

PPP-E-911D
September 28, 1973
SUPERSEDING
PPP-E-911C
March 18, 1965

FEDERAL SPECIFICATION

EXCELSIOR, WOOD, FABRICATED PADS AND BULK FORM

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 wood excelsior in loose or bulk form and pads made from excelsior.

1.2 Classification. Wood excelsior and excelsior pads shall be of the following types, classes, grades, and weight numbers, as specified (see 6.2).

Type I - Excelsior, bulk form

Class A - Limited specie of wood

Grade 1 - Superfine wood wool

Class B - General specie of wood

Grade 2 - Wood wool

Grade 3 - Extra fine

Grade 4 - Fine

Grade 5 - Medium

Grade 6 - Coarse or ribbon

Type II - Excelsior pads

Weight number 1

Weight number 1-1/4

Weight number 1-1/2

Weight number 1-3/4

Weight number 2

Weight number 2-1/4

Weight number 2-1/2

Weight number 3

Weight number 4

Weight number 5

Weight number 6

Weight number 7

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:

L-P-378	-	Plastic Sheet and Strip, Thin Gauge, Polyolefin
T-T-871	-	Twine, Cotton Wrapping
T-T-911	-	Twine, Jute
UU-P-268	-	Paper, Kraft, Untreated, Wrapping
CCC-C-429	-	Cloth, Cotton, Osnaburg
CCC-C-467	-	Cloth, Burlap, Jute (or Kenaf)
MMM-A-260	-	Adhesive, Water-Resistant, (For Sealing Waterproofed Paper)
PPP-B-636	-	Boxes, Shipping, Fiberboard
PPP-B-1055	-	Barrier Material, Waterproofed, Flexible

Federal Standard:

FED-STD-123	-	Marking for Domestic Shipment (Civil 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, DC 20402.

(Single copies of this specification and other product 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, Ft. 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 Specification:

MIL-T-40625	-	Tubing, Bias Sewn (Burlap or Osnaburg) Cloth
-------------	---	--

Military Standards:

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

(Copies of 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:

National Motor Freight Traffic Association, Inc., Agent:

National Motor Freight Classification

(Application for copies should be addressed to the American Trucking Associations, Inc., Tariff Order Section, 1616 P Street, N.W., Washington, DC 20036.)

Uniform Classification Committee, Agent:

Uniform Freight Classification

(Application for copies should be addressed to the Uniform Classification Committee, Room 1106, 222 So. Riverside Plaza, Chicago, IL 60606.)

3. REQUIREMENTS

3.1 Type I. Excelsior (bulk form). Type I class A excelsior shall be made from cotton wood (including eastern cotton wood and black cotton wood), aspen, including eastern and western varieties and large tooth aspen, poplar, except heartwood of yellow poplar. Type I class B shall be made from any commercially used wood other than specified for class A. The wood from which the excelsior is made shall be straight grained (slope of wood grain shall be not over 1 inch in 20 inches) and be formed into curled shreds. The moisture content of the excelsior shall be not less than 12 percent and not more than 20 percent of oven dry weight when tested as specified in 4.3.1, at time of baling or manufacture into pads. The size of the excelsior strands for the various grades shall be as shown on table I with commercial tolerances permitted.

TABLE I. Strand size for type I class A and B excelsior

Grade	Nomenclature	Thickness of strand	Width of strand
		Inch	Inch
1	Superfine wood wool	0.006	0.020
2	Wood wool	0.012	0.020
3	Extra fine	0.015	0.031
4	Fine	0.018	0.031
5	Medium	0.021	0.041
6	Coarse or ribbon	0.015	0.167

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 supplies and services conform to prescribed requirements.

4.2 Inspection. Sampling for inspection shall be performed in accordance with MIL-STD-105, except where otherwise indicated hereinafter.

4.2.1. Components and materials inspection. In accordance with 4.1, the components and material shall be inspected and tested in accordance with the requirements of referenced specifications and standards to the extent specified unless otherwise excluded, amended, modified or qualified in this specification or applicable purchase document.

4.2.2 Examination of the end item.

4.2.2.1 Examination of the end items for visual defects. Examination of the end item shall be in accordance with defects set forth in table III. The sample unit shall be one pound of excelsior or one excelsior pad. The lot shall be expressed in pounds of excelsior or the number of completed pads offered for inspection. The inspection level shall be S-2 and AQL shall be 10 defects per 100 units.

