



# Air Handling Units

Standard or customised air handling units for performance, quality and efficiency.

GJ Walker Air Handling Systems, has been developing, producing and supplying high quality air handling products in Australia for nearly 50 years. Our standard or fully customisable range can be used for the most straight forward or complex project requirements.

With access to over 70,000m<sup>2</sup> of production space our products are manufactured to the highest standard and to comply with AS 3666.

Our product options and our team enable the best customer service and project options for our customers.



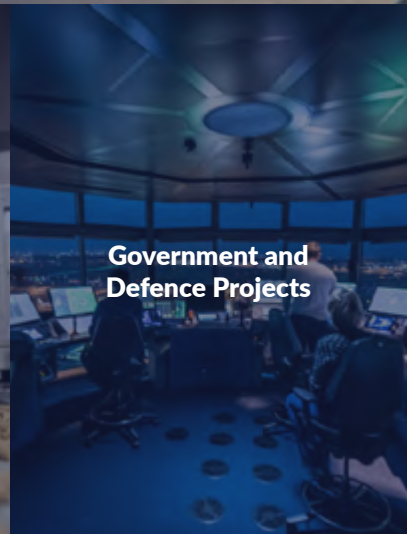
**Hospitals and Medical Facilities**



**Transportation**



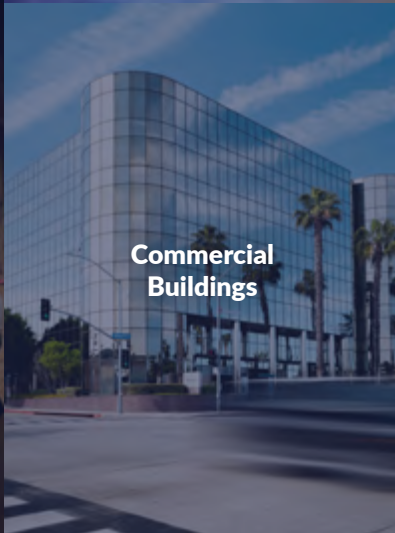
**Food and Beverage Industry**



**Government and Defence Projects**



**Universities and Educational Facilities**



**Commercial Buildings**



**Pharmaceutical Cleanrooms**



**Hospitality and Entertainment Venues**

# Certifications



The AHRI certification program provides consumers with a reliable, like-for-like comparison of equipment.

This provides a level playing field for manufacturers as competing products are tested and rated to the same standard or specification.



Accredited certification to VDI6022-1 guarantees the user that the product meets the market's most stringent hygiene requirements.

The user can use products bearing this logo with confidence as they are subjected to regular audits.



# Horizontal ASD and ASH, Vertical ASV and Multizone AM Air Handling Units

*Our air handling units are available as standard (ASD) or a fully customisable range (ASH, ASV & AM), to suit the most complex of project requirements. Designed for Australian conditions, these popular ranges can be installed both indoors and outdoors.*

*Designed and manufactured to meet design conditions these air handling units are market leading for performance, quality and efficiency.*

A design that has been refined over nearly 40 years and manufactured to AS/NZS 3666, our air handling unit range is designed to perform in environmental conditions from Darwin to Hobart. Known for its quality and performance our units are a pentapost construction with 60mm polyurethane filled panel. We are the only manufacturer that includes 60mm fill as standard enabling the units to perform better over a larger temperature range.

Units are supplied with LED lights prewired to a switch and inclined stainless steel drain pans with a threaded drain connection to allow for easy connection. Fans used are of a reputable brand and tested for performance and sound.

Our in-house built heat exchanger coils allow the flexibility to customise a solution for even the most complex of projects, building on the trust the market has placed on us over the years.

Maintenance and cleaning of our air handling units is made easy and accessible with ample space provided within. Access through hinged doors with safety latches enables safe entry. Enhancements and developments in the product over the years sets GJ Walker air handling units apart and are the go to brand when performance and design criteria is critical.

## Accessories

- Filter plenum for either panel, deep bed, HEPA filters or a combination
- Mixing box for fresh air or return air
- Economy cycle
- Speed controller on fan motor
- Internal bypass for temperature and humidity control
- Weatherproof design
- Humidifier (space for 3rd party install or factory fitted)
- Return air and Supply air dampers (motorised and non motorised)
- Integrated electronic controls available with integrated support for BMS
- Value train assemblies can be factory fitted
- Spigots
- Heat exchangers (plate or wheel)
- e-box cabinets

ASV



ASH

ASD



AM



# ASD, ASH, ASV and AM Air Handling Units

Horizontal (ASD & ASH), vertical (ASV) and Multizone (AM) range of air handling units can be factory fitted with most standard or optional accessories.



