

# ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

## ISO RECOMMENDATION

### R 1964

SHIPBUILDING DETAILS

INDICATIONS OF DETAILS

ON THE GENERAL ARRANGEMENT PLANS OF SHIPS

1st EDITION

April 1971

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Printed in Switzerland

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## BRIEF HISTORY

The ISO Recommendation R 1964, *Shipbuilding details – Indications of details on the general arrangement plans of ships*, was drawn up by Technical Committee ISO/TC 8, *Shipbuilding details*, the Secretariat of which is held by the Nederlands Normalisatie-Instituut (NNI).

Work on this question led to the adoption of Draft ISO Recommendation No. 1964, which was circulated to all the ISO Member Bodies for enquiry in December 1969. It was approved, subject to modifications of an editorial nature, by the following Member Bodies :

Belgium	Italy	Sweden
Czechoslovakia	Japan	Spain
France	Netherlands	Thailand
Germany	New Zealand	Turkey
Greece	Norway	U.A.R.
India	Peru	United Kingdom
Israel	Poland	U.S.S.R.

The following Member Bodies opposed the approval of the Draft :

Australia  
U.S.A.

This Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided to accept it as an ISO RECOMMENDATION.

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ISO Recommendation

R 1964

April 1971

## SHIPBUILDING DETAILS

### INDICATIONS OF DETAILS

#### ON THE GENERAL ARRANGEMENT PLANS OF SHIPS

##### INTRODUCTION

This ISO Recommendation covers symbols for the indication of details on the general arrangement plans of ships.

The symbols are drawn to scale 1 : 100 approximately. For general arrangement plans of the scale 1 : 50 or 1 : 200, the individual symbols should be scaled up or down correspondingly.

All symbols may be drawn in accordance with their size and the proportions of the equipment which they represent.

Under the clauses 1.1, 2.1 and 3.1 basic symbols have been laid down which may be combined with other symbols. Examples of combination have been given at the end of most subclauses.

All types of special equipment, machinery, etc., not contained in this ISO Recommendation, may be symbolized similar to their actual form. For distinction these symbols should be marked by figures and elucidated in the legend.

The symbols given in the tables have been classified in the following manner :

1. Bulkheads (walls) and bulkhead openings
2. Accommodation furniture
3. Sanitary equipment
4. Galley and laundry
5. Workshop
6. Navigation, etc.
7. Deck equipment
8. Stairs, bulwarks, etc.
9. Hatches and covers

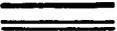
**1. BULKHEADS (WALLS) AND BULKHEAD OPENINGS**

**1.1 General symbols**

NOTE. — The number against the letter symbol indicates the time period for limitation of temperature rise. See Regulation 35 of the International Conference on Safety of Life at Sea (1960) and Resolution 122 (v) 1967 of IMCO\*.

1.1.1	Fire resisting Class A	A60, A30, A15, A0
1.1.2	Fire retarding Class B (a) made of incombustible material (b) made of combustible material	B15, B0 B30
1.1.3	Fire retarding Class C made of incombustible material, but not meeting any requirements relative to the passage of smoke or flame, nor the limiting of temperature rise	C
1.1.4	Insulation	
1.1.5	Oiltight	ooo

**1.2 Bulkheads (walls) and partitions**

1.2.1	Metal bulkhead or wall	
1.2.2	Wooden or other non-metal bulkhead or wall	
1.2.3	Pervious partition (such as perforated plate, expanded metal, wire-mesh)	
1.2.4	Curtain	
Examples of combination	(a) Metal bulkhead with non-metal lining	
	(b) Metal bulkhead with metal lining	
	(c) Fire-resisting metal bulkhead (without insulation) having zero time temperature limitation	A0
	(d) Metal bulkhead with insulation	

\* Intergovernmental Maritime Consultative Organization.

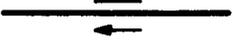
1.3 Doors

NOTE. - For the simplicity of the drawings, the bulkheads or walls are represented in the same material as the doors. Other combinations are indicated in the examples.

1.3.1	Hinged door	metal	
		non-metal	
1.3.2	Hinged lower and upper door	metal	
		non-metal	
1.3.3	Hinged self-closing door	metal	
		non-metal	
1.3.4	Horizontally sliding door	metal	
		non-metal	
1.3.5	Vertically sliding door	metal	
		non-metal	
Examples of combination	(a) Fire-resisting horizontally sliding metal door, having a 15 minute temperature rise limitation		
	(b) Hinged wooden door (without lining) in metal bulkhead with wooden lining		
	(c) Hinged mesh door in wooden wall		
	(d) Hinged metal door with insulation in bulkhead with insulation		

1.4 Windows

NOTE. - For the simplicity of the drawings, the bulkheads or walls are represented in the same material as the windows. Other combinations are indicated in the examples. The outside of the wall is towards the top of the page and the parallel line for the window should always be drawn on the outside of the wall.

