

CERTIFICATE No. : 0139/IN-IST-16  
50012732/EKG



SGS

### TEST CERTIFICATE

In pursuance of an inspection order given to us,

by : Yapı Enerji Doğal Yalıtım Malzemeleri Sanayi ve Ticaret A.Ş.  
Şifa Mah. Şifa Yanyol Cad. Gülkar Depolar No: 14 A1 Blok Tuzla / İstanbul

to Perform : Witnessing of Isolation Performance Tests

Description of Goods : Insulation Material (Construction Material)

	Room-1	Room-2
Name/Type of Material	: 40x40x2 mm iron profile Galvanized Trapezoid Sheets Aerated concrete, height 25 cm (TS-EN 771-4:2012), 400kg/m3 Oriented Strand Boards, 10mm thickness Bituminous waterproofing membrane, 3,5 mm thickness PVC door 90 cm with insulated double glasses PVC window, 50x50 cm with insulated double glasses Pozzolanic cement, 32.5 R Extruded polystyrene thermal insulation panel, 50 kg/m3, 5 cm thickness Gypsum plaster and satin finishing plaster	: 40x40x2 mm iron profile Galvanized Trapezoid Sheets Aerated concrete, height 25 cm (TS-EN 771-4:2012), 400kg/m3 Oriented Strand Boards, 10mm thickness Bituminous waterproofing membrane, 3,5 mm thickness PVC door 90 cm with insulated double glasses PVC window, 50x50 cm with insulated double glasses Styronit STY 550 Şap ( screed ) Styronit STY 160 Kaba
Inner Dimensions(mm)	: 1485x1485x2150mm	: 1480x1480x2180

\* It was declared by the client that the isolation material used on Room-2 was produced by Yapı Enerji Doğal Yalıtım Malzemeleri Sanayi ve Ticaret A.Ş.

at : Yapı Enerji Doğal Yalıtım Malzemeleri Sanayi ve Ticaret A.Ş.  
Şifa Mah. Şifa Yanyol Cad. Gülkar Depolar No: 14 A1 Blok Tuzla / İstanbul  
Client : Yapı Enerji Doğal Yalıtım Malzemeleri Sanayi ve Ticaret A.Ş.  
Şifa Mah. Şifa Yanyol Cad. Gülkar Depolar No: 14 A1 Blok Tuzla / İstanbul

We hereby report as follows:

Our inspector attended at premises of Yapı Enerji Doğal Yalıtım Malzemeleri Sanayi ve Ticaret A.Ş. Şifa Mah. Şifa Yanyol Cad. Gülkar Depolar No: 14 A1 Blok Tuzla, İstanbul / Turkey on 12<sup>th</sup> - 29<sup>th</sup> January, 2016 and on 01<sup>st</sup> February, 2016 to perform witnessing the above mentioned tests.

All test/measurement equipments and the heaters used as energy source in Room (1) and Room (2) have been adjusted/placed as same position before starting of tests/measurements under witnessing of our inspector.

The tests have been performed on working hours of weekdays from 12<sup>th</sup> of Jan, 2016 to 29<sup>th</sup> of Jan, 2016 and on 01<sup>st</sup> February, 2016. The test results have been recorded by Yapı Enerji Doğal Yalıtım Malzemeleri Sanayi ve Ticaret A.Ş. regularly under control of SGS inspector unexpected visits. During unexpected visits no nonconformity has been observed by SGS inspector. All rooms were locked and the keys were under inspector control.

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The result of this report has been given below by comparing data readen on thermometers & electricity meters used for each rooms. The details of test/measurement conditions&results have been given in Annex-II.

**Result**

The average value obtained according to the results of tests and measurements performed during 14 (fourteen) workday and on such data the amount of energy has been calculated for 1 (one) °C temperature rise for each building separately.

	Room (1)	Room (2)
<b>Total Energy Amount of Consumption</b>	98940Wh	99104Wh
<b>Average Amount of Energy Consumption</b>	7067,1Wh	7078,85Wh
<b>Average Temperature Difference for per Day</b>	14,23 °C	21,12 °C
<b>Amount of Energy Consumption for per 1°C</b>	496,63Wh	335,17Wh

As a result, the energy consumption was 335,17Wh in Room(2) for 1(one)°C temperature rise, and in Room(1) it was 496,63Wh for 1(one)°C temperature rise.

In addition an other test has been performed on 01st February, 2016. Indoor temperature of both rooms was heated until 24°C. The heating energy was cut for the room which has reached 24°C inner temperature and cooling rate for each degree decreases were recorded. As a result it has been observed that Room(2) has reached 24°C inner temperature in a shorter time with less energy consumption than Room(1). Likewise, the cooling rate in Room(2) has been slower than Room(1).

	Room (1)	Room (2)
<b>Initial Interior Temperature and Time</b>	13,1 °C @13:08	13,1 °C @13:08
<b>Time @ 24 °C Interior Temp.</b>	14:26	13:45
<b>Heating Rate to Reach 24 °C</b>	78 minutes	37 minutes
<b>Time @ 18 °C Interior Temp.</b>	15:26	15:45
<b>Cooling Rate to 18 °C</b>	60 minutes	120 minutes

**Annexes**

- Annex-I : Test/Measurement Equipments List & Calibration Certificates
- Annex-II : Test/Measurement Conditions And Results
- Annex-III : Photos Taken During the Tests/Measurements
- Annex-IV : Technical Drawings of Room (1) and Room (2)

The information stated in this certificate is derived from the results of inspection or testing procedures carried out in accordance with the instructions of our Client, and/or our assessment of such results on the basis of any technical standards, trade custom or practice, or other circumstances which should in our professional opinion be taken into account.

The Company is neither an insurer nor a guarantor and disclaims all liability in such capacity. This report reflects our findings at the time and place of our inspection only and does not relieve the parties from their contractual responsibilities.

Issued in Istanbul  
On 13<sup>th</sup> April 2016

For and on behalf of  
Supervise Gözetme Etüd  
Kontrol Servisleri A.Ş.



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