

# General Information

## General Design Details

Park Bearers are designed for installation on generally even subfloors. The surfaces of screeds, concrete subfloors or units must be sufficiently level to meet relevant Codes of Practice and Building Regulations (Equivalent to SR1: BS8204-1:2003). If they are not, the use of the CMS Danskin Saddle Floor Levelling System is recommended.

## Preparation

The building must be weatherproofed and wet trades completely dried out before commencing installation of flooring components. Isolated high points, mortar spillages and other debris should be removed from the area. All joints and air paths between concrete units and at perimeter walls must be sealed. Components exposed to wet conditions such as ingress of rain or plumbing leaks should be discarded and replaced.

## Moisture

Excessive moisture from cast in situ slabs and screeds which have not dried out can have adverse effects on flooring materials and timber components. BS 8201 : 1987 states that "it is reasonable to recommend that the concrete be considered dry when the relative humidity falls to 75% or less" (when tested by use of a hygrometer). Where the dryness of concrete cannot be guaranteed it is recommended that a dpm is installed (minimum 1000 gauge).

## Services

The provision of access to services is most successful if the location of services is detailed at an early stage. Services should be kept at least 150mm away from walls to allow space for perimeter bearers. The height of bearers must be adequate to provide clearance for services. Do not notch bearers where services cross. Place bearers on either side of the services leaving a gap of 25mm on either side. Gaps where services penetrate the floor should be filled with acoustic sealant.

## Spacings and Loadings

Bearer centres must not exceed 400mm for 18mm or 600mm for 22mm chipboard. These bearer centres are based on a maximum Uniformly distributed load of 1.5kNm<sup>3</sup> and Concentrated load of 1.4kN as specified for self contained, single family dwelling units in accordance with BS6399-1 : 1996.

## Areas of Heavy Loading

In areas where heavy loadings are anticipated (such as kitchens and bathrooms) centres should be reduced to 300mm between Park Bearers to provide additional support. In cases of extraordinary loading advice should be sought from the specifier or manufacturer. Storage heaters are considered to be an extraordinary loading and will require support direct from the subfloor, independent of the flooring system.

## NBS Specification Clauses

NBS Specification Clauses can be provided for Park Bearers.

## Installation

To ensure correct installation of the floor the detailed fixing instructions must be followed carefully. Copies of these instructions should be obtained from the manufacturer. The installation of Park Bearers is simple and can be undertaken by competent carpenters. Alternatively, experienced fixing contractors can be recommended who can undertake to supply and fix the bearers in most parts of the United Kingdom.

## Storage

All components should be stored inside, under cover and in dry conditions.

## Delivery

Park Bearers are supplied on curtainside vehicles ready for forklift unloading by site.

## Other Products

The company also manufactures the CMS Danskin Saddle System - a range of acoustic and thermally enhanced floor levelling systems suitable for a wide range of subfloors and the CMS Danskin Reflex Bearer - a high performance acoustic bearer for use in timber frame and masonry construction.

## Partitions

Partitions should normally be erected from the subfloor. Where lightweight non loadbearing partitions are built from the top of the floating floor a double row of Park Bearers should be placed beneath the partitions.

## Expansion Provision

Perimeter gaps of a minimum of 10mm should be provided between the chipboard edge and any rigid upstand such as walls or columns. Perimeter gaps for large floor areas should be based on a gap of 2mm per metre run of floor. For floors over 5m in length, additional intermediate expansion joints should be considered.

## Communal Areas in Flats

BS6399 : 1996 imposes more onerous load bearing requirements for communal areas in certain designs of flatted developments. Concentrated load requirements over the long term can be as high as 4.5kN. If it is intended to lay a floating floor in communal areas in flats such as common corridors, hallways, stairs and landings it is essential to contact CMS Danskin for specific advice regarding the floor boarding and component centres.

## Perimeters and Thresholds

It is recommended that Park Bearers are placed continuously around the perimeter of the room approximately 50mm from the wall for optimum support. A Park Bearer should also be placed across each threshold.

## Levelling

Where very minor subfloor irregularities are encountered continuous packing may be placed beneath the Bearer to provide support or furring pieces can be nailed to the top of the Bearer to level the floor. In the event that substantial packing would be needed the CMS Danskin Saddle System should be used instead of Park Bearers.

## Ceramic Tiles

As acoustic floors are designed to deflect vertically in order to reduce impact sound there are inherent risks in laying ceramic tiles on top of floating floors. However the risks can be significantly reduced by good detailing and the use of modern flexible adhesives. Ceramic tiles have been successfully laid on floors incorporating Park Bearers for many years. Contact the Sales Department for specialist advice.

Every care has been taken to ensure that all descriptions and specifications are correct at date of publication. The policy of CMS Danskin Acoustics is one of continuous improvement and product development, and the right is reserved to alter the product specifications and detailed fixing instructions without notice.

CMS Danskin Acoustics' employees or agents are not authorised to make any representations or give any advice or recommendations concerning any goods or services unless confirmed by CMS Danskin Acoustics in writing.



