

MM-L-736C
March 9, 1973
SUPERSEDING
Fed. Spec. MM-L-736B
March 14, 1968

FEDERAL SPECIFICATION

LUMBER: HARDWOOD

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 commercial species and grades of hardwood lumber commercially harvested and manufactured in the continental United States.

1.2 Classification. Hardwood lumber shall be of the following types, as specified (see 6.2):

Type I - Standard hardwood cutting grades.

Type II - Hardwood construction lumber - including boards, dimension, and timbers.

Type III - Hardwood flooring.

2. APPLICABLE DOCUMENTS

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

Federal Specifications

TT-P-32 - Paint, Oil; Iron-Oxide, Ready-Mixed, Red and Brown.

TT-W-571 Wood Preservation: Treating Practices.

(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, DC 20402.)

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

(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 Specifications:

MIL-L-14362 - Lumber: Unitizing and Loading of.
MIL-L-19140 - Lumber and Plywood, Fire-Retardant Treated.

Military Standards:

MIL-STD-105 - Sampling Procedures and Tables for Inspection by
Attributes.
MIL-STD-1363 - Measurement of Wood Moisture Content.

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

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

Maple Flooring Manufacturers Association:

Grading Rules for Hard Maple, Beech, and Birch Flooring.

(Application for copies should be addressed to the Maple Flooring Manufacturers Association, 424 Washington Avenue, Oshkosh, WI 54901.)

National Hardwood Lumber Association (NHLA):

Rules for the Measurement and Inspection of Hardwood and Cypress Lumber.

(Application for copies should be addressed to the National Hardwood Lumber Association, 59 East Van Buren Street, Chicago, IL 60605.)

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National Oak Flooring Manufacturers Association:

Flooring Grading Rules for Oak, Pecan, Beech, Birch, Hard Maple.

(Application for copies should be addressed to the National Oak Flooring Manufacturers Association, 814 Sterick Building, Memphis, TN 38013.)

(Technical society and technical association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

3. REQUIREMENTS

3 .1 Material.

3.1.1 Hardwood lumber. Type I and type II lumber shall be of the species and grade specified (see 6.2) and shall conform to the National Hardwood Lumber Association (NHLA) Rules for the Measurement and Inspection of Hardwood and Cypress Lumber.

3.1.2 Hardwood flooring. Type III lumber shall be of the species and grade specified (see 6.2), and shall conform to the following grading rules as applicable:

- (a) National Oak Flooring Manufacturers Association.
- (b) Maple Flooring Manufacturers Association.

3.2 Sizes. Sizes shall be as specified (see (6.2) and shall conform to the grading rules cited.

3.2.1 Length trimming. "Construction" and "Utility" boards, "Finish" and "Number 1" and "Number 2 Dimension" shall be trimmed to a length not over 3 inches in excess of nominal provided; however, such trimming shall permit trimming to nominal length.

3.3 Seasoning. The degree of seasoning shall be as specified, (see 6.2). Moisture content of lumber shall be determined as specified in 4.3.4.

3.3.1 Green. When "green" or "unseasoned" lumber is specified, the lumber shall have no intentional drying.

3.3.2 Dry. When "dry" or "seasoned" lumber is specified, the lumber shall conform to the following requirements.

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3.3.2.1 Type I and NHLA "A" and "B" finish grades of type II lumber. No piece of lumber 8/4 inches or less in thickness shall have a moisture content exceeding 12 percent. The moisture content of lumber over 8/4 inches in thickness shall be as specified (see 6.2). The lumber shall be graded and measured under the NHLA "Standard Kiln Dried Rule" with inspection after surfacing when surfacing is required (see 3.5).

3.3.2.2 Type II lumber, excluding "A" and "B" finish grades. Unless otherwise specified (see 6.2), lumber shall conform to the following average moisture content requirements, with no piece to exceed the average moisture content by more than 3 percent:

THICKNESS	AVERAGE MOISTURE CONTENT
4/4" and thinner	19 percent or less
5/4"	22 percent or less
6/4"	24 percent or less
7/4" and 8/4"	27 percent or less
over 8/4"	As specified (see 6.2)

When lumber intended for use as framing members is specified (see 6.2) the moisture content shall not exceed 19 percent.

3.3.2.3 Type III. The moisture content of hardwood flooring shall be not more than 9 percent, except that 5 percent of any quantity submitted for delivery may have a moisture content of not more than 12 percent.

