



شهادة تسجيل منتج عزل حراري
Registration Certificate of Thermal Insulation Product

(Ministerial Order No. 149/2018)

Certificate No: TIP 19024 **رقم الشهادة:**
Registration Date: 24/11/2019 **تاريخ الإصدار:**
Issued to: Al Manaratain Co. & Ali Al Shaab Gro. WLL **أصدرت إلى:**
Kingdom of Bahrain
Product Name: IMSI-Al Manaratain Block 8" **اسم المنتج:**
Application For: Wall **الاستخدام في:**
Manufacturer Name: Al Manaratain Co. & Ali Al Shaab Gro. WLL **اسم المصنع:**
Kingdom of Bahrain
Valid Until: 30/11/2020 **تاريخ الصلاحية:**

Product Details / تفاصيل المنتج	
Description	400x200x200mm - Concrete Masonry Insulation Block with two layers of Expanded Polystyrene sheet between the three layers of concrete.
Density	Concrete: 2320kg/m ³ / Expanded polystyrene: 28.86kg/m ³
Min. Thickness	200 mm
Thermal Conductivity (k)	0.2276 W/mK
Thermal Transmittance / Conductance (C)	1.138 W/m ² °C Non Standalone System **

Conditions:

- The above thermal insulation product is to be used as described above, provided the overall U-value for the wall does not exceed 0.57 W/m²°C.
- The owner should take the necessary precautions to ensure proper storage and installation of the product to protect it from moisture and direct sunlight.
- The owner of this product is responsible of ensuring that the product is carried out by him or an approved applicator, for supplying all the accessories associated with it, and for any consequences that may result from the use of this product.
- All documents published by the owner for the above product should not contradict with the thermal conductivity value stated in this certificate.
- This approval is granted for thermal insulation only. Any additional approvals / permissions required should be sought from the concerned authorities.
- The TIU should not be held responsible for any consequences that may result from the use of this product.
- The TIU reserves the right in future to request additional documents and to withdraw its approval of the above if any variations are noticed.

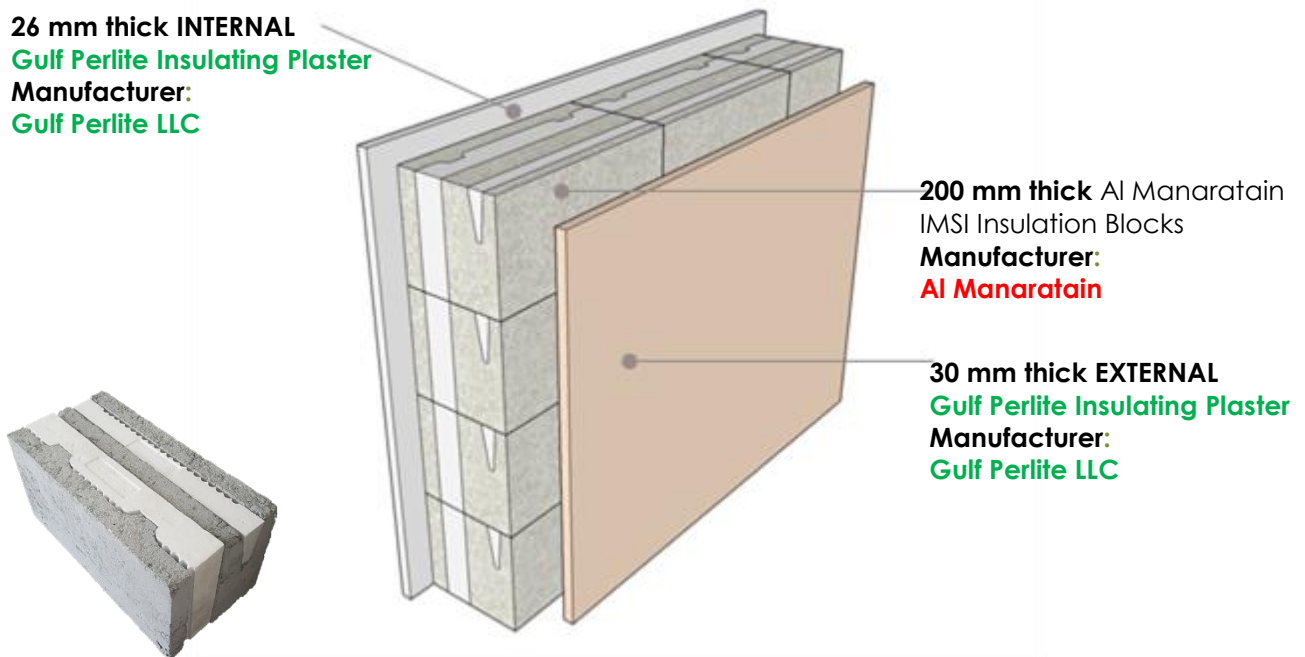
** Product above shall be supported by other certified insulation materials so that it can achieve the required U-Value.



