

ADVANCED MANUFACTURING
FOR METAL AND GLASS CO.



الشركة المتقدمة
لتصنيع المعادن و الزجاج

Architectural Solutions



Head Office

P.O. Box 13631 Dammam 31414
2nd Industrial City, K.S.A

|| +96613-812-7776 || +96613-812-7470

ALU@AMG-METAL.COM

المركز الرئيسي والمصنع

تلفون : +966 13 8127776

فاكس : +966 13 8127470

ص. ب. 13631 - الدمام 31414

الملكة العربية السعودية



ADVANCED MANUFACTURING FOR METAL & GLASS CO.

"We believe in building to positively impact communities, infrastructure, the economy, opportunity and employment. We take great pride in being proactive with our approach to projects, while ensuring that the best quality is represented at every stage."

PRE-QUALIFICATION CATALOGUE 2024

Contents:

1. Introduction
2. Organization Chart
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6. Product Specifications
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INTRODUCTION



Advanced
Manufacturing
For Metal and Glass Co.



INTRODUCTION / COMPANY PROFILE

Known as "**AMG**" company, located in 2nd Industrial Area, Dammam, Saudi Arabia; established in the year 2007, with a paid-up capital of SAR 20,000,000 under company no. (628970) from the Ministry of Commerce and Industry.

From its fundamentality, AMG has grown to become one of the most outstanding companies in its specialized field of **design, fabrication, assembly, and installation of glazing and aluminum façades.**

Its yield range includes with

- structural and conventional curtain wall (stick and unitized),
- aluminum doors and windows,
- aluminum cladding (ACP)
- dome and skylight,
- canopy and louvers,
- glazed wall & internal glass partitions,
- mashrabiya panels,
- all other aluminum and glazing works.

Operating in a facility area of 21,000 m². The production area facility is 10,500 m² and the rest is a supporting area for material movement. With a classy machine aid and highly trained and skilled manpower resources that meet international specifications.

Our primary focus is to meet and accomplish the requirements of our clients with expertise, dedication to work, and of a high-quality result.

General Information:

Company Name	:	ADVANCED MANUFACTURING FOR METAL & GLASS CO.
Acronym	:	AMG Company
Mailing Address	:	PO Box, 13631, Dammam, 31414- Kingdom of Saudi Arabia
Physical Address	:	Bldg. 2700 – 16 th Street, 2 nd Industrial Area, 34334 – Saudi Arabia
Telephone	:	+966 13 812 7776
Fax	:	+966 13 812 7470
Email	:	alu@amg-metal.com
Website	:	www.amg-metal.com
CR	:	2050058201
Chamber	:	91312
Zakat	:	1110210954
VAT Certificate No	:	30048683100003
ISO Certification	:	SZT.2023.SB2.0.044

Maps: <https://maps.app.goo.gl/cJUG3MMuB7Ur8F2XZ>



INTRODUCTION / COMPANY PROFILE

AMG Company has successfully served to the utmost satisfaction of its clients in the following sphere of activities.

Aluminum Fabrication:

From extruded and rolled materials supplied by globally known sophisticated suppliers such as SCHUECO, VISTAWALL, BALEXCO, REYNAERRS, INSTALLUX, ALUPCO, ALUMAN, ALU-K, EFP, and GUTMANN, including the following sub-activities.

Design - From concept to full working drawing including technical submissions and supportive data is available with us.

Fabrication – Utilizing the state-of-the-art equipment and sophisticated machines; the fabrication is done to the highest degree of accuracy and finish.

Assembly – Using crimping method or other mechanical connections, all units are assembled to international standards.

Transportation – AMG has its own fleet to transport the material to the customers throughout the Kingdom Provinces.

Installation – Trained installers, controlled by Project Manager are working in planned and agreed sequence, having regard to individual project requirements, covering, securing masonry, alignment, and application of caulking/mastic sealant.

Factory Location:

AMG is in 2nd Industrial Area in Dammam, Kingdom of Saudi Arabia in a purposed built factory. The administrative office is attached to the factory.

Production Capacity:

At present AMG can produce between 800 m² to 1,200 m² of glazed aluminum doors and windows, operating in one shift of 8 hours a day. The production range includes sliding doors & windows, side and bottom/top hung windows, single and double swing doors, louvers, partitions, railing, curtain wall, structural glazed curtain wall, horizontal structural curtain wall, etc....

Quality Control:

We (at AMG) establish, implement, maintain, and continually improve Quality Management System according to International Standard ISO 9001:2015 aligned with our scope "Design, Fabrication, Assembly and Installation of Façade Works". (Certified ISO 9001:2015 - # SZT.2023.SB.2.0.044)

Pre-delivery inspection of materials ensures a strict quality control scheme is being implemented to check flaws and errors in materials and workmanship.

HSE Policy:

AMG requires the active commitment to and accountability for Health, Safety, & Environment (HSE) from all employees and all contractors. We are committed to protect and strive for improvement of the health, safety, and security of our people at all times; eliminate quality nonconformances and HSE accidents; meet specified customer requirements and ensure continuous customer satisfaction; set quality and HSE performance objectives; measure results; and assess and continually improve processes, services, and product quality through the use of an effective management system; plan for, respond to, and recover from any emergency, crisis, and business disruption; minimize our impact on the environment through pollution prevention, reduction of natural resource consumption and emissions, and the reduction and recycling of waste; apply our technical skills to all HSE aspects in the design and engineering of our services and products; improve our performance on issues relevant to our stakeholders that are of global concern and on which we can have an impact and share with them our knowledge of successful HSE programs and initiatives.

Delivery:

Inspections of the goods/products are to be conducted to ensure before it is being delivered for installation. The quality check is cleared, and delivery notes are to be issued to complete the documents before sending it to the site.

Installation:

The delivered materials are then to be checked and quality measures are to be executed at the site to further ensure the quality of the product.





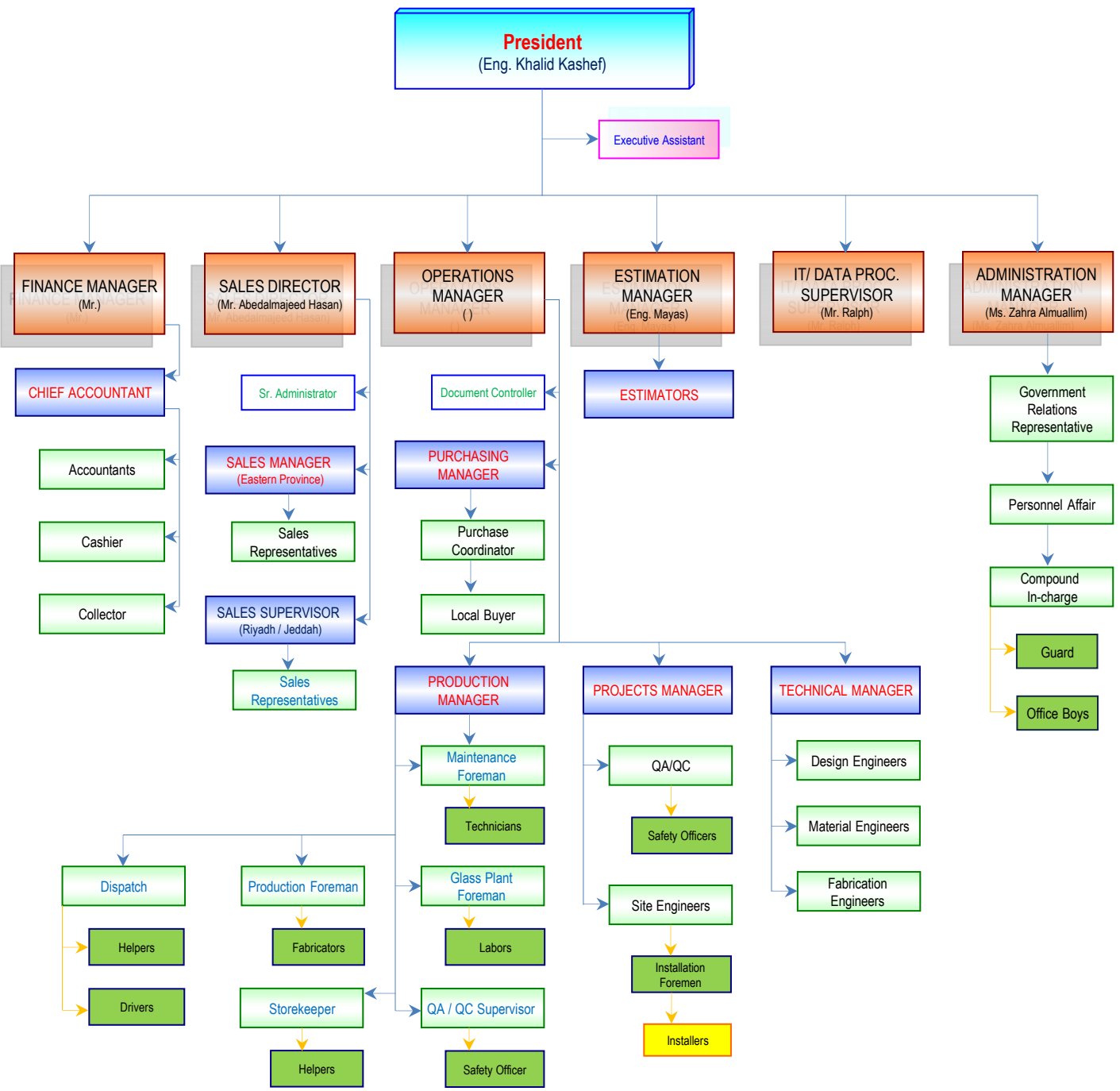
ORGANIZATION STRUCTURE



Advanced
Manufacturing
For Metal and Glass Co.



AMG - ORGANIZATIONAL CHART



ORGANIZATION STRUCTURES:

Manpower List:

Title	Qty	Title	Qty
General Manager	1	Site Engineers	3
Executive Assistant	1	Surveyors	2
Sales Director	1	Production Manager	1
Sr. Administrator	1	Maintenance Foreman	1
Sales Manager (Eastern Region)	1	Technicians	2
Sales Representatives	2	Glass Foreman	1
Sales Supervisor (Riyadh/Jeddah)	1	Helper/Labor	6
Sales Representatives	2	QA/QC Supervisor	2
Estimation Manager	1	Safety Officer	1
Estimation Supervisor	1	Production Supervisor	1
Estimators	4	Fabricators	50
Administration Manager	1	Storekeeper/Warehouse Lead	2
Supervisor Personnel Affairs	1	Helpers	4
Government Relations Officer	2	Dispatching Supervisor	1
Compound In-Charge	1	Drivers	8
Telephone Operator	1	Helpers	3
Office Boys	3	Other Labors (Welder, painter, mechanic, Electrician, etc)	12
Guards	1	Projects Manager	1
Finance Manager	1	Project Engineers	3
Chief Accountant	1	Site Engineer	3
Accountants	2	QA/QC Engineer	2
Cashier	1	HSE / Safety Officer	2
Data Processing Supervisor (IT)	1	Foreman	3
Operations Manager	1	Installers	85
Secretary		Purchase Manager	1
Material Planning Engineer	1	Secretary	1
Material Engineer	1	Purchasing Coordinators	2
Technical Manager	1	Local Purchase Coordinator	1
Executive Technical Assistant	1		
Design Engineers	3	Total	244

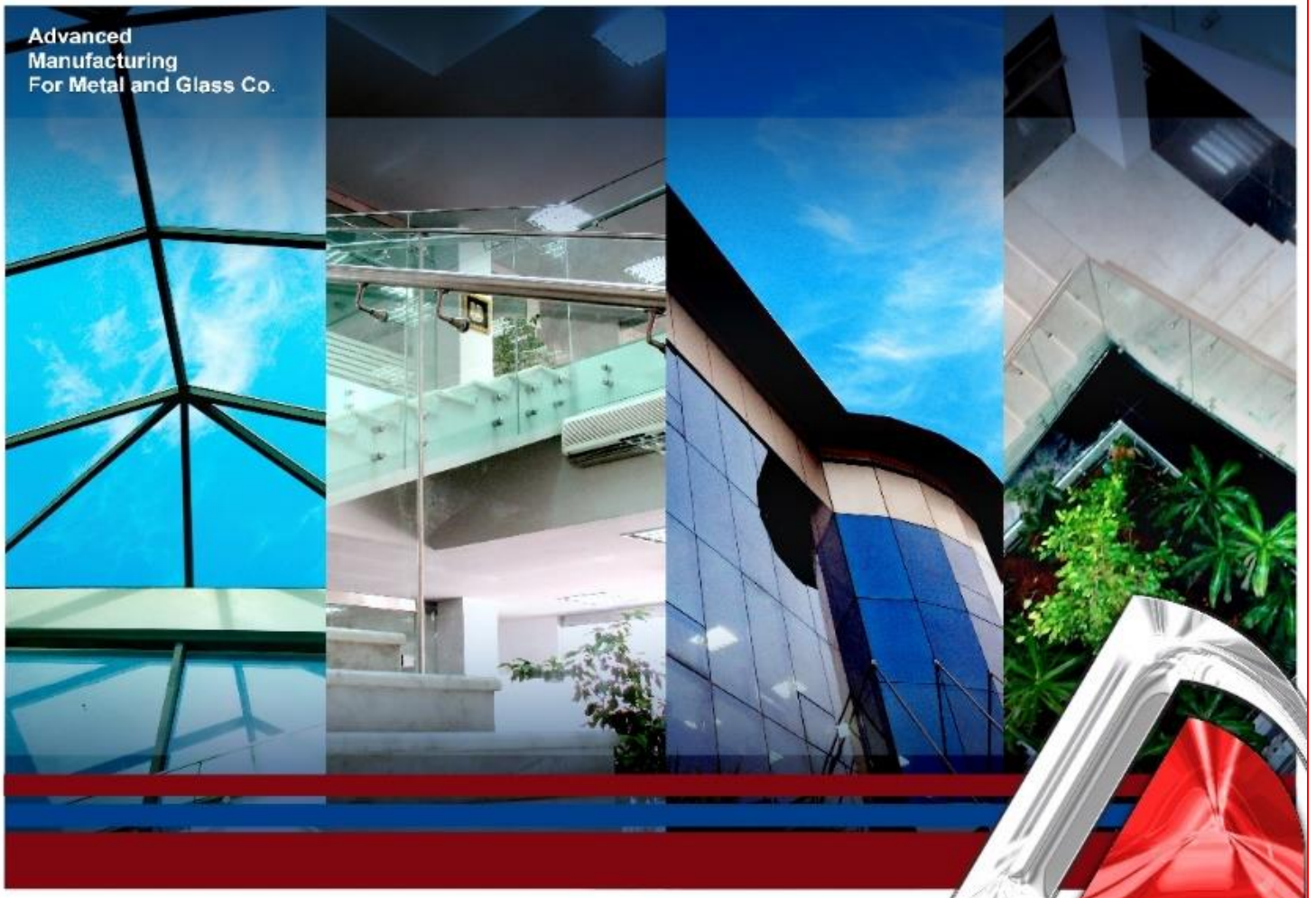




CERTIFICATIONS / LICENSES



Advanced
Manufacturing
For Metal and Glass Co.



٧٠٠١٥٣٩٣٠٨

الرقم الموحد : ٢٠٥٠٠٥٨٢٠١

رقم المنشأة : ١٤٤٢٩/٠١/٢١ هـ

التاريخ : ١٤٤٢/٠١/٢١ هـ

شهادة تسجيل الشركة
Company Registration Certificateوزارة التجارة
Ministry of Commerce

الاسم التجاري للشركة : الشركة المتقدمة لتصنيع المعادن والزجاج شركة ذات الشخص الواحد

نوعها : محدودة اجنبية

جنسيتها : سعودي

وتنتهي في : ١٤٥٣/١٢/٠١ هـ

تبدأ من : ١٤٢٨/١٢/٠٢ هـ

مدة الشركة : ٢٥ سنة

مركزها الرئيسي : الدمام / المدينة الصناعية الثانية/ شارع ١٦

الرمز البريدي : ٣١٩٥٢

ص. ب : ٢٥٦٢

هاتف : ٨١٢٧٧٧٦

النشاط : للاطلاع على بيانات الأنشطة الرجاء مسح الرمز التجاري

رأس المال : ٢٠٠٠٠٠٠٠٠ ريال سعودي

المديرون : 1 خالد وليد كاشف

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سلطات المدير/المديرون : حسب ما نص عليه عقد الشركة

يشهد مكتب السجل التجاري بمدينة : الدمام

بأنه تم تسجيل الشركة المذكورة أعلاه بمدينة : الدمام

وتنتهي صلاحية الشهادات في : ١٤٤٩/٠٧/٠١ هـ

بموجب الإيصال رقم : ٧٠٤١٦٢٦٨

وتاريخ : ١٤٤٢/٠٦/٢٩ هـ

يمكنكم التحقق من صحة هذه الشهادة بالدخول على <http://mc.gov.sa> To Verify The Information Of This Certificate Visit
-966 11 294 4444 | Riyadh 11162 | Kingdom of Saudi Arabia | المملكة العربية السعودية | www.mc.gov.sa | MCgovSA @ f t w

شهادة اشتراك

Membership

البوابة الموحدة
للغرف السعودية

نشهد بأن This is to certify that

الشركة المتقدمة لتصنيع المعادن والزجاج شركة ذات الشخص الواحد

.ADVANCED MANUFACTURING FOR METAL AND GLASS CO

عضو في الغرفة التجارية Is a member in the chamber

Certificate Date	15/01/2024 - 03/07/1445	تاريخ طباعة الشهادة
Date of Membership	02/02/2008 - 24/01/1429	تاريخ الاشتراك
Date of Expiry	29/11/2027 - 01/07/1449	تاريخ الانتهاء
Subscription Status	فعال	حالة الاشتراك
NUN	7001539308	رقم المنشأة الموحد
Membership No	91312	رقم الإشتراك
Membership Degree	الأولى	درجة الإشتراك
Commercial Record/ License	2050058201	الرخصة / السجل التجاري
P. O. Box	13631	صندوق البريد

التوقيع
عبدالعزیز بن سعد المعمر
مدير إدارة المشتركين والفروعغرفة الشرقية
ASHARQIA CHAMBER



تاريخ الترخيص : ١٤٣٨/١٢/٠٢ هـ
الرقم المميز : ٣٠٠٠٤٨٦٨٣١



الهيئة العامة للزكاة والدخل
GENERAL AUTHORITY OF ZAKAT & TAX

المملكة العربية السعودية
الهيئة العامة للزكاة والدخل
GENERAL AUTHORITY OF ZAKAT & TAX
(١٨٥)

شهادة CERTIFICATE

شهادة تسجيل في ضريبة القيمة المضافة VAT registration certificate

تشهد الهيئة العامة للزكاة والدخل بأن المكلف : الشركة المتقدمه لتصنيع المعادن والزجاج
مسجل في ضريبة القيمة المضافة بتاريخ : ١٤٣٨/١٢/٠٢ هـ، وتحمل الرقم الضريبي : ٣٠٠٠٤٨٦٨٣١٠٠٠٠٣

عنوان المركز الرئيسي :
المدينة : الرياض الحي :
صندوق البريد : الرمز البريدي : ١١٤٢٧
الهاتف : ٠٠٩٦٦٥٠٥٧٢٤٦٥٤

الهيئة العامة للزكاة والدخل



هذه الوثيقة مرسله من النظام الآلي ولا تحتاج إلى توقيع



TIN ٣٠٠٠٤٨٦٨٣١ الرقم المميز
Certificate No. ١١١٢٢١٧٦٨٣ رقم الشهادة
Issue Date ١٤٤٥/١٠/١٩ هـ تاريخ الاصدار

هيئة الزكاة والضريبة والجمارك
Zakat, Tax and Customs Authority

المملكة العربية السعودية
Kingdom of Saudi Arabia

شهادة Certificate

The Zakat, Tax and Customs

Authority certifies that the Taxpayer

تشهد هيئة الزكاة والضريبة

والجمارك أن المكلف /

الشركة المتقدمه لتصنيع المعادن والزجاج

Entity Unified No. / ID No.

٧٠٠١٥٣٩٣٠٨

الرقم الموحد للمنشأة / رقم هوية

Commercial Registration/License/
Contract No

٢٠٥٠٠٥٨٢٠١

سجل تجاري / رخصة / عقد رقم

Has submitted his tax return for the period ending on 31/12/2023 AD, and he was granted the certificate to complete all his transactions including the payment of the final amount due on the contract.

The Certificate is valid until 02/11/1446 AH corresponding to 30/04/2025 AD

(The second of Dhu al-Qi'dah one thousand four hundred forty-six Hijri)

قدم إقراره عن الفترة المنتهية في ١٨/١٢/١٤٤٥ هـ ، وقد منح هذه الشهادة لإنهاء جميع معاملاته بما في ذلك صرف مستحقاته النهائية عن العقود.

يسري مفعول هذه الشهادة حتى تاريخ ٢٠٢٥/٠٤/٣٠ هـ الموافق ٢٠٢٥/٠٤/٣٠ م

(الثاني من ذو القعدة ألف و أربعمئة و ستة و أربعون هجري)

لا يعتد بهذه الشهادة إلا بعد التحقق من موقع الهيئة الإلكتروني: www.zatca.gov.sa

This certificate is not valid until verified by the Authority's Website: www.zatca.gov.sa





شهادة التوطين

رقم الشهادة	641803-12386998
تاريخ الإصدار	14/11/2024
تاريخ انتهاء الصلاحية	12/02/2025
تاريخ التجديد/التحديث	—
حالة الشهادة	تم التحقق
اسم المنشأة	الشركة المتقدمة لتصنيع المعادن والزجاج شركة ذات الشخص الواحد
رقم المنشأة	4-73161
رقم السجل التجاري	2050058201
الرقم الوطني الموحد	7001539308
مستوى نطاقات	اخضر متوسط
معدل التوطين	31 %



The Ministry of Human Resources and Social Development certifies that the above mentioned Establishment has achieved the required Nationalization rate and has been granted this certificate upon request.

تشهد وزارة الموارد البشرية والتنمية الاجتماعية بأن المنشأة المذكورة أعلاه حققت نسبة التوطين المطلوبة وتم منحها هذه الشهادة بناء عن طلبها.

The certificate is electronically generated and approved by the authority. It does not require any signature or stamp.

الشهادة تم إنشاؤها إلكترونياً ومعتمدة من الجهة المختصة ولا تحتاج إلى ختم أو توقيع

التاريخ ١٤٤٥/١٢/٠٦
الموافق ١٢/٠٦/٢٠٢٤
رمز الشهادة ٦٧٠٨٨٨٠٣

شهادة

إسم المنشأة : الشركة المتقدمة لتصنيع المعادن والزجاج
ص.ب : ١٣٦٣١ الدمام ٣١٤١٤
السعودية
رقم الإشتراك : ٥٠٢٠٨١٤٣٨
رقم السجل التجاري: ٢٠٥٠٠٥٨٢٠١

رقما	كتابة	عدد المشتركين السعوديين
٧٢	اثنان و سبعون مشتركا	عدد المشتركين غير السعوديين
١٥٥	مائة و خمسة و خمسون مشتركا	المجموع
٢٢٧	مائتين و سبعة و عشرون مشتركا	

تشهد المؤسسة العامة للتأمينات الاجتماعية بأن المنشأة المذكورة أعلاه قد أوفت بالتزاماتها تجاه المؤسسة وفق البيانات المقدمة منها حتى تاريخ إصدار هذه الشهادة ، والتي تم منحها لتقديمها لأية جهة تطلبها ، وهي صالحة لجميع الأغراض التي نص عليها نظام التأمينات الاجتماعية في المادة (١٩/٦) منه.
هذه الشهادة سارية المفعول حتى ١٤٤٦/١/٠٥ هـ.

يلزم التحقق من صحة وصلاحيه الشهادة عبر زيارة الرابط
أدناه في الموقع الإلكتروني للمؤسسة العامة للتأمينات الاجتماعية
أو عن طريق استخدام
الرمز المعرف التالي :



www.gosi.gov.sa/vc

(الشهادة معتمدة من صاحب الصلاحية ولا تحتاج إلى توقيع أو ختم)

ننهادة 

www.gosi.gov.sa
800 1243344



تعد هذه الشهادة من الوثائق الالكترونية الحكومية الرسمية ، ويحظر قطعيا تقليدها أو إدخال أي تعديلات عليها سواء بالإضافة أو الحذف أو التغيير في بياناتها أو غير ذلك من أنواع التعديل ، وتعد الشهادة لاغية إذا شابها شيء من ذلك ، كما تعرض صاحبها للملاحقة النظامية أمام الجهات المختصة بالإضافة إلى مايفرضه نظام التأمينات الاجتماعية من عقوبات ، ولايجوز تداول الشهادة إلا في الأغراض التي أصدرت لأجلها وفقا لأحكام نظام التأمينات الاجتماعية ، والمؤسسة العامة للتأمينات الاجتماعية غير مسؤولة عن أي آثار أخرى مترتبة قبل الغير عن الشهادة وغير مسؤولة عن أي عملية تزوير أو تعديل تتم على البيانات الواردة فيها .

Proof Number	1031403926	رقم الإثبات
Original Date	27/2/2023	تاريخ الإصدار
Expiration Date	8/26/2023	تاريخ الانتهاء

العنوان الوطني
NATIONAL ADDRESS



إثبات عنوان Address Proof

Address Holder Details

بيانات صاحب العنوان

Name	Advanced Manufacturing for Metal & Glass	الشركة المتقدمة لتصنيع المعادن والزجاج شركة ذات الشخص الواحد	الاسم
Customer Acc.	7 1 6 1 3 3 0 2 1		رقم الحساب
Reg. Date	2/6/2013		تاريخ التسجيل

Address Details

تفاصيل العنوان

Short Address	E I G A 2 7 0 0	العنوان المختصر
Building No.	2 7 0 0	رقم المبنى
Street	Al Dammam 403	الشارع
Secondary No.	7 4 8 1	الرقم الفرعي
District		الحي
Postal Code	3 4 3 3 4	الرمز البريدي
City	DAMMAM	المدينة
		الدمام
Kingdom of Saudi Arabia		المملكة العربية السعودية



للتحقق To Verify

<https://proof.address.gov.sa/VerifyProofNA.aspx>

تم إصدار هذا الإثبات إلكترونياً ولا يتطلب التوقيع عليه

تم إصدار هذا الإثبات بناء على طلب الموضح أعلاه، ويحظر قطعياً تقليده أو إدخال أي تعديلات عليه سواء بالإضافة أو الحذف، ويعد الإثبات لاغياً إذا شابه شياً من ذلك، كما يعرض صاحبه للمساءلة القانونية.

This proof has been issued electronically and does not require a signature

This proof has been issued upon the request of the above-named, and it is absolutely prohibited to imitate it or make any modifications to it, whether by addition or deletion, and the proof is considered void if it is marred by something, and its owner is subject to legal accountability.

19992 <https://sponline.com.sa/ar/national-address-1/>



ارامكو السعودية
Saudi Aramco



September 2, 2012

YOUR SAUDI ARAMCO VENDOR
REGISTRATION NUMBER: 10049336

ADVANCED MANUFACTURING FOR METAL AND GLASS CO.
P.O.BOX.13631
Dammam 31414
Saudi Arabia

Gentlemen;

Thank you for your interest in providing contract services to Saudi Aramco. Your new contractor registration application has been approved and your Company has been assigned the following Vendor Number:

YOUR ASSIGNED SAUDI ARAMCO VENDOR NUMBER: 10049336

(Please note this Vendor Number for your future reference.)

