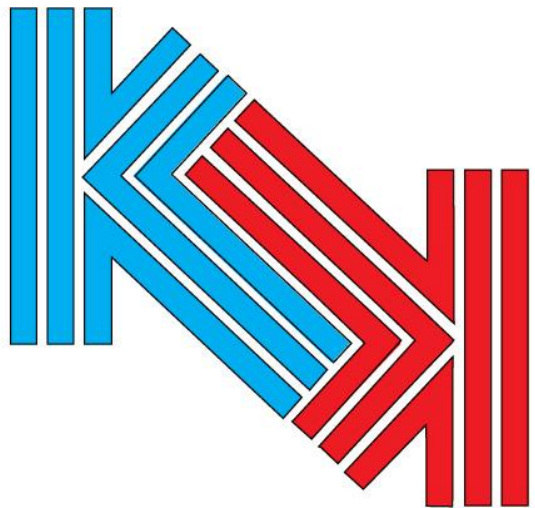


®



KLIMAK srl





**“...if possible, make it better,
and it’s always possible!”**

- Subbarao Gavirneni
President
Klimak srl

ICONIC PROJECTS



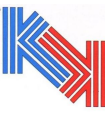
Burj Khalifa, Dubai, UAE - 144 units



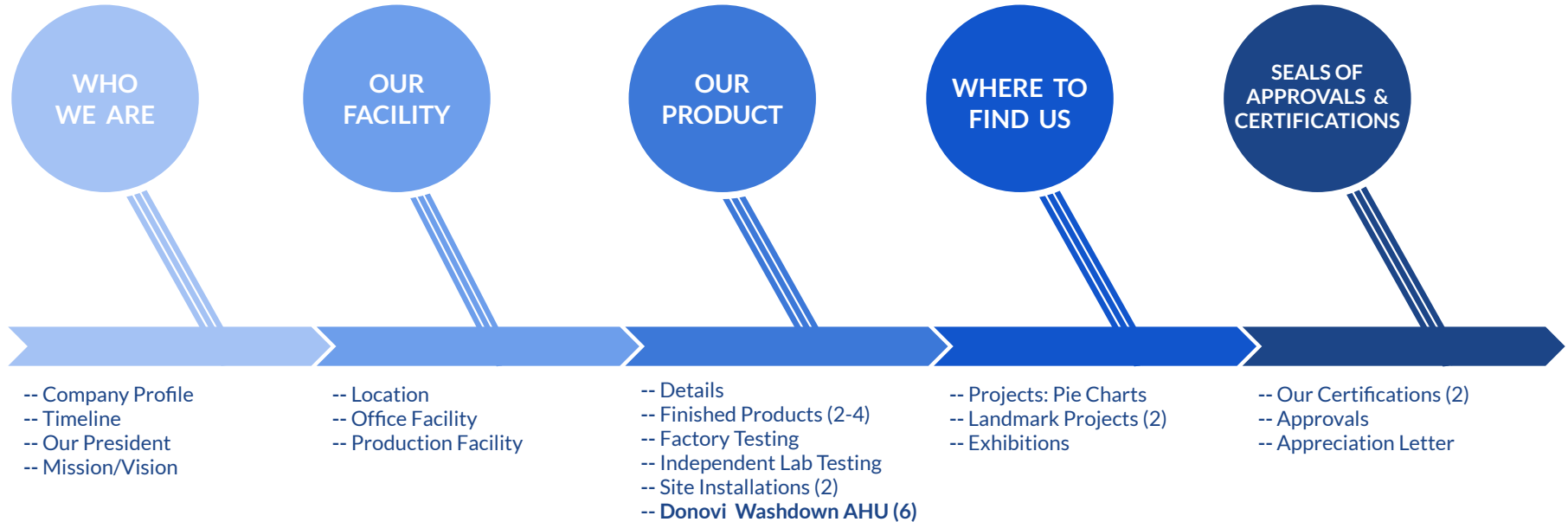
Hamad International Airport, Doha, Qatar - 297 units



Stadiums for FIFA 2022 - 793 units

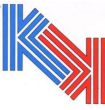


PRESENTATION OUTLINE



A photograph of four people in a meeting, overlaid with a blue tint. The text "WHO WE ARE" is centered in white. The scene shows a man and two women sitting around a table with papers and a small bowl. A woman is standing on the left, holding a pen to her face. The background includes a framed certificate on the wall and glass partitions.

WHO WE ARE



COMPANY PROFILE

We specialize in double skinned AHUs & FCUs incorporating components exceeding international standards, in order
To ensure trouble-free operation with minimum maintenance during the life of the AHU.

KLIMAK engineering team, with more than 40 years of experience in AHU industry, study and custom-design the
units for each application while giving special attention in the selection of materials for continuous operation
no matter the climatic conditions.