Electricity Conservation Section

EWA-APPROVED, COST-EFFECTIVE AL MANARATAIN INTEGRATED MASONRY SYSTEM INTERNATIONAL (IMSI) BLOCKWORK with GULF PERLITE INSULATING PLASTERS

26 mm thick INTERNAL
Gulf Perlite Insulating Plaster
Manufacturer:
Gulf Perlite LLC



200 mm thick Al Manaratain
IMSI Insulation Blocks
Manufacturer:
Al Manaratain

30 mm thick EXTERNAL
Gulf Perlite Insulating Plaster
Manufacturer:
Gulf Perlite LLC

Thermal Transmittance (U-Value) Calculation:

No.	Description of materials	Thickness (d) m	λ W/m.K	R m ² .K/W
1	R _i (Interior surface)	-	-	0.121
2	Gulf Perlite Insulating Plaster Internal	0.026	0.0800	0.325
3	8'' Al Manaratain IMSI Blockwork with EPS Insertions	0.200	0.2276	0.879
4	Gulf Perlite Insulating Plaster External	0.030	0.0800	0.375
5	R _o (Outside surface)	-	-	0.059
Total thermal resistance for materials used in Wall (RT):				1.759

U-Value = 0.569 W/m² °K

Kingdom of Bahrain		مملكة البحرين
Electricity & Water Authority		هيئة الكهرباء والماء
Electricity & Water Conservation Directorate		إدارة ترشيد الكهرباء والماء

• *Thermal Transmittance (U-Value) for external Walls with Blocks*

Sr. No.	Description of materials used	Density kg/m ³	Thickness (I) m	$\frac{r}{m.k}$ w	$\frac{R}{m^2.k}$ w	Notes
1-	Ext.Surface Resistance				0.0590	
2-	External Perlite Plaster	408	0.030	12.500	0.375	K=0.08
3-	IMSI Concrete Block - MIB	1200	0.200	4.394	0.879	K=0.2276
4-	Internal Perlite Plaster	408	0.026	12.500	0.325	K=0.08
5-	Int.Surface Resistance				0.1210	
6-						
7-						
8-						
9-						
10-						
11-						
12-						
13-						
Total thermal resistance for materials used in Wall (R _T):					1.759	

U-Value = 0.569 W/m.² °C

Client's Name
& Signature

In charge Engineer
Name & Signature

Engineering Office
Stamp & Signature

Electricity & Water Authority Approval

Date of Approval



AL MANARATAIN
AL MANARATAIN COMPANY AND ALI AL SHAAB GROUP W.L.L.

M.I.B INSULATION BLOCK (IMSI)



NEW!

M.I.B MANARATAIN INSULATION BLOCK :

The M.I.B Manaratain Insulation Block is a combination of unique block design and insulating inserts that enables the system to be highly energy efficient to utilize its own thermal mass properties. This unique design creates cells that the Expanded Polystyrene (EPS) inserts are specifically molded to fill.

