Housing & Building National Research Center
Vice-Chairman Office
for Research and Studies Affairs

المركز القومي لبحوث الإسكان والبناء
مكتب نائب رئيس مجلس الإدارة
لشئون البحوث والدراسات

مرجعنا : ٢٠١٤/٤/٦٢

مرجعكم :٢٠١٤/٥/٨

الموضوع: إجراء إختبارات (الموصلية الحرارية - XRD - مقاومة الحريق) لعينات من الصوف الزجاجى.

الجهة الطالبة: شركة جلاس روك للعزل

تحية طيبة... وبعد،،

إيماءً إلى خطابات سيادتكم والواردة بتاريخ ٢٠١٤/٥/٨ وبتاريخ ٢٠١٤/٥/١٤ بخصوص الموضوع عاليه، مرفق طيه التقرير بالنتائج. هذا وقد سددت الرسوم بالشيكات أرقام ٣٣٢٣٣٠٤٥ بتاريخ ٢٠١٤/٤/٢٧ ورقم ٣٣٢٣٣٠٧٨ بتاريخ ٢٠١٤/٥/١١.

وتفضلوا بقبول فائق الاحترام،،،

المركز القومي لبحوث الأسكان والبناء
إدارة السكرتارية والمحفوظات
التاريخ ١٤/٥/٨٥ ٢٠ المرفقات : تقرير
رقم الصادر : ١٦٤

مدير المعهد

أستاذ دكتور / منى أحمد محمد فنى

نائب رئيس مجلس الإدارة
لشئون البحوث والدراسات

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ص.ب. : ١٧٧٠ القاهرة

Building Physics Institute (BPI)

Housing & Building National Research Center (HBRC)

Supplier Named. شركة جلاس روك للعزل
Testing Name: Thermal Conductivity
Testing Date: 19/05/2014
Delivery Date: 08/05/2014
***Supplier Code*:** BPI/Th/Co.062
Material Type: Rock wool wire mesh

Thermal Laboratory
Thermal Conductivity Test Report

Density (kg/m^3)	Thermal conductivity (W/m.k)	Thickness cm
120	0.040	5
70	0.045	5
70	0.045	10
100	0.041	5
100	0.041	10

Remarks

- The test applied for the sample with wire mesh.
- The test was conducted in accordance to (ASTM C 518).
- The environmental test conditions: [temp. = 24 ^{0}C & R.H. = 55%].
- The hot plate temp. was 75°C, while the cold plate temp. was 50°C.
- This result is only valid for the sample delivered to the thermal Laboratory.
- These results are only valid for one year.

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Building Physics Institute (BPI)

Housing & Building National Research Center (HBRC)

Supplier Named. شركة جلاس روك للعزل
Testing Name: Thermal Conductivity
Testing Date: 19/05/2014
Delivery Date: 08/05/2014
***Supplier Code*:** BPI/Th/Co.062
Material Type: Rock wool

Thermal Laboratory
Thermal Conductivity Test Report

product	Density (kg/m^3)	Thermal conductivity (W/m.k)	Thickness cm
Brightness Glass wool pipe 1 inch	70	0.036	2.5
Brightness Glass wool pipe 6 inch	70	0.036	5
Darkness Glass wool pipe 1 inch	100	0.039	2.5
Darkness Glass wool pipe 6 inch	100	0.039	5

Remarks

- The test was conducted in accordance to (ASTM C 518).
- The environmental test conditions: [temp. = 24 ^{0}C & R.H. = 55%].
- This result is only valid for the sample delivered to the thermal Laboratory.
- These results are only valid for one year.

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Building Physics Institute (BPI)

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Supplier Named. شركة جلاس روك للعزل
Testing Name: FIRE RATING TEST
Testing Date: 19-20/05/2014
Delivery Date: 08/05/2014
Supplier Code: BPI/Th/Co.062
Material Type: مراتب صوف صخرى

Fire Laboratory
Fire rating test results

Property	Result
Fire Rating (Rock Wool Blanket 80 mm thickness)	40 (Minutes)
Fire Rating (Rock Wool Blanket 50 mm thickness)	25 (Minutes)