- **Name of company:** KLIMAK srl – ITALY
- **Type of activity:** Manufacturing of Double Skinned AHUs & FCUs
- **Year established:** 1989
- **Workshop floor area:** 14,000 m² (Covered); 10,000 m² (Open)
150,000 ft² (Covered); 107,000 ft² (Open)
- **AHU Selection:** Computer Software (AHRI 430 & Eurovent)
- **AHU in Operation:** In excess of 12,000 units
- **FCUs in Operation:** In excess of 10,000 units

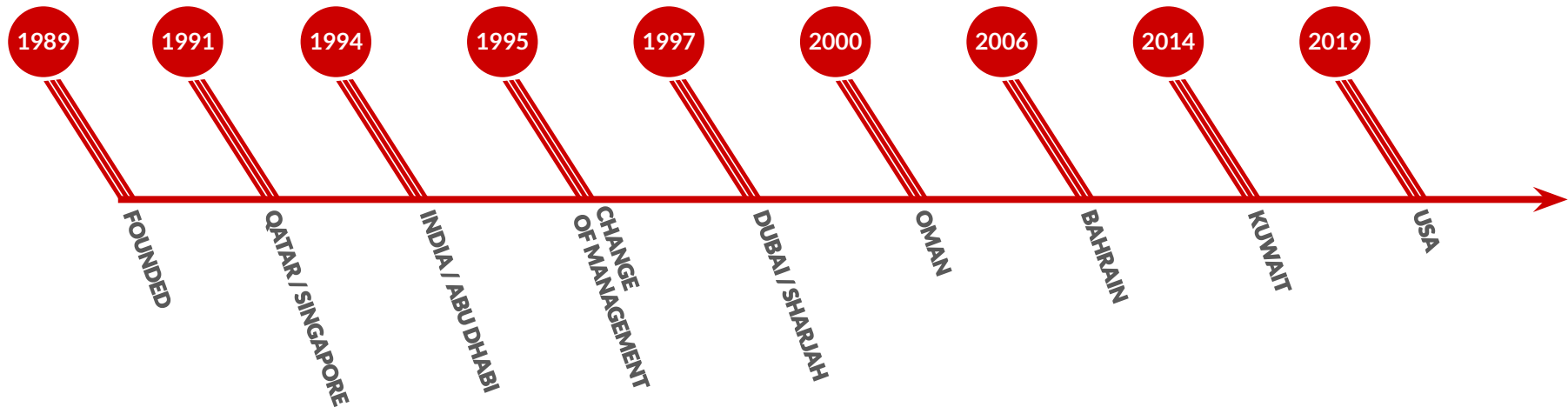


OUR YEARS OF EXPERIENCE

Klimak founded in 1989 has grown from humble beginnings into one of the finest manufacturer of custom air handling units, passionately engineering and precisely crafting them at its 14,000 m² (150,000 ft²) facility located near Venice, Italy.

Klimak's technical team, with over four decades of experience is ever searching to push design and performance boundaries.

The company is known for its consistency in quality and dedication to continuously improving manufacturing standards of AHUs and FCUs, delivering unparalleled value over their life cycle. Klimak stands tall in exceeding expectations of Developers and Consultants for many of their landmarks projects, resulting in repeat orders.





Subbarao Gavirneni

President and CEO of Klimak srl

Mr. Subbarao Gavirneni has been the President & CEO of Klimak for 25 years. He has dedicated his entire career to making breakthrough products in the industry of Air Handling Units in order to improve the standards of construction.

Background

During the 70s, after his Master's in engineering, specialized in Air Conditioning, Gavirneni began his career as an apprentice in India. Later he made his way as a junior engineer position in Qatar and was later promoted as the manager. But what brought him to Italy was the quality of craftsmanship. He knew that with his passion and experience combined with the Italian craftsmanship, he could really bring something innovative into the world of Air Handling Units.

Recognition

In 2008 Mr. Subbarao Gavirneni was conferred with *L'Onorificenza di Commendatore* (Legion of Honor as a Commander) by the President of The Italian Republic in recognition of individual contributions for the Italian industry. Mr. Gavirneni is one of the two to be given this rare honor in the vast Air Conditioning Sector in Italy.



OUR FACILITY

LOCATION

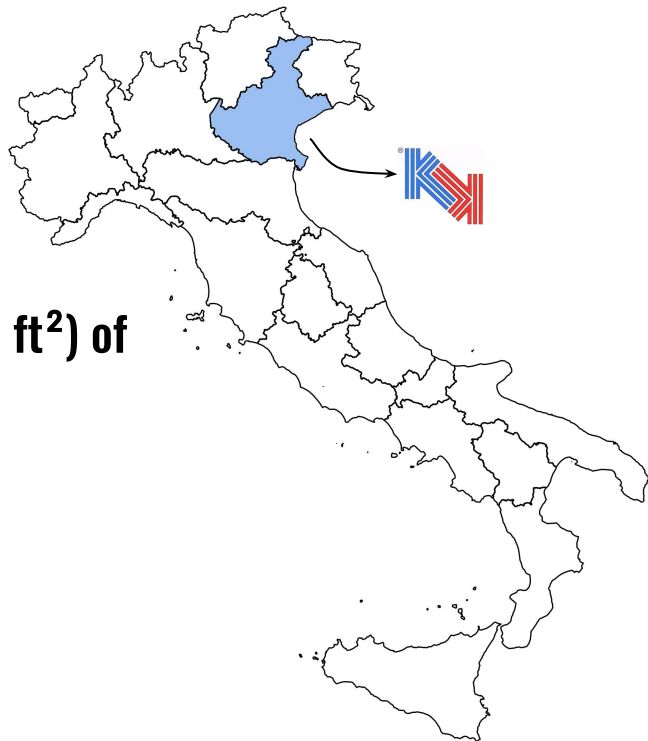
We are located in Piazzola Sul Brenta
near Venice in Italy.

