

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 644

CONVENTIONAL SIGNS
TO BE USED IN SCHEMES FOR THE INSTALLATIONS
OF VENTILATION SYSTEMS IN SHIPS

1st EDITION

December 1967

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BRIEF HISTORY

The ISO Recommendation R 644, *Conventional signs to be used in schemes for the installations of ventilation systems in 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 by the Technical Committee began in 1960 and led, in 1965, to the adoption of a Draft ISO Recommendation.

In October 1965, this Draft ISO Recommendation (No. 856) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Argentina	Finland	New Zealand
Australia	France	Poland
Austria	Germany	Spain
Belgium	India	United Kingdom
Brazil	Israel	U.S.S.R.
Canada	Italy	Yugoslavia
Chile	Japan	
Czechoslovakia	Netherlands	

No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in December 1967, to accept it as an ISO RECOMMENDATION.

**CONVENTIONAL SIGNS
TO BE USED IN SCHEMES FOR THE INSTALLATIONS
OF VENTILATION SYSTEMS IN SHIPS**

INTRODUCTION

This ISO Recommendation covers conventional signs to be used in schemes for the installations of ventilation systems in ships.*

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

1. General conventional signs	page 4
2. Ducts and duct joints	" 5
3. Appliances and fittings	" 8
4. Ventilators	" 12
5. Various conventional signs	" 14

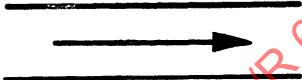
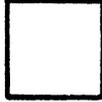
The *general conventional signs* concern symbols representing principal parts and appliances.

The *other signs* are derived from the general basic signs.

* Other ISO Recommendations for conventional signs to be used in ships:

ISO Recommendation R 538, *Conventional signs to be used in schemes for the installations of pipeline systems in ships.*
ISO Recommendation R . . . , *Conventional signs to be used in schemes for the installations of sanitary systems in ships*
(at present Draft ISO Recommendation No. 941).

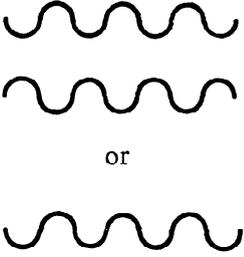
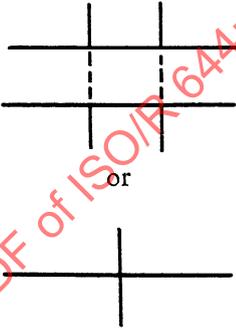
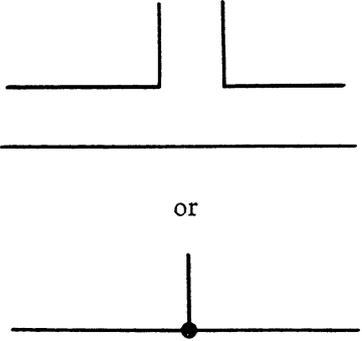
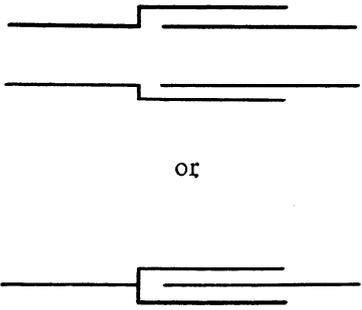
1. GENERAL CONVENTIONAL SIGNS

