



The measurements were carried out in accordance with the Laboratory's quality manual for Acoustics and the following standard:

EN ISO 3741:20101

Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Precision methods for reverberation test rooms.

Other applicable standard:

EN 12102:2013

Air conditioners, liquid chilling packages, heat pumps and dehumidifiers with electrically driven compressors for space heating and cooling – Measurement of airborne noise – Determination of the sound power level

Measurement Results Radiated Noise Power From, Heat Pump Type Inventum Economy Pump						
Flow Rate [M ³ / H]	Pressure Drop [Pa]	Voltage [V]	Amperage [A]	Includedpower [W]	Sound Power [Db (A)]	Figure No
126	39	233	1.80	385	41.5	4
159	61	237	1.88	412	46.0	5
202	95	-	-	-	51.5	6

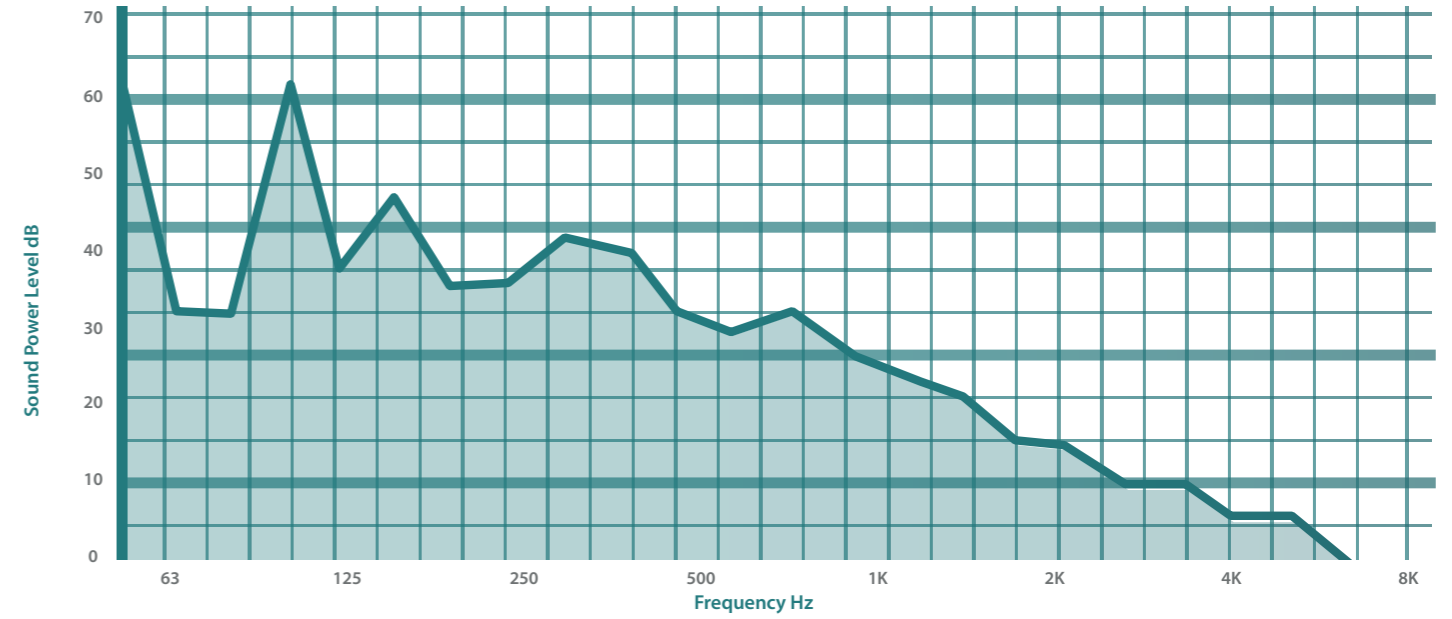
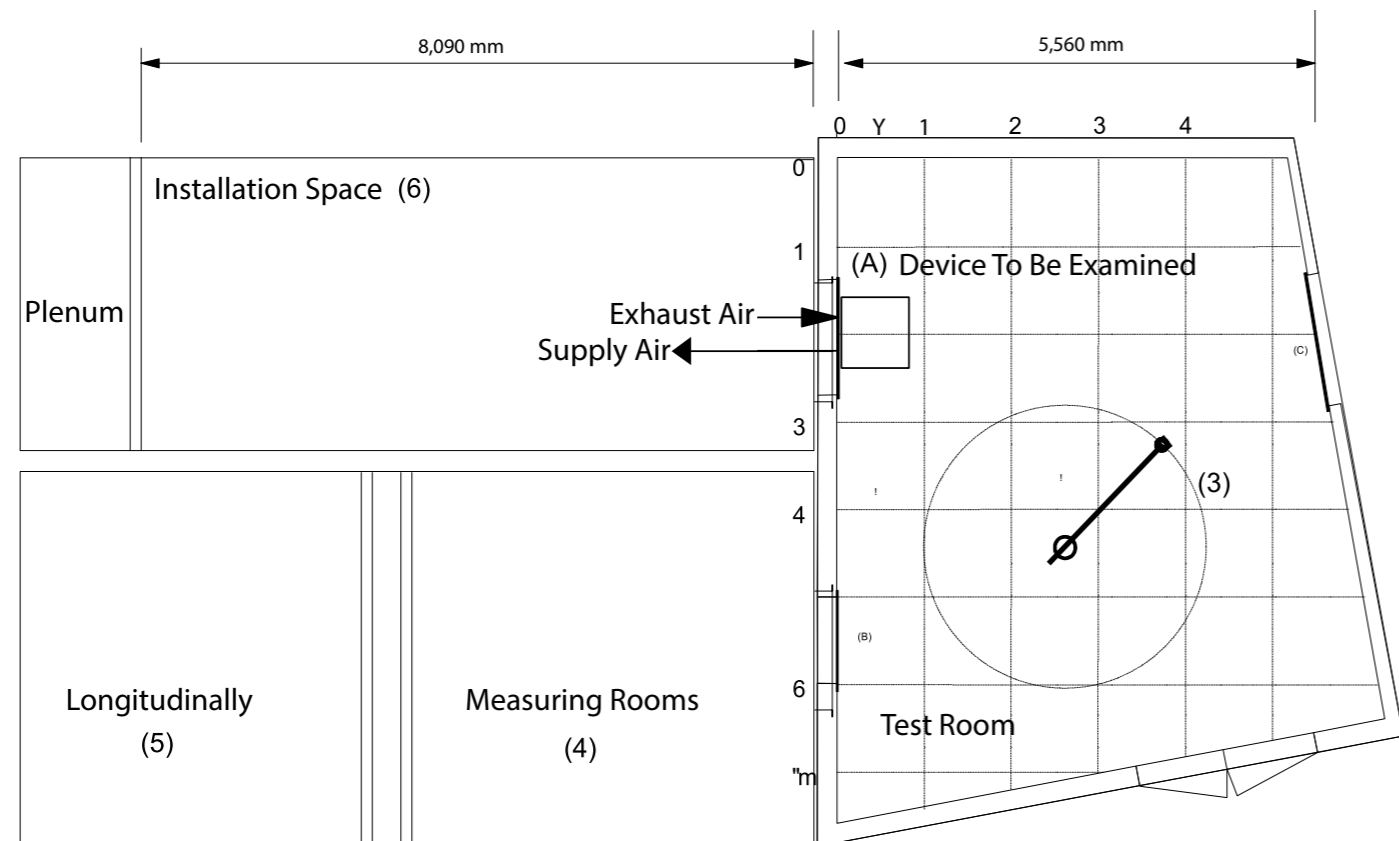


