect of how we at CRDF, CEPT University serve customers like you is regularly reviewed and carefully analyzed. One of the most important components of these reviews is gathering feedback directly from our customers.

The suggestions and responses from our customers are of great value. As one of our valued customers, you can help us improve our service, our products and our overall activities. Please take a few minutes to fill out the enclosed questionnaire on your experience dealing with us.

Thank you in advance for sharing your thoughts with us. We appreciate your time and effort in providing feedback to us.

Kindly acknowledge the receipt of the same.

With Regards,



Asha B. Joshi
Administrative Manager
Centre for Advanced Research in Building Science & Energy (CARBSE)
CEPT Research and Development Foundation
CEPT University, K L. Campus, Navrangpura
Ahmedabad - 380 009
+91 79 26302470 Extn 383

Encls: i. Test Report
ii. Customer Feedback Form

Report No: CRDF/RPT/GHB/U-Val/001

Report Date: 30th March 2016

Report of test carried out by CEPT Research and Development Foundation for U - Value of Supplied Material

The test results of the specimen submitted for U - Value on date 5th February 2016 are as under:

1. Customer Information

1.1. Name of the Organization : Perlcon Premix Pvt. Ltd.
 1.2. Contact Person : Mr. Nimish Desai – Head Marketing (Projects)
 1.3. Address : 302, "Akshay"53, Shrimali Society,
 Next to "Vadilal House", Near Mithakhali Six Road Crossing
 Navrangpura, Ahmedabad – 380009, Gujarat
 1.4. Phone Numbers : 079 26771404 / 079 26441325
 1.5. Fax Number : 079 26569103
 1.6. Email : nimish.desai@perlcon.com

2. Sample Details

2.1. Sample Identification Number : U-Val/03/16/0001
 2.2. Name and any other pertinent : Sand Free, Self-Curing, Light Weight, Cement based Dry mortars
 2.3. Identification of the material : BlockBond (HD) and ICYPLAST
 (Including physical description) : 20mm ICYPLAST + 200 mm AAC Block + 20mm ICYPLAST
 2.4 Instrument used : Guarded Hot Box
 2.5 Standard Used : In accordance with ASTM C1363-11

3. Test Specimen size

: 990mm Width X 990mm Height X 240 mm Thickness

4. Tested By

: Jigar Patel

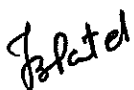
5. Description of Test Specimen

: As per attached sheet

6. Test period:

	Date
Beginning	7 th March 2016
End	12 th March 2016

Tested By



Jigar Patel
Laboratory Technician

Verified By

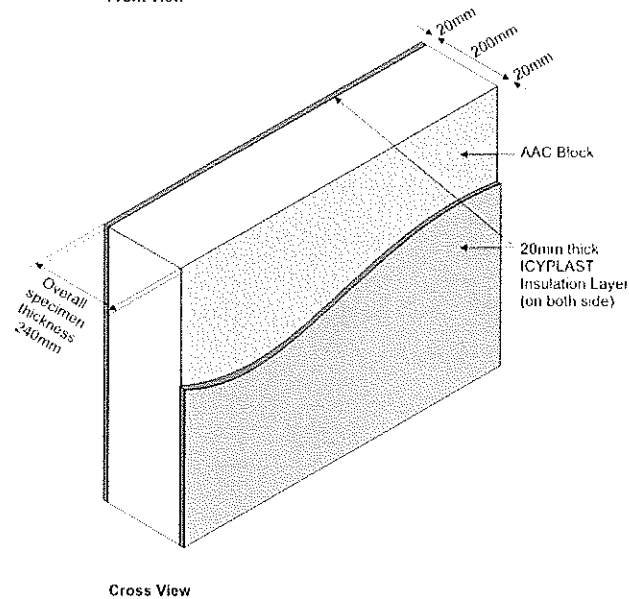
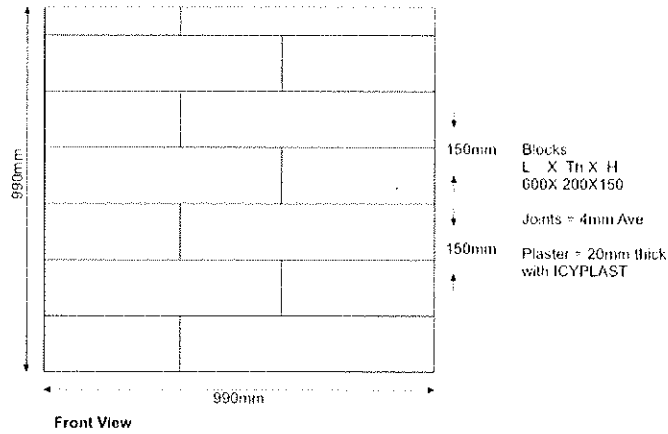


Yashkumar Shukla
Technical Director

7. Pre-Test assembly & Conditioning details

: Prepared a wall of AAC Block of 200mm thickness with 20mm plaster of ICYPLAST applied on both the sides as shown in the drawings below. As per manufacturer's instruction, the specimen was kept in dry environment (< 50% RH) for 21 days to remove the moisture.

