PART I  GENERAL

101  Scope
The work of this Section covers the supply and installation of site built and manufactured joinery items. It includes, but is not limited to:
Fabricated Joinery
Noticeboards

102  Related Work
Co-ordinate and cooperate with the following trades:
Wall construction
Ceiling construction
Plaster trades
Electrical installations
Hydraulics
Carpentry
Floor Finishes

103  Quality Assurance
Provide, implement and maintain a quality assurance system to AS/NZS ISO 9002. Submit evidence of the firm’s QA system if required by the Architect.

Work of this Section shall be performed by experienced tradespersons familiar with the quality required in this class of work. Comply throughout with the manufacturer’s instructions.

104  References
Comply with applicable portions of the latest revisions of the Australian Standards listed below:
AS 1163  Structural steel hollow sections
  There are two amendments to this standard,
AS 4785.1  Timber-softwood – sawn & milled products – product specification
AS 4785.2  Timber-softwood – sawn & milled products – grade description
AS 1859  Re-constituted wood-based panels.
  Includes particleboard & medium density fibreboard
  1859.1  Particleboard
  1859.2  MDF
AS 2131  Adhesives for bonding decorative thermoset laminates (contact adhesives)
AS 2754  Adhesives for timber and timber products
  2754.2  Polymer emulsion adhesives
  2754.3  Adhesives for non-structural applications
  There are two amendments to this standard
AS 2796  Timber - Seasoned hardwood - Milled products
AS 3715  Metal finishing – Thermoset powder coating for architectural applications

105  Submissions/Inspections
A.  Submit the following prior to fabrication:
   o  Product literature on proposed hardware items
   o  Technical data on melamine laminates proposed for use
B.  Prefabricated joinery and associated metalwork shall be inspected by the Architect at the workshop, prior to being delivered to site.

106  Delivery, Handling and Storage
Do not deliver until completion of anything that could soil, damage or deteriorate joinery. Prevent soiling, damage or deterioration during delivery, storage and handling.
Keep site storage to a minimum. If circumstances make storage necessary in areas other than the final location, store only in those that meet the requirements specified for installation areas.
PART II  MATERIALS

201  Materials – General

Scope: This clause specifies basic requirements for typical materials and finishes used on joinery items. Relevant materials and finishes can depart from these basic requirements only if the particulars of any such departures in an offered item have been subject to prior notification and acceptance in writing.

Steel tube: To AS 1163.
Surface:
- For painted work: Semi-bright.
- For electroplated work: Bright

Materials shall be free from loose rust, pittings, flaws, cracks, burrs or mill scale, and any other defects, and shall have a smooth uniform finish.

Aluminium
Drawn tube: To AS 1867.
Extrusions: To AS 1866.
Anodizing: To AS 1231.

Thermoset powder coatings: To the performance requirements of AS 3715 Section 2.

Flat pressed particle board, MDF, HDF
Shall conform and comply with the following standards:
AS/NZS 1859.1  Particleboard
Minimum Grade: Standard Grade Particle Board
AS/NZS 1859.2  Medium Density Fibreboard

All board products specified as EO – (ECG)
GECA Ecolabel Certified either from Laminex Greenfirst, D&R Henderson or Alpine MDF range of E0 board products

Note: Documentation is to be provided confirming that E0 board products have been supplied for use.

Timber Face Veneer
Face veneers shall be ‘polishing Grade’ sliced timber veneer with no holes, cracks, blemishes or variations in colour.
Timber veneer surfaces shall be sanded thoroughly along the grain to remove raised grain, cross grain scratches or dirt marks. Marks shall be removed.
Veneered components shall be as specified or scheduled.
Veneered components shall have a 10mm solid timber edge to match specified timber veneer finish.

Decorative Thermosetting Laminated Sheet
Shall conform to:
AS 2924  Decorative Thermosetting Laminated Sheet.
General Purpose type laminate shall be 0.8mm thick.

Plastics
Plastic materials shall be of approved specifications, suitable for their particular application and free from defects such as porosity, bubbles, blisters, flesh, burn marks, distortion and cracks.
Whiteboards

Location: Refer to drawings and schedule

Whiteboard panels: Equal to Edge Architectural Whiteboards white seamless vitreous enamel surface on sheet steel base, resistant to chipping and fracture when the base is slightly flexed, fixed with a suitable contact adhesive to a backing of primed particleboard at least 12 mm thick.

Surface: Suitable for use with fast-evaporation, dry-erase pens.

Edges: Trim the edges of the panels with aluminium sections equal to the Edge LX8000 Architectural Frame in satin silver standard finish (20mm D x nom 2.5mm front reveal); with concealed rear fixed reverse mounting brackets.

Provide sample of edge profile for approval prior to fabrication.

