











CONSTRUCTING
THE WORLD
Reaching new height together

EXCEL AIR CONDITIONER &

MANUFACTURING COMPANY LIMITED

EXCEL MEP GHANA LIMITED..

excelgh@hotmail.com / excelghana76@yahoo.com



Membership Number: 0018

# MEMBER

This Certifies that

EXCEL AIRCONDITIONER & MANUFACTURING CO.

was accepted into the Corporate Silver Membership Category

of the Ghana Green Building Council (GHGBC) in 2017 for annual renewal.

01 JANUARY, 2017

Date

xecutive Officer



Republic of Ghana

#### TRADE MARKS ACT, 2004

#### CERTIFICATE OF REGISTRATION OF A TRADE MARK

The Trade Mark shown below has been registered in the Register as of January 4, 2008 in the name of EXCEL AIR CONDITIONER AND MANUFACTURING COMPANY LIMITED of P. O. BOX AN 5326, ACCRA-NORTH., GHANA under No. 38494

In respect of Apparatus for lighting, heating, steam generating, cooking, refrigerating, drying, ventilating, water supply and sanitary purposes in International Class 11



IN WITNESS WHEREOF I have caused my official Seal to be hereunto affixed the December 10, 2009

For: Registrar of Trade Marks

Registrar General's Department P. O. Box 118 Access Ghann

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ELECTRICAL
PLUMBING
CONSTRUCTION

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Quality Policy & Objectives

Service Pledge

MANAGEMENT & OWNERSHIP
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#### **DIRECTORS**

CHIEF EXECUTIVE OFFICER
Daniel Kwatei Quartey
CHAIRMAN
Reverend Dr. Emmanuel Apea
DIRECTOR
Mr. Abam Quartey
DIRECTOR
Mrs. Judith Esi Quartey
DIRECTOR
Mr. John Hock Hoe Tan
DIRECTOR
Mr. Samuel Okwei Nortey

- EXCEL AIR CONDITIONER AND MANUFACTURING COMPANY LIMITED
- EXCEL MEP GHANA LIMITED

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TELEPHONE: +233 (0) 24 236 5462 +233 (0) 20 818 7858

MR DANIEL QUARTEY

| Chief Executive Officer |

"In today's complex, resource constrained and connected world, if we don't have a strategy for sustainability, we don't have a strategy for business" **KWATEI**.



CONSTRUCTION AND ALL

### **OVERVIEW**

Mechanical Engineers Team
Electrical Team
Project Managers
Accounts
Mechanical & Metal Works Technicians
Support Staff

Our Senior and Managerial staffs are graduate and have complete Intensive Training Programmes including International Tuition as Appropriate.
Our technical staff are fully qualified in their respective field

Continuous Professional Development is Encourage and Promoted under our Self Improvement Initiatives



### **STRATEGY**

#### **OUR VISION STATEMENT:**

To growing our footsteps in Africa, through a clear strategic path to excel in our execution services with talented, self-motivated and skilled individuals who are aware of our common goals

#### **OUR VISION GOALS:**

Quality is our watchword.
Profitability is our Corporate Goal
Our first priority is the customer.
Sound stewardship.
Understanding each other.
Our commitment for the future.
A top Company to work for.

#### MISSION STATEMENT:

To deliver a stable and sustained in growth in income and turnover, and to establish in the long term, a profitability to our stakeholders

#### CRITICAL SUCCESS FACTORS:

- Create new products and services.
- Enter new market with shared cost.
- Gain economies of scale and scope.
- Minimize organisational disruption.
- Reduce financial and business risk.
- Increase flexibility





Our positioning and predicated success in large project works is driven by the critical success factors in understanding the need for experienced and Technical competencies in such works, makes Excel's Technicians, Senior Plumbers, Chief Master Plumbers and Project Managers leader's in the Ghana market for extensive Projects. Our understanding of Sanitary Technology extensively and expertise, covers the entire water Cycle. The route taken by water on its journey through a building. Our clients can rely 100% on Excel evacuation designs, from the connection to the water supply via the distribution to the floors and end user consumers through the drainage from the roof and building into the Public Sewer.