1 head office
& production plant

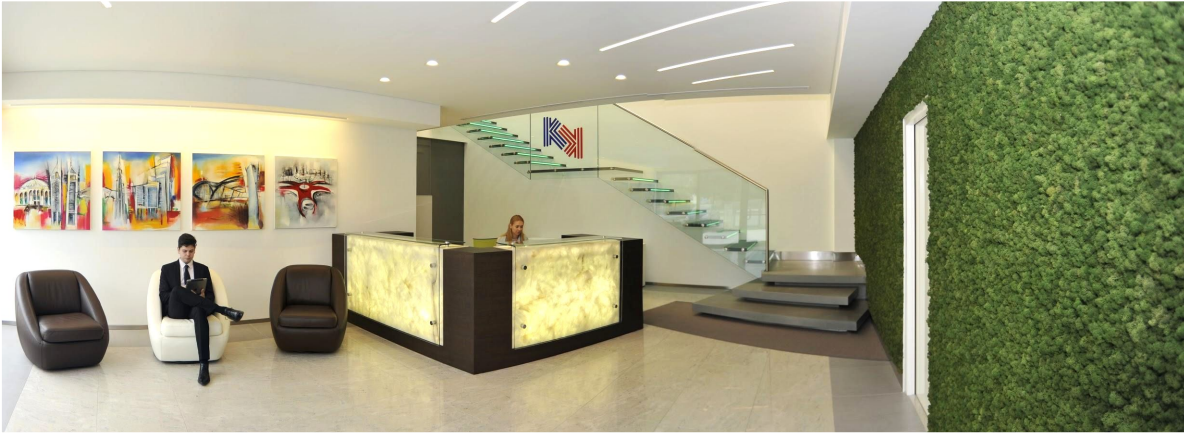
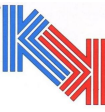
14,000 m² (150,000 ft²) of
plant surface area

HEAD OFFICE & PRODUCTION PLANT

9, Via Guido Rossa,
35016 Piazzola sul Brenta - Italy
Tel. +39 049 559 9452
E mail : klimakmail@klimak.com



OFFICE FACILITY

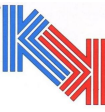


← RECEPTION

OFFICE →



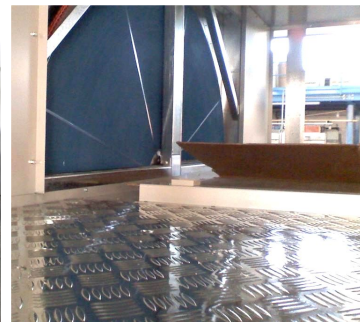
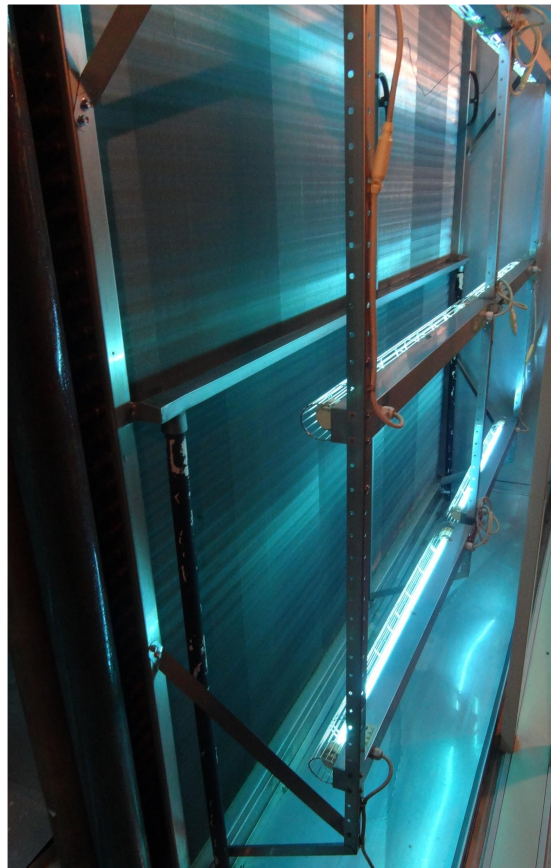
PRODUCTION FACILITY



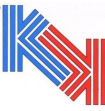


OUR PRODUCT

KLIMAK STANDARD CONSTRUCTION DETAILS



FINISHED PRODUCTS



FACTORY TESTING



Air Performance Test



Casing Leakage Test



INDEPENDENT LAB TESTING



TEST REPORT



Air Movement and Control Association International, Inc.
30 West University Drive, Arlington Heights, Illinois 60004-1893, U.S.A.

Test Number
34034-A1

Test Unit:
Manufacturer:
Trade Name:
Model Number:
Impeller Diameter:
Inlet Area:
Outlet Area:

Central Station Air Handling Unit
KLIMAK SRL (ITALY) - AHRI
KCD-105
YMA-K-065
22,000 in.
9,000 ft²
26,090 ft²

Test Purpose:
Date of Test:
Client:
Witness:
Personnel:
P-
Unit System:

Contract Test
09/28/2017
KLIMAK SRL (ITALY) - AHRI
None
In-situ
29.39 in. Hg
IP

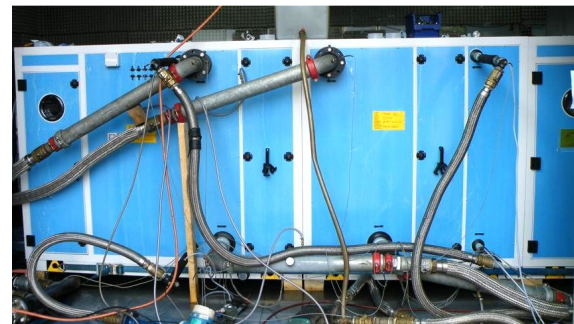
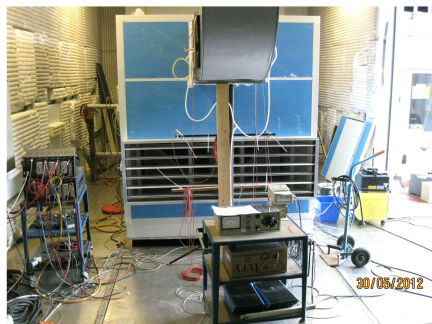
Air Handling Unit Classifications
Unit Type: Draw-through

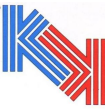
Application Type: Indoor

Fan Type: Airfoil

Test Method per ANSI / AMCA Standard 210-16, Figure 12 Setup, Installation Type A

Comments: Unit tested with AMCA supplied outlet duct.