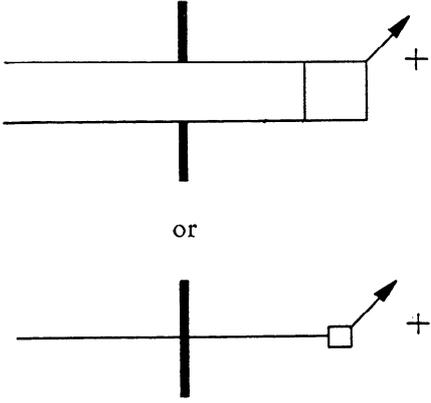
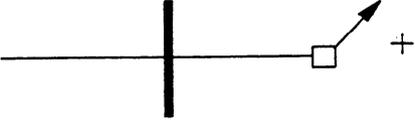
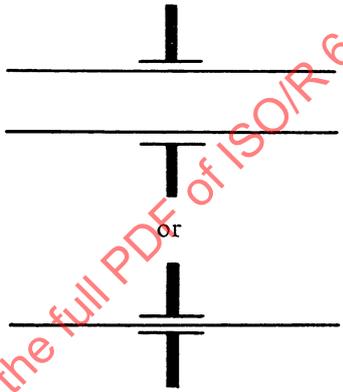
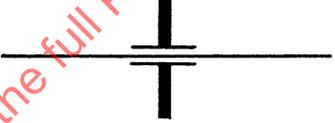
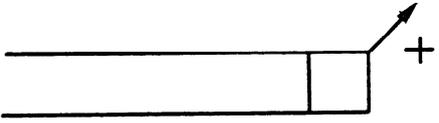
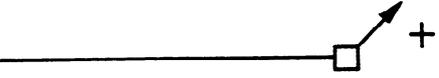
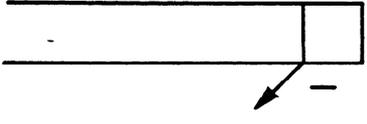
1.1	Duct	  or 
1.1.1	Duct with indication of direction of flow	 or 
1.2	Apparatus and fitting NOTE. — The square should be either mentioned in the legend of the drawing or accompanied by special abbreviations indicating the fitting concerned.	

NOTES.

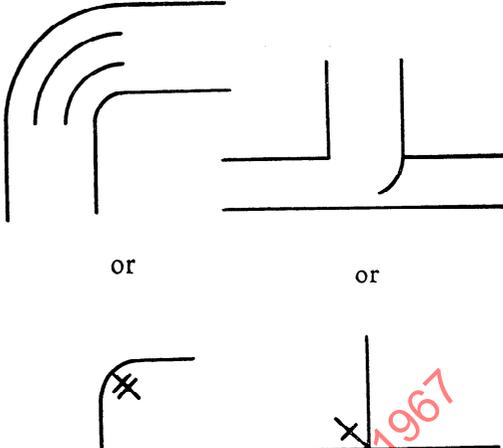
1. Conventional signs, not mentioned in this ISO Recommendation, can be derived from the General conventional signs under section 1, by adding an elucidation to the legend of the drawing.
2. See ISO Recommendation R 538, *Conventional signs to be used in schemes for the installations of pipeline systems in ships*.

2. DUCTS AND DUCT JOINTS

2.1	Flexible duct	
2.2	Crossing of ducts not connected	
2.3	Connection of ducts	
2.4	Compensating joint with gland	

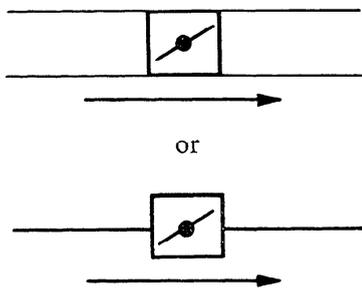
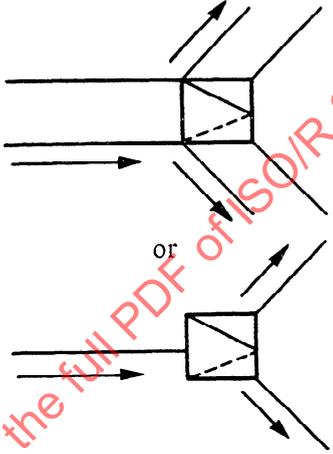
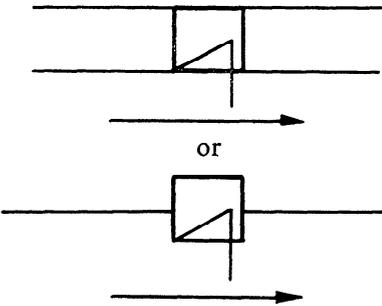
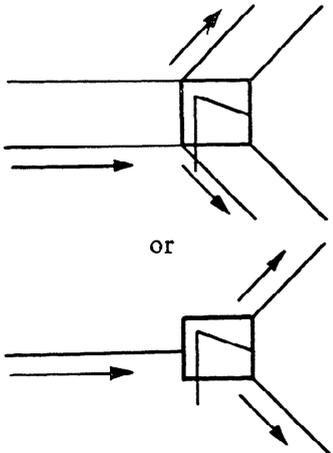
<p>2.5</p>	<p>Bulkhead crossing, watertight, fire resistant</p>	 <p>or</p> 
<p>2.6</p>	<p>Bulkhead crossing, non watertight, non fire resistant</p>	 <p>or</p> 
<p>2.7</p>	<p>Duct going upwards (+)</p>	 <p>or</p> 
<p>2.8</p>	<p>Duct going downwards (-)</p>	 <p>or</p> 