# OUR POSITION OF STRENGTH IN PROJECTS

### BASIC DESIGN FOR PIPE LAYOUT

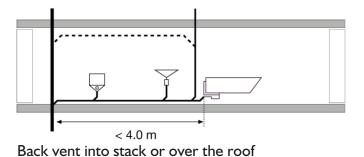
#### PLANNING FOR DRAINAGE SYSTEM

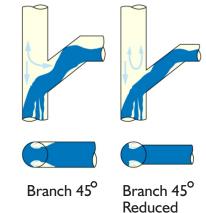
The correct connection and design from inception of the project will eliminate

- Bad odours
- Blockages
- KEY FACTORS

#### **Connection to the stack**

Branch discharge pipe with back vent

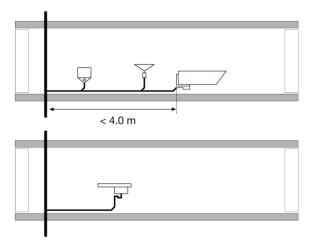


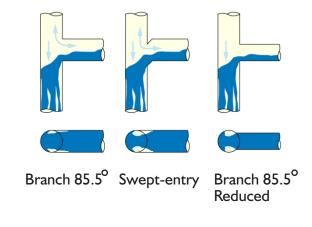


**Y-Branch,** due to possible under pressure for **ventilated** branch discharge pipe only

#### **Connection to the stack**

Branch discharge pipe without back vent





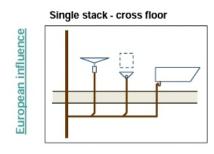
With both branch fittings, free air circulation into branch discharge pipe and vertical air circulation

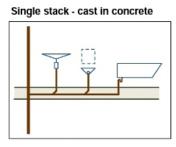
### DRAINAGE SYSTEM & THEIR PIPE LAYOUTS

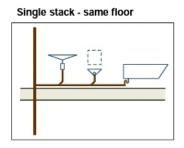
#### **EUROPEAN VS BRITISH / AMERICAN PIPE LAYOUTS**

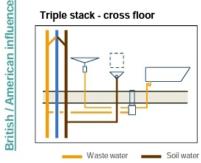
- SINGLE STACK CROSS FLOOR
- SINGLE STACK CAST IN CONCRETE
- SINGLE STACK SAME FLOOR
- TRIPLE STACK CROSS FLOOR
- DOUBLE STACK CROSS & SAME FLOOR
- SINGLE STACK CROSS & SAME FLOOR

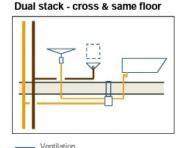
#### European vs. British / American pipe layouts

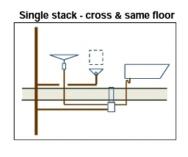




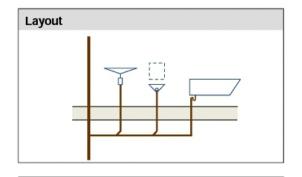








#### Single stack - cross floor



#### Characteristics

- One stack for soil-, waste and vent
- · One connector line
- · Floor drain optional possible

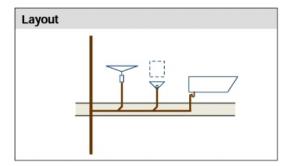
#### Pro

- · Simple pipe design and installation
- · Minimum of joints, pipes and fittings needed
- · Design freedom of bathroom layout
- · Accessibility of pipes through false ceiling
- · Less space requirement of duct

#### Contra

- · Noise transmitted to neighbors flat
- · Renovation / maintenance through neighbours flat
- · Requirement of false ceiling
- · Multiple ceiling penetrations necessary
- · Extended installation time

#### Single stack – cast in concrete



#### Characteristics

- · One stack for soil-, waste and vent
- One connector line
- · Connector pipes embedded in concrete
- · Floor drain optional possible

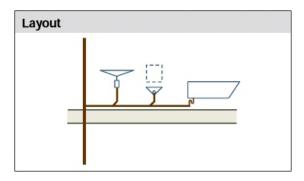
#### Pro

- Short construction time (prefabrication)
- Design freedom of bathroom layout
- Sound problem is solved
- · Less space requirement of duct
- · Minimum of joints, pipes and fittings needed
- · False ceiling not necessary saving of room height
- No additional ceiling penetrations

