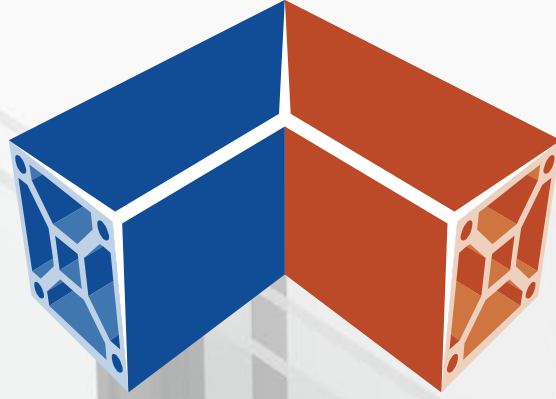




QALEX

الشركة القطرية لسحب الألمنيوم

QATAR ALUMINIUM EXTRUSION CO.

FALCON 50 CURTAINWALL SYSTEM

QALEX SYSTEM
TECHNICAL CATALOGUE

QATAR ALUMINIUM EXTRUSION COMPANY



QALEX

الشركة القطرية لسحب الألمنيوم

QATAR ALUMINIUM EXTRUSION CO.



FALCON 50 Curtainwall System

P.O. Box: 201698, New Salwa Industrial Area, Doha - QATAR.
Phone: (+974) 44 333 555 / 541 / 540, Fax: (+974) 44 333 500,
Mail: info@galex.com.qa
www.qalex.com.qa

COMPANY PROFILE



COMPANY PROFILE :

Qatar Aluminium Extrusion Company is the brainchild of QIMC (Qatar industrial Manufacturing company) jointly hosted along with other business tycoons of Qatar, viz. Salam International Investment Ltd, Alutec, Qatar Real Estate Investment Co., Aluminium Gulf Ray, Qatar Oman Investment Co. & Qatar Belgium Aluminium Co.

Multi Million project proudly designed and built with state of art technology plant & equipment majestically located at the pink zone of new industrial area. The plot of 28,000 sq mtrs aesthetically landscaped and engulfing a steel structure of 13,000 sq mtrs which houses modern extrusion production facilities.

CAPABILITIES & FACILITIES:

We are equipped with the following world class equipment.

- Japan origin 2250 MT Extrusion Press with 4S (Stem Shift Short Stroke) technology with an annual capacity of 8,000 MT to 10,000 MT.
- US origin Hot Log Shear which allows to reduce both material inventory and scrap generation because it cuts the billets to correct length as needed targeting maximum yield.
- US Origin log oven with designed capacity of 4,000 Kgs of output per hour.
- US Origin taper quench unit of billets for achieving quality extrusion by maintaining constant extrude temperature and very much essential for aluminium extrusions.
- US Origin Intense run our cooling system for both hard & architectural alloys.
- US Origin Double puller operation for improved productivity & short idle time.
- US Origin Stretcher which deliver precise accurate stretching which enhances profile quality and keeps scrap to a minimum.
- US Origin Precision profile cutting finish saw delivers a highly accurate cut with accuracy, safety and easy to use and with maximum cutting length up to 8,500 mm & extendable further on special cases.



- US Origin Ageing oven are designed to deliver rapid complete ageing of profile in every batch which translates into maximum profile quality.
- Die ovens are engineered for quick and uniform heating resulting in less strain on the press and better quality for extrusion.
- Fluidized Nitriding furnace to enhance the surface quality of the products.

OUR PRODUCTS:

A) MILL FINISH

- Mill Finish.
- Architectural Alloys i.e. 6063.
- Structural Alloys i.e. 6061 & 6082.
- Other 6000 series alloys on availability.
- Minimum cut length 1,500 mm.
- Maximum cut length of 8,500 mm.
- Excess cut length in mill finish can be considered on special request and to a whopping 16m for some sections.
- With different temper like T4, T6 etc.
- Large number of profile forms and shapes can be developed on request.

B) POWDER COATING

- Powder Coating in many RAL colour.
- Maximum profile length of 7,500 mm.
- Equipped laboratory to test coting quality.
- 70 to 80 microns international standard coating thickness.
- Minimum 60 microns confirmed coating thickness.
- Powder for international renowned brand.
- Regionally accepted guarantee period for coating.



