# RACKHAM TS SYSTEM - TECHNICAL SPECIFICATION 

## Building Regulations

When supplied and fixed in accordance with Agrément Certificate No. 16/5360 the Rackham TS System meets all the requirements of the latest Building Regulations.

## Rackham Floor Beams

Prestressed concrete floor beams, 175 mm standard and 175 mm WIDE deep are supplied in lengths to suit individual layouts, in 50 mm increments.

## TS System Infill Panels

The Rackham TS System comprise of EPS panels, each specifically profiled for a particular application within the floor construction - the panels are described in greater detail with the TS System components sheets.

The Rackham TS system is supplied in white or grey EPS dependant on the ' $u$ ' value required. The panels should be installed as indicated on the relevant installation drawing along with the system installation guide.

## Weight of Construction

175 mm standard beam weight $-34 \mathrm{~kg} / \mathrm{m}$. The calculated dead weight of the finished floor is $251 \mathrm{~kg} / \mathrm{m}^{3}$ (based upon beams at S 596 centres and a 75 mm thick concrete topping).
175 mm WIDE beam weight $-58 \mathrm{~kg} / \mathrm{m}$. The calculated dead weight of the finished floor is $280 \mathrm{~kg} / \mathrm{m}^{3}$ (based upon beams at S 651 centres and a 75 mm thick concrete topping).

## Imposed Loads

Normally $1.5 \mathrm{kN} / \mathrm{m}^{2}$ unless otherwise stated on the Rackham layout drawing. Extra Rackham beams are provided, where necessary to carry block partitions. No other loads e.g. Wind buttressing loads, newel posts etc, are allowed for unless noted on the Rackham layout drawing.

## Structural Calculations

The design method and calculations for this floor have been checked and approved by the Agrément Board. Particular calculations based on BS 8110 can be provided in connection with all schemes, if required.

## Bearings

Rackham beams are normally supported by the inner skin of the cavity walls. A double bearing can be taken on internal 100 mm brick or block walls by staggering the beam layout.

## Installation

Beams should always be lifted as near to the end as possible and always handled and stacked the right way up. Timber skids should be used in stacking, placed within 300 mm of the beam ends.

> When installing the Rackham TS System always refer to the appropriate Rackham layout drawing.

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## INSTALLATION - RACKHAM TS SYSTEM


fig. 1

fig. 2

1. Whichever end of the bay you start at you always begin with the TS Start Panel. If the TS Start Panel needs to be cut on site, this can be done using a fine toothed saw to reduce either the length or width of the panel as required.

External parallel blockwork adjacent to the TS Start Panels should be brought up an extra course to provide a vertical surface against which the panels can be installed.
2. The TS Start Panel should be held adjacent to the inner skin of the wall. The first beam in the bay is then moved into position to support this panel as shown in fig. $1 \&$ fig. 2.
3. The other floor beams in the bay should be positioned as shown on the Rackham layout drawing and spaced out using a suitable gauge between beams just above the shoulder.
4. The TS infill panels should be placed between the beams as shown in fig.3.

5. Before installing the last panel and beam in the bay you must first install the TS End Panel.
6. The TS End panel should be held adjacent to the inner skin of the wall and the last floor beam moved into position to support this panel as shown in fig.4.

7. When the TS End panel is in position, the final TS infill panel can be installed as in fig.5.


