INCH-POUND
MIL-D-23134A(SH)
14 September 1988
SUPERSEDING
MIL-D-23134(SHIPS)
17 January 1962
(See 6.9)

MILITARY SPECIFICATION

DECK UNDERLAY AND COVERING, INSULATING, MAGNESIA AGGREGATE MIXTURE

This specification is approved for use by the Naval Sea Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers an asbestos-free insulation underlayment and deck covering for use over such areas aboard ship as ballast tanks and hot machinery spaces.

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications and standards. The following specifications and standards form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

FEDERAL

UU-S-48 - Sacks, Shipping, Paper.
MMM-A-121 - Adhesive, Bonding Vulcanized Synthetic Rubber to Steel.
PPP-B-35 - Bags, Textile, Shipping, Burlap, Cotton and Waterproof Laminated.
PPP-B-636 - Boxes, Shipping, Fiberboard.
PPP-B-1714 - Bags, Shipping: Woven Polypropylene.
PPP-C-96 - Cans, Metal, 28 Gage and Lighter.
PPP-F-320 - Fiberboard; Corrugated and Solid, Sheet Stock (Container Grade), and Cut Shapes.
PPP-P-704 - Pails, Metal: (Shipping, Steel, 1 Through 12 Gallons).

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Naval Sea Systems Command, SEA 55Z3, Department of the Navy, Washington, DC 20362-5101 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 5610

MILITARY

MIL-L-19140 - Lumber and Plywood, Fire Retardant Treated.

STANDARDS

FEDERAL

FED-STD-313 - Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities.

MILITARY

MIL-STD-1186 - Cushioning, Anchoring, Bracing, Blocking and Waterproofing; with Appropriate Test Methods.

MIL-STD-2073-1 - DoD Materiel Procedures for Development and Application of Packaging Requirements.

(Application for copies should be addressed to the Naval Publications and Forms Center, (ATTN: NPODS), 5801 Tabor Avenue, Philadelphia, PA 19120-5099.)

(Unless otherwise indicated, copies of federal and Military specifications and standards are available from the Naval Publications and Forms Center, (ATTN: NPODS), 5801 Tabor Avenue, Philadelphia, PA 19120-5099.)

2.2 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

C 177 - Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus. (DoD adopted)

D 3951 - Standard Practice for Commercial Packaging. (DoD adopted)

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

(Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, (except for related associated detail specifications, specification sheets or MS standards), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Material. The material shall consist of a mixture of asbestos-free dry ingredients and a gauging solution of magnesium chloride proportioned to produce an insulating deck underlayment and covering that can be applied by a trowel (see 6.3). When trowelled, the material shall produce a smooth surface relatively free from waves, trowel marks, depressions, and other surface defects.

3.1.1 Dry ingredients. The dry ingredients, proportioned on a weight basis, shall be intimately premixed and shall consist of finely ground caustic calcined magnesia, asbestos-free inert aggregates and insulating component.

3.1.2 Magnesium chloride. The magnesium chloride shall be furnished in a dry flake form readily dissolvable in tap water to form the gauging solution, to which may be added a stabilizer if necessary.

3.2 Adhesion or bonding. The covering shall adhere to the deck or structure on which applied without the use of clips or other devices welded to the deck.

3.3 Weight. After drying, the covering shall not exceed 2.20 pounds per square foot for a thickness of 1/2 inch (see 4.4.2).

3.4 Indentation. The initial indentation of the covering shall not exceed 4.5 percent of the actual thickness of the covering. The covering shall show no signs of cracking or becoming detached from the steel base as a result of the indentation (see 4.4.3).

3.5 Water absorption. The covering shall not absorb more than 20 percent of water, based on its weight at normal atmospheric conditions (see 4.4.4).

3.6 Resistance to impact. The covering shall show no visible signs of chipping, cracking, or detachment from the steel plate. There shall be not more than 1/8 inch of permanent indentation (see 4.4.5).

