

BASIX™ Certificate

Building Sustainability Index

www.planningportal.nsw.gov.au/development-and-assessment/basix

Multi Dwelling

Certificate number: 1846161M

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.planningportal.nsw.gov.au/definitions

Secretary

Date of issue: Wednesday, 13 May 2026

To be valid, this certificate must be submitted with a development application or lodged with a complying development certificate application within 3 months of the date of issue.



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate HR-ZCJL1A-01.

Project summary

Project name	156-166 Rickard Road (Block 3)
Street address	166 RICKARD ROAD LEPPINGTON 2179
Local Government Area	CAMDEN
Plan type and plan number	Deposited Plan 8979
Lot No.	37
Section no.	-
No. of residential flat buildings	3
Residential flat buildings: no. of dwellings	404
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

Project score

Water	✓ 50	Target 40
Thermal Performance (Simulation method)	✓ Pass	Target Pass
Energy	✓ 73	Target 58
Materials	✓ -100	Target n/a

Certificate Prepared by

Name / Company Name: SLR Consulting Pty Ltd

ABN (if applicable): 29001584612

Description of project

Project address	
Project name	156-166 Rickard Road (Block 3)
Street address	166 RICKARD ROAD LEPPINGTON 2179
Local Government Area	CAMDEN
Plan type and plan number	Deposited Plan 8979
Lot No.	37
Section no.	-
Project type	
No. of residential flat buildings	3
Residential flat buildings: no. of dwellings	404
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0
Site details	
Site area (m²)	7630
Roof area (m²)	2821
Non-residential floor area (m²)	0
Residential car spaces	663
Non-residential car spaces	0

Common area landscape		
Common area lawn (m²)	783	
Common area garden (m²)	1577	
Area of indigenous or low water use species (m²)	700	
Assessor details and thermal loads		
Assessor number	101556	
Certificate number	HR-ZCJL1A-01	
Climate zone	28	
Project score		
Water	✓ 50	Target 40
Thermal Performance (Simulation method)	✓ Pass	Target Pass
Energy	✓ 73	Target 58
Materials	✓ -100	Target n/a

