© COPYRIGHT 2013 AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC. ALL RIGHTS RESERVED

FED. SUPPLY CLASS

5320

1. SCOPE

1.1 Scope - This specification covers mechanically expanded rivets for blind attachment intended for nonstructural use on military aircraft and other items and components of military equipment.

1.2 Classification. Nonstructural blind rivets shall be furnished in the following classes, as specified (see 6.2):

Class 1 - Universal-head rivets

Class 2 - 100° flush-head rivets

2. APPLICABLE DOCUMENTS

2.1 Issues of documents. The following documents, of the issue in effect on date of invitation for bid or request for proposal, form a part of this specification to the extent specified herein.

STANDARDS

MILITARY

MIL-STD-129	Marking for Shipment and Storage
MIL-STD-2073-1	Standard Practice for Military Packaging

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

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

ASTM International

ASTM D3951 Standard Practice for Commercial Packaging

Copies can be obtained from ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, www.astm.org

Aerospace Industries Association

NASM1312	Fastener Test Methods
NASM20604	Rivet, Blind, Non-Structural, Universal-Head, Class 1
NASM20605	Rivet, Blind, Non-Structural, 100° Flush-Head, Class 2

Copies can be obtained from the Aerospace Industries Association, 1000 Wilson Blvd., Suite 1700, Arlington, VA 22209. www.aia-aerospace.org

American Society for Quality

ANSI/ASQ Z1.4 Sampling Procedures and Tables for Inspection by Attributes

Copies can be obtained from the American Society for Quality, 600 North Plankinton Ave., Milwaukee, WI 53203. www.asq.org

The initial release of this document supersedes MIL-R-8814, Revision A, Amendment 1.

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 2
PROCUREMENT SPECIFICATION NONE	TITLE **RIVETS, BLIND, NONSTRUCTURAL TYPE**	CLASSIFICATION SPECIFICATION **NASM8814** SHEET 1 OF 5

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC
1000 WILSON BLVD.
ARLINGTON, VA 22209

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST REVISION DATE.

ISSUE DATE: AUGUST 1998 REVISION DATE: JANUARY 31, 2013

FORM 09-01

USE OF OR RELIANCE UPON THIS DOCUMENT OR ANY NATIONAL AEROSPACE STANDARD IS ENTIRELY VOLUNTARY. AIA DOES NOT QUALIFY SUPPLIERS OR CERTIFY ITEMS PRODUCED UNDER NATIONAL AEROSPACE STANDARDS. AIA MAKES NO REPRESENTATION OR CLAIM RESPECTING (1) THE SUITABILITY OF ANY SPECIFICATION FOR ANY APPLICATION OR (2) THE EXISTENCE OF OR APPLICABILITY OF ANY PATENTS OR TRADEMARKS RIGHTS.

Copyright Aerospace Industries Association of America Inc.
Provided by IHS under license with AIA/NAS
No reproduction or networking permitted without license from IHS
Licensee= www.sepana.ir/5991803002, User=sam, albert
Not for Resale, 01/04/2016 08:19:05 MST

Full document details: AIA NASM8814 2013

Document Sharing Hub

© COPYRIGHT 2013 AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC. ALL RIGHTS RESERVED

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC
1000 WILSON BLVD.
ARLINGTON, VA 22209

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST REVISION DATE.

FORM 09-01

3. REQUIREMENTS

3.1 Materials. The rivets shall be fabricated from aluminum alloy, nickel-copper alloy (monel), carbon steel, or corrosion-resistant steel, in accordance with the material coding specified on the applicable standards.

3.1.1 Finish. The finishes used on the rivets shall be as specified on the applicable standards. When no finish is required, cadmium or zinc shall not be used as a lubricant. Stem or mandrel, which does not remain in sleeve, shall be lubricated or finished to give corrosion protection while the rivets are in storage.

3.2 Design. The rivets shall consist of two parts: a rivet body and a mandrel or stem. The stem may be either plain or serrated. The rivet shall be installed by pulling the mandrel or stem axially through the rivet body, expanding the shank of the rivet and forming the blind head.

3.2.1 Dimensions. The rivet dimensions shall conform to the dimensions specified on NASM20604 and NASM20605.

3.2.2 Roundness and concentricity of heads. Rivet heads shall be round within the limits specified on the applicable standard. They shall be concentric with the shank within the limits specified in Table I when examined as specified in 4.4.2.

TABLE I – Tolerances on concentricity of head.

Nominal diameter shank (inch)	Total variation in indicator reading on rivet head	
	Flush head (inch)	Universal head (inch)
.094, .125	.010	.010
.156, .187	.010	.015
.250	.010	.020

3.3 Expansion. The rivets shall be subjected to the expansion test specified in 4.5.3.

3.4 Strengths. Single shear and tension strengths of the rivets shall be not less than those shown in Table II when tested as specified in 4.5.1 and 4.5.2.

TABLE II – Shear and tension strength

Material	Min. Single Shear Strength (Lbf)					Min. Tensile Strength (Lbf)				
	Rivet Dia					Rivet Dia				
	.094	.125	.156	.187	.250	.094	.125	.156	.187	.250
Al Alloy 5056	70	125	190	275	490	105	185	285	415	735
Al Alloy 2117	75	140	220	330	600	110	220	350	530	960
Ni-Cu Alloy (Monel)	105	185	285	415	735	155	270	430	620	1100
Carbon Steel C1008, C1018, C1012	105	185	285	415	735	155	270	430	620	1100
CRES A286	105	185	285	415	735	155	270	430	620	1100

USE OF OR RELIANCE UPON THIS DOCUMENT OR ANY NATIONAL AEROSPACE STANDARD IS ENTIRELY VOLUNTARY. AIA DOES NOT QUALIFY SUPPLIERS OR CERTIFY ITEMS PRODUCED UNDER NATIONAL AEROSPACE STANDARDS. AIA MAKES NO REPRESENTATION OR CLAIM RESPECTING (1) THE SUITABILITY OF ANY PARTICULAR APPLICATION OR (2) THE EXISTENCE OF OR APPLICABILITY OF ANY TRADEMARKS RIGHTS.
Copyright Aerospace Industries Association of America Inc.
Provided by IHS under license with AIA/NAS
No reproduction or networking permitted without license from IHS
Licensee= www.sepana.ir/5991803002, User=sam, albert
Not for Resale, 01/04/2016 08:19:05 MST
Full document details: AIA NASM8814 2013