FIGURE 4

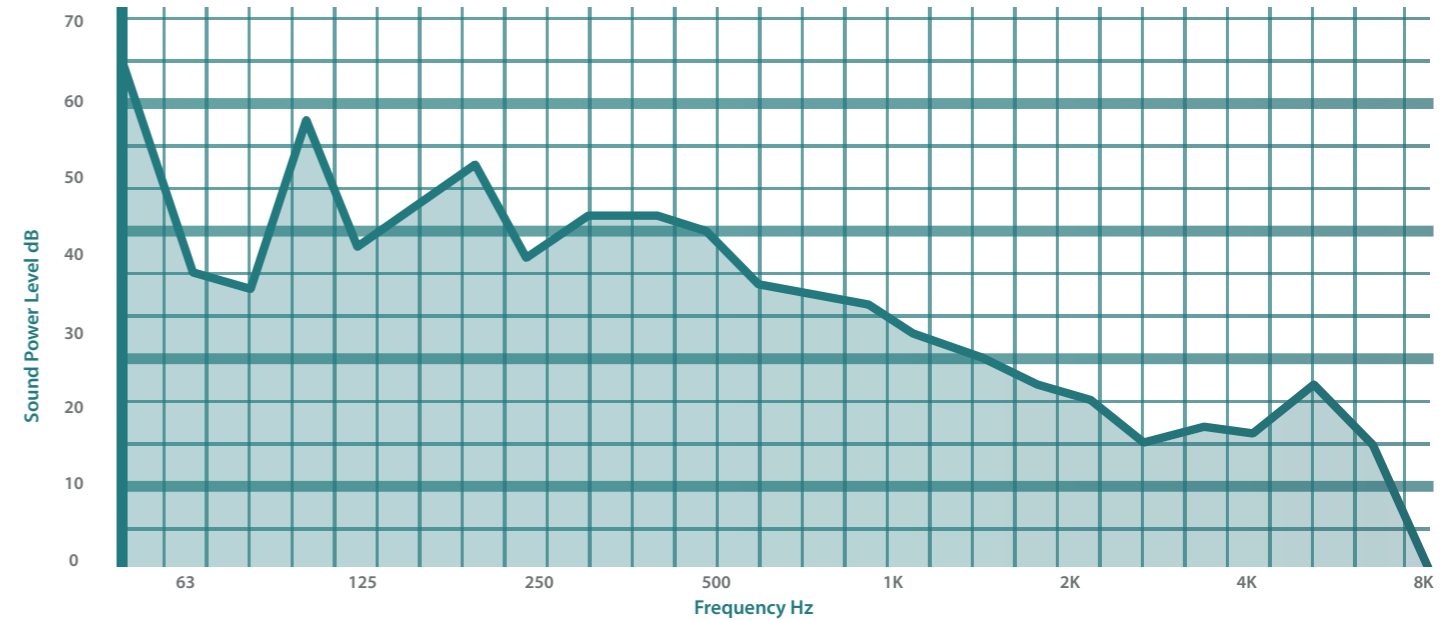


FIGURE 5

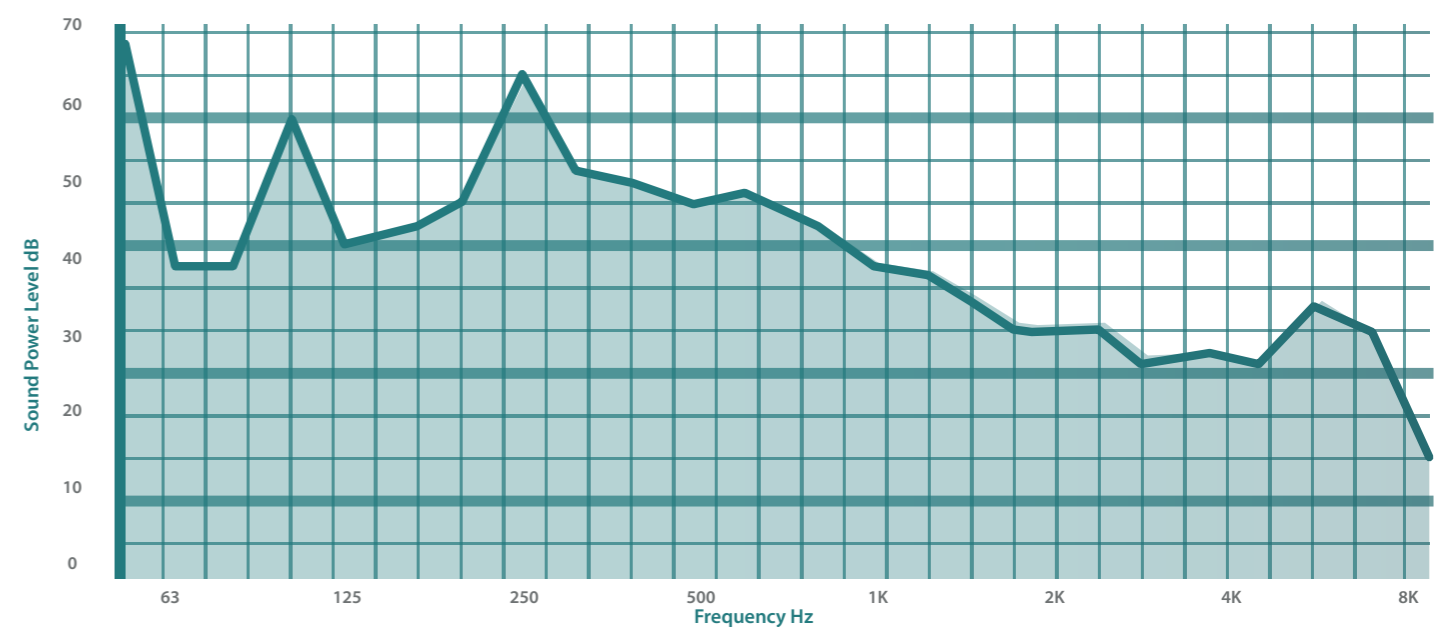
