



JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

---

**JIS A 4009 : 2017**  
**(JFDA/JSA)**  
**Components of air duct**

---

**ICS 91.140.30**

**Reference number : JIS A 4009 : 2017 (E)**

Date of Establishment: 1977-03-01

Date of Revision: 2017-03-21

Date of Public Notice in Official Gazette: 2017-03-21

Investigated by: Japanese Industrial Standards Committee  
Standards Board for ISO area  
Technical Committee on Architecture

---

JIS A 4009:2017, First English edition published in 2017-10

---

Translated and published by: Japanese Standards Association  
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

---

In the event of any doubts arising as to the contents,  
the original JIS is to be the final authority.

© JSA 2017

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

AT

## Contents

	Page
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	2
4 Classification .....	2
5 Dimensions and structure .....	3
5.1 Duct dimensions .....	3
5.2 Sheet thickness .....	6
5.3 Seam .....	9
5.4 Structure of joint .....	12
5.5 Reinforcement of duct .....	25
5.6 Seal of duct .....	40
6 Materials .....	41
6.1 Hot-dip zinc-coated steel sheet .....	41
6.2 Polyvinyl chloride lined steel sheet.....	42
6.3 Stainless steel sheet .....	42
6.4 Rigid polyvinyl chloride sheet .....	42
6.5 Glass wool plate .....	42
6.6 Steels .....	42
6.7 Jointing and support materials .....	42
6.8 Flange gasket.....	43
6.9 Duct tape .....	43
6.10 Aluminum tape for glass wool .....	43
6.11 Foam soft polyvinyl chloride and flexible tube gasket used for rigid polyvinyl chloride rectangular duct .....	43
6.12 Sealing material .....	43
7 Marking .....	43
Annex A (informative) Comparison table between previous and current editions of this Standard on technically significant revisions .....	45

(i)

## **Foreword**

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Federation of Duct industry Associations (JFDA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14. Consequently **JIS A 4009:1997** is replaced with this Standard.

This **JIS** document is protected by the Copyright Law.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

# Components of air duct

## 1 Scope

This Japanese Industrial Standard specifies components of air duct (hereafter referred to as duct) used for air conditioning and ventilation system (including gas exhausting system).

The comparison table between previous and current editions of this Standard on technically significant revisions is given in Annex A.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

- JIS A 6517 *Steel furrings for wall and ceiling in buildings*
- JIS A 9504 *Man made mineral fibre thermal insulation materials*
- JIS B 1180 *Hexagon head bolts and hexagon head screws*
- JIS B 1181 *Hexagon nuts and hexagon thin nuts*
- JIS B 1213 *Cold headed rivets*
- JIS C 8305 *Rigid steel conduits*
- JIS G 3101 *Rolled steels for general structure*
- JIS G 3191 *Dimensions, mass and permissible variations of hot rolled steel bars and bar in coil*
- JIS G 3192 *Dimensions, mass and permissible variations of hot rolled steel sections*
- JIS G 3193 *Dimensions, mass and permissible variations of hot rolled steel plates, sheets and strips*
- JIS G 3194 *Dimensions, mass and permissible variations of hot rolled flat steel*
- JIS G 3302 *Hot-dip zinc-coated steel sheet and strip*
- JIS G 3317 *Hot-dip zinc—5 % aluminium alloy-coated steel sheet and strip*
- JIS G 3321 *Hot-dip 55 % aluminium-zinc alloy-coated steel sheet and strip*
- JIS G 3323 *Hot-dip zinc-aluminium-magnesium alloy-coated steel sheet and strip*
- JIS G 3350 *Light gauge steel sections for general structure*
- JIS G 3452 *Carbon steel pipes for ordinary piping*
- JIS G 4304 *Hot-rolled stainless steel plate, sheet and strip*
- JIS G 4305 *Cold-rolled stainless steel plate, sheet and strip*
- JIS H 4160 *Aluminium and aluminium alloy foils*
- JIS K 6741 *Unplasticized poly (vinyl chloride) (PVC-U) pipes*
- JIS K 6744 *Polyvinyl chloride prepainted and laminated metal sheet and strip*