Description of project

The tables below describe the dwellings and common areas within the project

Residential flat buildings - BuildingA, 188 dwellings, 20 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A0101	2	76	0	0	0
A0105	3	105.60	0	0	0
A0201	2	76	0	0	0
A0205	2	77.80	0	0	0
A0209	2	77.60	0	0	0
A0303	2	81.6	0	0	0
A0307	3	105.6	0	0	0
A0401	2	76	0	0	0
A0405	2	77.8	0	0	0
A0409	2	77.6	0	0	0
A0503	2	81.6	0	0	0
A0507	3	105.6	0	0	0
A0601	2	76	0	0	0
A0605	2	77.8	0	0	0
A0609	2	77.6	0	0	0
A0703	2	81.6	0	0	0
A0707	3	105.6	0	0	0
A0801	2	76	0	0	0
A0805	2	77.8	0	0	0
A0809	2	77.6	0	0	0
A0903	2	81.6	0	0	0
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A0102	3	102.80	0	0	0
A0106	2	83.10	0	0	0
A0202	3	102.80	0	0	0
A0206	1	58.20	0	0	0
A0210	2	80.6	0	0	0
A0304	2	75.2	0	0	0
A0308	2	83.1	0	0	0
A0402	3	102.8	0	0	0
A0406	1	58.2	0	0	0
A0410	2	80.6	0	0	0
A0504	2	75.2	0	0	0
A0508	2	83.1	0	0	0
A0602	3	102.8	0	0	0
A0606	1	58.2	0	0	0
A0610	2	80.6	0	0	0
A0704	2	75.2	0	0	0
A0708	2	83.1	0	0	0
A0802	3	102.8	0	0	0
A0806	1	58.2	0	0	0
A0810	2	80.6	0	0	0
A0904	2	75.2	0	0	0
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A0103	2	77.80	0	0	0
A0107	2	77.6	0	0	0
A0203	2	81.60	0	0	0
A0207	3	105.60	0	0	0
A0301	2	76	0	0	0
A0305	2	77.8	0	0	0
A0309	2	77.6	0	0	0
A0403	2	81.6	0	0	0
A0407	3	105.6	0	0	0
A0501	2	76	0	0	0
A0505	2	77.8	0	0	0
A0509	2	77.6	0	0	0
A0603	2	81.6	0	0	0
A0607	3	105.6	0	0	0
A0701	2	76	0	0	0
A0705	2	77.8	0	0	0
A0709	2	77.6	0	0	0
A0803	2	81.6	0	0	0
A0807	3	105.6	0	0	0
A0901	2	76	0	0	0
A0905	2	77.8	0	0	0
Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A0104	1	58.20	0	0	0
A0108	2	80.6	0	0	0
A0204	2	75.20	0	0	0
A0208	2	83.10	0	0	0
A0302	3	102.8	0	0	0
A0306	1	58.2	0	0	0
A0310	2	80.6	0	0	0
A0404	2	75.2	0	0	0
A0408	2	83.1	0	0	0
A0502	3	102.8	0	0	0
A0506	1	58.2	0	0	0
A0510	2	80.6	0	0	0
A0604	2	75.2	0	0	0
A0608	2	83.1	0	0	0
A0702	3	102.8	0	0	0
A0706	1	58.2	0	0	0
A0710	2	80.6	0	0	0
A0804	2	75.2	0	0	0
A0808	2	83.1	0	0	0
A0902	3	102.8	0	0	0
A0906	1	58.2	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A0907	3	105.6	0	0	0
A1001	2	76	0	0	0
A1005	2	77.8	0	0	0
A1009	2	77.6	0	0	0
A1103	2	81.6	0	0	0
A1107	3	105.6	0	0	0
A1201	2	76	0	0	0
A1205	2	77.8	0	0	0
A1209	2	77.6	0	0	0
A1303	2	81.6	0	0	0
A1307	3	105.6	0	0	0
A1401	2	76	0	0	0
A1405	2	77.8	0	0	0
A1409	2	77.6	0	0	0
A1503	2	81.6	0	0	0
A1507	3	105.6	0	0	0
A1601	2	76	0	0	0
A1605	2	77.8	0	0	0
A1609	2	77.6	0	0	0
A1703	2	81.6	0	0	0
A1707	3	105.6	0	0	0
A1801	2	76	0	0	0
A1805	2	77.8	0	0	0
A1809	2	77.6	0	0	0
A1903	2	81.6	0	0	0
A1907	3	105.6	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A0908	2	83.1	0	0	0
A1002	3	102.8	0	0	0
A1006	1	58.2	0	0	0
A1010	2	80.6	0	0	0
A1104	2	75.2	0	0	0
A1108	2	83.1	0	0	0
A1202	3	102.8	0	0	0
A1206	1	58.2	0	0	0
A1210	2	80.6	0	0	0
A1304	2	75.2	0	0	0
A1308	2	83.1	0	0	0
A1402	3	102.8	0	0	0
A1406	1	58.2	0	0	0
A1410	2	80.6	0	0	0
A1504	2	75.2	0	0	0
A1508	2	83.1	0	0	0
A1602	3	102.8	0	0	0
A1606	1	58.2	0	0	0
A1610	2	80.6	0	0	0
A1704	2	75.2	0	0	0
A1708	2	83.1	0	0	0
A1802	3	102.8	0	0	0
A1806	1	58.2	0	0	0
A1810	2	80.6	0	0	0
A1904	2	75.2	0	0	0
A1908	2	83.1	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A0909	2	77.6	0	0	0
A1003	2	81.6	0	0	0
A1007	3	105.6	0	0	0
A1101	2	76	0	0	0
A1105	2	77.8	0	0	0
A1109	2	77.6	0	0	0
A1203	2	81.6	0	0	0
A1207	3	105.6	0	0	0
A1301	2	76	0	0	0
A1305	2	77.8	0	0	0
A1309	2	77.6	0	0	0
A1403	2	81.6	0	0	0
A1407	3	105.6	0	0	0
A1501	2	76	0	0	0
A1505	2	77.8	0	0	0
A1509	2	77.6	0	0	0
A1603	2	81.6	0	0	0
A1607	3	105.6	0	0	0
A1701	2	76	0	0	0
A1705	2	77.8	0	0	0
A1709	2	77.6	0	0	0
A1803	2	81.6	0	0	0
A1807	3	105.6	0	0	0
A1901	2	76	0	0	0
A1905	2	77.8	0	0	0
A1909	2	77.6	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A0910	2	80.6	0	0	0
A1004	2	75.2	0	0	0
A1008	2	83.1	0	0	0
A1102	3	102.8	0	0	0
A1106	1	58.2	0	0	0
A1110	2	80.6	0	0	0
A1204	2	75.2	0	0	0
A1208	2	83.1	0	0	0
A1302	3	102.8	0	0	0
A1306	1	58.2	0	0	0
A1310	2	80.6	0	0	0
A1404	2	75.2	0	0	0
A1408	2	83.1	0	0	0
A1502	3	102.8	0	0	0
A1506	1	58.2	0	0	0
A1510	2	80.6	0	0	0
A1604	2	75.2	0	0	0
A1608	2	83.1	0	0	0
A1702	3	102.8	0	0	0
A1706	1	58.2	0	0	0
A1710	2	80.6	0	0	0
A1804	2	75.2	0	0	0
A1808	2	83.1	0	0	0
A1902	3	102.8	0	0	0
A1906	1	58.2	0	0	0
A1910	2	80.6	0	0	0