3.7 Bond strength in shear. The initial bond strength in shear when bonded to steel shall be not less than 50 pounds per square inch (see 4.4.6).

3.8 Thermal conductivity. The thermal conductivity shall not exceed 1 British thermal unit per square foot per hour per degree Fahrenheit (°F) for a thickness of 1 inch at a mean temperature of 75°F (see 4.4.7).

3.9 Directions for application. Each container shall be clearly labeled with instructions for application of the covering.

3.10 Hazardous materials. Lead, chromate, or asbestos shall not be present.

3.11 Toxicity. The material shall have no adverse effect on the health of personnel when used for its proper intended purpose. Questions pertinent to this effect shall be referred by the contracting activity to the Naval Medical Command (NAVMEDCOM) who will act as an advisor to the contracting activity.

3.12 Material safety data sheet (MSDS). The contracting activity shall be provided a MSDS at the time of contract award. The MSDS shall be provided in accordance with the requirements of FED-STD-313. The MSDS shall be included with each shipment of the material covered by this specification (see 6.5).

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 (examinations and tests) 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 this specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items shall meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of the manufacturing operations, is an acceptable practice to ascertain conformance to requirements however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

4.2 Quality conformance inspection.

4.2.1 Lot. For purposes of sampling, a lot shall consist of all unmixed ingredients (dry ingredients and magnesium chloride flakes) from one production batch offered for delivery at one time.

4.2.2 Sampling for examination of filled containers. A random sample of filled containers shall be selected from each lot offered for examination to verify conformance in regard to fill, closure, and marking. Each type of container shall be sampled separately (see 4.3.1).

4.2.3 Sampling for quality conformance inspection. From each inspection lot, a sample of unmixed ingredients shall be selected in accordance with table I. Each sample shall consist of sufficient premixed dry ingredients (finish coat) and magnesium chloride flakes for the tests specified in 4.3.2.

TABLE I. Sampling for quality conformance inspection.

Lot size in pounds	Number of samples
500 and under	None
501 to 1,500	2
1,501 to 4,000	3
4,001 to 8,000	4
8,001 to 15,000	5
15,001 to 25,000	6
25,001 to 40,000	7
40,001 to 60,000	8
60,001 to 90,000	9
90,001 to 120,000	10
120,001 to 200,000	12
200,001 to 300,000	14
300,001 and over	16

4.3 Inspection procedures. Inspection procedures shall be as specified in 4.3.1 through 4.3.2.1 (see 6.3 and 6.6).

4.3.1 Inspection of filled containers. Each sample-filled container selected as specified in 4.2.2 shall be examined by the Government inspector for defects of the container and the closure, for evidence of leakage, and for unsatisfactory markings. Each sample-filled container shall also be weighed to determine the amount of contacts.

4.3.2 Tests. The dry ingredients and the magnesium chloride flakes selected in accordance with 4.2.3 shall be mixed (separately for each container) in accordance with the manufacturer's instructions and subjected separately to the tests specified in 4.4.2 through 4.4.6. When specified (see 6.2), the performance test specified in 4.4.7 shall also be conducted. If the sample is found to be not in conformance with this specification, the entire lot shall be rejected.

4.3.2.1 Small lots. When specified (see 6.2), tests may be omitted when the lot consists of 2,000 pounds or less.

4.4 Test methods. Test methods shall be as specified in 4.4.1 through 4.4.7.

4.4.1 Preparation of specimens. Unless otherwise specified, specimens of the sizes required for the following tests shall be made of clean 1/8-inch thick ordinary steel plates. The plates shall be primed with a brush coat of adhesive conforming to MMM-A-121 and allowed to dry for 2 hours. The covering shall be prepared following the manufacturer's instructions, using a gauging solution of 21.5 plus or minus 0.5 degrees Baume, and trowelled on the primed steel plates to a thickness of approximately 1/2 inch by means of templates. The specimens shall then be cured for 96 hours at room temperature before conducting tests. Unless otherwise specified herein, all tests shall be conducted at a temperature of 70 to 75°F and with a relative humidity of 50 ± 2 percent.