QALEX ADVANTAGES FOR QATAR:

- Locally based company with easy & economical accessibility.
- Technical assistance is available at hand reach.
- Immediate response to quality related issues.
- No border hassle for documental procedure.
- No bulk import and naturally no revenue block.
- Less inventory and so reduced storage space and no cash block.
- Quicker supply time which helps for quicker mock up work.
- Everything is in JIT basis (Just in Time).
- Flexible terms and condition on sales / shipment.

QATARI ESSENCE IN QALEX:

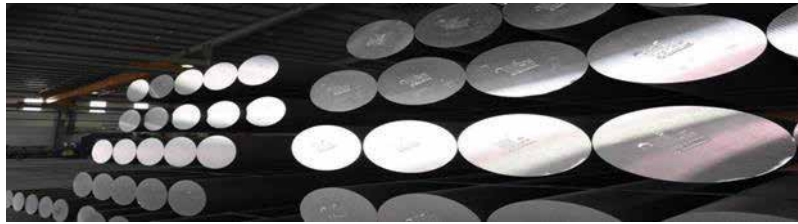
- Hosted by Qatar Industrial Manufacturing Company.
- Ably co – hosted and supported by Salam International Investment Limited, Alutec, Aluminium Gulf Ray, Qatar Real Estate Investment Co., Qatar Oman Investment Co., and Qatar Belgium Aluminium Co., (All are Qatar based Company).
- The Products are procured, manufactured & fabricated in QATAR.
- Added value as raw material is produced by QATALUM.
- Power supplied by KAHRAMAA, a Qatari Government Corp.
- Gas produced by QP & distributed by WOQOD.
- Reduced material wastages, which are totally recycled.



SOURCE OF RAW MATERIAL SUPPLY

ALUMINIUM LOGS:

- Aluminium Logs supplied by QATALUM, A Qatari Government Company.



- Architectural Alloys i.e. 6005 & 6063 ,6060.
- Structural Alloys i.e. 6082 & 6061.
- Other 6000 series alloys on availability.

POWDER COATING:

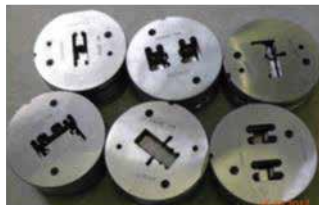
- Powder coating supplied by JOTUN POWDER COATINGS & AKZONOBEL.



- Powder coating available in many RAL colour.

ALUMINIUM EXTRUSION DIE & TOOLINGS HAS BEEN OUT SOURCED FROM MANY SUPPLIERS ACROSS EUROPIEN REGION:

- ALUTOOL, UK.
- EROGA, UK.
- ELITE, UK.
- EKSENAL, TURKEY.
- Many more.



CERTIFICATES



CERTIFICAT

CERTIFICADO

‘EPITITAT

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CERTIFICATE

ZERTIFIKAT



Middle East

CERTIFICATE

The Certification Body
of TÜV SÜD Middle East L.L.C.

certifies that



Qatar Aluminium Extrusion Company
P. O. Box: 201698, New Industrial Area
Doha, Qatar

has established and applies
a Quality Management System for

**Manufacturing and Supply of Aluminium Extruded
(Mill Finish & Powder Coated) Profiles**

An audit was performed, Report No. **50343**

Proof has been furnished that the requirements
according to

ISO 9001:2008

are fulfilled.

The certificate is valid from **2017-03-28** until **2018-09-14**

Certificate Registration No. **ME 9K 0095 DAC**

Dubai, 2017-04-04



CB-021

TÜV

TÜV SÜD Middle East L.L.C. , P.O. Box: 2834, Empire Heights Tower A, Business Bay, Dubai, United Arab Emirates



GALEX
الشركة القطرية لتسحب الألمنيوم
QATAR ALUMINIUM EXTRUSION CO.



Licence number: 4203

Falcon 50



Quali Middle East Association

MEMBERSHIP CERTIFICATION

This is to certify that

QATAR ALUMINIUM EXTRUSION CO.

P.O BOX 201698, DOHA, QATAR

Membership Ref.: A031

is a member of the Quali Middle East Association and is a signatory to the policies and procedures related to the membership of the Association.