# Park Bearers

## CMS Danskin Acoustics

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# Park Bearers

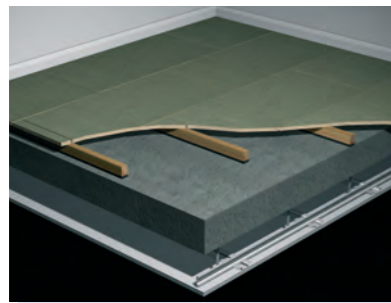


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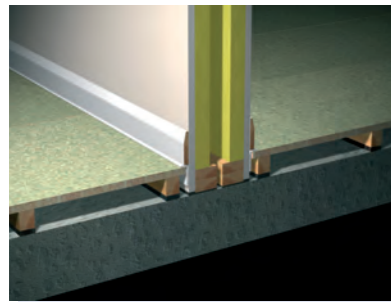


## Park Bearers

Excessive noise between flats is one of the prime concerns of today's architect and housebuilder. Park Bearers provide a highly effective method of reducing impact and airborne sound transmission through concrete party floors as part of a dry floating floor construction. Dry floating floors eliminate the delays caused by the drying out of screeds and the cavity created by the bearer can accommodate services running under the floor.



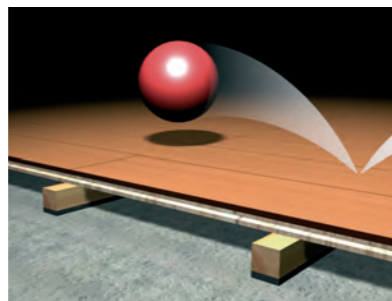
Robust Details Floors EFC1/EFC2/EFC7/EFS1



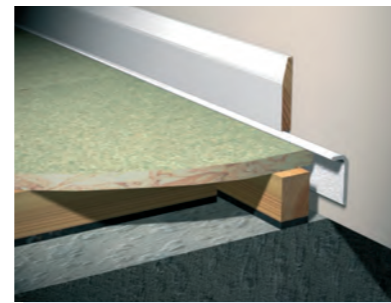
On Robust Details Raft Foundation Ground Floors EWT1/EWT2/EWT3/EWT4/EWS1/EWS2/EWS4

## Flexibility

Park Bearers are suitable for use in many environments:



Supporting Hardwood Flooring



On Higher Mass Concrete Subfloors



On Ground Floors

## Compliance with the Building Regulations

The sound insulation of party floors is a necessary requirement of the Building Regulations. Methods of satisfying the Regulations are set out in Approved Document E in England and Wales, Section 5 of the Technical Handbook in Scotland and Technical Booklet G in Northern Ireland. In addition the construction of Robust Details can provide a method of compliance in England and Wales.

**The CMS Danskin Park Bearer contributes significantly to the reduction of impact and airborne sound through concrete party floors. When used with appropriate structural floor and ceiling constructions it has been independently demonstrated to meet the performance standards of the Building Regulations in Scotland, Northern Ireland, England and Wales. In addition it has been approved for use as an FFT1 and FFT3 bearer in many Robust Detail constructions.**

## Performance

Laboratory values for Park Bearers are shown in Table 1. Please refer to CMS Danskin Performance Data Sheets for site test information on the Park Bearer with different structural floor and ceiling combinations. CMS Danskin also provide a Specification Questionnaire which can help ensure that, where available, an appropriate test certificate can be provided to justify the specification of the product.

## Advantages

- Approved FFT1 and FFT3 bearer in many concrete Robust Details
- Effective reduction of impact and airborne sound
- Accommodates service runs
- Eliminates the delays caused by screeds
- Proven track record
- PEFC or FSC chain of custody
- GWP of resilient layer is 0

## Components and Accessories



### Park Bearers

Park Bearers comprise softwood battens 45mm (Nom.) wide by 2400mm long with a specially developed resilient foam strip 9mm thick adhered to the underside. They can be preservative treated if required. Standard heights including the 9mm insulant are 45mm, 54mm, 61mm, 70mm and 79mm. Other sizes are available to order. Timber is PEFC certified as standard.



### 'L' Shaped Flanking Strip

This is placed at the perimeter of each floor. The 6mm thick preformed "L" shaped acoustic foam is supplied in strips 1.8m long and packed in bags containing 100 linear metres. The innovative "L" shape makes the flanking strip easy to fit and one size fits all floors. It is lightly trapped between the bottom of the skirting and the top of the flooring board with the excess neatly trimmed off.



### Acoustic Quilt (As required)

Where required to achieve a particular acoustic performance CMS Danskin can supply acoustic quilt. 25mm thick, the quilt has a density of 19kg/m<sup>2</sup> and is paper faced on one side. Each roll is 1200mm wide x 10 metres long.

Design Approach	Performance Requirement	Measured Performance
<b>Guidance / Specified Construction</b>		
England & Wales ADE Floor Type 1 ( Para 3.28 )	Minimum $\Delta L_w$ 17dB to BS EN ISO 140-8:1998	$\Delta L_w$ 17dB for 31mm high Park Bearer
Scotland Technical Handbook Section 5 Example Construction 1B and 2B	Minimum $\Delta L_w$ 22dB Minimum $\Delta R_w$ 5dB	$\Delta L_w$ 26dB for 50mm high Park Bearer $\Delta R_w$ 8dB for 50mm high Park Bearer
<b>Robust Detail Constructions</b>		
E-FC-1 E-FC-2 E-FC-7 E-FS-1	Minimum $rd\Delta L_w$ 17dB on Appendix D floor	$rd\Delta L_w$ 21dB for FFT3 bearer (54 mm high) $rd\Delta L_w$ 24dB for FFT1 bearer (75 mm high)
<b>Own Design</b>		
	Minimum Impact & Airborne Site Measurements	Where available, refer to Performance Data Sheets for test results on similar constructions.

Key:  $\Delta L_w$  = Impact Sound Improvement - Laboratory Test

Table 1