4.4.2 Weight. The covering shall be applied to three 6-inch square steel plates (see 4.4.1) that have been previously measured and weighed to the nearest 0.01 gram. The length and width shall be measured to the nearest 0.01 inch, and the thickness to the nearest 0.01 inch. The thickness shall be determined by measuring the steel plates with and without covering at 16 equally distributed points on the specimen by means of a dial thickness gauge and a template. The difference in thickness of the steel plate and the coated steel plate shall be averaged to determine the thickness of the material. From the difference between the weights of the coated steel, the actual weight of the material shall be determined and then computed in pounds per square foot per 1/2-inch thickness. The final computed weight shall be the average of the three specimens.

4.4.3 Indentation. One specimen 6 inches square shall be used including the full thickness of the covering and steel base to which it was applied (see 4.4.1). Three indentations shall be made on the specimen and the results averaged. The center of each indentation shall be not less than 1-1/2 inches from the edge of the specimen and not less than 2-1/2 inches from the center of the adjoining indentation. A load of 2,000 pounds shall be applied on the deck covering for 30 minutes by means of a circular indentor with a cross-sectional area of 1 square inch and a radius of 1/64 inch on the perimeter of the indenting flat face. The thickness of the covering shall be measured with a micrometer dial gauge using a 4-ounce weight and a 1/4-inch diameter flat foot on both sides of the specimen before and after the 2,000-pound load has been applied. The thickness of the steel base shall be subtracted in each case. The indentation shall be taken as the percent change in the thickness of the material.

4.4.4 Water absorption. Three specimens 2 inches square by 1/4-inch thick shall be prepared by applying the surfacing to oiled surfaces of steel plate in such a manner that upon drying the specimens will not adhere to the plates. Each specimen without the steel backing plate shall be weighed dry, dipped into tap water at room temperature, lightly wiped on all surfaces with a paper towel, and again weighed to the nearest 0.01 gram. Immediately, after weighing, the specimen shall again be immersed in the tap water for 24 hours, lightly wiped, and again weighed. The percent gain in water shall be based on the weight of the dry specimen and the difference between the weight after 24 hours immersion and difference in weight after dipping and wiping.

4.4.5 Resistance to impact. Two specimens 6-inches square shall be used, including the full thickness of the covering and the steel base (see 4.4.1). Each specimen shall be tested separately while being firmly held on a solid, horizontal base. A 2-pound solid steel ball shall be dropped vertically from a height of 8 feet so that the impact will be at the center of the specimen. Each specimen shall be subjected to two impacts of the ball.

4.4.6 Bond strength in shear. Six specimens shall be prepared by applying the covering on 2 by 2 by 1/8-inch thick mild steel plate to a thickness of 1/4 inch by means of a template so that 1 inch of the steel base is exposed at one end, and 3 inches are exposed at the opposite end. Specimens shall be tested by measuring the load required to shear the 2-inch square area of the covering from the steel plate by means of a shear test jig as shown on figure 1.

4.4.7 Thermal conductivity. Thermal conductivity shall be determined in accordance with ASTM C 177.

4.5 Toxicity. The contractor shall have the toxicological formulations and associated information available for review by the contracting activity to evaluate the safety of the material for the proposed use.

4.6 Inspection of packaging. Sample packages and packs, and the inspection of the preservation, packing and marking for shipment, stowage and storage shall be in accordance with the requirements of section 5 and the documents specified therein.

5. PACKAGING

(The packaging requirements specified herein apply only for direct Government acquisition.)