Period of validity of the certificate: until 31.12.2017

Dubai, 15 December 2016

QUALI MIDDLE EAST ASSOCIATION

Nasir Fahmeed
General Secretary

Mailing address: QMEA, P.O. Box 23070
Office 1801, 48 Burj Gate, Burj Khalifa Community
Downtown, Sheikh Zayed Road
Dubai, United Arab Emirates

Phone: +971 4 321 2317
Fax: +971 4 321 1986
E-Mail: admin@qualimiddleeast.com
Internet: www.qualimiddleeast.com

QMEA Professional License No: 577213 issued by Dubai Economic Department



QALEX
الشركة القطرية لسحب الألمنيوم
QATAR ALUMINIUM EXTRUSION CO.



Licence number: 4203

Falcon 50



ORGANIZATIONAL



QATAR ALUMINIUM EXTRUSION CO.
MEMBER SINCE JAN 04, 2017

The U.S. Green Building Council is the nation's foremost coalition of leaders working to transform the way buildings and communities are designed, built, and operated, enabling an environmentally and socially responsible, healthy, and prosperous environment that improves the quality of life.

Mahesh Ramaniyam

MAHESH RAMANIYAM
President & CEO



Together,
let's build
a sustainable
tomorrow



Certificate of Membership

This to certify that

Qatar Aluminium Extrusion Co.

is an Organization Member of Qatar Green Building Council
and is committed to promote sustainable building practices

Membership No: O-1116 Membership effective 1st Jan 2017 to 31st Dec 2017


Mesher Mohammed Al-Shamari
Director
Qatar Green Building Council



CERTIFICATE OF QUALITY



This is to certify that

Qatar Aluminium Extrusion Company

fulfills the requirements set by Technoform in the assembly of quality Thermal Break Systems.
The aforementioned company possesses adequate technical know-how, and uses only genuine
polyamide strips made of PA66/GF25, in compliance with Technoform's standards.


Technoform Middle East
Managing Director



Certified till August, 2017

TECHNOFORM **MIDDLE EAST**



Certificate of Approval

Qatar Aluminium Extrusion Co.

is certified as an Approved Applicator to coat

Jotun Durasol

a product from Jotun Powder Coatings

This company fulfils the requirements set by Jotun Powder Coatings for pre-treatment and application of powder coatings. These include having the necessary equipment, process controls and technical knowledge to comply with Jotun Powder Coatings' standards.

50

January 01, 2017

(Certificate valid for one year from date above)




Authorised Signatory
Jotun Powder Coatings UAE (LLC)



Certificate of Approval

Qatar Aluminium Extrusion Co.

is certified as an Approved Applicator to coat

Jotun Super Durable

a product from Jotun Powder Coatings

This company fulfils the requirements set by Jotun Powder Coatings for pre-treatment and application of powder coatings. These include having the necessary equipment, process controls and technical knowledge to comply with Jotun Powder Coatings' standards.

51

January 01, 2017

(Certificate valid for one year from date above)



Authorised Signatory
Jotun Powder Coatings UAE (LLC)



GALEX
الشركة القطرية لسحب الألمنيوم
QATAR ALUMINIUM EXTRUSION CO.



Licence number: 4203

Falcon 50



Interpon.
powder coatings
EVERY COLOR IS GREEN

AkzoNobel

Interpon D Approved Applicator

Interpon D1000 Series

Qatar Aluminium Extrusion Company

P.O. Box 201698, New Industrial Area, Doha,
Qatar

Has fulfilled AkzoNobel's tests and inspection regarding the pre-treatment, application, quality management standards and procedures, and complies with the requirements of the Architectural Range Approved Applicator schedule.

This certificate is effective from

6 September 2016 to 5 September 2017

Approved for Aluminium Alloys AA 6061 and AA 6063

Approved for Pre-treatment Type Chrome - free

Esmeralda Maria Malo
Business Development Manager
Middle East and Africa

Date: 18/09/2016

Certification number N° QAT05D1

AkzoNobel U.A.E. Paints L.L.C.



FALCON 50 Curtainwall System



TECHNICAL DESCRIPTION OF THE SYSTEM

System description: Aluminum profiles system, hardware and gaskets for the fabrication of Multiple design curtain walls, with and without covers, single and double glass.

Aluminum alloy: EN-AW-6060 (EN 533-3 e EN755-2) HB 65

Alloy treatment: EN 515

Dimensional Tolerances: UNI-EN 12020-2

System features and characteristics:

Profile system equipped with sealing gaskets all around the glasses. The thermal break barrier it is insured by polyamide spacers and EPDM gaskets.

