

Technical Specification

Typical U Values Achieved with Ecobead Platinum							
Cavity Width (U-Value in W/m ² K)							
Wall Construction	75 mm	90 mm	100 mm	110 mm	150 mm	175 mm	200 mm
Rendered Dense Block-Dense Block-Plaster	0.38	0.32	0.29	0.27	0.20	0.18	0.15
Brick - Medium Density Block - Plaster	0.36	0.31	0.28	0.26	0.21	0.18	0.16
Brick - Light Weight Block - Slab on Dab	0.33	0.28	0.26	0.24	0.19	0.17	0.15
Brick - Insulating Block - Slab on Dab	0.31	0.27	0.25	0.23	0.19	0.17	0.15

Units & Terminology Explained

- U value is the measure of how much heat is being lost through the wall, floor or roof section of a building.
- U Value is measured in Watts per metre squared Kelvin and is written as W/m²K
- Thermal Conductivity is the measure of a materials ability to conduct heat.
- The lower the thermal conductivity the better the insulator.
- Thermal Conductivity is measured in Watts per metre Kelvin
- The thermal conductivity of Ecobead Platinum is 0.033W/m.K

Heat is transferred in 3 ways Conduction, Convection & Radiation.

- **Conduction**
Conduction through solid material or gas: the better insulating the material, the less the conduction
- **Convection**
Heat "travels" through air movements because of temperature and density gradient. Hot air moves up and heat dissipates. The stiller the air, the less the convection
- **Radiation**
Each material absorbs or emits thermal radiations depending on its temperature and its emissivity .Heat exchange is function of propagation media (vacuum or air) When radiation is absorbed or reflected , there is less thermal transfer.