#### Contra

- Exact planning and timing required
- Limited flexibility for layout changes of bathroom
- Reliable joints and high quality pipe material required
- · No accessibility and cleaning openings

#### Single stack - same floor



#### Characteristics

- One stack for soil-, waste and vent
- One connector line

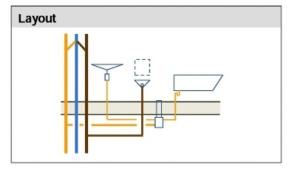
#### Pro

- · Short construction time (prefabrication)
- · Simple pipe design and installation
- · Minimum of joints, pipes and fittings needed
- · Optimal sound protection
- · Less space requirement of duct
- · False ceiling not necessary saving of room height
- No additional ceiling penetrations

#### Contra

- · Exact planning of bathroom walls for pipe installation
- Floor screed necessary for floor drain and floor even shower

#### Triple stack - cross floor



#### Pro

- · Design freedom of bathroom layout
- · Optional grey water usage due to separated stacks
- · High drainage performance of the stacks
- · Floor drain can not dry out
- · Accessibility of pipes through false ceiling

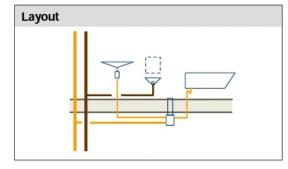
#### Characteristics

- · Soil-, waste- and ventilation stack are separated
- WC, urinals (kitchen) are connected to the soil stack
- All other fixtures are connected over a floor drain to the waste stack
- Vent stack is parallel to waste and soil stack, one connection per floor
- · 2 connector lines

#### Contra

- · Noise transmitted to neighbours flat
- Renovation / maintenance through neighbors flat
- Space requirement of duct
- Requirement of false ceiling
- Multiple ceiling penetrations necessary
- · Lot of joints, pipes and fittings needed
- · Extended installation time

#### Dual stack - cross & same floor



#### Characteristics

- · Soil-and waste stack are separated
- WC, urinals (kitchen) are connected to the soil stack
- All other fixtures are connected over a floor drain to the waste stack
- · 2 connector lines

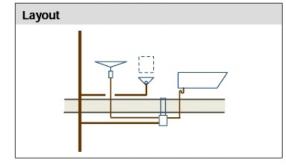
#### Pro

- Optional grey water usage due to separated stacks
- · Floor drain can not dry out
- · Accessibility of pipes through false ceiling
- Main noise source (WC) remains in the same floor

#### Contra

- · Noise transmitted to neighbours flat
- Renovation / maintenance through neighbors flat
- Space requirement of duct
- · Requirement of false ceiling
- Multiple ceiling penetrations necessary
- Lot of joints, pipes and fittings needed
- · Extended installation time

#### Single stack - cross & same floor



#### Characteristics

- · One stack for soil-, waste and vent
- · WC, urinals (kitchen) are connected to the soil stack
- All other fixtures are connected over a floor drain to the waste stack
- · 2 connector lines

#### Pro

- · Floor drain can not dry out
- Accessibility of pipes through false ceiling
- · Main noise source (WC) remains in the same floor
- · Less space requirement of duct

#### Contra

- · Noise transmitted to neighbours flat
- · Renovation / maintenance through neighbours flat
- Requirement of false ceiling
- Multiple ceiling penetrations necessary
- More joints, pipes and fittings needed
- Extended installation time



### **AIR CONDITIONING**

Installations, repair and maintain high qualified and experienced in Large and small scale Air Conditions and system to Maintain and service both Industrial and residential across Ghana. Our clientele include