## Construction

Pentapost design double skin with coated galvanised sheetmetal. Available in 60mm panel as standard and 80mm and 100mm panel available on request. Insulation material in PU, PIR and XFLAM



## Fans

EC and AC plug fans supplied as standard. Vee belt driven double width double inlet fans can be provided as options



## Access Space

Access space for coil cleaning and unit maintenance is supplied



## Filters

Filters of any type including Panel, Bag, HEPA and Carbon can be included in a filter plenum fitted directly from the factory



## Drip Tray

AS 3666 compliant stainless steel drip trays with incline to threaded drain point are factory fitted



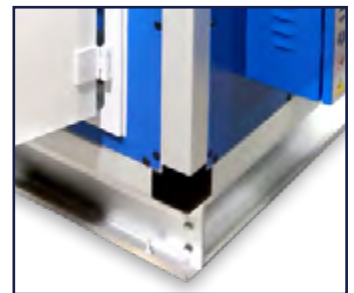
## Safety Door Handles

Door handles on positive pressure chambers are double latched for safety



## Cooling / Heating Coils

Coils can be selected and manufactured to suit various applications such as chilled water, direct expansion (DX), glycol and steam



## Unitary Base

Base frames provided as standard supply. Special customisable base frames up to 200mm in materials such as hot dipped galvanised or stainless steel available on request



## Hinged Access Doors

Access doors are hinged for easy access and maintenance. We also offer pull out doors (non fan sections) when space is restricted.



## Valve Trains

Factory fitted valve train available on request



## UV Lights

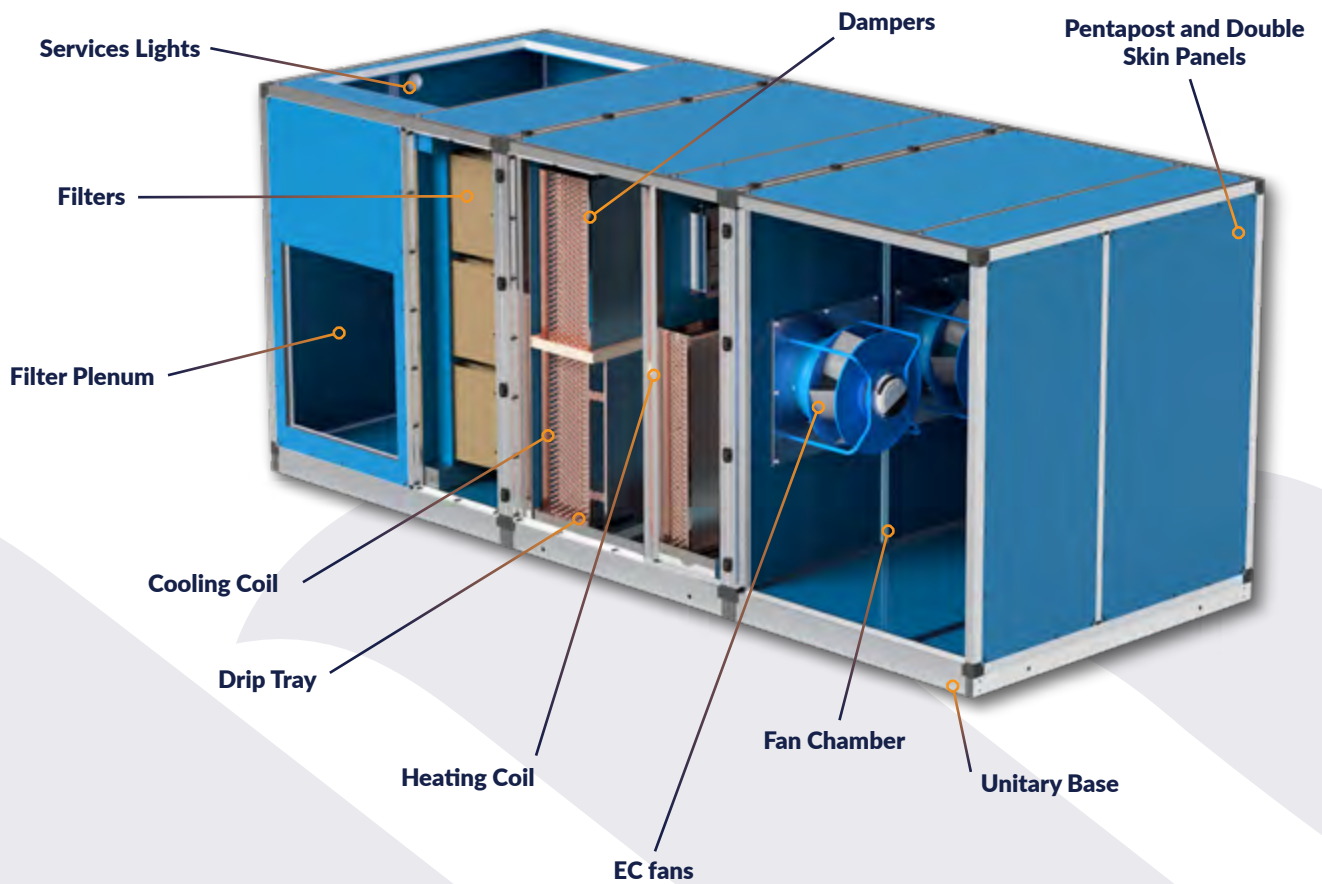
UV Lights for coil cleaning and disinfecting available as factory or retro fitted