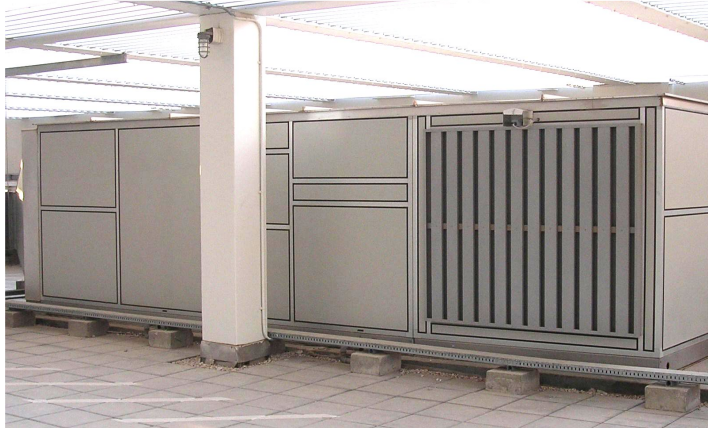
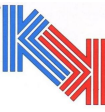


SITE INSTALLATIONS

Klimak ensures that their equipment withstands aggressive ambient conditions and is relatively maintenance free. Klimak has an established policy of deputing the technicians with first hand knowledge, should the need arise in the unlikely event, to step in and provide all the necessary assistance at a short notice.



SITE INSTALLATIONS



Introducing



Our 100% Washdown Units for healthcare applications



Hospital Grade AHUs

*Raising the industry standards
through continuous innovation*

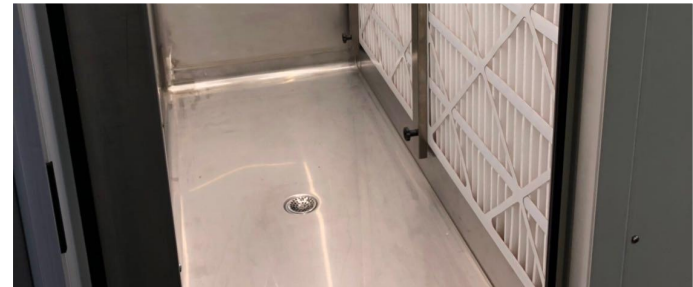
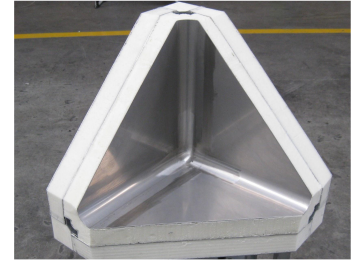
- 100% Washdown for sterilization
- Certified for Hygienic applications & IAQ standards
- Custom configurations available as required



The **dinovi** Hospital Grade Air Handling Units are the latest innovation by Klimak to meet the stringent sterilization requirements of today's health care facilities.

Featuring the state of the art “**100% Washdown**” facility, the **dinovi** units are custom designed to meet desired psychometric conditions ensuring high IAQ standards.

The **dinovi** units offer energy efficient options, contributing to savings and points to LEED Certification and Green Building initiatives.



The **dinovi** Air Handling Units are configured with components such as but not limited to:

- Airfoil Aluminum Dampers with powder coating
- Staged filtration up to HEPA quality
- Cooling and Heating Coils with E-Coated finish
- IAQ drains meet ASHRAE Standard 62.1, Chapter 5a
- UV Lamps
- Humidification Systems
- Fans for various pressure requirements
- Alternately, Fan Arrays with direct drive EC motors
- Airflow monitoring stations.

- R-20 Casing
- Washdown chambers made of 304/316 stainless steel

- Each unit comes with hygienic certification in accordance with DIN 1946 Part 4: 2008
- In-swing / Out-swing hinged access doors to open against the pressure
- Airtight panel and door seals to withstand 8" +ve or -ve internal pressures
- PVC sleeved airtight insulation around the coil connections
- Stainless steel drain lines.



dinovi PRODUCT HIGHLIGHTS



dinovi PRODUCT HIGHLIGHTS

The improved double wall foam injected R-20 casing is a state of the art design with powder coated extruded aluminum thermal-break corner frame.

The wall, floor and roof panels are encased in a custom designed aluminum and pvc combination extrusion for a perfect fit with thermal break.

The unique inswing and outswing door design incorporates a dual seal gasket that fits within the extrusion for high pressure applications.

