

IORA AIRCONDITIONING UPGRADE – EXEMPT DEVELOPMENT

INFORMATION PACK FOR AIR CONDITIONING UPGRADERS

DIVISION BETWEEN BODY CORPORATE AND OWNER RESPONSIBILITY

WITH RULES

EXEMPT DEVELOPMENT

The Tables at the end of this document note which apartments are expected to be make an Exempt Development upgrade (note it may need to be viewed on a computer screen as an A4 printout may be hard to read). If an upgrade meets the attached Development and Acoustic Standards a ground level apartment owner can make an upgrade exempt from meeting the requirements of the DA but would bear the responsibility of doing so.

The constraints and requirements for an Exempt Development upgrade are:

1. **Acoustic:** The Body Corporate has commissioned an acoustic engineers report which recommended the best position for the AC condenser to meet acoustic requirements, a copy of which can be obtained from the Iora website.
2. **Insulation:** In a multi rise building the requirements for the Building Code and Fire Regulations need to be met. The buildings of Iora are Class 2 Buildings. To comply with Section J5 of the Building Code of Australia, all refrigerant pipe work is required to be installed with 25mm thermal rated insulation in all areas of a Class 2 building. The insulation must also meet Fire Test criteria AS1530.3. (We understand 25mm Bradford FR Rubber insulation is an example of suitable insulation but you should confirm this with your installer).
3. **Visual Impact.** Consider the visual impact of what is proposed, particularly regarding placing condensers in courtyards. We recommend consultation with neighbours who may be affected to ensure there is unlikely to be any issues.
4. **Electrical Connection:** The electrical connection of the A/C unit will need to be done to ensure electrical load balance. Therefore if the electrical connection of a new A/C unit is single phase it will need to be done by a certified electrician who can also
 - a. confirm the phase balancing of electrical usage within your apartment, and
 - b. connect the A/C unit to the phase allocated for a specific apartment.
5. **Specific By-Law:** If you intend to upgrade your AC, you need to submit the By-Law form and the Consent document. At a General Meeting the Owners Corporation will consider a resolution and, if passed, attach your specific By-Law to the Special By-law No 74. The By-Law form and the Consent document are attached and require you to insert some specific details of your proposal and sign.
6. **Proposed Exempt Development Checklist Submission:** Once you are satisfied you have an Exempt Development upgrade proposal you need to make a submission using the Submission Checklist in the Information Pack together with supporting documentation. If the submission is not in order it will be returned for completion.
7. **Authority to Proceed:** If the submission is in order you will be issued with an Authority to Proceed. Allow 5 business days turnaround for consideration of your submission checklist.

