

Date: 25-06-2023

## FACTORY IN HOUSE TEST REPORT

### FIRE RETARDANT PLY IS-5509:2021

Sample size : 2440x1220x19mm

Type : AA

Grade : FRP

Brand: Archer

| Sl. No.  | TEST                             | PRESCRIBED VALUE   | RESULTS             |
|--|----------------------------------|--|---------------------|
| 1  | <b>Dimension (mm)</b>            | Tolerance of   | Tolerance of -      |
|  | a) Length                        | a) + 6 mm, - 0 mm  | a) + 3              |
|  | b) Width                         | b) + 3 mm, - 0 mm  | b) +2               |
|  | c) Thickness                     | c) + 5%  | c) 18.90 to 19.20mm |
| 2  | <b>Squareness, %</b>             | 0.2  | 0.17                |
| 3  | <b>Edge Straightness, %</b>      | 0.2  | 0.09                |
| 4  | <b>Workmanship and finish</b>    | As per Clause 9  | Conforms            |
| 5  | <b>Moisture content, %</b>       | 5 to 15  | 11.60%              |
| 6  | <b>Water Resistance Test</b>     | 3 cycles passed  | Passed              |
| <b>Modules of elasticity(N/mm<sup>2</sup>)</b> |                                  |  |                     |
| 7  | Parallel to the face grain,      | Avg. 5000  | Avg. 5590           |
|  |                                  | Min. 4300  | Min : 4429          |
|  | Perpendicular to the face grain, | Avg. 2500  | Avg. 2833           |
|  |                                  | Min. 2200  | Min. 2454           |
| <b>Modulus of Rupture, (N/mm<sup>2</sup>)</b>  |                                  |  |                     |
| 8  | Parallel to the face grain,      | Avg. 50  | Avg. 61             |
|  |                                  | Min. 45  | Min. 54             |
|  |                                  | Avg. 30  | Avg :39             |
|  |                                  | Min. 27  | Min. 34             |
| 9  | Flame penetration                | Time taken for flame penetration shall not be less than 15t/6 mints, where 't' is the thickness of the plywood | 54 min              |
| 10   | Flammability                     | Time taken for the second ignition shall not be less than 30 mints   | 33min               |
| 11   | Rate of Burning                  | Time taken to lose Weight from 30% to 70% shall not be less than 20 mints.                                     | 24 min              |

