

SUPERSEDES INVENTORY NO  
 सामग्री सूची संख्या को अधिकतम अंका

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**स्वत्वाधिकार एवं गोपनीयता**  
 इस प्रलेख में की गई सूचना भारत हेवी इलेक्ट्रिकल्स की सन्मति हे इशतका प्रयुक्त एवं अप्रयुक्त रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो या किया जाए ।

**EXPANDED POLYSTERENE (THERMOCOLE)**

**1. General**  
This specification governs the quality requirements of expanded polystyrene (Thermocole)

**2. Application**  
The material shall be used for pattern making purpose.

**3. Compliance with national standard**  
The material shall comply in general with the requirements of national standard IS : 4671 - 1984 - Type 2 and also meet the requirements of this specification.

**4. Dimensions and Tolerances**

4.1 Thickness, Width and Length shall be specified in the order.

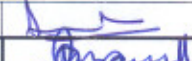
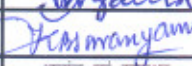

4.2 The standard size shall be 1000 mm X 500mm X Thickness unless it is mentioned.



4.3 The standard thickness shall be any of 15mm, 20mm, 25mm, 40mm, 50mm, 60mm, 75mm, and 100mm as mentioned in PO.


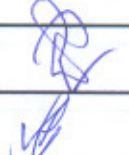

4.4 The dimensional tolerance shall be ±2mm on length, width and thickness.

**5. Test samples**  
One sheet of 200mm X 200 mm shall be taken from each consignment for testing purpose.

**6. Bulk density**  
Bulk density for pattern making purpose shall be (a) 30kg/cu.meter minimum (b) 35kg/cu meter minimum. When tested as per IS : 5688-1982.

हस्ताक्षर एवं दिनांक	RMI	SOMNATH GHOSH		अनुवादक	TRANSLATED BY	
	MPIC	SHYAM BABU		विनिर्माकता	WORKED BY	T DAVE
सामग्री सूची संख्या INVENTORY	CHAIRMAN CPSC	KB SUBRAMANYAM		जांचकर्ता	CHECKED BY	AK CHAKRABORTY
	सहमत विभाग AGREED DEPTT	नाम NAME	दिनांक एवं हस्ताक्षर DATE & SIGNATURE	पर्यवेक्षणकर्ता	SUPERVISED BY	AK CHAKRABORTY
				<b>संस्थान मानक समिति</b> APPROVED : <b>PLANT STANDARDS COMMITTEE</b>		
				विभाग	जारी	दिनांक
				PREPARED : FOUNDRY TECH	ISSUED : FOUNDRY TECHNOLOGY	DATE : 17.8.09