Attachments

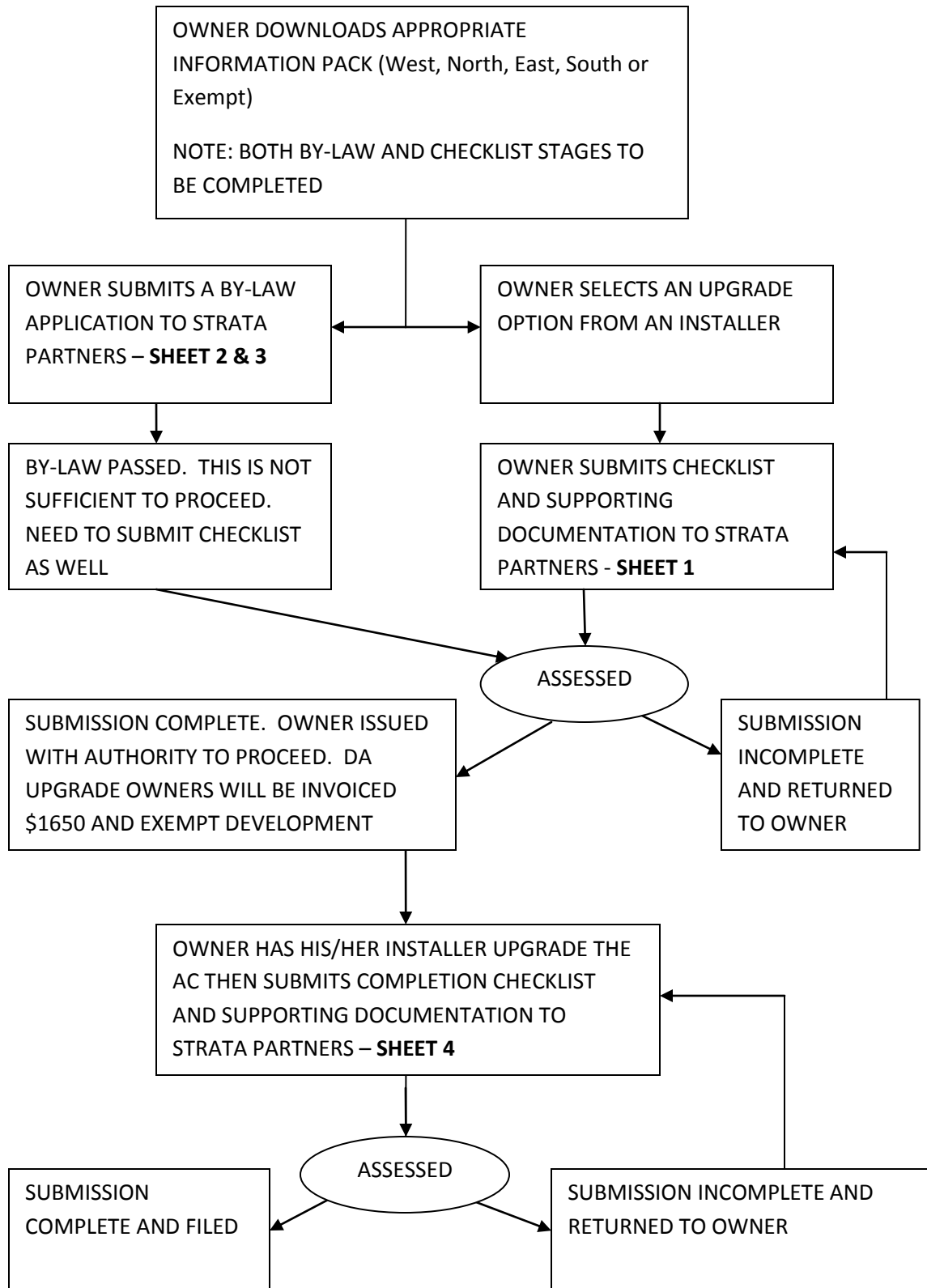
Attachment	Purpose
1. Workflow Diagram	Road map for Upgrade
2. Exempt Development Standards	Special Rules required for Exempt Development Upgrade
3. SHEET 1 - Submission Checklist	Checklist for information to be submitted to be granted an Authority to Proceed
4. SHEET 2 - Form of Special Resolution	To have a by-law motion considered for your Upgrade – to be submitted at least 2 weeks prior to an AGM or EGM
5. SHEET 3 - Consent under Section 52	To be completed and submitted with SHEET 2
6. SHEET 4 - Certification Checklist required at Upgrade Completion	Checklist to be submitted at the completion of the Upgrade with supporting documentation
7. Tables Of DA Compliant And Exempt Development Upgrades For All Blocks	For reference as the type of Upgrade permitted for you apartment.

RWD

22 October 2013

IORA AIRCONDITIONING UPGRADE

WORKFLOW



EXEMPT DEVELOPMENT STANDARDS

If a development meets the Development and Acoustic Standards below a ground level apartment owner can make an upgrade exempt from meeting the requirements of the DA but would bear the responsibility of doing so.

