

02.10.2025

Ref: SY212798-06

MREP Dasco JV Pty Ltd  
Level 2, 9 George St, North Strathfield NSW 2137

**Re: Beecroft Road, Epping - BASIX Pathway Summary**

## BASIX Pathway

### 1.1 Water Efficiency

Water score required: 40%

**Current score: 40%**

#### 1.1.1 Common Facilities :

- 15000L Rainwater Harvesting Tank to collect rainwater from at least 800m<sup>2</sup> of roof space to supply irrigation to at least 2000m<sup>2</sup> of common landscaping and common area toilet flushing on ground floor and lower ground level.
- Fire sprinkler test water to be contained in a closed system.
- Showerheads: 4-star WELS rated (>6 but <=7.5 L/min)
- All Taps: 5-star WELS rated
- Toilets: 4-star WELS rated
- Swimming pool (No.1) 115kL
- Swimming pool (No. 2) 35.6kL
- Spa 10.80kL

#### 1.1.2 Individual Apartment Units (Building A, B, C, D and E):

- Showerheads for affordable apartments (All of Building A + Building B GF – L5 and B601): 4-star WELS rated (>4.5 but <=6 L/min)
- Showerheads for all other apartments: 4-star WELS rated (>6 but <=7.5 L/min)
- Toilets: 4-star WELS rated
- Kitchen Taps: 5-star WELS rated
- Bathroom Taps: 5-star WELS rated
- Clothes Washer: Not specified
- Dishwashers: 2.5-star WELS rated
- Spa 1.08kL with spa cover for the following units:
  - Building B: B1502, B1503
  - Building C: C1603, C1604

### 1.2 Energy Efficiency

Energy score required: 25%

**Current Score: 28%**

#### 1.2.1 Common Facilities:

- Solar PV system: 160kW peak minimum
- Central electric heat pump – air sourced hot water systems with R0.6 (~25mm) insulation to all internal and external piping.
- Lifts: gearless traction with VVVF motor.
- No common area clothes dryers or drying lines.
- Outdoor pools with timer controlled electric heat pump system.
- Spa with timer controlled electric heat pump system.
- Ventilation and lighting as follows:

Area	Primary Lighting System	Lighting Efficiency Measure	Ventilation system	Ventilation Efficiency Measure
Basement 01 Bulk Waste	LED	motion sensors	exhaust only	N/A
Basement 01 Carpark	LED	time clock and motion sensors	supply + exhaust	carbon monoxide monitor + VSD fan
Basement 01 Fan Room	LED	motion sensors	no mechanical ventilation	N/A
Basement 01 Grease Arrestor	LED	motion sensors	exhaust only	time clock or BMS controlled
Basement 01 Lobbies	LED	manual on/off	supply only	time clock or BMS controlled
Basement 01 Management Store	LED	motion sensors	supply only	time clock or BMS controlled
Basement 01 Rainwater Tank	LED	manual on/off	no mechanical ventilation	N/A
Basement 01 Residential Lobby A	LED	time clock and motion sensors	no mechanical ventilation	N/A
Basement 01 Waste A + Bin room	LED	motion sensors	exhaust only	N/A
Basement 01 Waste B + Central Holding	LED	motion sensors	exhaust only	N/A
Basement 01 Waste C + Bin room	LED	motion sensors	exhaust only	N/A
Basement 01 Waste D + Bin room	LED	motion sensors	exhaust only	N/A
Basement 01 Waste E + Bin room	LED	motion sensors	exhaust only	N/A
Basement 02 Hot Water A & B	LED	time clock and motion sensors	no mechanical ventilation	N/A
Basement 02 Carpark	LED	time clock and motion sensors	supply + exhaust	carbon monoxide monitor + VSD fan
Basement 02 Storage cages	LED	time clock and motion sensors	no mechanical ventilation	N/A
Basement 02 Lobbies	LED	time clock and motion sensors	supply only	time clock or BMS controlled
Basement 03 Carpark	LED	time clock and motion sensors	supply + exhaust	carbon monoxide monitor + VSD fan
Basement 03 Comms D & E	LED	manual on/off	air conditioning	time clock or BMS controlled
Basement 03 Tower Switch Room D & E	LED	manual on/off	supply only	time clock or BMS controlled
Basement 03 Tower Switch Room A & B	LED	manual on/off	supply only	time clock or BMS controlled
GF Communal Space WCs	LED	time clock and motion sensors	exhaust only	time clock or BMS controlled
Basement 03 Lobbies	LED	time clock and motion sensors	supply only	time clock or BMS controlled
Building A Corridors	LED	time clock and motion sensors	supply only	time clock or BMS controlled
Building B Communal Space	LED	time clock and motion sensors	air conditioning	time clock or BMS controlled
Building B Corridors	LED	time clock and motion sensors	supply only	time clock or BMS controlled
Building B Main lobby	LED	time clock and motion sensors	supply only	time clock or BMS controlled
Building C Communal Space	LED	time clock and motion sensors	air conditioning	time clock or BMS controlled