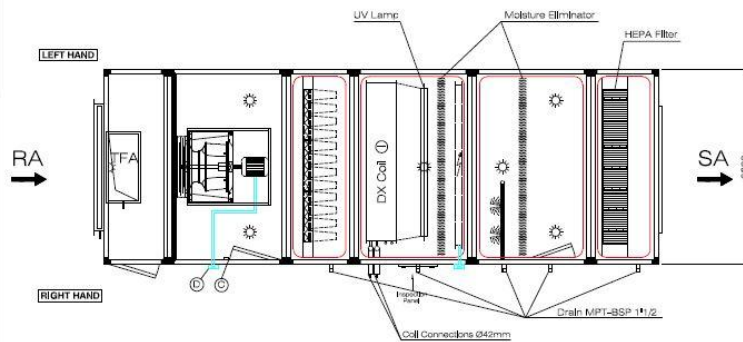
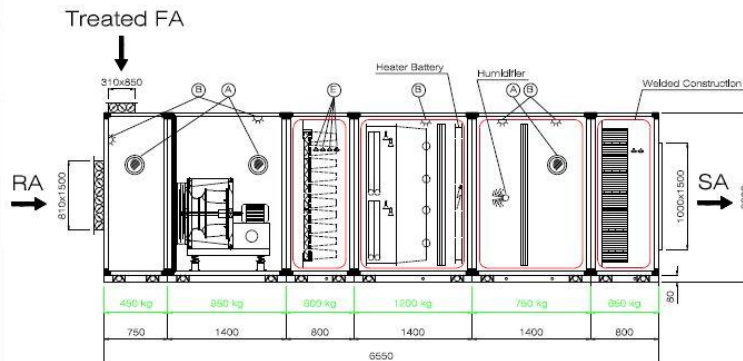
Each door assembly in the **dinovi** air handlers comes standard with high pressure rated porthole window as well as LED interior lighting.

Additional components such as Energy recovery, Glycol Run Around coils Heat Pipe are all available.



AHU-01

**Sample construction drawing,
submitted for approval with each unit prior to manufacturing.**



- A - View Port
B - Bulkhead Light
C - Micro Switch for Motor
D - Junction Box For Motor Termination

[illegible]

9, Via Guido Rossa
35016 Piazzola Sul Brenta (PD) - Italy
Tel. 049559 9452 r.a.
Website: www.kimark.com
E-mail: sales@kimark.it

This study has been approved by the Research Ethics Board of the University of Toronto.

DATE:
INITIALS:
STAMP:

DATE			CONTRACT NO.		
PROJECT			ITEM	AHLU-01	DATE
SCOPE	KCD 280	QUANTITY	01	COUNTRY	INDONESIA
UNIT				WEIGHT	4600 kg
ISSUED		DATE	23/09/19	SCALE	NTS
				BY	 PALLADITHORN M,R

1) T,B,A; To be advised later.

1) N.A: Not Applicable

The contents of this drawing is under kllmak property

© Copyright KLIMAK all Right Reserved



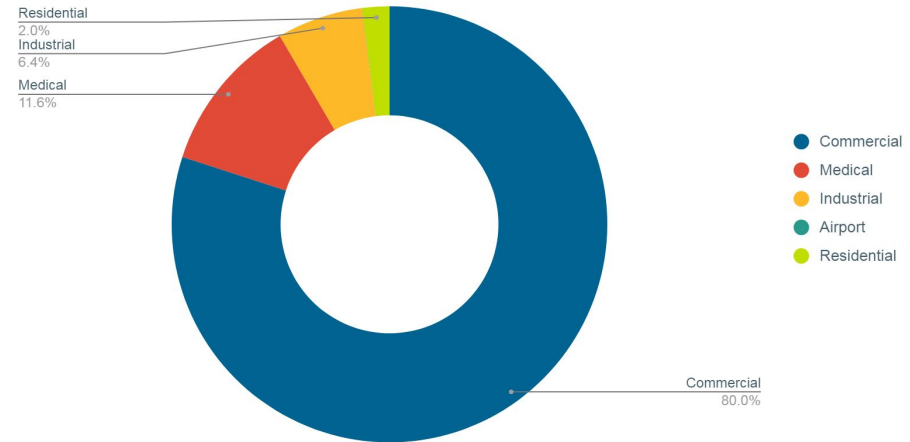
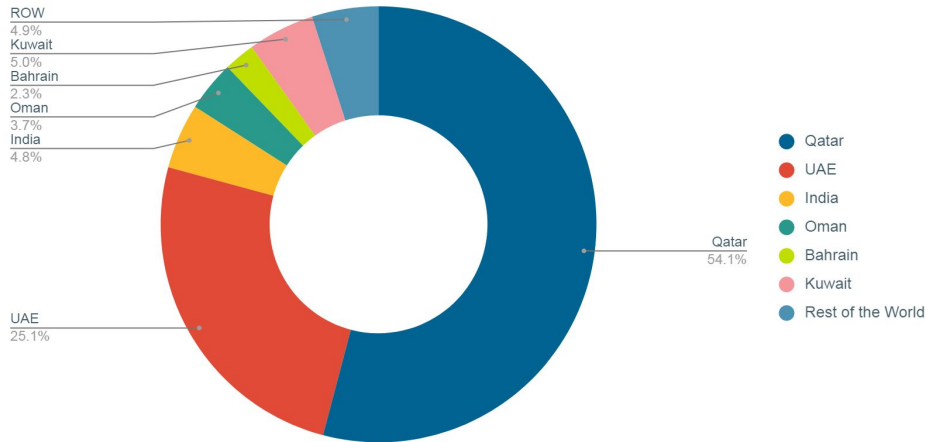
WHERE TO FIND US



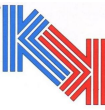
PROJECTS AROUND THE WORLD



Klimak has supplied in excess of **13,000** Double Skinned AHUs to various countries in Asia, Africa and Europe, for demanding applications in Hospitals, Airports, and Commercial Centers.