Development Standards

1. The standards specified for that development, if for domestic purposes only, are that the development must:
 - a) not be located on the wall or roof of a building that faces the primary road, or forward of the building line to the primary road, and
 - b) be located at least 450mm from each lot boundary, and
 - c) subject to paragraph (g), be attached to the external wall of a building or ground mounted, and
 - d) be not higher than 1.8m above ground level (existing), and
 - e) not involve work that reduces the structural integrity of the building, and
 - f) not reduce the existing fire resistance level of a wall, and
 - I. be designed so as not to operate:
 - (i) during peak time-at a noise level that exceeds 5 dB(A) above the ambient background noise level measured at any property boundary, or
 - (ii) during off peak time-at a noise level that is audible in habitable rooms of adjoining residences, and
 - g) if it is constructed or installed on or in a heritage item or a draft heritage item-not be wall mounted, and
 - h) if it is constructed or installed in a heritage conservation area or a draft heritage conservation area-be located in the rear yard.
2. Any opening created by the construction or installation of the development must be adequately waterproofed.

Extract from acoustic report re: Ground level units

Ground Level

To ensure noise from the outdoor air-condenser units complies with the noise assessment objectives, the equipment should be:

- selected such that sound pressure level the outdoor air-condenser unit is not more than 52dB(A) at 1m, as specified by Colin Shears and Associates (mechanical consultant);
- located against the wall, on ground level below the overhead balcony to take advantage of shielding/screening provided by the balcony; and
- the outdoor air-condenser unit should be a minimum distance of approximately 3m from the nearest residential unit.

Alternative equipment location and/or equipment with higher noise emission levels may be used provided that the outdoor air-condenser unit is at least 3m from the nearest residential units; sound power level of the outdoor air-condenser unit does not exceed 73dB(A); and the outdoor air-condenser unit enclosed in a purpose-built acoustic enclosure (*Contact: Robert Mason of Peace Engineering*) to achieve a minimum noise reduction of 20dB.

Intrusive Noise

To control intrusive noise, the NSW Industrial Noise Policy recommends that the $L_{Aeq,15min}$ noise level from the proposed air-conditioning equipment should not exceed the background L_{A90} level by more than 5dB at the most affected location within the residential property boundary.

Based on the measured day/evening/night L_{A90} background noise levels of 51/50/44dB(A), noise from air-conditioning equipment should not exceed 56/55/49dB(A) $L_{Aeq,15min}$ during day/evening/night respectively at the nearest residential units.

SHEET 1

Phil Vandervaere
Strata Partners
PO Box 3046
Willoughby North NSW 2068

Date.....

Dear Phil

STRATA PLAN 36253 – AIRCONDITIONING UPGRADE

PROPOSED EXEMPT DEVELOPMENT UPGRADE SUBMISSION CHECKLIST FOR UNIT

- ☐ The acoustic engineer's recommendations regarding installing the condenser to meet acoustic requirements will be met.
- ☐ Confirm discussions have been made with neighbours who might have a visual impact issue with your proposed upgrade
- ☐ Pipework insulation should meet specific requirements for a Class 2 building. Attach correspondence from your installer that the insulation proposed to be used is compliant with Section J5 of the Building Code of Australia and will meet Fire Test criteria AS1530.3.

Signature:

Name:

Phone no:

Email:

Mailing Address:

SHEET 2

Form of Special Resolution

MOTION

Subject to the by-law in the next succeeding motion being approved, The Owners – Strata Plan No. 36253 SPECIALLY RESOLVE pursuant to section 65A of the *Strata Schemes Management Act, 1996* (NSW) for the purpose of improving or enhancing the common property to specifically authorise the Works carried out by the owner of lot _____ to lot and common property on the terms and in the manner as set out in the by-law.

Form of By-law

MOTION

Subject to the preceding motion being passed, The Owners – Strata Plan No. 36253 SPECIALLY RESOLVE pursuant to section 52 of the *Strata Schemes Management Act, 1996* (NSW) to make a by-law in the following terms:

SPECIAL BY-LAW NO.

Works

The provisions of Parts 1, 2, and 3 of Special By-law No. **74** are adopted for the purposes of this by-law with the exception of the amendment of the definition of “Lot” as follows:

“**Lot**” means _____ in strata plan registration no 36253.

SHEET 3

CONSENT UNDER SECTION 52

STRATA SCHEMES MANAGEMENT ACT 1996 (NSW)

TO: The Registrar General

Land & Property Management Authority NSW

Queens Square

SYDNEY NSW 2000

I/ We, _____, CONSENT to the making of a by-law conferring rights over the common property for the installation of an air conditioning unit to be carried out by the Owner(s) of Lots _____ (me/us) in our scheme and conferring on them the responsibility to repair and maintain such works.

