

## TECHNICAL DATA SHEET 4MM - PEARL

| SR NO    | PARAMETERS                             | ASTM STD.   | UNIT              | 4P SPECIFICATION            |
|----------|----------------------------------------|-------------|-------------------|-----------------------------|
| <b>A</b> | <b>Properties of ACP Panel</b>         |             |                   |                             |
| 1        | Thickness of ACP Panel                 | -           | mm                | <b>4 ± 0.20</b>             |
| 2        | Weight of ACP Panel                    | -           | kg/m <sup>2</sup> | <b>4.90 ± 5%</b>            |
| 3        | Density of ACP Panel                   | ASTM D1505  | gm/cc             | <b>1.22</b>                 |
| 4        | Bond Integrity (Peel Strenght 180°)    | ASTM D903   | N/mm              | <b>6 ± 2</b>                |
| 5        | Tensile Strength of ACP Panel          | ASTM E8     | MPa               | <b>≥ 23</b>                 |
| 6        | Yield Strength of ACP Panel            | ASTM E8     | MPa               | <b>≥ 18</b>                 |
| 7        | % Elongation of ACP                    | ASTM E8     | %                 | <b>&gt; 6</b>               |
| 8        | Flexural Strength                      | ASTM D790   | MPa               | <b>≥ 50</b>                 |
| <b>B</b> | <b>Properties of Aluminium Skin</b>    |             |                   |                             |
| 1        | Skin Thickness                         | -           | mm                | <b>0.25 ± 0.03</b>          |
| 2        | Alloy                                  | ASTM B209M  | -                 | <b>AA 1xxx / 3xxx</b>       |
| 3        | Temper                                 | ASTM B209M  | -                 | <b>H18/H16</b>              |
| 4        | Tensile Strength                       | ASTM E8     | N/mm <sup>2</sup> | <b>140 - 165</b>            |
| 5        | 0.2% Proof Stress (Yield Strength)     | ASTM E8     | N/mm <sup>2</sup> | <b>115 - 135</b>            |
| 6        | Elongation                             | ASTM E8     | %                 | <b>5 - 8</b>                |
| 7        | Modulus of elasticity                  | ASTM E8     | N/mm <sup>2</sup> | <b>≥ 70000</b>              |
| <b>C</b> | <b>Coat/Paint Properties</b>           |             |                   |                             |
| 1        | Type of Coating                        | -           | -                 | <b>PVDF Coated</b>          |
| 2        | Coating Thickness                      | ASTM D7091  | µm                | <b>26 +5/-3</b>             |
| 3        | Gloss at 60° Angle                     | ASTM D523   | %                 | <b>20 - 40</b>              |
| 4        | Reverse Impact                         | ASTM D 2794 | 225 mm            | <b>Paint No peel off</b>    |
| 5        | T-Bend Flexibility                     | ASTM D 4145 | T                 | <b>&gt;2T</b>               |
| 6        | Pencil Hardness Test                   | ASTM D 3363 | Visual            | <b>HB-H</b>                 |
| 7        | Adhension (Cross Hatch)                |             |                   |                             |
|          | Dry                                    | ASTM D3359  | Visual            | <b>Paint No peel off</b>    |
|          | Wet (Under Water - 72 Hours)           | ASTM D3359  | Visual            | <b>Paint No peel off</b>    |
|          | Boiling Water (8 Hours)                | ASTM D3359  | Visual            | <b>Paint No peel off</b>    |
| 8        | Chemical Resistance                    |             |                   |                             |
|          | Acid Resistance                        | AAMA 2605   | Visual            | <b>Passed</b>               |
|          | Alkali Resistance                      | AAMA 2605   | Visual            | <b>Passed</b>               |
|          | Mortar Resistance                      | AAMA 2605   | Visual            | <b>Passed</b>               |
| 9        | Humidity Test                          | ASTM D 2247 | Visual            | <b>No Blister</b>           |
| 10       | Colour Retention                       | ASTM 2244   | ΔE                | <b>Max. 5 units</b>         |
| 11       | Gloss Retention                        | ASTM D523   | %                 | <b>60 Min.</b>              |
| 12       | Chalk Resistance                       | ASTM D4214  | Visual            | <b>Max. 8 units</b>         |
| 13       | Solvent Rub Test (MEK test)            | ASTM D 5402 | Visual            | <b>No Exposed Aluminium</b> |
| <b>D</b> | <b>Acoustical Properties of panel</b>  |             |                   |                             |
| 1        | Sound Transmission Loss R <sub>w</sub> | ASTM E90    | [db]              | <b>25</b>                   |

**PRODUCT TOLERANCE:** Panel Width ± 2mm, Length ± 4, Thickness ± 0.2mm, Aluminium coil ± 0.03mm  
Maximum Bow : 0.8% of width and / or length, Squareness : Maximum 5.0mm