



# Dexter Jhones H. Andaya

Mechanical Design Engineer - HVAC



## CONTACT

### Current Address

8901 Arkwan Ar Rumi, 3037  
An Naim District, 23526  
Jeddah KSA

### Home Address

Conconig East Sta. Lucia 2712  
Ilocos Sur Philippines

### Phone

+966 53 452 7014

### E-mail Address

dex\_andaya@yahoo.com

### Web

[www.linkedin.com/in/dexter-jhones-andaya-29bb856b](http://www.linkedin.com/in/dexter-jhones-andaya-29bb856b)

## SKILLS

Carrier HAP v6.1  
Carrier HAP v5.11  
HVAC Solution  
Revit BIM HVAC  
Auto CAD  
S3D Modelling  
MS Project Management  
MS Office

## REFERENCES

Shall be provided upon request.

## PROFILE

Licensed Mechanical Engineer specializes in HVAC with 13 years of combined experience in design, installation, operation and maintenance of HVAC systems for residential and non-residential (commercial & industrial) applications.

- Registered Mechanical Engineer (Professional Regulation Commission - Philippines): PRC License No. 0071881
- Accredited Mechanical Engineer (Saudi Council of Engineers): Membership ID No. 387777
- Application for Professional Engineer ongoing (EGBC)
- Application for ASEAN Engineer under preparation
- Application for Professional Mechanical Engineer under preparation

## EXPERIENCES

### MECHANICAL ENGINEER

Amsad Architectural Associates I Jeddah Kingdom of Saudi Arabia

March 2022 - February 2024

- Create Basis of Design (BOD) for the projects.
- Conceptualize the systems to be used for the projects.
- Calculate the cooling, heating, ventilating and humidifying requirements of the projects using HAP (Hourly Analysis Program), spreadsheets and other software based on project BOD, Saudi Building Code and other international accepted standards such as ASHRAE, SMACNA and NFPA.
- Design and calculate parking ventilation and kitchen ventilation system requirements.
- Design and calculate smoke management ventilation system requirements such as smoke evacuation, make-up air, service elevator pressurization and stair well pressurization.
- Review HVAC designs of other engineering design consultants for the purpose of code compliance and value engineering.
- Perform external static pressure calculation.
- Size and select HVAC equipment such as chillers, pumps, FAHUs (fresh air handling unit) AHUs (air handling units), FCUs (fan coil units), heaters, humidifiers and fans.
- Guide and give instructions to junior engineers and draftsmen.
- Review duct sizes and air outlet selections.
- Review project models using Revit.
- Review HVAC drawings.

### DESIGN ENGINEER 2

Fluor Daniel, Inc. - Philippines I Alabang Muntinlupa City Philippines

January 2019 - September 2020

- Calculate the cooling, heating, ventilating and humidifying requirements of the modular process buildings, mini e-houses, mini field auxiliary rooms and stick-built pump houses using HAP (Hourly Analysis Program), spreadsheets and other software based on project technical specifications for HVAC, Canadian Codes such as NECB, BCBC, NBC and other accepted international standards such as ASHRAE, SMACNA and NFPA.
- Review duct sizes and outlet selections.
- Review external static pressure calculations.
- Review building models using Smart Plant 3D.
- Responsible Engineer (RE) of package air conditioning units and make up air units.
- Review data sheets, air flow diagrams, duct and instrumentation diagrams and general arrangement drawings.
- Handle weight management concerns pertaining to HVAC equipment and items.
- Mark up required water lines and drain lines on P&IDs for HVAC equipment humidifiers.
- Model review representative to office in Calgary Alberta Canada.

## EDUCATION

Don Mariano Marcos Memorial State University  
Mid La Union Campus  
City of San Fernando La Union  
Bachelor of Science in Mechanical Engineering  
SY 2003-2008

## ON THE JOB TRAINING

- Bauang Private Power Corporation (April 2, 2007 – May25, 2007)
- Technical knowledge on Diesel Engines
- Apprenticeship on Overhauling Sulzer DieselEngines
- Corrective and Preventive Maintenance of SulzerDiesel Engines