LANDMARK PROJECTS



HITEC City
(Hyderabad - 1994)



Sheikh Khalifa Medical City
(Abu Dhabi - 1995)



Emirates Towers
(Dubai - 1998)



WAFI
(Dubai - 2002)



Bridge Arts & Science
(Doha - 2004)



Emirates Hanger
(Dubai - 2006)



Mall of the Emirates
(Dubai - 2007)



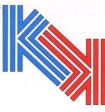
Dubai Flower Center
(Dubai - 2007)



Old Town Commercial Island
(Dubai - 2008)



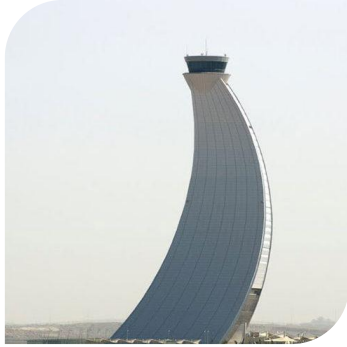
Burj Khalifa
(Dubai - 2009)



LANDMARK PROJECTS



Ferrari Experience
(Abu Dhabi - 2009)



Abu Dhabi Airport Tower
(Abu Dhabi - 2010)



Hamad International Airport
(Doha - 2011)



Sidra Hospital
(Doha - 2012)



Hamad Medical City
(Doha - 2013)



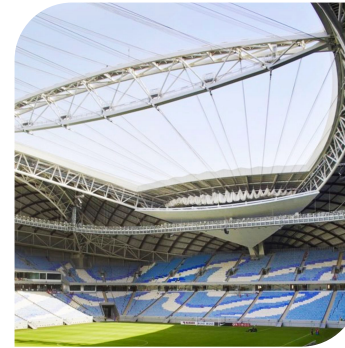
Qatar Petroleum District
(Doha - 2014)



Oman Convention Center
(Muscat - 2014)



Khalifa Stadium
(Doha - 2016)



Wakrah Stadium
(Doha - 2019)



Oman Museum
(Nizwa - 2019)



EXHIBITIONS

Big 5 - Kuwait

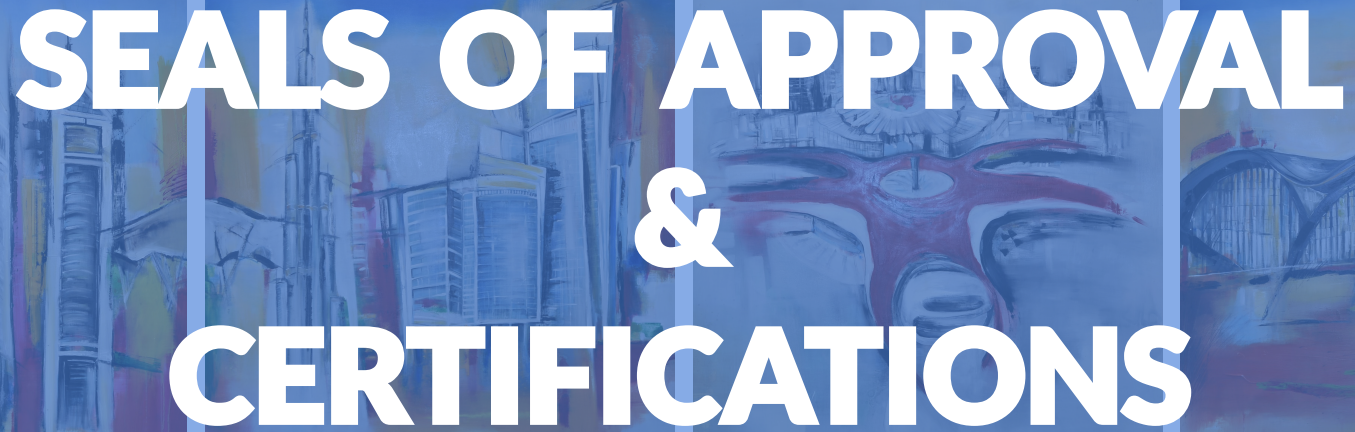


AHR EXPO 2020 - Orlando



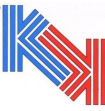
AHR EXPO 2018 - Chicago





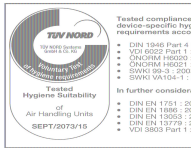
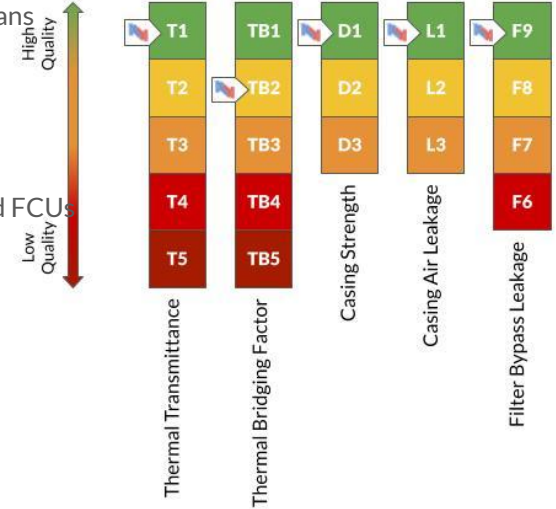
SEALS OF APPROVAL & CERTIFICATIONS

UNPARALLELED CERTIFICATIONS

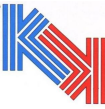


Klimak Certifications represents an added guarantee of professionalism and quality.