## LED Service Lights

Each accessible section is provided with an LED service light wired to a switch as standard

# Features



# ASD 6 Row Coil Performance Data

Model	ASD-01	ASD-02	ASD-03	ASD-04	ASD-05	ASD-06	ASD-07	
Air Flow (l/s)	565	920	1275	1625	1980	2550	3080	
Ext. Static Pressure (Pa)	400	400	400	400	400	400	400	
Coil Velocity (m/s)	2.02	2.02	2.03	2.02	2.02	2.03	2.03	
Cooling Conditions	Total Capacity (kW)	13.04	20.12	30.42	40.62	47.24	60.84	78.73
	Sensible Capacity (kW)	9.59	15.15	22.07	28.92	34.27	44.13	55.58
	Air On Temp (°C)	25	25	25	25	25	25	25
	Air Off Temp (°C)	11	11	11	11	11	11	11
	Water Temp In (°C)	6	6	6	6	6	6	6
	Water Temp Out (°C)	12	12	12	12	12	12	12
	Rows	6	6	6	6	6	6	6
	Water Flow Rate (l/s)	0.52	0.80	1.21	2.71	1.87	2.41	3.12
	Water Velocity (m/s)	0.48	0.37	0.56	0.75	0.56	0.56	0.94
	Water Pressure (kPa)	4.5	2.1	5.5	10.8	5.4	5.8	18.2

Heating Conditions	Total Capacity (kW)	7.8	15.8	24.1	32.6	37.4	48.2	63.5
	Air On Temp (°C)	20	20	20	20	20	20	20
	Air Off Temp (°C)	31	34	35	39	35	35	37
	Water Temp In (°C)	80	80	80	80	80	80	80
	Water Temp Out (°C)	60	60	60	60	60	60	60
	Rows	1	1	1	1	1	1	1
	Water Flow Rate (l/s)	0.10	0.19	0.30	0.40	0.46	0.60	0.78
	Water Velocity (m/s)	0.09	0.18	0.28	0.37	0.28	0.28	0.47
	Water Pressure (kPa)	0.1	0.2	0.5	1.0	0.7	0.5	2.2

Fan Details	Type	EC Plug	EC Plug	EC Plug	EC Plug	EC Plug	EC Plug	EC Plug
	No. of Fans	1	1	1	1	1	1	2
	Diameter (mm)	350	350	350	450	450	500	450
	Motor Power (kW)	0.54	0.75	1.09	1.30	1.66	2.13	2.47
	Voltage (V)	415	415	415	415	415	415	415
	Amps (A)	1.0	1.3	1.8	2.1	2.6	3.3	4.0
	Phase	3	3	3	3	3	3	3
	Frequency (Hz)	50	50	50	50	50	50	50

		Compact (No Access Between Coils)						
Attributes	Height (mm)	903	903	903	903	1228	1533	1228
	Width (mm)	843	1148	1453	1758	1453	1453	2063
	Length (mm)	2905	3058	3058	3210	3210	3210	3210
	Weight (kg)	290	390	480	600	600	690	860
	Standard (Access Between Coils)							
	Height (mm)	903	903	903	903	1228	1533	1228
	Width (mm)	843	1148	1453	1758	1453	1453	2063
	Length (mm)	3363	3363	3363	3363	3820	3820	3820
Weight (kg)	330	420	510	620	670	760	950	

