

FF-F-133a
~~October 5, 1967~~
SUPERSEDED
Fed. Spec. FF-F-133
February 24, 1954

FEDERAL SPECIFICATION

FASTENER, CORRUGATED, WOOD JOINT
(SAW EDGE)

This specification was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers corrugated (saw edge) wood joint fasteners.

1.2 Classification.

1.2.1 Types. The fasteners shall be of the following types, as specified (see 6.2):

- I - Divergent (saw edge) corrugations (see fig. 1).
- II - Parallel (saw edge) corrugations (see fig. 2).

2. APPLICABLE DOCUMENTS

2.1 The following specifications and standards, of the issues in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein:

Federal Standard:

Fed. Std. No. 123 - Marking for Domestic Shipment (Civilian Agencies).

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications and Standards, and at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., 20402.

(Single copies of this specification and other product specifications required by activities outside the Federal Government for bidding purposes are available without charge at the General Services Administration Regional Offices in Boston, New York, Washington, D. C., Atlanta, Chicago, Kansas City, Mo., Fort Worth, Denver, San Francisco, Los Angeles, and Seattle, Wash.

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications and Standards from established distribution points in their agencies.)

Military Specification:

MIL-P-3682 - Packaging of Hardware, Builders and Pole Line.

Military Standards:

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.
MIL-STD-129 - Marking for Shipment and Storage.

(Copies of Military Specifications and Standards required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

3. REQUIREMENTS

3.1 Material. Fasteners shall be made of bright, cold rolled strip steel, and shall be of a temper suitable for properly driving into wood.

3.2 Dimensions and tolerance.

3.2.1 Thickness. Fasteners shall be not less than 0.016 inch and not more than 0.022 inch thick.

3.2.2 Width (depth). The fasteners shall be furnished in the following widths:

1/4, 3/8, 1/2, 5/8, and 3/4

A tolerance of plus or minus 1/32 inch will be permitted on the width specified (see 6.2).

3.2.3 Length. Unless otherwise specified, fasteners shall be 1 inch in length. A tolerance of plus or minus 1/16 inch will be permitted on the length specified (see 6.2).

3.3 Design.

3.3.1 Type I, divergent (saw edge) corrugated fasteners. The corrugations shall diverge from the striking edge and shall be symmetrical with respect to a perpendicular line, through the center of the length (see fig. 1).

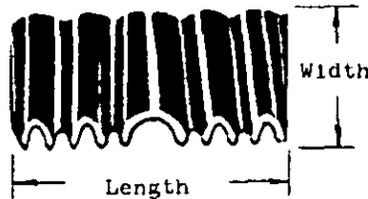


Figure 1

3.3.2 Type II, parallel (saw edge) corrugated fasteners. The corrugations shall be parallel with each other and perpendicular to the piercing edge of the fastener (see fig. 2).

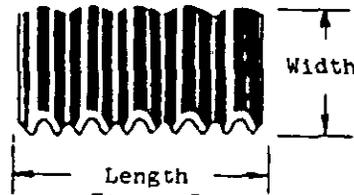


Figure 2

3.3.3 Corrugations. Unless otherwise specified (see 6.2), fasteners shall have 5 corrugations. Corrugations shall be rounded, smooth, covering the entire length of the fastener and extending across its full width.

3.3.4 Teeth. Corrugated (saw edge) fasteners shall have saw tooth form with sharp points, having a continuous cutting edge or "tack points" formed by sharpening the wood piercing edge of the fastener.

3.4 Workmanship. The fasteners shall be uniform in quality and temper, and shall be free from rust, splits, cracks, and other imperfections which may impair their serviceability.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any commercial laboratory acceptable to the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.

4.2 Inspection lot. A lot shall consist of fasteners of the same type and width offered for delivery at one time.

4.3 Sampling for examination. A random sample of fasteners shall be taken from each lot in accordance with MIL-STD-105, inspection level II. The acceptable quality level (AQL) shall be as specified in table I.

4.3.1 Packaging and packing. Sampling for examination and test of packaging and packing shall be in accordance with MIL-P-3682.

4.4 Examination.

4.4.1 Visual and dimensional. Each fastener, taken as specified in 4.3, shall be examined to verify compliance with this specification. Examination shall be conducted in accordance with table I.

TABLE I. Classification of defects

Categories	Defects	Inspection Method
Critical	None defined	
Major	AQL = 4 percent defective	
101	Corrugations missing (3.3.3)	Visual
102	Length not as specified (3.2.3)	SIE*
103	Width not as specified (see 3.2.2)	SIE
104	Material not as specified (3.1)	SIE
105	Thickness not as specified (3.2.1)	SIE
106	Edges not sharpened (3.3.4)	Visual
Minor	AQL = 10 percent defective	
201	Rust and corrosion	Visual
202	Irregular corrugation	Visual
203	Splits and cracks	Visual

*Standard Inspection Equipment

4.5 Examination and test. Examination and test of packaging and packing shall be in accordance with MIL-P-3682.

4.6 Test for temper. Ten fasteners taken at random from each lot shall be tested for temper by driving each fastener into a suitable pine block (see 3.1).

5. PREPARATION FOR DELIVERY

5.1 Preservation and packaging shall be in accordance with requirements of MIL-P-3682 (see 6.2).

5.2 Packing shall be in accordance with the requirements of MIL-P-3682 (see 6.2).

5.3 Marking.

5.3.1 Civil agencies. In addition to markings required by the contract or order, the packages and shipping containers shall be marked in accordance with Fed. Std. No. 123.

5.3.2 Military agencies. In addition to markings required by the contract or order, the packages and shipping containers shall be marked in accordance with MIL-STD-129.

6. NOTES

6.1 Intended use. The fasteners are intended for use in fabrication of boxes, furniture, screen doors, and other wooden assemblies.

6.2 Ordering data. Purchasers should select the preferred options permitted herein and include the following information in procurement documents:

- (a) Title, number, and date of this specification.
- (b) Type and width required (see 1.2.1 and 3.2.2).
- (c) Selection of applicable level of preservation, packaging and packing required (see 5.1 and 5.2).
- (d) Marking as required (see 5.3).
- (e) Length if different (see 3.2.3).
- (f) Number of corrugations, if different (see 3.3.3).

FP-F-133a

MILITARY CUSTODIANS:

Army - WC
Navy - YD
Air Force - 82

Review activities:

Army - GL, ME, WC
Navy - YD
Air Force - 82
DSA - IS
NSA

User activities:

Army - AT
Navy - MC, SA

Preparing activity:

Army - WC

CIVIL AGENCY INTEREST:

GSA- FSS

Orders for this publication are to be placed with General Services Administration, acting as an agent for the Superintendent of Documents. See section 2 of this specification to obtain copies of documents referenced herein. Price 6 cents each.