Area	Primary Lighting System	Lighting Efficiency Measure	Ventilation system	Ventilation Efficiency Measure
Building C Corridors	LED	time clock and motion sensors	supply only	time clock or BMS controlled
Building C Main lobby	LED	time clock and motion sensors	supply only	time clock or BMS controlled
Building D Main lobby	LED	time clock and motion sensors	supply only	time clock or BMS controlled
Building E Corridors	LED	time clock and motion sensors	supply only	time clock or BMS controlled
Building E Main lobby	LED	time clock and motion sensors	supply only	time clock or BMS controlled
L16 WC	LED	motion sensors	exhaust only	time clock or BMS controlled
L16 Mechanical Plant	LED	manual on/off	no mechanical ventilation	N/A
L7 Building C Storage	LED	motion sensors	no mechanical ventilation	N/A
LG Carpark	LED	time clock and motion sensors	supply + exhaust	carbon monoxide monitor + VSD fan
LG Cleaners room	LED	manual on/off	supply + exhaust	None
LG Comms rooms	LED	manual on/off	air conditioning	time clock or BMS controlled
LG Fan room	LED	motion sensors	no mechanical ventilation	N/A
LG Fire Pump Room	LED	manual on/off	supply + exhaust	None
LG Fire Reel & Cold Pump	LED	manual on/off	supply + exhaust	None
LG Fire Tank	LED	manual on/off	no mechanical ventilation	N/A
LG Gym	LED	time clocks	exhaust only	time clock or BMS controlled
LG Main Switch Room	LED	manual on/off	supply only	None
LG WC	LED	motion sensors	exhaust only	time clock or BMS controlled
Service rooms	LED	manual on/off	air conditioning	time clock or BMS controlled
Lifts	LED	connected to lift call button	N/A	N/A

### 1.2.2 Dwellings (Building A, B, C, D and E):

- Individual fan ducted to façade exhausts for bathroom, laundry, and kitchen. Bathroom and Laundry exhausts are controlled by a light switch. Kitchen fan is a manual switch on/off.
- For affordable apartments (All of Building A + Building B GF – L5 and B601) and standard 1-bedroom apartments, 1-phase air-conditioning (EER 3.0 – 3.5) for heating and cooling to be provided to the living areas only.
- For all other apartments, 1-phase air conditioning (EER 3.0 – 3.5), with day/night zoning for heating and cooling in living and bedroom areas.
- Dedicated fluorescent or LED fittings for all internal rooms.
- Induction cooktop and electric oven.
- Dishwasher: 3.5-star energy rating.
- Clothes Dryer: 2-star energy rating.
- No indoor or sheltered clothes drying line (e.g. screened line on balcony or line over bath).
- Spa with timer controlled electric heat pump for the following units:
  - Building B: B1502, B1503
  - Building C: C1603, C1604