Residential flat buildings - BuildingB, 191 dwellings, 20 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
B0101	2	76	0	0	0
B0105	3	105.6	0	0	0
B0201	2	76	0	0	0
B0205	2	77.8	0	0	0
B0209	2	77.6	0	0	0
B0303	2	81.6	0	0	0
B0307	3	105.6	0	0	0
B0401	2	76	0	0	0
B0405	2	77.8	0	0	0
B0409	2	77.6	0	0	0
B0503	2	81.6	0	0	0
B0507	3	105.6	0	0	0
B0601	2	76	0	0	0
B0605	2	77.8	0	0	0
B0609	2	77.6	0	0	0
B0703	2	81.6	0	0	0
B0707	3	105.6	0	0	0
B0801	2	76	0	0	0
B0805	2	77.8	0	0	0
B0809	2	77.6	0	0	0
B0903	3	81.6	0	0	0
B0907	3	105.6	0	0	0
B0G01	2	76.1	0	0	0
B1002	3	102.8	0	0	0
B1006	1	58.2	0	0	0
Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
B0102	3	102.8	0	0	0
B0106	2	83.1	0	0	0
B0202	3	102.8	0	0	0
B0206	1	58.2	0	0	0
B0210	2	80.6	0	0	0
B0304	2	75.2	0	0	0
B0308	2	83.1	0	0	0
B0402	3	102.8	0	0	0
B0406	1	58.2	0	0	0
B0410	2	80.6	0	0	0
B0504	2	75.2	0	0	0
B0508	2	83.1	0	0	0
B0602	3	102.8	0	0	0
B0606	1	58.2	0	0	0
B0610	2	80.6	0	0	0
B0704	2	75.2	0	0	0
B0708	2	83.1	0	0	0
B0802	3	102.8	0	0	0
B0806	1	58.2	0	0	0
B0810	2	80.6	0	0	0
B0904	2	75.2	0	0	0
B0908	2	83.1	0	0	0
B0G02	3	102.8	0	0	0
B1003	2	81.6	0	0	0
B1007	3	105.6	0	0	0
Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
B0103	2	77.8	0	0	0
B0107	2	77.6	0	0	0
B0203	2	81.6	0	0	0
B0207	3	105.6	0	0	0
B0301	2	76	0	0	0
B0305	2	77.8	0	0	0
B0309	2	77.6	0	0	0
B0403	2	81.6	0	0	0
B0407	3	105.6	0	0	0
B0501	2	76	0	0	0
B0505	2	77.8	0	0	0
B0509	2	77.6	0	0	0
B0603	2	81.6	0	0	0
B0607	3	105.6	0	0	0
B0701	2	76	0	0	0
B0705	2	77.8	0	0	0
B0709	2	77.6	0	0	0
B0803	2	81.6	0	0	0
B0807	3	105.6	0	0	0
B0901	2	76	0	0	0
B0905	2	77.8	0	0	0
B0909	2	77.6	0	0	0
B0G03	2	80.60	0	0	0
B1004	2	75.2	0	0	0
B1008	2	83.1	0	0	0
Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
B0104	1	58.2	0	0	0
B0108	2	80.6	0	0	0
B0204	2	75.2	0	0	0
B0208	2	83.1	0	0	0
B0302	3	102.8	0	0	0
B0306	1	58.2	0	0	0
B0310	2	80.6	0	0	0
B0404	2	75.2	0	0	0
B0408	2	83.1	0	0	0
B0502	3	102.8	0	0	0
B0506	1	58.2	0	0	0
B0510	2	80.6	0	0	0
B0604	2	75.2	0	0	0
B0608	2	83.1	0	0	0
B0702	3	102.8	0	0	0
B0706	1	58.2	0	0	0
B0710	2	80.6	0	0	0
B0804	2	75.2	0	0	0
B0808	2	83.1	0	0	0
B0902	3	102.8	0	0	0
B0906	1	58.2	0	0	0
B0910	2	80.6	0	0	0
B1001	2	76	0	0	0
B1005	2	77.8	0	0	0
B1009	2	77.6	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B1010	2	80.6	0	0	0
B1104	2	75.2	0	0	0
B1108	2	83.1	0	0	0
B1202	3	102.8	0	0	0
B1206	1	83.1	0	0	0
B1210	2	80.6	0	0	0
B1304	2	75.2	0	0	0
B1308	2	83.1	0	0	0
B1402	3	102.8	0	0	0
B1406	1	58.2	0	0	0
B1410	2	80.6	0	0	0
B1504	2	75.2	0	0	0
B1508	2	83.1	0	0	0
B1602	3	102.8	0	0	0
B1606	1	58.2	0	0	0
B1610	2	80.6	0	0	0
B1704	2	75.2	0	0	0
B1708	2	83.1	0	0	0
B1802	3	102.8	0	0	0
B1806	1	58.2	0	0	0
B1810	2	80.6	0	0	0
B1904	2	75.2	0	0	0
B1908	2	83.1	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B1101	2	76	0	0	0
B1105	2	77.8	0	0	0
B1109	2	77.6	0	0	0
B1203	2	81.6	0	0	0
B1207	3	77.6	0	0	0
B1301	2	76	0	0	0
B1305	2	77.8	0	0	0
B1309	2	77.6	0	0	0
B1403	2	81.6	0	0	0
B1407	3	105.6	0	0	0
B1501	2	76	0	0	0
B1505	2	77.8	0	0	0
B1509	2	77.6	0	0	0
B1603	2	81.6	0	0	0
B1607	3	105.6	0	0	0
B1701	2	76	0	0	0
B1705	2	77.8	0	0	0
B1709	2	77.6	0	0	0
B1803	2	81.6	0	0	0
B1807	3	105.6	0	0	0
B1901	2	76	0	0	0
B1905	2	77.8	0	0	0
B1909	2	77.6	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B1102	3	102.8	0	0	0
B1106	1	58.2	0	0	0
B1110	1	80.6	0	0	0
B1204	2	58.2	0	0	0
B1208	2	83.1	0	0	0
B1302	3	102.8	0	0	0
B1306	1	58.2	0	0	0
B1310	2	80.6	0	0	0
B1404	2	75.2	0	0	0
B1408	2	83.1	0	0	0
B1502	3	102.8	0	0	0
B1506	1	58.2	0	0	0
B1510	2	80.6	0	0	0
B1604	2	75.2	0	0	0
B1608	2	83.1	0	0	0
B1702	3	102.8	0	0	0
B1706	1	58.2	0	0	0
B1710	2	80.6	0	0	0
B1804	2	75.2	0	0	0
B1808	2	83.1	0	0	0
B1902	3	102.8	0	0	0
B1906	1	58.2	0	0	0
B1910	2	80.6	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
B1103	2	81.6	0	0	0
B1107	3	105.6	0	0	0
B1201	2	76	0	0	0
B1205	2	105.6	0	0	0
B1209	2	77.6	0	0	0
B1303	2	81.6	0	0	0
B1307	3	105.6	0	0	0
B1401	2	76	0	0	0
B1405	2	77.8	0	0	0
B1409	2	77.6	0	0	0
B1503	2	81.6	0	0	0
B1507	3	105.6	0	0	0
B1601	2	76	0	0	0
B1605	2	77.8	0	0	0
B1609	2	77.6	0	0	0
B1703	2	81.6	0	0	0
B1707	3	105.6	0	0	0
B1801	2	76	0	0	0
B1805	2	77.8	0	0	0
B1809	2	77.6	0	0	0
B1903	2	81.6	0	0	0
B1907	3	105.6	0	0	0