1.4.1	Non-opening window		
1.4.2	Hinged window, opening at the side	opening to the outside	
		opening to the inside	
1.4.3	Hinged window, opening upwards or downwards		
1.4.4	Horizontally sliding window		
1.4.5	Vertically sliding window		
Examples of combination	(a)	Hinged window, opening upwards, in metal bulkhead with metal lining	
	(b)	Double hinged window in bulkhead with metal lining	

1.5 Side scuttles

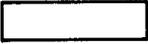
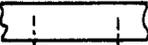
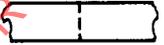
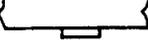
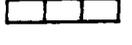
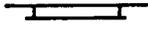
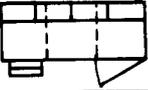
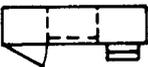
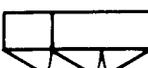
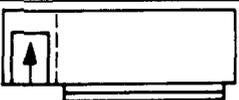
1.5.1	Non-opening side scuttle		
1.5.2	Hinged side scuttle	opening upwards or downwards	
		opening sideways	
Example of combination	Sideways opening scuttle in bulkhead with lining		

1.6 Other openings

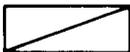
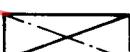
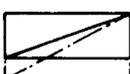
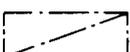
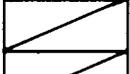
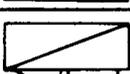
1.6.1	Clear opening in (metal) bulkhead	
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2. ACCOMMODATION FURNITURE

2.1 Fundamental elements

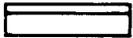
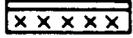
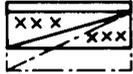
2.1.1	Shelf	
2.1.2	Shelves	
2.1.3	Pull-out shelf	
2.1.4	Hinged shelf, hinged seat, or hinged table	
2.1.5	Tip-up lid	
2.1.6	Vertical partition in medium high cupboard or wardrobe	
2.1.7	Vertical partition in high wardrobe extending from floor to deckhead	
2.1.8	Drawer	
2.1.9	Two drawers	
2.1.10	Hinged door	
2.1.11	Sliding doors	
2.1.12	Pigeon holes	
2.1.13	Mirror fixed to bulkhead, cupboard, etc.	
Examples of combination	(a) Writing desk with pigeon holes	
	(b) Cupboard with locker, drawers and open shelf	
	(c) Dressing table with mirror	
	(d) High wardrobe	
	(e) Drawer and hinged door	
	(f) Chart table and drawers, with chronometer chest having tip-up lid	

2.2 Berths and beds

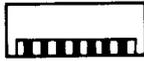
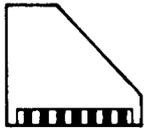
2.2.1	Single berth or bed	
2.2.2	Child's bed (distinguished by a smaller size only)	
2.2.3	Two tiered berth	
2.2.4	Two tiered berth with folding upper berth (pullman berth)	
2.2.5	Pull-out berth	
2.2.6	Folding berth	
2.2.7	Double bed	
2.2.8	Twin beds	
Examples of combination	(a) Single berth with chest and drawers	
	(b) Twin beds with bedside tables	

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2.3 Seats

2.3.1	Bench or seat in general	
2.3.2	Upholstered seat or sofa	
2.3.3	Stool	
2.3.4	Ordinary chair	 or 
2.3.5	Chair with arm-rests, upholstered	 or 
2.3.6	Swivel chair	
Example of combination	Bed settee	

2.4 Tables and other furniture

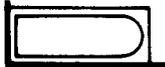
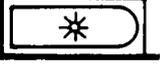
2.4.1	Table	 or 
2.4.2	Piano	
2.4.3	Grand piano	
2.4.4	Television equipment	
2.4.5	Cinema equipment	
2.4.6	Radiator	
2.4.7	Cooled drinking water unit	
Examples of combination	(a) Extending table	
	(b) Round table, for use tilt upwards	

3. SANITARY EQUIPMENT

3.1 General symbols

3.1.1	Water supply to basins, etc., hot or cold	
3.1.2	Shower	
3.1.3	Chilled water supply	
Example of combination	Hot and cold water supply to basins, etc.	

3.2 Washroom fittings

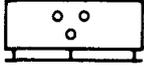
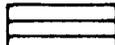
3.2.1	Wash basin, lavatory	
3.2.2	Sink, trough, or tub	
3.2.3	Freestanding bath tub	
3.2.4	Built-in bath	
3.2.5	Hipbath	
3.2.6	Bidet	
3.2.7	Water heater	
3.2.8	Draining board, right or left hand draining	
Examples of combination	(a) Wash basin with hot and cold water supply	
	(b) Built-in bath with shower	
	(c) Hipbath (built-in) with shower	
	(d) Sink unit incorporating cupboard and shelves	
	(e) Sink unit incorporating draining board	

3.3 Closet fittings

3.3.1	Water closet		
3.3.2	Asiatic-type closet		
3.3.3	Urinal	flat back type	
		angular type	

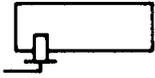
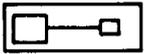
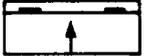
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4. GALLEY AND LAUNDRY

4.1	Coal burning range (coal = ☒ )	
4.2	Oil burning range (oil = ○ ○ )	
4.3	Electric range (electric = Ⓢ )	
4.4	Coal box	
4.5	Chopping block	
4.6	Dough trough	
4.7	Dough mixer	
4.8	Potato peeler	
4.9	Stockpot	
4.10	Baker's oven	
4.11	Refrigerated cabinet (appropriate door to be shown where necessary)	
4.12	Spin dryer	
4.13	Washing machine	
4.14	Small washing machine	
4.15	Ironing machine	
4.16	Ironing press	

5. WORKSHOP

NOTE. - For representation of workshop items other than those shown below, see Introduction to this ISO Recommendation.

5.1	Work bench with vice		
5.2	Lathe		
5.3	Vertical drilling machine		
5.4	Grindstone	hand operated	
		power operated	
Examples of combination	(a) Work bench with shelves and locker		
	(b) Box for various purposes with tip-up lid		

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6. NAVIGATION, etc.

6.1 Appliances

6.1.1	Steering column	
6.1.2	Magnetic compass	
6.1.3	Gyro master compass	
6.1.4	Gyro repeater (slave unit)	
6.1.5	Engine telegraph	
6.1.6	Voice pipe	
6.1.7	Radar display unit	
6.1.8	Radar transmitter receiver	
6.1.9	Radar scanner	
6.1.10	Closed circuit television camera	

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