Large Office Complex facilities,

Hotels,

Hospitals

**Embassies** 

Banks

NGO'S

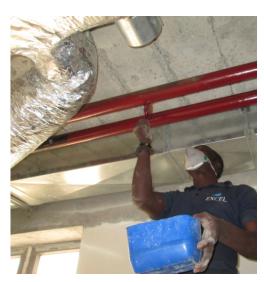
State Parastatals

Universities

Technical Schools and Colleges

Private Schools

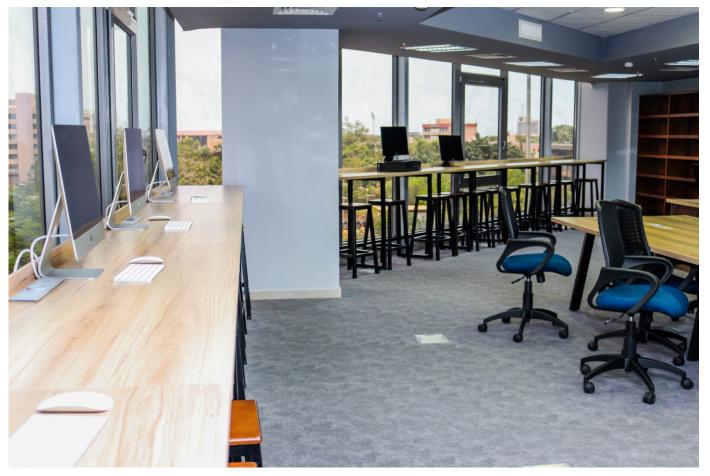
Private Individuals, Apartment Complexes, Churches

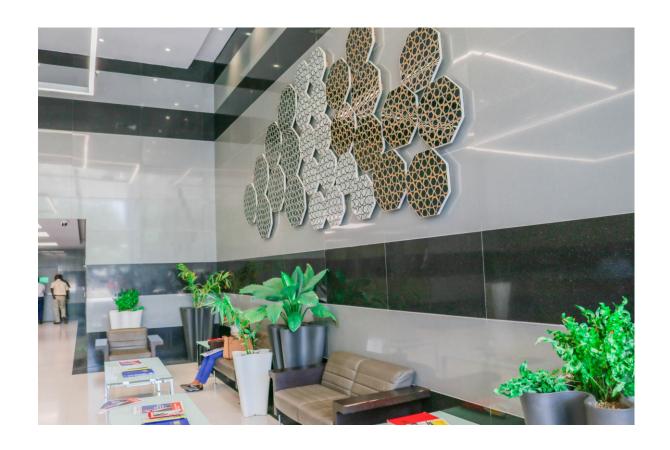


With over 13 years in the Ventilation market, the company through. With Dunham Bush Africa a subsidiary of one the world's top Commercial Air Conditioning Manufacturing Companies with over 103 years' experience in the Heating, Ventilation, Air Conditioning and Refrigeration (HVAC/R).

Dunham-Bush offers a complete range of HVAC/R products such as large chillers, unitary, airside system and cooling towers, for residences, commercial buildings and industrial facilities. Our people focus on providing innovative engineering and superior quality manufacturing that meet our customers' demands for performance, reliability, quiet operation and energy efficiency Dunham Bush has a long and proud history of providing equipment for Industrial and Process coolers.