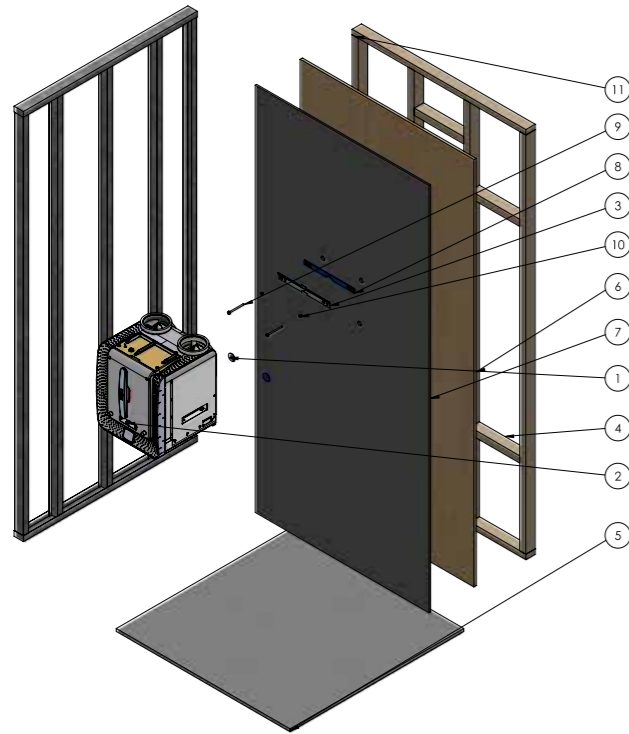
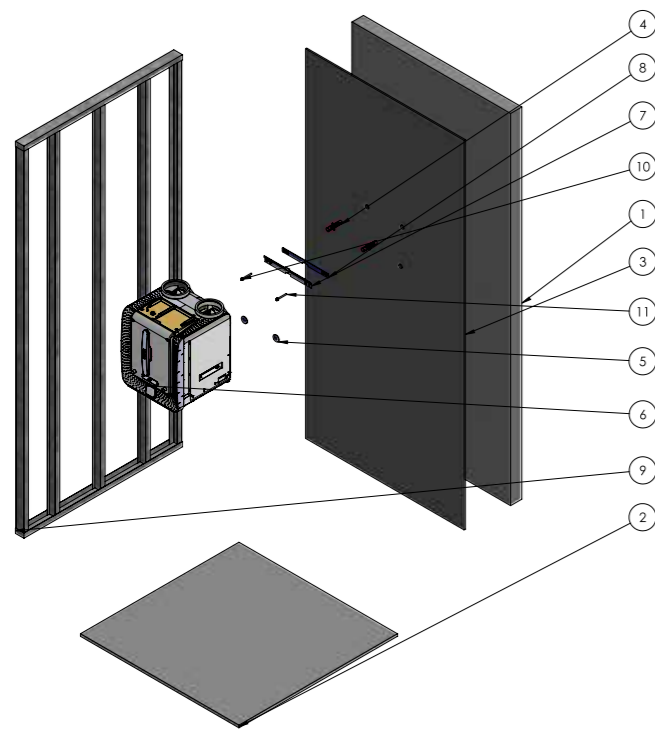


