

The following BASIX and thermal comfort specifications have been prepared by Integreco on behalf of Arncliffe Eden Property Pty Ltd.

The specifications are also utilised in the following certified documents:

1. Certificates for Building C:

- BASIX Certificate 1157001M with water score 42/40 and energy score 35/25
- NatHERS Certificate 0006203140

2. Certificates for Buildings A,B,D:

- BASIX Certificate 1187742M with water score 53/40 and energy score 31/25
- NatHERS Certificate 0006203140

BASIX Water Item	Proposed Specifications (42/40 for C +53/40 for A,B,D)
Rainwater Tanks – 6 total	4 x 22.7 kL (one per building) + 2 x 22.7 kL for public park
Rainwater Tank collection	C = 376 m ² + (A = 100, B = 313, D = 575) + communal tanks
Rainwater Tank use	Rainwater for irrigation + car wash bay
Stormwater Tank	None
Fire Sprinklers	Basement + all Buildings
Fire Sprinkler Test Water (2 systems)	All test water reused closed loops (Building + basement testing)
Showers	≤ 6 L/min (4 star)
Toilets	≥ 4 star
Kitchen Taps	≥ 5 star
Bathroom Taps	≥ 6 star
On demand hot recirculation	No
Clothes washers	A,B,D – 4.5 stars but C - Not supplied
Dishwashers	A,B,D – 4.5 stars but C - Not supplied
Planting and lawn – total	4,842 m ² = 3,592 + 1,250 respectively (incl ground, roofs)
Planting and lawn – C	235 m ² + 0 m ² (including ground, roof, etc)
Planting and lawn -A,B,D	4,607 m ² = 3,357 + 1,250 (including ground, roof, etc)
Planting – low water species	≥75% of plants (not lawn) locally indig. or 1-drop species
Blackwater/Greywater reuse	None
Pools and Spas	None

BASIX Energy Item	Proposed Specifications (35/25 for C +31/25 for A,B,D)
Heating for Units	A,B,D = 1 phase, EER >3.5, but C - Not supplied
Cooling for Units	A,B,D = 1 phase, EER >3.0, but C - Not supplied
AC zoning (day or night)	Yes – so only bedroom or living can be used, not both together
Bathroom Exhaust	Fan to façade/roof - manual switch
Laundry Exhaust	Fan to façade/roof - manual switch
Kitchen Exhaust	Fan to façade/roof - manual switch
Lighting for Apartments – all rooms	LEDs ≥80% fittings in all unit rooms (dedicated)
Vented fridge-spaces	No (needs ≥ 1 side or top totally open)
Cooking	Induction cooktop & electric oven
Fridges	Not supplied
Clothes washers	A,B,D – 4.0 stars but C - Not supplied
Dishwashers	A,B,D – 3.5 stars but C - Not supplied
Dryers	A,B,D – 2.5 stars but C - Not supplied
Lifts	VVVF gearless traction
BMS – Building Management Syst.	Yes
PFC – Power Factor Correction	Yes
PV Solar Power	157.5 kW (40kW for C and 117.5kW for A, B, D).
Clothes lines private	None except C has retractable clothes lines (on balcony/internal)
Common washing	None
Common dryers	None
Hot Water	Central gas-fired boiler
Hot Water Piping insulation	R1.0 to ringmains and supply risers
Car Park Ventilation	Mech supply/exhaust - with VSD fans and CO monitors
Loading Dock Ventilation	Mech supply/exhaust - with VSD fans and CO monitors
Hall/Lobby Ventilation	Mech supply – time clock or BMS
Plant Room Ventilation	Mech supply - continuous
Substation Room Ventilation	Mech supply - continuous
Storage Room Ventilation	Mech supply - continuous
Switch Room Ventilation	Mech supply – continuous (with thermo-sensors)
Fan Room Ventilation	No mech supply
Mail Room Ventilation	No mech supply
Garbage rooms Ventilation	Mech exhaust - continuous
Lift lights	LEDs (connected to call-button)
Car Park Lights	LEDs, motion sensor + zoning
Basement Lights	LEDs, motion sensor + zoning
Lobbies Lights	LEDs, daylight sensor + zoning
Corridors Lights	LEDs, motion sensor + zoning
Mail room Lights	LEDs, motion sensor + zoning
Switch rooms Lights	LEDs, manual on/off switch
Garbage Rooms Lights	LEDs, motion sensor
Plant rooms Lights	LEDs, motion sensor
Fan rooms Lights	LEDs, motion sensor
Storage room Lights	LEDs, motion sensor

Thermal Comfort Item	Specifications scoring 7.1 star ave for A,B,C,D
External Walls 1	FC/metal walls with R2.5 added
External Walls 2	Brick walls with R2.5 added
External Walls 3	Concrete walls with R2.5 added
Unit Walls next to halls/lobbies	Plasterboard (or concrete) + acoustic insulation
Party walls	Plasterboard + acoustic insulation
Walls next to lifts	Concrete $\geq 150\text{mm}$ and plasterboard
Walls next to stairs	Concrete $\geq 150\text{mm}$ and plasterboard
Internal Walls	Plasterboard on Studs
Internal Floors	Concrete floors, with plasterboard below
External Floors	Concrete slab with basement below
External Floor Insulation over Basement	R2 subfloors for units over basement
External Floor Insulation over cantilever	R2 subfloors for units over open air
Floor Finishes	Tiles - wet areas, carpet - beds, timber – living/dining
Penthouse Roofs	Concrete roof + R3.5 under and plasterboard
Roofs - below terraces	Concrete roof + R3.5 under and plasterboard
Roofs - below balcony	Concrete roof + R2.5 under and plasterboard
Roof Colour	Medium colour
Windows (inner skin on balconies/WGs)	Aluminium frames and double glazed, tinted
Windows - U-value	≤ 3.6 awning/bifold, ≤ 3.0 fixed/sliders
Windows – SHGC	$0.23 \pm 5\%$ awning/bifold, $0.26 \pm 5\%$ fixed/sliders
Windows- all on façade edges	Aluminium frames and double glazed, tinted
Windows - U-value	≤ 3.6 awning/bifold, ≤ 3.0 fixed/sliders
Windows – SHGC	$0.23 \pm 5\%$ awning/bifold, $0.26 \pm 5\%$ fixed/sliders
Skylights	Aluminium + double glaze tint – $U \leq 3.4$, SHGC = $0.40 \pm 5\%$
Window Shading	Fixed devices, Eaves and overhangs as shown
Weather Stripping	All external doors and windows
Ceiling Penetrations Lights	LED downlights sealed or oyster (so small/no holes in insulation)
Ceiling Penetrations Fans	Bathroom, laundry and kitchen penetrations
Window openings	Sliders as per plans, awning as per elevations
Ceiling fans (up to 1 star summer bonus)	Not for A,B,D but used for Building C (bedrooms and living)