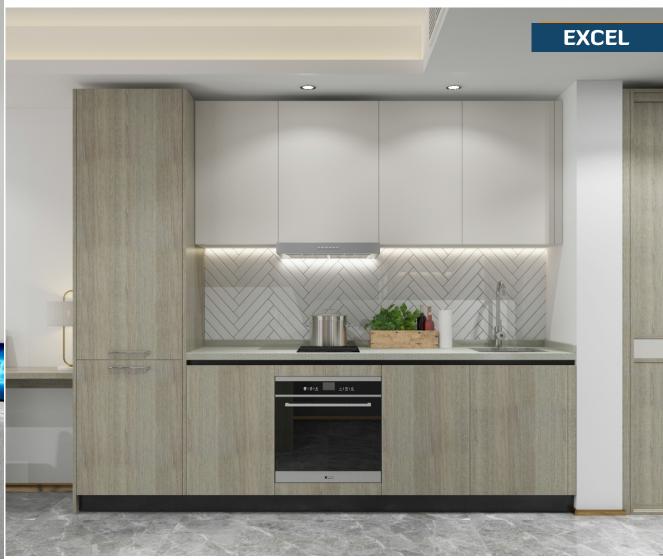


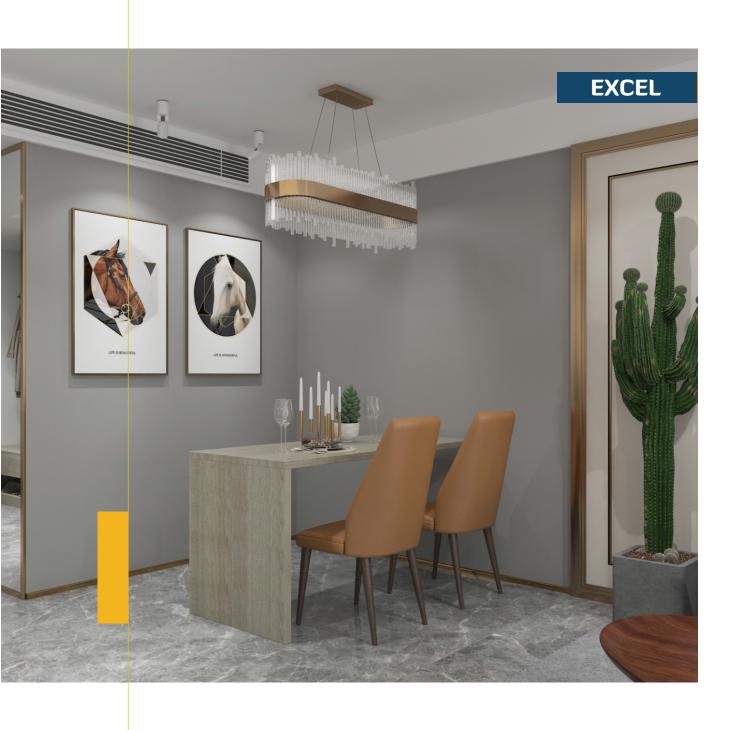


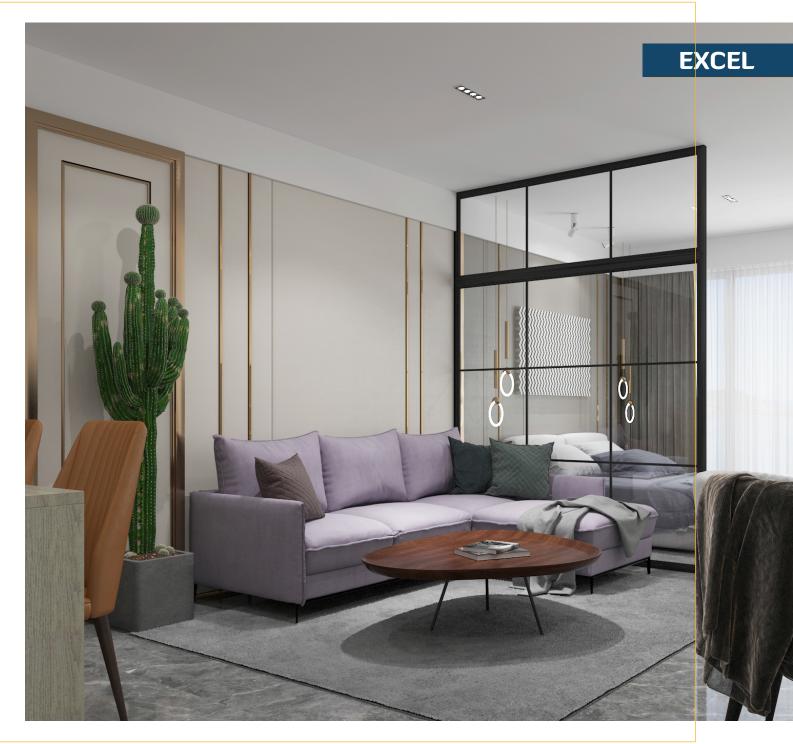
B

**EXCEL** 



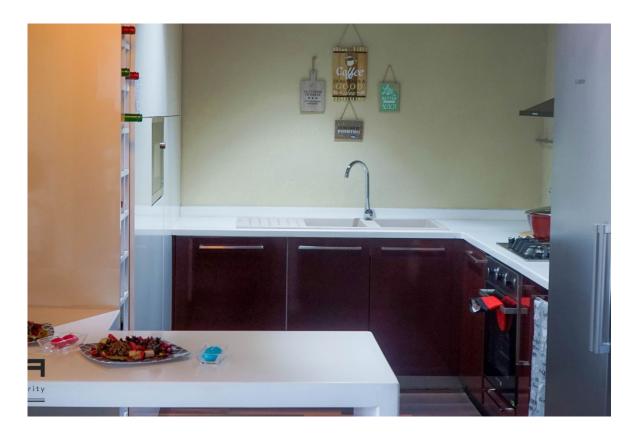




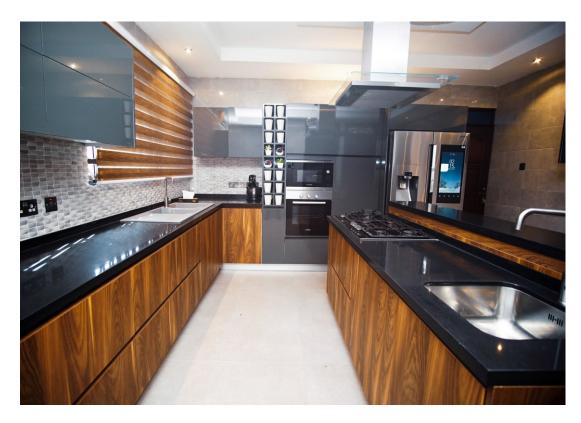


Excel's collaboration with LONCHA a company OFICIALLY established and operating in Ghana since 2013... with its core objective of providing Individuals and Commercial and Corporate entities with first class service providing customized Kitchens, Wardrobes Interior Furnishing for Homes. Apartments and Offices and providing interior design with quality accessories. Our Kitchens and Bedrooms are designed to specific needs and eclectic taste and needs of the Customer. We use 1st class appliances; Bosch, Samsung, Excel. We aim to provide our clients with an enduring relationship of value, aesthetic and luxurious in their investment by offering an array of Kitchen types and bedroom