

Ref.

11-GP-2
22 January 1960
CANCELLATION
April 1970

CANADIAN GOVERNMENT SPECIFICATIONS BOARD

Specification
for

FIBREBOARD: INSULATING

Specification 11-GP-2, Fibreboard; Insulating, dated 22 January 1960, is cancelled as of April 1970 because this material is covered by the following CSA standards:

CSA A247.1-1969	Fibreboard Roof Insulation
CSA A247.2-1969	Insulating Fibreboard Sheathing
CSA A247.3-1969	Fibreboard Used in Interior Application

These documents are available from the Canadian Standards Association, 178 Rexdale Blvd., Rexdale 603, Ontario, Canada.

11-GP-2
22 January 1960
AMENDMENT NO. 1
4 November 1960

CANADIAN GOVERNMENT SPECIFICATIONS BOARD

Specification
for

FIBREBOARD; INSULATING

Table II

Add to the Thermal Conductivity listing the requirement that this conductivity measurement is to be made at a mean temperature of $75 \pm 5^{\circ}\text{F}$.

11-GP-2
22 January 1960
AMENDMENT NO. 2
25 May 1962
Supersedes
Amendment No. 1

CANADIAN GOVERNMENT SPECIFICATIONS BOARD

7-5710

Specification
for

FIBERBOARD; INSULATING

3. CLASSIFICATION

- * Par. 3.1 Type A - Change the nomenclature for this type to read as follows:

Building board (Plain).

- * Par. 3.4 Type D - Change the nomenclature of Class 1 board to read as follows:

Class 1 - physically modified or factory coated.

4. GENERAL REQUIREMENTS

- * Par. 4.3.4 Type D - Replace this paragraph with the following:

Edges shall be either square or fabricated and surfaces may be treated or physically modified by embossing, perforating, grooving, etc. In addition, Class 2 boards shall be treated for resistance to flame spread.

5. DETAIL REQUIREMENTS

Table II - Add to the Thermal Conductivity listing the requirement that this conductivity measurement is to be made at a mean temperature of $75 \pm 5^{\circ}\text{F}$.

-
- * Change from previous amendment.



NADA

CANADIAN GOVERNMENT SPECIFICATIONS BOARD

SPECIFICATION

FOR

FIBREBOARD; INSULATING

11-GP-2

22 JANUARY 1960

SUPERSEDES 9-GP-15P

OCTOBER 1953

ARCHIVES COPY

THIS SPECIFICATION APPLIES TO INSULATING FIBREBOARD MANUFACTURED
FROM WOOD OR OTHER VEGETABLE FIBRE

NATIONAL RESEARCH COUNCIL, OTTAWA, CANADA

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CANADIAN GOVERNMENT SPECIFICATIONS BOARD

Specification
for

FIBREBOARD; INSULATING

1. DEFINITION

This specification applies to insulating fibreboard manufactured from wood or other vegetable fibre.

2. APPLICABLE PUBLICATIONS

The following publications contain requirements applicable to this specification:

2.1 Canadian Government Specifications Board standard

11-GP-0 - Methods of Sampling and Testing Fibreboard.

2.2 American Society for Testing Materials Methods

C177 - Thermal Conductivity of Materials by Means of the Guarded Hot Plate.

C355 - Water Vapor Transmission of Materials Used in Building Construction.

Reference to the above publications is to the issues in effect on the date of the invitation to tender, unless otherwise specified.

3. CLASSIFICATION

The insulating fibreboard shall be of the following types and classes as specified by the purchaser:

3.1 Type A - Building board (General)

3.2 Type B - Lath (for plaster base)

3.3 Type C - Roof insulation board

3.4 Type D - Interior board

Class 1 - factory finished

Class 2 - flame-spread treated

3.5 Type E - Sheathing

4. GENERAL REQUIREMENTS

4.1 Construction - The fibreboard may be either single or multiple ply. When multiple ply boards are supplied they shall be cemented together with a bonding agent of such characteristics that breakage in the transverse strength test (Table II), after soaking, will occur in the board and not in the bond.

4.2 Surfaces - Surfaces shall be natural or other specified finish and shall be free from cracks, excessive departure from planeness or other defects.

4.3 Edges and Finishes

4.3.1 Type A - Edges shall be square

4.3.2 Type B - Short edges shall be square or fabricated, and long edges shall be fabricated.

4.3.3 Type C - For thicknesses under 1 inch, edges shall be square. For thicknesses of 1 inch or more, edges shall be square or offset, as specified. When offset material is specified, the amount of offset shall be 1 inch minimum.

