



HVAC SYSTEM

Introduction

Al Muthathawerah AC Systems ind. Center LL.C (MACS) is specialized in the manufacturing of premium duct work and accessories for commercial and residential HVAC applications. MACS has established a fully automated state of the art Duct Fabrication facility using the latest technology available from IOWA Precision Industries USA which is capable to produce high quality ductwork in record time.

MACS was established in 2010 on the basic policy of serving the market with high quality and reliable products using latest technology and qualified staff. The factory is strategically located in Sharjah Industrial Area 15 and serving customer's requirements by supplying them with HVAC duct work, Sheet Metal, Volume Control Dampers, Non Return Dampers, and Access Doors and all other related products and accessories as per requirement.

Meeting and understanding the customer's requirements to achieve added value is one of Al Muthathawerah's major goals. Through its sophisticated facilities. Al Muthathawerah intends to distribute and supply to AC Supplier's. Contractors & private clients the highest quality of HVAC duct work either Galvanized, Stainless Steel, Mild Steel, Pie-insulated Duct or Aluminum Cladding at the most competitive rates.

Health, Safety and Environmental Management is an integral and essential part of the way we do our business and is considered an equal part of the wider system for the management of our business.

Through effective management, MACS aims to be the preferred contractor and the favoured employer. The requirements set out in this document constitute the expectations for divisional compliance with MACS Policy.



















Mission, Vision & Values

To strive for global excellence in providing services to the HVAC industry worldwide.

To distinguish ourselves through listening, learning and understanding industry challenges and to capitalize on strategic and opportunistic possibilities.

To provide services that are attractive and fair to our customers and earn their loyalty while also providing value to our shareholders.

To create a work place that protects worker health and safety with due respect for the environment, and promote an atmosphere to grow employee learning and opportunity in a way that is fulfilling, recognized and fairly rewarded.





Ductwork Identified

Most air-conditioning works and heating systems require some form of duct work to channel or direct the air to places in the dwelling where the conditioned or heated air is needed.

Duct work is available in various types, and has many advantages such as reducing utility bills due to proper channeling and sizing, but only when it is installed correctly by qualified installation technicians.

Quality Policy

Our principle objective is to provide customers with quality products and professional services that Fully satisfy their needs.

Are delivered on time and within budget. Represent value for money, and through exceptional personal service, meeting or exceeding their expectations.

We achieve this through a structured continuous improvement program that ensures the quality of our products and services thus helping to reduce costs and develop staff skills.

Constant review and audit of this system ensures its adaptability throughout the organization.

MACS Management team is committed to the principles of continuous improvement and to the successful implem- entation of the quality system.

Therefore, all employees are committed to the quality system and are aware of its benefits to customer satisfaction, internal process and the goals and objectives of MACS.





DUCTWORK

Description

DUCT WORK MANUFACTURED TO THE FOLLOWING STANDARDS:

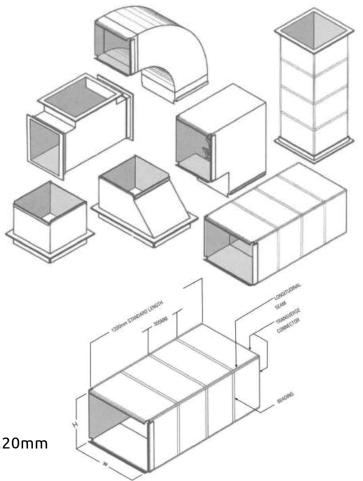
- SMACNA
- DWI 42/144
- GALVANIZED STEEL TO ASTM A527/653 ZINC COATING LOCK FORMING QUALITY GRADE OF G90/Z275.

OPTIONS:

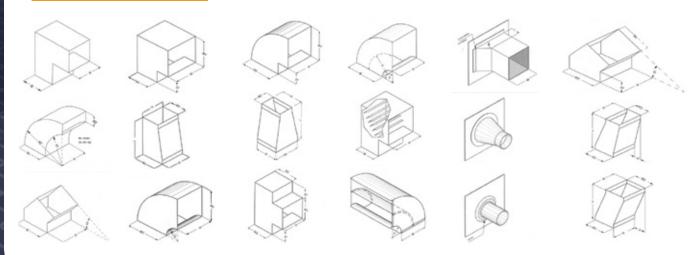
- S&C OR FLANGE.
- BLACK MILD STEEL.
- ALUMINUM
- STAINLESS STEEL

THICKNESS

- 0.56mm thick. up to 3mm thick
- STANDARD STRAIGHT LENGTH 1220mm



Rectangular fittings



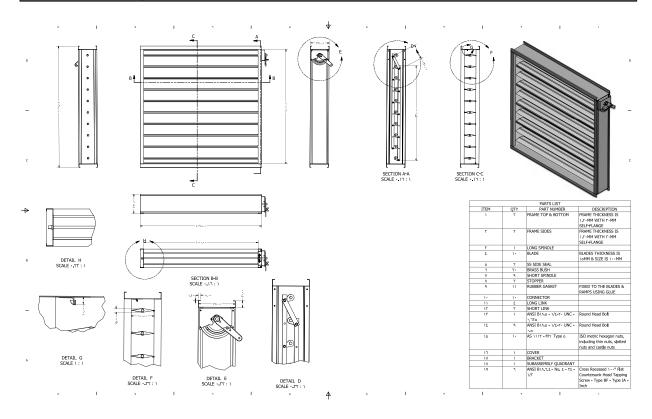
VOLUME CONTROL DAMPER (VCD)







Standard Construction			
FRAME	0.7 - 1.5mm thickness from galvanized steel formed channel for flange connections.		
BLADES	3V 0.90mm thick BLADES		
FINISH	Mill galvanized		
LINKAGE	Side linkage concealed in frame for parallel and opposed blade operation.		
CASE BEARINGS	Brass Bearing as standard.		
AXLES	12mm X 12mm Zinc plated mild steel.		
TEMP. LIMITS	-40°C to 100°C		





MINIMUM SIZE:

100 X 100 mm, dampers up to 250mm in height Frame, Blades, shafts and blade to shaft fixing: are single blade construction.