and Apartment designs. Our dealings in the furnishing of Hotels, Apartments and private Hospitals including Security Doors. With a Modernized State of the Art manufacturing Factory and warehousing facility, Staffed with well trained Technicians, Designers CAD, Project Coordinators and Specialist Installers to facilitate all kind of Works Projects and specific Customer works including Office and Space Design We are Customer Centric and ready to walk our clients through their project's needs. A luxury available to all for our Execution Service Teams. We are Project ready.

# KITCHEN, WARDROBE & DOORS IN COLLABORATION WITH LONCHA













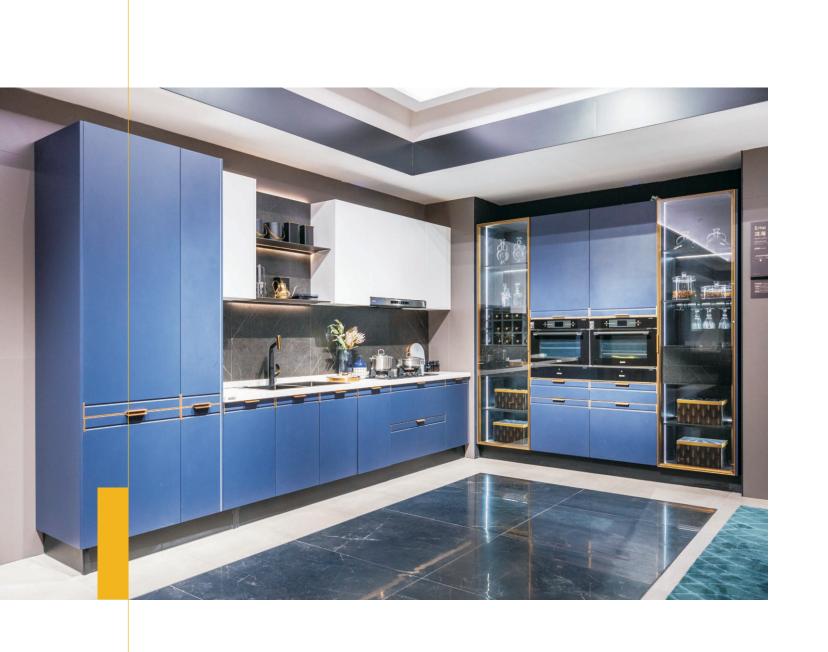




































### WHAT WE DO

We have the experience and capacity to support solar projects from inception, throughout the development and construction stages and for the complete lifetime of the plant.