Where width of whiteboards exceed width of whiteboard panels, provide shop drawings of set out of whiteboard joins and framing for approval prior to fabrication.

Pen rails: Proprietary aluminium section fixed to the full width of the bottom edge of the board.

Installation: Attach the panels to building substrates with proprietary fixings or either of the following:

- Wallboard adhesive to AS 2329.
- Masonry wall plugs and chromium plated raised head screws over chromium plated cup washers.

Pinboards

Materials: Woven Image EchoPanel 12mm acoustic panel, PET (60% recycled content).

Edges: To be finished with natural anodised aluminium edge angle to all exposed edges.

Confirm all dimensions on site. Refer Finishes Plan, Joinery Details & Interior Elevations for locations. Refer Finishes Schedule for colour selection.

Pinboard to be installed as per manufacturers installation specifications

Textile upholstery fabrics

Standard: To AS 2687.

Performance classification (minimum): 5 (heavy duty commercial use).

Polyester fabrics: Minimum 50% post-consumer recycled content.

Fire Tests: AS/NZS 1530.3, AS/NZS 3837

Wool and woolblend fabrics: Woolmark/Woolblendmark: Required.

Flexible cellular polyurethane

Standard: To AS 2281.

Applications: Generally as recommended in AS 2281 Appendix A.

Seat Cushioning: High density Dacron coated foam (Dunlop enduro)

Back Cushioning: Medium density Dacron coated foam (Dunlop enduro)

Fixings and Adhesives

Shall conform to:

AS 1111 ISO metric hexagon commercial bolts and screws.

AS 2754 Adhesives for timber and timber products

AS 2754.2 Polymer emulsion adhesives

AS 2754.3 Adhesives for non-structural applications

AS 2131 Contact Adhesives

Adhesives shall be suitable for the particular application and shall be applied evenly over the whole of the surfaces joined, in accordance with manufacturer’s written specification.

Adhesives to be low or no VOC equal or similar to Titebond range of adhesives.

Fixings shall be capable of transferring applied loads and shall be completely hidden from view.

Provide required bolts, screws, inserts, fasteners, templates and other accessories required for a complete installation. Co-ordinate with other trades as to the proper fastening systems suitable for the substrates to which the item is to be secured.
All fixings to joinery unless otherwise documented are to be concealed. Provide ‘locktite’ to screws fixing joinery door handles prior to installation.

**ABS Edge stripping**

All particleboard and MDF board edges to have semi-rigid ABS edge stripping to all exposed edges, in 2 colours/types:

- Type 1: to match melamine or laminate face of board
- Type 2 (PL3): Contrast edge strip on nominated joinery units (refer joinery details) in Classrooms, Reception, Entry Foyer & Staff Room

