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HH-I-515E  
June 19, 1992  
SUPERSEDING  
HH-I-515D  
June 15, 1978

FEDERAL SPECIFICATION

INSULATION, THERMAL  
(LOOSE-FILL FOR PNEUMATIC OR POURED APPLICATION):  
CELLULOSIC OR WOOD FIBER

This specification is 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 the composition and physical requirements of chemically treated, recycled cellulosic fiber (wood-base) loose-fill type thermal insulation for use in attics or enclosed spaces in housing, and other framed buildings within the ambient temperature range from -45.6 to 82.2 degrees Centigrade (-50 to 180 degrees Fahrenheit) by pneumatic or pouring application. While products that comply with this specification may be used in various constructions, they are adaptable primarily, but not exclusively, to wood joist, rafters, and stud construction.

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).

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\*Beneficial comments (recommendations, additions, deletions) and any \*  
\*pertinent data which may be of use in improving this document should be \*  
\*addressed to: Commanding Officer (Code 156), Naval Construction Battalion \*  
\*Center, 621 Pleasant Valley Road, Port Hueneme, CA 93043-4300, by using the\*  
\*Standardization Document Improvement Proposal (DD Form 1426) appearing at \*  
\*the end of this document or by letter. \*  
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FSC 5640

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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Federal Specification

UU-S-48 - Sacks, Shipping, Paper

Federal Standard

FED-STD-123 - Marking for Shipment (Civil Agencies)

Military Standard

MIL-STD-129 - Marking for Shipment and Storage

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Bldg. 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.1.2 Other Government documents. The following other Government document forms a part of this document to the extent specified herein. Unless otherwise specified, the issue is that cited in the solicitation.

Federal Regulations

Code of Federal Regulations (CFR)

40 CFR Part 248

(The Code of Federal Regulations (CFR) and the Federal Register (FR) are for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. When indicated, reprints of certain regulations may be obtained from the Federal Agency responsible for issuance thereof.)

2.2 Non-Government publications. The following document(s) 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 which are current on the date of the solicitation (see 6.2).

ASTM

ASTM C 739 - Standard Specification for Cellulosic Fiber (Wood-Base)  
Loose-Fill Thermal Insulation

ASTM D 3951 - Practice for Commercial Packaging

(Application for copies should be addressed to ASTM, 1916 Race Street, Philadelphia, PA 19103.)

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.

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3. REQUIREMENTS

3.1 Material. The insulating material shall conform to ASTM C 739, Standard Specification for Cellulosic Fiber (Wood-Base) Loose-Fill Thermal Insulation.

3.2 Recovered content. The material shall meet the recovered content requirements of 40 CFR Part 248, Guideline for Federal Procurement of Building Insulation Products Containing Recovered Materials, or the procuring agency's affirmative procurement program established in accordance with 40 CFR Part 248 and the Resource Conservation and Recovery Act.

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 document 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 document shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in this document 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 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 Tests. Tests will be those specified in ASTM C 739.

5. PREPARATION FOR DELIVERY

5.1 Packing. The packing shall be level A or Commercial as specified (see 6.2).

5.1.1 Level A. Insulation shall be packed in bag conforming to UU-S-48 6-6x (1) or a polyethylene bag of equal moistureproof and bursting strength. The gross weight shall not exceed 45 pounds.

5.1.2 Commercial. The insulation shall be packed in accordance with ASTM D 3951.

5.2 Marking.

5.2.1 Military agencies. Shipments to military agencies shall be marked in accordance with MIL-STD-129.

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5.2.2 Civil agencies. Shipments to civil agencies shall be marked in accordance with FED-STD-123.

6. NOTES

6.1 Intended use. The loose-fill insulation covered by this specification is intended for use as thermal insulation in housing and buildings.

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. Level of packing required (see 5.1).
- c. 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).

MILITARY INTERESTS:

Custodians

Navy - YD  
Air Force - 84

User Activity

Army - ME

CIVIL AGENCY COORDINATING ACTIVITIES:

COMMERCE - NBS  
GSA - FSS, PCD  
HUD - TCS - DOE - FTC  
CPSC

PREPARING ACTIVITY:

Navy - YD

(Project 5640-0551)

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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.