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2.9	Vaness	 <p>The table contains technical drawings of vane profiles. The top row shows three rounded profiles on the left and two chamfered profiles on the right, with the word 'or' centered between them. The bottom row shows a beveled profile on the left and a chamfered profile on the right, also with the word 'or' centered between them. A large red watermark is overlaid diagonally across the entire page.</p>
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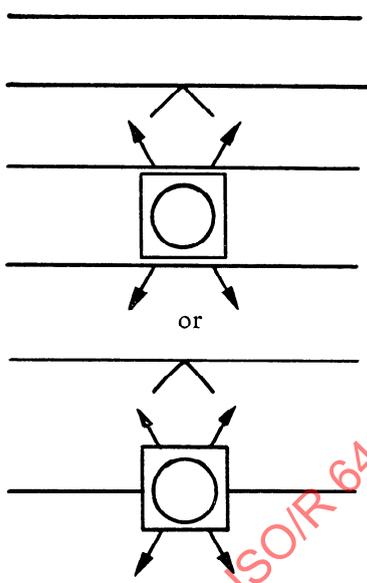
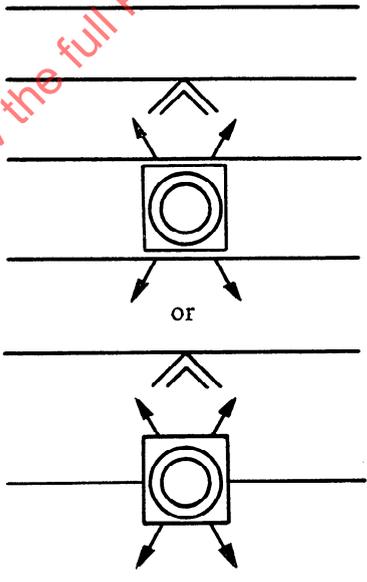
3. APPLIANCES AND FITTINGS

<p>3.1</p>	<p>Butterfly damper</p>	
<p>3.2</p>	<p>Change over damper</p>	
<p>3.3</p>	<p>Reducing damper</p>	
<p>3.4</p>	<p>Distributing damper</p>	

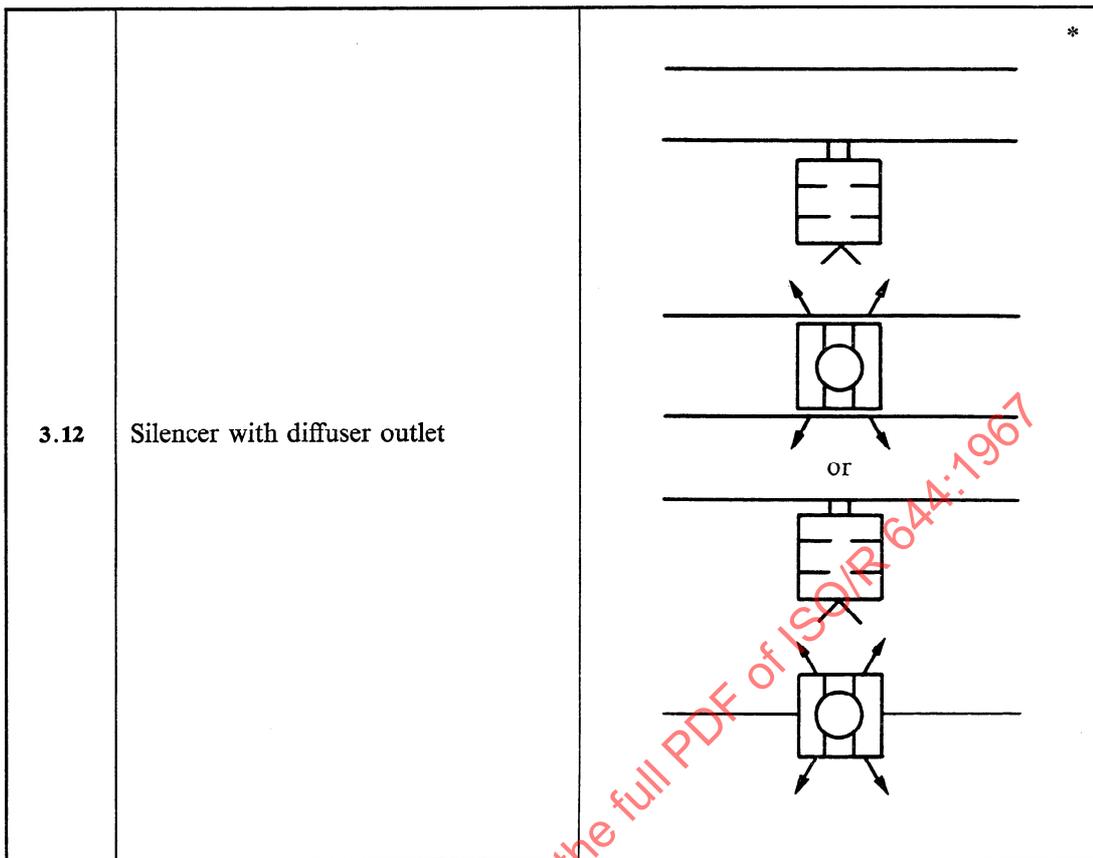
* The arrow gives the direction of flow of the air, but need not be drawn in drawings and/or schemes.

