

INTRODUCTION

TorFloor RdB is a low build up structural underfloor heating system designed to work well with heat pumps and specifically designed for acoustic separation. The system is as per the standard TorFloor; it uses 22mm chipboard, but has an additional 8mm of acoustic rubber bonded to the bottom to reduce vibrations and to attenuate airborne and impact noise passing through floors.

The panels have the pipe as close to the floor finish as possible, this maximises the heat output of the panels whilst minimising the temperature of the water being used. The system replaces the chipboard or plywood floor deck used in the construction.

The TorFloor RdB panels have pre-routed channels to accept the continuous pipe and factory fitted aluminium diffuser strips to further improve performance and provide a method for detecting the pipe. The panels are laid on the joists or battens in an industry standard brick pattern according to the OMNIE design with the pipe installed by piercing through the soft temper aluminium diffuser strips. The ends of each circuit drop into the joist or batten space and are fed to and from the manifold as a continuous system (12mm compression fittings can be used if access is limited or as required and must be accessible on completion). The panels then require a 6mm flooring grade Ply screwed and glued to complete the structural deck.



SPECIFICATION

OMNIE TorFloor RdB system with a total build up of 30mm consists of an 8mm acoustic rubber and 22mm chipboard routed to accept 12mm PE-RT pipe to DIN 4726 at 150mm centres and factory fitted aluminium heat diffuser strips to be laid over joisted or battened floor up to 600mm centres. In order to form a structural deck a 6mm ply or floor deck is to be glued and screwed over. The system to be designed, installed and commissioned to BS1264.

LAYFAST – Speed up installation time. This product uses our multi-directional pipe channel system.

For more information see DS UFH 22

DRYSYSTEM – No wet trades required, designed for dry constructions.

For more information see DS UFH 24



TECHNICAL DETAILS

Panel Description

22mm P5 grade chipboard.

8mm High density acoustic rubber (900kg/m3) base layer.

Panel Thickness

30mm (+6mm ply layer)

Panel Weight including 6mm ply & IsoRubber

20.5 kg/m²

Panel Dimensions

2400mm x 600mm

Pipe

12mm PE-RT to DIN 4726

Pipe Centres

150mm

Heat Output

Heat outputs are dependent on the water temperature, floor construction, system dimensions, floor finish & design conditions. Please call 01392 36 36 05 to discuss your specific requirements.

As a guide the heat outputs below are based on 12mm PE-RT pipe at 150mm centres with 6mm ply installed over. Air Temperature = 20°C. Call our technical team to discuss tiling on TorFloor RdB.

(0.15 m²K/W = 1.5 TOG).

Design Considerations

Maximum uniform distributed load = 1.5N/m²
Maximum concentrated load = 2.0KN in accordance with BS EN1991-1-1:2002

Floor Finish	55/48 (°C)	50/43 (°C)	45/38 (°C)	40/33 (°C)
15mm Wood Finish (0.1m²K/W)	74 W/m²	62 W/m²	50 W/m²	38 W/m²
Carpet & Underlay (0.15 m²K/W)	67 W/m²	56 W/m²	45 W/m²	35 W/m²