



# Decorated MR E0 MDF - Grain

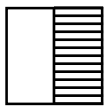
## Technical Data Sheet

Formica® Decorated MDF is a medium density fibreboard bonded on both sides with a hardwearing melamine decorative surface. Formica Decorated MDF is a wood-based panel and which is hygroscopic, this means it may retain moisture from the air and respond to changes in humidity and temperature in the same as natural timber.

### APPLICATIONS

- Cabinetry
- Cabinetry - Interiors & Panels
- Cabinetry - Doors & Drawers
- Shelving
- Wardrobes
- Wall Panels
- Vanities

### FUNCTIONAL BENEFITS



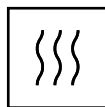
Vertical Application



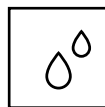
Light Duty Horizontal



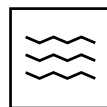
Stain Resistant



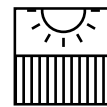
Heat Resistant



Water Resistant



Scratch Resistant



UV Stable Indoor Use

## Product Characteristics

| ATTRIBUTE                          | DESCRIPTION   |
|------------------------------------|---|
| Product Category                   | Low Pressure Melamine   |
| Substrate Type                     | Moisture Resistant E0 MDF   |
| Sheet Size (nominal)               | 2400mm x 1200mm   |
| Thickness (nominal)                | 16mm  |
| Weight (Kg/m <sup>2</sup> approx.) | 11.5  |
| Finish                             | Grain   |
| Colour/Pattern                     | To view the full range, please visit <a href="http://www.formica.com.au">www.formica.com.au</a> |



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### Dimensional Tolerance

(Tested to AS/NZS 4266.1)

| ATTRIBUTE        | DESCRIPTION  |
|------------------|--|
| Thickness        | 0.6mm  |
| Length and Width | +5mm / -5mm maximum deviation                      |
| Squareness       | 2mm/m maximum deviation                            |
| Flatness         | 1.5mm/m maximum deviation (measured in horizontal) |

### Surface Quality

(Tested to AS/NZS 4266.2)

| ATTRIBUTE                             | MEASUREMENT  |
|---------------------------------------|--|
| Inspection Guidelines                 | Viewing distance 1.5m from decorative surface<br>Light intensity approximately 800 to 1000 lx at the decorative surface<br>Using normal vision, corrected if necessary. No magnification devices   |
| Dirt, Spots & Similar Surface Defects | The admissible size of defects is based on a maximum contamination area equivalent to 1.0mm <sup>2</sup> /m <sup>2</sup> and is proportional to the sheet size under inspection<br><br>The total admissible area of contamination may be concentrated in one spot or dispersed over an unlimited amount of smaller defects |
| Fibres, Hairs & Scratches             | The admissible size of defects is based on a maximum contamination length equivalent to 10mm/m <sup>2</sup> and is proportional to the sheet size under inspection<br><br>The total admissible length of contamination may be concentrated in one defect or dispersed over an unlimited amount of smaller defects          |

### Surface Performance

(Tested to AS/NZS 4266.2)

| ATTRIBUTE                       | MEASUREMENT  |
|---------------------------------|--|
| Resistance to Surface Abrasion  | Printed patterns $\geq 40$ cycles. Solid colours $\geq 300$ cycles                                       |
| Resistance to Scratching        | $\geq 4$ Newton  |
| Porosity                        | Appearance rating not worse than 3   |
| Resistance to Steam             | Appearance rating not worse than 3<br><i>Moderate swelling</i>   |
| Resistance to Cracking          | No visible cracks or micro cracks  |
| Resistance to Staining          | Rating $\leq 2$<br><i>Faint stain left on surface</i>  |
| Lightfastness<br>ISO 4586-2     | Contrast: Grey scale rating $\geq 4$<br><i>When tested in contrast with Blue wool 6 Ref: ISO 105-A02</i> |
| Colour Variation<br>ISO 105-A05 | Surface material "batch to batch" colour variation of $\Delta E \leq 1$                                  |



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### Adhesion Performance

(Tested to AS/NZS 4266.2)

| ATTRIBUTE     | MEASUREMENT |
|---------------|-------------|
| Bond Strength | ≥ 1.3 MPa   |

### Substrate Performance

(Tested to AS/NZS 4266.1)

| ATTRIBUTE                       | UNITS             | MEASUREMENT    |                 |
|---------------------------------|-------------------|----------------|-----------------|
|                                 |                   | MINIMUM VALUES | TYPICAL VALUES# |
| Density                         | Kg/m <sup>3</sup> | -              | 760 ± 20        |
| Internal bond                   | MPa               | 0.50           | 1.0 - 1.2       |
| Modulus of Rupture              | MPa               | 26             | 42 - 45         |
| Modulus of Elasticity           | MPa               | 2000           | 3300 - 3500     |
| Surface Soundness               | MPa               | 0.9            | 1.3 - 1.6       |
| Screw Holding, Face             | Force N           | 1000           | 1100 - 1400     |
| Screw Holding, Edge             | Force N           | 900            | 1000 - 1300     |
| Thickness Swell (24hr)          | %                 | (Max) 0.9      | 5.0 - 7.0       |
| Wet Bending Strength (Method A) | MPa               | 5              | 6 - 8           |
| Formaldehyde                    | mg/L              | ≤ 0.5          | E0 ≤ 0.5        |

# Table contains representative values only. Performance variation outside stated typical values does not constitute a product failure.

