



## ROMPA® WATER MATTRESSES 20188, 20189, 20194 ROMPA® MUSICAL WATER BEDS 20191, 20192, 20193



### WORKING LOAD

Water Mattresses and Musical Water Beds have a displaced load. This means that the weight of the bed is distributed evenly over a solid frame, NOT point loaded on four legs as typical beds. For example: an adult whose weight is 60kg makes contact with the floor over an approximate area of 0.035 square metres, exerting point pressure of 1700 kilos/sq.m. However, the displaced load averages only 15kgs/sq.m. A conventional bed on eight legs exerts 16000 kilos/sq.m of point pressure but the displaced load is almost the same as an adult. The displaced load of a Water Bed is greater than these examples, but less than a refrigerator or a bath.

The original London Building Act was first enforced in 1894. Since that time there have always been regulations governing the construction of private dwellings. These regulations established a LIVE LOAD that floors must be able to sustain. Whilst it has changed over the years, the Live Load factor has never been less than 150kgs/sq.m and that ratio was intended to allow a substantial safety margin. A typical 5' Water Bed covers an area of 3 sq.m allowing a Live Load of 450kg.

LIVE LOAD is a calculated number that sets a minimum load, evenly distributed, that the floor must be capable of supporting. For example, if a bedroom is 3m x 4m, then the total live load is 12 sq.m x 150kgs/sq.m = 1800kg

DISPLACED LOAD varies from room to room depending on the size and distance between joists and on the type of floor – planking, plywood, chipboard etc

**Please note:** if you have any doubts about the quality of your establishment's construction or if you believe it is not built to British Housing standards then it is recommended that your installation be independently assessed.

Further copies of these instructions can be downloaded at [www.rompa.com](http://www.rompa.com)

We hope you find our instructions invaluable. If you have any suggestions for improving them further your comments will be greatly received – please contact us at [producthelp@rompa.com](mailto:producthelp@rompa.com)