The system it is created to obtain all type of Curtain Walls with and without pressure plates and covers. The profiles are assembled using apposite die cast T joint with cleat for transoms frontal installation between already positioned mullions.

Thermal performances: please read the It data sheets of this catalogue in order to obtain the correct Uf value of the main sections of each model of window and doors of this system.

System performances: this system have been tested and classified according to norms the European standards and norms EN 14351 -1:2006.

Air : EN 1026-2000 and EN 12207-1999

Water : EN 1027-2000 and EN 12208-1999

Wind : EN 12211-2000 and EN 12210-1999.

Glazing method: With pressure plates or without with structural silicon

Glazing and panels gap: Up to 50 mm

Glazingdepth: Up to 20 mm

System dimensions: this system it is composed of mullions profiles of various depths for specifics architectural applications and building solutions, the transoms of the same depth are built in order to obtain coplanar solutions .The standard width of the structure composed of mullions and transoms it is of 50 mm. The system it is completed by specific profiles for all type of Glazing solution and structural application. The profiles are based on 5 mm of overlap between mullions and transoms, obtained with the application of a profile on transoms. For all detail and specific application please consult the section NS of this catalogue about the various curtain walls model sections.

Field of application: the system have been created and studied to be apply on private buildings as well on public buildings and high rise Tower. The Profiles are studied in order to obtain the required and appropriate inertia values for 6-7 meter of height.

Design features: the system it is composed of various design solutions including all types of projecting windows and others openings. The external lines are lightly rounded cornering to the profiles a good design and equilibrate sections. The system it is design in order to insure good performances and have at the same time a modern style. The system allow the installation of thermal break casement and sliding systems. Customize solutions are also studied for particular building and architectural requirements.

Materials:

Extruded aluminum collection for Thermal break Curtain wall.

The profiles extruded against our exclusive aluminum design conception, in aluminum alloy EN AW - 6063 (EN 573-3 e E755-2), physical state and treatment according to EN 515.

The alloys confirm to the ASTM and BS norms

The Physical state and the oven treatments of the profiles correspond to the class T - T5.

The profiles are confirm to the dimensional tolerances according to the norm EN 12020-2.



System relevant information:

- Thermal Break Aluminum System for Curtain walls
- Glazing depth: from 4 mm up to 20 mm
- Profiles Depth: Up to 188 mm
- Profiles Design: For all type of Architectural solutions
- Sealing : By double gaskets on the interlock.
- Latching : Simple or/and multipoint.
- Hardware: Based on European accessories gap.
- Glazing Gap: From 4 mm Up to 50 mm
- Dimensions: Structure based on 50 mm width
- Models: All type of Curtain walls - Stick system

Surface Treatment:

All the surface treatment are confirm to the quality labels QUALICOAT for Powder Coating and QUALANOD for anodizing.

Anodizing we guarantee the minimum thickness of 15 micron up to 25 microns according to international norms. The powder coating is done with thermosetting and Polyesters Polymeric powders, the profiles are finished in special coating ovens, where the powders reach the right hardness through a heat treatment.

Surface treatment resistance:

The surface treatment done according FI QUALANOAD and QUALICOAT Quality labels shall be guafantee against corrosion and surface aging degfadacion for a period of 5-10 years. The surface treatments shall resist FI normal and marine exposition without been effected by corrosion or loss of shiness. The most relevant facFlrs influencing the surface treatment life lasting are the direct exposure FI chemicals. The direct exposure in the front of the sea and/or salty water it may reduce the life lasting of the components. The exposure FI heavy polluted environment may cause also problems. A regular cleaning with Ph neutfal water and soaps increase the components life.

Safety:

In order FI prevent injuries or/an accidents the windows and doors are to be installed as displayed in to this catalogue, anchoring the components to the building and using original only accessories. The fixing should be made according to the National norms for security and safety use.