Residential flat buildings - BuildingC, 25 dwellings, 7 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C0201	2	77.3	0	0	0
C0205	2	77.3	0	0	0
C0304	2	77.3	0	0	0
C0403	2	77.3	0	0	0
C0502	2	77.3	0	0	0
C0601	2	77.3	0	0	0
C0605	2	77.3	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C0202	2	77.3	0	0	0
C0301	2	77.3	0	0	0
C0305	2	77.3	0	0	0
C0404	2	77.3	0	0	0
C0503	2	77.3	0	0	0
C0602	2	77.3	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C0203	3	77.3	0	0	0
C0302	2	77.3	0	0	0
C0401	2	77.3	0	0	0
C0405	2	77.3	0	0	0
C0504	2	77.3	0	0	0
C0603	2	77.3	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
C0204	2	77.3	0	0	0
C0303	2	77.3	0	0	0
C0402	2	77.3	0	0	0
C0501	2	77.3	0	0	0
C0505	2	77.3	0	0	0
C0604	2	77.3	0	0	0

Description of project

The tables below describe the dwellings and common areas within the project

Common areas of unit building - BuildingA

Common area	Floor area (m²)	Common area	Floor area (m²)	Common area	Floor area (m²)
Plant or service room (Nat Vent)-BA	240	Ground floor lobby-BA	309	Hallway/lobby type-BA	1465

Common areas of unit building - BuildingB

Common area	Floor area (m²)	Common area	Floor area (m²)	Common area	Floor area (m²)
Plant or service room (Nat Vent)-BB	240	Ground floor lobby-BB	300.7	Hallway/lobby type (No. 2)	1465

Common areas of unit building - BuildingC

Common area	Floor area (m²)	Common area	Floor area (m²)	Common area	Floor area (m²)
Lift bank (No. 1)	-	Lift bank (No. 2)	-	Lift bank (No. 3)	-
Hallway/lobby type (No. 3)	714				

Common areas of the development (non-building specific)

Common area	Floor area (m²)	Common area	Floor area (m²)	Common area	Floor area (m²)
Gym area (No. 1)	280	Undercover car park area (No. 1)	1577	Garbage room	450
Plant or service room (Mec Vent)	624	Bike Storage/FCR	190		

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - BuildingA

(a) Buildings

(i) Materials

(b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

(c) Common areas and central systems/facilities

(i) Water

(ii) Energy

2. Commitments for Residential flat buildings - BuildingB

(a) Buildings

(i) Materials

(b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

(c) Common areas and central systems/facilities

(i) Water

(ii) Energy

3. Commitments for Residential flat buildings - BuildingC

(a) Buildings

(i) Materials

(b) Dwellings

(i) Water

- (ii) Energy
- (iii) Thermal Performance

(c) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

4. Commitments for multi-dwelling housing

(a) Dwellings

- (i) Water
- (ii) Energy
- (iii) Thermal Performance and Materials

5. Commitments for single dwelling houses

(a) Dwellings

- (i) Water
- (ii) Energy
- (iii) Thermal Performance and Materials

6. Commitments for common areas and central systems/facilities for the development (non-building specific)

(a) Buildings 'Other'

- (i) Materials

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

1. Commitments for Residential flat buildings - Building A

(a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
floors above habitable rooms, frame: suspended concrete slab	23060	-	-
suspended floor above garage, frame: suspended concrete slab	1446	foil-foam composite board	-

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	single skin autoclaved aerated concrete (AAC), frame: heavy steel post and beam frame	6987	-	fibreglass batts or roll

Internal wall types			
Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	75 mm AAC panel, frame:light steel frame	4338	fibreglass batts or roll
Internal wall type 2	75 mm AAC panel, frame:light steel frame	3614	-
Internal wall type 3	plasterboard, frame:light steel frame	5545	-
Internal wall type 4	Concrete, frame:no frame	6070	-

Reinforcement concrete frames/columns		
Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
-	-	-

Ceiling and roof types			
Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: no frame	1008	foil/sarking	fibreglass batts or roll

Glazing types			Frame types				
Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)
2813	2280	-	5093	-	-	-	-

(b) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install: (aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and (bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓ ✓	✓ ✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 6 but ≤ 7.5 L/min)	4 star	5 star	5 star	-	5 star	4 star	-	-	-	-	-	-	-

	Alternative water source							
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	No alternative water supply	-	-	-	-	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✓	

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 1)	individual fan into central duct + VSD	interlocked to light with timer off	individual fan into central duct + VSD	manual switch on/off	individual fan into central duct + VSD	manual switch on/off