3.4 End coating. When green or unseasoned lumber is specified, lumber 4 inches and thicker shall be end coated with two coats of ready-mixed paint conforming to TT-P-31 or with any suitable commercial end coating equally effective when compared with approved coating in reducing end checking and splitting.

3.5 Surfacing. Lumber shall be rough, dressed or run to pattern, as specified (see 6.2 and 6.4).

3.6 Treatment.

3.6.1 Preservative treatment. When specified (see 6.2), lumber shall be preservative treated in accordance with TT-W-571.

3.6.2 Fire retardant treatment. When specified (see 6.2), lumber shall be fire retardant treated in accordance with MIL-L-19140.

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3.7 Grade Certification. Hardwood lumber of like grade, size and species shall be certified for grade by a certificate of inspection or label of certification. Unless otherwise specified (see 6.2), the certificate for type I lumber shall be issued by a National Inspector of the National Hardwood Lumber Association and certificates for type II and III lumber shall be issued by the supplier.

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 in the contract or order, the supplier may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by 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 Classification of inspection. Inspection shall be classified as follows:

- (a) Quality conformance inspection (see 4.3).
- (b) Inspection of preparation for delivery (see 4.4).

4.3 Quality conformance inspection.

4.3.1 Sampling.

4.3.1.1 Unit of product. For the purpose of quality conformance inspection, each piece of lumber shall constitute a unit of product.

4.3.1.2 Lot. For the purpose of quality conformance inspection, a lot shall consist of all pieces of the same material and manufacturing classification offered for delivery at one time.

4.3.2 Samples for examination and tests. Samples for examination and tests shall be selected in accordance with MIL-STD-105. The AQL shall be 4.0 percent defective.

4.3.3 Examination. Samples selected in accordance with 4.3.2 shall be examined for the following defects:

- 101. Species not as specified.
- 102. Size (thickness, width and length) not as specified.
- 103. Grade not as specified.

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- 104. No certificate of inspection or label of certification.
- 105. Seasoning not as specified.
- 106. Surfacing or pattern not as specified.
- 107. Preservative treatment not as specified (when required).
- 108. Fire retardant treatment not as specified (when required).

4.3.4 Tests. Samples selected in accordance with 4.3.2, from lots of seasoned lumber only, shall be tested for moisture content in accordance with MIL-STD-1363.

4.4 Inspection of preparation for delivery. Inspection of unitizing, marking and loading shall be in accordance with MIL-L-14362.

5. PREPARATION FOR DELIVERY

5.1 Unitizing, marking and loading. Unitizing, marking and loading shall be in accordance with MIL-L-14362, as specified (see 6.2).

6. NOTES

6.1 Intended use.

6.1.1 Type I. Type I hardwood lumber is intended for recutting to smaller sizes for the manufacture of furniture and other fabricated products where a high quality appearance is essential.

6.1.2 Type II. Type II hardwood lumber is intended for use in construction work and related applications where the material will be used essentially in the size as procured.

6.1.3 Type III. Type III hardwood lumber is intended to be used specifically for flooring.

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 of hardwood lumber required (see 1.2).
- (c) Species and grade required (see 3.1.1 and 3.1.2).
- (d) Size, including thickness, width and length, required (see 3.2 and 6.3).
- (e) Degree of seasoning required (see 3.3).
- (f) Moisture content required for lumber over 8/4 inches in thickness (see 3.3.2.1 and 3.3.2.2).
- (g) When moisture content of type II lumber excluding A and B finish grades other than as specified is required (see 3.3.2.2).

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- (h) When lumber is to be used for framing (see 3.3.2.2).
- (i) Surfacing required (see 3.5).
- (j) When preservative treatment is required and service conditions (see 3.6.1).
- (k) When fire retardant treatment is required (see 3.6.2).
- (l) Certification if other than as specified (see 3.7).
- (m) Unitization level and method required (see 5.1).

6.3 Thickness, width and length. In the case of type I hardwood lumber, widths are normally in accordance with NHLA Rules (see page 50 of MIL-HDBK 7A, and pages 107 through 109 of U. S. Department of Agriculture Wood Handbook No. 72). Minimum, and percentages of widths and lengths of standard cutting grades may be specified. If assorted widths or assorted lengths are ordered in the case of type II hardwood lumber, percentages of each width or length may be specified. See the introduction to the CS500-IL Federal Supply Catalog, Lumber, Millwork, Plywood and Veneer, for further information.

