

**RECENT
PROJECTS**



Werribee Police



Holiday Inn



Kangan Tafe



Queen and Collins



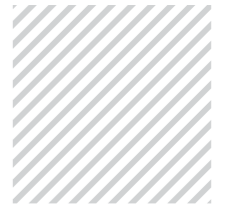
Melbourne Uni
Student Precinct

AHU



AIR HANDLING UNITS

Customisable modular air handling units,
designed and built to suit your project
requirements



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PRODUCT GUIDE

AHU

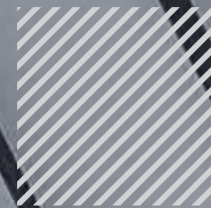
Air Handling Units are customisable, designed and built for Australian, New Zealand and Asia Pacific conditions. Modular units can be used in both indoor and outdoor installations.

Colair Technology modular Air Handling Units have non-cold tracking options available to suit your thermal bridging requirements. Manufactured in accordance with EN1886:2007 and built to comply with Australian Standards AS/NZS 3666, with particular attention to access for cleaning and maintenance, Colair modular Air Handling Units have all the features and accessories your project requires.

Colair Technology modular Air Handling Units are constructed using aluminium penta-post frames with a 50mm polyurethane filled panel, and a thermally broken construction to prevent cold tracking. Panels can be removed without affecting the structural integrity of the unit. Access panels can be sized to suit the individual requirements of the project with hinged doors opening outward for negative pressure applications and inward opening doors for positive pressure applications.

**COLAIR IS COMMITTED
TO PROVIDING COMFORT
AND ASSURANCE WITH A
CERTIFIED AND QUALITY
SOLUTION FOR YOUR NEXT
PROJECT OR DESIGN.**



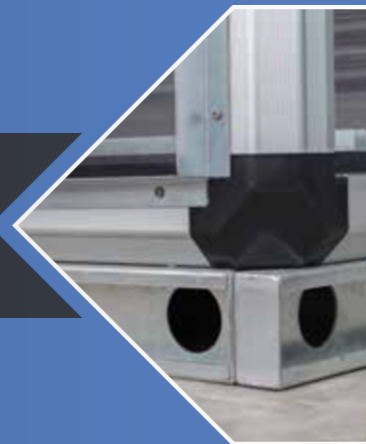


The units come with stainless steel 304 drain pans as standard, which are inclined to ensure no pooling of water. The drain pans are designed to enable easy cleaning and have a 1½" drain pipe connection to enable drainage of water. Colair Technology modular Air Handling Units are supplied with a wide range of high efficiency fan solutions from EC plug wall grids, AC plug fans or AC centrifugal belt driven fans. fAC motors can be supplied with IE1, IE2 or IE3 efficiency depending on the requirements.

The units are available in a variety of corrosion resistant options. Panels can be made with SS304 or SS316 materials and coils can be made with copper fin with various types of corrosion coating. Available in horizontal, vertical and multizone configurations, chilled water, hot water, DX, steam and glycol coils solutions, Colair modular Air Handling Units are the solution for your project.



UNITARY BASE



Constructed from 3mm folded galvanised sheet metal, it is suitable for both lifting and installation.

C-Channel bases with powder coating or hot dipped galvanised coating are available for more severe environments.

Standard base heights will be 100mm with available options up to 400mm to replace the use of a plinth.

Base is suitable to be positioned directly on a flat surface with anti vibration pads installed between the base and plinth or deck or floor surface.

INSULATED PANEL



Polyurethane panels available in thickness of 25mm, 50mm and 75mm with standard

0.55mm internal and external pre-painted galvanised sheet metal (PPGI). Insulation has a standard density of no less than 40kg/m³.

Options include different metal material for panel: aluminum, SS304 and SS316.

Options for insulation materials include rockwool or PIR.

FILTERS & FRAMES



A wide range of filters for different applications ranging from: G3, G4 and M5 washable pre-filters (standard aluminium frame)

- M6, F7, F8 and F9 disposable deep bed filters (standard Galvanised Sheet Metal frame)
- H13 and H14 for clean room applications (standard Galvanised Sheet Metal frame)

Front and side loading/unloading of filter options are available.

Galvanised or stainless steel 304 filter frame options available for corrosive environments.

DAMPER (VCDS)



Standard PacAir Ikim Technology modular unit is offered with aluminium dampers assembled from extruded frames and aerofoil blades.