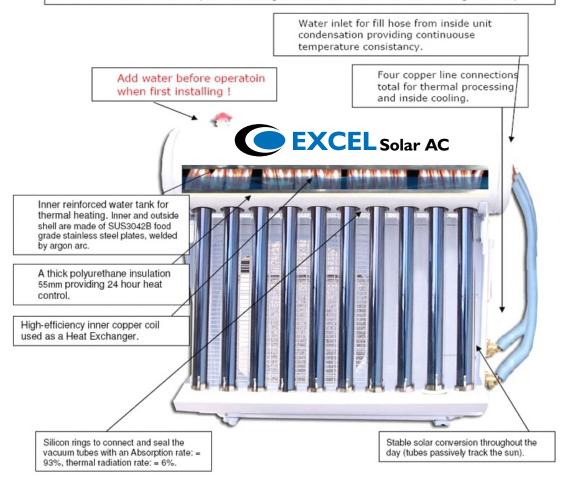
### SOLAR POWER SOLUTIONS

BUILDING A WORLD OF OPPORTUNITIES IN SOLAR ENERGY



#### **EXCEL Solar Air Conditioner Features & Benefits**

Solar Air-Conditioner absorbs solar energy to heat the inside medium by using a vacuum solar collector. The refrigerant from the compressor goes through the copper coil inside the collector and undertakes a heat exchange. The refrigerant heated by the medium inside the solar collector will go through a cycle inside the system cooling and heating. We use a smaller compressor instead of standard compressors to run our system which saves electricity dramatically. A smaller compressor consumes much less electricity and works together with our solar collector to saving electricity.



Solar Cooling is divided into two main types:

Open Cooling Cycles and Closed Cooling Cycles.

In open cycles, a sorptive component is in direct contact with environmental air, and is able to dehumidify the air. In closed cooling cycle arrangement a refrigerant undergoes a closed thermodynamic process. (The material can be solid (adsorption) or liquid (absorption).

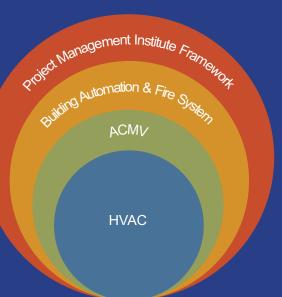


#### PROJECT MANAGEMENT SERVI CES

Dunham-Bush provides integrated professional project management with premier knowledge of HVAC system applications and a full product portfolio that offers customers a total solution from concept to reality.

As part of this total solution we provide our customer with:

- Lower first investment and lifetime operation costs
- Solutions and value under a single source
- Green building design focusing on energy efficiency and efficient total operation costs
- Value added solutions from HVAC to MEP requirement



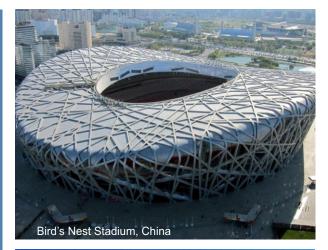
#### **BUILT LIKE NOTHING ELSE**

You'll find Dunham-Bush cooling equipment in some of the world's highest profile buildings and most demanding environments. No two facilities are alike. And no two regional markets are alike. However, all Dunham-Bush installations do share some things in common. The need for superior engineering, stateof-the-art technology and worry-free performance. Our goal is to design and manufacture high reliability and performance equipment that doesn't just meet your requirements, but exceeds them.

No matter the location, the customer or the application, our strategy is the same. To provide innovative engineering and superior quality manufacturing that will meet your demands for performance, reliability, quiet operation, and energy efficiency.

#### **PARTNERSHIP**

Through our partnership with Dunham-Bush Excel Air Conditioner and Manufacturing Co. Ltd offers Green Air conditioning solutions which will allow both Commercial Developers and building owners to leverage on sustainable energy options to cut cost reduce the size of their carbon footprints?

