**Drawer and door stops:** Supply and install clear neoprene silent bumpers to all joinery drawers and doors.

### 202 Materials – Fabricated Joinery Schedule

<table>
<thead>
<tr>
<th>Ref.</th>
<th>count</th>
<th>Description</th>
<th>Location</th>
<th>Room Name</th>
<th>Refer Drawing</th>
</tr>
</thead>
<tbody>
<tr>
<td>J1</td>
<td></td>
<td>Nido Store cpb</td>
<td>G02</td>
<td>Nido Multipurpose</td>
<td>A700</td>
</tr>
<tr>
<td>J2</td>
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<td>Nido Kitchenette</td>
<td>G02</td>
<td>Nido Multipurpose</td>
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</tr>
<tr>
<td>J3</td>
<td>1</td>
<td>Nido Mattress store</td>
<td>G03</td>
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<tr>
<td>J4a</td>
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<td>Nido nappy change store</td>
<td>G04</td>
<td>Nido Toilet</td>
<td>A701</td>
</tr>
<tr>
<td>J4b</td>
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<td>Nido nappy change store</td>
<td>G04</td>
<td>Nido Toilet</td>
<td>A701</td>
</tr>
<tr>
<td>J5</td>
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<td>Nido nappy change bench</td>
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<td>A702</td>
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<tr>
<td>J6</td>
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<td>Nido sign in &amp; lockers</td>
<td>G01</td>
<td>Nido Classroom</td>
<td>A702</td>
</tr>
<tr>
<td>J7</td>
<td>1</td>
<td>Reception Counter</td>
<td>G14</td>
<td>Reception</td>
<td>A703</td>
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<tr>
<td>J8</td>
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<td>G14</td>
<td>Reception</td>
<td>A704</td>
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<tr>
<td>J9</td>
<td>1</td>
<td>Storage Unit</td>
<td>G14</td>
<td>Reception</td>
<td>A704</td>
</tr>
<tr>
<td>J10</td>
<td>1</td>
<td>Foyer seating</td>
<td>G13</td>
<td>Entry Foyer</td>
<td>A705</td>
</tr>
<tr>
<td>J11</td>
<td>2</td>
<td>Office storage</td>
<td>G16</td>
<td>Office</td>
<td>A705</td>
</tr>
<tr>
<td>J12</td>
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<td>Utilities layout bench</td>
<td>G19</td>
<td>Office Utilities</td>
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<tr>
<td>J13</td>
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<td>Staff kitchenette</td>
<td>G21</td>
<td>Staff Rm</td>
<td>A707</td>
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<tr>
<td>J14</td>
<td>1</td>
<td>Bench seat</td>
<td>G21</td>
<td>Staff Rm</td>
<td>A708</td>
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<tr>
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<td>G27</td>
<td>Clnr / Laundry</td>
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<tr>
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<td>Laundry/cleaner storage</td>
<td>G27</td>
<td>Clnr / Laundry</td>
<td>A709</td>
</tr>
<tr>
<td>J17</td>
<td>1</td>
<td>Shoe rack bench</td>
<td>G05</td>
<td>IC Classroom</td>
<td>A709</td>
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<tr>
<td>J18</td>
<td>1</td>
<td>IC Wash-up (530H bench)</td>
<td>G05</td>
<td>IC Classroom</td>
<td>A710</td>
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<tr>
<td>J19</td>
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<td>Mattress store</td>
<td>G05</td>
<td>IC Classroom</td>
<td>A710</td>
</tr>
<tr>
<td>J20</td>
<td>1</td>
<td>Nook Shelving</td>
<td>G05</td>
<td>IC Classroom</td>
<td>A711</td>
</tr>
<tr>
<td>J21</td>
<td>1</td>
<td>Storage &amp; workpoint</td>
<td>G07</td>
<td>IC Multipurpose</td>
<td>A711</td>
</tr>
<tr>
<td>J22</td>
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<td>IC Kitchenette</td>
<td>G07</td>
<td>IC Multipurpose</td>
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<tr>
<td>J23</td>
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<td>IC Toilet store</td>
<td>G08</td>
<td>IC Toilet</td>
<td>A712</td>
</tr>
<tr>
<td>J24</td>
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<td>IC Nappy Change Bench</td>
<td>G08</td>
<td>IC Toilet</td>
<td>A713</td>
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<tr>
<td>J25a</td>
<td>1</td>
<td>Mattress Storage cpb</td>
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<td>IC Classroom 2</td>
<td>A713</td>
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<tr>
<td>J25b</td>
<td>1</td>
<td>Mattress Storage cpb</td>
<td>G09</td>
<td>Casa Classroom 1</td>
<td>A715</td>
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<tr>
<td>J26</td>
<td>2</td>
<td>Nook shelving</td>
<td>G06 &amp; G09</td>
<td>IC Classroom 2 &amp; Casa Classroom 1</td>
<td>A714</td>
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<tr>
<td>J27</td>
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<td>Classroom Wash-up (530H bench)</td>
<td>G06</td>
<td>IC Classroom 2</td>
<td>A714</td>
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<tr>
<td>J28</td>
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<td>Classroom Wash-up (660H bench)</td>
<td>G09</td>
<td>Casa Classroom 1</td>
<td>A714</td>
</tr>
<tr>
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<td>Shoe rack bench</td>
<td>G06</td>
<td>IC Classroom</td>
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### Joinery Hardware and Miscellaneous Items

<table>
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<tr>
<th>Code</th>
<th>Description</th>
<th>Location</th>
<th>Note</th>
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<tbody>
<tr>
<td>J30</td>
<td>1 Shoe rack bench G09</td>
<td>Casa Classroom A716</td>
<td></td>
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<tr>
<td>J31</td>
<td>1 MP Storage G11</td>
<td>Casa Multipurpose A717</td>
<td></td>
</tr>
<tr>
<td>J32</td>
<td>1 Casa Kitchenette G11</td>
<td>Casa Multipurpose A717</td>
<td></td>
</tr>
<tr>
<td>J33</td>
<td>1 Overhead shelving G12</td>
<td>Casa Toilet A718</td>
<td></td>
</tr>
<tr>
<td>J34</td>
<td>1 Shoe rack bench G10</td>
<td>Casa Classroom A718</td>
<td></td>
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<td>J35</td>
<td>1 Classroom Wash-up (660H bench) G10</td>
<td>Casa Classroom A719</td>
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<tr>
<td>J36</td>
<td>1 Classroom storage G10</td>
<td>Casa Classroom A719</td>
<td></td>
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<tr>
<td>J37</td>
<td>1 Nook shelving G10</td>
<td>Casa Classroom A720</td>
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<td>J38</td>
<td>1 Mattress store G10</td>
<td>Casa Classroom A720</td>
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<td>J39</td>
<td>1 Classroom Storage G06</td>
<td>IC Classroom 2 A721</td>
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<tr>
<td>J40</td>
<td>1 Toothbrush Storage G12</td>
<td>Casa Toilet A721</td>
<td></td>
</tr>
</tbody>
</table>

#### Adjustable Shelving

Where shown on drawings provide a complete adjustable shelving system including but not limited to Hettich – Shelf support safety, translucent 016 180, 5mm Pin.