5.1 General.

5.1.1 Navy fire-retardant requirements.

5.1.1.1 Lumber and plywood. Except when otherwise specified (see 6.2), all lumber and plywood including laminated veneer material used in shipping container and pallet construction members, blocking, bracing and reinforcing shall be fire-retardant treated material conforming to MIL-L-19140 as follows:

Levels A and B - Type II - weather resistant.
Category 1 - general use.
Level C - Type I - non-weather resistant.
Category 1 - general use.

5.1.1.2 Fiberboard. Except when otherwise specified (see 6.2), fiberboard used in the construction of class domestic, non-weather resistant fiberboard, and cleated fiberboard boxes, including interior packaging forms shall meet the requirements of PPP-F-320 and amendments thereto.

5.2 Preservation. Preservation shall be level A, or commercial as specified (see 6.2).

5.2.1 Level A. Level A preservation shall be as specified in 5.2.1.1 through 5.2.1.1.2.

5.2.1.1 Underlay materials. The deck covering may be supplied as a kit consisting of appropriate resin and dry ingredients. The quantity of each component in the kit shall be in the proper proportions so that when applied it shall meet the performance specified herein. The components shall be supplied in cans or pails of appropriate size to contain the required quantities of each material. The pail containing the dry ingredients shall be of sufficient size to contain the materials when mixed ready for application. Materials may also be supplied separately; resins in appropriate cans and pails, and dry ingredients in sacks or bags.

5.2.1.1.1 Cans. Cans shall conform to type V, class 2, round of PPP-C-96. Exterior plan B coating and side seam striping is required. Cans shall be provided with wire handles and shall be galvanized or coated to resist corrosion.

5.2.1.1.2 Pails. Pails for latex resin shall conform to type I, class 5 or type II, class 4 of PPP-P-704. Interior and exterior coatings are required. Pails for other resins shall conform to type II, classes 3, 5 or 11. Interior coating is not required. Wire handles or bails shall be treated to resist corrosion. Container selection shall be at the contractor's option.

5.2.2 Dry ingredients. The dry ingredients shall be furnished in quantities not exceeding 100 pounds net weight in paper or textile bags or sacks conforming to UU-S-48, PPP-B-35, or PPP-B-1714.

5.2.3 Commercial. Commercial packaging (cleaning, preservation, cushioning and the unit pack) shall be in accordance with ASTM D 3951.

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

5.3.1 General requirements for levels A and B. Containers selected (see 5.3.2) shall be of minimum weight and cube consistent with the protection required, of uniform size, and contain identical quantities.

5.3.2 Levels A and B containers. The deck covering, preserved as specified (see 5.2), shall be packed in exterior shipping containers in accordance with appendix C, table VII of MIL-STD-2073-1, for the level of packing specified (see 5.3). Unless otherwise specified (see 6.2), container selection including container options shall be the contractor's option.

5.3.2.1 Waterproofing. Unless otherwise specified (see 6.2), level A and, when specified (see 6.2), level B shipping containers shall be provided with caseliners, linings, wraps or shrouds in accordance with the waterproofing requirements of MIL-STD-1186.

5.3.2.2 Closure and gross weight.

5.3.2.2.1 Closure. Container closure, reinforcing, or banding shall be in accordance with the applicable container specification or appendix thereto except that weather-resistant fiberboard boxes shall be closed in accordance with method V and reinforced with non-metallic or tape banding and domestic non-weather-resistant fiberboard boxes shall be closed in accordance with method I using pressure sensitive tape.

5.3.2.2.2 Weight. Wood, plywood, and cleated type containers exceeding 200 pounds gross weight shall be modified by the addition of skids in accordance with MIL-STD-2073-1 and the applicable container specification or appendix thereto.

5.3.3 Commercial. The deck covering, preserved as specified (see 5.2), shall be packed for shipment in accordance with ASTM D 3951 and herein.

5.3.3.1 Container modification. Shipping containers exceeding 200 pounds gross weight shall be provided with a minimum of two, 3- by 4-inch nominal wood skids laid flat, or a skid- or sill-type base which will support the material and facilitate handling by mechanical handling equipment during shipment, stowage and storage.

