
INTERNATIONAL STANDARD



3827 / IV

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**Shipbuilding — Co-ordination of dimensions in ships’
accommodation —
Part IV : Controlling dimensions**

*Construction navale — Coordination dimensionnelle pour l’ameublement des navires — Partie IV :
Dimensions clés*

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FOREWORD

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3827/IV was developed by Technical Committee ISO/TC 8, *Shipbuilding*, and was circulated to the member bodies in June 1975.

It has been approved by the member bodies of the following countries:

Austria	Italy	Spain
Belgium	Japan	Sweden
Brazil	Netherlands	Turkey
Czechoslovakia	Norway	United Kingdom
Finland	Poland	Yugoslavia
Germany	Romania	
Ireland	South Africa, Rep. of	

The member body of the following country expressed disapproval of the document on technical grounds :

France

Shipbuilding — Co-ordination of dimensions in ships' accommodation —

Part IV : Controlling dimensions

0 INTRODUCTION

This part of ISO 3827 is a companion work to the following :

Part I : Principles of dimensional co-ordination;

Part II : Glossary of terms;

Part III : Co-ordinating sizes for components and assemblies.

It establishes a dimensional framework as a basis for the derivation of the co-ordinating sizes of components. The framework is based on those vertical and horizontal dimensions in ships which derive from user considerations and, in turn, influence the sizing of components and assemblies.

1 SCOPE AND FIELD OF APPLICATION

1.1 This International Standard establishes a framework of controlling dimensions for use in the design of ships' deckhouse and accommodation and for assistance in the derivation of co-ordinating sizes of components.

1.2 Recommendations are given for the deck to ceiling height; horizontal spacing between bulkheads; controlling zones for bulkhead and lining spaces; and heights for doors and window box heads and sills.

NOTE — Users of this International Standard should refer to national and international rules or regulations to ensure compliance with the requirements for individual ships.

2 DEFINITIONS

For the purpose of this International Standard the definitions given in ISO 3827/II are applicable.

3 VERTICAL CONTROLLING DIMENSIONS

3.1 In order to make full use of dimensionally co-ordinated components, flat decks are necessary and, wherever possible, camber and sheer of the decks should be eliminated.

3.2 The recommendations are based on flat decks as shown in figure 1 and where camber and/or sheer is present consideration should be given to their effect on ceiling heights, etc. in order to give the maximum degree of modular co-ordination.

3.3 The preferred size for deck to ceiling height (*A*) is 2 100 mm. Other heights in multiples of 100 mm (preferred) or 50 mm may be selected.

NOTE — The deck to ceiling height is the clear height from top of finished deck to underside of ceilings or services.

3.4 When selecting the modular deck to ceiling height, allowance must be made within the tween deck height (*B*) for finished floor, structure, services and suspended ceilings.