- AHRI Standard 430 - Performance Rating of Central Station Air-Handling Units Supply Fans
- AHRI Standard 410 - Forced Circulation Air-Cooling & Air Heating Coils (ACHC)
- ANSI/UL 1995 - ETL Listed for the safety standard
- DIN EN 1886:2009 - Mechanical Performance of the AHU casing
- EN 13053 - Rating and Performance of AHU Components and Sections
- DIN 1946 Part 4: 2008 / VDI 6022 Part 1: 2011
- ISO 9001:2008 - Quality management system for the design and production of AHUs and FCUs
- Eurovent - Under Process



APPROVALS



TECHNICAL DOCUMENT SUBMITTAL FORM

Document No: **SC-CSC-CAE-MMS-MMS-0001** Rev: **1.1** Date: **20-10-2018**

Project Name: **SC-CSC-CAE-MMS-MMS-0001**

Type of Submittal: ☒ Design Change ☐ New Material ☐ New Method ☐ New Equipment ☐ New Software ☐ New Hardware ☐ New Process ☐ New Material ☐ New Method ☐ New Equipment ☐ New Software ☐ New Hardware ☐ New Process

Submitted by: **SC-CSC-CAE-MMS-MMS-0001**

Reviewed by: **SC-CSC-CAE-MMS-MMS-0001**

Approved by: **SC-CSC-CAE-MMS-MMS-0001**

Signature: **SC-CSC-CAE-MMS-MMS-0001**

Date: **20-10-2018**

NDIA

Module Indoor Air Handling Units
KUMAC S.D. ITALY
SKY ORYX JOINT VENTURE

Technical Drawing

Document No: **20040-A1000-15-MAD-000** Rev: **03**

Submitted by: **SC-CSC-CAE-MMS-MMS-0001**

Reviewed by: **SC-CSC-CAE-MMS-MMS-0001**

Approved by: **SC-CSC-CAE-MMS-MMS-0001**

Signature: **SC-CSC-CAE-MMS-MMS-0001**

Date: **20-10-2018**

SUBMITTAL FOR APPROVAL OF MATERIALS

Project Name: **EXECUTION, COMPLETION & MAINTENANCE OF CIVIL ARCHITECTURAL FINISHES**

Contract No: **10000000000000000000**

Material Description: **EXECUTION, COMPLETION & MAINTENANCE OF CIVIL ARCHITECTURAL FINISHES**

Submitted by: **SC-CSC-CAE-MMS-MMS-0001**

Reviewed by: **SC-CSC-CAE-MMS-MMS-0001**

Approved by: **SC-CSC-CAE-MMS-MMS-0001**

Signature: **SC-CSC-CAE-MMS-MMS-0001**

Date: **20-10-2018**

KEOC

SITE TRANSMITTAL

Document No: **20040-A1000-15-MAD-000** Rev: **03**

Submitted by: **SC-CSC-CAE-MMS-MMS-0001**

Reviewed by: **SC-CSC-CAE-MMS-MMS-0001**

Approved by: **SC-CSC-CAE-MMS-MMS-0001**

Signature: **SC-CSC-CAE-MMS-MMS-0001**

Date: **20-10-2018**

MATERIAL SUBMITTAL

Document No: **20040-A1000-15-MAD-000** Rev: **03**

Submitted by: **SC-CSC-CAE-MMS-MMS-0001**

Reviewed by: **SC-CSC-CAE-MMS-MMS-0001**

Approved by: **SC-CSC-CAE-MMS-MMS-0001**

Signature: **SC-CSC-CAE-MMS-MMS-0001**

Date: **20-10-2018**

APPRECIATION LETTERS



Donald Smith, Segments & Roddy

Consulting Engineers

22, Al Jaddaf Road, 1st Floor
Dubai, U.A.E. P.O. Box 2722
Tel: +971 (0) 4 321 2332
Fax: +971 (0) 4 321 2332
www.donaldsmith.com

23/1/2000

Re: The Emirates Towers Project - Klimak AHU's & FCU's

Further to our meeting, we recommend your product to other customers and we confirm that Klimak have supplied Air Handling, Component and Fan Coil Units project wide for this Landmark Project, with no problems at all in terms of quality, delivery, price or after sales service. The Construction Manager and Lead Consultant are very pleased with the end result, and have no hesitation in recommending Klimak to others.

If any prospective customers or clients have any doubt's in this regard, we would welcome them to the Emirates Towers Project to judge the air side products for themselves.

Yours faithfully,

Bryan Thursfield.

Project Manager.



Hyder Consulting Middle East Limited
P.O. Box 32750
Dubai
U.A.E.
Tel: +971 (0) 4 321 2332
Fax: +971 (0) 4 321 2332
www.hyderconsulting.com

26 June 2011

Dear Sirs

Subject: Burj Khalifa - Klimak AHU

Hyder Consulting Middle East Ltd can confirm that Klimak AHU have been used throughout Burj Khalifa project with approx 150 AHU in many different configurations and capacities being supplied for this project.

The specifications and standards required for Burj Khalifa were very high and we are pleased to confirm that the AHU manufactured and supplied by Klimak were able to meet these exacting standards.

The decision to use Klimak was made after an extensive compliance statement review process, in addition a factory visit was made to review factory procedures, sample AHU and production capabilities. Independent 3rd party tests were then carried out on sample AHUs to measure actual thermal and acoustic performance against those specified. Hyder Consulting were favorably impressed with Klimak products at all steps along the way and Klimak AHU were in due course approved for the entire Burj Khalifa project.

Hyder Consulting Middle East Ltd can recommend Klimak as a manufacturer and supplier of AHU capable of meeting high quality standards and the high performance required in the Middle East environment.