We appreciate your interest in doing business with Saudi Aramco and wish you the best of success.

Sincerely yours,

Sgd:

Manager
Saudi Aramco Contracting Department



Kingdom of Saudi Arabia
Royal Commission For Jubail & Yanbu
Royal Commission in jubail



المملكة العربية السعودية
الهيئة الملكية للجبيل وينبع
الهيئة الملكية بالجبيل

ANNOUNCEMENT OF SUPPLIER REGISTRATION

إخطار بتسجيل مورد

Date : 27/04 /2010

التاريخ : ١٣ / ٥ / ١٤٣١ هـ

ADVANCED MANUFACTURING FOR METAL AND
GLASS (AMG)

فرع الشركة المتقدمة لتصنيع المعادن والزجاج

فاكس رقم: ٨١٢٧٤٧٠

FAX NO.: 8127470

السلام عليكم ورحمة الله وبركاته،

Gentlemen:

We would like to thank you for your interest in being a
supplier registered With Royal Commision In Jubail .

نقدر لكم رغبتكم بان تكونوا احدى الموردين المسجلين
لدى الهيئة الملكية بالجبيل.

This is to acknowledge that your registration request and
documentation have been reviewed and accepted. Royal
Comission in Jubail- Supply Management Department has
registerd your Company/Estblishment under vedor
Number 13238

وهذا الإشعار لتلبية طلبكم للتسجيل لدينا بموجب المستندات
الرسمية المقدمة التي تمت مراجعتها والموافقة عليها. علماً
بأن الهيئة الملكية بالجبيل- إدارة المشتريات والمستودعات
سجلت شركتكم/مؤسستكم تحت الرقم ١٣٢٣٨

To participate in the Royal Commission's supplies and
material requests, your Company/Estblishment have to
followe up with advertismnt that published on local
newspapers, or posted on the Supply Mnagement Bulletin
Board, and on the Royal Commission Web-Site.

ولكي يتسنى لكم الدخول في التوريد وطلبات المواد
التابعة للهيئة الملكية بالجبيل، يرجى منكم متابعة الإعلانات
التي يتم نشرها في الصحف المحلية ولوحة
الإعلانات الخاصة لإدارة المشتريات والمستودعات،
وكذلك على الشبكة الإلكترونية للهيئة الملكية.

Very truly yours,

ولكم تحياتي،

A. I. AL-JELOUZ
Purchasing Manager
Supply Management Dep.

عبدالرحمن بن ابراهيم الجلعوز
رئيس قسم المشتريات
إدارة المشتريات والمستودعات



Aluminium
Steel
PVC-U
Solar products
Design
Service

SCHÜCO

07 March 2012

To Whom It May Concern

Schüco Middle East Windows & Façade Systems L.L.C. hereby confirms that **Advanced Manufacturing for Metal & Glass Company, P.O. Box 13631, Dammam, K.S.A. ("AMG")**, is an authorized Schüco aluminum fabricator in Saudi Arabia. **AMG** is authorized to sell fabricated Schüco products internationally.

This authorization covers the use of Schüco systems and support according to Schüco's policies and procedures, which includes allowing the following:

- The use of Schüco designs;
- The purchase of Schüco systems genuine aluminum profiles and accessories from Schüco Middle East;
- The purchase from Schüco Middle East of all related required punching tools and equipment to fabricate and install the system;
- Technical support as needed and agreed.

Schüco Middle East Windows & Façade System is the sole Schüco subsidiary authorized by Schüco International KG (www.schuco.com) to sell genuine Schüco aluminum profiles and accessories in the Territory, which includes Saudi Arabia and other countries in the Middle East and Africa. Schüco Middle East Windows & Façade System LLC is also the sole entity authorized to approve, appoint, and authorize Schüco fabricators in the Territory, and is the only Schüco subsidiary authorized to sell un-fabricated profiles and accessories in the Territory.

Please do not hesitate to contact Schüco Middle East Windows & Façade System LLC should further details and/or clarifications be needed regarding this authorization.

This letter is valid for one year from the date first written above.

Sincerely,

Schüco Middle East Windows & Façade Systems L.L.C.



Ammar H. Alul
General Manager

SCHÜCO
Schüco Middle East
Windows and Façade Systems L.L.C.
P.O. Box 1861 - Sharjah - U.A.E

Schüco Middle East Windows and Façade Systems L.L.C.
P.O. Box 1861 - Sharjah - U.A.E.
Tel: +971 6 5336659
Fax: +971 6 5337732
www.schuco.ae - info@schucome.com

شركة شوكو ميديل إيست للنوافذ وأغطية الواجهات لدم
ع.م.ب. 1861 - الشارقة - الإمارات العربية المتحدة
هاتف: +971 6 5336659
فاكس: +971 6 5337732
www.schuco.ae - info@schucome.com



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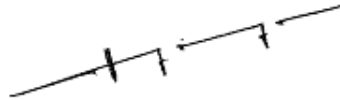
This is to certify that

ADVANCED MANUFACTURING FOR METAL AND GLASS CO.

16 St, Industrial Area-2,
Dammam,
Saudi Arabia

is now part of the
Dun & Bradstreet Global Database


D&B D-U-N-S Number®
55-784-8016






R Suryanarayan,
General Manager Africa
Dun & Bradstreet South Asia Middle East Limited

April 5, 2016





DCC-MI-DC-SP F-0005a_04

Consultant:  Manens-Tifs ENGINEERING	Owner:  Ministry of Interior, KSA	Contractor:  ABV ROCK GROUP
--	--	--

Project Name: Security Forces Medical Center **Ref. No.:** MI-AA-A0-B00.00-A0-SQ-114 00 01 A
Contract No.: 1/53/34/53 **Location:** PKA - Riyadh Proj Orig Pkg Building Doc Type Series Phase Rev Status
Bldg Name: General Site **Date:** 24 NOV 2019

SUPPLIER/VENDOR APPROVAL

New Submittal Submittal No. _____ Submittal Date: _____
 Resubmittal Submittal Date: _____ Prev Subm. Date: 25 SEP 2019
 Issue for Construction Submittal No. _____ Submittal Date: _____

PURPOSE OF SUBMITTAL: For Information For Comments For Approval
 Previous Action Code Action Code

DISCIPLINE:
 Architecture Civil Structural Mechanical Electrical Medical Eqpt Others

ATTACHMENT:
 Catalogue Drawing Certificate Sample Tech. Data Calculation

MECHANICAL EQPT: Note: Please use the attachment in case items are more than the provided space
Remarks: _____

SN	Name and Description	Origin	Spec. Ref.	Standard	Approval
1	Supply and Installation of Curtain Walls, Stick / Unitized Facade System and Aluminum Doors	KSA	See Spec. 8		Approved

Contractor's Remarks We clarify that above submittal is strictly adhered with contract Specification except otherwise as stated below

Exceptions _____


Contractor Representative:
 Name: Mohammed Al Rashidi
 Signature: _____ Date: 24/11/19
 Position: Procurement & Material Dept. Manager

Client's Comments:

- The Subcontractor is approved only for curtain walls stick/unitized facades for the Hospital -
- The Engineer' approval is conditioned to the fully Subcontractor' acceptance of the dedicated Contract Specifications.
- The Engineer' approval formalizes that the Subcontractor has chosen to provide facades with SCHUCO system as part of the approval process. SHUCO shall provide all the technical assistance as written into a dedicated document attached to this submittal

CLIENT'S REPRESENTATIVE Name: _____ Position: _____ Signature: _____ Date: _____	MOI-SECURITY FORCES MEDICAL CENTER Date: _____ Signature: _____ Name / Signature: _____
---	---

Approval Status:
 A - Approved **B - APPROVED AS NOTED** (carlo.migliora , 28/11/2019, 10:42:57) submit for Approved submittal Required
 D - Rejected

Received by Cli Name: _____ Signature: _____ Date: _____  kenneth.wells , 28/11/2019	Received by Contractor (Out) Name: _____ Signature: _____ Date: _____ Stamp: _____
---	---

with Stamp Contractor: Original Page 1()







FACILITIES & EQUIPMENT



Advanced
Manufacturing
For Metal and Glass Co.



FACILITIES

AMG Co. is in 16th Street, 2nd Industrial City, Dammam. Operating in a facility area of 21,000 m². The designated zone for the production area is 10,500 m² and the rest of the area is a supporting area for material movement.



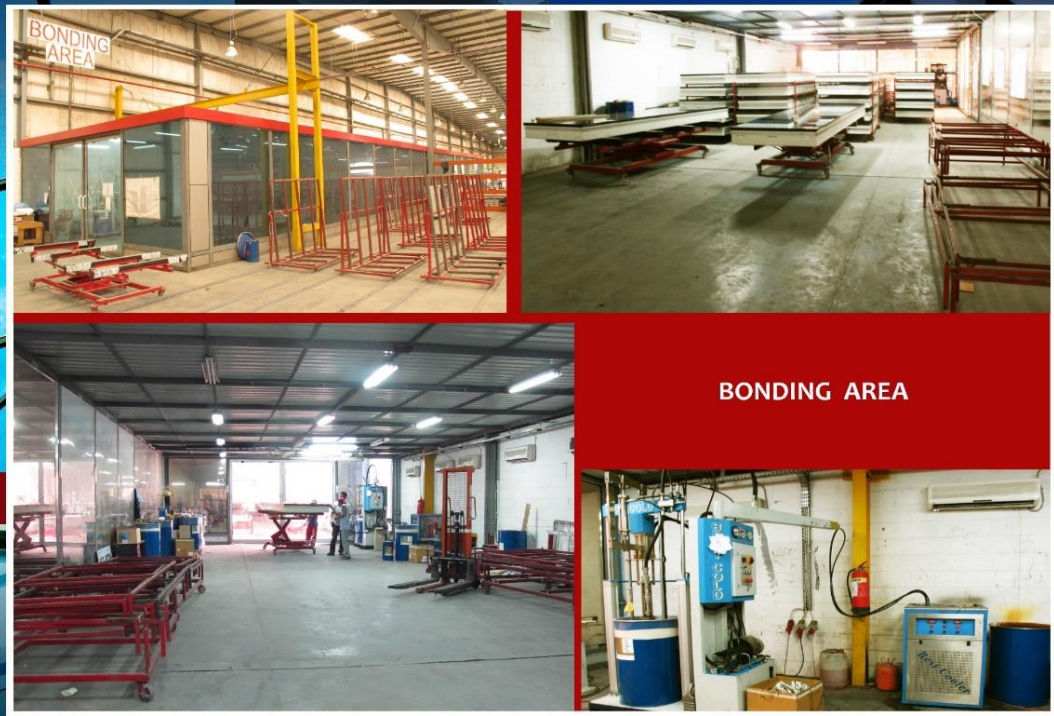
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MAJOR EQUIPMENT

AMG COMPANY

Curtain wall capacity per year?	250,000 m ²
Factory total production area?	15,000 m ²
Facility for design & engineering?	Available
Do you have your own testing center?	No / By outsource.
What system do you use?	Schuco, Reynaers, EFP, Vistawall, Gutmann, Alupco
Structural-thermal-acoustic-LEED specialist?	Yes
Pre-construction testing	Profiles are pre-tested, by outsource.
Flow chart showing different manufacturing stages (From raw material to finish product)	Yes. Attached.
Factory Departments	
Warehouse Department	
Storage Area: 3,500 m ²	
Workers: 5	
Aluminum Profiles	
Glass	
Sealing Materials	
Composite Materials	
Accessories	
Aluminum Composite Department	
Total Area: 1,000 m ²	
Workers: 14	
Machinery	
XYZ CNC Panel Builder Machine (1)	
Cutting Machines - ELUMATEC (1)	
Rolling Machines - SAHINLER-230223 (1)	
Façade CNC Machining Department	
Total Area: 3,000 m ²	
Workers: 60-80	
Machinery	
EMMEGI- 6-Axis Profile Machining Center (1)	
ELUMATEC - 5-axis Profile Machining Center (1)	
EMMEGI - Double Degree Cutting Machine-(1)	
ELUMATEC - Double Head Cutting Machine (2)	
EMMEGI - Single Head Cutting-off Machine (1)	
ELUMATEC -Manual Single axis Milling Machine (2)	
ELUMATEC- Manual Double Axis Milling Machine (1)	
ELUMATEC- Automatic Table Saw (2)	
ELUMATEC- Notching Machine (3)	
ELUMATEC - Cutting Machine (2)	
THOMAS - Cutting Machine (2)	
PBT 25- Profile Bending Machine (1)	
BEST MAKINA -Silicon Injection Machine (1)	
BEST MAKINA - Rotating Table Machine (1)	
ELUMATEC -Crimping Machine (2)	
REYNAERS - Hydraulic Press Machine (2)	
UNIVERSAL - Press Drilling Machine (3)	
DRILL MASTER -Press Drilling Machine (1)	



MAJOR EQUIPMENT

AMG COMPANY

UNIVERSAL 10" Table Saw (1)	
UNIVERSAL - Wrapping Machine (1)	
Façade Assembly Department	
Total Area: 4,000 m ²	
Unitized Curtain Wall Panel Systems: 10,000 m ² /month	
Stick System: 15,000 m ² /month	
Steel & Welding Department	
Total Area: 2,000 m ²	
Workers: 20	
Capacity: 60,000 - 80,000 kg/month	
Machinery	
LOYAL Mac Plasma Machine 060 (1)	
Water Jet TEXA-00077457 (1)	
Laser Machine - ERMAK 18879-n8v654 (1)	
Nibbling Machine EUROMAC MR01063530 (1)	
Shark Bandsaw 281 /260 (2)	
Chenlong Metal Band - Sawing Machine (1)	
Universal Punch Machine- SAHINLER (1)	
EDWARD Punch Machine (1)	
Lathe Machine Koppings Mekaniska (1)	
Drill Press (6)	
Welding Stations (5)	
Cutting & Bending Department	
Total Area: 1,000 m ²	
Workers: 10	
Capacity: 5,000 m ² /month	
Machinery	
CNC DURMA Bending Machine (1)	
CNC ERMAC Bending Machine (1)	
Shearing Machine DURMA (1)	
Shearing Machine ERMAC (1)	
Aluminium Composite Panel Processing Department	
Total Area : 1,000 m ²	
Workers: 14	
Capacity: 10,000 m ² /month	
Machinery:	
XYZ CNC Panel Builder Machine (1)	
Cutting Machines - ELUMATEC (1)	
Rolling Machines - SAHINLER-230223 (1)	
Electrostatic Painting Department	From outsource companies approved by our system suppliers.
Logistics Department?	Workers: 10
Human Resources Department?	Personnel: 4
Quality Control Department?	QA/QC: 6
Quality Management Department?	Available
Survey Team	Surveyor : 3

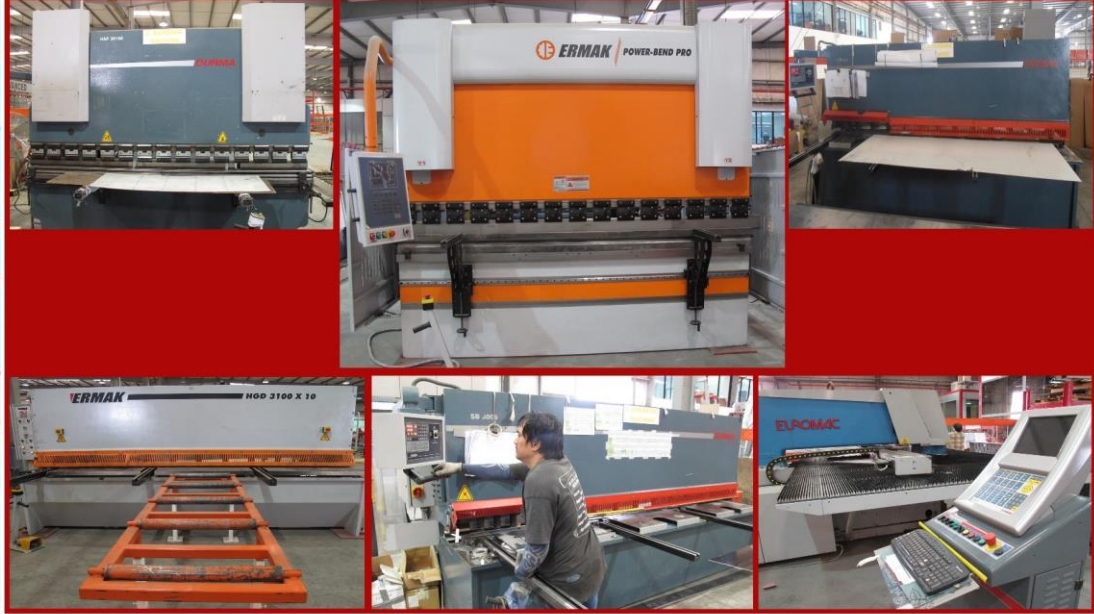


MAJOR EQUIPMENT



MAJOR EQUIPMENT

BENDING, PUNCHING & SHEARING MACHINES



NOTCHING, MILLING & WELDING MACHINES





PROJECTS REFERENCES



Advanced
Manufacturing
For Metal and Glass Co.



MAJOR PROJECTS REFERENCES

CLIENT/CONTRACTOR	PROJECT NAME	AMOUNT (SAR)	SCOPE	LOCATION
Tharouk Contracting	Bamarouf Building	12,200,00	Cladding, Curtain Wall, Louver, Frameless partitions	Jeddah
Al Kifah Contracting	Al Kifah Tower	5,694,832	CW, Cladding, Canopy, and Frameless	Khobar-Dammam
A.Al-Syed Con. Group	Al Amal Hospital	2,668,854	Doors, Window, Curtain Wall	Dammam
Al Joudah Contracting	College of Medical Science – Al Jouf University	7,139,345	CW, Cladding, Doors & Windows	Jouf
Al Joudah Contracting	Faculty of Society – Al Hail University	6,185,313	CW, Cladding, Doors & Windows	Hail
Al Joudah Contracting	Faculty of Science – Al Baha University	6,037,939	CW, Cladding, Doors & Windows	Baha
Khaled Est. Gen. Contr.	Medical Tower	6,572,547	CW, Cladding, Doors & Windows	Jouf
Saudi Bin Ladin Group	(KSU) Research Center	10,246,483	CW, Cladding, Skylight, Doors & Windows	Riyadh
Saudi Bin Ladin Group	(KSU) Girl's Housing	11,311,151	CW, Cladding, Doors, & Windows	Riyadh
Four Corners Contracting	AACC New Facilities Bldg.	4,341,281	CW, Cladding, Doors & Windows	Jeddah
MASCO	Unaizah University (Qassim)	6,074,557	CW, Cladding, Doors & Windows	Unaizah
Al Qussie International	Technical Science for Girls	4,577,823	CW, Cladding, Doors & Windows	Dammam
Dar Al Khiyoul Contracting	Al Othaim Mall	9,970,800	CW, Cladding, Doors, & Windows	Dammam
Drake & Skull / ARAMCO	UPDC Building	7,501,025	CW, Canopy, and Frameless	Dhahran
Al Hokair Contracting	Mall of Arabia	36,426,269	CW, Cladding, Skylight, Doors & Windows	Jeddah
IBS	Samsung Naffora Techno Valley	2,073,522	CW, Cladding, Doors & Windows	Jubail
Al Subeaei Contracting	Al Fanar Tower / Jacobs Zate	6,065,458	CW, Cladding, Doors & Windows	Khobar
ARCON	Baker Hughes Tech. Center	1,387,551	CW, Cladding, Doors & Windows	Dhahran
United Arabian Company	Al Noaimy Tower	1,967,267	CW, Cladding, Doors & Windows	Jubail
Maliki Contracting	Al Jarbouh Tower	2,929,583	CW, Cladding, Doors & Windows	Khobar
Al Joudah Contracting	Water Tank Tower	9,698,190	CW, Cladding, Doors & Windows	Khamis Mushayt
Damac Properties Co. Ltd	Al Jawhara Tower	20,028,792	CW, Cladding, Doors & Windows, Canopy	Jeddah
Damac Properties Co. Ltd	Exclusiva Tower Towers	42,548,784	CW, Cladding, Doors & Windows, Canopy	Riyadh
Safari Company	Al Jouf University	6,380,922	CW, Cladding, Doors & Windows	Jouf
DSCC	Rafal Living Tower	52,000,000	CW, Cladding, Doors & Windows	Riyadh
Marco	Taif University		CW, Cladding, Doors & Windows	Taif
Al Joudah Contracting	Arar Airport		CW, Cladding, Doors, Windows, Partitions	Arar
Al Manar Contracting	National Guard Building		CW, Cladding, Doors & Windows	Dammam
Jamal Al Jaroudi Group	Al Qassim Museum		CW, Cladding, Doors & Windows	Qassim
The Palms	Admin Building		CW, Cladding, Doors & Windows	Riyadh
Jamal Al Jaroudi Group	Modon – Ready Built Factory		CW, Cladding, Doors & Windows	Jizan
Jamal Al Jaroudi Group	Modon – Multi Storey Factory		CW, Cladding, Doors & Windows	Dammam
IKK Group	Sulai Office Building		CW, Cladding, Doors & Windows	Sulai, Riyadh
Gulf Builder	Modon – 84 Factories		CW, Cladding, Doors & Windows	Dammam
Alupco	MOI-SFMC – Border Housing		Doors, and Windows	Jizan
Sterling & Wilson – EDGNEX	Data Center		CW, Doors/Windows, Louvers, Cladding	Dammam-Spark



MAJOR PROJECTS REFERENCES



EDGNEX DATA CENTER (SPARK)



ARAR AIRPORT (ARAR)

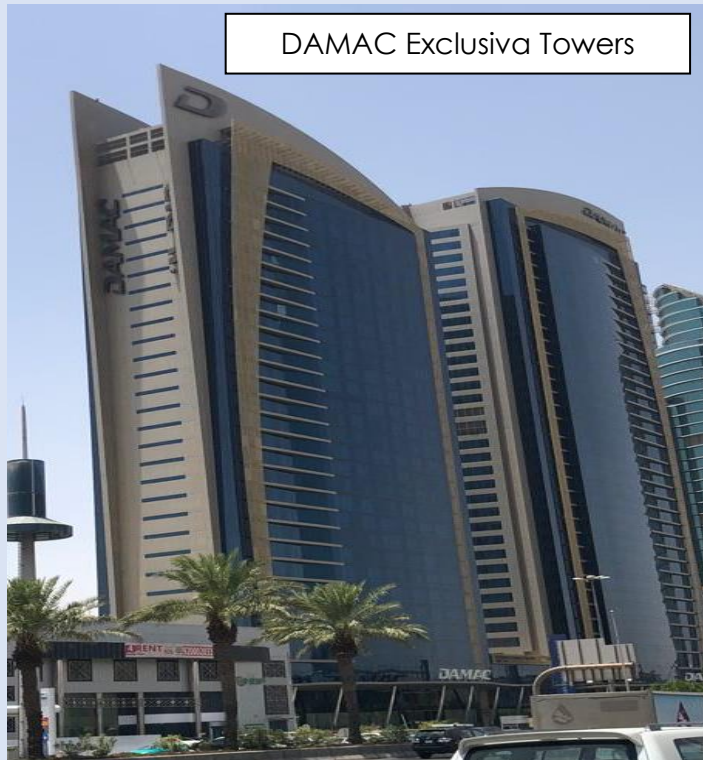


MAJOR PROJECTS REFERENCES

Al Jawhara Tower



DAMAC Exclusiva Towers



MAJOR PROJECTS REFERENCES

Water Tank Tower



Al Baha University



Mall of Arabia



MAJOR PROJECTS REFERENCES

Jouf University



Al Jarboub Tower



National Guard Building

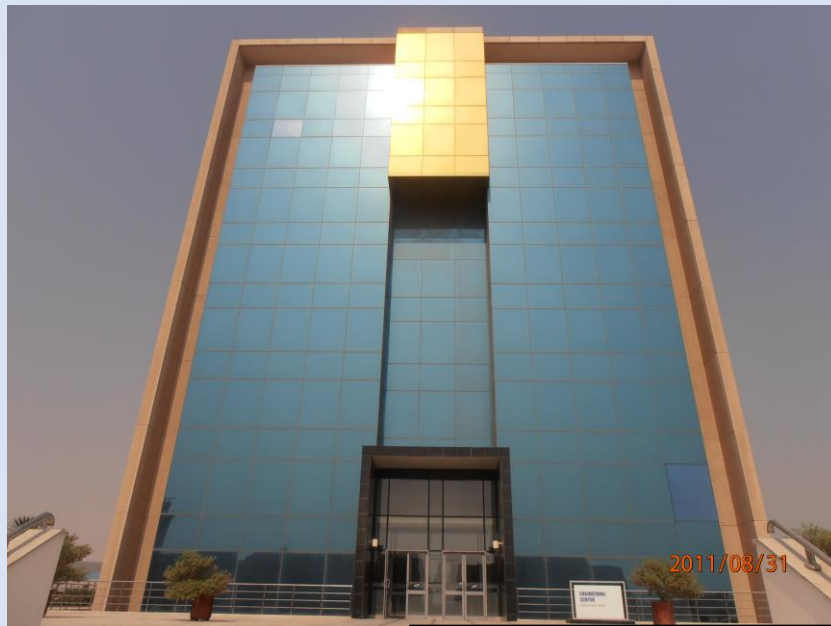
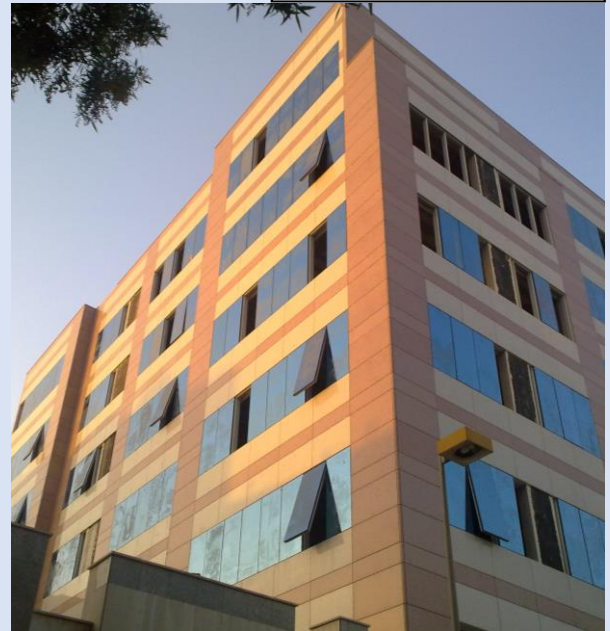


MAJOR PROJECTS REFERENCES

Al Kifah Tower



Al Suhaily Project



Samsung Naffora



MAJOR PROJECTS REFERENCES

Sky Garden / Rafal



Al Fanar / Jacobs Zate



Sabic - Greenhouse



MAJOR PROJECTS REFERENCES

Al Jouf University



Medical Tower



AACC - Building



ON-GOING PROJECTS REFERENCES

CLIENT/CONTRACTOR	PROJECT NAME	SCOPE	LOCATION
ABV Rock – MOI	Security Medical Forces Center (SFMC) – Main Building	CW, Cladding, Doors/Windows, Louvers	Riyadh
ABV Rock – MOI	Security Medical Forces Center (SFMC) – Engineering Building	CW, Cladding Doors & Windows	Riyadh
ABV Rock – MOI	Security Medical Forces Center (SFMC) – Residential Building	Doors, Windows	Riyadh
BK GCC – SAHAYEB	Data Center 1 -	CW, Doors/Windows, Louvers, Cladding	Dammam – Modon
BK GCC – SAHAYEB	Data Center 2 -	CW, Doors/Windows, Louvers, Cladding	Dammam – Al Anwar
BK GCC – SAHAYEB	Data Center 3 -	CW, Doors/Windows, Louvers, Cladding	Dammam – Al Waha