The by-law to be made by the Owners Corporation at a general meeting on _____ or any adjournment of that meeting.

Dated:

.....

.....

Signature of owner/s of Lot

cc: The Owners – Strata Plan No 36253

SHEET 4

Phil Vandervaere
Strata Partners
PO Box 3046
Willoughby North NSW 2068

Date.....

Dear Phil

**STRATA PLAN 36253 – AIRCONDITIONING UPGRADE
CERTIFICATION CHECKLIST REQUIRED AT UPGRADE COMPLETION FOR UNIT**

At the completion of the Exempt Development, the Body Corporate will require from the owner the following certifications, the bulk of which can come from the tradespeople used for the upgrade. These will include confirmation that:

- ☐ Appropriate insulation was used. Attach certification from your installer.
- ☐ If 3 phase power, just tick.
- ☐ If single phase, the electrical load was balanced when the electrical connection was made. Attach certification from a certified electrician.

Dated:

.....

.....

Signature of owner/s of Lot

TABLES OF DA COMPLIANT AND EXEMPT DEVELOPMENT UPGRADES FOR ALL BLOCKS

Assessment of appropriate options for apartments

The following represent suggested types suitable for various apartments.

All are a single pipe run except for M, the multi pipe split.
Note the maximum noise from condenser DA condition and Acoustic Report is 52dBa.
Most units do not exceed this value... owner to check.
Other manufacturers can be considered, which is recommended, as some installers are keen on other manufacturers.

Below is a table of Daikin models **Stratawe** have considered, to assist apartment owners to understand their options, not to be regarded as an approved selection.

Bldg / West Level/Apartment	Pipe/condenser location	Reuse Existing Ducting	Enlarge Existing Ducting	Replace ducting by: multi pipework**, or wall units
L1/2 Apt 56	West wall in garden or own courtyard. No pipe allowances to rise to roof.	SDS (7 kW)***	SDL	HW*, M* or MP
L1 Apt 57, 58	Own garden subject to acoustic. No pipe allowances to rise to roof.	SDS (7 kW)***	SDL	HW*, M* or MP
L1/2 Apt 59	Own courtyard or garden location. No pipe allowances to rise to roof.	SDS (7 kW)***	SDL	HW*, M* or MP
L2 Apt 61, 62	Types rise up GC to roof condenser****	SDS (7 kW)***	SDL	MP
L2 Apt 60, 63	Courtyard Location subject to acoustic. No pipe allowances to rise to roof.	SDS (7 kW)***	SDL	HW*, M* or MP
L3 Apt 64	Pipes rise in communications cupboard (CC) to roof condenser	SDS (7 kW)***	SDL	MP
L4 Apt 65	Types rise up via garage chute space (GC) to roof condenser	SDS (7 kW)***	SDL	MP
L4 Apt 66	Types rise up via electrical cupboard (EC) to roof condenser	SDS (7 kW)***	SDL	MP
L4 Apt 67	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 68	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 69	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 70	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 71	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 72	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 73	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 74	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 75	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 76	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 77	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 78	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 79	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 80	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 81	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 82	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 83	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 84	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 85	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 86	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 87	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 88	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 89	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 90	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 91	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 92	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 93	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 94	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 95	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 96	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 97	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 98	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 99	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 100	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP

Upgrade Option Tables

West

Tower 1 (West) has level 1 (lower carpark), 2 (main ground entry), 3, 4, 5, 6 penthouse and roof plantroom. Please refer to Note 3 for all possible supplier options.