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
All dwellings	1-phase airconditioning - non ducted / 4.5 star (average zone)	1-phase airconditioning - ducted / 4.5 star (average zone)	1-phase airconditioning - ducted / 4.5 star (average zone)	1-phase airconditioning - ducted / 4.5 star (average zone)	0	-

	Individual pool			Individual spa		Appliances other efficiency measures				
Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	induction cooktop & electric oven	4.5 star	5 star	yes	no

(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✓		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✓	

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
A0101	61.3	9.9	71.200
A0102	37	29.5	66.500
A0103	51.5	7.2	58.700
A0104	47.8	10.1	57.900

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
A0105	45.8	25.1	70.900
A0106	30	33.2	63.200
A0107	46.6	13.3	59.900
A0108	57.7	11.6	69.300
A0201	61.8	10.5	72.300
A0202	36.5	30	66.500
A0203	37.4	27.9	65.300
A0204	31.3	22.9	54.200
A0205	53.6	9	62.600
A0207	39.3	27.6	66.900
A0208	30.5	32.2	62.700
A0209	47.4	13	60.400
A0210	58.5	11.6	70.100
A0301	46.7	6.9	53.600
A0302	38.6	25.4	64.000
A0303	35.6	23.8	59.400
A0304	34.4	20.4	54.800
A0305	58.5	7.8	66.300
A0306	56.3	10.9	67.200
A0307	42.8	22.2	65.000
A0308	48.4	30.4	78.800
A0310	60.2	11.7	71.900
A0401	47.1	7	54.100
A0403	28.5	25.3	53.800
A0404	34.9	20.4	55.300
A0405	59.2	7.8	67.000
A0406	56.9	10.8	67.700
A0407	43.4	21.9	65.300
A0408	49.1	29.8	78.900
A0409	52.2	12	64.200
A0410	61	11.7	72.700

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
A0501	47.6	7	54.600
A0502	32.6	26.5	59.100
A0503	21.2	26.7	47.900
A0504	35.3	20.4	55.700
A0505	59.9	7.9	67.800
A0506	57.4	10.4	67.800
A0507	43.9	21.7	65.600
A0508	34.5	25.1	59.600
A0509	52.9	11.8	64.700
A0510	61.7	11.7	73.400
A0601	47.9	7	54.900
A0602	30.7	27.3	58.000
A0603	16.9	28.6	45.500
A0604	35.5	20.7	56.200
A0605	60.3	7.8	68.100
A0606	57.8	10.8	68.600
A0607	44.3	21.6	65.900
A0608	34.9	24.8	59.700
A0609	53.4	11.7	65.100
A0610	62.3	11.7	74.000
A0701	48.2	7.4	55.600
A0702	30.7	27.8	58.500
A0703	16.3	29.4	45.700
A0704	35.7	22.1	57.800
A0705	60.7	8	68.700
A0706	57.9	10.6	68.500
A0707	44.5	21.3	65.800
A0708	35.3	24.1	59.400
A0709	53.9	11.7	65.600
A0710	62.8	11.7	74.500
A0801	47.8	7.6	55.400

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
A0802	30.9	27.9	58.800
A0803	16.5	28.6	45.100
A0804	35.8	22.9	58.700
A0805	56.6	8.9	65.500
A0806	57.2	11	68.200
A0807	44.5	21	65.500
A0808	35.4	24.2	59.600
A0809	54	11.6	65.600
A0810	60.4	12.2	72.600
A0901	63.9	9.8	73.700
A0902	28.4	28.3	56.700
A0903	12.4	31.1	43.500
A0904	35.3	22.1	57.400
A0905	49.2	8.3	57.500
A0906	48.9	11.2	60.100
A0907	43.6	20	63.600
A0908	34.7	22.6	57.300
A0909	52.6	7.8	60.400
A0910	53.6	10.6	64.200
A1001	50.9	6.1	57.000
A1003	19.5	24.1	43.600
A1004	37.4	22.8	60.200
A1005	63.1	8.9	72.000
A1006	59.4	11	70.400
A1007	46.2	18.8	65.000
A1008	37.7	21.6	59.300
A1009	57.3	9	66.300
A1010	45.8	6.7	52.500
A1101	50.7	6.6	57.300
A1102	34.2	24	58.200
A1103	19.1	23.6	42.700

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
A1104	36.3	24.3	60.600
A1105	62.1	9.1	71.200
A1106	56.7	10.9	67.600
A1107	44.8	18.7	63.500
A1108	37.6	21.7	59.300
A1109	57.1	8.9	66.000
A1110	45.6	6.7	52.300
A1201	50.8	6.9	57.700
A1203	19.2	22.9	42.100
A1204	35.2	25.5	60.700
A1205	60.7	9.5	70.200
A1206	53.6	11.2	64.800
A1207	43.2	18.9	62.100
A1208	37.8	21.5	59.300
A1209	57.4	9	66.400
A1210	45.9	6.8	52.700
A1301	50.7	7	57.700
A1303	19	23.8	42.800
A1304	33.1	26.7	59.800
A1305	57.4	9.7	67.100
A1306	50.6	11.5	62.100
A1307	41.3	18.7	60.000
A1308	37.9	21.4	59.300
A1309	57.6	9	66.600
A1310	45.9	6.9	52.800
A1401	50.7	7.1	57.800
A1403	18.6	23.6	42.200
A1404	31.2	28.1	59.300
A1405	53.3	10	63.300
A1406	45.6	11.9	57.500
A1407	38.3	18.7	57.000