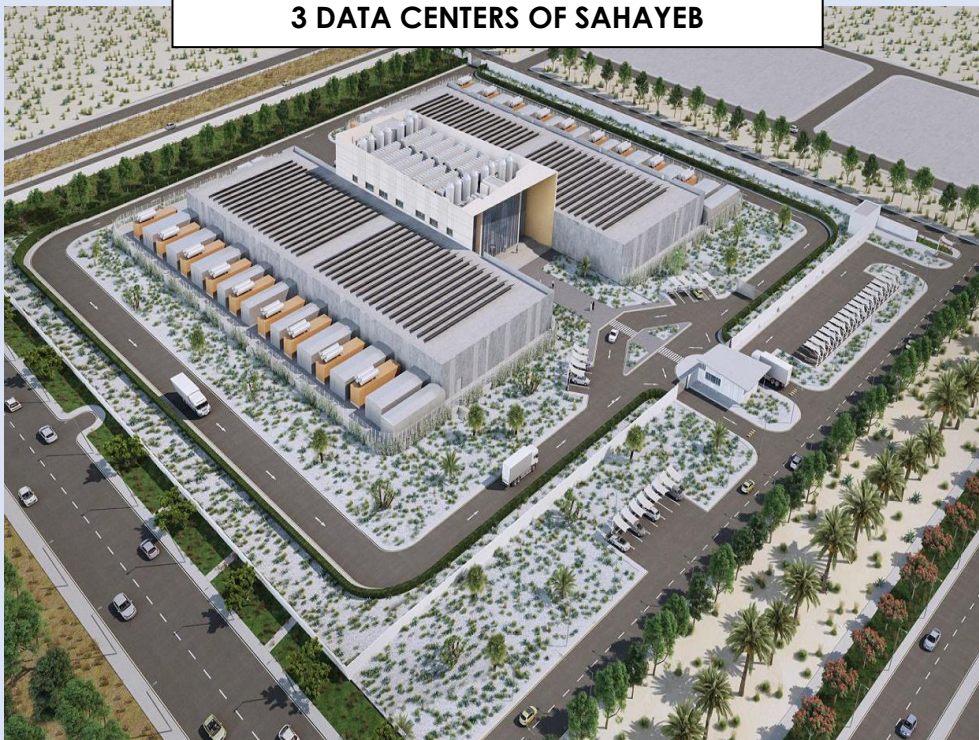


AMG



ONGOING REFERENCE PROJECTS

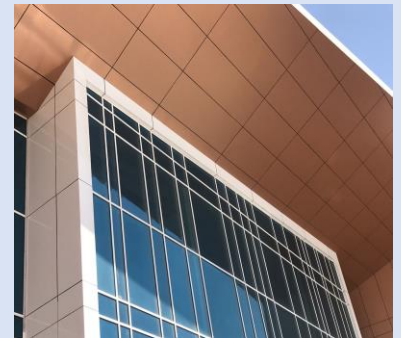
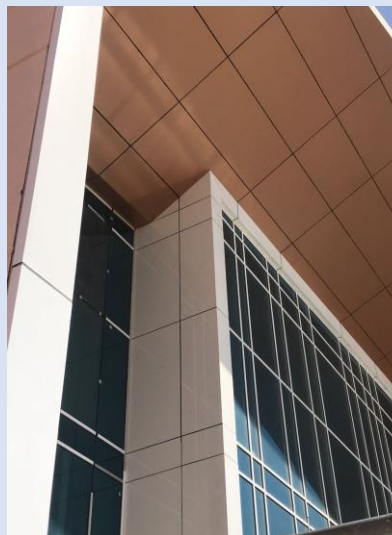
3 DATA CENTERS OF SAHAYEB



(DC1) – MODON
INDUSTRIAL 2 - DAMMAM

(DC2) AL-ANWAR
DAMMAM

(DC3) AL-WAHA
DAMMAM



ONGOING REFERENCE PROJECTS

SFMC (MOI) RIYADH





PRODUCT SPECIFICATIONS



Advanced
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AMG COMPANY:

The company's standard curtain wall, doors, and windows are designed and tested as per the international standards. Having ranges of fully integrated series of profiles, allowing manufacture of individual or composite units to suit a particular design option or variable to suit a multiplicity of client exacting requirements.

The system conforms to the most recognized European and International Standards in all aspects of design and fabrication, finishes of painting and/or anodizing, workshop practices, glazing and hardware. Skilled and trained installation teams are employed for improved operations.

The system has many unique and ingenious design features, it permits a variable glazing thickness of 4 mm to 24 mm glass or panels or any other type of in-fill construction using the bead clipping principle. Wall thickness of profile designed to suit in a particular application. Aluminum framed insect screens (single or double), quality system hardware: hinges, handles, locks, flush bolt, and many other hardware such as panic devices and door closers (surface and floor mounted) are all available to suit specific design.

Corner joints are individually designed and are constructed by welding; screw fixings within profile screw ports or generally mechanically jointed using cast or extruded aluminum cleats secured by mechanical jointed using cast or extruded sealed in accordance with BS4873:1972. All doors and windows are glazed, fully weather-stripped, and sealed against all elements with EPDM or equivalent gaskets. Aluminum insect screens where required are retained in aluminum frames using the rolled in gasket or clip method for fixing into main frame after installation. Windows are designed to allow water drainage to the exterior.

Quality finishes to surfaces of aluminum profiles, panels, hardware, and accessories, etc. may be in either anodizing or polyester painting. Many colors are available to suit client individual requirements.

Unless otherwise required/specified all exposed profiles are anodized to Grade AA20 or 20 microns minimum average thickness in accordance with BS 1615:1972.



1. CONFORMING TO FOLLOWING BRITISH AND INTERNATION STANDARDS :

	BS	DIN	ASTM
Manufactured from extruded aluminum alloys generally.	BS 1474	17615P3	
Anodizing to	BS 3987	17611	
Glass generally to comply with requirements of	BS 952	n/a	1036
Glazing in accordance with	BS 6262	n/a	UB
Regulations sealant-single part gun grade polysulphide based	BS 5215	n/a	C920
Wind Loading	BS CP-3 (Ch.5 Part2)	n/a	E330
Construction in accordance with	BS 4873:1972 (Section 5.2.6)		
Weather Strip EPDM – International Standards	1503934-1978 (E)	7863	C864
Weather Strip sizes		7715 Cat. E	
Design Criteria	General BS 4313 : Part 1 : 1968 DD4: 1971 BS 5386: Part 1 : 1976 Part 2 : 1980 Part 3 : 1974		

2. PERFORMANCE

Working with the above standards codes and drawings should not change the dimension or shape of the window and their components caused by presence or absence of water or variations in moisture conditions or temperature changes including the effect of differential temperature difference between and within the various components or deformation due to sporadic pressure of suction from the wind or by reason of their being used for their purpose or for any other cause within normal limits shall not affect the appearance, use, colour or performance specified.

All surface finish shall be uniform in texture, color, and appearance within the limits of the approved samples and without irregularities or distortion. Rivets and screws etc., which are not intended to be visible shall be treated so that there is no discontinuity of the finished surface.

3. CONSTRUCTION

The design and method of construction shall be consistent with good and proven practice.

Windows shall generally comply with BS 4873: 1972 in respect to materials, work sizes, manufacturing tolerance, glazing securities safety and performance.

The outer frames and leaves are crimped cleated and sealed at each corner. All in accordance with BS 4873:1972 Section 5.2.6.

All units shall be fabricated to agreed tolerances. No metals likely to cause galvanic or other corrosion shall be placed in contact with the aluminum. Any other dissimilar materials shall be treated to avoid such action between metals.



4. DELIVERY AND PROTECTION

- A. Aluminum window frames, components and accessories will be suitably protected with low-tac tape or other means from the time of leaving our premises to the installation in the building, suitable storage to be provided for all materials.
- B. All window units, assemblies or elements are to be prepared and packaged for transport to the site. All corners, edges and finished surfaces are to be adequately protected to avoid damages.

5. SEALANT

One part polysulphide-based gun grade in accordance with BS 5215, supported by suitable polyethylene backing core applied in accordance with manufacturer's recommendations.

6. WEATHER-STRIPPING

All opening sections are weather-stripping with E.P.D.M. gaskets to International Standards:

1503934 - 1978 (E)
DIN 7715 cat. E
BS 3734

And silicone brush.

7. MATERIALS

All aluminum frames and shutter profiles extruded from the following,

A1 Mg Si 0.5 F22 - F25)
A1 Mg Si 1.0 F28) ---- World Designation
A1 Mg Si 1.0 F32 - F36)
All in accordance with BS 1474

Anodizing to BS 3987: 1974 (Anodic Oxide Coating on wrought aluminum for external architectural applications).

The finished anodized surface shall be free from "Banding, Streaking and Smut". Colour to be controlled within approved top and bottom limits agreed.

Fasteners shall be tempered aluminum, stainless steel or other metallic or non-metallic materials non-corrosive and compatible with the aluminum members.

8. HARDWARE/ACCESSORIES

All aluminum frames and shutter profiles extruded from the following,

Side Hung windows



PRODUCT SPECIFICATIONS

Operating handles will be manufactured from one or more of the following materials with non-corrosive pins and springs etc.

- aa. Extruded Aluminum
- bb. Die Cast Aluminum
- cc. Die Cast Mazak

Each shutter will be mounted on one set of aluminum extruded hinge with stainless steels pin and nylon bushes.

Bottom Hung Windows

One spring loaded catch manufactured from one or more of following materials with non-corrosive pins and springs etc.

- aa. Extruded Aluminum
- bb. Die Cast Aluminium
- cc. Die Cast Mazak

Each leaf will be fitted with a set of hinges and a set of arms.

Sliding Windows

Each Sliding leaf shall receive the following hardware.

- 3 Rollers/Leaf
- One (1) side Handle/Lock

The frame shall accommodate handle striker plate and dust plugs.

Single Swing Doors

Single Swing doors shall have the following fittings.

- aa. Two (2) nos. Hinges
- bb. One (1) no. Lock
- cc. One pair of Lever Handle
- dd. One (1) Pair of Flush Extension Bolt
- ee. One (1) Door Closer (Optional)

All the steel pins and springs etc used in above mentioned accessories shall be in stainless steel.

Double Swing Door

Double Swing Doors incorporate the following accessories.

- aa. One (1) no. Floor Closer per leaf
- bb. One (1) no. Dead Lock per door
- cc. One (1) pair of Push/Pull Bar or Plate
- dd. one (1) pair of Extension Flush Bolt

9. WORKMANSHIP



PRODUCT SPECIFICATIONS

The standard of workmanship, comprising design, fabrication and delivery shall be the best possible standard.

Cutting shall be straight and free from burrs and joints without gaps or imperfections except as designed.

The glass is secured in a gasket manufactured from E. P. D. M and is installed in the shutter frame either by the bead principle or wrap around dependent on type of windows. All in accordance with BS 4873: 1972 and BS: 6262: 1982 glazing for buildings.

10. DRAWINGS

Drawings shall be submitted in accordance with following.

The elevation of the unit, full size cross section, thickness, standard dimensions, the method of installing, anchorage, size of anchors and gap between them and method of weather-stripping.





APPROACH TO PROJECTS



Advanced
Manufacturing
For Metal and Glass Co.



APPROACH TO PROJECTS

QUALITY CONTROL

The following notes are intended for the guidance of supervisory and Inspection staff.

It is expected that Section Supervisor will exercise strict control over their sections to ensure that Inspector have minimum cause for rejection of materials due to faulty workmanship.

Inspector will be familiar with the standard laid down by Advanced Manufacturing for Metal & Glass Co. with reference to British Standards method of compliance and will cooperate fully with management to ensure that no product leaving the work falls below the criteria dictated by these standards.

DELIVERY & INSPECTION

All aluminum profiles when delivered to be wrapped and tested for minimum micron thickness, top and bottom limits of color with approved apparatus. Profile to be checked for shapes and damages. All damaged areas are to be clearly marked.

Once all checks have been made and cleared for usage, all faces of profiles will be taped for inspection.

WORK INSPECTION

A.) Before commencing any new job, Supervisors will check with drawing office that materials to be used are as specified.

B.) On completion of machining operations, materials will be drugged of any swerve burrs or sharp edges.

C.) All cutting machines to be checked weekly for accuracy and operation. All jigs and fixtures will be checked for accuracy and alignment before a production run and at not less than weekly intervals during use. All inspection to be recorded in the relevant. Section logs and signed by Supervisor.

D.) Random Checks to be carried out by Operator Supervisor and Quality Control Inspector on accuracy of meters and other cuts.

E.) On final assembly of all parts, a complete inspection by Q.C. Dept. is to be carried out. Upon acceptance by Q.C, the Q.C. level of approval is to be attached and documented as required.

F.) Q.C. Inspector to fill in Q.C. report sheet daily, sending copy to Production Sales and master copy to the G.M. keeping copies for their own use.

This contains a description of the main activities to be executed during the performance and development of the project.

To sum up, the distinct features of Advanced Manufacturing for Metal & Glass Co. are best measured by the following key areas.

-
- 1. Overall Project Planning and Control**
 - 2. Engineering & Design**
 - 3. Production and Quality Assur**
 - 4. Procurement and Transportation**
 - 5. Installation**



1. OVERALL PLANNING CONTROL:

In order to ensure that schedule will be met, cost controlled, and maximum efficiency obtained during all phases of the project, our activities with the cooperation of the Consultant would include the following:

- Overall planning and scheduling of design, manufacturing and fabrication.
- Material Submittals
- Coordination in preparation of material requisitions.
- Preparation and delivery of detailed shop drawings.
- Furnishing materials such as basic engineering, drawings, structural calculations and installation procedures.
- Organized release of drawings required for the product.

2. ENGINEERING AND DESIGN

The Engineering and Design department forms the essence of the spectacular growth of Advanced Manufacturing for Metal & Glass Co. in terms of technical, qualitative, and productive aspects. To further streamline the department activities, it has been subdivided into five distinct but interlinked groups.

- Estimation
- Design
- Costing
- Manufacturing
- Installing

3. PRODUCTION AND QUALITY ASSURANCE

In order to ensure that quality standards are constantly maintained, Advanced Manufacturing for Metal & Glass Co. shall make the highest degree to commit to the following:

Manufacturing:

- Preparation of fabrication drawings and manufacturing.
- In plant preliminary inspection run a thorough check to ascertain that all materials are properly manufactured and tested in compliance with the check point.
- For final quality inspection, examine the quality of materials and products before the delivery to site.

4. PROCUREMENT AND TRANSPORTATION

- All materials and products concerning this project are delivered with sufficient time to site.
- AMG will render its full assistance in the round of chain activities of loading, shipping, unloading, and inland transportation through their process of planning organizing and directing in close conjunction with the main contractor.
- Procurement activities concerning necessary hardware, weather-stripping, gaskets, and sealant will be performed by AMG in such a manner that all items are delivered timely to its plant for proper fabrication of the products.

5. INSTALLATION

Trained installers, under the supervision of qualified site Engineers controlled by the Project Manager, are working in planned sequence, having regard to individual project requirements, covering, securing to structural opening, alignment and application of levelling, shims covered with sealant with backing rod.





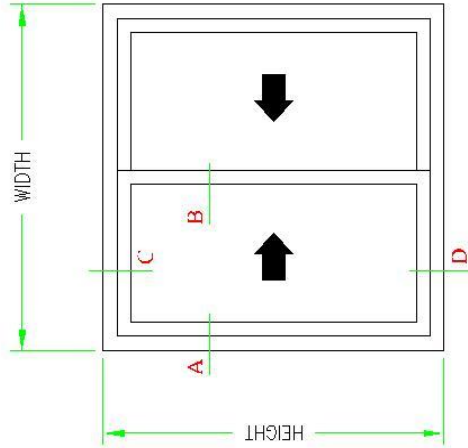
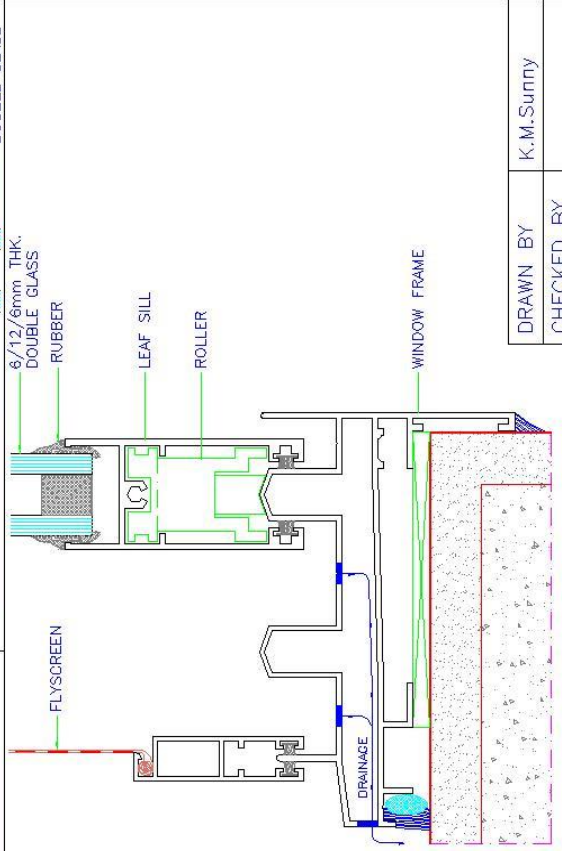
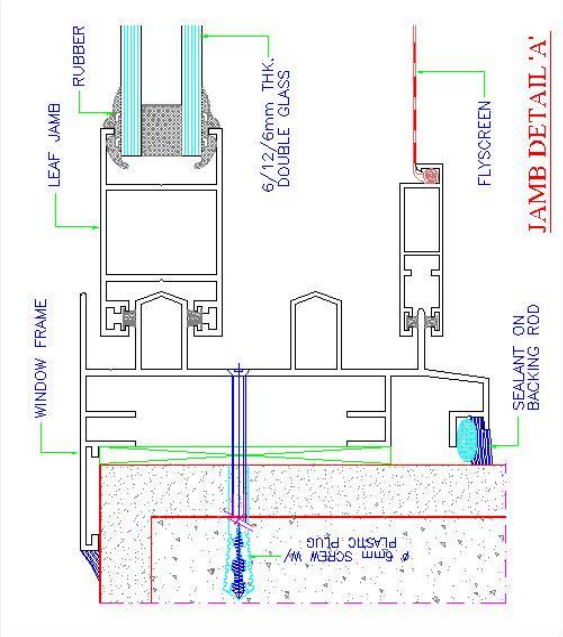
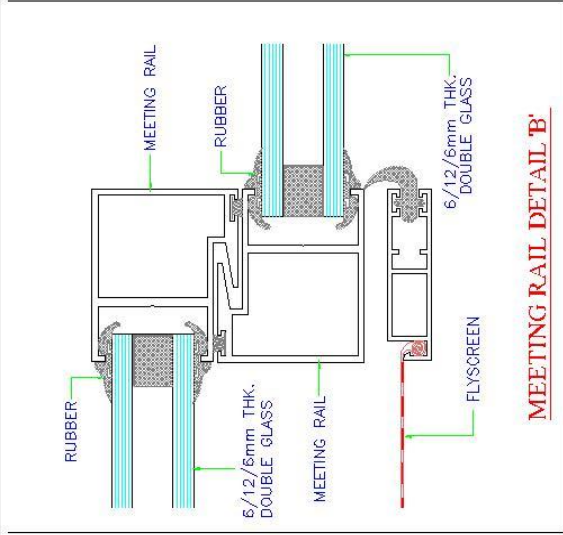
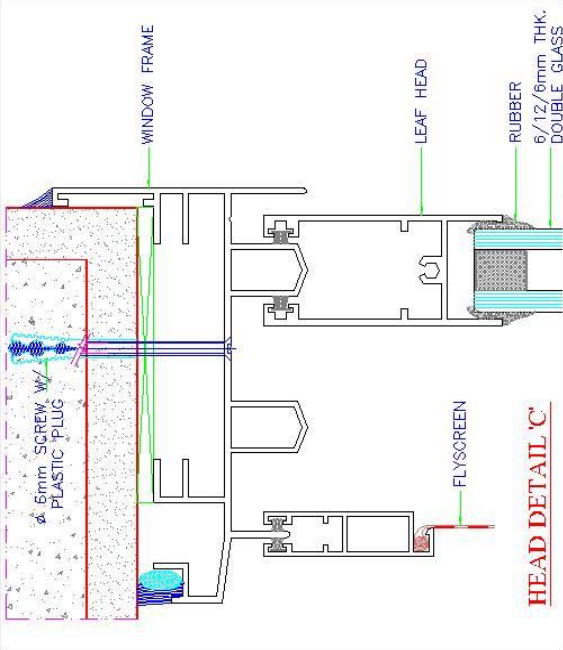
SYSTEM DRAWINGS



Advanced
Manufacturing
For Metal and Glass Co.



SLIDING SYSTEM

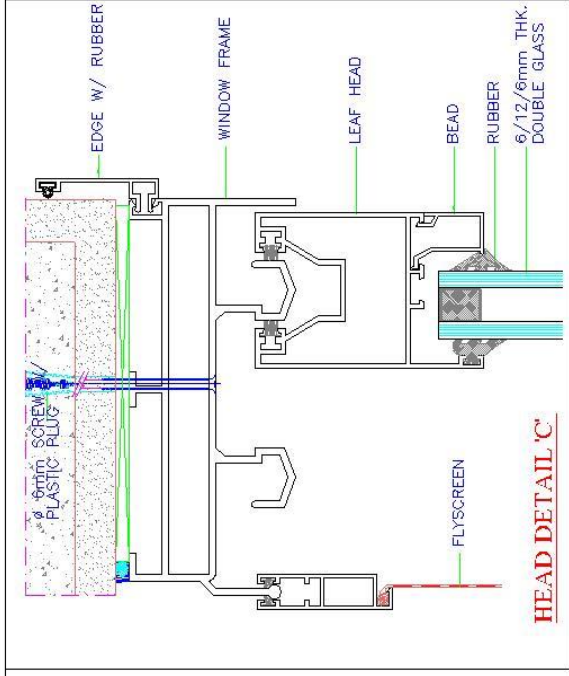


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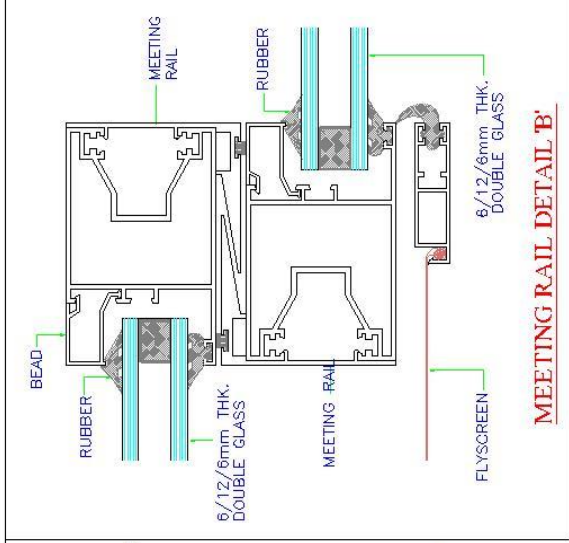
12cm SLIDING SYSTEM

