



Ref: 5410 / 5.903/ TIS W/F/R / 21 /2016  
Date: 07/01/2016

**To: M/s. Al Manrattain Co. & Ali Al Shahaab Group W.L.L.**  
**P.O. Box 926**  
**Manama**  
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**Fax: 17 591257**

**SUB: IMSI Block**

We have reviewed the documents pertinent to the above material submitted to us and we approve its use to insulate walls subject to the following conditions:

- The approval is limited to IMSI Concrete Block, manufactured by your Company, having a density of about 2130kg/m<sup>3</sup> for concrete and 30kg/m<sup>3</sup> for expanded polystyrene from Al-Rashed Polystyrene Products Factory-K S A.
- The IMSI concrete block should be supplied with all polystyrene inserts tightly fitted at the factory. The polystyrene inserts should not be supplied loose for inserting at site.
- **The overall U-value for wall should not exceed 0.75W/m<sup>2</sup>°C using the IMSI Concrete blocks.**
- Thermal resistance value of 2.045 m<sup>2</sup>·K/W shall be used for the IMSI Block, **based on the Dubai Central Laboratory report on Thermal Insulation Properties and considering the estimated error of 17.92% for calculation method**, for calculating the overall U-value of wall.
- The approved material produced remain in compliance with the regulations of Bahrain and in accordance with the relevant standard specifications.
- The TIU reserves the right in future to request additional documents and to withdraw its approval of the above mentioned material if any variations are noticed.
- This approval is granted for thermal insulation part 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 material.

Regards

**THERMAL INSULATION UNIT**

Enc:

Thermal Insulation System Approval Form including Applicant's Undertaking & Commitments