#### Drawer Runners

- **(General)**
  - Detachable, steel. 420.93.950 (Sizes to be confirmed as built)

- **(Kitchens & kitchenettes)**
  - Equal or similar to Hafele Nova Pro Drawer runners with soft close and round rails. Colour (where required) – Powdercoated Silver metallic. Type to suit weight and drawer size.

#### Hinges

- Three hinges per 800 mm height of cupboard door. Equal to Hafele Salice series 200. Nom opening angle 165°

#### Cupboard Door Locks

- **(General as shown on joinery detail drawings)**
  - Equal to Hafele – Symo 3000 inlaid locks, nickel plated. Must accept Block cylinders (Specific system required to be confirmed per joinery item)

#### Joinery Door Handles

- **(where shown)**
  - Equal to Madinoz Stainless Steel Lip Pull Handle MDZ 221/200

#### Joinery sliding doors

- **(J3 1 door, J19 door doors)**
  - Equal to Hettich sliding door system Topline M STB16.1, top running track. – ensure track is suitable for size and weight of door

#### Castors (nappy change steps)

- Equal to Hafele - fixed steel castor with rubber wheel 663.07.920

#### Tread tape (nappy change steps)

- Equal to 3M safety walk – general purpose grip tape, 50mm Black

#### Child safety catch (J5 & J24 underbench units):

- Equal to Nover - Safety Catch 100579 (Install to all under sink cupboard doors where noted)

#### Cable Grommets:

- Equal or similar to Hafele – Cable outlet, drill hole 60mm, Plastic, with spring loaded, swivelling section in cover, silver finish.

Provide required bolts, screws, inserts, fasteners, templates and other accessories required for a complete installation. Co-ordinate with other trades as to the proper fastening systems suitable for the substrates to which the item is to be secured. All fixings to joinery are to be concealed.

### 203 Trims, Architrave’s and Skirting

Refer to carpentry specifications.

### 204 Laminate, Melamine, Veneer & Other Finishes

Refer to the Finishes Schedule

**Melamine (hidden carcass)**

- White generally.
205 **Associated metalwork**  
Refer drawings and Metalwork specification.

**PART III EXECUTION**

301 **Examination**  
Visit the site and inspect conditions. Check dimensions and compare aspects with the Drawings and Specification. Resolve differences before ordering materials or starting work.  
Start of work means total acceptance of conditions.

302 **Preparation for Joinery Installation**  
Prior to installing, condition joinery to the average humidity conditions prevailing in the installation areas.  
Deliver anchoring devices and similar inserts required to be built into substrates well in advance of the fixing of fittings and provide full details when they are to be fixed by others.  
Prior to installation, examine shop-fabricated work for completeness and remedy deficiencies.  
Include back priming and the removal of packing.  
Thoroughly clean floors and walls that will be permanently concealed by joinery.

303 **Installation of Joinery**  
Use concealed shims as required to install the work plumb, level, straight and distortion free within the following tolerances:  
- 1mm in 800mm for plumb and level (including bench tops),  
- 0.5mm maximum offsets in flush adjoining surfaces,  
- 2mm maximum offsets in revealed adjoining surfaces.  
Scribe and cut to fit adjoining work; refinish cut surfaces or repair damaged finishes at cuts.  
Secure joinery with anchors or blocking built-in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required to complete the installation. Except where pre-finished matching fastener heads are required, use fine finishing nails, countersunk and filled flush. Use matching filler where a transparent finish is required.  
Install casework without distortion so that doors will fit openings properly and be accurately aligned.

304 **Hardware**  
Install joinery hardware as scheduled, listed and required in full compliance with the manufacturer’s recommendations.  
Adjust as needed to centre doors in openings.

305 **Adjustments, Cleaning, Finishing and Protection**  
A. Finish the work specified in this Section and remedy anything not finished at the shop or other stage prior to completion.  
B. Adjust joinery to achieve a uniform appearance.  
C. Lubricate and clean hardware making final adjustments needed for proper operation.  
D. Protection: Do everything needed to ensure that work is without damage or deterioration at Practical Completion.

306 **Completion**  
Complete contracted work in accordance with contract documents and written variation orders issued by the Architect.

END OF SECTION