<p>3.5</p>	<p>Fire damper</p>	<p style="text-align: center;">or</p>
<p>3.6</p>	<p>Air filter</p>	
<p>3.7</p>	<p>Silencer</p>	
<p>3.8</p>	<p>Normal air outlet (↓) NOTE. — Indication for inlet: ↑</p>	<p style="text-align: center;">or</p>
<p>3.9</p>	<p>Punkah louvre outlet</p>	<p style="text-align: center;">or</p>

* See footnote, page 8.

<p>3.10 Diffuser outlet</p>		<p style="text-align: right;">*</p> 
<p>3.11 Anemostat outlet</p>		<p style="text-align: right;">*</p> 

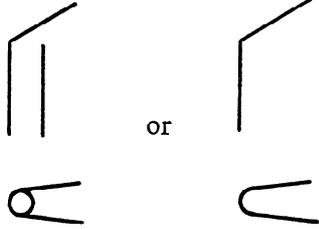
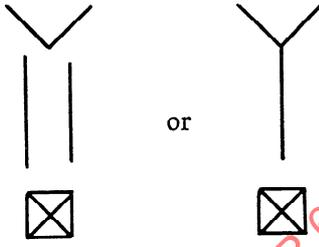
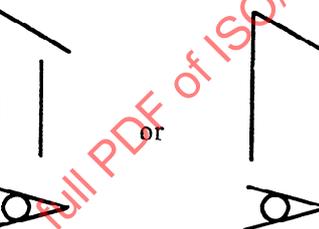
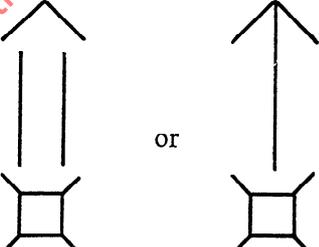
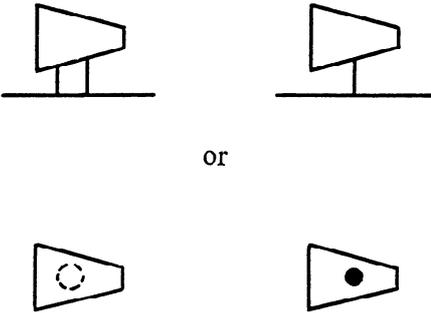
* See footnote, page 8.



* See footnote, page 8.

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4. VENTILATORS

4.1	Turnable supply ventilator cowl	
4.2	Fixed supply ventilator cowl	
4.3	Turnable exhaust ventilator cowl	
4.4	Fixed exhaust ventilator cowl	
4.5	Exhaust wall ventilator cowl	
4.6	Mushroom ventilator NOTE. — Where applicable with indication: <i>with screen</i>	