

Technical Information Sheet

Tactray 90 – Guide to Loads & Weights

Tileform UK

Tactray 90

Subject	Tactray 90 – Guide to Loads & Weights	Date : July 2009
Application	Roofs	Edition : TT90/0014
Standard		Page : 1 of 2

The primary function of Tactray 90 is to carry the dead and live loads associated with the roof and overall structure.

The dead load is defined as that load imposed by the various coverings, plus internal features such as suspended ceilings, sprinklers, heating and ventilating systems and lighting.

Live loads are taken to comprise of snow loads (0.75 Kn/m²) plus any other transient loads such as positive or negative wind loads and construction loads.

It is important to understand the definition between weight and load when considering Tactray 90

Weight How heavy an object is and can be expressed inKilo-gram's per square metre (Kg/m²)

Load A force acting as a weight and can be expressed in Kilo-newtons per square metre (kN/m²)

To calculate a load from a known weight, use the following formula

$$\frac{\text{Weight (Kg/m}^2\text{)} \times 9.81}{1000} = \text{kN/m}^2$$

The gauges, weight and loads for Tactray 90 are given in the table below

Tactray 90 - Gauge (mm)	Weight (Kg/m ²)	Load (kN/m ²)
0.75	8.83	0.09
1.00	11.78	0.12
1.25	14.72	0.14

The table on page 2 gives typical weight and load figures for popular roof coverings

Tileform UK Ltd

Spital Farm Offices, Thorpe Mead, Banbury, Oxon, OX16 4RZ

Tel : 01295 250998 | Fax : 01295 271068 | www.britmet.co.uk | email : britmettileform@hotmail.com

Technical Information Sheet

Tacray 90 – Guide to Loads & Weights

Tileform UK

Tacray 90

Subject	Tacray 90 – Guide to Loads & Weights	Date : July 2009
Application	Roofs	Edition : TT90/0014
Standard		Page : 2 of 2

External weights can vary considerably from as little as 7 Kg/m² such a Britmet Tileform steel tile sheets up to 110 Kg/m² with a reconstructed stone slate.

TYPICAL WEIGHTS AND LOADS OF VARIOUS SLATES AND TILES

Manufacturer	Product	Weight Kg/m ²	Load kN/m ²
Forticrete Roofing Products 051 922 2048	Hardrow Stone Slates	80–96	0.78–0.94
Britmet Tileform Ltd 01295 250998	Steel Tile Sheets	7 7 - 11	0.07
ECC Building Products 0293 545058	Cotswold Stone Slates Moordale Stone Slates	84 110	0.82 1.08
Eternit 0763 260421	600 x 300 Rivendale, Shire, 2000, Duracem, Country Gower, Fibre Cement Slates.	19–21	0.18–0.20
Keymer 0444 232931	Handmade Clay Plain Tiles	76	0.75
Alfred McAlpine Slate Products 0248 600656	Penrhyn 600 x 300 Standard Grade Natural Slates	34	0.33
Marley Roof Tiles 0732 741500	Modern, Flat Concrete Supalite, Shallow Roll Concrete	52–56 28–30	0.51–0.55 0.27–0.29
Redland Roof Tiles 0737 242488	Cambrian Interlocking Slate Regent, Bold Roll Concrete	17 47–51	0.17 0.46–0.50
Sandtoft Tileries 0427 872696	County, Clay Pantile Old English Clay Pantile	42 44	0.41 0.43
Steetley Roofing 0782 750243	Acme Machine Made Clay Plain Tiles	64	0.63

NB Weights are typical and, whilst weight ranges quoted are for different gauges and thicknesses, please consult the tile manufacturer concerned. To calculate the load from the typical weight, use the following formula:

$$\frac{\text{Weight (kg)} \times 9.81}{1000} = \text{kN/m}^2$$

Once the structural engineer has calculated all the relevant loadings, Tacray 90 Load/Span tables can be used to determine the gauge of material and purlin spacings.

See Tileform Technical Information sheet TT90/0015 for guide to loads and spans also Tacray 90 Brochure

Tileform UK Ltd

Spital Farm Offices, Thorpe Mead, Banbury, Oxon, OX16 4RZ

Tel : 01295 250998 | Fax : 01295 271068 | www.britmet.co.uk | email : britmettileform@hotmail.com