



AEROSPACE STANDARD

AS6554™**REV. A**

Issued	2011-07
Revised	2017-02
Reaffirmed	2022-10

Superseding AS6554

(R) Cargo Stopper Devices

RATIONALE

This SAE Aerospace Standard (AS) was prepared in order to replace former SAE Aerospace Recommended Practice ARP6022, developed in order to specify basic design, performance, and testing requirements for cargo tie-down accessories known as "Cargo Stoppers." Sub-committee AGE-2A determined that, because these devices were used as part of tie-down arrangements meeting airworthiness criteria, they should be covered by a standard rather than a recommendation. Revision A updates the references which became obsolete subsequent to publication of TSO-C202.

AS6554A has been reaffirmed to comply with the SAE Five-Year Review policy.

FOREWORD

In this document, the minimum essential criteria are identified by the use of the key word "shall". Other recommended criteria are identified by the key word "should" and, while not mandatory, are considered to be of primary importance in providing reliable and effective Cargo Stopper devices.

SAE Executive Standards Committee Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2022 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
<http://www.sae.org>

SAE WEB ADDRESS:

Full document details: **SAE AS6554A**

For more information on this standard, visit
<https://www.sae.org/standards/content/AS6554A/>

Documents
Document Sharing Hub

TABLE OF CONTENTS

1.	SCOPE.....	3
1.1	Purpose.....	3
1.2	Field of Application.....	3
2.	REFERENCES.....	3
2.1	Applicable Documents.....	3
2.1.1	SAE Publications.....	3
2.1.2	IATA Publications.....	4
2.1.3	FAA Publications.....	4
2.1.4	ISO Publications.....	4
2.2	Definitions.....	4
3.	REQUIREMENTS.....	4
4.	TESTING.....	5
4.1	Load Test.....	5
4.2	Puncture Test.....	5
4.3	Flammability Test.....	6
4.4	Other Tests.....	6
4.5	Test Report.....	6
5.	MARKINGS.....	6
6.	OPERATOR'S RESPONSIBILITIES.....	6
7.	NOTES.....	7
7.1	Revision Indicator.....	7
FIGURE 1	TYPICAL CARGO STOPPER DEVICES EXAMPLES.....	7

1. SCOPE

1.1 Purpose

- 1.1.1 The purpose of this SAE Aerospace Standard (AS) is to standardize the basic design, performance, and testing requirements for "Cargo Stoppers" cargo tie-down accessories to be used in conjunction with approved restraint straps meeting AS5385C (TSO C-172) requirements.
- 1.1.2 The lack of an agreed industry standard resulted in uncertainties about their operational capabilities so that it was deemed advisable to specify the applicable design, minimum performance, and testing requirements, since Cargo Stoppers are used as part of cargo tie-down arrangements that must meet regulatory airworthiness requirements.

1.2 Field of Application

- 1.2.1 The Cargo Stopper devices specified by this Aerospace Standard (AS) are intended to be used in either of the operational circumstances defined in 1.2.2, 1.2.3, and 1.2.4 hereafter.
- 1.2.2 A Cargo Stopper device should be used to ensure restraint/tie-down of a piece of cargo that does not lend itself to either direct hooking of restraint straps or passing a strap around without risk of slippage. A common example is long cargo items with a narrow cross-section, whether or not overhanging from the pallet, individual or in bundles, e.g., pipes or beams. See 6.4 in ARP5595.
- 1.2.3 A Cargo Stopper device shall be used to restrain cargo identified as "piercing", presenting a hazard to the aircraft in the event of it being released during flight.
- 1.2.4 A Cargo Stopper device shall also be used whenever a crate containing cargo, even though its cross-section is large enough to be directly tied-down with the pallet net or restraint straps, contains or may contain a heavy item, e.g., a piece of machinery, shaft, or similar with a cross-section lower than the pallet net's mesh size.

NOTE: Such "hidden" items have been known to break free from insufficiently strong crates when subjected to in-flight accelerations, then pass due to their small size through the net mesh restraining the crate, and be released into the cargo compartment.

- 1.2.5 In addition, a Cargo Stopper device may also be used to assist in tying-down odd shaped cargo pieces where it is difficult or not allowed to directly attach restraint straps or pass them around the load in an effective manner.

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

- | | |
|---------|--|
| AS5385 | Cargo Restraint Straps – Design Criteria and Testing Methods |
| ARP5595 | Cargo Restraint Straps – Utilization Guidelines |
| AS33601 | Track and Stud Fitting for Cargo Transport Aircraft, Standard Dimensions for |