Glazing and panels specifications:

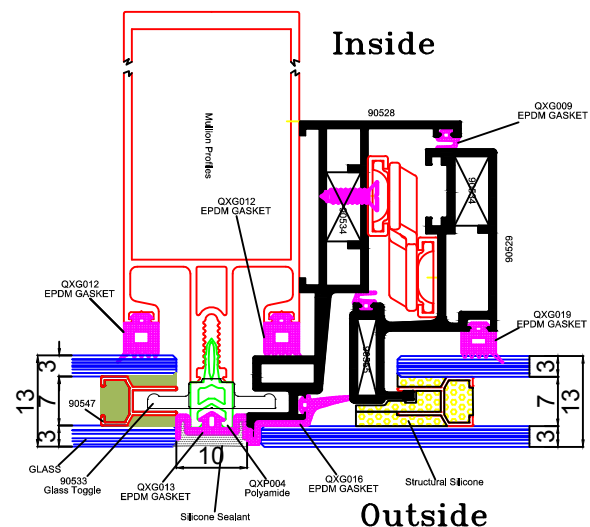
Glazing should be mounted according to the catalogue drawings and selected in accordance to the performances required in consideration of LOGO saving, safety, Acustic and Solar radiation factors. These performances are depending on the type of glass installed. The glass mounted shall be conform to the national norms for Glazing.

Gaskets:

The gaskets used during assembling and installing the components should be only the ones created for this system and displayed in this product catalogue.

The use of other gaskets or/and brushes it may cause functional and design problems. The gaskets used should be conform to the national norms for windows and doors safety applications, do not release Toxic smokes in case of fire and insure the performances during all the component life lasting.

ALUMINIUM PROFILES SYSTEM FOR CURTAIN WALLS	
SYSTEM DIMENSIONS AND DESCRIPTION	
FIXED FfAME DEPTH:	Variable Design
STRUCTURE WIDTH:	50 mm
SEALING:	BY GASKETS
THERMAL BREAK:	RIGID EPDM GASKETS
ACCESSORIES:	PROJECTING ARMS
GLFING:	4 - 20 mm
ALUMINIUM ALLOY	AA 6063 T5





Sealing products:

All the sealing products employed during the fabrication of the components and installing the components on the building are to be confirm to the specific uses for aluminum profiles and its surface treatments. Sealing products should be PH neutral and specifically studied do not start any chemical or/and corrosive reaction with the windows and doors components, accessories, gaskets and surface treatments.

Accessories:

All the accessories used for the manufacturing, mounting, functioning and installation of this system are specifically studied for this system in order to insure performances and a correct functioning of the models. The use of others accessories different from the ones displayed in this catalogue it may effect or/and make dangerous the functioning of the component. Only the accessories studied for this system are the ones FI be used.

Acoustic performances:

The Acustical performances of the Windows and doors are depending on the correct mounting of all accessories and gaskets according to the catalogue specifications. The performances that you will obtain depend on various factors.

The nature of the sound, the distance of the component from the noise origin and the orientation of diffusion of the noise. The factor influencing the final performances of the window are the sound performances of the glass and the air permeability window's classification. In general to have an approximate idea of the final performances of the components from the Certified Insulating Power expressed in dB (decibel) of the glass, you should subtract from 8 to 2 decibels (8-5-2) 8 db for the lowest classification, 5 db for a medium performance to the air and only 2 db in case the window is classified to the top performances for air permeability. Only Laboratory tests will provide you in all the case a scientific and trustable classification.

1. Glass Thickness

- The thickness of the sheets are to be determined according to the static calculations and module size

2. External Lastra

- The outer panes of double glazing must be tempered with a thickness 6 ÷ 8 ÷ 10 mm with beveled edges, to be determined with the glassware.

3. Internal Lastra

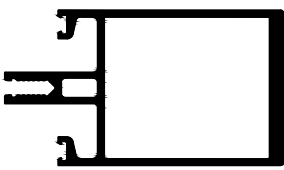
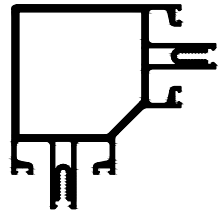
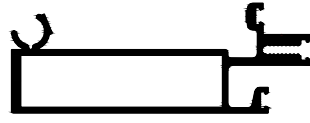
- The inner sheets of glazing must have ground edges, to be determined with the glassware and thickness 33.1÷44.1 ÷55.2mm

4. Outline of the structural seal and responsibilities

- The sealing of the structural boundary is determined by the structural sealant manufacturer, and performed only by authorized glassware, as a function of the static load and the size of the modules.
- The frame manufacturer must obtain a written assurance from the glass factory and the structural sealant manufacturer.
- The design of the glass sections shown on our catalog have been agreed and approved by the structural sealant manufacturer Dow Coming and SIKa.
- To obtain a guarantee from the structural sealant manufaturer, the fabricator and glassware should complete the Project Check List, to be sent back to him indicating the location of the construction site and m² of openable insertion.