Yours faithfully

Alastair D Mitchell

Principal Mechanical Engineer

Hyder Consulting Middle East



Registered office: 1st and 2nd floors, Elizabeth House, 55, Peter Paul, Gurnsey, GY1 1DF



4-5 Sheikh Central Manager, JLT - 174 4437-7300 - 3, 184 - 174 4437-7329
P.O. Box 93008, Doha, Qatar. <http://www.hdc.co.kr>

Ref No : HMD-HDSC-LE- 9622

3rd December 2016

To : KLIMAK SRL

Attn: Mr. Subbarao Gavimani, CEO

Page: 1

Subject : Letter of Thanks & Appreciation for Project Completion

Dear Sir,

Hyundai are pleased to announce that they have now received the project Completion Certificate from the Employer PWA/Ahghal dated the 11th October 2016 for the Whole of the Works.

We would like to extend the Contractors deep Appreciation from your company and individual managers that have combined to deliver our esteemed project to PWA/Ahghal.

Hyundai appreciate each and every subcontractors efforts as a team and family group who have assisted with this great effort over the period since inception on the 3rd February 2011 up to the formal Completion of the 30 April 2016 and beyond into the ongoing Defect Period.

Further we request that you use your best endeavors and diligently undertake any remaining outstanding works and to complete any recorded defects promptly in support of the Employer up to the 4th June 2017 the end of the Defects Period.

Finally we take this opportunity to thank each and every individual and company for their efforts and look forward to working together again in the future on new iconic international projects.

Thank you to one and all from the Project Director and the Hyundai team.

Respectfully yours,

Chung Moon Kim, Project Director

Hamad Bin Khalifa Medical City CP3008 Hospital Fit-out Project
Hyundai Engineering & Construction Co., Ltd.



Ref: JN/07/SPD-062

31 July 2018

TO WHOM IT MAY CONCERN

This serves to confirm that M/s.Klimak, manufacturers of Air Handling & Fan Coil Units has worked on the Sidra Medical and Research Centre Mega Project, designed to operate as an ALL-DIGITAL (nearby) paperless and film less environment where information, images, and clinical know-how are all connected and its systems are highly adaptable to future technologies and growth. The facility provides patients with world class, patient-focused medical services for women and children in Qatar and throughout the region.

As the Specialist to the Major Mechanical and Electrical subcontractor, Klimak have successfully supplied, installed and commissioned in excesses of 350 no. AHU's and 250 no. Fan Coil units to the project.

Klimak has proven to have a technical team that can manage the full cycle from inception of the Project, through design and unit selection, to installation, warranties and operational maintenance. Klimak technical team's support for the authority approval on the project has contributed integrally to the successful completion and opening of this prestigious project.

In recognition of Klimak commitment to achieving highest standards of installation and support to the project and in my capacity as the Client Representatives' authorized nominated deputy and as the Project Director for the PM/CMCS services, I hereby recommend Klimak services with confidence, to any prospective developer and Client.

This statement is issued upon the request of Klimak.

Jay Naidoo

Sidra Project Director



31711 - 01000 - 0000 - 0000 - 0000 - 0000 - 0000 - 0000 - 0000 - 0000
ASTAD Engineering Consulting & Project Management WFOO P.O. Box 20000 Doha, Qatar
Commercial Bank Plaza Floor 10 P.O. Box 1000 Doha, Qatar
T: +974 4444 4444 F: +974 4444 4444

KLIMAK

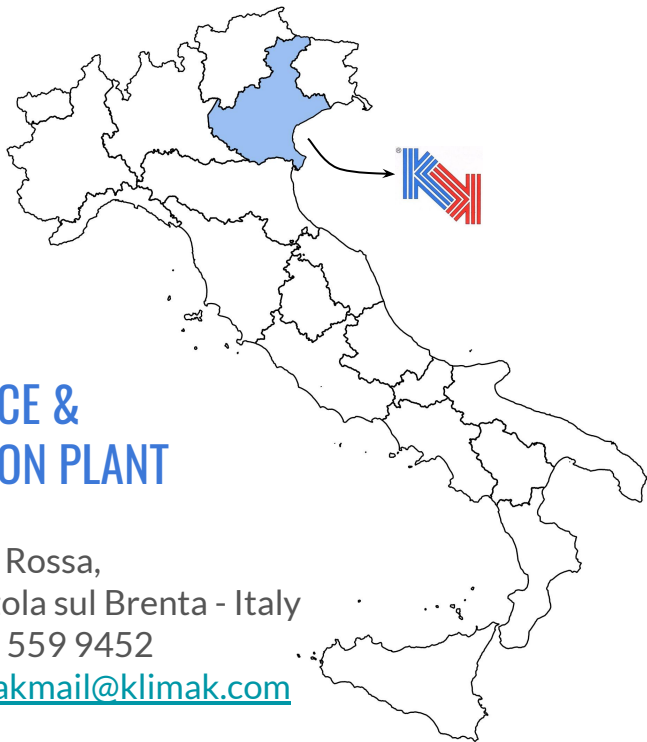
*"...if possible, make it better,
and it is always possible!"*

CORS
F





CONTACT US



HEAD OFFICE & PRODUCTION PLANT

Klimak srl
9, Via Guido Rossa,
35016 Piazzola sul Brenta - Italy
Tel. +39 049 559 9452
E mail : klimakmail@klimak.com

OUR REPS

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Mr. Vignesh
klimakqatar@klimak.com
+974 3102 0780

UAE

Cheqpoint
Mr. Jay Deliwala
jay@cheqpoint.com
+971 50 272 6998

Kuwait

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