6.4 Surfacing. Type I hardwood lumber is produced either rough or surfaced-two-sides (525); type I lumber therefore should not be ordered 545.

MILITARY INTEREST

CIVIL AGENCY COORDINATING ACTIVITY:

Custodians:

GSA-FSS

Army - ME

Navy - YD

Air Force - 84

User Activities

Project NO. 5510-0130

Army - CE

Navy - MC, SH

Preparing Activity:

Army - ME

Orders for this publication are to be placed with the General Services Administration, acting as an agent for the Superintendent of Documents. See section 2 of this specification to obtain extra copies and other documents referenced herein. Price 15 cents each.

MM-L-736C
AMENDMENT-1
March 11, 1983

FEDERAL SPECIFICATION

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This amendment, which forms a part of Federal Specification MM-L-736C, dated March 9, 1973, was approved by the Assistant Administrator, Office of Personal Service, General Services Administration, for the use of all Federal Agencies.

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2.2 Other Publications.

Change address of Maple Flooring Manufacturer's Association to: Sperry Univac Plaza, Suite 720-South, 8600 West Bryn Mawr Avenue, Chicago, Illinois 60631.

Change address of National Hardwood Lumber Association to: P.O. Box 34518, Memphis, TN 38134.

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Change address of National Oak Flooring Manufacturer's Association to: 804 Sterick Bldg., Memphis, TN 38103.

3.3 Seasoning. Delete in its entirety and substitute the following:

"3.3 Seasoning. Unless otherwise specified (see 6.2), the degree of seasoning shall conform to the following requirements. Lumber not required to be seasoned shall be designated, "Any stage of seasoning". Moisture content of lumber shall be determined as specified in 4.3.4."

3.3.1 Green. Delete in its entirety without substitution.

3.3.2 Dry. Delete in its entirety without substitution.

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3.6 Treatment. Add the following new subparagraph after 3.6.2.

"3.6.3 Anti-strain treatment. When specified (see 6.2), all hard-wood lumber which is subject to staining (see 6.5-) shall be anti-stain treated. The treating solution shall be waterbased with the composition, concentration and application as specified by the chemical supplier."

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3.7 Grade certification. Delete in its entirety and substitute the following:

"3.7 Grade certification. Hardwood lumber of like grade, size and species shall be certified for grade by a certificate of inspection. Unless otherwise specified (see 6.2), certificates for types I and II lumber shall be issued by a National Inspector of the National Hardwood Lumber Association and certificates for type III lumber shall be issued by the supplier."

3.8 Marking. Add the following new paragraph:

"3.8 Marking. Unless otherwise specified, (see 6.2), each piece of type I and II lumber, graded and certified as specified in 3.7, shall be hammer branded by a National Inspector of the National Hardwood Lumber Association."

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4.3.3 Examination. Add the following new defects.

"109. Anti-stain treatment not as specified (when required).
110. Pieces not hammer branded as specified."

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6.2 Ordering data. Delete (l) and (m) in their entirety and substitute the following:

"(l) When anti-stain treatment is required (see 3.6.3).
(m) Certification if other than as specified (see 3.7).
(n) Marking if other than as specified (see 3.8).
(o) Unitization level and methods (see 5.1)."

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6.3, line 2, delete "widths" and substitute "thickness".

Lines 2-4, delete paranthetical phrase and substitute: "(see MIL-HDBR-7B and U.S. Department of Agriculture Wood Handbook No. 72)."

After paragraph 6.4 Surfacing, add the following:

"6.5 Anti-stain treatment applicability- Under certain circumstances, such as overseas shipments or extended periods of storage, an anti-stain treatment may be necessary for unseasoned lumber to inhibit the penetration of undesirable stains. The need for such treatment (see 3.6.3), shall be specified on the order [see 6.2 (1)]."

MILITARY INTERESTS:

Custodians
Army - ME
Navy - YD
Air Force - 99

CIVIL AGENCY COORDINATING ACTIVITIES:

GSA - FSS, PCD
USDA - AFS
HHS - FEC

User activities

Army - CE
Navy - MC, SH

PREPARING ACTIVITY:

Army - ME

Project No. 5510-0156