

INDIAN JUTE INDUSTRIES' RESEARCH ASSOCIATION

Testing / Service Charges in IJIRA for member mills

| (A) PHYSICAL TESTING | | | | |
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| Sl nos. | Name of the Test / Test Parameter | Standard specification | Sample size | Rates (Rs.) |
| I | JUTE FIBRE | | | |
| 1 | Bundle Strength (Tenacity) | BIS: 7032 – 1975 | One morah of fibre | 550 |
| 2 | Single Fibre Tenacity & Elongation (Instron & Vibroskop) | BIS: 235 - 1954 | -Do- | 1500 |
| 3 | Fineness (Airflow) / Linear Density | BIS: 7032 (Pt. VIII) - 1976 | -Do- | 500 |
| 4 | Fineness (Gravimetric) | BIS: 234 – 1974 | -Do- | 1000 |
| 5 | Elastic Recovery / Relaxation (Instron) | ASTM: D 1774 - 90 | -Do- | 1500 |
| 6 | Jute Grading (Hand and Eye method) / Bulk Density | BIS: 7032 (Pt.VI) - 1975 | 3 morah of fibre | 250 |
| 7 | Moisture | ASTM: D 1576 - 90 | One morah of fibre | 150 |
| 8 | Fibre Flexural Rigidity | IJIRA method | 300 g | 500 |
| II | SLIVER | | | |
| 9 | Grist (Count) | IJIRA method (ASTM D 861-89) | 70 to 150 yds. | 100 |
| 10 | Sliver Weight CV% | IJIRA method | 200 yds sliver | 300 |
| 11 | Short term sliver Weight CV% (Manual cut method) | IJIRA method | 20 yds sliver | 500 |
| 12 | Av. Fibre Length (Beard method) | IJIRA method | 5 to 25 yds. | 200 |
| 13 | Av. Fibre Length, Short Fibre%,Length Distribution (Almeter) | ASTM: D 1575 - 90 | -do- | 1500 |
| III | YARN | | | |
| 14 | Grist (Count) | BIS: 570 - 1964 | 5 full bobbins or 1 kg spool | 100 |
| 15 | Cotton Yarn Count | IS : 237, IS : 239 | 10 Hanks / Spools | 100 |

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|-----------|--|---|------------------------------|------|
| 16 | Cotton yarn Count Strength Product (CSP) | IS : 239 | -do- | 500 |
| 17 | Single Yarn Strength (Goodbrand) | BIS: 1670 - 1970 | 5 full bobbins or 1 kg spool | 500 |
| 18 | Single Yarn Strength & Elongation (Tensojute) | BIS: 1670 - 1970 | 5 full bobbins or 1 kg spool | 400 |
| 19 | Single Yarn Strength & Elongation (Instron) | BIS: 1670 - 1991 | -do- | 750 |
| 20 | Cyclic Loading and unloading (Instron) | IJIRA method | 5 hanks | 2000 |
| 21 | Yarn mass CV%, Imperfection | IJIRA method | 500 m yarn / spool | 1000 |
| 22 | Break under Const. Tension Winding | IJIRA method | 2 km length of yarn | 500. |
| 23 | Twist | BIS: 832 – 1985,IS : 568-1954 | 5 full bobbins. | 200 |
| 24 | Yarn Abrasion Resistance | IJIRA method | 5 Hanks | 250. |
| 25 | Crimp | BIS: 3442 - 1980 | 1 metre of yarn | 200 |
| IV | FABRIC (General) | | | |
| 26 | GSM, Thickness, Ends/Picks, Weave etc | BIS: 2387 - 1969, IS:1964 – 70 IS : 1954 – 1990; IS 14716.IS 1963, IS1954 | 1.5 sq. metre | 500 |
| 27 | Tensile Strength & Elongation (Instron) | BIS: 2818 : 1990; ASTM 4632; IS 13162 | 1.5 sq. metre | 1000 |
| 28 | Tensile Strength (Good Brand) | BIS: 2818 : 1990,IS : 685-1962 | 1.5 sq. metre | 750 |
| 29 | Ballistic Work of Rupture | IJIRA method | -do- | 500 |
| 30 | Bursting Strength (Diaphragm) | BIS: 1966 : 1975ASTM D 3786 | 1sq. metre | 500 |
| 31 | Trapezoid Tear Strength (Instron)/ Tongue | ASTM D : 4533 | 1 sq. metre | 1000 |
| 32 | Abrasion Resistance (Flex / Flat / Edge) | BIS: 12673 : 1989 | -do- | 1000 |
| 33 | Cover Factor & Brightness | IJIRA method | 1 sq. metre | 200 |
| 34 | Yarn Weight (Grist) taken from Fabric | IJIRA method | 1 sq. metre | 300 |
| 35 | Yarn Strength taken from Fabric | IJIRA method | 1 sq. metre | 500 |
| 36 | Yarn Crimp taken from Fabric (Shirley) | IJIRA method | 1 sq. metre | 200 |
| 37 | Cover Factor / Porosity | BIS: 4355 - 1977 | -do- | 250 |
| 38 | Air / Water Permeability | ASTM D 737; ASTM D 4491 IS : 390-1975, EN ISO 11058/ EN ISO 12958, IS 11056-1984 | 1.5 sq. metre | 500 |
| 39 | Drape | BIS: 8357 - 1977 | 2 sq. metre | 750 |
| 40 | Flexural Rigidity (Stiffness) | BIS: 6490 - 1971 | 0.5 m ² | 750 |

