

FIRE RETARDANT TECHNICAL SPECIFICATIONS (IS:5509:2010)

| | Dimensions | BIS Requirements | Observation Values |
|--|---|--|--|
| 1. | Length | 2440 + 6 0 | 2442mm |
| 2. | Width | 1220 + 3 0 | 1222mm |
| 3. | Thickness | 12mm ± 5% | 11.80mm |
| 4. | Squareness | 2mm/1000mm | 0.95mm |
| 5. | Edge straightness | 2mm/1000mm | 0.50mm |
| 6. | Workmanship & finish | As per clause 9.1 to 9.2 | Satisfactory |
| | Physical properties | | |
| 7. | Density | 0.60 – 0.65 | 0.64 |
| 8. | Moisture contents | 5 – 20% | 10.25% |
| 9. | Water resistance test Cyclic test 8 hours – 16 hours Boiling – drying 3 Cycles | Pass standard | Excellent |
| 10. | Mycological Test | Pass standard | Excellent |
| 11. | Static bending strength Along the grain M.O.E. Across the grain M.O.E. Along the grain M.O.R. Across the grain M.O.R. | Avg. – 5000N/mm ² Ind. – 4500N/mm ² Avg. – 2500N/mm ² Ind. – 2200N/mm ² Avg. – 40 Ind. – 36 Avg. – 20 Ind. – 18 | 5850 N/mm ² 4020 N/mm ² 3480 N/mm ² 2855 N/mm ² 47.80N/mm ² 36.40N/mm ² 27.25N/mm ² 20.35N/mm ² |
| FIRE RETARDANT TESTS IS : 5509 : 2000 | | | |
| 12. | Flammability | 30 Min. | 35 Min. |
| 13. | Flame penetration | 30 Min. | 33 Min. |
| 14. | Rate of burning | 20 Min. (Wt. loss 30 to 70%) | 28 Min. |