ELEVATION

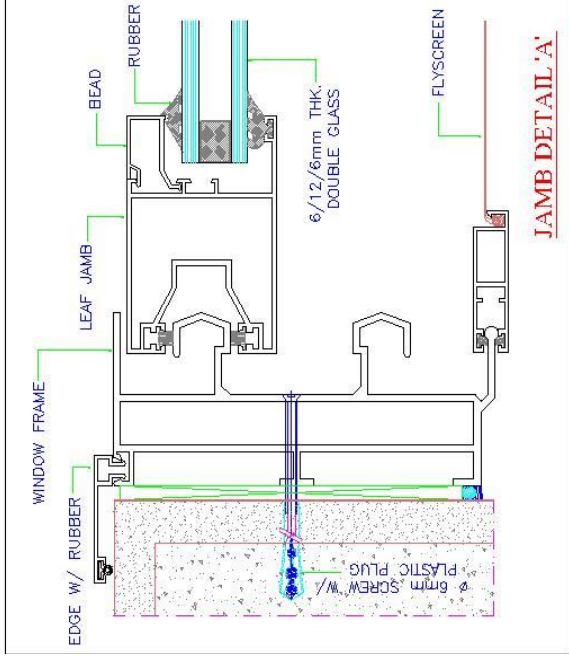




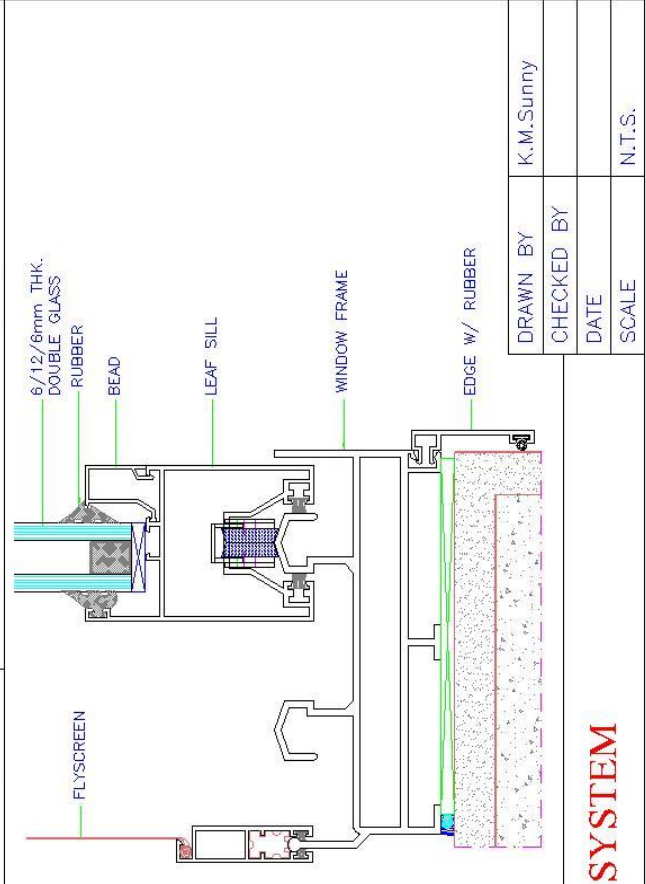
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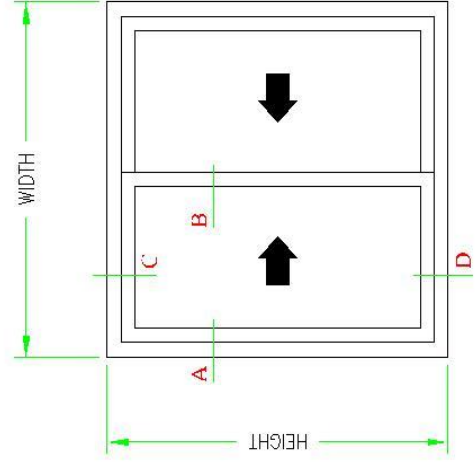
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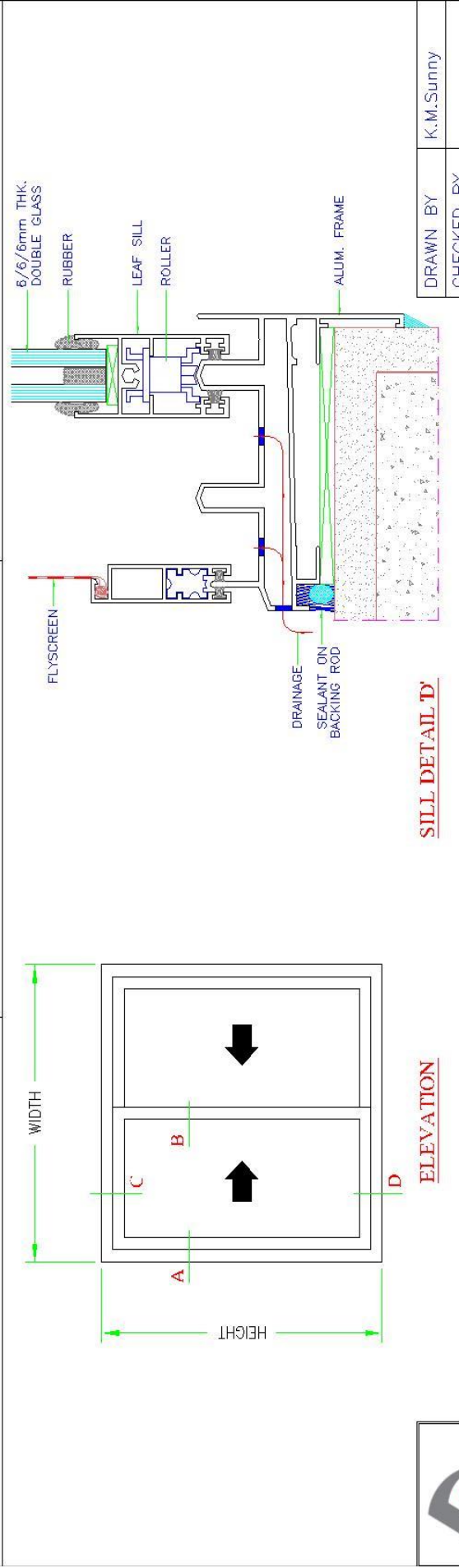
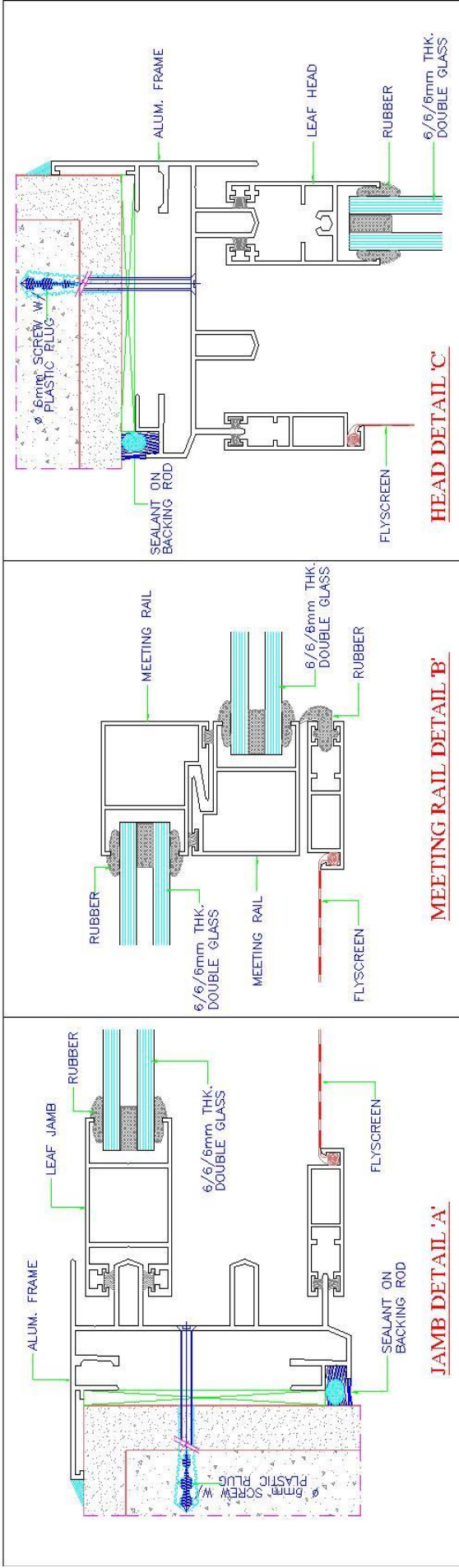


ELEVATION

14cm SLIDING SYSTEM

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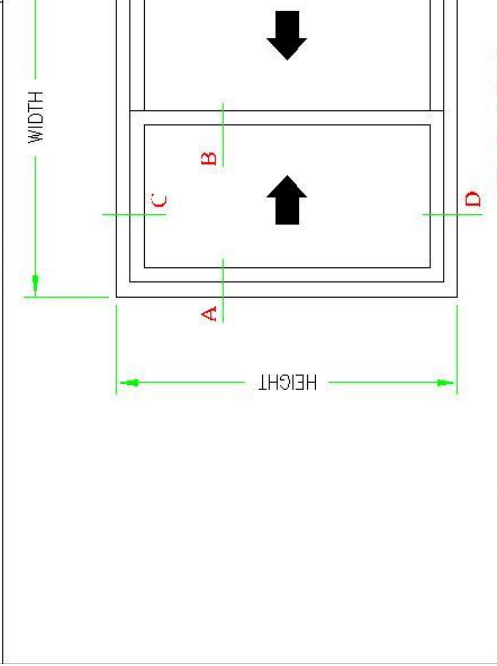
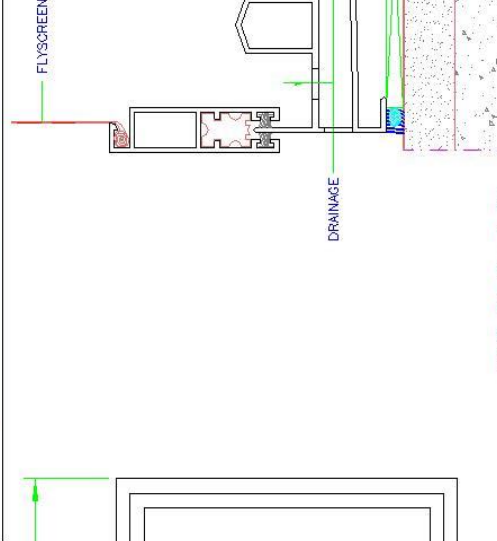
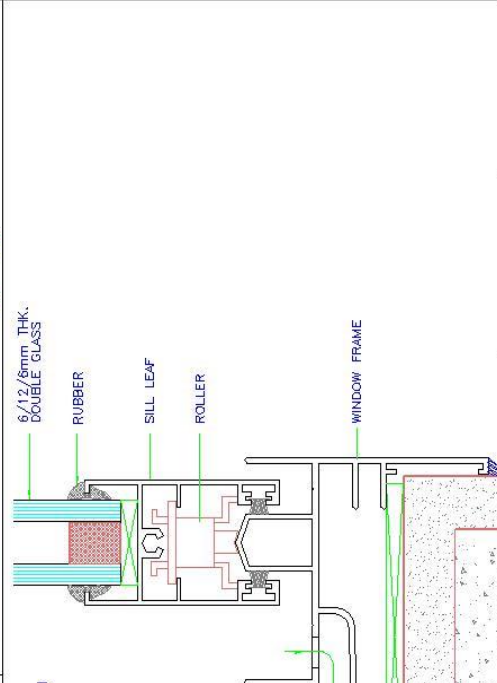
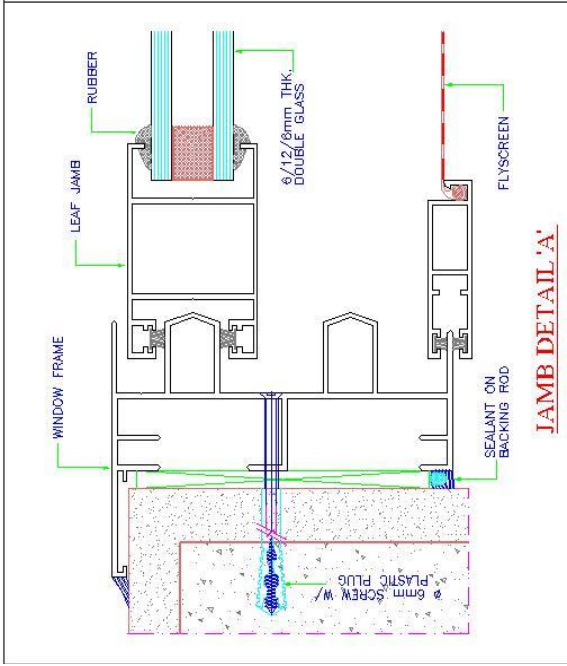
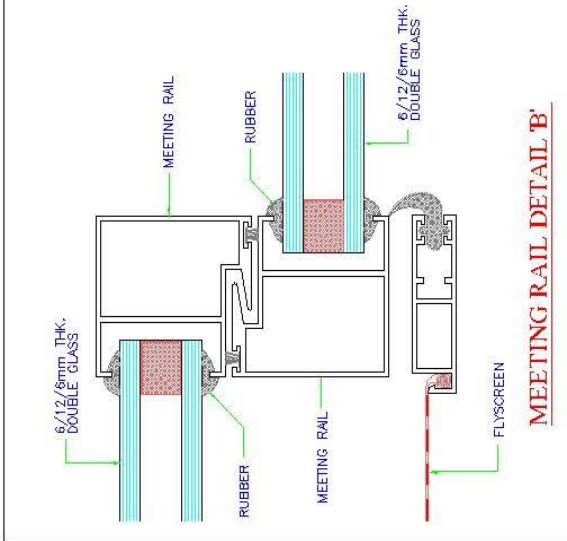
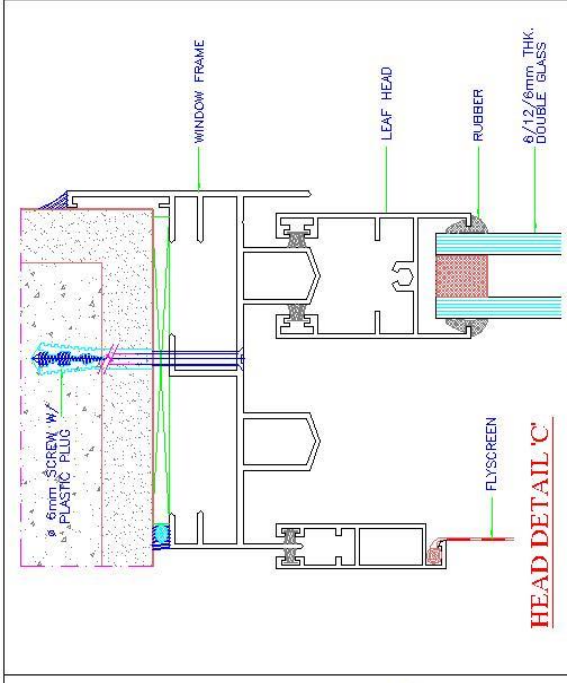




S1 100 SLIDING SYSTEM (DOUBLE GLASS)

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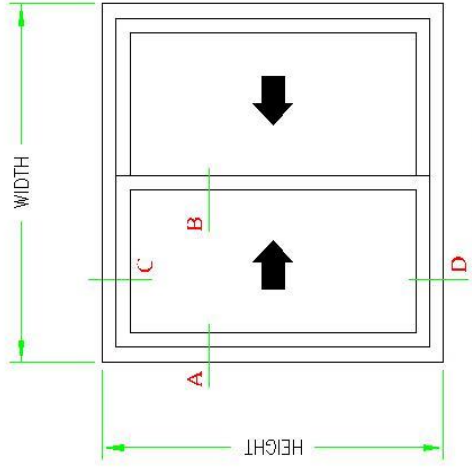
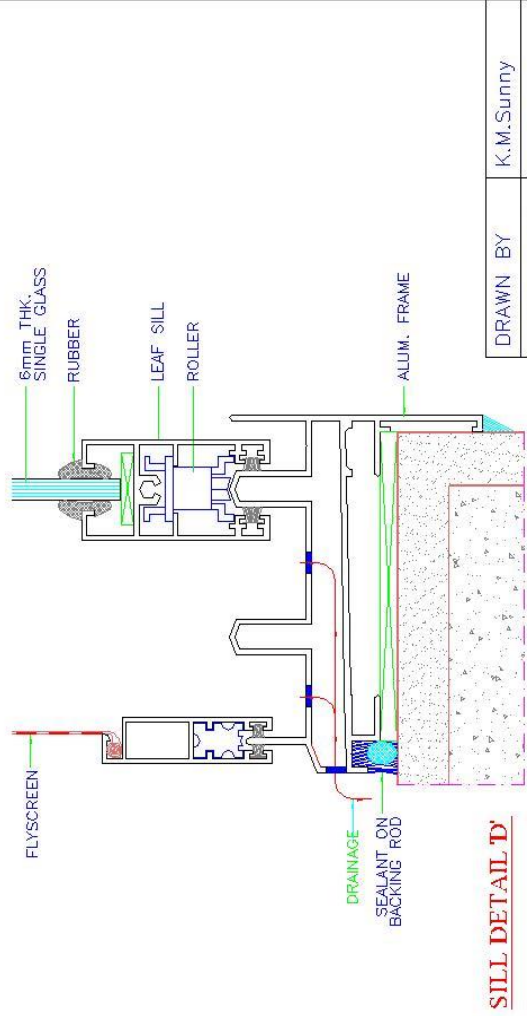
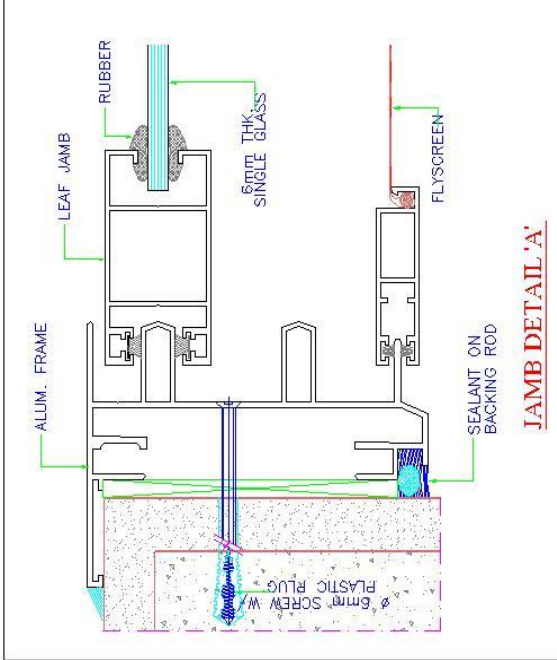
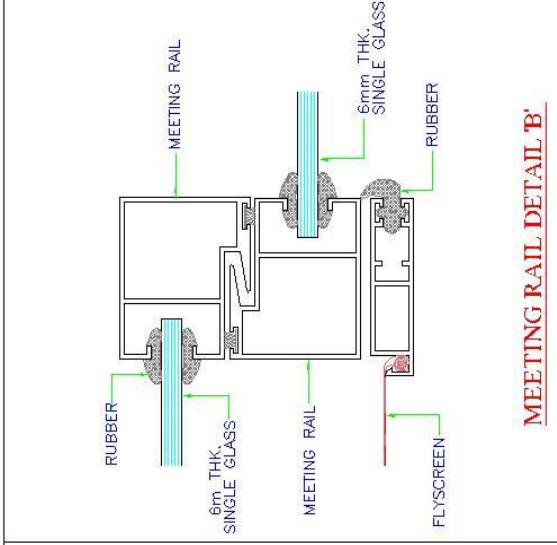
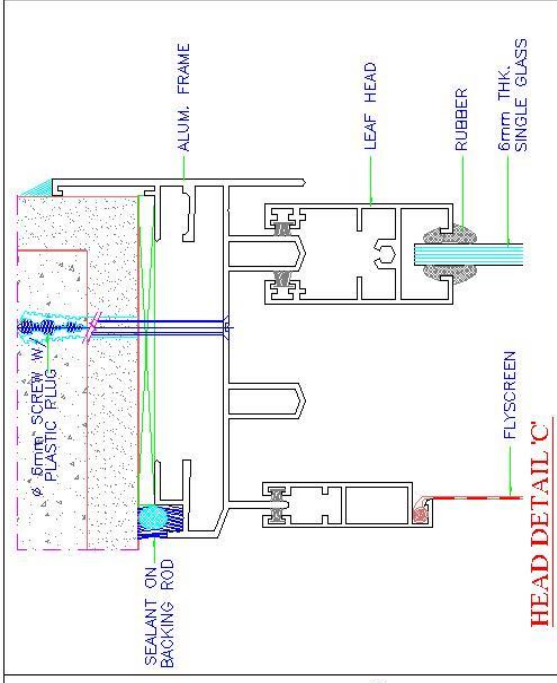




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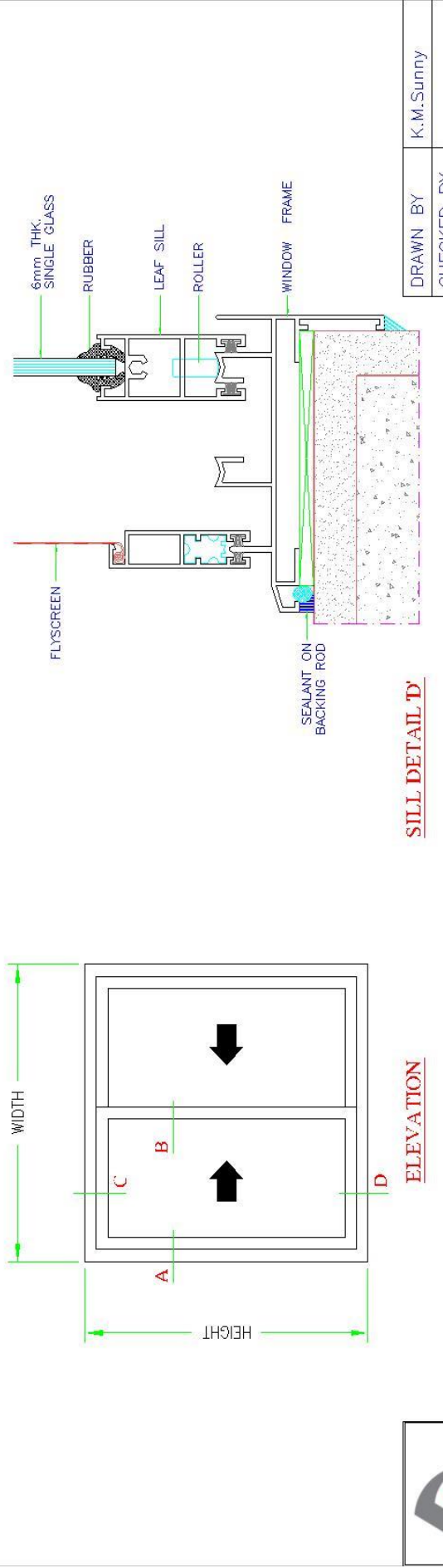
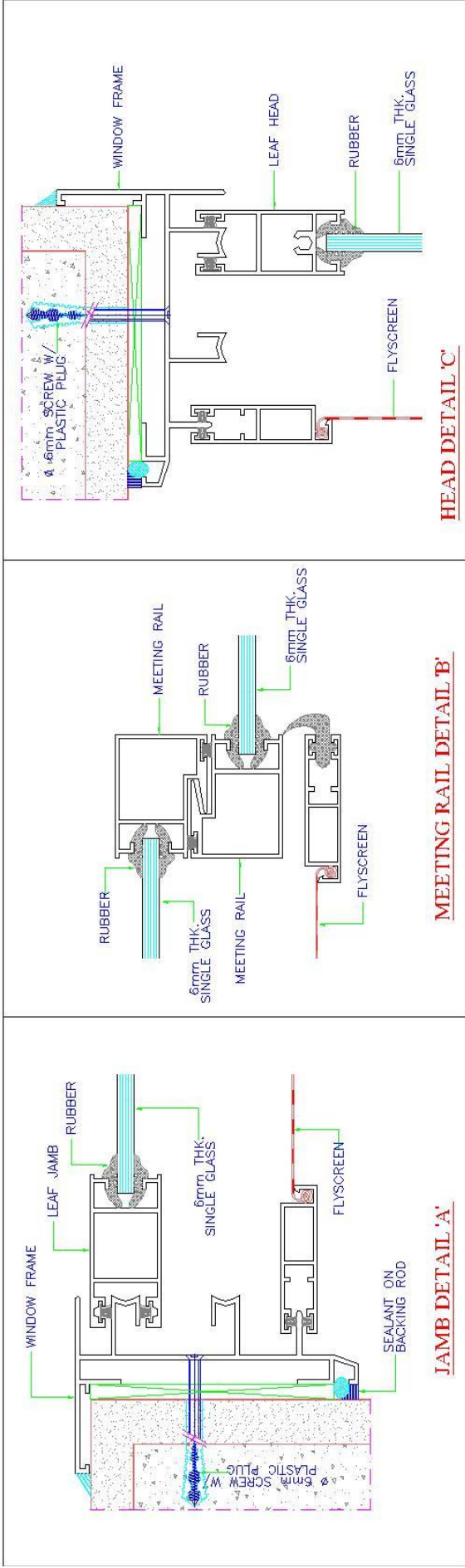




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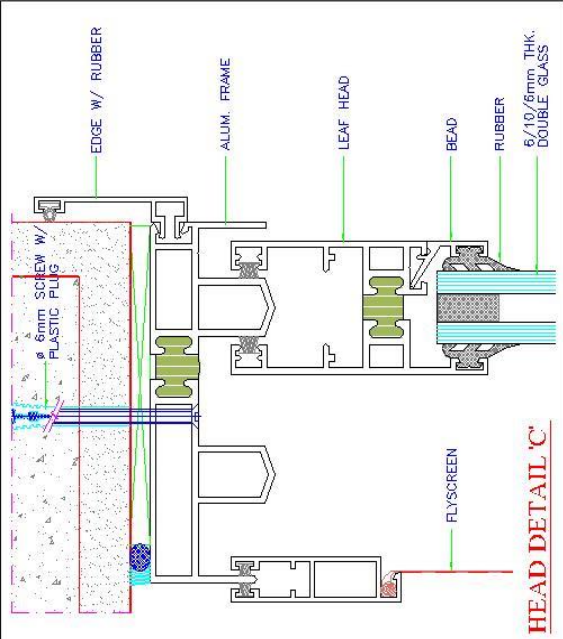




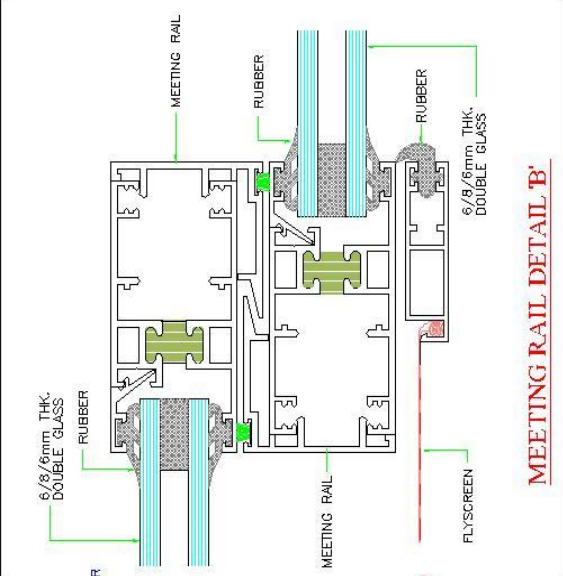
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NCP SLIDING SYSTEM (SINGLE GLASS)

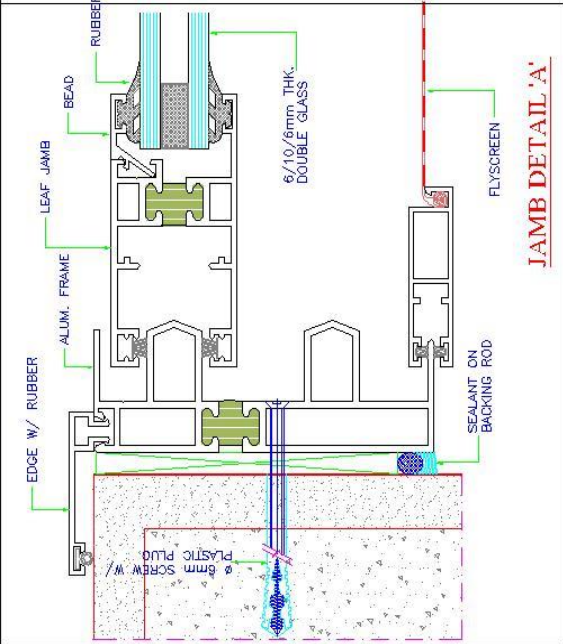




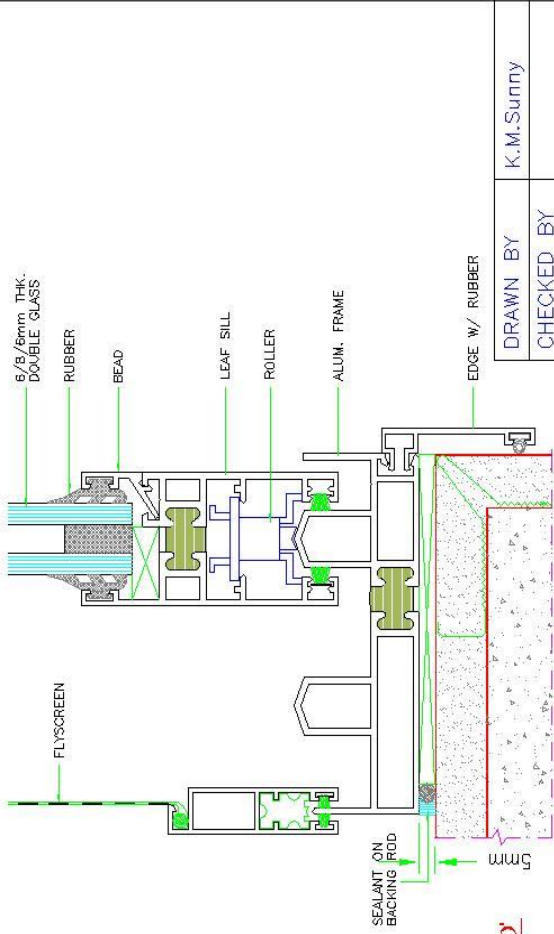
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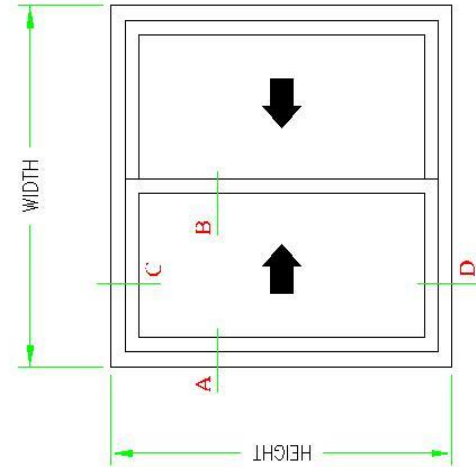
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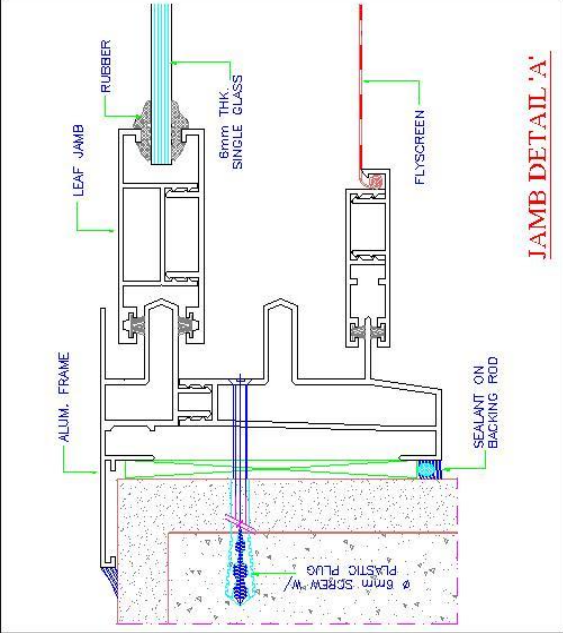