Bldg / West Level/Apartment	Pipe/condenser location	Reuse Existing Ducting	Enlarge Existing Ducting	Replace ducting by: multi pipework**, or wall units
L1/2 Apt 56	West wall in garden or own courtyard. No pipe allowances to rise to roof.	SDS (7 kW)***	SDL	HW*, M* or MP
L1 Apt 57, 58	Own garden subject to acoustic. No pipe allowances to rise to roof.	SDS (7 kW)***	SDL	HW*, M* or MP
L1/2 Apt 59	Own courtyard or garden location. No pipe allowances to rise to roof.	SDS (7 kW)***	SDL	HW*, M* or MP
L2 Apt 61, 62	Types rise up GC to roof condenser****	SDS (7 kW)***	SDL	MP
L2 Apt 60, 63	Courtyard Location subject to acoustic. No pipe allowances to rise to roof.	SDS (7 kW)***	SDL	HW*, M* or MP
L3 Apt 64	Pipes rise in communications cupboard (CC) to roof condenser	SDS (7 kW)***	SDL	MP
L4 Apt 65	Types rise up via garage chute space (GC) to roof condenser	SDS (7 kW)***	SDL	MP
L4 Apt 66	Types rise up via electrical cupboard (EC) to roof condenser	SDS (7 kW)***	SDL	MP
L4 Apt 67	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 68	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 69	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 70	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 71	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 72	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 73	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 74	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 75	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 76	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 77	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 78	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 79	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 80	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 81	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 82	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 83	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 84	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 85	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 86	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 87	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 88	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 89	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 90	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 91	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 92	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 93	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 94	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 95	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 96	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 97	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 98	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 99	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP
L4 Apt 100	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP

Note 1 *only if condenser is NOT on roof

Note 2 **The difference between the M and MP is that:

• M has multiple pipes from condenser and is **unsuitable** for condenser on the roof,

• MP has a single pair of pipes.

Note 3 *** Owner to confirm with the contractor that this model is suitable for height and pipe run length.

Note 4 ****To be suitable must minimise the horizontal pipe runs and number of bends with condensers in plant room as close as possible to where pipework enters plantroom from the garage chute area.

South

Tower 4 (South) has level 1 (lower carpark), 2 (main ground entry), 3, 4 penthouse and roof plantroom.

Bldg / South Level/Apartment	Pipe/condenser location	Reuse Existing Ducting	Enlarge Existing Ducting	Replace ducting by: multi pipework**, or wall units
L1 Apt 1, 2	1 and 2 in garden but work access to the roof. Condenser in own garage. No pipe allowances to rise to roof.	SDS (7 kW)	SDL	HW*, M* or MP
L2 Apt 3	Courtyard Location subject to acoustic. No pipe allowances to rise to roof.	N/A		
L2 Apt 6	Courtyard Location subject to acoustic. No pipe allowances to rise to roof.	SDS (7 kW)	SDL	HW*, M* or MP
L2 Apt 5	Pipes rise up elec cbpd to roof condenser	SDS (7 kW)***	SDL	HW*, M* or MP
L2 Apt 7, 8, 9	Although 11 has upgraded want to redo and put condenser on roof	SDS (7 kW)***	SDL	HW*, M* or MP
L2 Apt 10	12 done. Separate systems not using existing GC, EC or CC risers. TBC by Owners.	N/A		
L4 Apt 12, 15	Separate systems not using existing GC, EC or CC risers. TBC by Owners.	SDS (7 kW)***	SDL	MP

Note 1 *only if condenser is NOT on roof

Note 2 **The difference between the M and MP is that:

• M has multiple pipes from condenser and is **unsuitable** for condenser on the roof,

• MP has a single pair of pipes.

Note 3 *** Owner to confirm with the contractor that this model is suitable for height and pipe run length.

Note 4 ****To be suitable must minimise the horizontal pipe runs and number of bends with condensers in plant room as close as possible to where pipework enters plantroom from the garage chute area.

Note Ground floor apartments 15, 34, 35, 57 and 58 with gardens can use a small window for a piping route to their garden. They can bulk purchase of small replacement windows for each apartment modified. This approach will not work for Apartments 1, 2 and 16 who have modified or will modify their glass windows and have or will lose their small windows.

North

Tower 2 (North) has level 1 (lower carpark), 2 (main ground entry), 3, 4, 5, 6 penthouse and roof plantroom.