4.3.4 Type D - Edges shall be either square or fabricated and surfaces may be treated.

4.3.5 Type E - Edges shall be either square or fabricated.

5. DETAIL REQUIREMENTS

5.1 Dimensions - Dimensions of the conditioned fibreboard shall be as specified by the purchaser, subject to the following tolerances:

5.1.1 Length and Width - Tolerances shall be not more than ± 0 , $-1/16$ inch per foot, with a total tolerance of not more than ± 0 , $-1/4$ inch per piece.

5.1.2 Thickness - Tolerances shall be not more than specified in Table I. Measurement of thickness shall be in accordance with Method 3.1.

Table I

Thickness Tolerances

Thickness (inches)	Tolerance (per cent)
1/2 and under.....	± 8
Over 1/2, up to and including 1.....	± 7
Over 1.....	± 5

Table II

Physical Properties	Type					Test Method
	A	B	C	D	E	
Thermal Conductivity, B.t.u./hr./sq.ft./degree F/inch of thickness (maximum)	0.38	0.38	0.38	0.38	0.42	ASTM C177
Transverse Load at Rupture, average (Note 1), pounds (minimum)	12	12	7	12	14	Method 5.1
Deflection at Rupture, inch (minimum) (Note 1A)	0.25	0.25	0.25	0.25	0.25	Method 5.1
Deflection at Minimum Specified Load, inch (maximum) (Note 1A)	0.85	0.85	1.25	0.85	0.75	Method 5.1
Tensile Strength Parallel to Surface, pounds per square inch (Note 2) (minimum)	150	150	100	150	150	Method 6.1
Water Absorption, per cent (maximum)	7	7	10	10	7	Method 8.1
Water Permeability, time of penetration through the board, hours, (minimum)	--	--	--	--	20	Method 9.1
Water Vapor Permeance, perms (grains/hr/sq.ft/inch Hg) (minimum)	--	--	--	--	3	ASTM C355
Linear Expansion, per cent (maximum)	1/2	1/2	1/2	1/2	1/2	Method 11.1
Flame Spread Resistance, area of char, sq. inches (maximum) (Flaming shall not continue more than 60 seconds after fuel is exhausted.)	--	--	--	12 (Class 2 only)	--	Method 15.1

Note 1: This requirement is based on specimens 1/2 inch thick and 3 inches wide, tested on a span of 12 inches. For thicker specimens, tested with the same span-depth ratio (24:1), the same minimum transverse loads shall apply. For thinner specimens, the minimum transverse load shall be increased by 1.5 pounds for each 1/16 inch under 1/2 inch. Since this requirement is based on 3-inch wide test specimens, it does not cover material less than 1/4 inch in thickness, for which specimens are only 2 inches wide.

The average of test results in both the machine direction and across-machine direction shall be used to determine compliance with the requirement. However, average strength values in any one direction shall be not more than ten per cent below the specification requirement.

Note 1A: This requirement is based on specimens 1/2 inch thick. For specimens less than 1/2 inch thick, the minimum deflection at rupture shall be varied in direct proportion to thickness, and the maximum deflection at minimum specified load shall be that for 1/2-inch thickness reduced by 0.20 inches for each 1/16 inch below 1/2 inch thickness.

Note 2: Tensile strength requirements shall be applicable only on thicknesses up to and including 1-inch.

5.2 Squareness - The corners of any fibreboard sheet or panel shall not deviate from a right angle by an amount greater than that represented by 0.075 degrees (i.e., not more than 1/64 inch per foot).

5.3 Physical Properties - The fibreboard shall comply with the physical requirements listed in Table II.

6. PREPARATION FOR DELIVERY

6.1 Packaging and Packing - Unless otherwise specified, standard commercial packaging and packing of fibreboard shall be acceptable under this specification.

6.2 Marking - Each package of fibreboard shall be plainly marked on the outside with the name of the material, the type, size, quantity contained therein, and the manufacturer's name or trade mark.

7. INSPECTION

7.1 Sampling - Sampling of fibreboard for inspection and testing shall be in accordance with Method 1.1 of CGSB publication 11-GP-0 - Methods of Sampling and Testing Fibreboard.

7.2 Conditioning of Samples - All samples shall be conditioned before test according to Method 2.1 of 11-GP-0.

7.3 Testing - The methods of testing shall be those described in 11-GP-0, and in the applicable ASTM designations, using the method specified in each requirement.

8. NOTES

8.1 Ordering Data - Invitations to tender for fibreboard according to this specification should state the following:

- (a) Type and Class (where applicable).
- (b) Dimensions (length, width, thickness).

8.2 Provision for Retesting - In case of rejection of a shipment on the basis of tests according to 7.3, the vendor shall have the right to reinspect the rejected shipment and resubmit the lot after removal and replacement of those packages not conforming to the specified requirements.