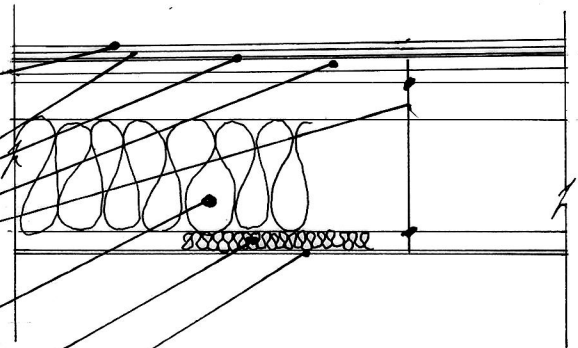


TERRACE CONSTRUCTION.

13 MM CEMENTITIOUS GLASS FIBRE
REINFORCED WALKING TILES.
12 MM ELASTOMERIC ROOFING MEMBRANE
5 MM SHEAVING FELT
18 MM EXTERNAL QUALITY PLYWOOD
75x195 FLOOR JOISTS AT 400 CENTRES
150MM CELOTEX XR4150 INSULATION
BETWEEN JOISTS
25MM CELOTEX PL4000
(COMPOSITE 12.5MM PLASTERBOARD
CELOTEX INSULATION 12.5MM)
6 MM BOARD PLASTER SKIM.



FOR CALCULATION PURPOSES 1 M² TERRACE AREA WILL HAVE
MIN 2 NO. JOISTS TIMBER AREA = 9% OF INSULATED 1M².
CELOTEX AREA = 91% OF INSULATED 1M²

'U' VALUE OF THE TERRACE ROOF AREA ABOVE BEDROOM.

EXTERNAL SURFACE RESISTANCE FOR
SHELTERED EXPOSURE URBAN
LOCATION LOW EMISSIVITY COEFFICIENT

0.9

Resistivity

0.9

13 MM CEMENTITIOUS GLASS FIBRE
REINFORCED TILES.

5.3 x 0.013

0.069

12MM ELASTOMERIC MEMBRANE

5.3 x 0.012

0.064

5MM SHEAVING FELT

5.3 x 0.005

0.027

18MM EXTERNAL QUALITY PLYWOOD

6.93 x 0.018

0.125

VENTILATED VOID COEFFICIENT

0.18

0.18

150MM CELOTEX XR4150 INSULATION
BETWEEN JOISTS

45.45 x 0.150 x 91%

6.204

JOISTS BRIDGING INSULATION

0.195 x 6.93 x 9%

0.122

25MM CELOTEX PL4000

45.45 x 0.025

1.136

6 MM BOARD PLASTER SKIM

6.25 x 0.006

0.038

INTERNAL SURFACE RESISTANCE
COEFFICIENT

0.106

0.106

TOTAL RESISTANCE = 8.971

$$'U' \text{ VALUE} = \frac{1}{R}$$

$$'U' \text{ VALUE} = \frac{1}{8.974}$$

$$= 0.111 \text{ W/m}^2 \text{ } ^\circ\text{K.}$$

Current Building Regulations require minimum 'U' Value of 0.13 W/m²°K.
The construction will be well within the required standard.

'U' VALUE CALCULATION FOR TERRACE ROOF ABOVE BEDROOM.

Data Source for resistance
values : Celotex published trade Literature
Design Data Publication for Common
Construction materials
CIBS publications.

Cannon, Morgan & Rheinberg Partnership
Chartered Architects

Tel: 01727 861622 / 01494 791066

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Initial issue date

NOT TO SCALE

Scale (CALCULATION SHEET)

99a CAMDEN MEWS, CAMDEN, LONDON NW1 9BU.

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Contract

Org. No.