

# Technical specification sheet

Ball & Doggett

ballanddoggett.com.au

Product: MasterBond



Category: Sign, Display & Digital - Rigid

|                                    |  |  |
|------------------------------------|--|--|
| Panel thickness                    |  | 3 mm                                       |
| Thickness of Aluminium Layers (mm) |  | 0.2  |
| Technical Properties               | Section Modulus $W$ ( $\text{cm}^3/\text{m}$ )             | 0.54                                       |
|                                    | Rigidity (Poisson's ratio $\mu = 0.3$ )                    | 865  |
|                                    | E-I ( $\text{kNcm}^2/\text{m}$ ) Alloy of Aluminium Layers | 1100                                       |
|                                    | Modulus of Elasticity ( $\text{N}/\text{mm}^2$ )           | 69'000                                     |
|                                    | Tensile Strength of Aluminium ( $\text{N}/\text{mm}^2$ )   | 140-180 Rp0.2                              |
|                                    | 0.2% Proof Stress ( $\text{N}/\text{mm}^2$ )               | 105 - 170                                  |
|                                    | Elongation (%)   | $\geq A50$                                 |
| Core                               | Polyethylene, LDPE ( $\text{g}/\text{cm}^3$ )              | 1.25                                       |
| Surface                            | Paint Thickness(micron)                                    | 18-20 $\mu$ m                              |
|                                    | Toughness of coating                                       | 3T   |
|                                    | Pencil Hardness  | 2H   |
|                                    | Temperature Resistance Impact                              | -40...+80                                  |
|                                    | Strength( $\text{Kg}/\text{cm}^2$ ) Boiling                | 50kg/cm <sup>2</sup>                       |
|                                    | Water Resistance   | 2hrs. No change                            |
|                                    | Acid Resistance  | 2% HCL, 24hrs on change                    |
|                                    | Alkali Resistance  | 2% NaOH, 24hrs on change                   |
|                                    | Oil Resistance   | 20# engine oil, no change                  |
|                                    | Solvent Resistance Cleaning                                | 200 times by MEK                           |
|                                    | Resistance Peel Strength 180 °C                            | >1000 times without change<br>>5 Newton/mm |

## Conversion <sup>+</sup>

- |   |   |
|---|---|
| <input type="checkbox"/> Flat bed cutters     | <input type="checkbox"/> Cold overlaminating  |
| <input type="checkbox"/> Friction fed cutters | <input type="checkbox"/> Aqueous              |
| <input type="checkbox"/> Die cutting          | <input type="checkbox"/> Latex                |
| <input type="checkbox"/> Thermal transfer     | <input type="checkbox"/> Eco Solvnt           |
| <input type="checkbox"/> Screen printing      | <input type="checkbox"/> Solvent              |
| <input type="checkbox"/> Offset printing      | <input checked="" type="checkbox"/> UV Inkjet |

\*Always test with your combination of printer and inks prior to commercial use.

## Sheet Size

172608 - 1220 x 2440mm, 0.2mil skin, Matt|Gloss, Black, 3mm thickness  
168598 - 1220 x 2440mm, 0.2mil skin, Matt|Gloss, White, 3mm thickness  
168599 - 1220 x 3050mm, 0.2mil skin, Matt|Gloss, White, 3mm thickness  
170407 - 1220 x 3660mm, 0.2mil skin, Matt|Gloss, White, 3mm thickness  
168600 - 1500 x 3050mm, 0.2mil skin, Matt|Gloss, White, 3mm thickness

## Common Applications

|                     |                              |
|---------------------|------------------------------|
| Sign Making         | Food Truck /Campervan panels |
| Shop Front          | Building panels              |
| Interior Decoration |                              |
| Exhibition Stand    |                              |
| POS Display         |                              |