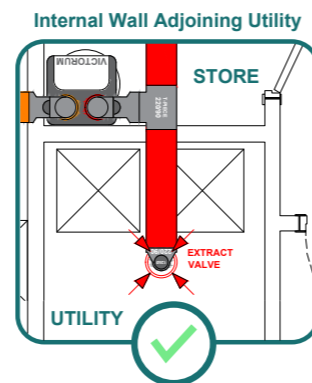
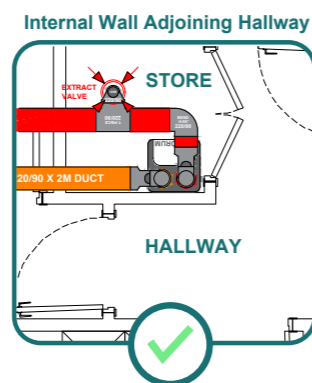
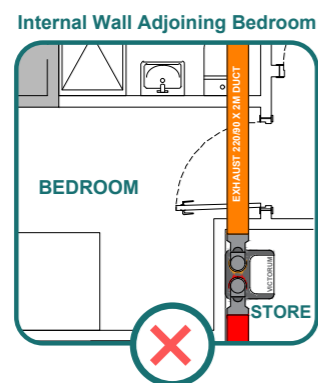
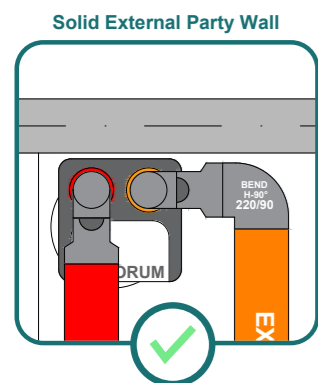
FIGURE 6



	Description	Part No.	QTY
1	Victorium Rubber Damper Bottom Circle	TZV-MOUNT00-B	2
2	Joule Victorium Vhp (le)	HHH-0-0000-VHP	1
3	Victorium Wall Bracket	TZ-W-00-COMP-1	1
4	400mm Timber Noggin	n/a	7
5	Concrete Floor Slab	n/a	1
6	3/4" Plywood Sheet	n/a	1
7	11mm Undercoat Plaster	n/a	1
8	Victorium Mounting Bracket Rubber Damper Top	TZV-MOUNT00-T	1
9	B18.2.3.9m - Heavy Hex Flange Screw, M8 X 1.25 X 80 --22n	n/a	2
10	B18.2.2.4m - Hex Flange Nut, M8 X 1.25 --N	n/a	2
11	Timber Stud Wall	n/a	4