5.4 Palletized unit loads. When specified (see 6.2), containers shall be palletized in accordance with appendix F of MIL-STD-2073-1.

5.5 Marking.

5.5.1 Levels A, B, and commercial. In addition to any special marking required (see 6.2), and interior (unit) packs, shipping containers and palletized unit loads shall be marked for shipment, stowage, and storage in accordance with MIL-STD-2073-1, appendix F.

5.5.2 Special marking. Each component container shall have the following additional information:

(a) Type.
(b) Manufacturer's name.
(c) Manufacturer's lot number and date of manufacture.
(d) Contract number.
(e) Shelf-life marking.
(f) Asbestos, chromate, and lead free.

5.5.2.1 Two-component systems. Where applicable, each component container shall be marked with the following:

"CAUTION

This is one component of a two component system which WILL NOT HARDEN unless both components are mixed together.

INSTRUCTIONS FOR USE

Refer to manufacturer's written mixing and application instructions prior to use."

5.5.2.1.1 Air pollution conformance. For those products that have been approved for use in areas with regulations controlling the emission of solvents into the atmosphere (see 6.4), containers shall include the following statement: "Complies with air pollution regulations".

5.5.2.2 Caution label. When applicable, each component container shall be marked with the following:

"CAUTION: Avoid skin contact during application. Chemicals may cause irritation or skin sensitization. In case of contact, wash skin thoroughly with soap and water."

5.6 Material safety data sheet (MSDS). A copy of the material safety data sheet shall be attached to the shipping document for each destination (see 3.12).

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. The deck underlay and covering covered by this specification are intended for use in ship spaces such as living, wardroom, storage over ballast tanks, and hot machinery spaces.

6.2 Acquisition requirements. Acquisition documents must specify the following:

(a) Title, number, and date of this specification.
(b) Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.1.1 and 2.2).
(c) Whether thermal conductivity is required (see 4.3.2).
(d) Whether small lot testing may be waived (see 4.3.2.1).
(e) When fire-retardant treated materials are not required (see 5.1.1.1).
(f) When fiberboard need not meet requirements (see 5.1.1.2).
(g) Level of preservation and packing required (see 5.2 and 5.3).
(h) Container selection, if other than contractor's option (see 5.3.2).
(i) Waterproofing, when required (see 5.3.2.1).
(j) Palletization, when required (see 5.4).
(k) Special marking required (see 5.5.1).

6.3 Consideration of data requirements. The following data requirements should be considered when this specification is applied on a contract. The applicable Data Item Descriptions (DIDs) should be reviewed in conjunction with the specific acquisition to ensure that only essential data are requested/provided and that the DIDs are tailored to reflect the requirements of the specific acquisition. To ensure correct contractual application of the data requirements, a Contract Data Requirements List (DD Form 1423) must be prepared to obtain the data, except where DoD FAR Supplement 27.475-1 exempts the requirement for a DD Form 1423.

Reference paragraph	DID number	DID title	Suggested tailoring
3.1	DI-E-2121	Certificate of compliance	----
4.3 and 6.6	UDI-A-23264	Certification data/report	10.2.1

The above DIDs were those cleared as of the date of this specification. The current issue of DoD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL), must be researched to ensure that only current, cleared DIDs are cited on the DD Form 1423.

6.4 Volatile content. Although the container marking refers to the South Coast Air Quality Management District (California), the solution may be used anywhere volatile organic compound is allowed. This includes nearly all other air pollution control districts or similar areas controlling the emission of solvents into the atmosphere.

6.5 Material safety data sheet (MSDS). Contracting officers must identify those activities requiring copies of MSDSs. Additional required Government information is contained in FED-STD-313. In order to obtain the MSDS, FAR clause 52.223-3 must be in the contract.