MAXIMUM SIZE:

1200 X 1800 mm, as single section.

Multiple Section assembly with unlimited size, OPERATION: where each section operates independently. For details of multiple sections consult MACS

OPTIONS:

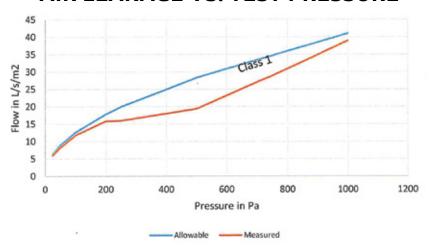
available in Stainless steel.

Linkage: Face Linkage available.

Case Bearings: Sintered Bronze available.

Parallel Blades, Opposed Blades. Manual, or with Actuator.

AIR LEAKAGE VS. TEST PRESSURE



MACS VCD's are categorized as Class 1 in terms of air leakage when tested against the performance requirement as per AMCA Standard 511

NON RETURN DAMPER



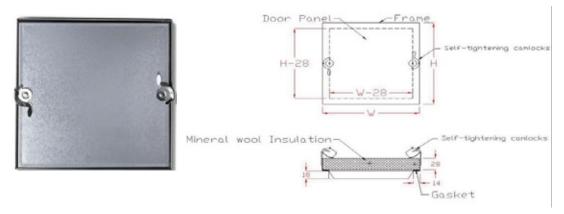


Standard Construction		
BODY 20 ga. (1.00mm) galvanized steel formed channel for flange connecti		
BLADES Plain Aluminum sheet Gauge 20		
FINISH Mill galvanized		
CASE BEARINGS	PVC Bearing as required.	
CONTROL SHAFT	10mm diameter zinc plated mild steel.	



ACCESS DOORS

DOUBLE CAM TYPE



Description

Access doors of 25mm thickness with double walled and mineral wool insulation. Designed to provide access to dampers, filters, etc.

Specifications:

Self-tightening camlocks type, 2 per unit up to size 350mm and 4 per unit on larger sizes.

HINGE & CAM TYPE



Description

Access doors of 25mm thickness with double walled and mineral wool insulation. Designed to provide access to dampers, filters, etc.

Specifications:

Continuous Hinge on one edge and one camlock on the other up to 350mm, two camlock on the other edge on larger sizes

Options:

Can use Butt Hinge instead of Continuous hinge.



CURTAIN FIRE DAMPERS









Standard Construction				
FRAME	18 ga. (1.20mm) galvanized steel formed channel for falnge connections.			
BLADES	24 ga. (0.71mm) galvanized Steel "interlocking blades".			
FINISH	Mill galvanized			
BLADE RAMP	18 gauge galvanized steel			
CLOSURE SPRINGS	304 stainless steel pring			
FUSIBLE LINK	Standard 165°F. Others available.			
MOUNTING	Vertical.			
FIRE DURATION RATING	1 - 1/2 Hours			
TEMPERATURE RATING	250°F			
OPERATION	Interlocking Blades			
CERTIFICATION	UL LISTED			

Fusible Link Bracket

Fusible link bracket is fabricated from galvanized steel as a

Fusible Link
Blades are held in open
position by a straight bar
link (lifted as standard)
rated at 72°C (162°F)
with a formed reinforcing
gauge and two location
holes.

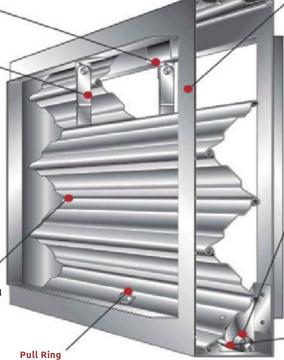


Casing Formed to provide two continous internal flanges not less than 30mm.

Casing and Components are not less than 1.20mm in thickness from a hot dipped galvanized steel G90 (Z275).

Blades
Formed to provide a continous interlocking hinge extending the full length with dual gauge providing maximum strength and rigidty.

Normally 0.70mm in thickness from hot dipped galvanized steel G90 (Z275).



Closure Springs
Dampers are supplied with two constant force coil springs exerting a pull of not less than 35N. with one end fixed to the leading blade by rivets and the coil fitted on the spindle of the locking ramp. The spring is manufactured from Grade 302 stainless steel to BS 4,5770 hard.

Locking Ramps
Dual locking ramps ensure positive closing action of the blade pack in horizontal or vertical installations.



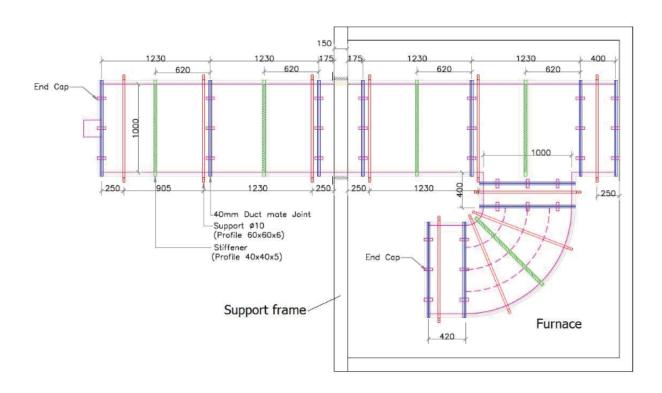
FIRE RATED DUCTWORK

Fire rated Duct as per BS476 part 20:1987 & part 24:1987. For rectangular and circular fire resistant ventilation and smoke extraction ducts Type A (Fire outside duct) and Type B (Fire inside duct). With horizontal and vertical installation, made of Stainless Steel, Mild Steel, or galvanized Steel.