	Description	Part No.	QTY
1	Block Wall	n/a	1
2	Concrete Floor Slab	n/a	1
3	11mm Undercoat Plaster	n/a	1
4	Rawplug-Wall Fixing Bolt Plugs	TZ-W-00-COMP-1	2
5	Victorium Rubber Damper Bottom Circle	TZV-MOUNT-00-B	2
6	Joule Victorium	HHH-0-0000-VHP	1
7	Victorium Wall Bracket	TZ-W-00-COMP-1	1
8	Victorium Mounting Bracket Rubber Damper Top	TZV-MOUNT-00-T	1
9	Metal Stud Wall	n/a	1
10	B18.2.3.9m - Heavy Hex Flange Screw, M8 X 1.25 X 80 --22n	n/a	1
11	B18.2.3.9m - Heavy Hex Flange Screw, M8 X 1.25 X 25 --25n	n/a	1



Typical Situations	Design Range L _{Aeq} T dB	
	Daytime L _{Aeq} T dB 16hr (07:00 to 23:00hrs)	Daytime L _{Aeq} T dB 8hr (23:00 to 07:00hrs)
Living Rooms	35-40	n/a
Bedrooms	35	30

Apartment 6

Test No.	Room Name	"Volume - m3"	Test Time	Performance Target - LAeq	"Result - LAeq"	Pass/ Fail	Performance Target - NR	"Result - NR"	Pass/ Fail
1	Living Room	93	17:58	≤ 35 LAeq	28.3	Pass	≤ 30 NR	27	Pass
2	Dining Room	93	18:10	≤ 40 LAeq	26.1	Pass	≤ 30 NR	21	Pass
3	Bedroom	30	18:21	≤ 35 LAeq	26.6	Pass	≤ 30 NR	25	Pass

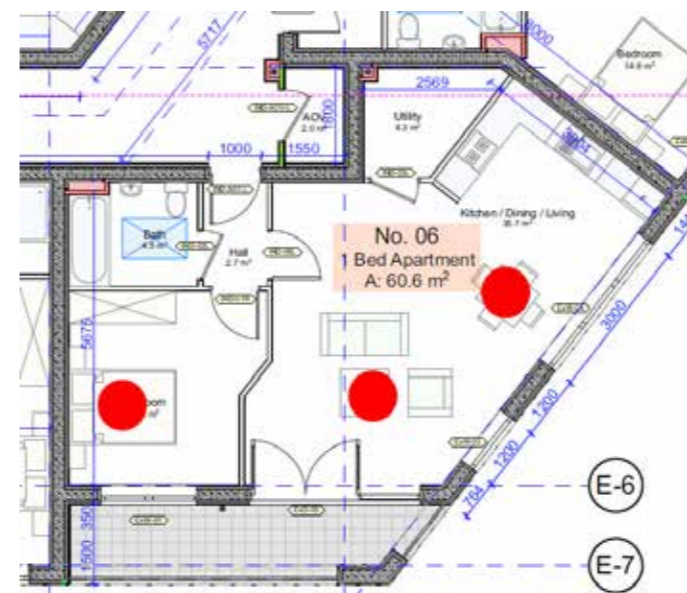
*EAHP was mounted on a timber stud wall
*Apartment 6 was fully furnished at time of testing

Apartment 8

Test No.	Room Name	"Volume - m3"	Test Time	Performance Target - LAeq	"Result - LAeq"	Pass/ Fail	Performance Target - NR	"Result - NR"	Pass/ Fail
1	Living Room	82	16:10	≤ 35 LAeq	29.5	Pass	≤ 30 NR	25	Pass
2	Dining Room	82	16:48	≤ 40 LAeq	27.2	Pass	≤ 30 NR	22	Pass
3	Ensuite Bedroom	38	17:14	≤ 35 LAeq	25.7	Pass	≤ 30 NR	20	Pass
4	Bedroom	33	17:03	≤ 35 LAeq	26	Pass	≤ 30 NR	20	Pass

*EAHP was mounted on a concrete wall
*Apartment 8 was fully furnished at time of testing

Apartment 6



Apartment 8