ALUMINIUM PROFILE

90519		MULLION 80MM	<table><tr><td>WEIGHT</td><td>g/m</td><td>2.492</td></tr><tr><td>Jx</td><td>cm⁴</td><td>101.8</td></tr><tr><td>Jy</td><td>cm⁴</td><td>34.8</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	2.492	Jx	cm ⁴	101.8	Jy	cm ⁴	34.8			
WEIGHT	g/m	2.492													
Jx	cm ⁴	101.8													
Jy	cm ⁴	34.8													
90520		MULLION 115 MM	<table><tr><td>WEIGHT</td><td>g/m</td><td>2.927</td></tr><tr><td>Jx</td><td>cm⁴</td><td>256.4</td></tr><tr><td>Jy</td><td>cm⁴</td><td>47.1</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	2.927	Jx	cm ⁴	256.4	Jy	cm ⁴	47.1			
WEIGHT	g/m	2.927													
Jx	cm ⁴	256.4													
Jy	cm ⁴	47.1													
90517		MULLION 150 MM	<table><tr><td>WEIGHT</td><td>g/m</td><td>3.361</td></tr><tr><td>Jx</td><td>cm⁴</td><td>430.2</td></tr><tr><td>Jy</td><td>cm⁴</td><td>56.3</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	3.361	Jx	cm ⁴	430.2	Jy	cm ⁴	56.3			
WEIGHT	g/m	3.361													
Jx	cm ⁴	430.2													
Jy	cm ⁴	56.3													
90521*		MULLION 200 MM	<table><tr><td>WEIGHT</td><td>g/m</td><td>3.988</td></tr><tr><td>Jx</td><td>cm⁴</td><td>848.8</td></tr><tr><td>Jy</td><td>cm⁴</td><td>71.7</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	3.988	Jx	cm ⁴	848.8	Jy	cm ⁴	71.7			
WEIGHT	g/m	3.988													
Jx	cm ⁴	848.8													
Jy	cm ⁴	71.7													
90518		MULLION 170 MM @ 45°	<table><tr><td>WEIGHT</td><td>g/m</td><td>3.660</td></tr><tr><td>Jx</td><td>cm⁴</td><td>639.5</td></tr><tr><td>Jy</td><td>cm⁴</td><td>63.7</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	3.660	Jx	cm ⁴	639.5	Jy	cm ⁴	63.7			
WEIGHT	g/m	3.660													
Jx	cm ⁴	639.5													
Jy	cm ⁴	63.7													
90522*		MULLION CORNER 90°	<table><tr><td>WEIGHT</td><td>g/m</td><td>3.685</td></tr><tr><td>Jx</td><td>cm⁴</td><td>122.1</td></tr><tr><td>Jy</td><td>cm⁴</td><td>122.1</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	3.685	Jx	cm ⁴	122.1	Jy	cm ⁴	122.1			
WEIGHT	g/m	3.685													
Jx	cm ⁴	122.1													
Jy	cm ⁴	122.1													
90523*		MULLION VARIABLE °	<table><tr><td>WEIGHT</td><td>g/m</td><td>2.190</td></tr><tr><td>Jx</td><td>cm⁴</td><td>181.6</td></tr><tr><td>Jy</td><td>cm⁴</td><td>14.9</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	2.190	Jx	cm ⁴	181.6	Jy	cm ⁴	14.9			
WEIGHT	g/m	2.190													
Jx	cm ⁴	181.6													
Jy	cm ⁴	14.9													



