# Program to Compare the Actual Loss with the Permitted Loss

## Actual Heat Loss

| | | | | |
|---|---|---|---|---|
| Walls | 0.26 | 88.51 | 1.00 | 23.01 |
| Semi-exposed walls | 0.45 | 0.00 | 1.00 | 0.00 |
| Windows (single glazed) | 5.70 | 0.00 | 1.00 | 0.00 |
| Windows (double glazed) | 2.70 | 14.41 | 1.00 | 38.91 |
| Roof | 0.13 | 42.71 | 1.00 | 5.55 |
| Floor | 0.45 | 37.00 | 1.00 | 16.65 |
| | | Total Heat Loss | | 84.12 |

Watts per degree Celsius

## Permitted Heat Loss

**Building complies**

| | | | | |
|---|---|---|---|---|
| Walls | 0.45 | 88.51 | 1.00 | 39.83 |
| Semi-exposed walls | 0.60 | 0.00 | 1.00 | 0.00 |
| Windows (single glazed) | 5.70 | 14.80 | 1.00 | 84.36 |
| Roof | 0.25 | 42.71 | 1.00 | 10.68 |
| Floor | 0.60 | 37.00 | 1.00 | 22.20 |
| | | Total Heat Loss | | 157.07 |

Watts per degree Celsius

Existing

Please enter data into the **blue** cells only

Internal Temperature 20 Degrees Celsius

External Temprature 4 Degrees Celsius

Temperature drop 16 D

| Material | Thickness | K value | Resistance | Temperature Drop | Face Temperature |
|---|---|---|---|---|---|
| | | | | | 20 |
| Rsi | ~ | ~ | 0.123 | 2.28 | 17.72 |
| Gypsum Plaster | 0.005 | 0.20 | 0.025 | 0.46 | 17.26 |
| Browning/hardwall | 0.012 | 0.50 | 0.024 | 0.44 | 16.82 |
| Brickwork | 0.103 | 0.45 | 0.229 | 4.23 | 12.58 |
| Cavity | ~ | ~ | 0.180 | 3.33 | 9.25 |
| Brickwork | 0.103 | 0.45 | 0.229 | 4.23 | 5.02 |
| Rso | ~ | ~ | 0.055 | 1.02 | 4.00 |

Total Resistance 0.865

U value 1.16 watts sq metre/ per degree C

PLANNING
ACK'D
REPLIED
RECD 29 MAY 2008
UNIT RECD | DATE
M
M
M
FOIL ACTION

New Build.

# Program to calculate the U Value of a standard wall

***Please enter data into the blue cells only - at the bottom of the sheet***
***a statement will indicate whether the wall complies with current Building Regulations***

| Material | Thickness | K value | Resistance |
|---|---|---|---|
| *Rsi* | ~ | ~ | **0.123** |
| Plaster | 0.005 | 0.200 | **0.025** |
| Browning | 0.012 | 0.500 | **0.024** |
| Brickwork | 0.103 | 0.030 | **3.433** |
| *Rcavity* | ~ | ~ | **0.180** |
| Brickwork | 0.103 | 0.300 | **0.343** |
| *Rso* | ~ | ~ | **0.055** |

| | | |
|---|---|---|
| **Total Resistance** | **4.184** | **$M^2$ per $^0$ Celsius per Watt** |
| **U Value** | **0.239** | **Watts per $M^2$ per $^0$ Celsius** |

***This wall complies with current Building Regulations***