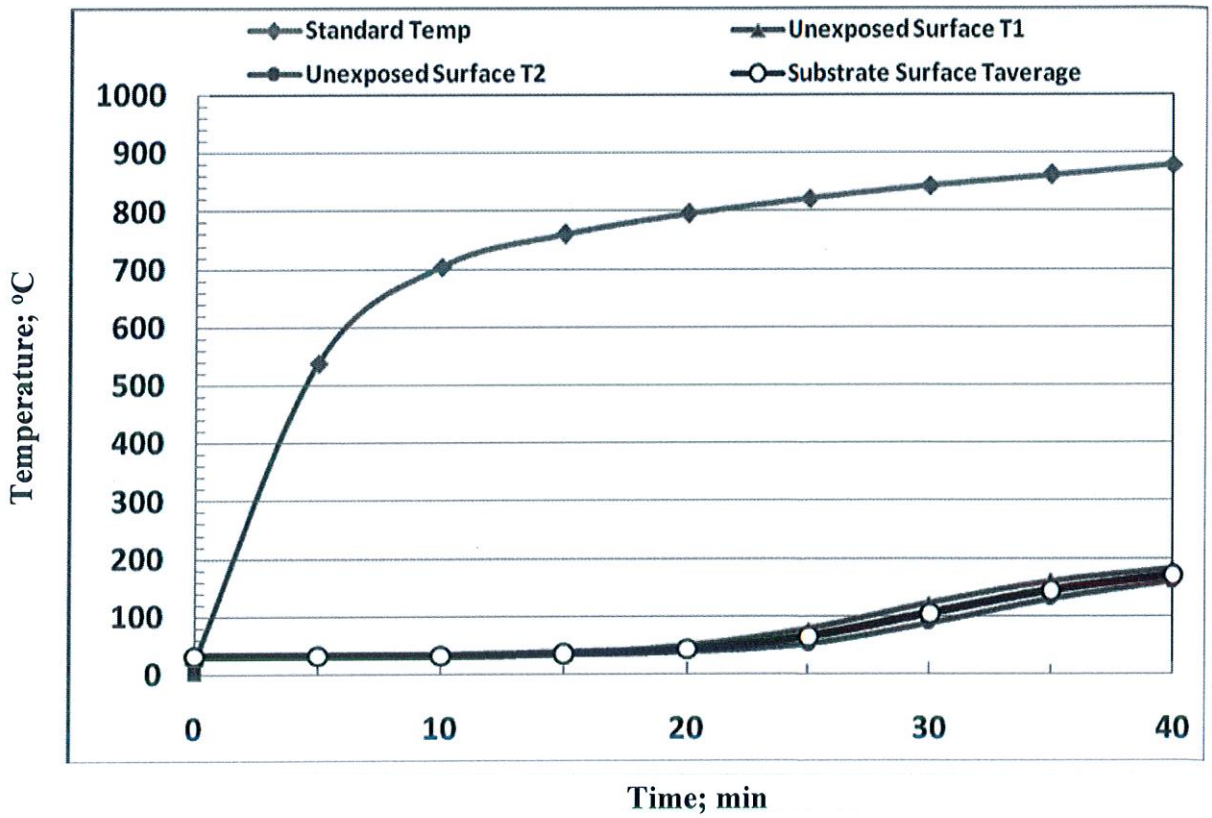


Fig 1 Fire Rating for Rock Wool blanket with thickness 80 mm

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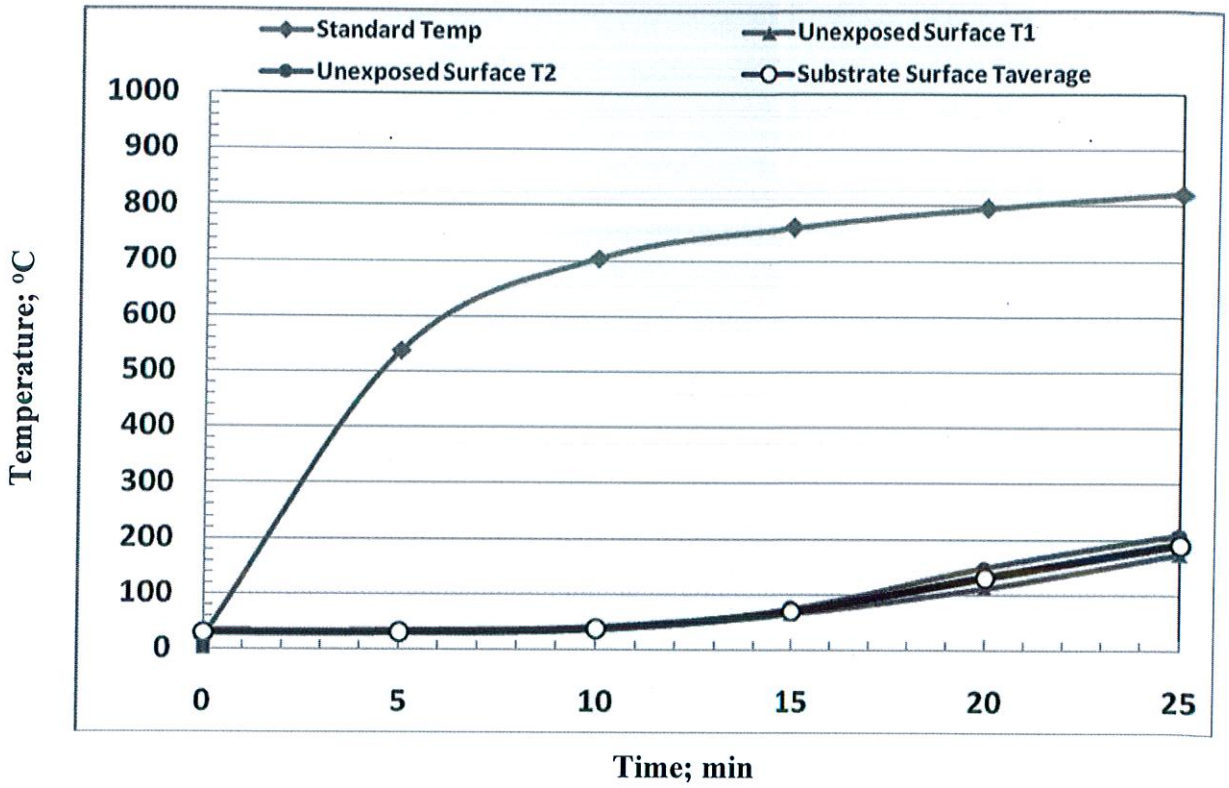


