

HH-P-0031E(SH)  
11 July 1983  

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INTERIM REVISION OF  
HH-P-31D  
October 31, 1963  
(See 6.6)

## INTERIM FEDERAL SPECIFICATION

### PACKING AND LAGGING MATERIAL, FIBROUS GLASS METALLIC AND PLAIN CLOTH AND TAPE

This Interim Federal Specification was developed by the Department of the Navy, Naval Sea Systems Command, Washington, DC, based upon currently available technical information. It is recommended that Federal agencies use it in acquisition and forward recommendations for changes to the preparing activity at the address shown above.

The General Services Administration has authorized the use of this Interim Federal Specification as a valid exception to Federal Specification HH-P-31D, dated October 31, 1963.

#### 1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers fibrous glass metallic cloth and tape packing for boiler casing access openings or insulation lagging pads and heavyweight, friction treated fibrous glass cloth and tape for pipe flange joint gaskets.

1.2 Classification. Packing or lagging covered by this specification shall be of the following types and classes, as specified (see 6.2.1):

Type I - Fibrous glass, wire-reinforced plain.

Class 1 - Cloth

Class 2 - Tape

Type II - Fibrous glass, heavyweight, friction treated.

Class 1 - Cloth

Class 2 - Tape

#### 2. APPLICABLE DOCUMENTS

2.1 The following documents, 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:

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Federal Specification:

PPP-B-1055 - Barrier Material, Waterproofed, Flexible

Federal Standards:

FED-STD-123 - Marking for Shipment (Civil Agencies).  
 FED-STD-191 - Federal Standard for Textile Test Methods.  
 FED-STD-601 - Rubber: Sampling and Testing.

(Activities outside the Federal Government may obtain copies of Federal specifications, standards, and commercial item descriptions as outlined under General Information in the Index of Federal Specifications, Standards and Commercial Item Descriptions. The Index, which includes cumulative bi-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, other Federal specifications and commercial item descriptions required by activities outside the Federal Government for bidding purposes are available without charge from General Services Administration Business Service Centers in Boston; New York; Philadelphia; Washington, DC; Atlanta; Chicago; Kansas City, MO; Fort Worth; Houston; Denver; San Francisco; Los Angeles; and Seattle, WA.

(Federal Government activities may obtain copies of Federal standardization documents and the Index of Federal Specifications, Standards and Commercial Item Descriptions from established distribution points in their agencies.)

Military Standards:

MIL-STD-105 - Sampling Procedures and Tables for Inspection  
by Attributes.  
 MIL-STD-129 - Marking for Shipment and Storage.  
 MIL-STD-147 - Palletized Unit Loads.

(Copies of military standards required by contractors 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.

American Society for Testing and Materials (ASTM) Standards:

A 478 - Chromium-Nickel Stainless and Heat-Resisting Steel  
Weaving Wire.  
 D 1777 - Measuring Thickness of Textile Materials.  
 D 3774 - Width of Woven Fabric.  
 D 3775 - Fabric Count of Woven Fabric.  
 D 3776 - Weight (Mass) Per Unit Area of Woven Fabric.  
 F 205 - Measuring Diameter of Fine Wire by Weighing.

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

National Motor Freight Traffic Association, Inc., Agent:  
National Motor Freight Classification.

(Application for copies should be addressed to the American Trucking Associations, Inc., Traffic Department, 1616 "P" Street, NW, Washington, DC 20036.)

Uniform Classification Committee, Agent:  
Uniform Freight Classification.

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

(Industry 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 First article. When specified (see 6.2.1), a sample shall be subjected to first article inspection (see 4.3 and 6.3).

3.2 Materials. Type I packing or lagging shall be a plain woven fibrous glass wire-inserted cloth, and type II packing shall be a heavyweight plain woven fibrous glass cloth treated with a natural or synthetic rubber compound. A certificate of compliance shall be required to ensure that only non-asbestos materials are used (see 6.2.2).

#### 3.3 Type I.

3.3.1 Construction. The cloth and tape (classes 1 and 2) shall be woven from wire-reinforced fibrous glass yarn. There shall be not less than 20 strands in the warp and 14 strands in the fill per linear inch plus or minus 2 ends or picks when tested in accordance with 4.6.1.

