

FED. SUPPLY CLASS

53GP

FOREWORD:

This standard sets forth a standard test procedure to determine the sheet pull-up capability of quick-operating structural panel fasteners.

TABLE OF CONTENTS

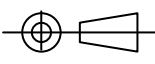
<u>Paragraph</u>		<u>Sheet</u>
1.	SCOPE	2
1.1	Applicability	2
2.	REFERENCED DOCUMENTS	2
2.1	Government documents	2
2.1.1	Specifications, standards and handbooks	2
2.2	Industry Publications	2
3.	DEFINITIONS	2
4.	GENERAL REQUIREMENTS	2
4.1	Test apparatus	2
4.1.1	Torque wrench	2
4.2	Test specimen	3
5.	DETAIL REQUIREMENTS	3
5.1	Test procedures	3
6.	NOTES	3
6.1	Test report	3

FIGURE

<u>Figure</u>		<u>Sheet</u>
1	Test specimen	4

① COMPLETELY REVISED

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MIL-STD-1312-27.
DESIGNATION FOR THIS TEST METHOD REMAINS MIL-STD-1312-27.

THIRD ANGLE PROJECTION		CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 1
PROCUREMENT SPECIFICATION NONE		TITLE FASTENER TEST METHODS METHOD 27 PANEL FASTENER SHEET PULL-UP	CLASSIFICATION STANDARD PRACTICE NAS 1312-27

SHEET 1 OF 4



NAS Documents
Document Sharing Hub

1. SCOPE

- 1.1 **Applicability.** This method covers the procedure for testing all types of quick-operating structural panel fasteners to determine sheet pull-up capability. The installed fastener shall be capable of initial engagement when a sheet separation exists. The fastener shall then be capable of drawing the sheets together at the fastener to the fully locked condition.

2. REFERENCED DOCUMENTS

2.1 Government documents

- 2.1.1 Specifications, standards and handbooks. Unless otherwise specified, the following specifications, standards and handbooks of the issue listed in the current Department of Defense Index of Specifications and Standards (DoDISS) and the supplement thereto (if applicable), form a part of this standard to the extent specified herein.

Federal

QQ-A-250/4 Aluminum Alloy Plate and Sheet 2024
QQ-A-250/12 Aluminum Alloy Plate and Sheet 7075

Copies can be obtained from the Department of Defense Single Stock Point (DODSSP). <http://dodssp.daps.dla.mil>

- 2.2 Industry publications. The following document(s) forms a part of this specification to the extent specified herein. The issues of the documents which are indicated as DOD adopted shall be the issue in the current DoDISS and the supplement thereto, if applicable.

SAE International

AMS-QQ-A-250/4 Aluminum Alloy Plate and Sheet 2024
AMS-QQ-A-250/12 Aluminum Alloy Plate and Sheet 7075

Copies can be obtained from SAE International, 400 Commonwealth Dr., Warrendale, PA 15096-0001. www.sae.org

ASME

ASME B107.300 Torque Instruments

Copies can be obtained from ASME, Three Park Ave., New York, NY 10016-5990. www.asme.org

3. DEFINITIONS

Not applicable.

4. GENERAL REQUIREMENTS

4.1 Test apparatus

- 4.1.1 Torque wrench. Torque applied for unlocking fastener or for locking into locked position shall be measured with a torque indicating wrench calibrated for accuracy within the limits specified by ASME B107.300.

- 4.2 Test specimen. The fastener shall be installed in flat plates of aluminum alloy (2024-T4, 2024-T3, 2024-T6 or 7075-T6) in accordance with ~~QQ-A-250/4~~ AMS-QQ-A-250/4 or ~~QQ-A-250/12~~ AMS-QQ-A-250/12. The plate size shall be 3 inches (76.2 mm) by 5 inches (127 mm) by .125 inches (3.175 mm). Recommended holes in plates shall conform to fastener procurement specifications. The receptacle shall be mounted with centerline of attaching holes lengthwise in the plate. The manipulated member stud will engage in the receptacle when two .062 inch (1.57 mm) thick feeler gages are inserted between the inner and outer plates and 1.5 inches (38 mm) on each side of the manipulated member (or shear bushing if specified; see Figure 1).

① COMPLETELY REVISED

REVISION
1
NAS1012-27
SHEET 2



Document Sharing Hub