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| 41 | Cyclic Loading and unloading (Instron) | IJIRA method | 1 sq. metre | 2000 |
| 42 | Crease Recovery (Shirley) | BIS: 4681 - 1981 | 1.5 sq. metre | 750 |
| 43 | Fabric Puncture Test | ASTM D 4833 | 0.5 sq. metre | 1000 |
| 44 | Fibre Shedding by Martindale Tester | ASTM D 4966 | 1 metre | 500 |
| 45 | Fibre Shedding on abrasion between fabrics | IJIRA method | -do- | 500 |
| 46 | Blend Ratio (Union Fabric of two fibres only) | IJIRA method | 1 sq. metre | 200 |
| 47 | Tear Strength (Elmendorf) | IS1989; ASTM D 1424; 4533 | 0.5 sq m (minimum) | 750 |
| 48 | Fabric Defect Analysis | IJIRA method | 1 sq. metre cloth | 200 |
| V | Geo-Textile fabrics (Jute / Synthetic – Woven / Non-Woven) | | | |
| 49 | Rod Puncture Resistance | ASTM D -4833-00 | 1 sq. metre | 1000 |
| 50 | Fabric Pull Out test | | | 1000 |
| 51 | Tensile strength of PVJD | ASTM D :4632 | 1 mt long sample | 1000 |
| 52 | CBR test | | | 1000 |
| 53 | Dynamic Perforation Test (Cone Drop) | ISO 13433 | 1 sq metre | 500 |
| 54 | AOS (Apparent Opening Size) [O ₉₅] | ASTM D -4751; IS:14294, EN ISO 12956 | 1 sq. metre | 1000 |
| 55 | Water Permeability | ASTM D : 4491 | ¹ / ₂ sq. metre | 500 |
| 56 | Water Flow Rate | ASTM D : 4491 | ¹ / ₂ sq. metre | 500 |
| 57 | Wide Width Br. Strength & Br. Elongation (Instron) | BIS: 2818 : 1990 ASTM D 4595 | 2 sq. metre | 2000 |
| 58 | Water Holding Capacity of Jute Soil Saver | IJIRA method | 1 sq. metre cloth | 200 |
| 59 | Open Area % of Jute Soil Saver | IJIRA method | 1 sq. metre cloth | 1000 |
| VII | Fire Retardant Brattice Cloth / Rubberized Water-Proof Cloth | | | |
| 60 | Strength of Brattice Cloth before & after accelerated aging | BIS: 4355 – 1977; | 2 sq. metre cloth | 3000. |
| 61 | Thickness | BIS 7702-1 975 | -do- | 200 |
| 62 | Content % of Coated Fabric | IS : 7016 (Part -1 to 8)- 1982 | -do- | 2000 |
| 63 | Waterproofness of aged sample | IS : 7016 (Pt –I, P-VII) | -do- | 1000 |
| VIII | Cotton / Juco Fabrics | | | |
| 64 | Yarn counts, end/picks etc of Cotton Drill / Denim / JuCoFabrics | IS 177 | 1 sq metre | 2000 |
| 65 | Fabric Shrinkage % | IS 177 | 0.5 sq metre | 200 |

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| 66 | Blend Ratio % | IJIRA method | 1 sq. metre cloth | 200 |
| IX | BAG | | | |
| 67 | Fabric Strength | BIS: 9030 - 1979 | 5 bags minimum | 500 |
| 68 | Seam Strength | BIS: 9030 - 1979 | -do- | 500 |
| 69 | Fabric Construction, Stitch Analysis & Dimension | BIS: 1963-1981, BIS: 1954-1998 | -do- | 500 |
| 70 | Drop Test (Bag Package) | BIS: 13035 - 1991 | 10 bags minimum | 2000 |
| X | CARD PINS | | | |
| 71 | Dimensions | BIS: 4909 - 1990 (Revised) | A set of 25 pins | 500 |
| 72 | Impact Strength | BIS: 4909 - 1990 (Revised) | -do- | 500 |
| XI | GABION | | | |
| 73 | Gabion Weight | IS : 7071 (P -4) 1986 | 1 Full Gabion (min.) | 400 |
| 74 | Gabion Tensile Strength | -do- | -do- | 3000 |
| 75 | Gabion Net Strength | -do- | -do- | 1500 |
| 76 | Rope Dia and Mesh dymention of Gabion | -do- | -do- | 700 |
| 77 | GABION Rope Strength | IS 7071 | -do- | 1500 |
| XII | OTHERS | | | |
| 78 | Certification & Calibration of IJIRA Analogue type Moisture Meter | IJIRA method | ----- | 1000 |