3.3.1.1 Yarn. Each yarn of the warp and filling shall consist of 3 ends of textured glass and 2 ends of type 304 corrosion resistant steel (CRES) wire yarn. The wire and glass shall be plied in a manner that will secure the glass and wire and prevent skinback when tested in accordance with 4.6.1.1.

3.3.1.2 Wire insertion. The wire shall be made of type 304 CRES in accordance with ASTM A 478. A certificate of compliance shall be required to show that the wire is of the proper composition (see 6.2.2). The total cross section of the two wires shall be  $.009 \pm 0.001$  inch in diameter when tested in accordance with 4.6.2. Any combination of wire diameters is permitted.

#### 3.3.2 Thickness.

3.3.2.1 Class 1, cloth. Unless otherwise specified (see 6.2.1), cloth shall have a nominal thickness of 0.041 inch with a tolerance of plus or minus 10 percent and shall be tested in accordance with 4.6.3.

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3.3.2.2 Class 2, tape. Tape shall be as specified in 6.2.1 with a tolerance of plus or minus 10 percent and shall be tested in accordance with 4.6.3. Tape 3/64 inch in nominal thickness shall be woven with or without a selvage (see 6.2.1). Tape 1/8 inch and thicker may either be woven to the specified thickness or made from strips cut from sheet, folded to the specified thickness and sewn.

3.3.3 Weight. The weight of the cloth shall be 24 ounces per square yard plus or minus 10 percent when tested in accordance with 4.6.4.

#### 3.3.4 Width.

3.3.4.1 Class 1, cloth. The nominal width of the cloth shall be as specified (see 6.2.1), with the following tolerances, when tested in accordance with 4.6.8:

Up to and including 40 inches	- plus or minus 1/2 inch.
Over 40 inches but not including 60 inches	- plus or minus 3/4 inch.
60 inches and over	- plus or minus 1 inch.

3.3.4.2 Class 2, tape. Tape shall be 1/2, 3/4, 1 and 2-3/4 inches wide when tested as specified in 4.6.8 with a tolerance of plus or minus 1/8 inch on 1/2, 3/4 and 1 inch widths. For widths over 1 inch, the tolerance shall be plus or minus 1/4 inch (see 6.2.1).

#### 3.3.5 Breaking strength.

3.3.5.1 Class 1, cloth. The fabric shall have a minimum breaking strength of 224 pounds per inch of width in the longitudinal (warp) direction and 118 pounds per inch of width in the transverse (fill) direction when tested as specified in 4.6.9.

3.3.5.2 Class 2, tape. The tape shall have a minimum breaking strength of 224 pounds per inch of width in the longitudinal (warp) direction when tested as specified in 4.6.9.

### 3.4 Type II.

#### 3.4.1 Untreated cloth and tape.

3.4.1.1 Construction. The cloth and tape shall be woven from texturized fibrous glass yarn with not less than 10 + 2 ends and picks per inch when tested as specified in 4.6.1.

3.4.1.2 Weight. The weight of the fabric shall be 36 ounces per square yard, plus or minus 10 percent when tested as specified in 4.6.4.

#### 3.4.1.3 Thickness.

3.4.1.3.1 Class 1, cloth. Unless otherwise specified (see 6.2.1), cloth shall have a nominal thickness of 0.065 inch with a tolerance of plus or minus 10 percent and shall be tested in accordance with 4.6.3.

3.4.1.3.2 Class 2, tape. Tape shall be as specified in 6.2.1 with a tolerance of plus or minus 10 percent and shall be tested in accordance with 4.6.3. Tape, 1/16 inch in nominal thickness, shall be woven with or without a selvage (see 6.2.1). Tape, 1/8 inch and thicker, may either be woven to the specified thickness or made from strips cut from sheet, folded to the specified thickness, and sewn.

#### 3.4.1.4 Breaking strength.

3.4.1.4.1 Class 1, cloth. The fabric shall have a minimum breaking strength of 500 pounds per inch of width in the longitudinal (warp) direction and 350 pounds per inch of width in the transverse (fill) direction when tested as specified in 4.6.9.