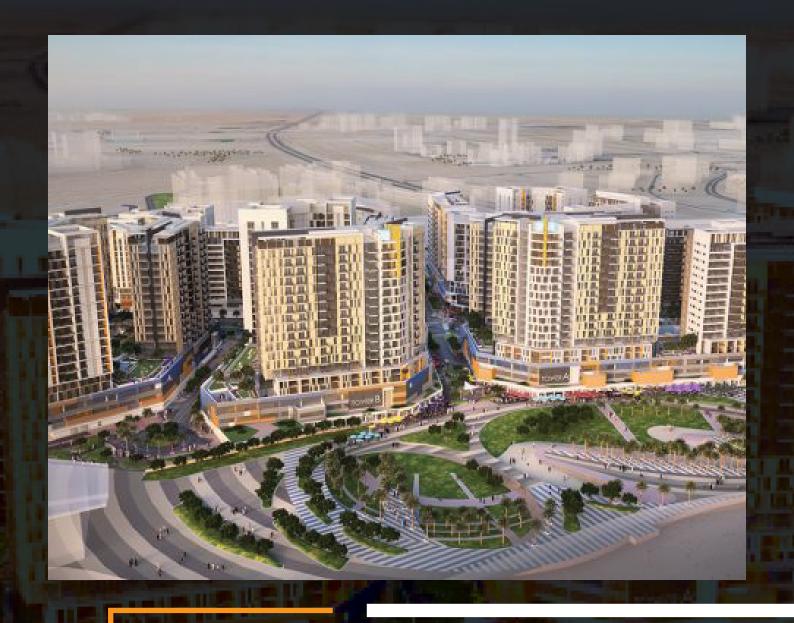


Applus





Expo Village (Parcel 10 & 11)



Project

Location

Client

Consultant

Main Contractor

Expo Village (Parcel 10 & 11)