TABLE III. Examination of the end item for visual defects

Examine	Defect
Excelsior (bulk form)	Not straight grained Not curled Heart wood of yellow poplar used for type I, class A
Excelsior (pads)	Not grade of filler specified Edges of kraft paper liner lapped less than 5/8 inch Edges of kraft paper of polyethylene liner not securely sealed the entire length Liners do not completely enclose the filler
Workmanship	Excelsior not free of mold, decay or pitch Pads not clean, uniform in size and weight and not uniformly filled.

4.2.2.2 Examination of end items for defects in dimensions. The excelsior or excelsior pads shall be examined for compliance with dimensions specified. Any dimension not within the specification tolerance shall be a defect. The lot size shall be in units of pounds of excelsior or pads. The inspection level shall be S-2 with an AQL of 10 expressed in terms of defects per hundred units.

4.2.2.3 End item testing. Excelsior shall be tested in accordance with table IV for characteristics specified therein. The number of sample units to be tested, randomly selected throughout the lot for the applicable material, shall be as

indicated in table IV. The lot size shall be in units of pounds of excelsior or pads. Failure to meet any of the tests shall be basis for rejection of the lot.

TABLE IV. Testing of end item

Item	Basic spec. requirement paragraph	Test method	Sample unit	Inspection level or sample size	Results reported to nearest
Excelsior moisture content	3.1	4.3.1	(Specimen 20 grams)	S-2	Percent
Excelsior strands thickness	Table I	4.3.2	1 strand	20 strands	0.001 inch
width	Table I	4.3.2	1 strand	20 strands	0.001 inch

4.2.3 Examination for preparation for delivery. An examination shall be made to determine that packing and marking requirements in section 5 are complied with. Defects shall be scored as set forth in table V. The sample unit shall be one shipping container (bale, bundle, or container) as applicable. The lot size shall be expressed in units of bale, bundles, or containers. The lot shall be the number of sample units offered for inspection at one time. The inspection level shall be S-2 and the AQL shall be 10 expressed in defects per 100 units.

TABLE V. Examination of packing and marking

Examine	Defect
Level A packing (when applicable) Bales (for type I)	Bales not wrapped as specified Folds, seams, and laps not completely sealed Adhesive seal seam less than 3/4 inch wide Bales not overwrapped with burlap or osnaburg Burlap or osnaburg overwrap not sewn nor in tubing or bag form; ends not secured with wire ties
Binding wire	Diameter of wire less than specified Number of wires less than specified for applicable diameter of wire Bale not compressed (wire loose) Wire ends not securely joined Weights of bale more than 100 pounds

TABLE V. Examination of packing and marking (cont'd)

Examine	Defect
Bundles (for type II)	Not bundled Fiberboard baling boards missing Bundles not securely tied as specified Not wrapped, overwrapped, and closure secured as specified Folds, seams, and laps not completely sealed Adhesive seal seam less than 3/4 inch wide Weight of bundle more than 100 pounds
Level B packing (when applicable) Bales (for type I)	(see 5.1.2)
Binding wire	Diameter of wire less than specified Number of wires less than specified for applicable diameter of wire Bale not compressed (wires loose) Wire joint not securely clinched Weight of bale more than 100 pounds
Bundles (for type II)	Not bundled Fiberboard baling boards missing Weight of bundle more than 100 pounds
Level A and B packing (when applicable) Boxes (for type I and type II)	Not weight specified Liner missing (when required) Level A packs not waterproofed or reinforced
Marking (all levels)	Missing, illegible, incomplete, incorrect, or not in accordance with 5.2 or contract requirements

4.2.3.1 Examination of shipping container. Examination for defects in construction, closure, waterproofing and reinforcement of shipping containers shall be in accordance with the appendix to PPP-B-636.

4.3 Tests. Excelsior shall be tested as specified in 4.3.1 or by other methods or procedures approved by this contracting officer. The sample to be tested shall be placed in a tared metal can or weighing bottle having a tight fitting cover.

4.3.1 Moisture content. Each tared metal can or weighing bottle containing each 20 gram specimen of excelsior (type I) or excelsior filler from a sample pad (type II) shall be weighed to the nearest 0.01 gram. The cover shall remain tightly fitted until the weighing is completed. The cover shall then be removed, and the contained, with the specimen inside, shall be placed in an oven at 212 deg. F. for 24 hours, or until constant weight is reached. Each time before the container is removed

from the oven for weighing, the cover shall be put securely in place. The moisture content of the specimen shall be determined by substitution in the following formula:

$$\text{Moisture content (percent) =} \\ \frac{\text{original weight} - \text{oven-dry-weight} \times 100}{\text{oven-dry weight}}$$

4.3.2 Size of strands. Width and thickness of strands shall be measured to determine compliance with strand dimensions specified for the various excelsior grades (see 3.1).