8. Design drawing(s) of Test Specimen:



Tested By

Jig Patel

Jigar Patel

Laboratory Technician

Verified By

Yash Kumar Shukla

Yashkumar Shukla

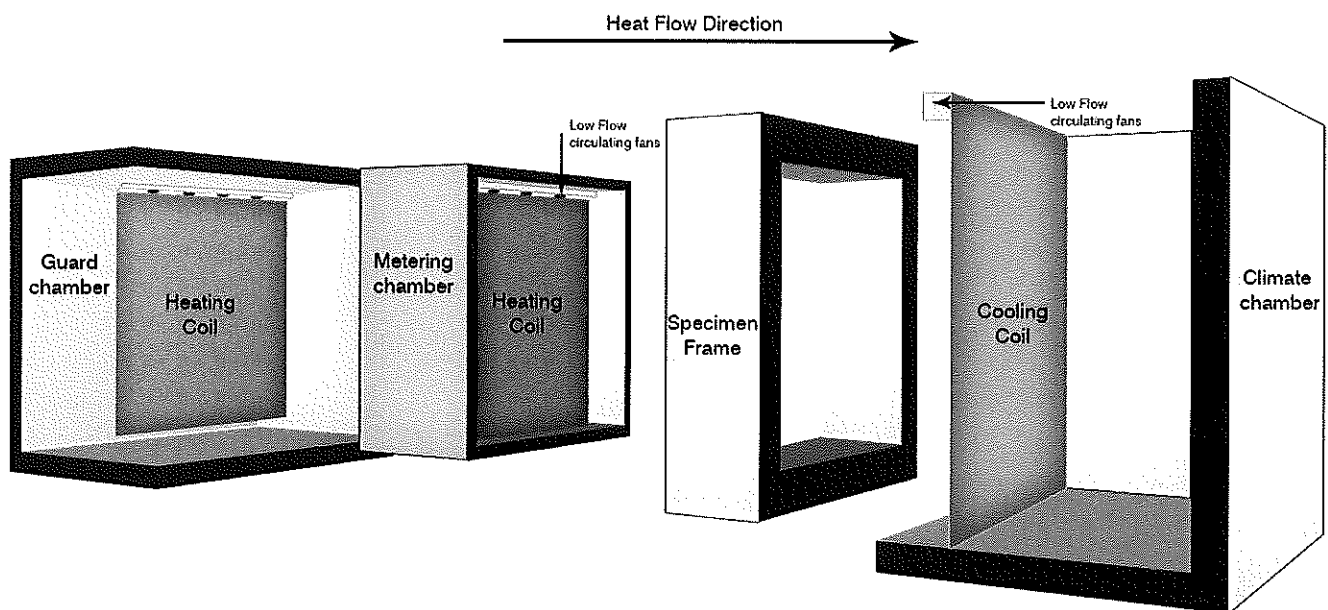
Technical Director

9. **Test Parameters:** Test determines the overall thermal transmittance (U – Value) of the specimen in Guarded Hot Box apparatus located at CARBSE, CEPT Research and Development Foundation. The thermal performance evaluation is completed in accordance with ASTM C1363-11. Data was collected for successive five (5) hours period for a minimum duration of eight (8) hours after steady state condition were achieved. Steady state conditions were considered established when, over five (5) hours period; 1) one hour average of the surface temperature did not vary more than 0.5 °C; and 2) The one hour average of the power input to the metering box did not vary more than $\pm 1\%$.

10. **Test Specimen Orientation** : Vertical

11. **Direction of Energy Transfer** : Heat transfer from Metering Chamber to Climate Chamber

12. **Schematic of Guarded Hot Box Apparatus**



Tested By

Jigar Patel

Jigar Patel

Laboratory Technician

Verified By

Yashkumar Shukla

Yashkumar Shukla

Technical Director

13. Results of the measurement:

Sr. No.	Parameter	Measured Value
01	Metering Chamber Surface Temperature	40 °C
02	Metering Chamber Air Temperature	40 °C
03	Metering Chamber Air Velocity	0.2 m/s
04	Climate Chamber Surface Temperature	15 °C
05	Climate Chamber Air Temperature	15 °C
06	Climate Chamber Air Velocity	0.2 m/s
07	Mean Temperature across the specimen	27.5 °C
08	Temperature difference across the specimen	25 °C
09	Overall Thermal Transmittance (U – Value)	0.45 W/m ² k
10	Overall Thermal Resistance (R – Value)	2.22 m ² k/W

14. Certificate of Accuracy:

This is to certify that the test results herein presented are, to the best of my knowledge, true and accurate representations of the samples submitted.

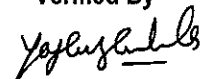
Tested By



Jigar Patel

Laboratory Technician

Verified By



Yashkumar Shukla

Technical Director

CEPT Research and Development
Foundation

Disclaimer:

1. *The CEPT Research and Development Foundation, CEPT University is not responsible for any kind of alterations in the physical property of the sample and the customer is solely responsible for it and its consequences.*
2. *Result relates to the sample tested only. Sample will be destroyed after 7 days of issue of the report unless specified by the customer.*
3. *Any complains about this report should be communicated in writing within 7 days of issue of the report.*
4. *The test report shall not be reproduced fully or partially or in parts and cannot be used as an evidence in a court of law and shall be used in advert singeing media without written approval of Director, CEPT Research and Development Foundation, CEPT University.*