दिनांक एवं हस्ताक्षर SIGN & DATE SUPERSEDES INVENTORY NO. सामग्री सूची संख्या से अधिकृत करता		संस्थान क्रय विनिर्देश (सी.एफ.एफ.पी - हरिद्वार)		<b>FF 51499 Rev 02</b>													
		<b>PLANT PURCHASE SPECIFICATION (CFFP - HARDWAR)</b>		पृष्ठ का Page 2 of 4													
<b>7. Physical properties</b> When tested as per IS:4671-1984, material should conform to the following results: <table border="0" style="width: 100%;"> <tr> <td></td> <td colspan="2" style="text-align: center;">Bulk density (minimum)</td> </tr> <tr> <td></td> <td style="text-align: center;">30kg/cu meter</td> <td style="text-align: center;">35kg/cu meter</td> </tr> <tr> <td>Compressive strength at 10% deformation</td> <td style="text-align: center;">1.4kg/sq.cm. min.</td> <td style="text-align: center;">1.7kg/sq.cm. min.</td> </tr> <tr> <td>Cross breaking strength</td> <td style="text-align: center;">2.2kg/sq.cm.min.</td> <td style="text-align: center;">2.6kg/sq.cm. min.</td> </tr> </table>							Bulk density (minimum)			30kg/cu meter	35kg/cu meter	Compressive strength at 10% deformation	1.4kg/sq.cm. min.	1.7kg/sq.cm. min.	Cross breaking strength	2.2kg/sq.cm.min.	2.6kg/sq.cm. min.
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<b>8. Flammability</b> The material shall be of self extinguishing type when tested by the method prescribed in appendix of IS:4671 1984.																	
<b>9. Test Certificates</b> 9.1 Unless otherwise specified, one original and three copies of original manufacturer's test certificates shall be supplied with each consignment bearing the following information. In order to facilitate quick clearance of material, the supplier shall ensure to send a copy of test certificate along with despatch document. <ol style="list-style-type: none"> <li>a. BHEL PO No. with Date</li> <li>b. Specification No.</li> <li>c. Supplier reference / trade mark</li> <li>d. Identification No. / Batch No.</li> <li>e. Properties as per Clause 4, 6 &amp; 7</li> <li>f. Date of manufacture</li> <li>g. Any other specific information which the supplier would like to convey.</li> </ol> 9.2 Suppliers other than the original manufacturer shall ensure providing original manufacturer's test certificates with linkage to supplier's invoice stating the batch No., lot No, etc. of the supply.																	
<b>स्वत्वाधिकार एवं गोपनीयता</b> इस प्रलेख में दी गई सूचना भारत की संपत्ति है। इसका प्रकाश एवं अप्रकाश रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो सके बिना किया जाए।																	
दिनांक एवं हस्ताक्षर SIGN & DATE																	
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	जांचकर्ता CHECKED BY AKC																

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सामग्री सूची संख्या INVENTORY NO.	<b>10. Inspection, Deviation and Replacement</b>			
COPYRIGHT AND CONFIDENTIAL The information on this documents is the property of Bharat Heavy Electrical Limited. It must not be used directly or indirectly in any way detrimental to the interest of the company.	<p>10.1 BHEL reserves the right to inspect material at site before despatch. The supplier shall intimate in advance enclosing a copy of test certificate of the material offered for inspection. However inspection at BHEL shall be final. The supplier shall offer BHEL representative all reasonable facilities without charge to satisfy the latter that the material is being furnished in accordance with this specification. The supplier shall prepare and provide necessary test specimens for testing to be carried out at his premises. If facilities are not available at his works, the supplier shall make necessary arrangements for carrying out the prescribed tests elsewhere.</p>			
	<p>10.2 If the material received at CFFP is not found in accordance with the requirements, it shall be rejected and the supplier will have to replace it free of cost at the earliest.</p>			
<p>10.3 For any deviation from the specification demanded by the supplier prior approval of BHEL must be obtained in writing.</p>				
<b>11. Packing and Marking</b>				
<p>The material shall be securely and suitably packed in order to avoid damage during transit. The material should be packed in original manufacturer's packing. Each package shall be legibly marked with the following details.</p>				
<ul style="list-style-type: none"> <li>(a) "Expanded Polysterene Sheet"</li> <li>(b) Name of the product</li> <li>(c) Supplier's trade mark</li> <li>(d) BHEL PO No.</li> </ul>				
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FF51499 Rev 02

पृष्ठ का  
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**PLANT PURCHASE SPECIFICATION**  
(CFFP - HARDWAR)

सुपरसेडिड  
INVENTORY NO

सामग्री सूची

**RECORD OF CHANGES**

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REV CODE	NO. OF CHANGES	NATURE OF CHANGES	SHEET NO.	SIGN	DATE
01	3	TOLERANCE REMOVED IN BULK DENSITY VALUE AND MINIMUM ADDED.			17.6.04
02	2	Clause 9 & 11 modified to included original manufacturer clause for test certificate and packing.			17.8.09

**DISTRIBUTION OF PRINTS**

RMI	✓
STANDARD SECTION	✓
MPIC	✓

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