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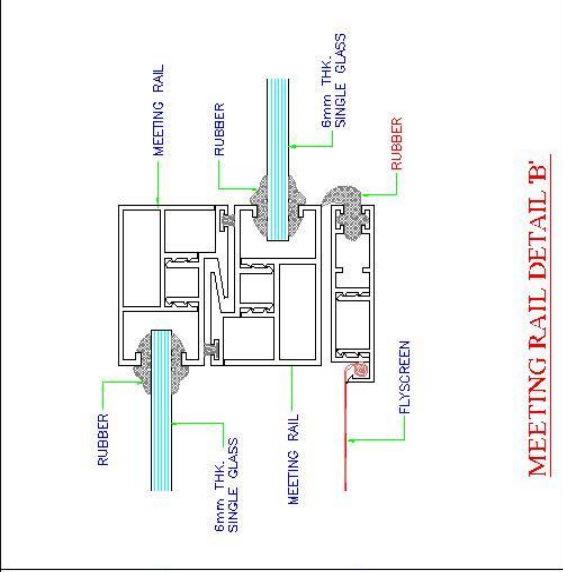
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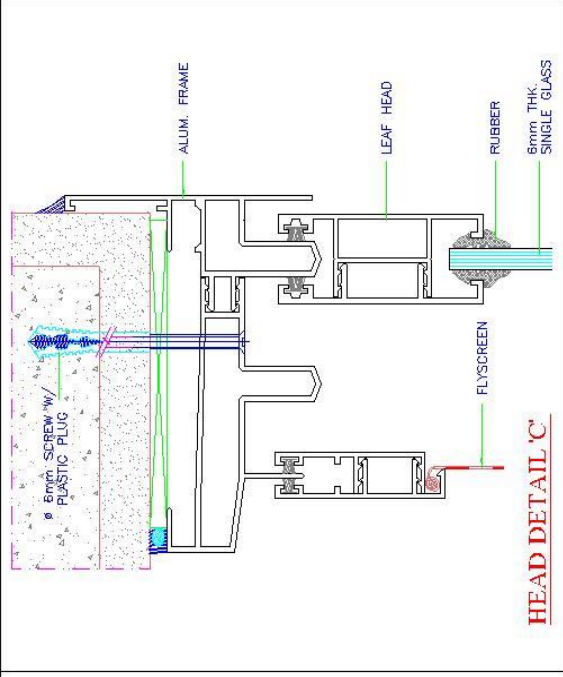




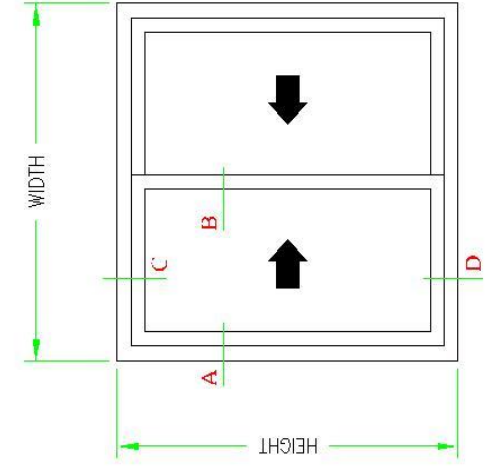
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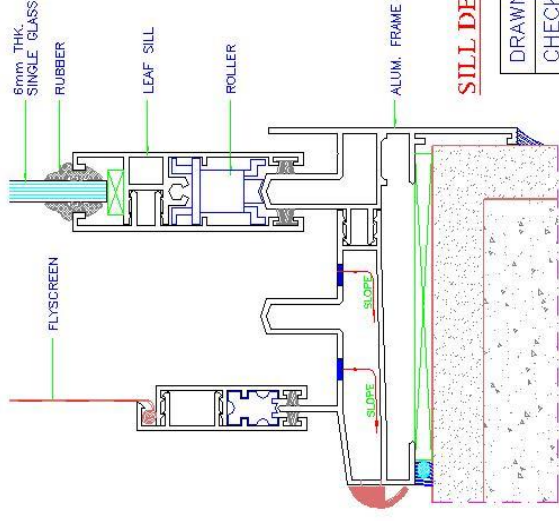
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ELEVATION

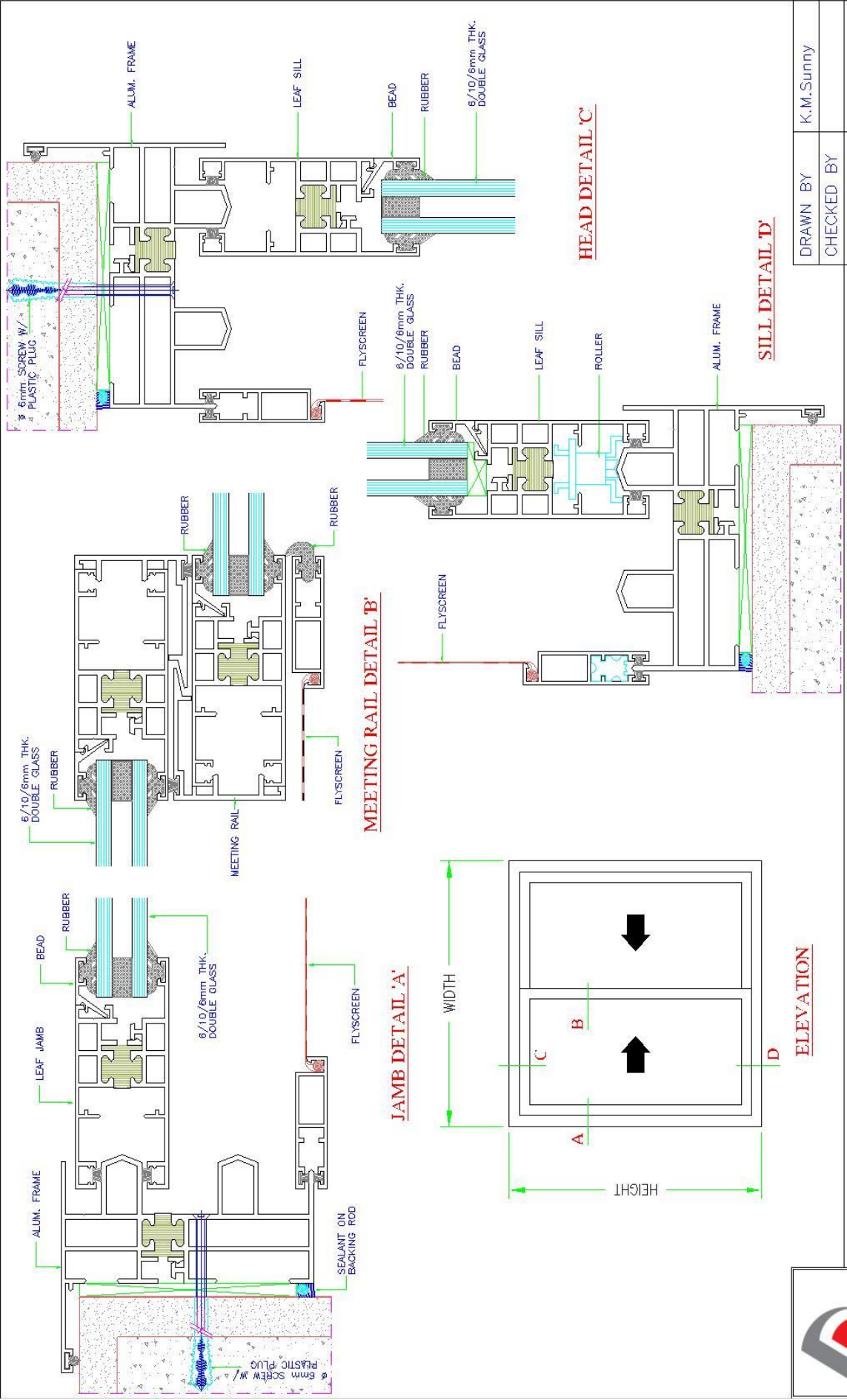


SILL DETAIL 'D'



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DOUBLE COLOR SLIDING SYSTEM



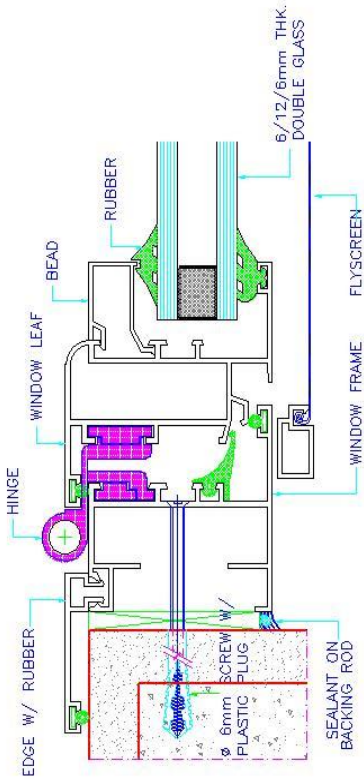
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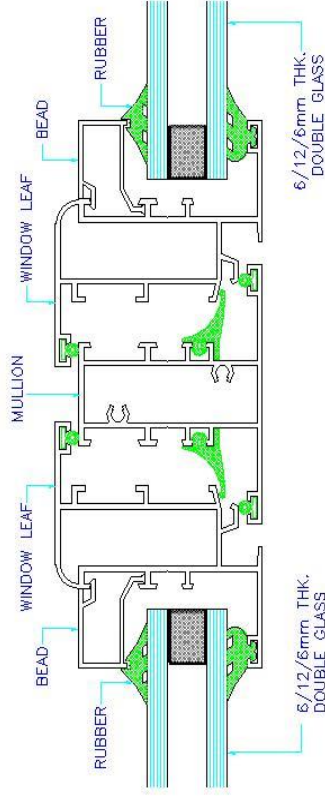


DOUBLE COLOR THERMAL BREAK SLIDING SYSTEM

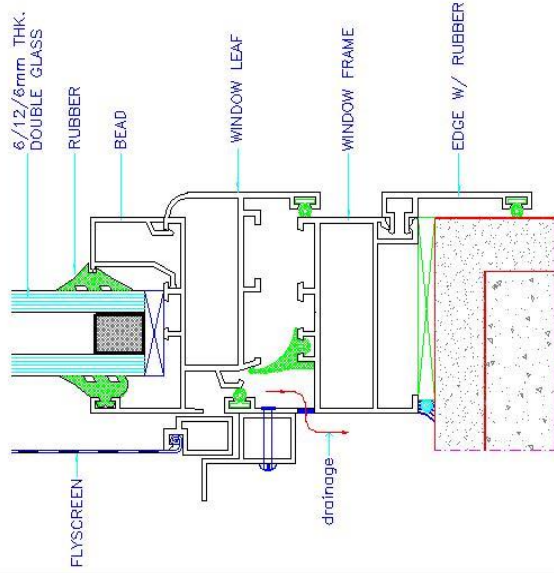
WINDOW SYSTEM



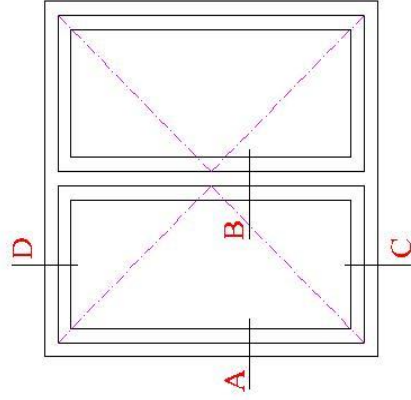
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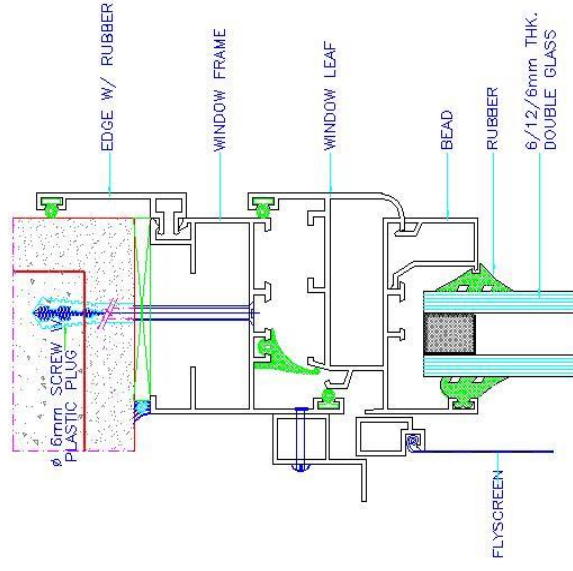
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SILL DETAIL 'C'



ELEVATION

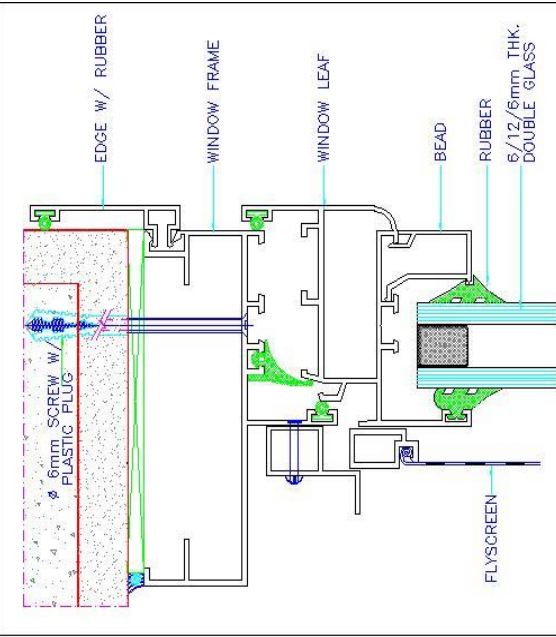
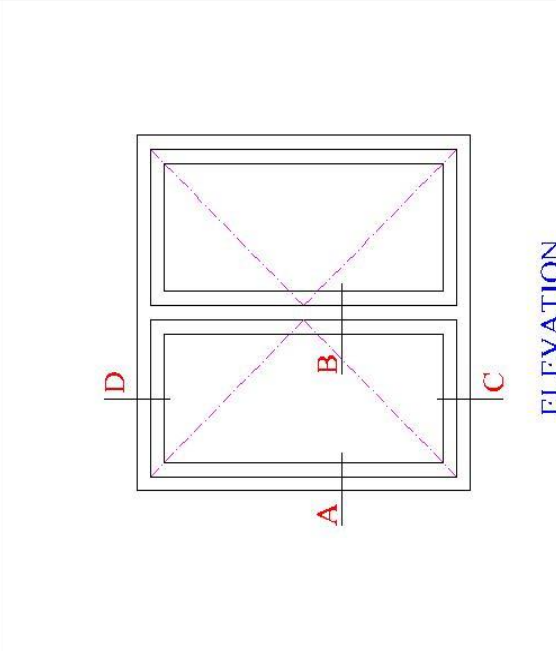
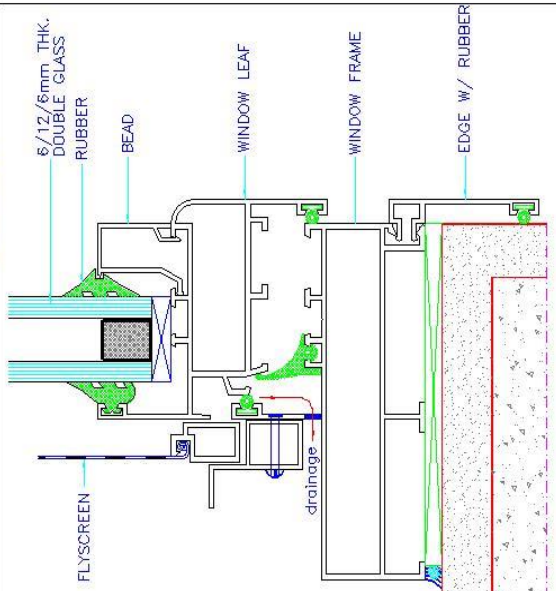
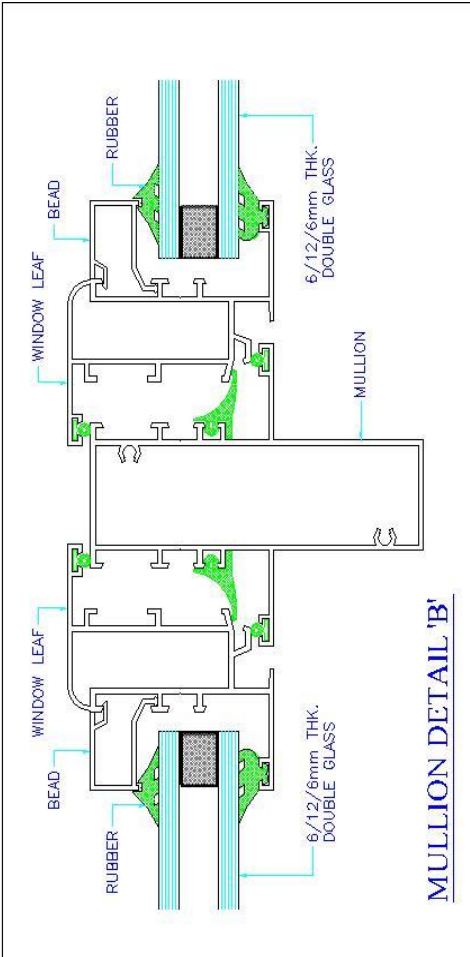
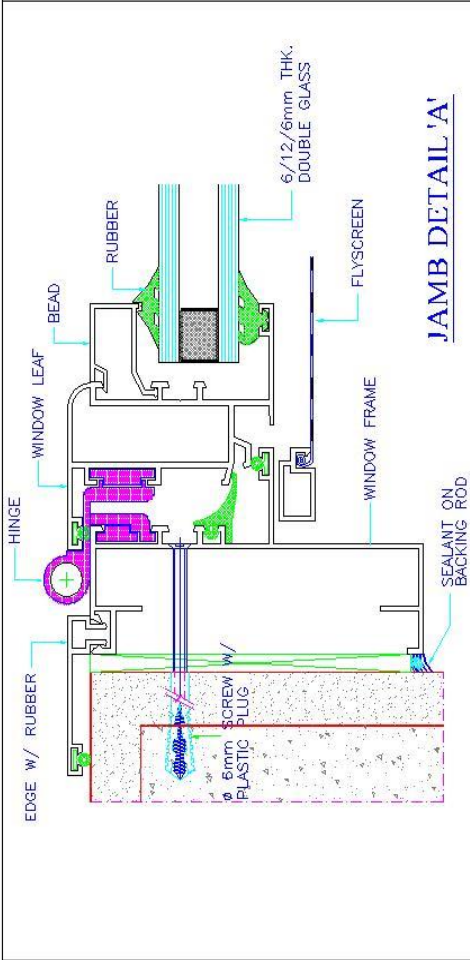


HEAD DETAIL 'D'

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SCALE	N.T.S.

HINGE WINDOW SYSTEM (5.5cm SERIES)





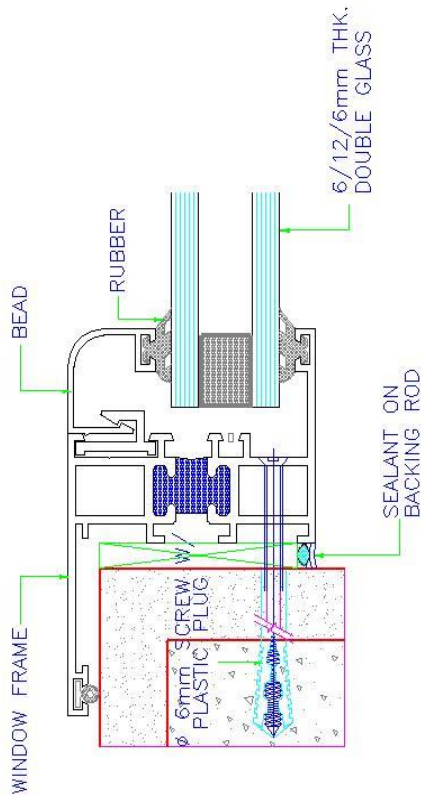
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ELEVATION

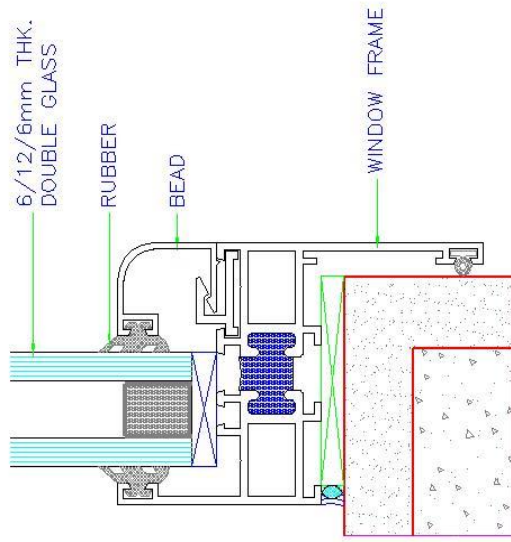
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SCALE	N.T.S.

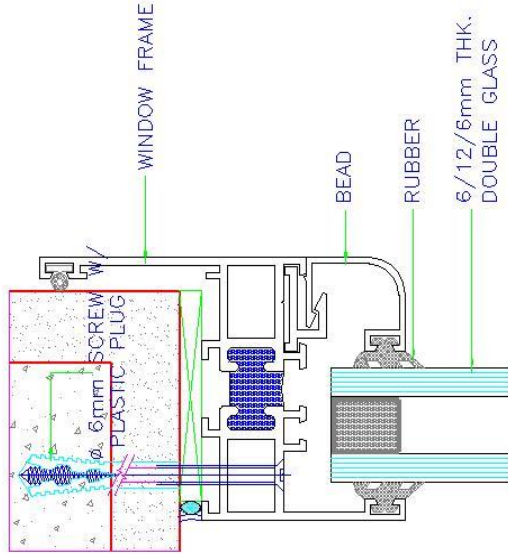
HINGE WINDOW SYSTEM (10cm SERIES)



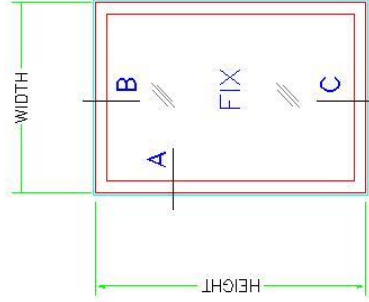
JAMB DETAIL-A



SILL DETAIL-C



HEAD DETAIL-B



FIX WINDOW ELEVATION

THERMAL BREAK FIX WINDOW



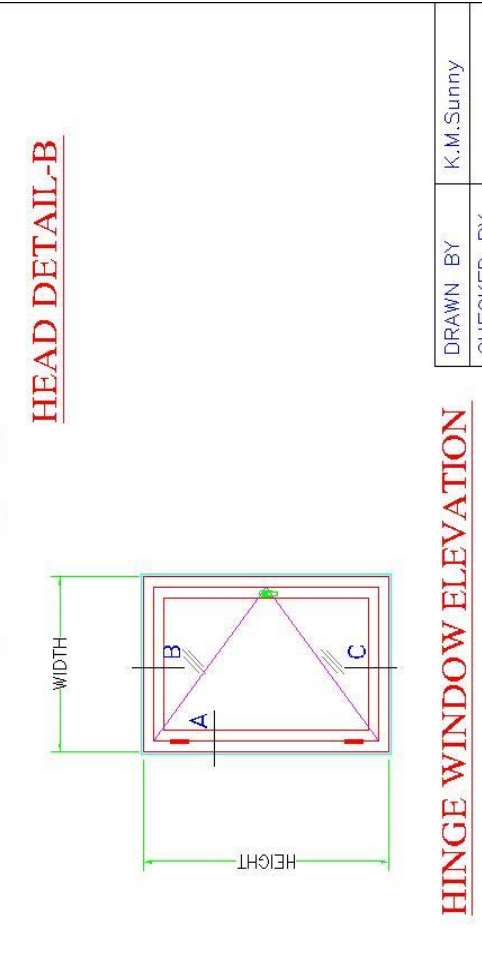
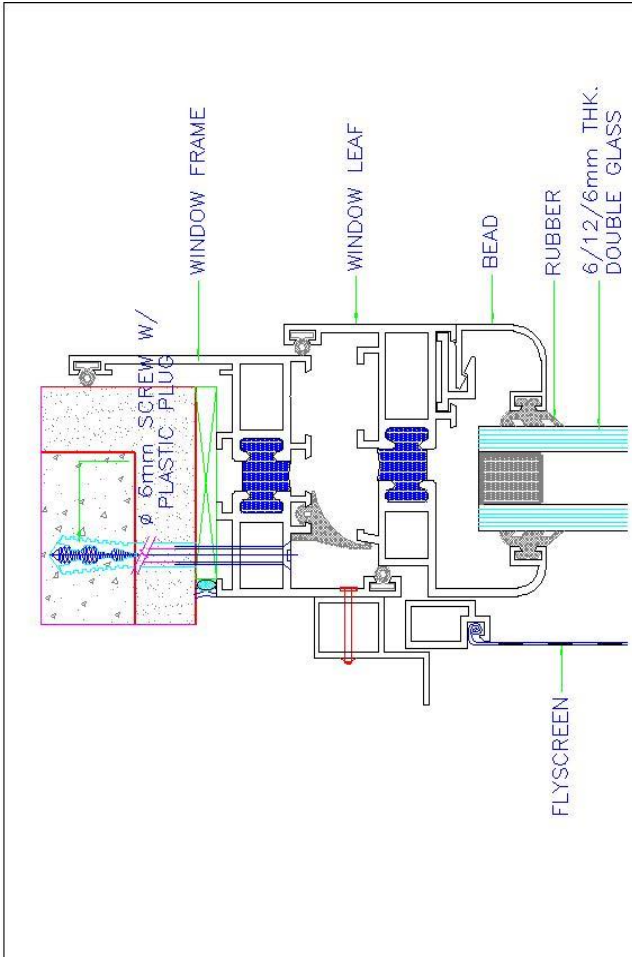
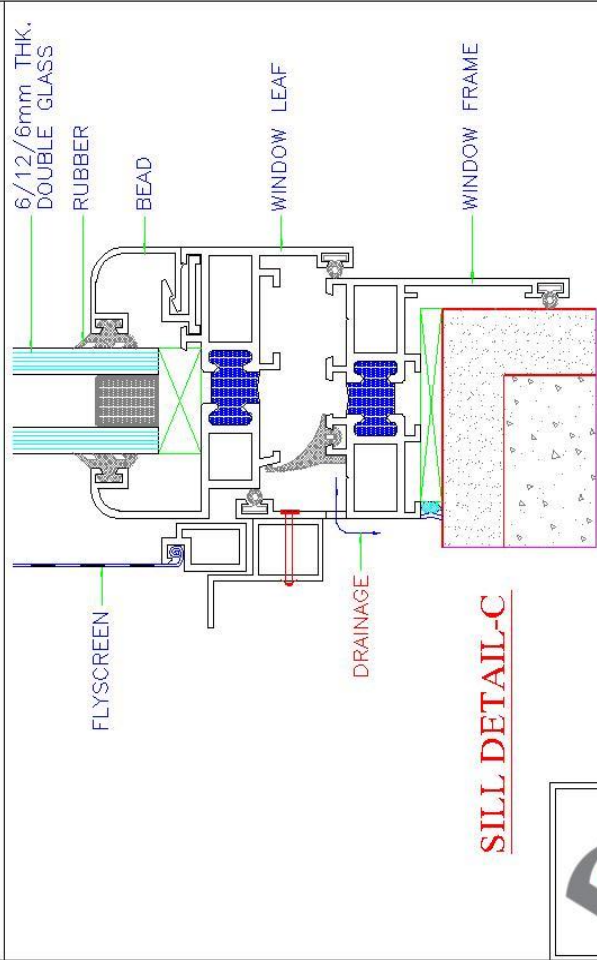
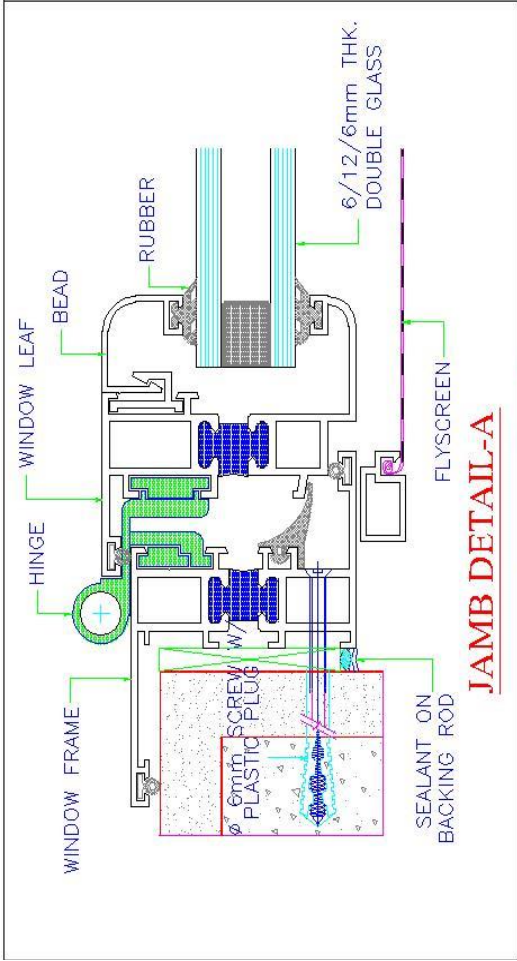
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CHECKED BY