3.4.1.4.2 Class 2, tape. The tape shall have a minimum breaking strength of 500 pounds per inch of width in the longitudinal (warp) direction when tested as specified in 4.6.9.

#### 3.4.2 Frictioned cloth and tape.

3.4.2.1 Friction compound. Cloth and tape meeting the requirements of 3.4.1 shall be treated with a balanced amount (approximately as much on one side as the other) of rubber friction compound. The friction compound shall not be less than 40 percent or more than 55 percent of the finished fabric weight when tested in accordance with 4.6.5.

3.4.2.2 Number of plies. The frictioned cloth or tape packing of 1/16-inch nominal thickness shall be one-ply cloth. Packing 1/8, 3/16, and 1/4 inch shall have two, three and four plies respectively, of one-ply cloth.

3.4.2.3 Resistance to cracking. The frictioned packing shall not crack or show any signs of injury when tested in accordance with 4.6.6.

3.4.2.4 Effect of steam. The frictioned packing shall show no significant deterioration, such as cracking or disintegration, of the friction compound when tested in accordance with 4.6.7.

#### 3.4.2.5 Width.

3.4.2.5.1 Class 1, cloth. Unless otherwise specified (see 6.2.1), the width of cloth packing shall be 40 -0 +2 inches when tested in accordance with 4.6.8. Other widths shall have a tolerance of minus 0, plus 10 percent.

3.4.2.5.2 Class 2, tape. Tape packing shall be 1/2, 3/4, 1 or 2-3/4 inches wide when tested in accordance with 4.6.8 with a tolerance of plus or minus 1/8 inch on 1/2, 3/4 and 1 inch widths. For widths over 1 inch, the tolerance shall be plus or minus 1/4 inch (see 6.2.1).

3.5 Weight of rolls (type I, class 1 and type II, class 1). Each roll of cloth packing or lagging material shall weigh 100, 125, 200 or 250 pounds and consist of not more than two pieces (see 6.2.1).

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3.6 Marking. The finished packing or lagging material shall be marked with the manufacturer's name or trademark neatly stenciled upon each linear yard. The date of manufacture shall be marked on the end of each roll. The packing material shall be marked "ASBESTOS-FREE" in accordance with 5.3.

3.7 Workmanship. The finished packing or lagging material shall be free from visible defects which may impair its serviceability.

#### 4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or purchase order, the contractor 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 Classification of inspections. The inspection requirements specified herein are classified as follows:

- (a) First article inspection (see 4.3).
- (b) Quality conformance inspection (see 4.4 and 4.5).

4.2.1 Inspection conditions. Unless otherwise specified, all inspections shall be performed in accordance with the test conditions specified in 4.3, 4.4, 4.5 and 4.6.

4.3 First article inspection. First article inspection shall consist of the examinations and tests specified in table I and in 4.6. Certificates of compliance (see 6.2.2) are acceptable for establishing effect of steam (see 3.4.2.4 and 4.6.7).

TABLE I. First article inspection.

Characteristic	Requirement	Test paragraph
Construction	3.3.1, 3.4.1.1	4.6.1
Yarn	3.3.1.1	4.6.1.1
Wire-insertion	3.3.1.2	4.6.2
Thickness	3.3.2, 3.4.1.3	4.6.3
Weight	3.3.3, 3.4.1.2	4.6.4
Width	3.3.4, 3.4.2.5	4.6.8
Breaking strength	3.3.5, 3.4.1.4	4.6.9
Friction compound	3.4.2.1	4.6.5
Resistance to cracking	3.4.2.3	4.6.6
Effect of steam	3.4.2.4	4.6.7
Weight of rolls	3.5	- - -

4.3.1 First article unit. Unless otherwise specified (see 6.2.1), the first article unit shall consist of packing or lagging material for each type and class. The sample shall be of sufficient size to permit the examination and tests specified in 4.6.

4.3.2 First article inspection report. The contractor shall furnish a first article inspection report in accordance with the data ordering document included in the contract (see 6.2.2).

#### 4.4 Sampling for quality conformance inspection.

4.4.1 Lot. For the purposes of sampling, a lot shall consist of all packing or lagging material of the same type and thickness produced under the same conditions.

