



DuPont™ Energain®

ENERGY-SAVING THERMAL MASS SYSTEMS

Data Sheet - Measured Properties

THERMAL MASS PANEL

| Descriptive Properties | | Unit | Value |
|--|-----------------------------|-------------------|-------|
| Thickness | | mm | 5.26 |
| Width | | mm | 1000 |
| Length | | mm | 1198 |
| Area weight | | kg/m ² | 4.5 |
| Aluminium thickness (sheet) | | µm | 130 |
| Aluminium thickness (edges) | | µm | 75 |
| Thermal properties | Test Method | | |
| Paraffin loading | Comparative test by DSC | % | 60 |
| Melt point (paraffin) | DSC method (1°C/min) | °C | 21.7 |
| Latent heat storage capacity | DSC method (1°C/min) | kJ/kg | > 70 |
| Total heat storage capacity (Temperature range 14°C to 30°C) | DSC method (1°C/min) | kJ/kg | > 170 |
| Physical properties | | | |
| Aluminium sheet delamination force | Internal DuPont test method | N/cm | > 20 |
| Conductivity solid | BS EN 12667-2001 | W/(m.K) | 0.18 |
| Conductivity liquid | BS EN 12667-2001 | W/(m.K) | 0.14 |
| Flash Point (paraffin) | ASTM D56 | °C | 148 |

PRODUCT DESCRIPTION

The panel is a fine mixture of ethylene based polymer (40%) designed by DuPont and paraffin wax (60%) laminated on both sides with a 130 µm aluminium sheet. The edges are closed with a 75 µm aluminium tape.

REACTION TO FIRE

| | | |
|---|-----------------------------|---------|
| Single-flame source test | EN 11925-2 | Class E |
| Surface spread of flame test | BS476 part 7 | Class 1 |
| BS476 part 7 & BS476 part 6 (behind plasterboard) | Building Regulations (AD B) | Class 0 |

DURABILITY

Predicted to be durable for the life-time of a building
Chemically inert with most materials

ALUMINIUM TAPE

| Descriptive Properties | | Unit | Value |
|------------------------|--|------|-------|
| Thickness | | µm | 75 |
| Width | | mm | 50 |

DuPont patented technology

All values correspond to average results obtained in our laboratories and outside institutes and are indicative. The right is reserved to make changes at any time without notice.

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