Bldg / West Level/Apartment	Pipe/condenser location	Reuse Existing Ducting	Enlarge Existing Ducting	Replace ducting by: multi pipework**, or wall units
L1/2 Apt 33	Installed in courtyard. No pipe allowances to rise to roof.	N/A		
L1 Apt 34, 35	Own garden subject to acoustic. No pipe allowances to rise to roof.	SDS (7 kW)***	SDL	HW*, M* or MP
L1/2 Apt 36	Courtyard location. No pipe allowances to rise to roof.	SDS (7 kW)***	SDL	MP
L2 Apt 38, 39	Pipes rise up GC to roof condenser****	SDS (7 kW)***	SDL	MP
L2 Apt 37, 40	Courtyard Locat on subject to acoustic. No pipe allowances to rise to roof.	SDS (7 kW)***	SDL	HW*, M* or MP
L3 Apt 41	Pipes rise in comms cbpd to roof condenser	SDS (7 kW)***	SDL	MP
L4 Apt 42	Already installed on roof	N/A		
L4 Apt 43	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 44	Already installed on roof	N/A		
L4 Apt 45	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 46	Already installed on roof	N/A		
L4 Apt 47	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 48	Already installed on roof	N/A		
L4 Apt 49	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 50	Already installed on roof	N/A		
L4 Apt 51	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 52	Already installed on roof	N/A		
L4 Apt 53	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 54	Already installed on roof	N/A		
L4 Apt 55	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 56	Already installed on roof	N/A		
L4 Apt 57	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 58	Already installed on roof	N/A		
L4 Apt 59	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 60	Already installed on roof	N/A		
L4 Apt 61	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 62	Already installed on roof	N/A		
L4 Apt 63	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 64	Already installed on roof	N/A		
L4 Apt 65	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 66	Already installed on roof	N/A		
L4 Apt 67	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 68	Already installed on roof	N/A		
L4 Apt 69	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 70	Already installed on roof	N/A		
L4 Apt 71	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 72	Already installed on roof	N/A		
L4 Apt 73	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 74	Already installed on roof	N/A		
L4 Apt 75	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 76	Already installed on roof	N/A		
L4 Apt 77	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 78	Already installed on roof	N/A		
L4 Apt 79	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 80	Already installed on roof	N/A		
L4 Apt 81	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 82	Already installed on roof	N/A		
L4 Apt 83	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 84	Already installed on roof	N/A		
L4 Apt 85	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 86	Already installed on roof	N/A		
L4 Apt 87	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 88	Already installed on roof	N/A		
L4 Apt 89	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 90	Already installed on roof	N/A		
L4 Apt 91	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 92	Already installed on roof	N/A		
L4 Apt 93	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 94	Already installed on roof	N/A		
L4 Apt 95	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 96	Already installed on roof	N/A		
L4 Apt 97	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 98	Already installed on roof	N/A		
L4 Apt 99	Already installed on roof	SDS (7 kW)***	SDL	MP
L4 Apt 100	Already installed on roof	N/A		

Note 1 *only if condenser is NOT on roof

Note 2 **The difference between the M and MP is that:

• M has multiple pipes from condenser and is **unsuitable** for condenser on the roof,

• MP has a single pair of pipes.

Note 3 *** Owner to confirm with the contractor that this model is suitable for height and pipe run length.

Note 4 ****To be suitable must minimise the horizontal pipe runs and number of bends with condensers in plant room as close as possible to where pipework enters plantroom from the garage chute area.

