

	TITLE: STANDARD TECHNICAL SPECIFICATION FOR ALUMINIUM CLADDING SHEETS	STD SPECIFICATION No: PE-SS-999-169-M034	
		VOLUME II-B	
		SECTION "D"	
		REV. NO. 03	DATE: 05.03.2011
		SHEET 1	OF 2

1.00.00 GENERAL

This specification covers the requirements for supply of Aluminium sheet for using it as cladding or protective covering over Thermal insulation.

2.00.00 CODES & STANDARDS

- 2.01.01 The manufacture, physical & chemical properties, inspection and testing of Aluminium sheets to be supplied under this specification shall conform to the latest edition of the following codes and standards.
- 2.01.02 IS:737 Specification for wrought aluminium and aluminium alloy sheet and strip for general engineering purposes.
- 2.01.03 IS:504 Methods of chemical analysis of aluminium and its alloys.
- 2.01.04 IS:1608 Metallic materials - Tensile testing at ambient temperature
- 2.01.05 IS:2676 Dimensions for wrought aluminium and aluminium alloys, sheet and strip.
- 2.01.06 IS:5052 Aluminium and its alloys - Temper designations.

3.00.00 MATERIAL REQUIREMENTS:

3.01.00 FORM

The aluminium sheets to be supplied will be in coil form.

3.02.00 FREEDOM FROM DEFECTS

The material shall be sound and free from harmful defects for the intended application.

3.03.00 DESIGNATION AND CONDITION

The designation and the condition of the material will be in line with IS:737 **Gr. 19000 H2 or Gr. 31000 H3** as specified in the BOM.

3.04.00 CHEMICAL COMPOSITION

The material when analyzed as per IS 504 or any other instrumental/chemical method shall conform to the requirements as given in Table 1 of IS:737.

3.05.00 MECHANICAL PROPERTIES

3.05.01 TENSILE TEST

The material when tested in accordance with IS:1608 shall conform to the values given in Table 2 of IS:737.

3.05.02 BEND TEST

When tested in accordance with the method prescribed in IS:737, the outer surface of the bend shall not show any visible crack.

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4.00.00 DIMENSION AND TOLERANCES

- 4.01.00 The width of the aluminium sheet will be 900 or 1200 mm.
- 4.02.00 Standard thicknesses of the aluminium sheet will be 0.56, 0.71, 0.91, 1.22 mm. (Requirements to be given separately).
- 4.03.00 Tolerances on width and sheet thickness shall be as given in IS:2676.

5.00.00 INSPECTION AND TESTING

- 5.01.00 The material sampling will be done as given in IS:737.
- 5.02.00 The material to be supplied under this specification will be of tested quality. Inspection and testing of Aluminium sheets will be carried out as per the requirements of IS:737. Manufacturer's test certificate indicating all the chemical composition and mechanical properties will be furnished.
- 5.03.00 All test certificates will be submitted in ORIGINAL for BHEL / CUSTOMER review and based on the satisfactory test results MDCC will be issued.

6.00.00 PACKING AND MARKING

- 6.01.00 The material will have to be packed in polythene-lined hessian and covered with metallic sheets and finally strapped with metallic bands suitably. Material shall be packed in such a manner so as to prevent damage in ordinary handling & transport.
- 6.02.00 Each package shall contain only one size of material.
- 6.03.00 Each package / coil will be suitably marked with a tag for identification as given below: (legibly written on the packet).
- BHEL's Purchase order number
 - Project Name
 - Name of the manufacturer
 - Material grade & condition
 - Sheet thickness
 - Weight of the contents