4.4.2 Sampling for examination. As specified in 4.5.1, a random sample of rolls shall be selected from each lot of packing for examination. Examination shall be in accordance with inspection level II of MIL-STD-105. The acceptable quality level (AQL) shall be 2.5 percent defective.

4.4.3 Sampling for tests. Samples of packing or lagging material shall be selected from each lot for the test specified in 4.5.2 at special inspection level S4 of MIL-STD-105. The AQL shall be 4.0 percent defective. Each sample piece shall be 12 by 12 inches, or 3 feet long by ordered width.

#### 4.5 Quality conformance inspection.

4.5.1 Examination. Each of the sample rolls selected as specified in 4.2.2 shall be surface examined, measured and weighed to determine conformance with the requirements specified herein which do not require tests (see 3.6 and 3.7). Any roll in the sample containing one or more visual or dimensional defects shall not be offered for delivery, and if the number of defective rolls in any sample exceeds the acceptance number for that sample, this shall be cause for rejection of the lot represented by the sample.

4.5.2 Tests. To determine quality conformance, the samples selected for testing as specified in 4.4 shall be subjected to the tests specified in 4.4. If any of the samples tested fail to meet any of the requirements specified herein, it shall be cause for rejection of the entire lot.

#### 4.6 Test procedures.

4.6.1 Cloth construction (type I, class 1 and type II, class 1). The number of warp yarns and filling yarns shall be determined by the methods for fabric, warp and fill count in accordance with ASTM D 3775 to determine conformance with 3.2 and 3.3.1.1. This method cannot be readily performed on type II treated cloth. Therefore, test samples for type II cloth shall be furnished from the lot before treatment is applied.

4.6.1.1 Yarn skinback (unravel) test (type I). Approximately 16 to 18 inches of yarn shall be cut from the fabric with 2 inches rolled around a mandrel and secured into a vise. Holding the loose end, the yarn shall be extended in a horizontal position until taut. The yarn shall be pinched a minimum of 1-1/2 inches from the end and the glass yarns unravelled, exposing the wires. The



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exposed wires shall be pinched with pliers. Holding wires taut, the glass yarn shall be held with thumb and forefinger at least 5 inches from the end, and slide back toward the vise. Yarns should not skinback from the wire as specified in 3.3.1.1.

4.6.2 Diameter of wire (type I). The diameter of the wire shall be tested in accordance with ASTM F 205 to determine conformance with 3.3.1.2.

4.6.3 Thickness. Thickness shall be tested in accordance with ASTM D 1777 to determine conformance with 3.3.2 and 3.4.1.3.

4.6.4 Weight. Weight shall be tested in accordance with ASTM D 3776 to determine conformance with 3.3.3 and 3.4.1.2.

4.6.5 Friction compound (type II only). The friction compound content shall be tested with method 16601 and 16611 of FED-STD-601 as follows:

- (a) Composite samples. Composite samples taken, as specified in 4.4, shall be prepared in accordance with method 16601.
- (b) Friction content. Determine amount of rubber friction compound in accordance with method 16611.

4.6.6 Resistance to cracking (type II only). A specimen of the packing shall be bent flat on itself and then examined visually for cracks or injury to determine conformance with 3.4.2.3.

4.6.7 Effect of steam (type II only). The effect of steam on packing shall be determined by method 7421 of FED-STD-601, except that the test shall be carried out, using saturated steam at a pressure of 300 pounds per square inch (lb/in<sup>2</sup>) for a period of 24 hours. The steam-treated specimen shall be examined for compliance with the requirements of 3.4.2.4.

4.6.8 Width. Width shall be tested in accordance with ASTM D 3774 to determine conformance with 3.3.4 and 3.4.2.5.

#### 4.6.9 Breaking strength of cloth and tape.

4.6.9.1 Except as otherwise specified hereinafter, breaking strength shall be determined in accordance with method 5104 of FED-STD-191. In case of cloth, specimens shall be cut in both warp and filling directions; in the case of tape, only the warp yarns shall be tested. Five tests shall be made upon each sample and the results averaged to give the breaking strength of the sample.