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
A1408	38.2	21.3	59.500
A1409	57.9	8.9	66.800
A1410	46.2	6.8	53.000
A1501	50.1	7.3	57.400
A1502	34.3	24.1	58.400
A1503	17.5	23.1	40.600
A1504	26.7	29.6	56.300
A1505	48.1	10.1	58.200
A1506	39.9	11.9	51.800
A1507	34.7	18.5	53.200
A1508	38.3	21.3	59.600
A1509	58.1	8.9	67.000
A1510	46.2	6.7	52.900
A1601	47.7	7.7	55.400
A1602	34.3	23.8	58.100
A1603	16.2	23	39.200
A1604	22.7	30.3	53.000
A1605	42.7	10.4	53.100
A1606	34.2	12.1	46.300
A1607	31.4	18.6	50.000
A1608	38.4	21	59.400
A1609	58.2	8.9	67.100
A1701	47.3	8.2	55.500
A1702	34.1	24.2	58.300
A1703	14.2	23.1	37.300
A1704	17.8	31.3	49.100
A1705	35.6	10.8	46.400
A1706	26.8	12.3	39.100
A1707	27.3	18.6	45.900
A1708	38.5	21	59.500
A1709	58.4	9	67.400

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
A1801	46	8.7	54.700
A1802	33.6	24.6	58.200
A1803	12.6	23.1	35.700
A1804	14.6	32.1	46.700
A1805	28.5	11.6	40.100
A1806	21.6	12.3	33.900
A1807	25	18.7	43.700
A1808	38.3	21	59.300
A1809	58.1	9.1	67.200
A1810	64.4	11.7	76.100
A1901	54	21.7	75.700
A1902	33.6	39.1	72.700
A1904	22	41.1	63.100
A1905	33.6	21.8	55.400
A1906	27.1	25	52.100
A1907	35.8	26.8	62.600
A1908	46.1	32.4	78.500
A1909	49.6	14.7	64.300
A1910	50.7	16.4	67.100
A0206, A0309	51.5	12.1	63.600
A0402, A1903	36.2	26.1	62.300
A1002, A1402	34.4	23.9	58.300
A1202, A1302	34.3	23.7	58.000
All other dwellings	46.3	6.8	53.100

(c) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Fire sprinkler system (No. 2)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Plant or service room (Nat Vent)-BA	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Ground floor lobby-BA	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no
Hallway/lobby type-BA	no mechanical ventilation	-	light-emitting diode	zoned switching with motion sensor	no

Central energy systems	Type	Specification
Lift bank (No. 1)	gearless traction with V V V F motor and regenerative drive	Number of levels with apartments served by a lift: 20 number of levels from the bottom of the lift shaft to the top of the lift shaft: 24 number of lifts: 3 lift load capacity: ≥ 1001 kg but ≤ 1500 kg
Central hot water system (No. 1)	electric heat pump – air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm) (c) Unit Efficiency: $3.5 < \text{COP} \leq 4.0$

2. Commitments for Residential flat buildings - BuildingB

(a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
floors above habitable rooms, frame: suspended concrete slab	22984	-	-
suspended floor above garage, frame: suspended concrete slab	1780	foil-foam composite board	-

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	single skin autoclaved aerated concrete (AAC), frame: light steel frame	7253	-	fibreglass batts or roll

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	75 mm AAC panel, frame: light steel frame	4354	fibreglass batts or roll
Internal wall type 2	75 mm AAC panel, frame: light steel frame	3655	-
Internal wall type 3	Concrete, frame: light steel frame	6150	-

Reinforcement concrete frames/columns		
Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
-	-	-

Ceiling and roof types			
Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: no frame	1008	foil/sarking	fibreglass batts or roll

Glazing types			Frame types				
Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)
4452	719	-	5171	-	-	-	-

(b) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install: (aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and (bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓ ✓	✓ ✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 6 but ≤ 7.5 L/min)	4 star	5 star	5 star	-	5 star	4 star	-	-	-	-	-	-	-

	Alternative water source							
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	No alternative water supply	-	-	-	-	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✓	

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and		✓	✓
(cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓	
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 2)	individual fan into central duct + VSD	interlocked to light with timer off	individual fan into central duct + VSD	manual switch on/off	individual fan into central duct + VSD	manual switch on/off

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
All dwellings	1-phase airconditioning - non ducted / 4.5 star (average zone)	1-phase airconditioning - ducted / 4.5 star (average zone)	1-phase airconditioning - ducted / 4.5 star (average zone)	1-phase airconditioning - ducted / 4.5 star (average zone)	0	-

	Individual pool			Individual spa		Appliances other efficiency measures				
Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	induction cooktop & electric oven	4.5 star	5 star	yes	no

(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✓		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✓	

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
B0101	16.3	14.4	30.700
B0102	8.5	18.3	26.800
B0103	58.7	8.4	67.100
B0104	58.3	8.8	67.100