DATE

SCALE

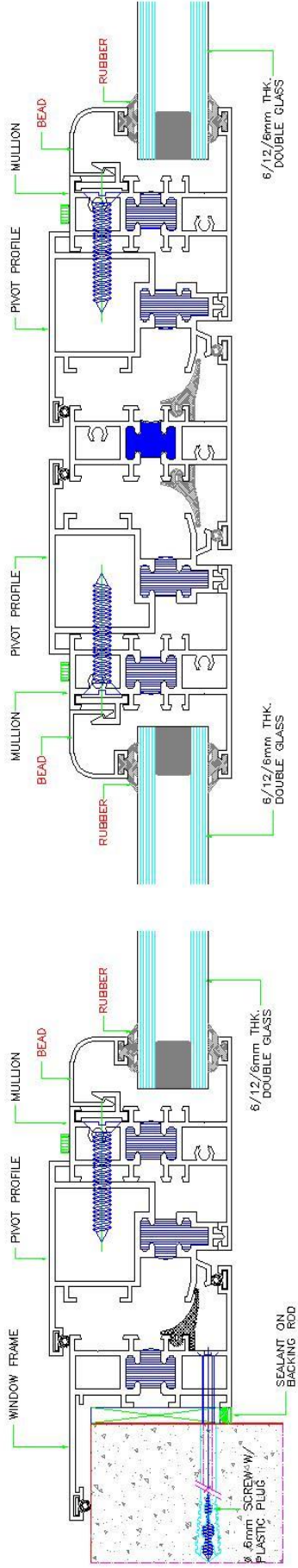
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HERMETIC SEALING

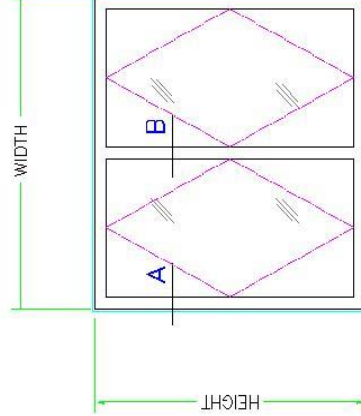
HINGE WINDOW ELEVATION

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JAMB DETAIL-A

MULLION DETAIL-B

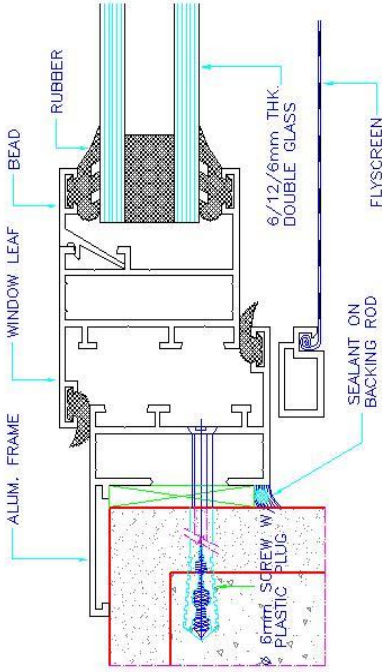


PIVOT WINDOW ELEVATION

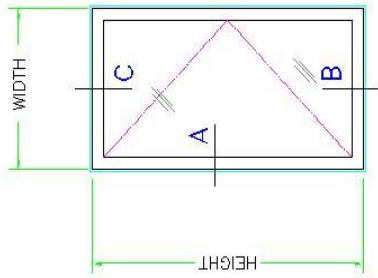
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DRAWN BY	K.M.Sunny
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SCALE	NTS.

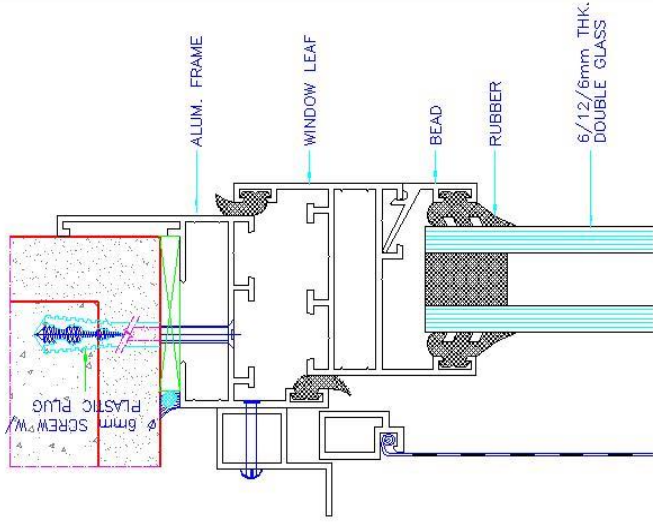




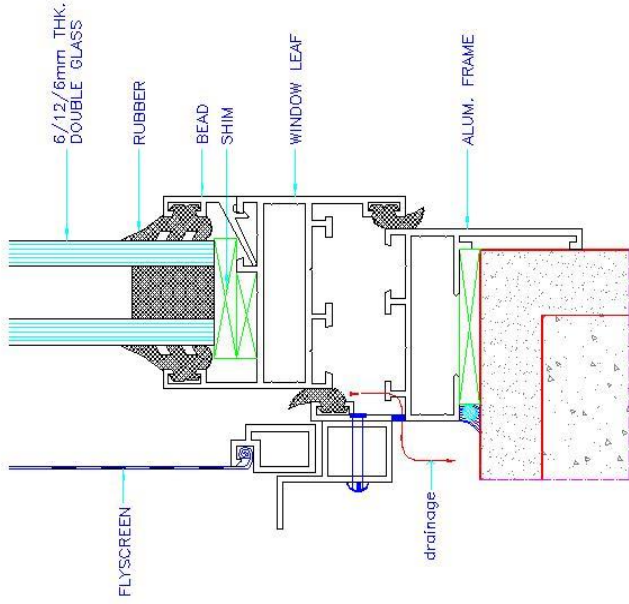
JAMB DETAIL-A



ELEVATION



HEAD DETAIL-C

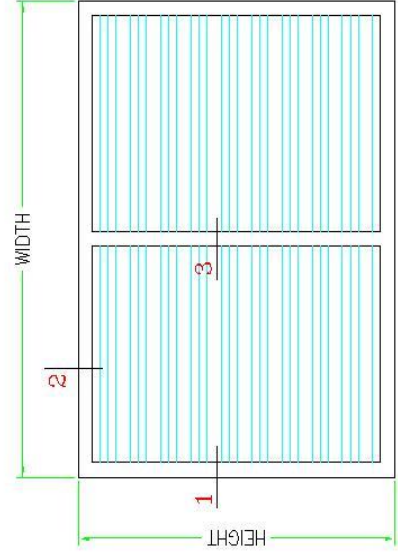
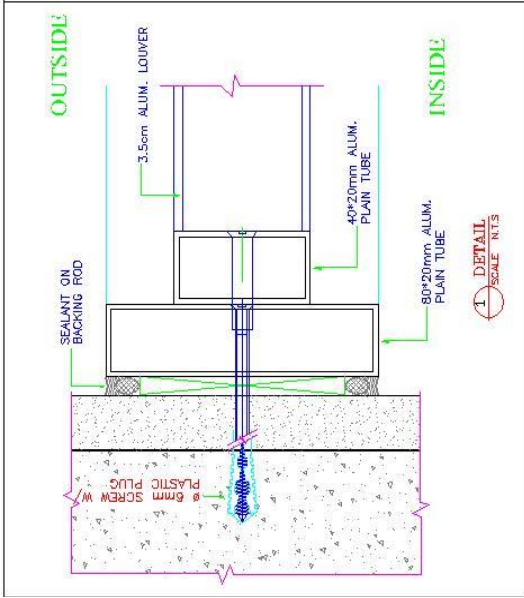
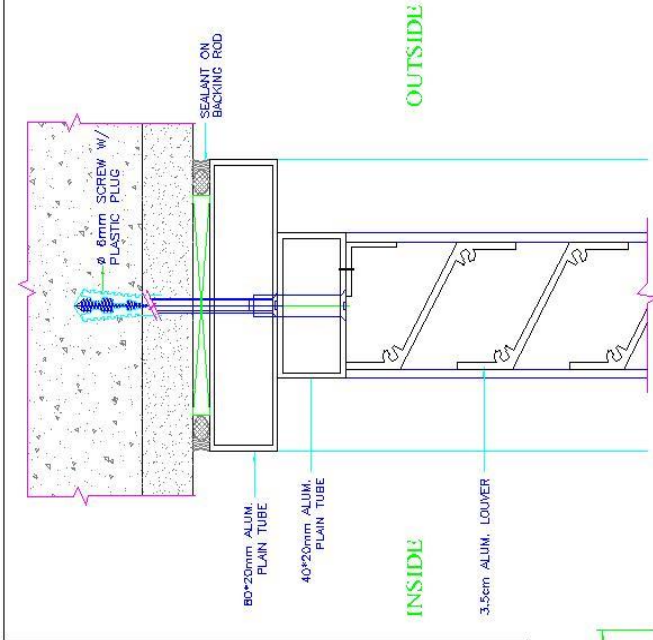
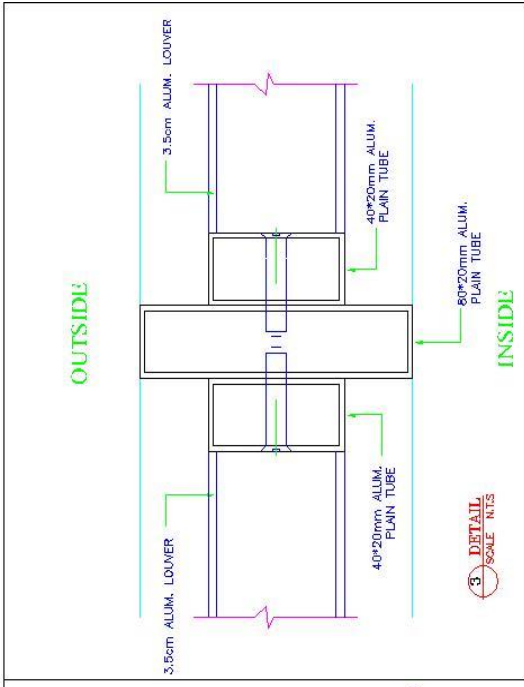


SILL DETAIL-B

HINGE WINDOW (44mm SERIES)

DRAWN BY	K.M.Sunny
CHECKED BY	
DATE	
SCALE	NTS.





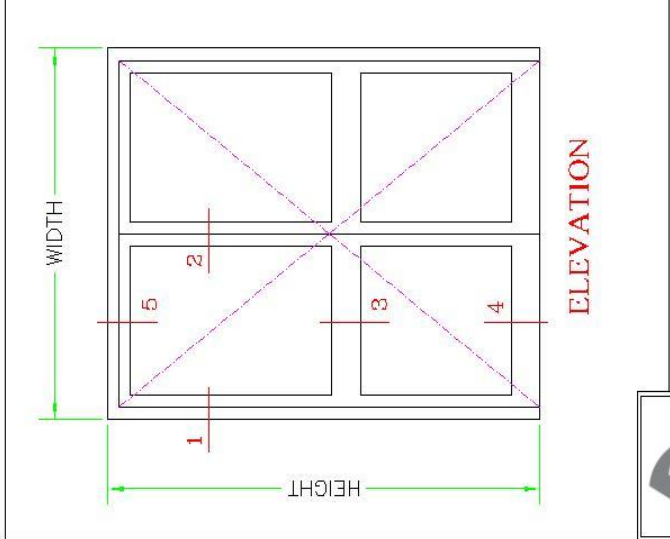
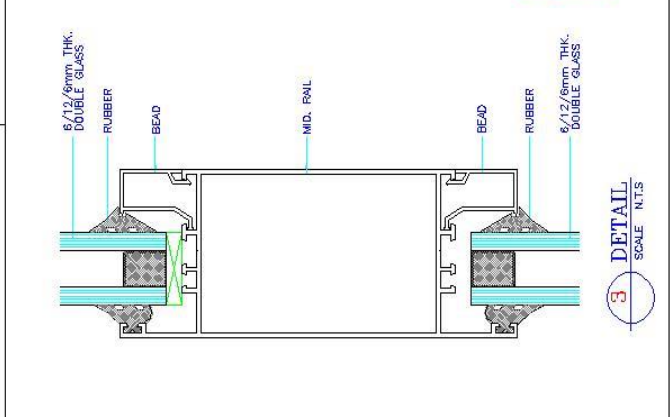
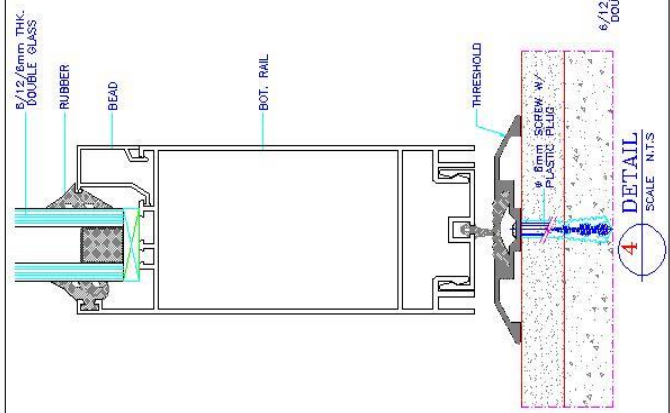
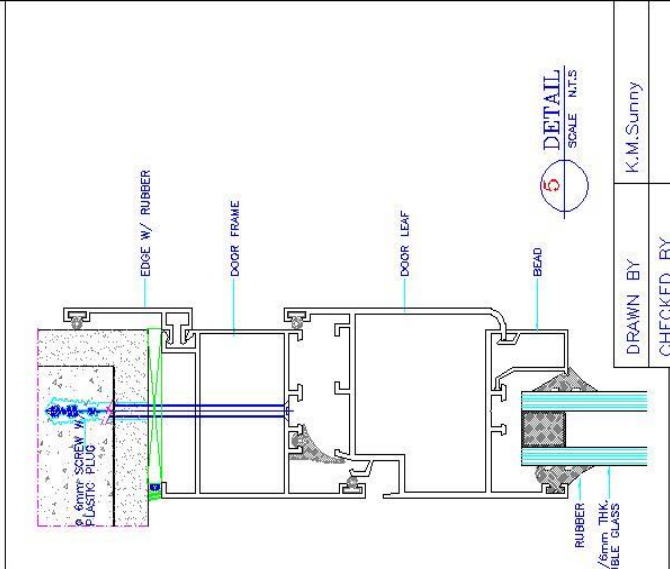
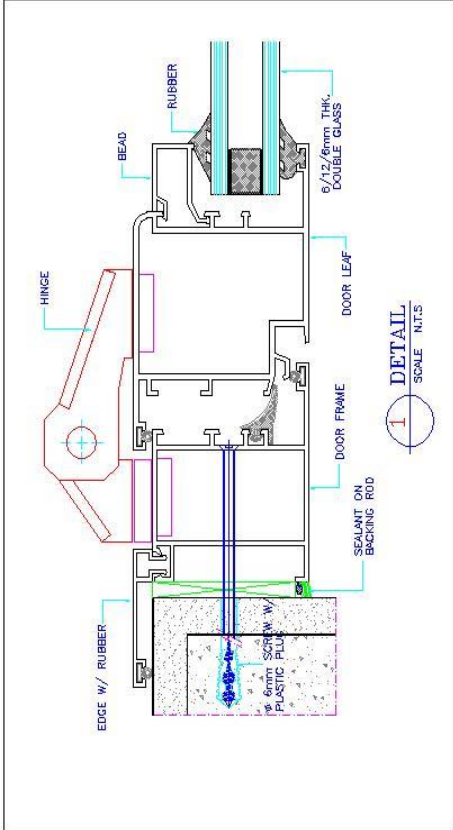
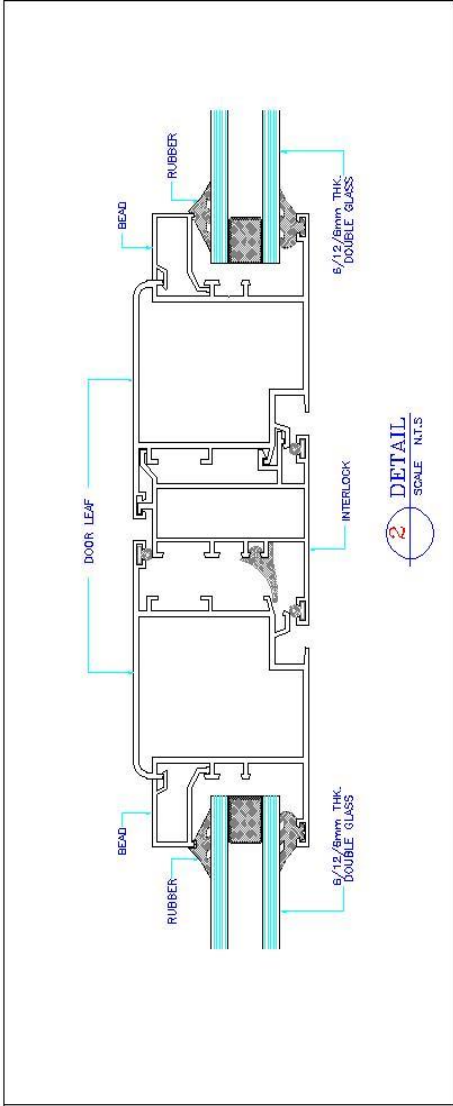
ELEVATION

LOUVER SYSTEM

DRAWN BY	K.M.Sunny
CHECKED BY	
DATE	
SCALE	NTS.



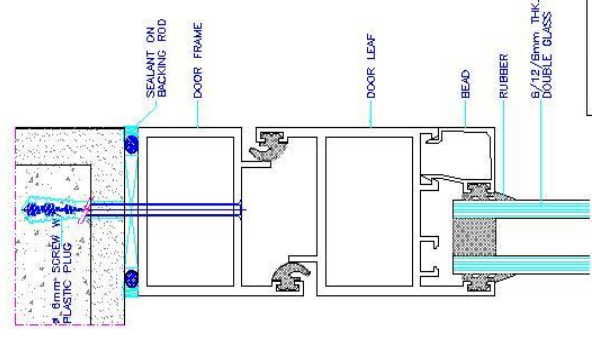
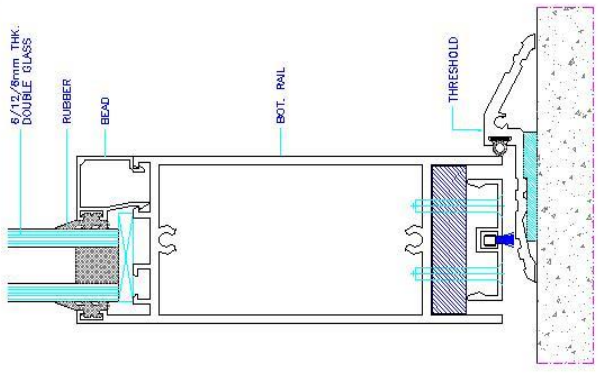
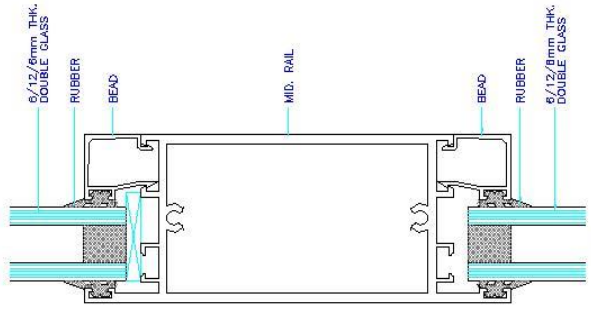
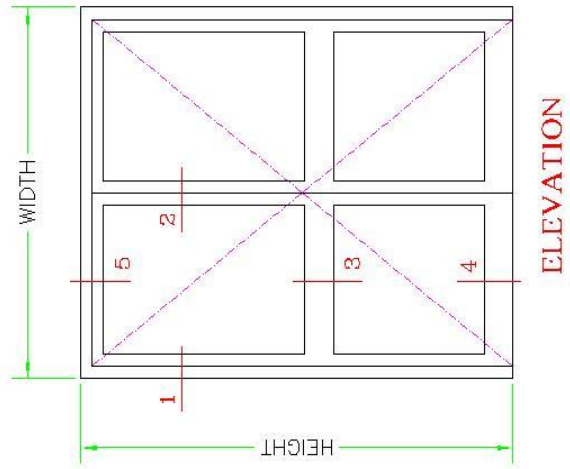
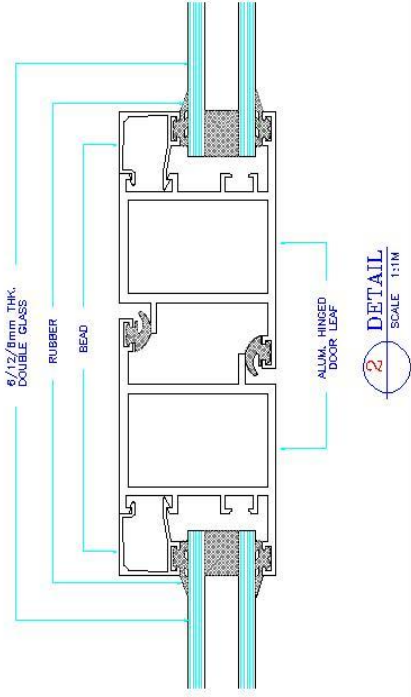
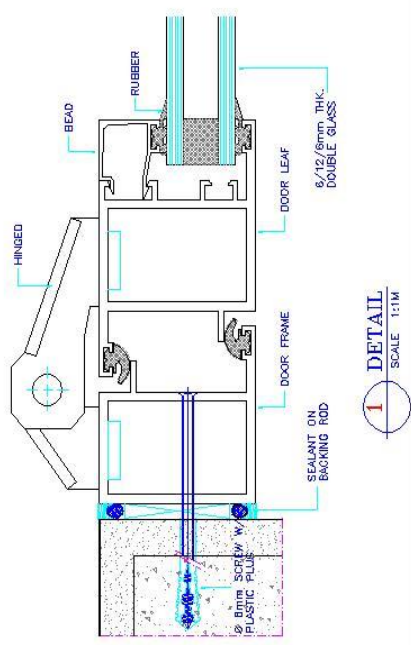
DOOR SYSTEM



DRAWN BY	K.M.Sunny
CHECKED BY	
DATE	
SCALE	N.T.S.