4.6.9.2 In order to prevent the jaws of the testing machine from cutting the cloth, the ends of each specimen shall be coated with rubber or painted with thick shellac for a distance of 1-5/8 inches from each end and allowed to dry in the air before unravelled to the 1 inch width, and small pieces of manila paper or soft cotton twill fabric shall be inserted between the specimen and the face of each jaw.

4.6.10 Examination of preparation for delivery. An examination shall be made to determine compliance with the requirements of section 5. The sample unit shall be one shipping container fully prepared for delivery. Sampling shall be in accordance with inspection level I of MIL-STD-105. The AQL shall be 4.0 percent defective.



## 5. PREPARATION FOR DELIVERY

5.1 Packing. Packing or lagging material shall be level A, B or C, as specified (see 6.2.1).

5.1.1 Levels A and B. Each roll (see 3.6) shall be wrapped in barrier material conforming to PPP-B-1055. Seams, joints and closures of the barrier material shall be sealed with adhesive or other suitable materials to afford waterproofness equal to the wrap itself. A minimum of 2-inch overlap shall be provided at all overlapping edges.

5.1.2 Level C. Each roll (see 3.6) shall be packed in containers, at the lowest rates, in a manner which will insure acceptance by common carrier and which will afford protection against physical damage during direct shipment from the supply source to the first receiving activity for immediate use. This level in general shall conform to the Uniform Freight Classification Ratings, Rules and Regulations and the National Motor Freight Classification or other carrier regulations as applicable to the mode of transportation and may be the contractor's commercial practice when such meets the requirements of this level.

## 5.2 Palletization.

5.2.1 Military palletization. When specified (see 6.2.1), the packed rolls shall be palletized in accordance with MIL-STD-147.

5.2.2 Civil agency palletization. The packed rolls shall be palletized on expendable wooden pallets, 2- or 4-way design, to facilitate handling, in accordance with normal commercial practice. The palletized load shall not exceed 2,500 pounds in weight, 63 inches in height, 56 inches in length, and 45 inches in width. Less than half pallet loads need not be palletized.

## 5.3 Marking.

5.3.1 Civil agencies. In addition to any special marking required by the contract or order, rolls or palletized unit loads shall be marked in accordance with FED-STD-123.

5.3.2 Military agencies. In addition to any special marking required by the contract or order, rolls or palletized unit loads shall be marked in accordance with MIL-STD-129.

5.3.3 Special marking. The packing or lagging material shall be marked "ASBESTOS-FREE" in accordance with MIL-STD-129.

## 6. NOTES

6.1 Intended use. Type I packing or lagging material is primarily intended for use as a boiler access opening gasket and as the inner surface of insulation blankets and covers for service temperature up to a nominal 1050 degrees Fahrenheit (°F). Type II packing is intended for use in flange joint gaskets for air, cold water, hot water and brine under pressures up to 300 lb/in<sup>2</sup>, for steam pressures up to 300 lb/in<sup>2</sup>, and at temperatures up to a nominal 500°F.

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## 6.2 Ordering data.

6.2.1 Acquisition requirements. Acquisition documents should specify the following:

- (a) Title, number and date of this specification.
- (b) Type and class required (see 1.2).
- (c) First article sample, when required (see 3.1).
- (d) Thickness of cloth or tape required (see 3.3.2.1, 3.3.2.2, 3.4.1.3.1 and 3.4.1.3.2).
- (e) Width of cloth or tape required (see 3.3.4.1, 3.3.4.2, 3.4.2.5.1 and 3.4.2.5.2).
- (f) Whether or not selvage required for tape (see 3.3.2.2, 3.3.4.2, 3.4.1.3.2 and 3.4.2.5.2).
- (g) Weight of roll required (see 3.5).
- (h) Level of packing required (see 5.1).
- (i) Whether rolls shall be palletized and whether military or civil agency palletization required (see 5.2.1).

6.2.2 Data requirements. When this specification is used in an acquisition which incorporates a DD Form 1423, Contract Data Requirements List (CDRL), the data requirements identified below shall be developed as specified by an approved Data Item Description (DD Form 1664) and delivered in accordance with the approved CDRL incorporated into the contract. When the provisions of DAR 7-104.9 (n)(2) are invoked and the DD Form 1423 is not used, the data specified below shall be delivered by the contractor in accordance with the contract or purchase order requirements. Deliverable data required by this specification is cited in the following paragraphs.