# ASD 6 Row Coil Performance Data

Model	ASD-08	ASD-09	ASD-10	ASD-11	ASD-12	ASD-13	ASD-14	
Air Flow (l/s)	3255	3960	4845	5725	6745	7765	10140	
Ext. Static Pressure (Pa)	400	400	400	400	400	400	400	
Coil Velocity (m/s)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	
Cooling Conditions	Total Capacity (kW)	81.36	101.23	123.85	146.35	166.19	196.29	262.09
	Sensible Capacity (kW)	57.93	71.46	87.43	103.31	118.98	139.11	184.2
	Air On Temp (°C)	25	25	25	25	25	25	25
	Air Off Temp (°C)	11	11	11	11	11	11	11
	Water Temp In (°C)	6	6	6	6	6	6	6
	Water Temp Out (°C)	12	12	12	12	12	12	12
	Rows	6	6	6	6	6	6	6
	Water Flow Rate (l/s)	3.23	4.02	4.91	5.81	6.59	7.79	10.40
	Water Velocity (m/s)	0.76	0.94	0.94	0.94	0.71	0.84	0.97
	Water Pressure (kPa)	11.3	19.1	19	18.1	9.8	14.5	21.9

Heating Conditions	Total Capacity (kW)	65.2	81.7	99.9	118	142.9	169	220.6
	Air On Temp (°C)	20	20	20	20	20	20	20
	Air Off Temp (°C)	36	37	37	37	37	38	38
	Water Temp In (°C)	80	80	80	80	80	80	80
	Water Temp Out (°C)	60	60	60	60	60	60	60
	Rows	1	1	1	1	1	1	1
	Water Flow Rate (l/s)	0.80	1.00	1.23	1.45	1.76	2.08	2.71
	Water Velocity (m/s)	0.38	0.47	0.47	0.47	0.57	0.67	0.76
	Water Pressure (kPa)	1.1	1.8	1.9	2.1	3.2	4.8	7.0

Fan Details	Type	EC Plug	EC Plug	EC Plug	EC Plug	EC Plug	EC Plug	EC Plug
	No. of Fans	2	2	2	2	3	3	3
	Diameter (mm)	450	450	500	560	500	560	560
	Motor Power (kW)	2.61	3.32	3.98	4.55	5.43	6.06	8.41
	Voltage (V)	415	415	415	415	415	415	415
	Amps (A)	4.1	5.2	6.2	7.0	8.4	9.4	12.9
	Phase	3	3	3	3	3	3	3
	Frequency (Hz)	50	50	50	50	50	50	50

		Compact (No Access Between Coils)						
Attributes	Height (mm)	1533	1533	1858	2163	2163	2163	2315
	Width (mm)	1758	2063	2063	2063	2368	2678	2978
	Length (mm)	3210	3363	3363	3363	3363	3363	3363
	Weight (kg)	840	960	1110	1250	1420	1610	1950
		Standard (Access Between Coils)						
Attributes	Height (mm)	1533	1533	1858	2163	2163	2163	2315
	Width (mm)	1758	2063	2063	2063	2368	2678	2978
	Length (mm)	3820	3820	3973	3973	4053	4053	4053
	Weight (kg)	930	1060	1220	1350	1560	1750	2110