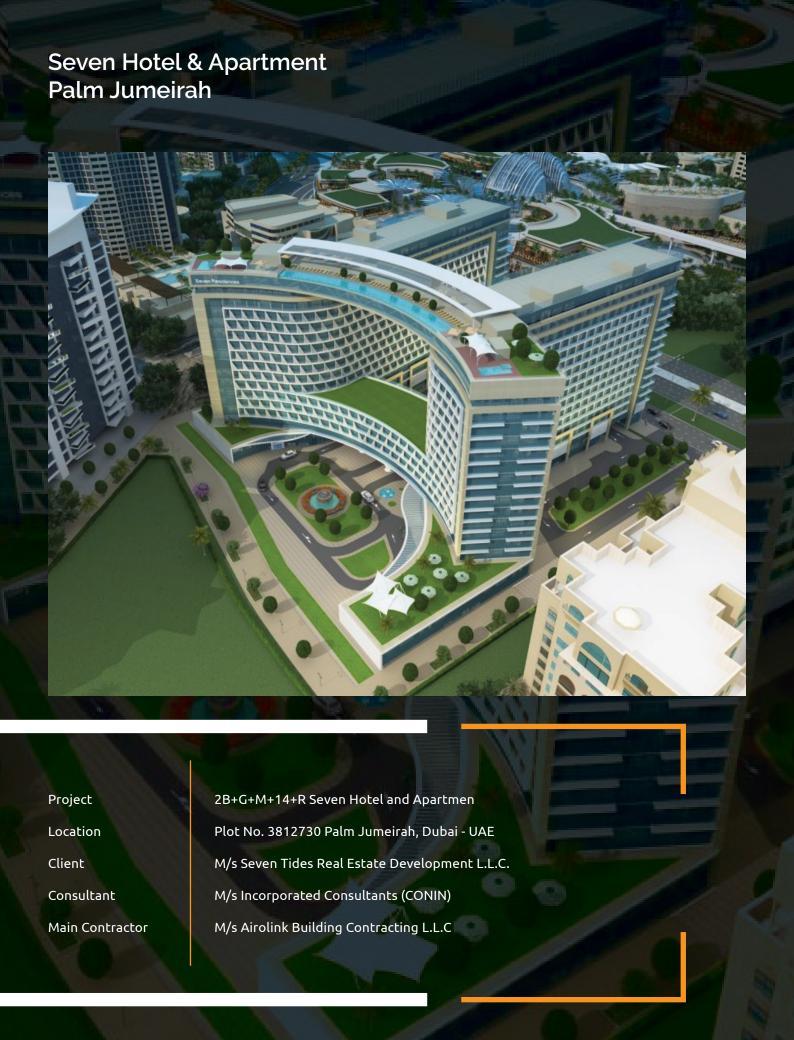
Jebel Ali Dubai - UAE

M/s Dubai World Trade Center

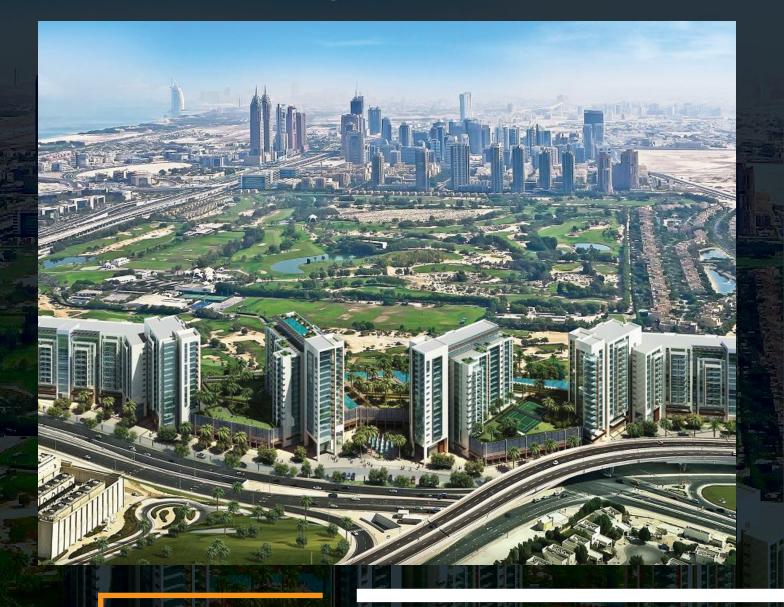
M/s KEO International Consultant

M/s China State Construction Engineering Corp. LTD.





The Hills –B+G+14 Storey Residential Buildings and 15 Storey Hotel and Service Apartment Buildings



Project

Location

Client

Consultant

Main Contractor

The Hills –B+G+14 Storey Residential Buildings and 15 Storey Hotel and Service Apartment Buildings (6 Bldgs. Built Up Area 2,150,000 ft2) Plot no. 3886352, Al Thanyah Third, Emirates Hills –Dubai, UAE

M/s Emaar Properties, PJSC

M/s DAR Consulting Architects and Engineers

M/s Al Ghandi &Consolidated Contractors Int'l. Co. (L.L.C)



The Midtown Afnan Zone 2 and Midtown Dania Zone 3 at Dubai Productivity City



Project

Location

Client

Consultant

Main Contractor

The Midtown Afnan Zone 2 and Midtown Dania Zone 3 at Dubai Productivity City

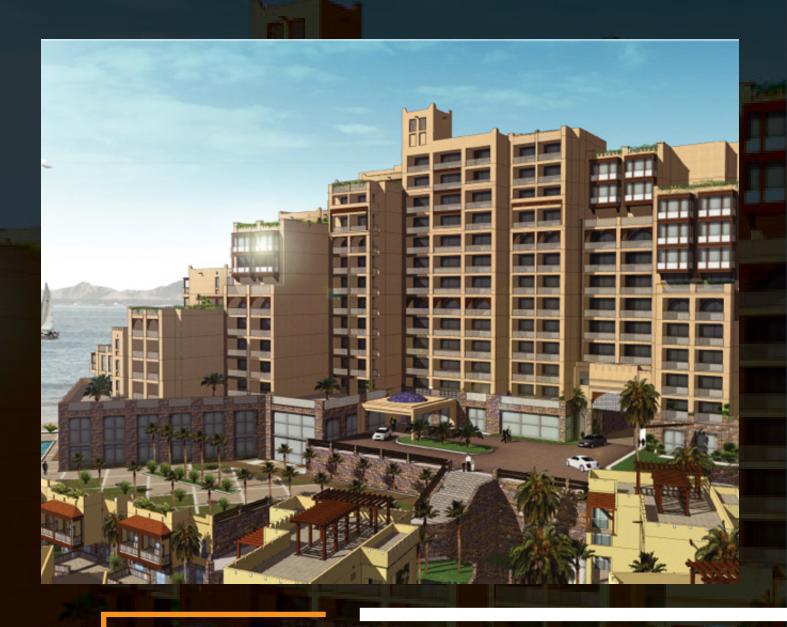
Plot No. IMPZ.A.01 at IMPZ, Dubai Productivity City – Dubai, UAE

M/s DEYAAR Developments PJSC

M/s U+A Architecture

M/s Belhasa Engineering and Contracting Co. L.L.C.

Fairmont Hotel at Mina Al Fajer Resort Dibba, Fujairah



Project

Location

Client

Consultant

Main Contractor

3B+G+12F+R+Upper Roof Fairmont Hotel at Mina Al Fajer Resort

Fujairah, UAE

M/s Mina Al Fajer Resort for H.H Dr. Sheikh Sultan Bin Khalifa Bin Zayed Al Nahyan

M/s ErgaProgress Engineering Consultant

M/s Intermass Engineering & Contracting Co. L.L.C.



New Medical Center Hospital, Fujairah



Project

Location

Client

Consultant

Main Contractor

Main Hospital (B+G+3), Staff Accommodation (G+3)