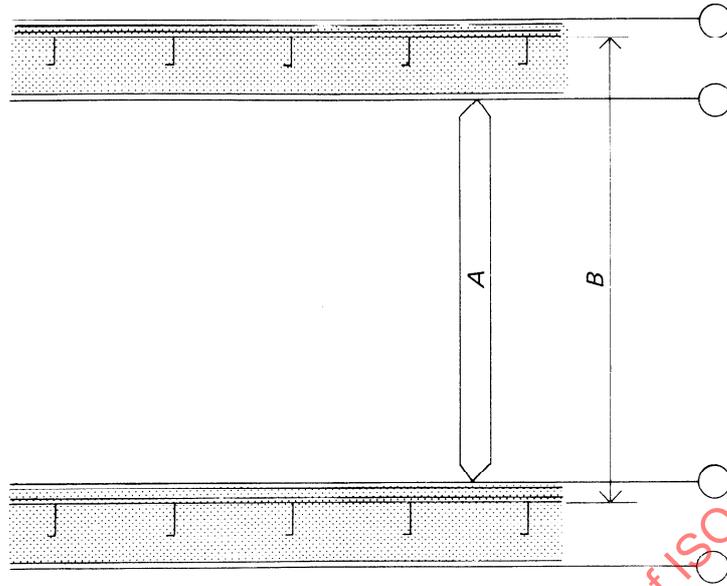


FIGURE 1 – Vertical controlling dimensions

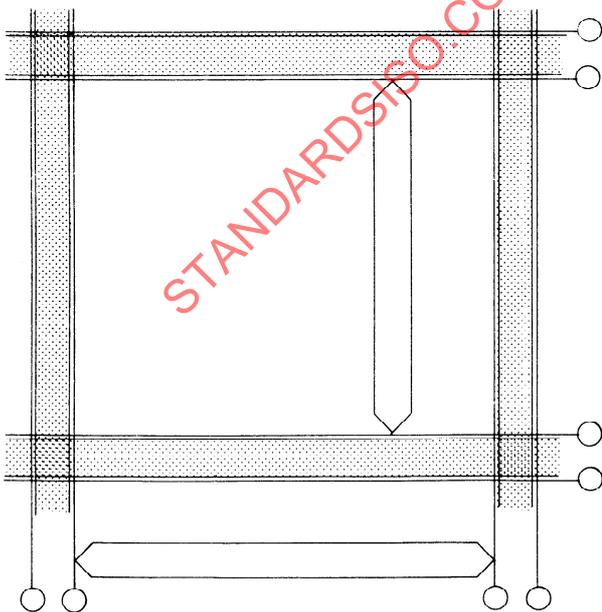
4 HORIZONTAL CONTROLLING DIMENSIONS

4.1 Horizontal controlling dimensions are for the width and spacing of controlling zones for the structural bulk-heads and linings, and for the spacing of neutral zones.

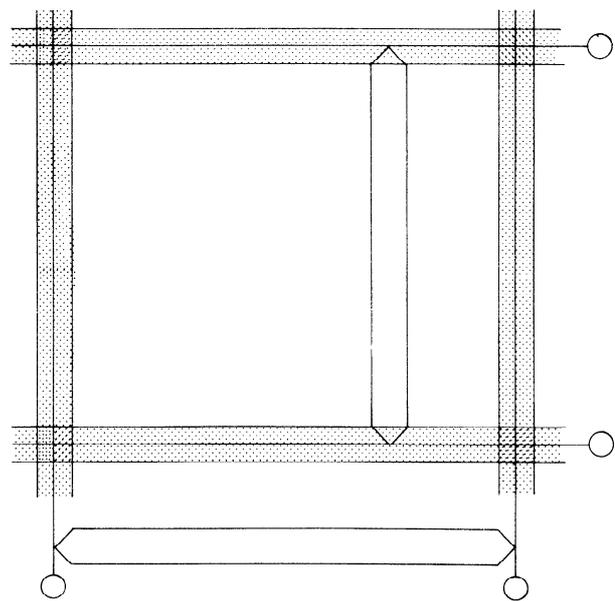
4.2 There are two principal methods of locating controlling lines in relation to the zones : on the boundaries of zones and on the axial lines of the zones, as shown in figure 2.

4.3 In order to make full use of dimensionally co-ordinated components, a box structure is necessary and wherever possible raked or cambered house fronts, shaped house sides and sloping side shell should be avoided or obviated internally.

4.4 The recommendations are based on rectilinear structures and where shaping is present consideration should be given to its effect in order to obtain the maximum degree of modular co-ordination.



Method 1 (preferred). Controlling lines on the boundaries of zones



Method 2. Controlling lines on the axial lines of the zones

FIGURE 2 – Location of controlling lines

4.5 Controlling dimensions for widths of zones

The sizes of controlling zones should be in multiples of 50 mm although some deviation may be necessary where required by structural arrangements. These sizes refer to the dimensions within the boundaries of zones, for example casing, lining and insulation; house-side lining, insulation and stiffeners.

4.6 The sizes of neutral zones shall be determined from the actual sizes for bulkheads and their supports, etc.

4.7 Controlling dimensions for spacing of zones

Selection of sizes should be made from the table whether Method 1 (the distance between boundaries of zones) or Method 2 (the distance between axial lines) is employed. The sizes refer to the horizontal distances between controlling lines.

First preference multiples of 300 mm	Second preference multiples of 100 mm
From 300	From 300

5 INTERMEDIATE CONTROLLING DIMENSIONS

5.1 Intermediate controlling lines indicate where joints are most likely to occur between components or assemblies. The sizes given are the vertical distances from the controlling line bounding the top of the floor zone.

5.2 Window box sill height

The first preference height of the controlling line for a window/sidelight box sill should be 1 000 mm.

5.3 Window box head height

The first preference height of the controlling line for a window/sidelight box head should be 2 000 mm.

5.4 Door-set head height

The first preference for the height of the controlling line for a door-set head should be 2 000 mm.

5.5 Alternative heights

Alternative choices of heights for 5.2, 5.3 and 5.4 should be limited to 100 mm multiples of the standard modules given in ISO 3827/III.

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