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
B0105	49.8	22.9	72.700
B0106	23.5	31.2	54.700
B0107	11.8	12.1	23.900
B0108	20.1	17.2	37.300
B0201	17	14.5	31.500
B0202	8.7	18.1	26.800
B0203	49.4	21.7	71.100
B0204	43	25.7	68.700
B0205	62.2	10.6	72.800
B0206	55.6	11.2	66.800
B0207	41.9	25.9	67.800
B0208	20.4	35.9	56.300
B0209	12.4	12.9	25.300
B0210	20.8	16.9	37.700
B0301	20.3	12.4	32.700
B0302	11.4	15.9	27.300
B0303	49.5	22.8	72.300
B0305	46.9	7.3	54.200
B0306	59.9	9.9	69.800
B0307	45.5	22.4	67.900
B0308	24	29.1	53.100
B0309	15.8	11.5	27.300
B0310	23.7	15.7	39.400
B0401	20.8	12.4	33.200
B0402	11.6	18.3	29.900
B0403	40.5	25.5	66.000
B0404	46	22.7	68.700
B0405	47.4	7.3	54.700
B0406	60.1	10.1	70.200
B0407	46.1	22.4	68.500
B0408	24.7	28.8	53.500

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
B0409	16.3	11.9	28.200
B0410	24.1	15.5	39.600
B0501	21.3	12.3	33.600
B0502	10.9	21.9	32.800
B0503	31.7	29.7	61.400
B0504	45.8	22.4	68.200
B0705	48.4	7.4	55.800
B0706	61	10	71.000
B0707	47.4	21.7	69.100
B0708	26.1	26.5	52.600
B0709	17.8	11.7	29.500
B0710	25.6	15.3	40.900
B0801	22.2	12.5	34.700
B0802	9	28.1	37.100
B0803	26.2	34.5	60.700
B0805	46.3	8.2	54.500
B0806	60.6	11	71.600
B0807	47.6	21.6	69.200
B0808	26.4	26.3	52.700
B0809	18	11.6	29.600
B0810	24.7	16.7	41.400
B0901	19.4	15	34.400
B0902	8.8	31.50	40.300
B0903	24.8	43.2	68.000
B1009	21	10.8	31.800
B1010	28.9	15.2	44.100
B1101	25	11.4	36.400
B1102	11.2	22.2	33.400
B1103	29.3	29.5	58.800
B1104	47.5	19.8	67.300
B1105	50.2	7.1	57.300

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
B1106	63.9	9.8	73.700
B1107	49.8	18.9	68.700
B1108	29	22	51.000
B1109	20.7	10.8	31.500
B1110	28.6	15	43.600
B1201	25.3	11.7	37.000
B1202	11.4	21.9	33.300
B1203	29.5	29.4	58.900
B1204	47.4	19.5	66.900
B1205	50.2	7.3	57.500
B1206	63.9	10.3	74.200
B1207	49.9	18.8	68.700
B1208	29.3	21.8	51.100
B1210	28.9	15	43.900
B1301	25.4	11.6	37.000
B1302	11.5	21.9	33.400
B1303	29.4	29.4	58.800
B1308	29.4	21.8	51.200
B1310	29	15.1	44.100
B1401	25.7	11.5	37.200
B1402	11.7	21.7	33.400
B1403	29.5	29.5	59.000
B1404	46.8	20.2	67.000
B1405	49.6	8.3	57.900
B1406	63.4	10.7	74.100
B1407	49.8	18.7	68.500
B1408	29.7	21.60	51.300
B1409	21.2	10.8	32.000
B1410	29.3	15.1	44.400
B1501	25.3	11.5	36.800
B1502	11.9	21.6	33.500

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
B1503	29.4	29.5	58.900
B1504	46.3	21.4	67.700
B1505	49.1	9	58.100
B1506	62.9	11.1	74.000
B1507	49.7	19.2	68.900
B1508	29.7	21.3	51.000
B1509	21.3	10.7	32.000
B1510	29.5	14.9	44.400
B1601	25.1	11.4	36.500
B1602	12	21.7	33.700
B1603	29.2	29.5	58.700
B1604	45.7	21.6	67.300
B1605	48.5	9.6	58.100
B1606	62.3	11.1	73.400
B1607	49.4	19.5	68.900
B1608	29.9	21.2	51.100
B1609	21.5	10.5	32.000
B1610	29.6	15.1	44.700
B1701	25.2	11.3	36.500
B1702	12	21.6	33.600
B1703	29	29.9	58.900
B1704	45	22.3	67.300
B1705	47.9	9.7	57.600
B1706	61.6	11.7	73.300
B1707	49.1	19.5	68.600
B1708	30	20.9	50.900
B1709	21.6	10.7	32.300
B1710	29.8	15.1	44.900
B1801	24.7	11.80	36.500
B1802	12	21.5	33.500
B1803	28.6	30.1	58.700

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
B1804	44.1	23.7	67.800
B1805	44.5	11.6	56.100
B1806	59.8	12.7	72.500
B1807	48.5	20.1	68.600
B1808	30	21	51.000
B1809	21.5	10.7	32.200
B1810	28.4	15.5	43.900
B1901	34.3	22.1	56.400
B1902	26.4	35	61.400
B1903	29.6	47.8	77.400
B1904	41.2	29.8	71.000
B1905	50.3	20.9	71.200
B1906	46.8	24	70.800
B1907	46.5	26	72.500
B1908	28.2	31	59.200
B1909	32	17.7	49.700
B1910	38	25.4	63.400
B0304, B0804	45.9	22.7	68.600
B0702, B0704	45.7	22.8	68.500
B1209, B1309	21	10.7	31.700
All other dwellings	15	15	30.000

(c) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Fire sprinkler system (No. 3)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Plant or service room (Nat Vent)-BB	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
Ground floor lobby-BB	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no
Hallway/lobby type (No. 2)	no mechanical ventilation	-	light-emitting diode	zoned switching with motion sensor	no