### Specialty Performance

| ATTRIBUTE              | TESTED TO:  | TYPICAL VALUES                          |                         |
|------------------------|---|---|-------------------------|
| Fire Hazard Properties | AS/NZS 3837<br>(In accordance to AS5637.1) <sup>3</sup> | Group Number                            | 3                       |
|                        |   | Average Specific Extinction Area (ASEA) | 18.2 m <sup>2</sup> /Kg |



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### Emissions & Environmental Performance

| ATTRIBUTE                          | TESTED TO:    | UNITS                | MEASUREMENT |
|------------------------------------|---------------|----------------------|-------------|
| Formaldehyde                       | AS/NZS 1859.2 | mg/L                 | E0 ≤ 0.5    |
| Volatile Organic Compounds (VOC's) | ASTM D5116    | mg/m <sup>2</sup> /h | ≤ 0.5       |

### Important Information

| NOTE  | DETAILS   |                  |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
|---|---|------------------|------------------|---------------|----------|--------|---|-----------|---------|---|-----------|---------|---|-----------|---------|---|
| Ⓜ ONLY use for internal applications  | Claims arising from external or outdoor applications are not covered under warranty   |                  |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
| Ⓜ ONLY use for vertical applications  | Claims arising from horizontal applications are not covered under warranty  |                  |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
| Ⓜ Light horizontal use only   | Use only for decorative horizontal applications (eg shelving) where no worksurface/benchtop/high abrasion activities apply  |                  |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
| Ⓜ CAUTION! - Darker colours will show fingerprints, scratches and superficial wear & tear more readily than lighter colours | Claims arising from fingerprints, scratches or superficial wear & tear directly attributable to the selection of a dark colour, are not covered under warranty  |                  |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
| Ⓜ DO NOT expose to prolonged direct or indirect UV light  | Claims arising from use in windowsill applications are not covered under warranty (refer to Formica MR TDS)<br><br>Claims arising from prolonged exposure to UV light (natural or artificial sources) resulting in shrinkage and/or colour changes beyond the tolerances stated in this document, are not covered under warranty  |                  |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
| Ⓜ Use of different surface materials within a single installation may result in a perceived visual variation                | Claims arising from colour, gloss or finish variation between different product groups are not covered under warranty   |                  |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
| Ⓜ Use of directional designs or finishes in opposing orientations may result in a perceived visual variation                | Claims arising from colour, gloss or finish variation directly attributable to surface directionality, are not be covered under warranty  |                  |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
| Ⓜ ALL material must be inspected prior to commencing any fabrication activity   | Claims arising from defects or variation clearly detectable prior to fabrication, will not be covered under warranty for labour costs or penalties  |                  |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
| Ⓜ DO NOT allow water to pool on the surface or around the edges   | Claims arising from exposure to pooled water are not covered under warranty   |                  |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
| Ⓜ ONLY use recommended hinge quantities   | Claims arising from failure to comply with the table below are not covered under warranty   |                  |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
|   | <table border="1"> <thead> <tr> <th>Door Height (mm)</th> <th>Door Weight (Kg)</th> <th>No. of Hinges</th> </tr> </thead> <tbody> <tr> <td>≤ 900 mm</td> <td>≤ 9 Kg</td> <td>2</td> </tr> <tr> <td>≤ 1600 mm</td> <td>≤ 15 Kg</td> <td>3</td> </tr> <tr> <td>≤ 2000 mm</td> <td>≤ 19 Kg</td> <td>4</td> </tr> <tr> <td>≤ 2400 mm</td> <td>≤ 23 Kg</td> <td>5</td> </tr> </tbody> </table> | Door Height (mm) | Door Weight (Kg) | No. of Hinges | ≤ 900 mm | ≤ 9 Kg | 2 | ≤ 1600 mm | ≤ 15 Kg | 3 | ≤ 2000 mm | ≤ 19 Kg | 4 | ≤ 2400 mm | ≤ 23 Kg | 5 |
| Door Height (mm)  | Door Weight (Kg)  | No. of Hinges    |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
| ≤ 900 mm  | ≤ 9 Kg  | 2                |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
| ≤ 1600 mm   | ≤ 15 Kg   | 3                |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
| ≤ 2000 mm   | ≤ 19 Kg   | 4                |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |
| ≤ 2400 mm   | ≤ 23 Kg   | 5                |                  |               |          |        |   |           |         |   |           |         |   |           |         |   |



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### Important Information

| NOTE   | DETAILS  |
|--|--|
| Ⓜ CAUTION! - Bowing warping or twisting                    | Claims arising from bow, warp or twisting of doors/panels are not covered under warranty   |
| Ⓜ DO NOT leave edges unsealed                              | Claims arising from the effect of heat or moisture ingress attributable to exposed edges of panels, are not covered under warranty   |
| Ⓜ DO NOT apply a coating to the surface                    | Claims arising from surface defects or other failure modes directly attributable to the application of paint or other surface lacquering systems, are not covered under warranty |
| Ⓜ DO NOT use for high impact or high traffic installations | Claims arising from high impact or high traffic installations are not covered under warranty   |
| Ⓜ DO NOT use decorative face as a cutting surface          | Claims arising from physical damage of the decorative surface are not covered under warranty   |
| Ⓜ DO NOT expose to heat, hot gases or moisture             | Claims arising from exposure to heat or moisture are not covered under warranty  |
|  | Claims arising from damage due to front venting oven installations without a heat deflector shield are not covered under warranty  |
|  | Claims arising from damage due to fugitive heat or moisture leaking from appliance seals are not covered under warranty  |
|  | Claims arising from the use of benchtop hot plates without exhaust fan activation or use of an ineffective extraction, are not covered under warranty                            |
| Ⓜ ONLY use recommended Care & Maintenance methods          | Claims arising from staining or damage attributable to not following Care & Maintenance instructions, are not covered under warranty   |
| Ⓜ Denotes specific warranty conditions apply               |  |

