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British Standard

# Design loading for buildings

## Part 1. Code of practice for dead and imposed loads

(Formerly CP 3 : Chapter V : Part 1)

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Charges de calcul pour le bâtiment

Partie 1. Charges mortes et charges imposées. Code de bonne pratique

Lastannahmen für Gebäuden

Teil 1. Leitfaden über Eigengewichte und aufgebrachte Lasten



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Foreword

This Part of this British Standard code of practice has been prepared under the direction of the Civil Engineering and Building Structures Standards Committee as a revision of the 1967 edition of CP 3 : Chapter V : Part 1 which it supersedes. CP 3 : Chapter V : Part 1 : 1967 is therefore withdrawn. The data on wind loads are given in CP 3 : Chapter V : Part 2 which is being revised and will be issued as Part 2 'Code of practice for wind loads' of this standard. A further Part of this standard, currently in course of preparation, will be Part 3 'Code of practice for snow loading'.

The principal change in this revision is in the presentation of the imposed floor loads in groups of descending magnitude under occupancies. When the load to be taken for a particular use is not given in the tables, the occupancy class will indicate where the load for a comparable use can

be found. The weights of movable partitions have been redefined as imposed loads. The reductions in floor load with number of storeys and with area have been clarified. The basis of the loadings is historical and they agree, subject to comparatively minor variations, with international consensus of opinion.

In this Part of this British Standard code of practice, numerical values have been given in terms of SI units, details of which are to be found in BS 5555. Those concerned with the conversion and renovation of older buildings designed in terms of imperial units may find it useful to note that 1 N = 0.225 lbf and 1 kN/m<sup>2</sup> = 20.89 lbf/ft<sup>2</sup>.

**Compliance with a British Standard does not of itself confer immunity from legal obligations.**

**Amendment No. 1**

**published and effective from 31 October 1985  
to BS 6399 : Part 1 : 1984**

**Design loading for buildings**

**Part 1. Code of practice for dead and imposed loads**

**Revised text**

**AMD 4949  
October 1985**

**Front cover**

In the generic title delete 'Design loading' and substitute 'Loading'.

In line 1 of the French title delete 'de calcul'.

Delete line 2 of the French title and substitute the following:

'Partie 1. Charges mortes et charges imposées. Code de bonne pratique'.

In line 1 of the German title delete 'Lastannahmen' and substitute 'Lasten'.

**AMD 4949  
October 1985**

**Page 1**

In the generic title delete 'Design loading' and substitute 'Loading'.

**AMD 4949  
October 1985**

**Clause 1.1**

Delete lines 1 and 2 and substitute the following:

'1.1 This Part of BS 6399 gives dead and minimum recommended imposed loads for use in designing buildings. It applies to:'

**AMD 4949  
October 1985**

**Clause 4.1 Floors**

Delete the last paragraph and substitute the following:

'When partitions are indicated on the plans their weight should be included in the dead load acting as concentrated loads in their actual positions. When the partitions are not determined on the plans, an additional imposed load on beams and floors (where these are capable of effective lateral distribution of the load) may be taken as a uniformly distributed load per square metre of not less than one-third of the weight per metre run of the finished partitions. For floors of offices the uniformly distributed load should not be less than 1.0 kN/m<sup>2</sup>.'

**AMD 4949  
October 1985**

**Clause 5.1**

In line 2 delete 'or for' and substitute 'or in'.

Delete line 3 and substitute the following:

'designed for storage purposes.'



AMD 4949  
October 1985

### Clause 5.2

Delete the existing clause and substitute the following:

'5.2 Except as provided in 5.1 and 5.3, the reductions given in table 2 and table 3 may be applied to the total imposed floor load (including the additional partition loading allowance given in 4.1) in designing columns, piers, walls, beams and their supports and foundations. Where the floor load given in tables 5 to 12 exceeds  $5 \text{ kN/m}^2$  the reductions given in table 2 may be taken provided that the loading assumed is not less than it would have been if all floors had been designed for  $5 \text{ kN/m}^2$  with no reductions. The reductions given in table 3 do not apply to roofs.'

AMD 4949  
October 1985

### Table 2. Reduction in total distributed imposed floor loads with number of storeys

In the heading to column 1 delete 'construction' and substitute 'consideration'.

AMD 4949  
October 1985

### Clause 5.3

Delete the existing clause and substitute the following:

'5.3 In the design of a beam or girder the imposed floor load may be reduced in accordance with table 3, subject to a maximum reduction of 25 %. This reduction, or that given in table 2, whichever is the greater, may be taken into account in the design of columns or other types of member supporting such a beam.'

AMD 4949  
October 1985

### Table 3. Reduction in total distributed imposed floor loads on a supporting beam or girder with floor area

Delete the existing table and substitute the following:

'Table 3. Reduction in total distributed imposed floor loads on a supporting beam or girder with floor area

| Area supported<br>(see note) | Reduction in total<br>distributed imposed load |
|------------------------------|------------------------------------------------|
| $\text{m}^2$                 | %                                              |
| 0                            | 0                                              |
| 50                           | 5                                              |
| 100                          | 10                                             |
| 150                          | 15                                             |
| 200                          | 20                                             |
| above 250                    | 25                                             |

NOTE. Reductions for intermediate areas may be calculated by linear interpolation.'



AMD 4949  
October 1985

**Clause 7. Crane gantry girders**

Insert the following paragraph at the end of the existing clause:

'Reference should also be made to BS 2573 which gives more detailed guidance on crane loading.'

AMD 4949  
October 1985

**Publications referred to**

Insert the following between lines 1 and 2:

'BS 2573 Rules for the design of cranes'





**Amendment No. 2**  
**published and effective from 31 May 1988**  
**to BS 6399 : Part 1 : 1984**

**Design loading for buildings**  
**Part 1. Code of practice for dead and**  
**imposed loads**

## Revised text

AMD 5881  
 May 1988

### Foreword

In paragraph 1 delete the last sentence and substitute the following:  
 'The data on imposed roof loads are given in Part 3 of this standard.'

AMD 5881  
 May 1988

### Clause 1.2

Insert the following new items (c) and (d):

(c) imposed roof loads (see BS 6399 : Part 3);

(d) snow loads (see BS 6399 : Part 3);

Renumber existing items (c) to (h) as (e) to (j) respectively.

AMD 5881  
 May 1988

### Clause 5.2 (as amended by Amendment No. 1)

In line 9 after 'reductions' insert 'except as stated in 4.2 of BS 6399 : Part 3 : 1988'.

AMD 5881  
 May 1988

### Clause 6. Imposed roof loads

Delete entirely the text of the existing clause and substitute the following:

'For imposed roof loads refer to Part 3 of this standard.'

AMD 5881  
 May 1988

### Inside back cover (as amended by Amendment No. 1)

In the list of publications referred to, after BS 6180, insert the following new entry:

'BS 6399 Design loading for buildings  
 Part 3 Code of practice for imposed roof loads'.