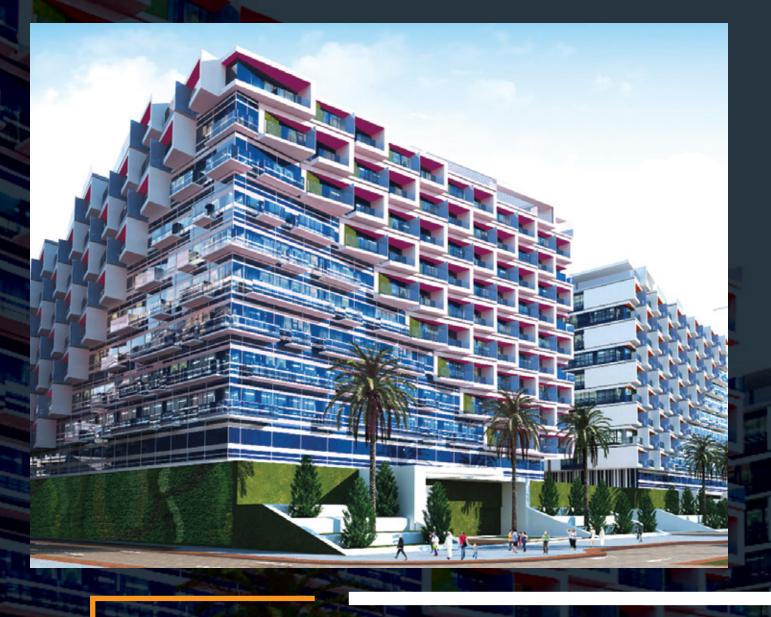
Fujairah, UAE

M/s NMC Hospital Company

M/s Consultair Engineers & Consultant

M/s Best Building Contracting Co.

Royal Pearls - Phase 1 (Cluster A, B & C) Commercial and Residential Buildings on Plot Nos. 6184116 and 6184086 at Nadd Al Shiba First-MEP First Fix



Project

Location

Client

Consultant

Main Contractor

Royal Pearls - Phase 1 (Cluster A, B & C) - Commercial and Residential Buildings

Plot Nos. 6184116 and 6184086 at Nadd Al Shiba First

M/s Oriental Pearls Real Estate Development LLC

M/s KEO International Consultants

M/s China Construction Eight Engineering Division Corp. Ltd.



3B+G+14/29F Commercial/Residential Twin Towers Building "Sparkle Towers" at Marsa, Dubai



Project

Location

Client

Consultant

Main Contractor

3B+G+14/29 Commercial/Residential Building

Plot 392-404, Marsa - Dubai, UAE

Mr. Talal Suliman, Mr. Adel Hamad & Mr. Hussain Al Jaboori

M/s Al Mimar Engineering &ADC Architectural Design Consultants

M/s Sun Engineering & Contracting L.L.C.

Town Square Development -Residential Buildings on Plot 35, Dubai



Project

Location

Plot No. 35 –Dubai, UAE

Client

M/s NSHAMA

Consultant

M/s Mimar Emirates Engineering Consultants

G+1P+11+HCFloors Residential Buildings

Main Contractor

M/s Kier Construction L.L.CM/s Arabian Construction Company

Built up Area

168,476.54 m²



Al Sofouh Mix Use Development (2B + G + 4P + 43 + RTECOM Al Sofouh, Dubai



Project

Location

Client

Consultant

Main Contractor

Built up Area

Al Sofouh Mix Use Development (2B + G +4P + 43 + R)

Plot No. A-002-038 TECOM Al Sofouh, Dubai

M/s Al Fahim Group

M/s AECOM Middle East Ltd

M/s Ali & Sons Contracting Company

126,904 m²

SZUTEST

CERTIFICATE



Environment Management System

CERTIFICATE NO: SZT.2019.SB.2.1.041

AL MUTHATHAWERAH A/C SYSTEMS ACCESSORIES IND. CENTER LLC

Shed No. 5, 9, 10, 11 Behind Mohd Bin Zayed Road, Industrial Area 15, P.O Box 81615, Sharjah, United Arab Emirates

ISO 14001:2015

Manufacturing Central A/C Systems Accessories, Fire Ratted Duct Works, Pump Assembly

EA Code: 18

Szutest confirms with the certificate details given above, that the organization has an appropriate management system complying with the relevant standard principles. This certificate is valid until the date of certification period expiry date only provided that the management system is found successful as a result of surveillance audits.

 First Issue Date
 29.08.2019

 Issue Date
 29.08.2019

 Expiry Date
 28.08.2022

 Period Finish Date
 28.08.2022



This certificate can be examined by scanning the square codes on the certificate with a mobile device or by verifying the numbers on the square code from the http://public.szutest.com.tr.

FR.SB.74 R:5

SZUTEST UYGUNLUK DEĞERLENDİRME A.Ş. Tatlısu Mahallesi, Akif İnan Sk. No:1 Ümraniye 34774 İSTANBUL / TÜRKİYE

Szutest.com.tr



SZUTEST

CERTIFICATE



Occupational Health and Safety Management System
CERTIFICATE NO: SZT.2019.SB.2.3.042

AL MUTHATHAWERAH A/C SYSTEMS ACCESSORIES IND. CENTER LLC

Shed No. 5, 9, 10, 11 Behind Mohd Bin Zayed Road, Industrial Area 15, P.O Box 81615, Sharjah, United Arab Emirates

OHSAS 18001:2007

Manufacturing Central A/C Systems Accessories, Fire Ratted Duct Works, Pump Assembly

EA Code: 18

Szutest confirms with the certificate details given above, that the organization has an appropriate management system complying with the relevant standard principles. This certificate is valid until the date of certification period expiry date only provided that the management system is found successful as a result of surveillance audits.

 First Issue Date
 29.08.2019

 Issue Date
 29.08.2019

 Expiry Date
 28.08.2022

 Period Finish Date
 28.08.2022



Manager of System Certification

This certificate can be examined by scanning the square codes on the certificate with a mobile device or by verifying the numbers on the square code from the http://public.szutest.com.tr.