NOTES

- A. THE ROOF MEMBRANE SHALL NOT BE PENETRATED.
- B. ALL INDIVIDUAL PIPEWORK SHALL BE SUPPORTED SUCH THAT THE PIPEWORK DOES NOT COME INTO CONTACT WITH THE ROOF.
- C. ALL PIPEWORK SHALL PENETRATE THE PLANTROOM EXTERNAL WALL ELEVATION SHALL BE PENETRATED AT THE ROOF RAIL (R).
- D. ALL EXPOSED PIPEWORK SHALL BE COVERED WITH A UV RESISTANT BUBBLE EQUAL TO "COLORBOND" COLOUR OR EQUAL.
- E. PIPEWORK TO PENETRATE WALL ELEVATION AT L/L & ROSE TO RETICULATE WITH PLANTROOM.
- F. EXISTING CONDENSER WATER EQUIPMENT SHALL REMAIN. ANY INSTALLATION OF NEW EQUIPMENT SHALL BE CO-ORDINATED AROUND IT (IF ANY).
- G. EXISTING CONDENSERS AND PIPING TO REMAIN (IF ANY).
- H. THE BUILDINGS DOCUMENTED ON THESE DRAWINGS ARE GENERAL ONLY AND DO NOT PURPORT TO BE A COMPLETE SOLUTION AND IN ALL CASES CONSOLE MUST BE COMPLETED WITH AND R/C/A / R/C/A AND AUSTRIAN PERFORMANCE. THIS INCLUDES COMPLIANCE WITH THE NEED FOR A PLANNING DEPT BUILDING PROFESSIONAL BOARD. ANY TAKE EFFECT IN 2018 CHECK WITH COUNCIL BEFORE INSTALLING. AS PLANNING INSPECTIONS ARE PART OF THE NEW PROCESS. THE INSTALLER CONTRACTOR MUST PROVIDE A CERTIFICATE SAYING ALL WORKS COMPLY WITH LOCAL COUNCIL RULES & REGULATIONS INCLUDING R/C/A VUL. L103 SPECIFICATION (2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23, 2.24, 2.25, 2.26, 2.27, 2.28, 2.29, 2.30, 2.31, 2.32, 2.33, 2.34, 2.35, 2.36, 2.37, 2.38, 2.39, 2.40, 2.41, 2.42, 2.43, 2.44, 2.45, 2.46, 2.47, 2.48, 2.49, 2.50, 2.51, 2.52, 2.53, 2.54, 2.55, 2.56, 2.57, 2.58, 2.59, 2.60, 2.61, 2.62, 2.63, 2.64, 2.65, 2.66, 2.67, 2.68, 2.69, 2.70, 2.71, 2.72, 2.73, 2.74, 2.75, 2.76, 2.77, 2.78, 2.79, 2.80, 2.81, 2.82, 2.83, 2.84, 2.85, 2.86, 2.87, 2.88, 2.89, 2.90, 2.91, 2.92, 2.93, 2.94, 2.95, 2.96, 2.97, 2.98, 2.99, 3.00, 3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07, 3.08, 3.09, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18, 3.19, 3.20, 3.21, 3.22, 3.23, 3.24, 3.25, 3.26, 3.27, 3.28, 3.29, 3.30, 3.31, 3.32, 3.33, 3.34, 3.35, 3.36, 3.37, 3.38, 3.39, 3.40, 3.41, 3.42, 3.43, 3.44, 3.45, 3.46, 3.47, 3.48, 3.49, 3.50, 3.51, 3.52, 3.53, 3.54, 3.55, 3.56, 3.57, 3.58, 3.59, 3.60, 3.61, 3.62, 3.63, 3.64, 3.65, 3.66, 3.67, 3.68, 3.69, 3.70, 3.71, 3.72, 3.73, 3.74, 3.75, 3.76, 3.77, 3.78, 3.79, 3.80, 3.81, 3.82, 3.83, 3.84, 3.85, 3.86, 3.87, 3.88, 3.89, 3.90, 3.91, 3.92, 3.93, 3.94, 3.95, 3.96, 3.97, 3.98, 3.99, 4.00, 4.01, 4.02, 4.03, 4.04, 4.05, 4.06, 4.07, 4.08, 4.09, 4.10, 4.11, 4.12, 4.13, 4.14, 4.15, 4.16, 4.17, 4.18, 4.19, 4.20, 4.21, 4.22, 4.23, 4.24, 4.25, 4.26, 4.27, 4.28, 4.29, 4.30, 4.31, 4.32, 4.33, 4.34, 4.35, 4.36, 4.37, 4.38, 4.39, 4.40, 4.41, 4.42, 4.43, 4.44, 4.45, 4.46, 4.47, 4.48, 4.49, 4.50, 4.51, 4.52, 4.53, 4.54, 4.55, 4.56, 4.57, 4.58,