



SOLAR AGNI INTERNATIONAL.
COMMUNITY AND ENERGY SYSTEMS
(A Unit of Mother's Centenary Memorial Trust)

Ref.....

Date.....

INSULTEC / TEST/ O1 / 95

26TH July 1995

TEST REPORT.

SAMPLE: Insultec x 300 μ m thick on GI sheet applied by brush in 3 coats of 100 microns each as per application instructions by the proprietary manufacturer.

COMPANY: M/S Chitra Insultec Pvt (Itd) 'ASHISH' 2nd floor, Swastik Junction Navrangpura, Ahmedabad 380 009

RESULT: It is mildly selective white surface with double action of solar reflector and high quality emitter. The value (ϵ/α) is

$$\frac{\epsilon \text{ (low temperature heat radiation)}}{\alpha \text{ (solar radiation flux)}} = 4.6$$

EFFECT: * This will reduce ceiling temperature appreciably (particularly of sheet roofing) for all kinds of sun exposed surfaces.

In non conditioned rooms, it will reduce the air temperature gradient from ceiling to floor considerably. And also reduce the temperature at breast level. The exact magnitude will depend upon location, surface, orientation, type of material, and details of enclosure.

In conditioned rooms, it will cut down solar part of sensible heat gain by almost 70 % as compared to non coated surfaces.

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