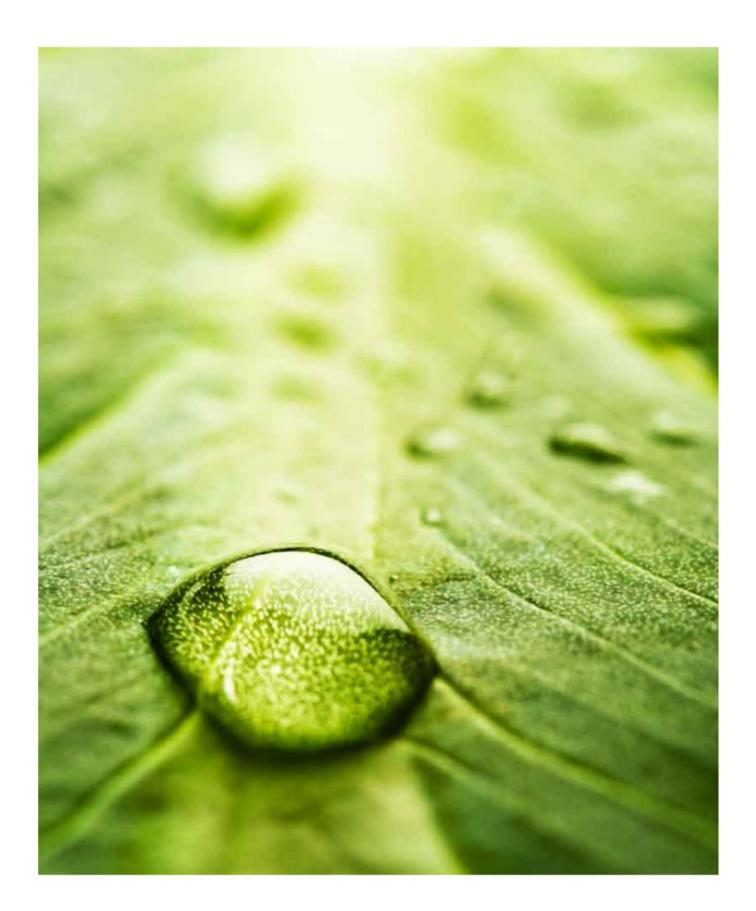












#### **DUNHAM-BUSH IS WORKING TO BE THE LEADING EDGE** IN GREEN SOLUTION



#### **Ice Thermal Storage Air Conditioning Systems**

The Ice Thermal Storage Air Conditioning System works in a similar manner to storingenergy in a battery. It's able to reduce peak energy consumption, lower operating costs and improve system efficiency by 10%, while improving indoor air quality. All this adds upto greatly reducing your carbon footprint.



#### **Geothermal Heat Pump Air Conditioning Systems**

Dunham-Bush is able to use the ground water instead of outside air to provide heating, air conditioning, and in most cases, hot water. Using 25%-50% less electricity than conventional heating or cooling systems, our Geo-Thermal Heat Pump Air Conditioning Systems greatly reduce operation cost and corresponding emissions. It also improves humidity control for indoor comfort.



#### CO<sub>2</sub> / NH <sub>3</sub> Cascade Refrigeration Systems

The innovative CO<sub>2</sub> / NH<sub>3</sub> concept is based on a cascade system that combines the advantages of CO<sub>2</sub> on the low-temperature side and ammonia on the high-temperature side. Ammonia is limited to the engine room, and only CO2 will be present in working, processing and storage areas. Compared with conventional two-stage or economized single-stage systems, a CO<sub>2</sub> / NH<sub>3</sub> System uses significantly less power and has lower refrigerant costs, lower operating costs and lower installation costs.



#### **Solar Powered Absorption Air Conditioning Systems**

Since the peaks of solar energy and cooling demand match perfectly, our Solar Powered Absorption Air Conditioning System uses the same energy that creates the demand to create the cooling supply. This replacement of electricity supports not only the power plants but also the distribution grid, reducing the peak load dramatically.



#### **Heat Recovery Air Conditioning Systems**

Using a shell and tube de-superheater, our Heat Recovery Air Conditioning System recovers the waste heat from the cooling process, stores it and then uses it to generate hot water for sanitary uses. This reduces the building's need for hot water boilers/heaters by around 10%, saving energy and costs.



# Water simply connected

#### WATER TREATMENT & WASTE MANAGEMENT

#### BALMORAL TANKS

- Filtration
- Water Treatment
- Storage
- Pump Works
- Pumping Solution

















#### HEAD OFFICE:

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#### LOCATION:

The Octagon Kinbu Gardens Accra, Ghana

#### CONTACTS

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