Fig 2 Fire Rating for Rock Wool blanket with thickness 50 mm

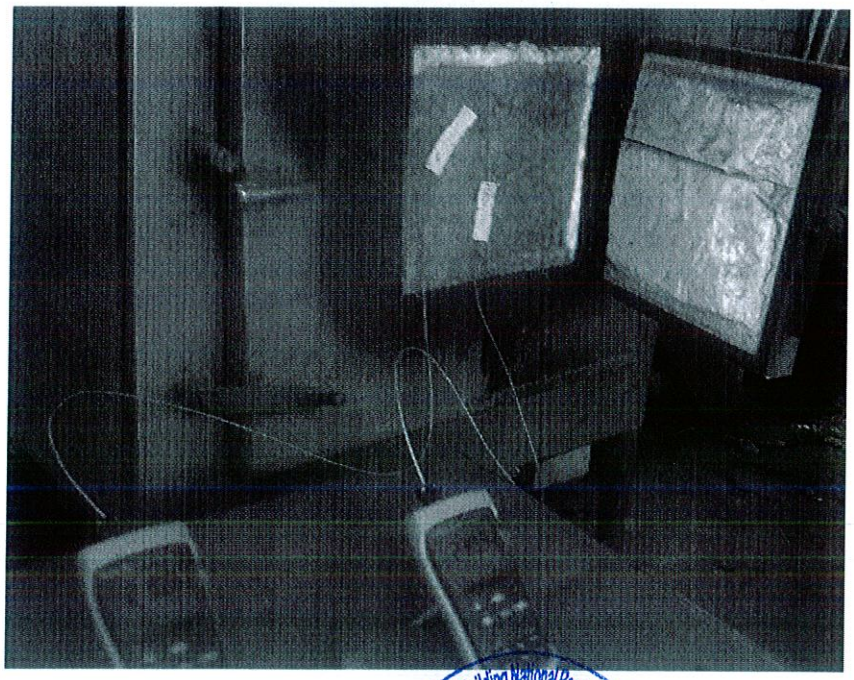


Fig 3 Photography of tested sample during the fire test

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conclusion

- *The delivered Test sample is completely prepared by the client.*
- *The delivered test samples were Rock Wool blanket with dimensions of (30×30×8) cm and (30×30×5) product of Glass Rock - Egypt.*
- *The fire resistance test was conducted in accordance with the standard specification ASTM E-119. The only exception was the sample dimensions as requested by the client.*
- *The test was ended at 40 and 25 minutes due to rise of the unexposed surface temperature to about 170°C.*
- *Figure (1&2) shows the Time Temperature pattern of the tested samples of thickness 8 and 5cm, respectively.*
- *Figure (3) shows a photography of tested sample during the fire test.*
- *This result is only valid for sample delivered to the Laboratory.*
- *This certificate is valid for only one year.*

S. A. Ibrahim	**Prof.Dr. N. M. Girguis**	**Prof. Dr. S. S. Shebl**
Fire Technologist	**Technical Manger**	**Head of Fire Dept.**

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