<u>Paragraph no.</u>	<u>Data requirement title</u>	<u>Applicable DID no.</u>	<u>Option</u>
3.2, 3.3.1.2 and 4.3	Certificate of compliance	DI-E-2121	----
4.3.2	First article inspection report	UDI-T-23790	----

(Data item descriptions related to this specification, and identified in Section 6 will be approved and listed as such in DoD 5000.19L., Vol. II, AMSDL. Copies of data item descriptions required by the contractors in connection with specific acquisition functions should be obtained from the Naval Publications and Forms Center or as directed by the contracting officer.)

6.2.2.1 The data requirements of 6.2.2 and any task in sections 3, 4 or 5 of the specification required to be performed to meet a data requirement may be waived by the contracting/acquisition activity upon certification by the offeror that identical data were submitted by the offeror and accepted by the Government under a previous contract for identical item acquired to this specification. This does not apply to specific data which may be required for each contract, regardless of whether an identical item has been supplied previously (for example, test reports).

6.2.2.2 Test report data. The contract will specify that first article test reports shall be prepared by the manufacturer and sent to both the contracting activity and Department of the Navy, Naval Sea Systems Command, Washington, DC 20362, Attn: NAVSEA Code 05M3.

6.3 First article inspection. Invitations for bids should provide that the Government reserves the right to waive the requirement for samples for first article inspection as to those bidders offering a product which has been previously acquired or tested by the Government, and that bidders offering such products, who wish to rely on such production or test, must furnish evidence with the bid that prior Government approval is presently appropriate for the pending contract.

6.4 Transportation description. Transportation descriptions and minimum weights applicable to this commodity are:

Rail:

Fibrous glass, reinforced with metal.  
Carload minimum weight 30,000 pounds.

Motor:

Fibrous glass, reinforced with metal.  
Motor volume minimum weight 30,000 pounds.

6.5 Non-interchangeability. Packing material purchased under previous issues of this specification is not interchangeable with packing material purchased under this issue of HH-P-31.

6.6 Changes from previous issue. Asterisks are not used in this revision to identify changes with respect to the previous issue, due to the extensiveness of the changes.

Preparing activity:  
Navy - SH  
(Project 5330-N071)

**INSTRUCTIONS:** In a continuing effort to make our standardization documents better, the DoD provides this form for use in submitting comments and suggestions for improvements. All users of military standardization documents are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge (**DO NOT STAPLE**), and mailed. In block 5, be as specific as possible about particular problem areas such as wording which required interpretation, was too rigid, restrictive, loose, ambiguous, or was incompatible, and give proposed wording changes which would alleviate the problems. Enter in block 6 any remarks not related to a specific paragraph of the document. If block 7 is filled out, an acknowledgement will be mailed to you within 30 days to let you know that your comments were received and are being considered.

**NOTE:** This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

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## STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions - Reverse Side)

1. DOCUMENT NUMBER HH-P-0031E(SH)		2. DOCUMENT TITLE Packing and Lagging Material, Fibrous Glass Metallic And Plain Cloth And Tape	
3a. NAME OF SUBMITTING ORGANIZATION		4. TYPE OF ORGANIZATION (Mark one)	
b. ADDRESS (Street, City, State, ZIP Code)		<input type="checkbox"/> VENDOR	
		<input type="checkbox"/> USER	
		<input type="checkbox"/> MANUFACTURER	
		<input type="checkbox"/> OTHER (Specify): _____	
5. PROBLEM AREAS			
a. Paragraph Number and Wording:			
b. Recommended Wording:			
c. Reason/Rationale for Recommendation:			
6. REMARKS			
7a. NAME OF SUBMITTER (Last, First, MI) - Optional		b. WORK TELEPHONE NUMBER (Include Area Code) - Optional	
c. MAILING ADDRESS (Street, City, State, ZIP Code) - Optional		8. DATE OF SUBMISSION (YYMMDD)	