### 1.3 Thermal Comfort

Element	Construction/Detail
<b>External Wall construction</b>	Brick Veneer, R2.5 bulk insulation, plasterboard - total R-value of 2.74 Metal Clad, R2.5 bulk, plasterboard – total R-value of 2.56
<b>External Wall (corridor)</b>	Brick Veneer, R2.5 bulk insulation, plasterboard - total R-value of 2.74 Metal Clad, R2.5 bulk, plasterboard – total R-value of 2.56
<b>External Wall Solar absorptance (0&lt;absorptance&lt;1)</b>	0.5 assumed (medium)
<b>Walls to Non-Conditioned Zones</b>	Concrete, no insulation, plasterboard – total R-value of 0.41
<b>Internal Wall</b>	Plasterboard, no insulation – total R-value of 0.28
<b>Party Walls/Intertenancy Walls</b>	Concrete, no insulation, plasterboard – total R-value of 0.41
<b>Exposed Ceiling/Roof</b>	Cast Concrete 200mm with added R2.5 insulation - total R-value of 2.84
<b>Roof Solar absorptance (0&lt;absorptance&lt;1)</b>	0.5 assumed (medium)
<b>Suspended Floor to non-conditioned space (above car park) or External Floor</b>	Cast Concrete with added R1.5 soffit insulation to under slab – total R-value of R1.74 <b>Only applicable to unit EG01 and EG02:</b> Cast Concrete with added R2.5 soffit insulation to under slab - total R-value of R2.74 <b>Only applicable to unit CLG04:</b> Cast Concrete with added R4.0 soffit insulation to under slab - total R-value of R4.24
<b>Internal Floor construction</b>	Concrete Slab, no insulation – total R-value of 0.24
<b>Floor coverings</b>	Timber/engineered wood coverings in living and kitchen areas. Tiles in wet areas. Timber/engineered wood coverings in affordable housing unit bedrooms <b>(applicable to all units in Tower A, and all apartments from Ground Floor to L5 and B601 in Tower B – 81 units total).</b> Carpet in all other unit bedrooms.
<b>Window system performance*</b>	<b><u>Glazing Type 1:</u></b> Awnings, Bifold, Casement, Hinged: <b>U-Value 3.4 SHGC 0.47</b> Sliding, Fixed, Double Hung: <b>U-Value 3.4 SHGC 0.53</b> <b><i>Applicable to all units, except those specified in Glazing Type 2 and Glazing Type 3.</i></b>
	<b><u>Glazing Type 2:</u></b> Awnings, Bifold, Casement, Hinged: <b>U-Value 3.1 SHGC 0.39</b> Sliding, Fixed, Double Hung: <b>U-Value 3.1 SHGC 0.49</b> <b><i>Applicable to the below unit.</i></b> <b>EG02</b>

Element	Construction/Detail
	<p><b><u>Glazing Type 3 :</u></b></p> <p>Awnings, Bifold, Casement, Hinged: <b>U-Value 3.6 SHGC 0.28</b></p> <p>Sliding, Fixed, Double Hung: <b>U-Value 3.6 SHGC 0.28</b></p> <p><b><i>Applicable to the below units.</i></b></p> <p><b><i>EB103, ELG03, EG04, CLG04</i></b></p> <p><b><u>Skylights:</u></b></p> <p>Skylights: <b>U-value of 4.2 and SHGC of 0.72</b></p> <p><b><i>Applicable to the below units.</i></b></p> <p><b><i>B1502, B1405, C1605, C1606, E1601.</i></b></p> <p>All external doors and windows are weather-stripped.</p> <p><i>* NOTE: Specified U-value is the maximum. SHGC allowance of +/-10%.</i></p>
<b>Window operability</b>	<p>Window type and openness according to Architectural drawings.</p> <p>All operable windows not next to the balcony, above 2m from the ground, are to be fitted with BCA complying restrictor with adequate strength to act as fall prevention device. These windows have been modelled to have 10% opening which aligns with the NatHERS Technical Notes.</p>
<b>Shading Devices</b>	<p>As per architectural drawings.</p>
<b>Ceiling Penetrations</b>	<p>Thermally sealed downlights have been assumed in all models.</p> <p>Exhaust fans have been modelled as 1 per bathroom, 1 per laundry if available and 1 per kitchen.</p> <p>Weather seals for all exhausts and ventilation vents have been assumed in all models.</p>
<b>Corridor Ventilation</b>	<p><b>Tower D</b></p> <p>Naturally ventilated</p> <p><b>All other corridors</b></p> <p>Mechanically ventilated</p>