SZUTEST UYGUNLUK DEĞERLENDİRME A.Ş. Tatlısu Mahallesi, Akif İnan Sk. No:1 Ümraniye 34774 İSTANBUL / TÜRKİYE

Szutest.com.tr



CERTIFICATE

This is to Certify that the Quality Management System

of

AL MUTHATHAWERAH A/C SYSTEMS ACCESSORIES IND. CENTER LLC

SHED NO. 5, 9, 10, 11 BEHIND MOHD BIN ZAYED ROAD, INDUSTRIAL AREA 15, P.O BOX 81615, SHARJAH, UNITED ARAB EMIRATES.

Has been independently assessed and is compliant with the requirements of

ISO 9001:2015

This certificate is applicable to the following product or service ranges:

MANUFACTURING CENTRAL A/C SYSTEMS ACCESSORIES, FIRE RATED DUCT WORKS, PUMP ASSEMBLY

:: Certificate No :: AE205165A

Date of initial registration

26 March 2018

Date of this certificate

26 March 2018

Surveillance audit on or before

25 March 2019

Recertification Due / Certificate expiry

25 March 2021

This Certificate is property of LMS Certifications and remains valid subject to satisfactory surveillance audits.

Directo

For verification and updated information concerning the present certificate visit to save tribusculativers, i.e.m.
The Certificate in the monochemic LMS Certifications Provided Linet and another set and another set and a



LMS Certifications Private Limited
1, Ananddham, Opp. Kušizai Picnic Spot Gate
Fandi Nagar, Lucknow - 226015, U.P. (INDIA).
Phone: +91-9554645464

Ved - www.insussessmente.com



CERTIFICATE OF COMPLIANCE

20141231-R37956 Certificate Number Report Reference Issue Date

R37956-20141229 2014-DECEMBER-31

Issued to:

AL MUTHATHAWERAH A/C SYSTEMS ACCESSORIES

INDUSTRIAL CENTER L L C INDUSTRIAL AREA 15TH,81615 SHARJAH UNITED ARAB EMIRATES

This is to certify that representative samples of DAMPERS FOR FIRE BARRIER AND SMOKE APPLICATIONS

Fire damper, Model, curtain type, for vertical installation and for use in

static systems for 1.5 hrs. rating Model :-MACS-GC-B

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: Additional Information: UL 555 - Standard for the Standard for Fire Dampers See the UL Online Certifications Directory at

www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

Bamely





ترخيص وكيل - بإمارة دبي

K110 2019

رقم التسرخيص: سنية التسرخيص: عدد التسراخيص:

تم اصدار الترخيص استناداً إلى القرار الوزاري رقم(213) لسنة 2017 ، في شان تنظيم خدمات الدفاع المدني

دوثة الإمارات العربية المتحدة

الإدارة العامة للدهاع المدني . دبي **United Arab Emirates** Ministry of Interior

DCD General Directorate

ميناس للتجارة العامة شركة الشخص الواحد	سعيد بن كد بن عبدالله الرقباني	***	04-2635707		menascodxb@gmail.com	1990/01/04 تاريخ الإصدار	2 17 18
14	الرقباني الجنسية	الجنسنة		مكتب رقم(2) ملك سعيد مجد الرقباني - القصيص		لإصدار 92/01/9102م	
رقم الرخصة 221782 رقم السجل 19414		A RESIDENCE	رقم الفاكس 367555	رقباني - القصيص	تاريخ انتهاء الرخصة التجارية		
رقم السجل	الامارات	李安安	j. 2	X	01/03		
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Fax: 009714 2612449

Tel.: 009714 2611111

United Arab Emirates

للطوارئ **Emergency**

P.O. Box 11377 Dubai

عد القنيين المعتمدين 我ないいのといるというとう

يعتمد/ عن مدير الإدارة العامة للدفاع المدني/دبي

عدد المهندسين المعتمدين

أن تكون دولة الإمارات العربية المتحدة من أهضل دول العالم هي تحقيق الأمسن والسالامة

www.dcd.gov.ae

997





رقع الترخيص: سنة الترخيص: K110

عد التراخيص:

(9 - 9)

2019

ميناس للتجارة العامة شركة الشخص الواحد

اسم الشركة

Fire-resistant ducts Towns. 大き 日本の 377

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دولة الإمارات العربية المتحدة

وزارة الماخا

الإدارة العامة للدفاع المدنى . دبي United Arab Emirates Ministry of Interior

1-Material: Galvanized Steel Thickness: 1.20mm

Insulation rating: 13 minutes when average temperature rises more than 140°C over its original temperature. Stability rating: 240 minutes. Integrity rating: 240 minutes.

Thickness: 1,20mm Stability rating: 241 minutes. Integrity rating: 241 minutes. 2- Material: Stainless Steel AL MUTHATHAWERA H ACSYSTEM ACCESSORIES IND.CENTER LLC

UAE-1491 / UAE-1492

APPLUS+ LGAI technological center S.A

Arab Arab Emirates

18154

3

2019/09/10

DCD General Directorate

Fax: 009714 2612449

United Arab Emirates P.O. Box 11377 Dubai

Tel.: 009714 2611111

Insulation rating: 13 minutes when over its original temperature. Thickness: 1.50mm 3-Material: Mild Steel

more than 140°C

Stability rating: 241 minutes.

Insulation rating: 13 minutes when average temperature rises more than 140°C Integrity rating: 241 minutes.

Dampers For Fire Barrier And Smoke Application over its original temperature.