Central energy systems	Type	Specification
Lift bank (No. 2)	gearless traction with V V V F motor and regenerative drive	Number of levels with apartments served by a lift: 21 number of levels from the bottom of the lift shaft to the top of the lift shaft: 24 number of lifts: 3 lift load capacity: ≥ 1001 kg but ≤ 1500 kg
Central hot water system (No. 2)	electric heat pump – air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm) (c) Unit Efficiency: $3.5 < \text{COP} \leq 4.0$

3. Commitments for Residential flat buildings - BuildingC

(a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
suspended floor above open subfloor, frame: suspended concrete slab	390	foil-foam composite board	-
floors above habitable rooms, frame: suspended concrete slab	1545	-	-
suspended floor above enclosed subfloor, frame: suspended concrete slab	712	-	-

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	single skin autoclaved aerated concrete (AAC), frame: light steel frame	1329	-	fibreglass batts or roll
External wall type 2	off form concrete, frame: no frame	114	none	fibreglass batts or roll

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame: light steel frame	1317	-

Internal wall types			
Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 2	75 mm AAC panel, frame:light steel frame	205	-

Reinforcement concrete frames/columns		
Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
-	-	-

Ceiling and roof types			
Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: no frame	805	foil/sarking	fibreglass batts or roll

Glazing types			Frame types				
Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)
-	958	-	958	-	-	-	-

(b) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install: (aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and (bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓ ✓	✓ ✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 6 but ≤ 7.5 L/min)	4 star	5 star	5 star	-	5 star	4 star	-	-	-	-	-	-	-

	Alternative water source							
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	No alternative water supply	-	-	-	-	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✓	

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 3)	individual fan into central duct + VSD	interlocked to light with timer off	individual fan into central duct + VSD	manual switch on/off	individual fan into central duct + VSD	manual switch on/off

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
All dwellings	1-phase airconditioning - non ducted / 4.5 star (average zone)	1-phase airconditioning - ducted / 4.5 star (average zone)	1-phase airconditioning - ducted / 4.5 star (average zone)	1-phase airconditioning - ducted / 4.5 star (average zone)	0	-

	Individual pool			Individual spa		Appliances other efficiency measures				
Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	induction cooktop & electric oven	4.5 star	5 star	yes	no

(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✓		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✓	

Thermal loads			
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
C0201	57	16	73.000
C0202	54.4	16.5	70.900
C0203	39.9	28.2	68.100
C0204	45.1	26	71.100

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
C0205	49	17.6	66.600
C0301	58.7	19.4	78.100
C0302	44.2	16.4	60.600
C0303	41	31.6	72.600
C0304	46.3	29.6	75.900
C0305	47.9	22.5	70.400
C0401	59.3	19.6	78.900
C0402	44.8	16.6	61.400
C0403	41.4	31	72.400
C0404	46.9	29.2	76.100
C0405	48.3	22.2	70.500
C0501	32	12.7	44.700
C0502	45	17.8	62.800
C0503	41.5	31.1	72.600
C0504	46.9	29	75.900
C0505	48.4	22	70.400
C0601	50.3	27.3	77.600
C0602	43.1	25.3	68.400
C0603	40	37.3	77.300
C0604	40.6	35.6	76.200
All other dwellings	45.1	28.1	73.200

(c) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Fire sprinkler system (No. 4)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Lift bank (No. 1)	-	-	light-emitting diode	connected to lift call button	no
Lift bank (No. 2)	-	-	light-emitting diode	connected to lift call button	no
Lift bank (No. 3)	-	-	light-emitting diode	connected to lift call button	no
Hallway/lobby type (No. 3)	no mechanical ventilation	-	light-emitting diode	zoned switching with motion sensor	no

Central energy systems	Type	Specification
Lift bank (No. 3)	gearless traction with V V V F motor	Number of levels with apartments served by a lift: 5 number of levels from the bottom of the lift shaft to the top of the lift shaft: 6 number of lifts: 2 lift load capacity: ≥ 1001 kg but ≤ 1500 kg
Central hot water system (No. 3)	electric heat pump – air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm) (c) Unit Efficiency: $3.5 < \text{COP} \leq 4.0$

4. Commitments for multi-dwelling housing

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install: (aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and (bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓ ✓	✓ ✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓
(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	
(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			

(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✓		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✓	

5. Commitments for single dwelling houses

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install: (aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and (bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓ ✓	✓ ✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓
(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	
(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			

(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✓		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✓	

6. Commitments for common areas and central systems/facilities for the development (non-building specific)

(a) Buildings 'Other'

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
garage floor, frame: suspended concrete slab	5830	-	-
garage floor, frame: suspended concrete slab	18561	-	none

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	off form concrete,frame:no frame	3250	none	-

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
-	-	-	-

Reinforcement concrete frames/columns		
Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
-	-	-

Ceiling and roof types			
Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
-	-	-	

Glazing types			Frame types				
Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)
-	-	-	-	-	-	-	-

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	5 star	no common laundry facility

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Gym area (No. 1)	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	time clocks	no
Undercover car park area (No. 1)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	no
Garbage room	ventilation exhaust only	-	light-emitting diode	motion sensors	no
Plant or service room (Mec Vent)	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	no
Bike Storage/FCR	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	no

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 150 peak kW
Other	-	-

Notes

1. In these commitments, "applicant" means the person carrying out the development.
2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commitment, this is a minimum rating.
6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

Legend

1. Commitments identified with a "✔" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
2. Commitments identified with a "✔" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
3. Commitments identified with a "✔" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).