5. PREPARATION FOR DELIVERY

5.1 Packing. Packing shall be level A, B, or C, as specified (see 6.2).

5.1.1 Level A.

5.1.1.1 Type I. Bulk excelsior of one class and grade only shall be packed in machine-pressed bales. Bales shall be bound with at least two wires of not less than 0.0800-inch diameter or with at least three wires of not less than 0.0721-inch diameter. Wire bands shall be drawn tight so as to compress the bale. The wire ends shall be mechanically joined together and the ends turned into the bale to provide a joint of not less than 75 percent of the tensile strength of the wire. Each bale shall be wrapped in weather resistant paper conforming to class E-1 of PPP-B-1055 with all folds, seams, and laps completely sealed with a minimum 3/4-inch width continuous seams of adhesive conforming to type I, grade A of MMM-A-260. Each bale shall be overwrapped and sewn in cotton osnaburg cloth conforming to class 2 of CCC-C-429 or jute (or kenaf) burlap cloth conforming to class 1 of CCC-C-467. The wrapping shall be securely sewn with type I, 16-ply cotton twine conforming to T-T-871 or type I, size No. 2 jute twine conforming to T-T-911, with approximately one stitch to the inch and every third stitch knotted. Closure shall be effected by securing each open end with two wire ties. The first wire tie shall be applied as close to the contents as possible. The second wire tie shall be applied approximately 1 inch from the first wire tie, with the twisted ends positioned opposite to the ends of the first wire tie. The wire ties shall be not less than 6 inches long, 0.072-inch thick galvanized soft iron or steel wire with a 1/2 inch diameter formed eye at each end. In lieu of the sewn wrapping, the cloth covering may be in bias-sewn tubing form or bags (tubing pre-sewn one end) conforming to MIL-T-40625 with closure effected by securing each open end with two wire ties as specified above. The weight of contents of each bale shall not exceed 100 pounds. Alternatively, 100 pounds of excelsior may be packed in a fiberboard box conforming to style RSC-L or DBLCC or IC, V2s of PPP-B-636. Closure, waterproofing and reinforcing shall be in accordance with the appendix of PPP-B-636.

5.1.1.2 Type II. Excelsior pads of one class and weight only shall be stacked in a bundle with solid fiberboard baling boards positioned at the top and bottom. Each bundle shall be securely tied with cord or rope with two ties in each direction. Each bundle shall then be wrapped with waterproof kraft wrapping paper; overwrapped with osnaburg or burlap cloth; and closure secured with wire ties as specified in 5.1.1.1. The weight of contents of each bundle shall not exceed 100 pounds. Alternatively, 100 pounds of excelsior pads may be packed in a fiberboard box conforming to

style RSC-L, DBLCC or IC, V2s of PPP-B-636. Closure, waterproofing and reinforcement shall be in accordance with the appendix of PPP-B-636.

5.1.2 Level B.

5.1.2.1 Type I. Bulk excelsior of one class and grade only shall be baled as specified in 5.1.1.1, except that the waterproofed kraft wrapping paper and the osnaburg or burlap cloth overwrap shall not be required. The weight of contents of each bale shall not exceed 100 pounds. Alternatively, 100 pounds of excelsior may be packed in a fiberboard box conforming to type CF, class domestic, variety optional, grade 350, style RSC, DBLCC or IC of PPP-B-636. Closure shall be in accordance with the appendix of PPP-B-636.

5.1.2.2 Type II. Excelsior pads of one class and weight only shall be packed as specified in 5.1.1.2, except that the waterproof kraft wrapping paper and the osnaburg or burlap cloth overwrap shall not be required. The weight of contents of each bundle shall not exceed 100 pounds. Alternatively, 100 pounds of excelsior pads may be packed in a fiberboard box conforming to type CF, class domestic, variety optional, grade 350, style RSC, DBLCC or IC of PPP-B-636. Closure shall be in accordance with the appendix of PPP-B-636.

Custodians:

Army - CL

Navy - SA

Air Force - 69

Review activities:

Army - EL, SM

Air Force - 84

User activities:

Army - AV

Navy - MC

Preparing activity:

Army - CL

Civil Agency Interest:

GSA-FSS

Project No. 8135-0355

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 extra copies and other documents referenced herein. Price 15 cents each.