HINGE DOOR SYSTEM





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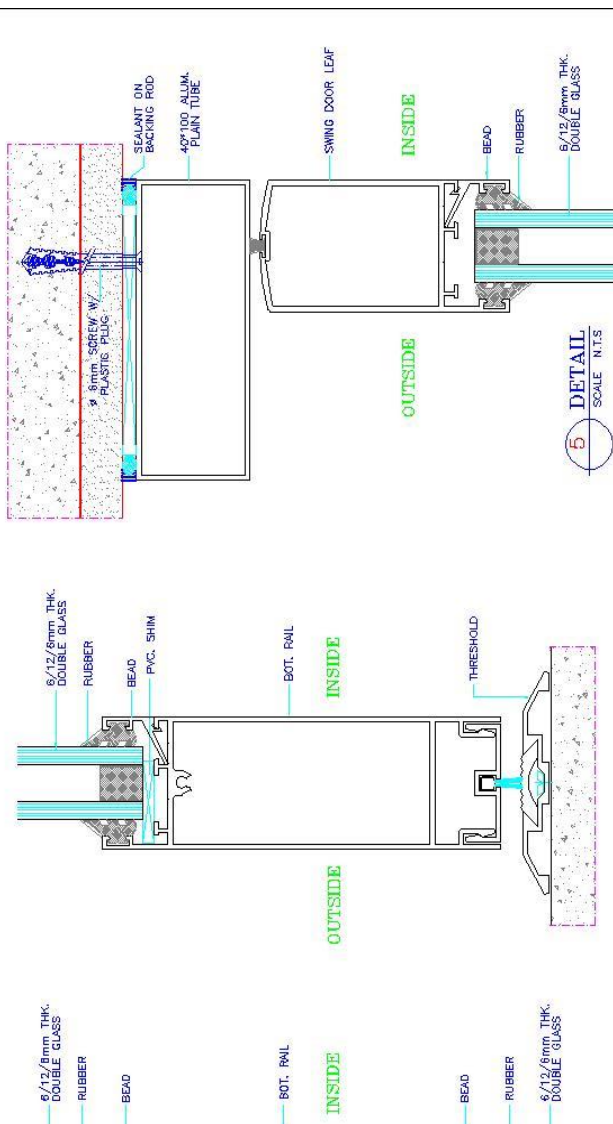
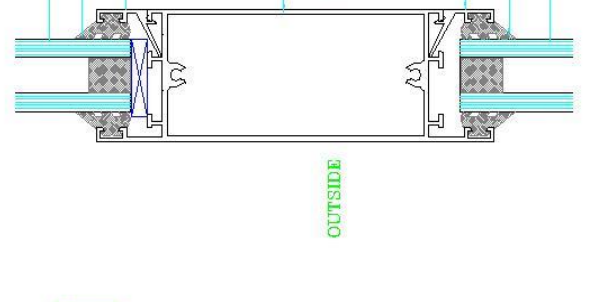
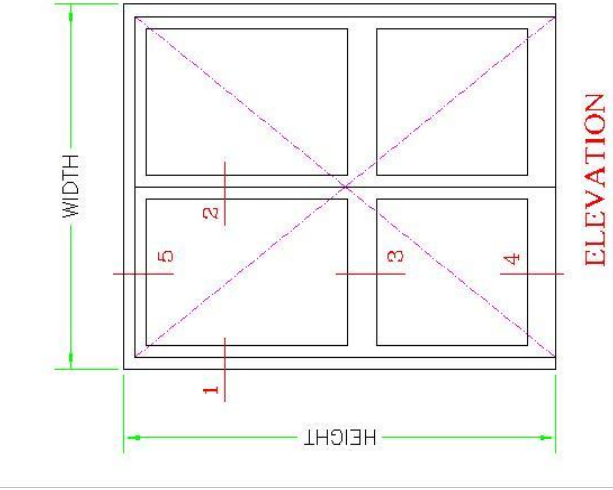
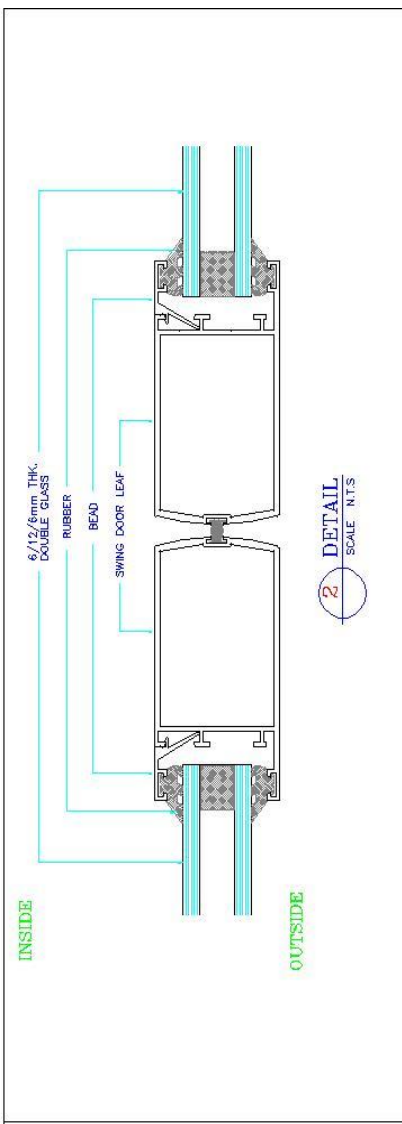
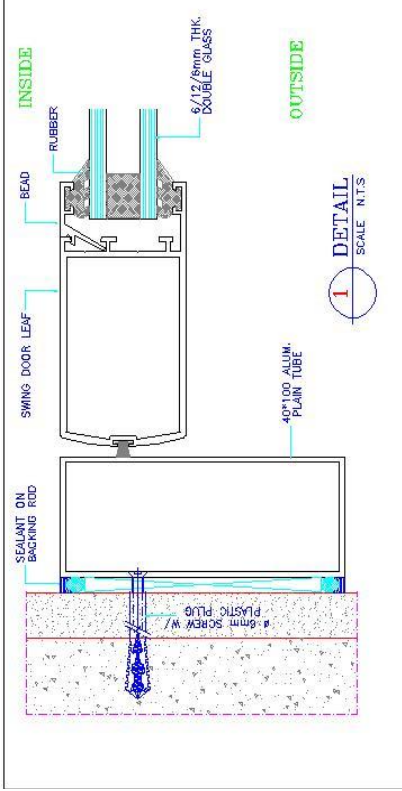
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5 DETAIL SCALE 1:1M

HINGE DOOR SYSTEM (3mm THK.)

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CHECKED BY	
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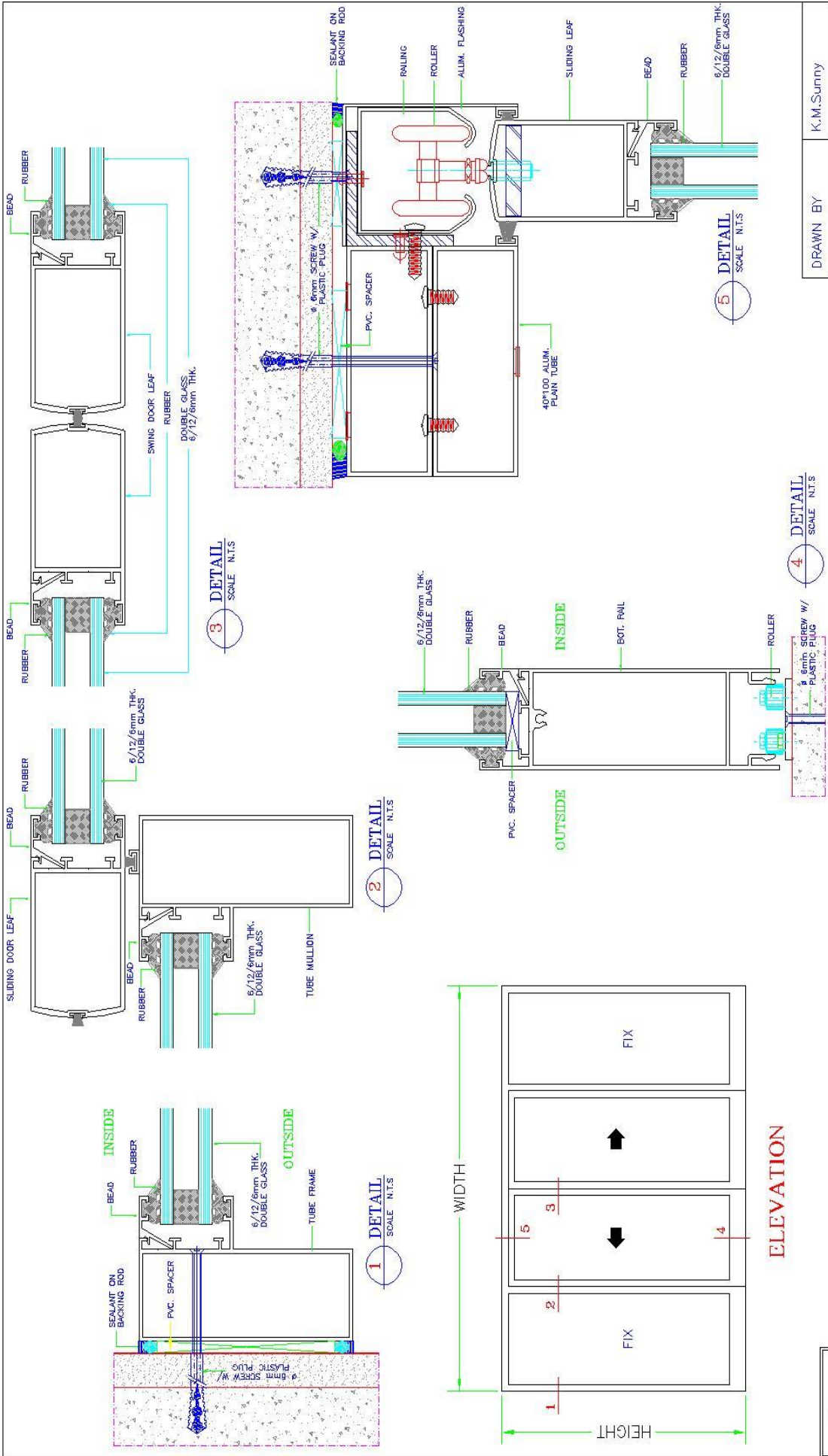




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DATE	
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SWING DOOR SYSTEM



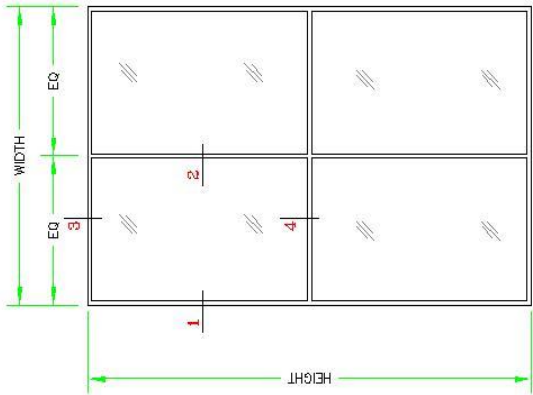


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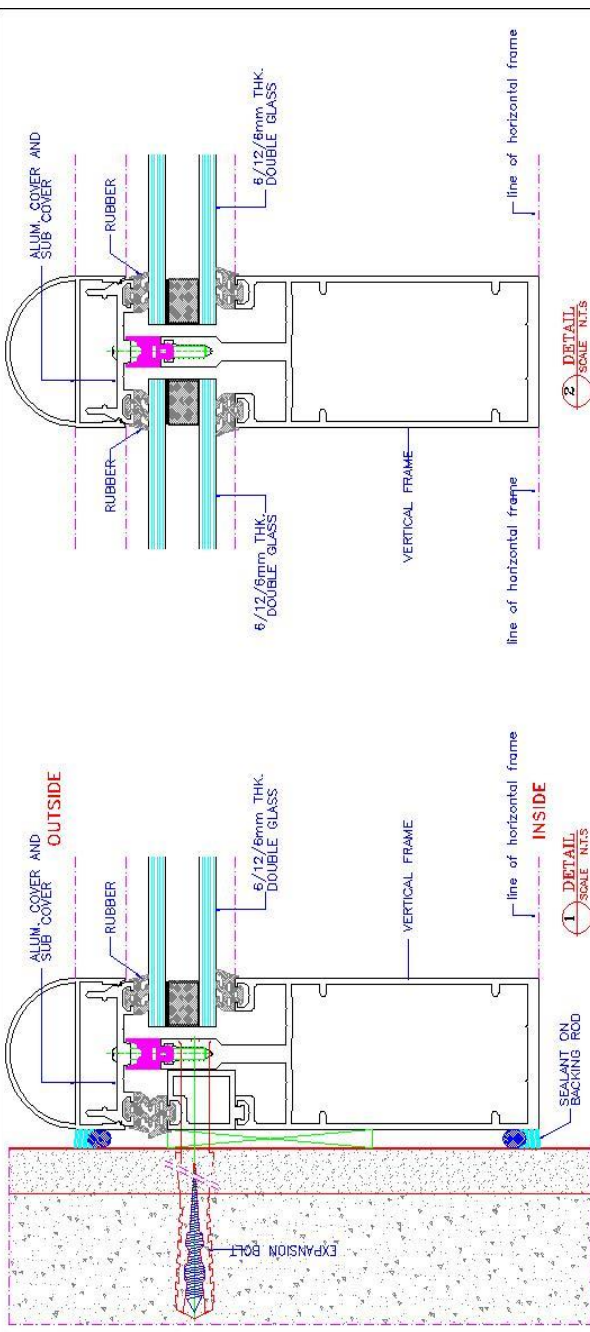
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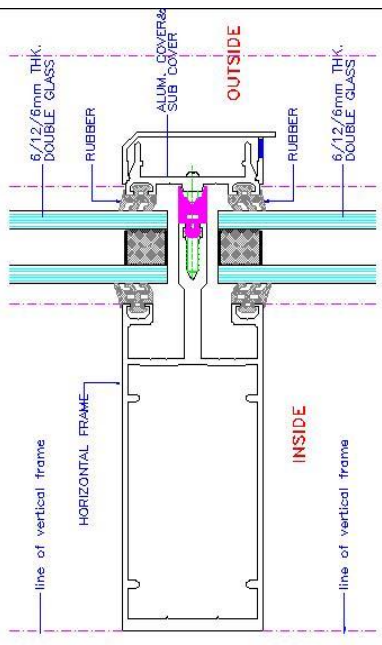
STANDARD
CURTAIN WALL
SYSTEM



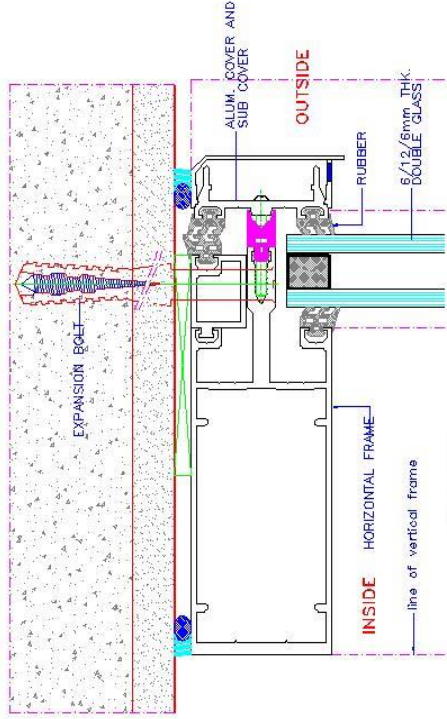
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2 DETAIL SCALE: N.T.S.



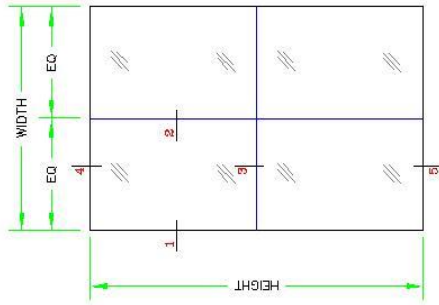
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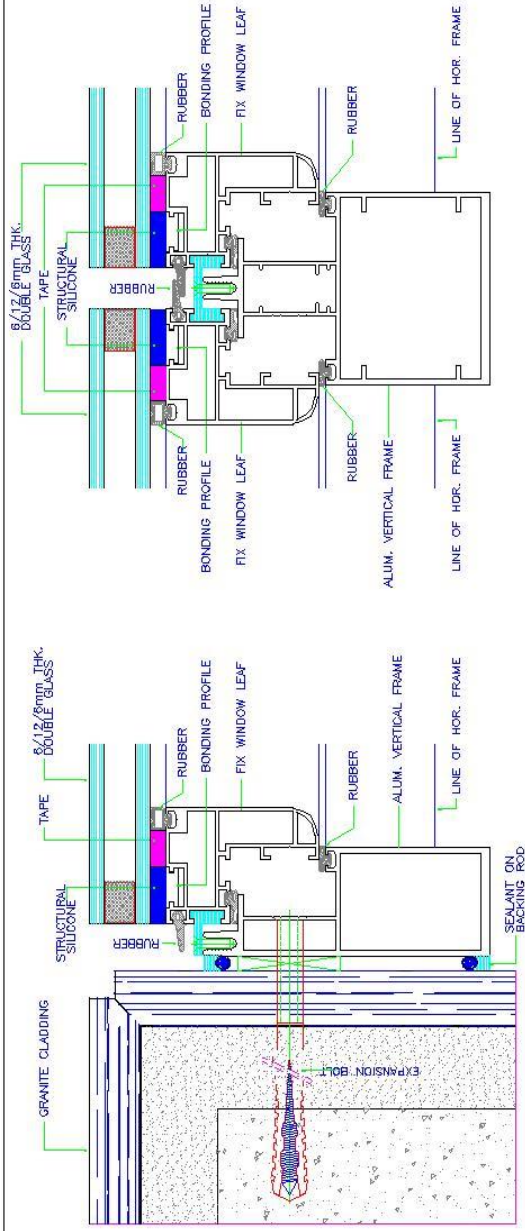
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STANDARD CURTAIN WALL SYSTEM



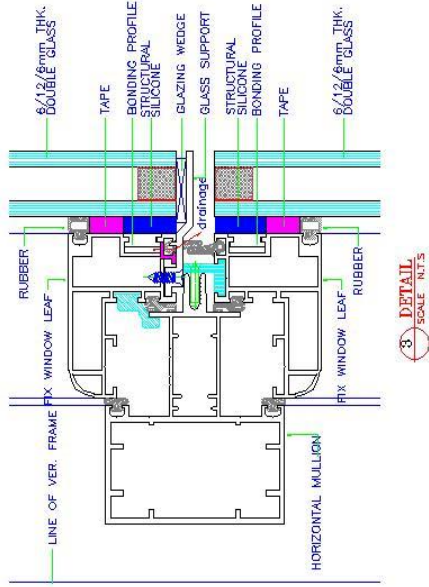


ELEVATION

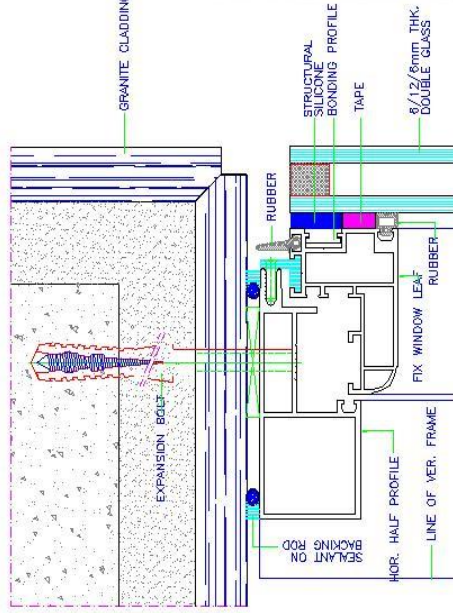


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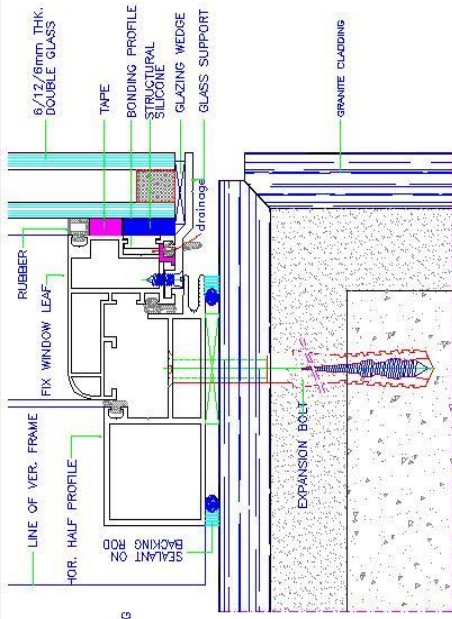
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4 DETAIL SCALE: N.T.S.



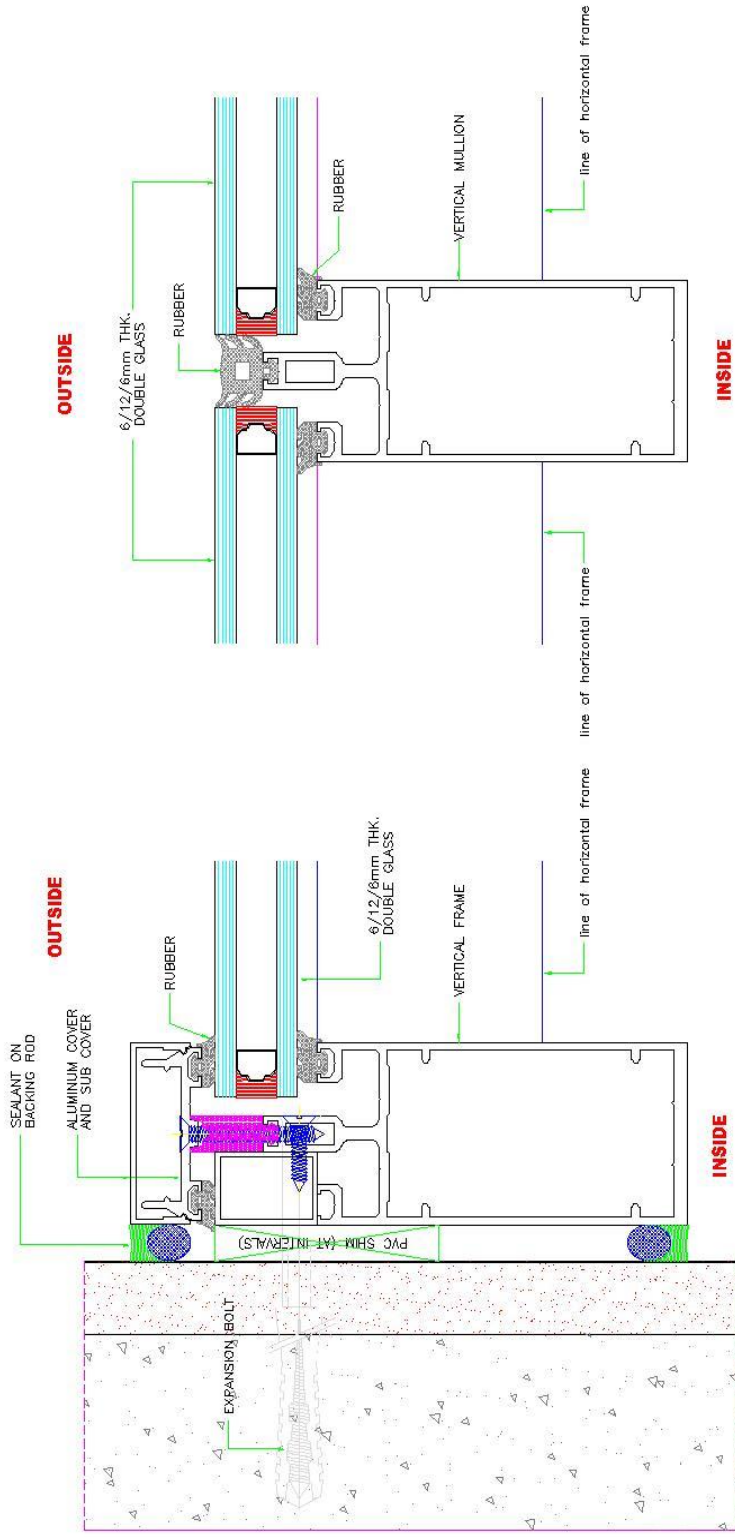
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DRAWN BY	K.M.Sunny
CHECKED BY	
DATE	
SCALE	N.T.S.

STANDARD STRUCTURAL GLAZING SYSTEM



STRUCTURAL
CURTAIN WALL
SYSTEM



1 DETAIL
SCALE N.T.S.

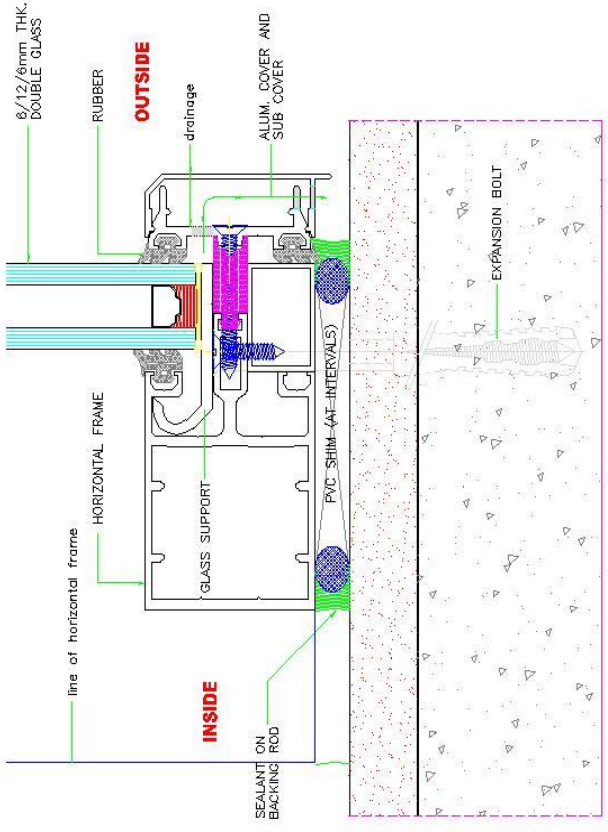
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SCALE N.T.S.



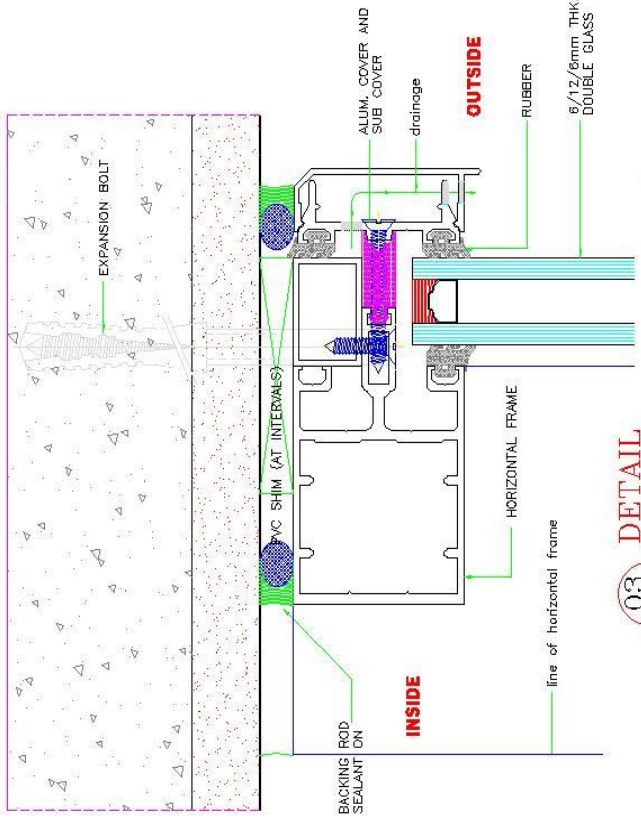
ELEVATION

HORIZONTAL STRUCTURAL GLAZING

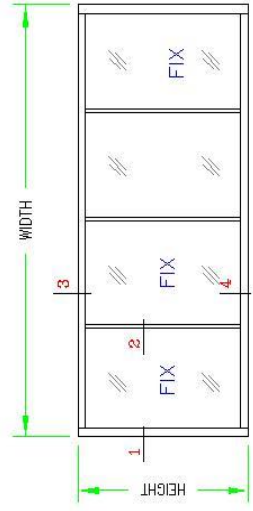
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CHECKED BY	
DATE	22-03-2005
SCALE	NTS.



04 DETAIL
SCALE N.T.S



03 DETAIL
SCALE N.T.S



ELEVATION

HORIZONTAL STRUCTURAL GLAZING

DRAWN BY	Sunny
CHECKED BY	
DATE	22-03-2005
SCALE	NTS.





CUSTOM MADE DESIGNS



Advanced
Manufacturing
For Metal and Glass Co.





AL SUHAILY COMMERCIAL BUILDING

CONTRACTOR: SHEIKH SAAD SUHAILY

LOCATION: MAKKAH, K. S. A.

