

No.: SHIN1402004871PS

Date: Mar 11, 2014

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CUSTOMER NAME: BEC INDUSTRIAL (SHANGHAI ) CO.,LTD

ADDRESS: NO.5050, LONGWU ROAD, MINHANG DISTRICT, SHANGHAI, CHINA

200241

The following sample(s) was/ were submitted and identified on behalf of the client as:

Sample Name : ASBESTOS-FREE CALCIUM SILICATE

Manufacturer : BEC INDUSTRIAL (SHANGHAI ) CO.,LTD

Ref. Standard : ASTM C533-13

Date of Receipt : Feb 14, 2014

Testing Start Date : Feb 14, 2014

Testing End Date : Mar 10, 2014

Test result(s) : For further details, please refer to the following page(s)

Signed for SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Zano Lai

Authorized signatory



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Test Conducted: ASTM C533-13 Standard Specification for Calcium Silicate Block and Pipe Thermal

Insulation

Declared Classification: Type I

Density

i. Beliety					
Test item	Test method	Requirement	Test result	Conclusion	
Density (dry, kg/m³)	ASTM C303-10	≤240	224	Pass	
Remark	Specimen dimensions: 600mm×300mm×50mm, 4pcs				

II. Flexural strength

Test item	Test method	Requirement	Individual value	Average value	conclusion	
	ASTM C203- Flexural 05a(R2012) strength (kPa) Method I, Procedure A	≥344	287	386	Pass	
Flexural			540			
strength (kPa)			398			
			319			
Domark	Specimen dimensions: 300mm×100mm×25mm, 4pcs					
Remark	Test span: 250mm, Test rate: 4.2mm/min					



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III. Compressive strength, at 5% deformation

Test item	Test method	Requirement	Individual value	Average value	Conclusion	
Compressive			1458			
Strength, at	ASTM C165-	≥688	1434	1434	Pass	
5%	07(R2012)		1441			
deformation	Procedure A					
(kPa)			1401			
Remark	Specimen dimensions: 150mm×150mm×25mm, 4pcs					
hemark	Test rate: 2.5mm/min					

#### IV. Linear shrinkage

Test item		Test method	Requirement	Test result	Conclusion	
Linear shrinkage	Length			0.91		
(649°C, 24h),	Width	ASTM C356-10	≤2	0.84	Pass	
(%)	Thickness			1.22		

### V. Thermal conductivity

Test item		Test method	Requirement	Test result	Conclusion
Thermal conductivity [W/(m·K)]	Mean temperature 93°C	ASTM C177-13	≤0.065	0.059	Pass

Statement: Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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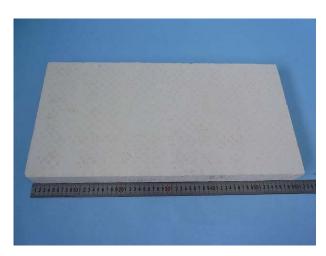


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## Sample Photo:



Density





Flexural Strength

Compressive Strength

\*\*\*\*\*\* End of report\*\*\*\*\*\*

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