6.6 The certification data/report should include the following information:

(a) Toxicological data and formulations required to evaluate the safety of the material for the proposed use (see 3.11).
(b) Certification that volatility requirements are met (see 3.12).
(c) Conformance of each lot of ingredient material, stating test results and source, as applicable (see 4.3).

6.7 Sampling for quality conformance. A random sample of filled containers selected from each lot offered (see 4.2.2) may be examined in accordance with MIL-STD-105 at inspection level I and acceptance quality level of 2.5 percent defective to verify conformance to this specification in regard to fill, closure, and marking. Any container in the sample having one or more defects or under required fill should be rejected, and if the number of defective containers in any sample exceeds the acceptable number for the appropriate sampling plan in accordance with MIL-STD-105, the lot represented by the sample should be rejected. Rejected lots may be resubmitted for acceptance inspection provided the contractor has removed or repaired non-conforming containers.

6.8 Subject term (key word) listing.

Bonding
Impact
Indentation
Magnesium chloride
Thermal conductivity
Volatile organic compound

6.9 Changes from previous issue. Marginal notations 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 5610-N463)

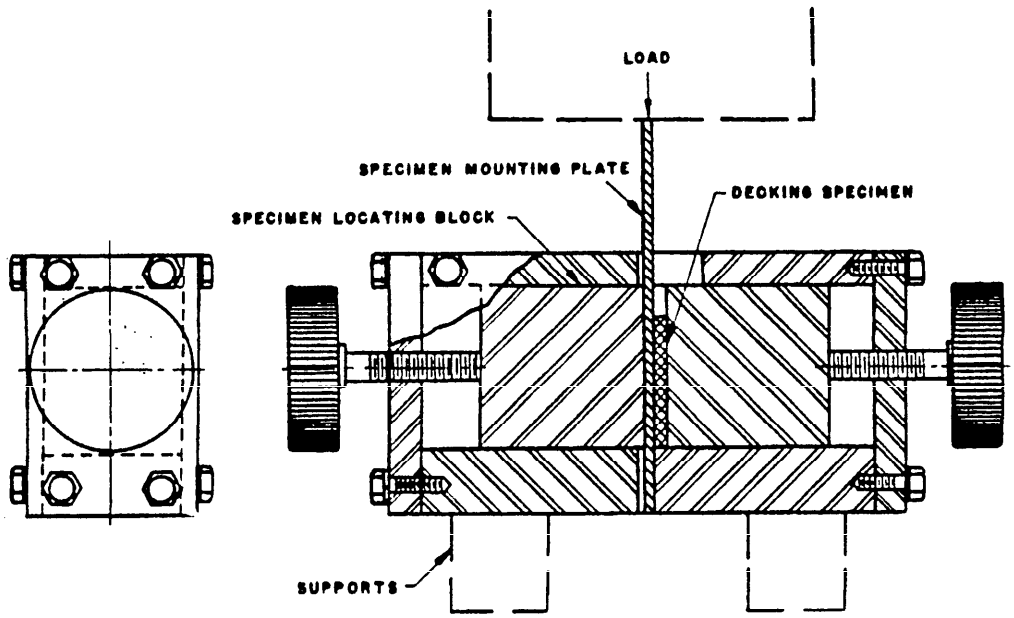

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FIGURE 1. Shear test jig.

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	2. DOCUMENT TITLE
MIL-D-23134A(SH)	DECK UNDERLAY AND COVERING, INSULATING, MAGNESIA AGGREGATE MIXTURE

3a. NAME OF SUBMITTING ORGANIZATION	4. TYPE OF ORGANIZATION *(Mark one)*
b. ADDRESS *(Street, City, State, ZIP Code)*	☐ VENDOR ☐ USER ☐ MANUFACTURER ☐ 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)*

(TO DETACH THIS FORM, CUT ALONG THIS LINE.)

DD FORM 82 MAR 1426 PREVIOUS EDITION IS OBSOLETE.