## PROJECTS

- Al Othaim Dammam Mall at Dammam KSA
- Al Othaim Jubail Mall at Jubail KSA
- 737 Masarrah Mall at Jeddah KSA
- Al Ula Terminal-1 Expansion at Al Ula KSA
- Office and Palace at Riyadh KSA
- Abdullah Hashim Malik Road Development at Jeddah KSA
- Sumou Ajwan Resort Project at Khoubar KSA
- Araqa Staff Accommodation at Riyadh KSA
- LNG Canada located at BC Canada
- Thakher City (99 hotel buildings, 1 mall and 1 mosque) located at Makkah KSA
- Maad Mixed Use Complex, Tower 3 (5 buildings) and Tower 4 (6 buildings) located at Makkah KSA
- Al Manakha Hotels (4 buildings) located at Madinah KSA
- Ibis and Adagio Hotel located at Al Khobar KSA
- Al Bakri Hotel located at Jeddah KSA
- Ashesha Hotel located at Makkah KSA
- Raj Al Shesha Hotel located at Makkah KSA
- King Abdullah Financial District Monorail Depot (KAFD Project) located at Riyadh KSA
- Hospitalisation Soins de Suite located at Paris France
- King Abdulaziz Project 1 (KAP1) composed of 19 prototypes for 305 sites located at KSA
- Am Euro Pharma Plant at Calamba Laguna Philippines
- Henry Sy Sr. Hall located at De Lasalle University Taft Avenue Manila Philippines
- BTTC Centre located at Ortigas Avenue San Juan Metro Manila Philippines
- Filinvest Building at EDSA Mandaluyong City Philippines
- Revolving Restaurant at MDC100 Eastwood Quezon City Philippines

## MECHANICAL ENGINEER

Amsad Architectural Associates I Jeddah Kingdom of Saudi Arabia  
January 2015 - December 2018

- Create Basis of Design (BOD) for the projects.
- Conceptualize the systems to be used for the projects.
- Calculate the cooling, heating, ventilating and humidifying requirements of the projects using HAP (Hourly Analysis Program), spreadsheets and other software based on project BOD, Codes and other international accepted standards such as ASHRAE, SMACNA and NFPA.
- Design and calculate parking ventilation and kitchen ventilation system requirements.
- Design and calculate smoke management ventilation system requirements such as smoke evacuation, make-up air, service elevator pressurization and stair well pressurization.
- Perform external static pressure calculation.
- Size and select HVAC equipment such as chillers, pumps, FAHUs (fresh air handling unit) AHUs (air handling units), FCUs (fan coil units), heaters, humidifiers and fans.
- Guide and give instructions to junior engineers and draftsmen.
- Review duct sizes and air outlet selections.
- Review project models using Revit.
- Review HVAC drawings.

## JUNIOR HVAC ENGINEER

Oger Branch Philippines I Quezon City Philippines  
February 2014 - December 2014

- Calculate the cooling, heating, ventilating and humidifying requirements of the projects using HAP (Hourly Analysis Program), spreadsheets and other software based on project BOD, Codes and other international accepted standards such as ASHRAE, SMACNA and NFPA.
- Sketch duct routing and size the duct, to be drawn by the draftsmen.
- Supervise and review the activities of draftsmen.
- Perform external static pressure calculations.
- Size chilled water pipes.
- Size and select HVAC equipment such as chillers, pumps, FAHUs (fresh air handling unit) AHUs (air handling units), FCUs (fan coil units), heaters, humidifiers and fans.
- Review and consolidate material take off and bill of quantities done by draftsmen.

## PROJECT ENGINEER

April 2012 - December 2013  
Technocycle Corporation I Binan City Philippines

- Supervise the installation of air conditioning and kitchen ventilation system of food and beverage shops.
- Supervise the installation of air conditioning system for commercial and manufacturing buildings.

## BUILDING/ MOTOR VEHICLE MAINTENANCE STAFF

Wallem Philippines Shipping, Inc. I Manila City Philippines  
September 2010 - March 2012

- Prepare annual building maintenance program.
- Supervise maintenance activities.
- Keep records of maintenance activities.
- Coordinate with state agencies.
- Prepares periodic maintenance service for company cars.

## PLANT ENGINEER

Atgas Traders I Quezon City Philippines  
May 2009 - June 2010

- Monitor plant operation.
- Ensure safe plant operation.
- Present recommendations for improvement.
- Create maintenance plan.