Dampers are design for manual operation via a quadrant or come with the facility to install or have a factory installed actuator.

Dampers are available in stainless steel 304 or can be epoxy coated.

ALUMINIUM PROFILE



Available with thermal break profile from 50mm and 75mm with additional PVC sleeve on the internal section to enhance thermal resistance in order to prevent cold tracking.

Available in non-thermal break 25mm and 50mm profiles.

Panels are mechanically attached to the profile using the aluminium "clip & lock" method for ease of panel removal during installation, maintenance and access.

DRAIN PAN



Drain pan comes standard in galvanised steel painted (black).

Options available SS304 complying to AS/NZ 3666 standard.

Drain pipe size 1 1/2" for ease of cleaning.

OTHER ACCESSORIES



UV RATED VIEWING PORTHOLES



MAGNEHELIC GAUGES & SERVICE LIGHTS



HEAVY GAUGE HINGES & LOCKABLE DOOR HANDLES



EXTENDED STUBS & ADDITIONAL INSULATION



Coils are manufactured and tested in accordance to AHRI 410-2001 with an option to have a certified coil.

Standard coil comes with aluminum fins mechanically bonded to a 1/2" copper tubes with steel header. Copper header with brass connection and 5/8" copper tube sizes are also available as options.

Standard coil frame is galvanized sheet metal with options of epoxy coated aluminum or SS304 material.

Coil comes with an air trap release valve and drainage valve as standard.

Direct expansion coil are available with TXV/EXV as options.

Coil fin protection includes Aeris, Heresite and Epoxy coating. Copper fin and hydrophilic fins are also available as options.

A wide range of fans for different application:

Centrifugal DIDW fans: forward, backward and aerofoil blades are available. All fans are AMCA certified with the impellers statically and dynamically balanced in accordance to ISO 1940.

Fans are available for belt driven or direct driven (plug fan) application.

EC plug fans are available.

Standard motors used for AC application are totally enclosed fan cooled (TEFC) induction motors ranging from IE1 efficiency to IE3 efficiency.





AHU CASE SIZING BY DESIGN AIR FLOW RATE

	Module width	10	15	20	25	30	35	40	45	50	55	60	65
Module height	Casing size	795	1100	1405	1710	2015	2320	2625	2930	3235	3540	3845	4150
10	795	600	980	1370	1760	2150							
15	1100		1600	2230	2860	3490	4120						
20	1405			3090	3960	4830	5700	6570					
25	1710				4950	6040	7130	8220	9310				
30	2015					7380	8710	10040	11370	12700			
35	2320						10130	11680	13230	14780	16330	17880	19440

NOTES

1. Air flow rate listed is in l/s.
2. Air flow rate shown as maximum allowed based on 2.5m/s face velocity.
3. Casing size shown is in mm.
4. All models shown are able to fit into standard container of 20', 40' or 40'HC where applicable.
5. Unit height to add IKLIM Air Handling Units metal base 100mm.
6. Unit height to add damper height 125mm where applicable.
7. Unit length to add damper depth 125mm where applicable.
8. Unit width with coil heat exchanger, coil pipe header extended out from side panel maximum 150mm.

AIR FILTER CONFIGURATION

	Module height	Module width																							
		10		15		20		25		30		35		40		45		50		55		60		65	
		Full	Half	Full	Half	Full	Half	Full	Half	Full	Half	Full	Half	Full	Half	Full	Half	Full	Half	Full	Half	Full	Half	Full	Half
	10	1	0	1	1	2	0	2	1	3	0														
	15			1	2	2	2	2	3	3	3	3	4												
	20					4	0	4	2	6	0	6	2	8	0										
	25							4	4	6	3	6	5	8	4	8	6								
	30									9	0	9	3	12	0	12	3	15	0						
	35											9	6	12	4	12	7	15	5	15	8	18	6	18	9

NOTES

1. Full size filter dimension is nominal at 610mm height x 610mm width.
2. Half size filter dimension is nominal at 305mm height x 610mm width.
3. Standard pleated synthetic fibre filter class is G3, G4 and M5.
4. Thickness of aluminium casing is nominal 50mm.
5. Standard deepbed filter class is M6, F7, F8 and F9. Thickness of GI casing is nominal 25mm. Standard filter lengths of 380 and 530mm.
6. Filters can be either front loading or side loading as per requirement, selection or space availability.