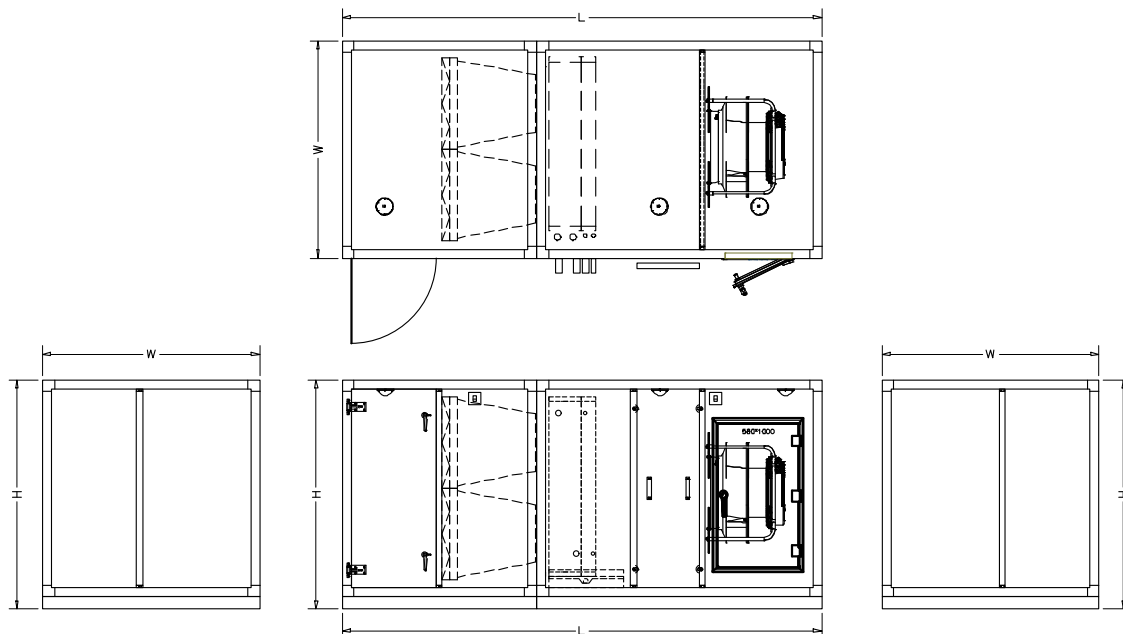
# Dimensional information

ASD standard horizontal AHU range can be supplied with a quick turnaround for those projects where customisation is not required.

Airflow For Given Coil Face Velocity (l/s)											
Model	Width (mm)	Height (mm)	Length Standard (mm)	Length Compact (mm)	1.0 m/s	1.25 m/s	1.5 m/s	1.75 m/s	2.0 m/s	2.25 m/s	2.5 m/s
ASD-01	843	903	3363	2905	285	355	425	495	565	635	710
ASD-02	1148	903	3363	3058	460	575	690	805	920	1030	1145
ASD-03	1453	903	3363	3058	635	795	950	1110	1270	1430	1585
ASD-04	1758	903	3363	3210	810	1015	1215	1420	1620	1825	2025
ASD-05	1453	1228	3820	3210	980	1225	1470	1715	1960	2200	2445
ASD-06	1453	1533	3820	3210	1260	1575	1890	2200	2515	2830	3145
ASD-07	2063	1228	3820	3210	1520	1900	2280	2660	3040	3420	3800
ASD-08	1758	1533	3820	3210	1610	2010	2410	2810	3215	3615	4015
ASD-09	2063	1533	3820	3210	1955	2445	2935	3420	3910	4400	4890
ASD-10	2063	1858	3973	3363	1195	1495	1795	2095	2395	2690	2990
ASD-11	2063	2163	3973	3363	1420	1775	2130	2485	2840	3195	3550
ASD-12	2368	2163	4053	3363	1675	2095	2510	2930	3345	3765	4185
ASD-13	2673	2163	4053	3363	1930	2410	2890	3370	3855	4335	4815
ASD-14	2978	2315	4053	3363	2515	3140	3770	4400	5025	5655	6280

\*Compact Units Do Not Have Spacing Between Coils

# Dimensional drawing



# Recent projects



**Festival Hall  
South Australia**



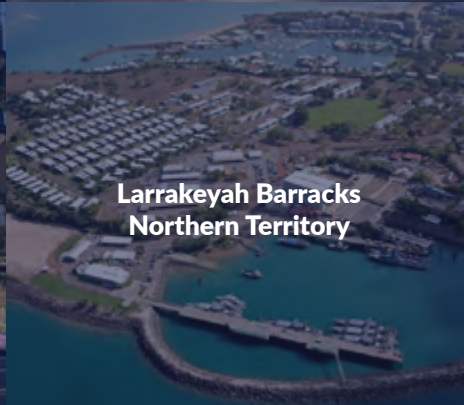
**CSL  
Victoria**



**Western Sydney  
Airport  
New South Wales**



**360 Queen Street  
Queensland**



**Larrakeyah Barracks  
Northern Territory**



**Public Transport  
Operations Control  
Western Australia**



**Royal Hobart Hospital  
Tasmania**



**ACT Canberra Hospital  
Australian Capital  
Territory**



**Supermarkets  
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