CLIENT: SHEIKH SAAD AL SUHAILY
SCOPE: ALUMINIUM, GLAZING, DOORS & WINDOWS
WORKS

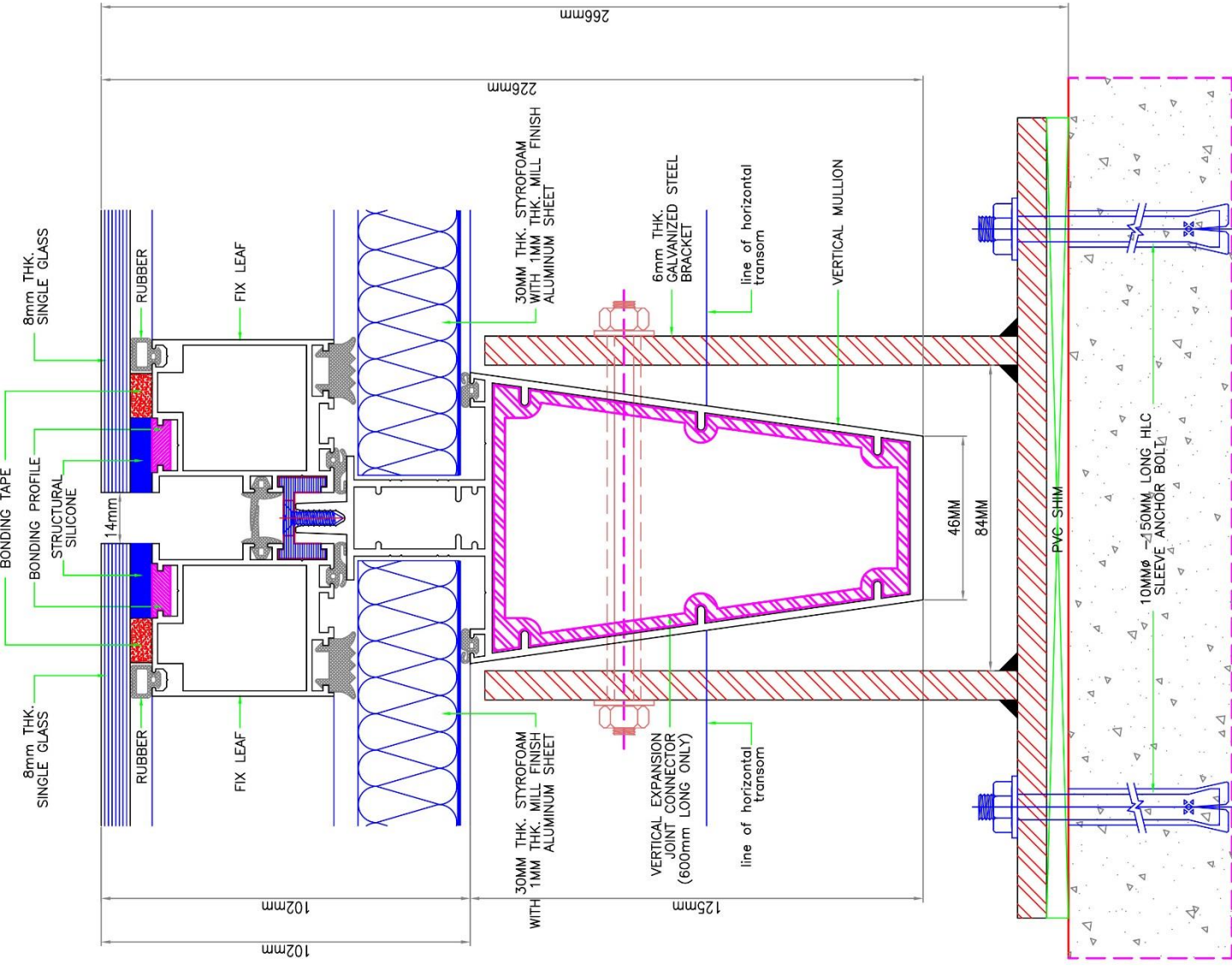
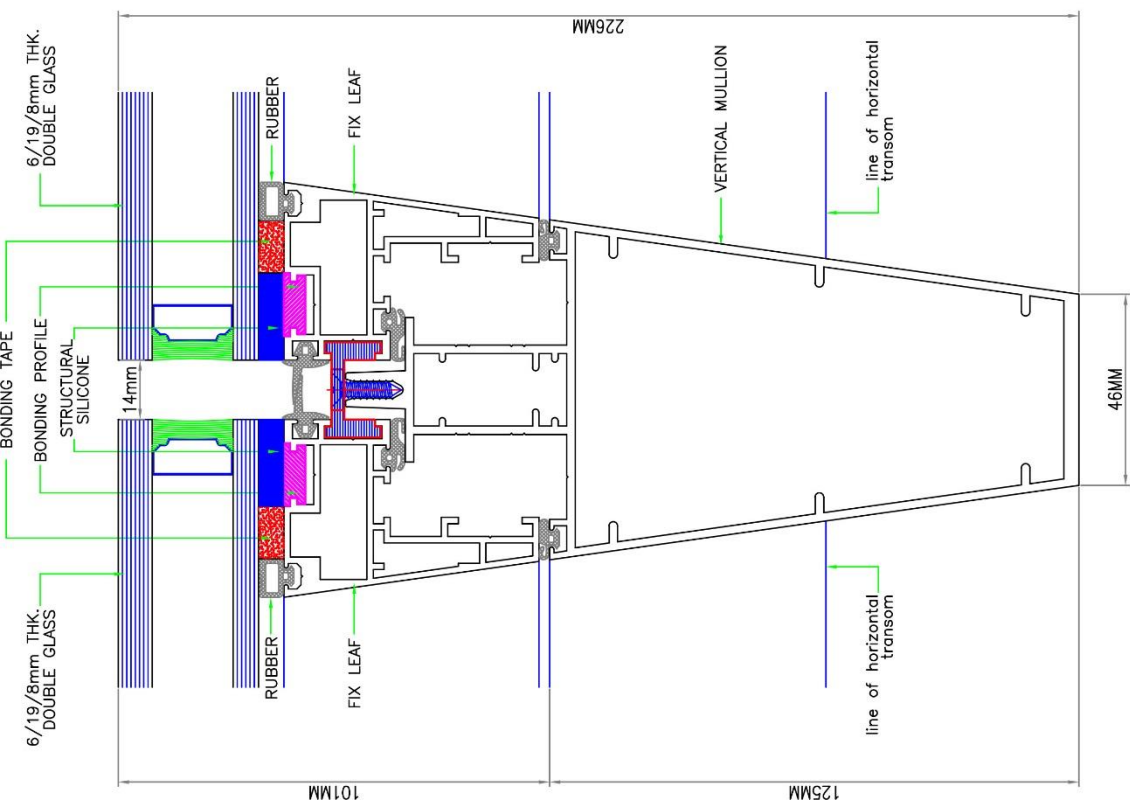
الشركة المتقدمة لتصنيع المعادن و الزجاج
Advanced Manufacturing for Metal and Glass



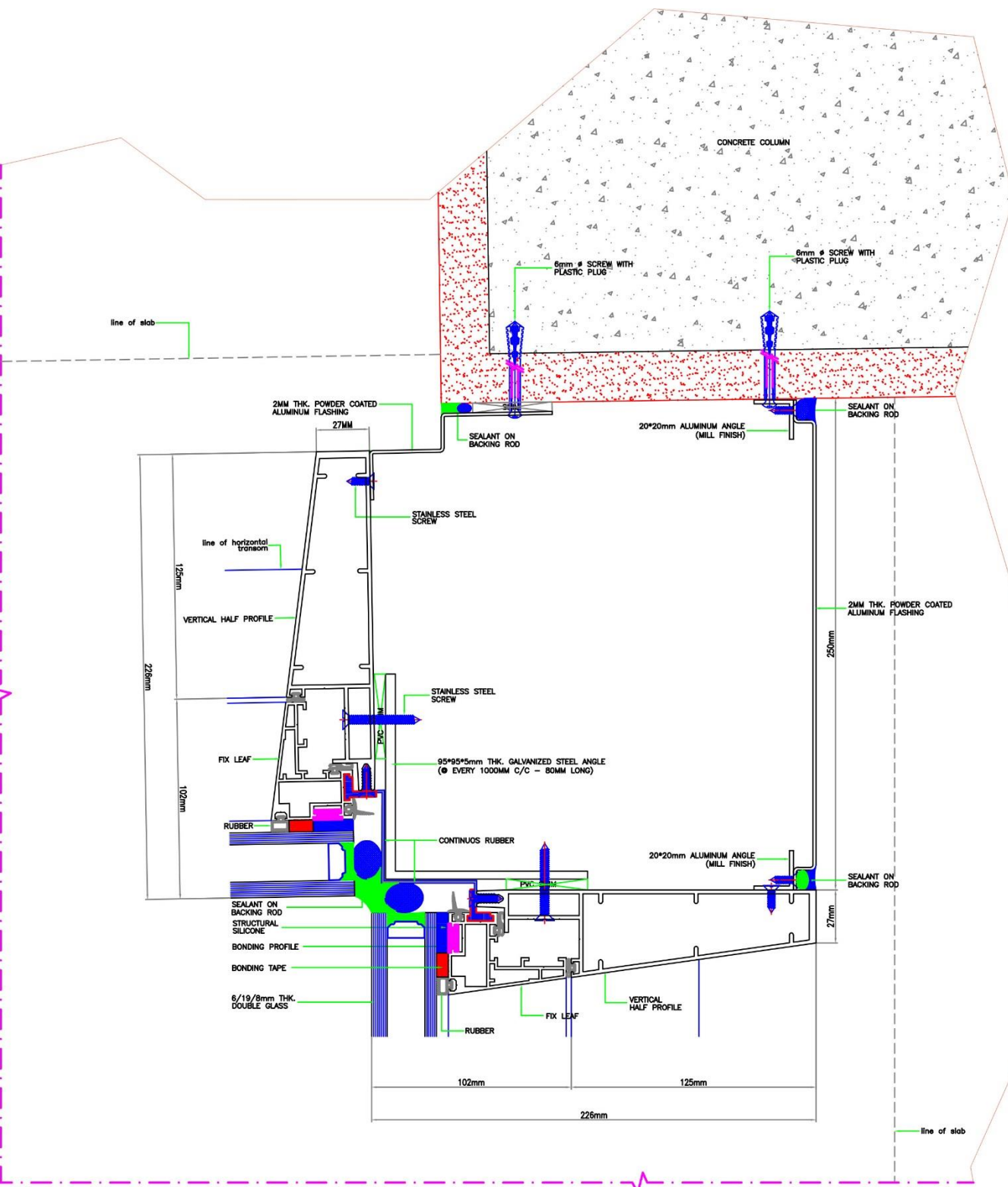
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01 **DETAIL**
 SCALE 1:1



24 DETAIL
SCALE 1:1



STAINLESS STEEL



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Manufacturing
For Metal and Glass Co.



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CURTAIN WALLS



FACADES



DOOR ENTRANCES



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Advanced Manufacturing for Metal and Glass



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Page No. 01/01/2011

CEILING CLADDING



COLUMN CLADDING

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DOME & SKYLIGHTS





TEST REPORTS



Advanced
Manufacturing
For Metal and Glass Co.



Name of Project:

AL JAWHARA TOWER

Location:

Jeddah, KSA

Clients:

Damac Properties Ltd.

On-Site Hose Water Penetration Test - Report

AFE's Client: Advanced Manufacturing for Metals and Glass	Date: 04 May 2016
Project: Al Jawhara Tower, Jeddah, KSA	AFE Project No: PD105049
Report no: SR0605 Rev.0	Total no of Pages: 6 + 4

1 Introduction

This report describes the hose test performed on installed façade, by Al Futtaim Exova (AFE) - Façade Testing & Advisory Services in Dubai at the request of Advanced Manufacturing for Metals and Glass.

The tests were carried out on 24th and 25th April 2016 and witnessed wholly or in part by:

Yahya Rawzy Salama - AMG
Hassan Alshenohy - AMG

The tests were supervised by:

Arun Kumar M - AFE

This report relates only to the location tested and described herein:

2 System Description

The system tested was a portion of stick curtain wall installed in the following project in Jeddah, KSA.

▶ Al Jawhara Tower

The test locations / joints were designated by Advanced Manufacturing for Metals and Glass.

3 Purpose of Testing

The tests are to determine the weathertightness of a façade system with respect to water penetration. The test method, was in accordance with this method statement and are in accordance with the following standard, except where modified herein.

▶ Water penetration AAMA 501.2-09 (Hose test)

4 References

AFE method statement DMH2348/MSrev0

5 Apparatus

The test was conducted using a nozzle that produces a solid cone of water droplets with a nominal spread of 30°. (AAMA 501.2 specifies a Type B-25, #6.030 with a 1/2 inch FPT as manufactured by Monarch Manufacturing Works.) The nozzle was used with a 3/4 inch diameter hose and was provided with a control valve and a pressure gauge between the valve and the nozzle. The pressure at the nozzle was adjusted to produce 30-35 psi at the nozzle inlet.

6 Test Procedure

The water was directed at the test section and perpendicular to the face of the wall. The nozzle was moved back and forth above approximately five (5) linear feet / 1.5m of the framing and joints, at a distance of 1 foot / 300mm from the most exterior surface of the wall for a period of five (5) minutes. The nozzle pressure was set to 30-35 psi.

Working from the exterior, the wall test section was selectively wetted, progressing from the lowest horizontal framing member. During the test, an observer on the indoor side of the wall checked for any leakage and noted where it occurred.

7 Performance Criteria

Water leakage is defined as any uncontrolled water that appears on any normally exposed interior surfaces, that is not contained or drained back to the exterior, or that can cause damage to adjacent materials or finishes. Water contained within drained flashings, gutters and sills is not considered water leakage. The collection of up to one half ounce of water (15 ml) in a five minute test period on top of an interior stop or stool integral with the system shall not be considered water leakage.

8 Test Results / Observations

Date	Location	Result	Observations
24 Apr. '16	Location #1, Horizontal and Vertical joints, East Elevation, Level 27, Flat no 2701 as marked up in drawing no. AMG-ALU-JAWH-AB-10 Rev. 0 attached. Tested areas are marked up in red.	Pass	No water ingress was observed.
24 Apr. '16	Location #2, Horizontal and Vertical joints, East Elevation, Level 09, Flat no 0901 as marked up in drawing no. AMG-ALU-JAWH-AB-10 Rev. 0 attached. Tested areas are marked up in red.	Pass	No water ingress was observed.

25 Apr. '16	Location #3, Horizontal and Vertical joints, North Elevation, Level 35, Flat no 3502 as marked up in drawing no. AMG-ALU-JAWH-AB-09 Rev. 0 attached. Tested areas are marked up in red.	Pass	No water ingress was observed.
25 Apr. '16	Location #4, Horizontal and Vertical joints, West Elevation, Level 35, Flat no 3502 as marked up in drawing no. AMG-ALU-JAWH-AB-11 Rev. 0 attached. Tested areas are marked up in red.	Pass	No water ingress was observed.
25 Apr. '16	Location #5, Horizontal and Vertical joints, North Elevation, Level 30, Flat no 3001 as marked up in drawing no. AMG-ALU-JAWH-AB-09 Rev. 0 attached. Tested areas are marked up in red.	Pass	No water ingress was observed.
25 Apr. '16	Location #6, Horizontal and Vertical joints, South Elevation, Level 37, Flat no 3706 as marked up in drawing no. AMG-ALU-JAWH-AB-08 Rev. 0 attached. Tested areas are marked up in red.	Pass	No water ingress was observed.
25 Apr. '16	Location #7, Horizontal and Vertical joints, East Elevation, Level 37, Flat no 3706 as marked up in drawing no. AMG-ALU-JAWH-AB-10 Rev. 0 attached. Tested areas are marked up in red.	Pass	No water ingress was observed.
25 Apr. '16	Location #8, Horizontal and Vertical joints, South Elevation, Level 27, Flat no 2708 as marked up in drawing no. AMG-ALU-JAWH-AB-08 Rev. 0 attached. Tested areas are marked up in red.	Pass	No water ingress was observed.

Note: Tests were conducted only at the areas where access was available from inside as marked in the elevation drawings.

We understand from AMG that hose tests were earlier conducted by AMG on the installed façade as part of their internal quality assurance process. However AFE was neither a party to it nor witnessed the test, hence this could not be verified.

APPENDIX A Photographs



Photo 1 Water penetration test in progress

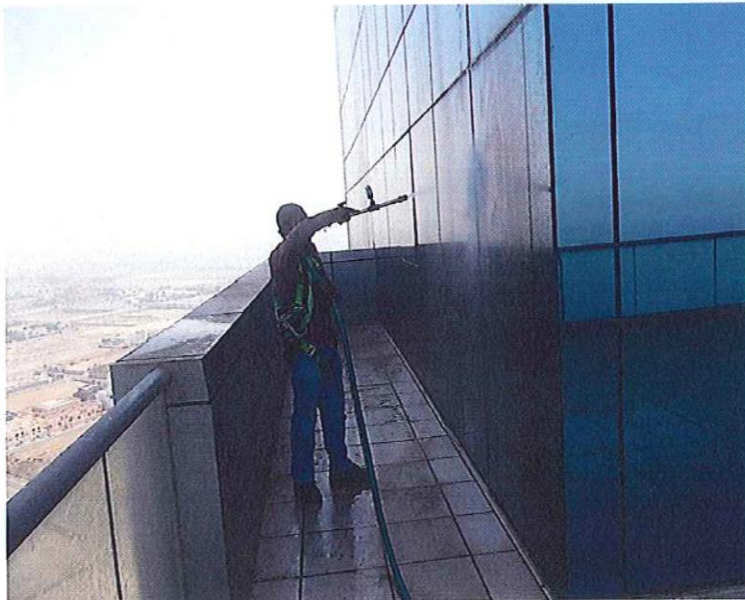


Photo 2 Testing on the balcony façade

APPENDIX B

Drawings

The following four un-paginated sheets are copies of Advanced Manufacturing for Metals and Glass drawings numbered below, showing the test locations.

- ▶ AMG-ALU-JAWH-AB-08
- ▶ AMG-ALU-JAWH-AB-09
- ▶ AMG-ALU-JAWH-AB-10
- ▶ AMG-ALU-JAWH-AB-11

GENERAL LEGEND-

- TEMPERED GLASS
- ALU. LOUVER
- LAMINATED GLASS
- ALU. CLADDING

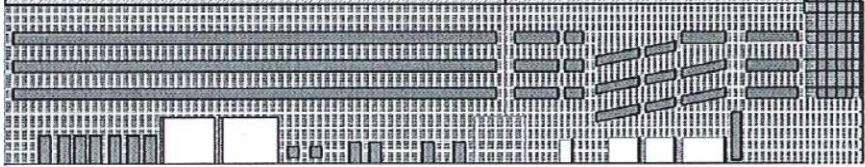
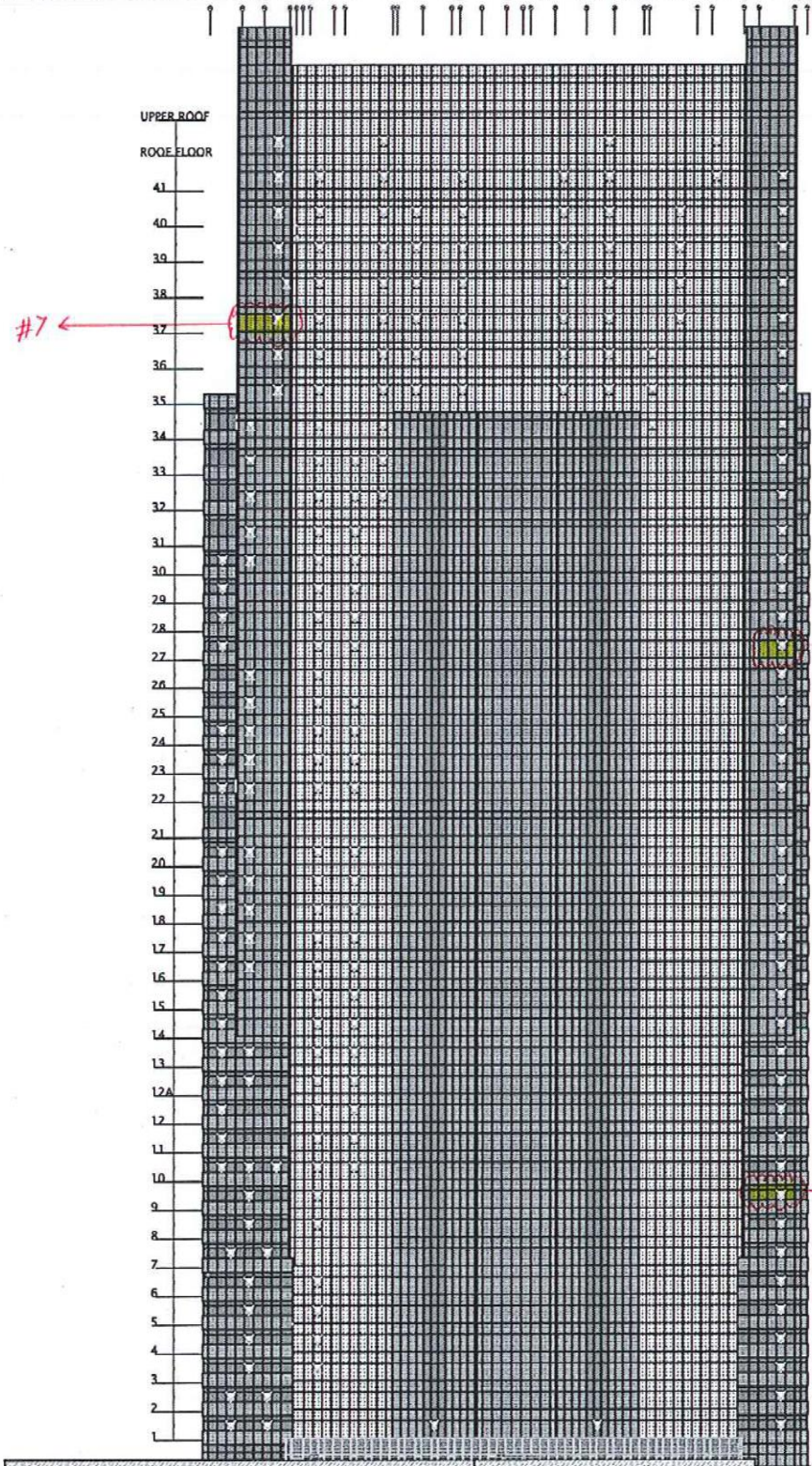
PROJECT: AL JAWHARAH TOWER PROJECT
KIT PLAN

NO.	DATE	REVISION	BY	APP.
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002		REVISION 1		
003		REVISION 2		
004		REVISION 3		
005		REVISION 4		
006		REVISION 5		
007		REVISION 6		
008		REVISION 7		
009		REVISION 8		
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DAWAC PROPERTIES CO. LTD.

DATE: 15/01/2010


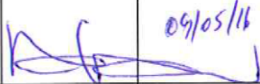
<p>DAWAC PROPERTIES CO. LTD. 10th Floor, Al Jannah Tower, Al Jannah Project, Doha, Qatar. Tel: +974 4400 1111 Fax: +974 4400 1112 Email: dawac@qnet.net.qa</p>	<p>PROJECT: AL JAWHARAH TOWER PROJECT KIT PLAN</p>	<p>DATE: 15/01/2010</p>
<p>DESIGNER: DAWAC & SOCIAL INTERNATIONAL DRAWN BY: [Name] CHECKED BY: [Name] SCALE: 1:100</p>	<p>CLIENT: DAWAC PROPERTIES CO. LTD.</p>	<p>NO. OF SHEETS: 10</p>
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<p>PROJECT: AL JAWHARAH TOWER PROJECT KIT PLAN</p>	<p>DATE: 15/01/2010</p>	<p>SCALE: 1:100</p>



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Table 1 Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	Arun Kumar M	Ranjith P. Operations Manager		Manoj Kumar Laboratory Manager		09/05/16



Name of Project:

DAMAC TWIN TOWER

Location:

Riyadh, KSA

Clients:

Damac Properties Ltd.

Façade Testing & Advisory Services

29 September 2016

To	Advanced Manufacturing for Metal & Glass	Tel. / Fax	By email
Attention	Khalid Kashef	Fax ref.	CLF14614
From	Akhil Chacko	AFE tel.	04 886 8715
Email	Akhil.Chacko@Exova.com	AFE fax	04 885 6795
Project	Damac Twin Residence Towers, Riyadh	Pages	1
Subject	Preliminary Test Report		

Dear Sir,

As requested, please find the following results of the laboratory main tests performed on the above mentioned sample on 25th September 2016.

The test methods were in accordance with the AFE - Façade Testing & Advisory Services method statement DMC2385/Msrev0 and were in accordance with the following standards:

- ▶ Air infiltration ASTM E283-04
- ▶ Water penetration (static pressure) ASTM E331-00
- ▶ Wind resistance ASTM E330-14
- ▶ Water penetration (dynamic pressure) CWCT Section 7
- ▶ Inter-storey displacement (left/right) AAMA 501.4-00
- ▶ Inter-storey displacement (up/down) Project specific

The following table summarises the main tests performed on the above mentioned sample:

DATE	TESTS	RESULT	REMARKS
25 Sept. '16	Pre -load @ +1191 Pa	-	-
25 Sept. '16	Air infiltration @ +300Pa	Pass	Air infiltration readings were within allowable limits.
25 Sept. '16	Static air pressure water penetration @ 1429Pa	Pass	No water ingress was observed.
25 Sept. '16	Dynamic air pressure water penetration	Pass	No water ingress was observed.
25 Sept. '16	Wind resistance – serviceability @ +2382 Pa & -2382 Pa	Pass	Deflections were within allowable limits.
25 Sept. '16	Static air pressure water penetration @ 1429Pa	Pass	No water ingress was observed.
25 Sept. '16	Inter-storey displacement - up & down @ ±5mm; 3 Cycles	Pass	No visual damage was observed.
25 Sept. '16	Inter-storey displacement - left & right @ ±7.5 mm; 3 Cycles	Pass	No visual damage was observed.

25 Sept. '16	Static air pressure water penetration @ 1429Pa	Pass	No water ingress was observed.
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This is only a preliminary report supplied at the request of Advanced Manufacturing for Metal & Glass. AFE accept no responsibilities in the way in which these results are used or interpreted. A comprehensive report containing the sample details, drawings, any variations from the drawings, photographs and other test conditions will be issued two weeks after the completion of the test sequence.

Yours faithfully,
Al Futtaim Exova (AFE),

Akhil Chacko



Project Engineer - Façade Testing & Advisory Services

Name of Project:

Rafal Living Tower

Location:

Riyadh, KSA

Clients:

DSACC



RAFAL LIVING PROJECT Riyadh, KSA

PMU Final Test Inspection Report # 01

Project Title : RAFAL LIVING PROJECT

Project No. : MFDB-16-80019

PMU Test Date: 25th & 26th July 2018

Inspection for the Dismantling of PMU Specimen: 1st August 2018

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Date	Revision	Prepared By	Checked By	Approved By
25 th & 26 th July 2018 & 1 st Aug. 2018	Rev 0	ET/JB	DC/PG	DC/PG

3.0 CONCLUSION

3.1 SUMMARY OF TESTS AND RESULTS

Test Description	Test Date	MFT's comment
Air Infiltration & Exfiltration Test	25 th July 18	Failed
Air Infiltration & Exfiltration Re-Test	25 th July 18	Passed
Static Water Penetration Test	25 th July 18	Passed
Wind Resistance (Serviceability) Test	25 th July 18	Passed
Repeat Air Infiltration & Exfiltration Test	25 th July 18	Passed
Repeat Static Water Penetration Test	25 th July 18	Passed
Wind Resistance (Safety) Test	25 th July 18	Passed
Impact Test	26 th July 18	Passed
Controlled Dismantle	1 st Aug. 18	Passed

3.2 GENERAL

Notwithstanding the above, the Independent Test Report of Al Futtaim Exova should be reviewed for the details of test results, as well as test methodology.

---End of Report---