M.I.B 8" BLOCK SPECIFICATION :

Dimensions	400 × 200 × 200 mm
Dimensional Tolerance	Category D1
Compressive Strength	7 N/mm ² & 12.5 N/mm ²
Weight	22.5 Kg
Gross Dry Density	1400 Kg/m ³
K-Value	0.2276 (W/m.K)
Standards	BS EN 771 - BS EN 772

M.I.B ADVANTAGES :

- ✓ Load bearing.
- ✓ Excellent heat insulation.
- ✓ Easy electrical pipe installation.
- ✓ Easy reinforcement installation.
- ✓ Easy to fix.
- ✓ Eco friendly.

EWA
Electricity & Water Conservation Directorate
Ministry of Electricity & Water
Kingdom of Bahrain

إدارة ترشيد الكهرباء والماء
Electricity & Water Conservation Directorate
Ministry of Electricity & Water
Kingdom of Bahrain

شهادة تسجيل منتج عزل حراري
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Certificate No: TIP 19024
Registration Date: 24/11/2019
Issued to: Al Manaratain Co. & Ali Al Shaab Gro. W.L.L.
Kingdom of Bahrain

Product Name: IMSI-Al Manaratain Block 8"
Application For: Wall
Manufacturer Name: Al Manaratain Co. & Ali Al Shaab Gro. W.L.L.
Kingdom of Bahrain

Valid Until: 30/11/2020

Product Details / تفاصيل المنتج:
Description: 400x200x200mm - Concrete Masonry Insulation Block with two layers of Expanded Polystyrene sheet between the three layers of concrete.
Density: Concrete: 2320kg/m³ / Expanded polystyrene: 28.88kg/m³
Min. Thickness: 200 mm
Thermal Conductivity (k): 0.2276 W/mK
Thermal Transmittance / Conductance (C): 1.136 W/m²°C Non Standalone System **

Conditions:
• The above thermal insulation product is to be used as described above, provided the overall U-value for the wall does not exceed 0.67 W/m²°C.
• The owner should take the necessary precautions to ensure proper storage and installation of the product to protect it from moisture and direct sunlight.
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• The TIU reserves the right in future to request additional documents and to withdraw its approval of the above if any variations are noticed.
** Product above shall be supported by other certified insulation materials so that it can achieve the required U-Value.

ELECTRICITY & WATER AUTHORITY
سلطة ترشيد الكهرباء والماء
ELECTRICITY CONSERVATION
Electricity Conservation Section

Conservation / ترشيد resources and energy by saving electricity and water
ترشيد الكهرباء والماء من خلال ترشيد الكهرباء والماء
TEL: (+973) 1794 1501 - 1502 FAX: (+973) 172 2692 E-mail: ewa@emw.bh



CAS/ 3/7/19/6211/11672

Protection and Safety Directorate

Dated: 2 September 2019

M/S. AL MANARATAIN COMPANY AND ALI AL SHAAB GROUP W.L.L

P.O.Box No. 75965

Manama

Kingdom of Bahrain

Dear Sir,

**PRODUCT IMPORT AND TRADE PERMIT FOR M.I.B INSULATION
BLOCKS(IMSI)**

Thank you for your submittal dated 8 August 2019, enclosing product, catalogue, technical details and international approvals for "8 INCH M.I.B BLOKS" manufactured by AL MANARATAIN COMPANY AND ALI AL SHAAB GROUP W.L.L IN MANAMA, BAHRAIN .

As the product is tested and certified by the following certification bodies:

S/ No	Product	Model	Certification body	Certificate number	Issued date
1	M.I.B INSULATION BLOCKS (IMSI)	8 In	EXOVA	KSA/C17/5391	3/3/2016

Therefore, the General Directorate of Civil Defense has **NO OBJECTION** to import and trade the above mentioned product within the Kingdom of Bahrain.

This certificate is valid up to 2 September 2020.



For Colonel
Director Protection & Safety Directorate
General Directorate of Civil Defence
Hamad Ali Al-Ka'abi