

# JIS

JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

---

---

**JIS A 9504** : 2017

(JTIA/JSA)

**Man made mineral fibre thermal  
insulation materials**

---

ICS 91.100.60;91.120.10

Reference number : **JIS A 9504 : 2017 (E)**

A 9504 : 2017

Date of Establishment: 1952-09-04

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 9504:2017, First English edition published in 2018-01

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 2018

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

KK/AT

PROTECTED BY COPYRIGHT

## Contents

	Page
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	2
4 Classification .....	2
5 Quality .....	4
5.1 Characteristics .....	4
5.2 Dimensions .....	5
5.3 Appearance .....	7
6 Tests .....	7
6.1 Dimensions of board insulation, felt, wave insulation, lamella product and blanket .....	7
6.2 Density of board insulation, felt, wave insulation, lamella product and blanket .....	10
6.3 Dimensions, density and squareness of pipe insulation .....	11
6.4 Thermal conductivity .....	11
6.5 Temperature for 10 % shrinkage under heat and compression .....	12
6.6 Average thickness of fibre .....	12
6.7 Particle content rate .....	13
6.8 Formaldehyde emission characteristics .....	13
6.9 Appearance .....	15
7 Inspection .....	15
7.1 Classification of inspections and inspection items .....	15
7.2 Judgement criteria .....	16
8 Designation of products .....	16
9 Marking .....	16
Annex A (normative) Measuring method of dimensions, density and squareness of pipe insulation .....	17
Annex B (normative) Test method for determining the temperature for 10 % shrinkage under heat and compression .....	21
Annex C (informative) Comparison table between previous and current editions of this Standard on technically significant revisions .....	24

## 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 Thermal Insulation Association (JTIA)/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 9504:2011** is replaced with this Standard.

However, **JIS A 9504:2011** may be applied in the **JIS** mark certification based on the relevant provisions of Article 19 Clause 1, etc. of the Industrial Standardization Law until March 20, 2018.

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.

# Man made mineral fibre thermal insulation materials

## 1 Scope

This Japanese Industrial Standard specifies the man-made mineral fibre thermal insulation materials (hereafter referred to as thermal insulation materials) used for the hot insulation or cold insulation of the equipment in industrial installation such as factories, power plants, incinerators, air-conditioning and plumbing unit of buildings.

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

## 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 0202 *Thermal insulation—Vocabulary*

JIS A 1412-1 *Test method for thermal resistance and related properties of thermal insulations—Part 1: Guarded hot plate apparatus*

JIS A 1412-2 *Test method for thermal resistance and related properties of thermal insulations—Part 2: Heat flow meter apparatus*

JIS A 1412-3 *Test method for thermal resistance and related properties of thermal insulations—Part 3: Circular pipe apparatus*

JIS A 1901 *Determination of the emission of volatile organic compounds and aldehydes by building products—Small chamber method*

JIS A 1902-4 *Determination of the emission of volatile organic compounds and aldehydes by building products—Sampling, preparation of test specimens and testing condition—Part 4: Heat-Insulating material boards*

JIS B 7502 *Micrometers*

JIS B 7507 *Vernier, dial and digital callipers*

JIS B 7512 *Steel tape measures*

JIS B 7516 *Metal rules*

JIS B 7522 *Textile tape measures*

JIS B 7526 *Squares*

JIS C 1602 *Thermocouples*

JIS G 3452 *Carbon steel pipes for ordinary piping*

JIS H 3300 *Copper and copper alloy seamless pipes and tubes*

JIS H 4160 *Aluminium and aluminium alloy foils*

JIS R 3414 *Textile glass fabrics*