Reflective Insulation



This is one of the most effective materials to be used in warm climates to keep the buildings cool. Contrary to other insulations, reflective insulation does not degrade over time owing to disintegration and moisture absorption capability. It can reflect up to 90% sun's heat in an efficient manner. It is very thin and fairly lightweight in comparison to other insulation materials, making it extremely easy to work with. It finds application in roofing, walls treatment, and particularly in those spaces which are profusely bigger in size. Reflective insulation is also none toxic and none carcinogenic, and these properties make it safer and easy to install with the need of minimal safety equipments.

TECHINCAL DETAILS: Reflective Insulation

| S.No. | Index | Thermostatic Chamber [m] | Cold chamber [m] | Protected Heating box | Opening thermal area to sample |
|-------|---|-----------------------------------|---|--------------------------------|---------------------------------|
| 01 | Volume of Test area | 3.2 x 3.2 x 3.7 (W x D x H) | 3.2 x 2.5 x 3.7 (W x D x H) | 2.5 × 0.7 × 2.0 (W × D × H) | 1.5 x 0.32 x 1.5 (W x D x H) |
| 02 | Test 1 | Test 2 | Test 3 | | |
| 03 | Ambient temp. [Celsius] | Thermostatic Chamber | 19.95 | 19.96 | 19.97 |
| | | Protected Heating box | 20.10 | 20.08 | 20.07 |
| | | Cold chamber | 0.05 | 0.03 | 0.00 |
| | | Temp. gap *1 | 20.06 | 20.06 | 20.07 |
| 04 | Heat quantity [watt] | Total supplied qty *2 | 28.68 | 28.68 | 28.68 |
| | | Calibration heat flow rate *3 | 19.65 | 19.53 | 9.19 |
| | | Passed heat qty through sample | 9.03 | 9.13 | 9.19 |
| 05 | Thermal transmittance [W/(m^2.K)] | | 0.20 | 0.20 | 0.20 |
| 06 | Resistance of thermal transmittance [W/(m^2.K)/W] | | 5.00 | 4.94 | 4.91 |
| 07 | Remarks | | 01 Thermostatic chamber / heating box condition: (20+/-) degree, Humidity 50% R.H. 02 Cold chamber condition: Room temp. 0 degree 03 Air current direction: Horizontal | | |

^{*01} Temp. gap: Over 75mm distance from sample's AVG. room temp in Protected heating box minus over 75mm distance from sample's AVG. room temp in cold chamber.

^{*02} Total supplied Qty: Inside protected heating box total heating qty by blowing fan and heater.

^{*03} Calibration heat flow rate: Between outer wall of heating box to attachment frame for sample.