Fire Dampers For Use in Static System:

MACS

EMME. R37956

H

United Arab Emirates

18154

3

2019/09/10

للطوارئ Emergency اللاي الشركة

997

A. Models: MACS-GC-B

I. Mounting Position: Vertical
Class: L5 hour

مني فويار برخص بن قرارور و مداد تنفو مدين بي ويجو له براونة ندعة في بيز وبي المستدارا فرار وي رقو (19) منة 100 في غير بعدات هذام مدين التحدة فلطيف رقر1000 لمنة 1000 من الان فلمنت في بقي وجود له بعد استفراع ترجيس من ويولون تحدة الله والمنتسط بقرابي في الرائمة الانتساط المنتسط المناطقة المنتسط من منها والمنتسط المنتسط
ন ন্নন

Kent.

يعتمد/ عن مدير الإدارة العامة للدفاع المدني/دبي

أن تكون دولة الإمبارات العبربيية المتحيدة من أفضل دول العبالم في تحقيق الأمسن والسبلامة

www.dcd.gov.ae



General Directorate of Civil Defense United Arab Emirates Ministry of Interior

General Department of Civil Defense - Sharjah



الإمارة الحامة للنقاع المنني - الشارقة مولة الاملرات العربية المتحد القبادة المامة للطاع المنثي وزارة الناخلية

ترخيص مصن
ع لمعلات و أ
جفزة و م
واد الوقاية
ف مكافحة ال
اچا م

رام الترخيص : 2013-3-66828 سنة الترخيص : 2019 عد التراهيص : 1

الاستم التجاري للمنشأة

تم إصنار الترخيص استنانا إلى القرار الوزاري رقم (42) لسنة 2012 . في شأن تنظيم خنمات النفاع المنني

اسع صاحب الترخيص المتطورة لصناعة مستلزمات انظمة تكييف رقم الرخصة سعيد محمد عبالله الرقباني الجنسة 627403 الإمارات العربية المتحدة 2013-3-66828

صناعة مستلزمات أنظمة تكييف الهواء المركزية - صناعة مجاري الهواء المقاومة للحريق - منطقة النشاط 065351750

نوع النثياط نقم الهاتف

عنوان الشركة ملك عنتان رافت مشتهي - خلف شارع الشيخ محمد بن زايد ، الصناعية ،15 الشارقة الشارقة

تاريخ تأسيس المنشأة الموقع و البريد الإلكتروني 02/04/2013

عند المعنات و الأجهزة المراد ترخيصها 2 عند المهنسين المعتمين 4

عند القنيين المجتمين 4

18/06/2019

- تم تسئيد الرسوم بإيصال رقم (1900527 18615).



رؤيتنا أن تكون دولة الإمارات العربية المتحدة من أفضل دول العالم في تحقيق الأمن و السلامة

تعتبر هذه الشهادة وشقة رسمية لا تحتاج الى توقيع. للتأكد من صحة المعلومات يرجى زيارة الرابط https://cdservices.moi.gov.ae//index/certificate-inquiry

United Arab Emirates

Ministry of Interior

General Directorate of Civil Defense

General Department of Civil Defense - Sharjah



مولة الامراء العربية المتعدة وزارة المكلية القيادة المامة للماع المنتي الإمارة الملحة للماع المنتي - التنارقة

الاسم التجاري للمنشأة : المتطورة لصناعة مستلزمات انظمة تكييف الهواء ذمم

رلم الترخيص : 2013-3-66828 سنة الترخيص : 2019 عند التراخيص : 1

_	-	-Pag	61	30
استم المعدة/المواد/الثظام	مثبط الحريق / الدهان : مثبط - مثبط الدهان	رقم المو ديل : MACS-CC-B	القتوات : القتوات مقاوم للحريق	رقم الموديل : 1953 -
الاسم اللجاري	MACS		EMIRATES AC INDUSTRY	
رقم شهادة السلامة	EMMER37956		UAE-1491	
اسم المختبر الصادر للشهادة	UL UNDERWRITERS LABORATORIES INC, USA		APPLUS, SPAIN	

ملاحظة 1 . يعتبر المصنع مرخص من قبل الإدارة العامة للنفاع المدني- الشارقة و يحق له مزاولة نشاطه في إمارة الشارقة فقط استئادا إلى قرار مجلس الوزاري رقم (24) لسنة 2012 في شأن تتظيم خدمات النفاع المدني للائحة التنفيذية رقم (213) لسنة 2017 . و لا يحق له مزاولة أنشطته في باقي الإمارات إلا بعد استخراج ترخيص موزع من قبل الإدارات العامة نات

الاختصاص بكل إمارة. 2 . إيلاغ الإدارة العامة للدفاع المدني في حالة تغيير أو تحديل في البيانات المتطقة في الترخيص الصادر من قبل الإدارة العامة للدفاع المدني.

رؤيتنا أن تكون دولة الإمارات العربية المتحدة من أفضل دول العالم في تحقيق الأمن و السلامة

تعتبر هذه الشهادة وشقة رسمية لا تحتاج الى توقيع. للتأكد من صحة المعلومات يرجى زيارة الرابط https://cdservices.mol.gov.ae//index/certificate-inquiry

يتالي

LGAI Technological Center, S.A Campus UAB – Ronda de la Font del Carme s/n 08193 Bellaterra (Barcelona) – Spain T +34 93 567 20 00 F +34 93 567 20 01 www.applus.com



FIRE SAFETY CERTIFICATION

PRODUCT APPROVAL

No.

APF-1491

APPLUS+ LGAI TECHNOLOGICAL CENTER S.A., under the requirements of its SPC-117 certifies:

Product range Company Manufactured	Rectangular metallic ventilation duct type A (fire from outside) reference "EFD-Fire Duct" AL MUTHATHAWERAH A/C SYSTEMS ACCESORIES IND.CENTER LLC. Sharjah (UAE) AL MUTHATHAWERAH A/C SYSTEMS ACCESORIES IND.CENTER LLC.	ΑĐ
Standard Reference	Sharjah (UAE) BS 476-24:1987: "Fire tests on building materials and structures. Method for determination of the fire resistance of ventilation ducts". BS 476-20:1987: "Fire tests on building materials and structures. Part 20: Method for determination of the fire resistance of elements of construction (general principles)"	Applus BS 476-24 APF-1491 Fire Safety Certification
Product Details and Test Report	Please check at the annex of the UAE - 1491 Applus+ certificate.	Logo on the product EMIRATES AIR CONDITIONING INDUSTRY

This certificate was first issued on May 3^{rd} 2019 and will remain valid as long as the test methods and/or factory production control requirements in the certification scheme, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly.

Valid until March 12th 2020

Bellaterra, May 3rd 2019



LGAI Technological Center, S.A.



Product Conformity B. U., Managing Director

You can find this certificate into our website at: https://apps.applus.com/microsites/FECIP/login

LGAI TECHNOLOGICAL CENTER, S.A. CIF: A-63207492



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FIRE SAFETY CERTIFICATION

PRODUCT APPROVAL

No.

APF-1492

APPLUS+ LGAI TECHNOLOGICAL CENTER S.A., under the requirements of its SPC-117 certifies:

Product Details and Test Report	Please check at the annex of the UAE - 1492 Applus+ certificate.	EMIRATE AR CONDITIONING INDIX
Standard Reference	BS 476-24:1987: "Fire tests on building materials and structures. Method for determination of the fire resistance of ventilation ducts". BS 476-20:1987: "Fire tests on building materials and structures. Part 20: Method for determination of the fire resistance of elements of construction (general principles)".	BS 476-24 APF-1492 Fire Safety Certification
Manufactured	AL MUTHATHAWERAH A/C SYSTEMS ACCESSORIES IND. CENTER LLC, SHARJAH, UAE	Arplus [⊕]
Company	AL MUTHATHAWERAH A/C SYSTEMS ACCESSORIES IND. CENTER LLC, SHARJAH, UAE	ΑĐ
Product range	Rectangular metallic ventilation duct type B (fire from inside) reference "EFD-Fire Duct"	

This certificate was first issued on May 3^{rd} 2019 and will remain valid as long as the test methods and/or factory production control requirements in the certification scheme, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly.

Valid until March 12th 2020

Bellaterra, May 3rd 2019



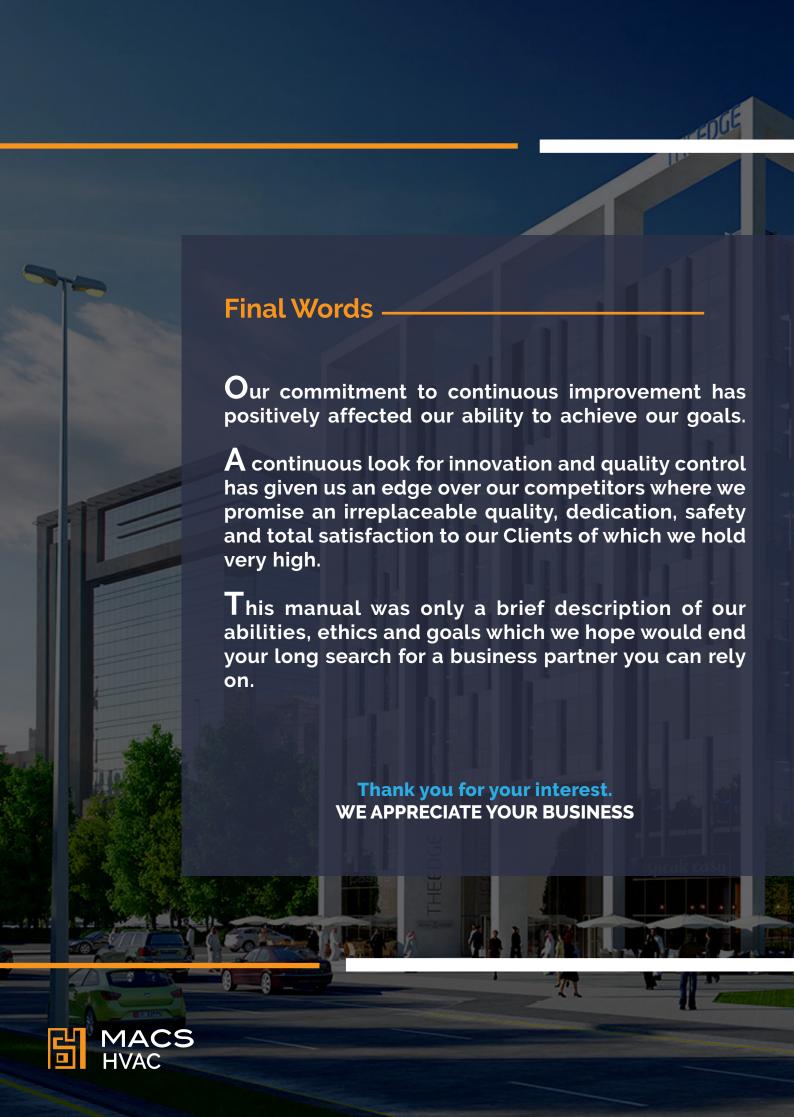
Product Conformity B. U., Managing Director



You can find this certificate into our website at: https://apps.applus.com/microsites/microsites/FECIP/login

LGAI TECHNOLOGICAL CENTER, S.A. CIF: A-63207492











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