ALUMINIUM PROFILE

90524*		MULLION VARIABLE °	<table><tr><td>WEIGHT</td><td>g/m</td><td>2.160</td></tr><tr><td>Jx</td><td>cm⁴</td><td>179.4</td></tr><tr><td>Jy</td><td>cm⁴</td><td>14.9</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	2.160	Jx	cm ⁴	179.4	Jy	cm ⁴	14.9			
WEIGHT	g/m	2.160													
Jx	cm ⁴	179.4													
Jy	cm ⁴	14.9													
90525*		HALF MULLION	<table><tr><td>WEIGHT</td><td>g/m</td><td>2.884</td></tr><tr><td>Jx</td><td>cm⁴</td><td>341.6</td></tr><tr><td>Jy</td><td>cm⁴</td><td>48.3</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	2.884	Jx	cm ⁴	341.6	Jy	cm ⁴	48.3			
WEIGHT	g/m	2.884													
Jx	cm ⁴	341.6													
Jy	cm ⁴	48.3													
90526*		MULLION 18 MM	<table><tr><td>WEIGHT</td><td>g/m</td><td>1.120</td></tr><tr><td>Jx</td><td>cm⁴</td><td>4.6</td></tr><tr><td>Jy</td><td>cm⁴</td><td>11.2</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	1.120	Jx	cm ⁴	4.6	Jy	cm ⁴	11.2			
WEIGHT	g/m	1.120													
Jx	cm ⁴	4.6													
Jy	cm ⁴	11.2													
90527*		REINFORCEMENT PROFILE	<table><tr><td>WEIGHT</td><td>g/m</td><td>5.940</td></tr><tr><td>Jx</td><td>cm⁴</td><td>452.9</td></tr><tr><td>Jy</td><td>cm⁴</td><td>12.2</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	5.940	Jx	cm ⁴	452.9	Jy	cm ⁴	12.2			
WEIGHT	g/m	5.940													
Jx	cm ⁴	452.9													
Jy	cm ⁴	12.2													
90535*		TRANSOM 22.5 MM	<table><tr><td>WEIGHT</td><td>g/m</td><td>1.090</td></tr><tr><td>Jx</td><td>cm⁴</td><td>2.18</td></tr><tr><td>Jy</td><td>cm⁴</td><td>4.1</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	1.090	Jx	cm ⁴	2.18	Jy	cm ⁴	4.1			
WEIGHT	g/m	1.090													
Jx	cm ⁴	2.18													
Jy	cm ⁴	4.1													
90536*		TRANSOM 84.5 MM	<table><tr><td>WEIGHT</td><td>g/m</td><td>2.170</td></tr><tr><td>Jx</td><td>cm⁴</td><td>72.8</td></tr><tr><td>Jy</td><td>cm⁴</td><td>28.9</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	2.170	Jx	cm ⁴	72.8	Jy	cm ⁴	28.9			
WEIGHT	g/m	2.170													
Jx	cm ⁴	72.8													
Jy	cm ⁴	28.9													
90537*		TRANSOM 119.5 MM	<table><tr><td>WEIGHT</td><td>g/m</td><td>2.586</td></tr><tr><td>Jx</td><td>cm⁴</td><td>180.6</td></tr><tr><td>Jy</td><td>cm⁴</td><td>40.1</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	2.586	Jx	cm ⁴	180.6	Jy	cm ⁴	40.1			
WEIGHT	g/m	2.586													
Jx	cm ⁴	180.6													
Jy	cm ⁴	40.1													

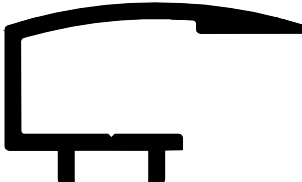


ALUMINIUM PROFILE

90538*		TRANSOM 154.5 MM	<table><tr><td>WEIGHT</td><td>g/m</td><td>3.002</td></tr><tr><td>Jx</td><td>cm⁴</td><td>301.4</td></tr><tr><td>Jy</td><td>cm⁴</td><td>46.5</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	3.002	Jx	cm ⁴	301.4	Jy	cm ⁴	46.5			
WEIGHT	g/m	3.002													
Jx	cm ⁴	301.4													
Jy	cm ⁴	46.5													
90539*		TRANSOM 204.5 MM	<table><tr><td>WEIGHT</td><td>g/m</td><td>3.598</td></tr><tr><td>Jx</td><td>cm⁴</td><td>604.4</td></tr><tr><td>Jy</td><td>cm⁴</td><td>62.6</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	3.598	Jx	cm ⁴	604.4	Jy	cm ⁴	62.6			
WEIGHT	g/m	3.598													
Jx	cm ⁴	604.4													
Jy	cm ⁴	62.6													
90531		SPANDREL 18 MM	<table><tr><td>WEIGHT</td><td>g/m</td><td>0.323</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	0.323									
WEIGHT	g/m	0.323													
90528		FRAME	<table><tr><td>WEIGHT</td><td>g/m</td><td>1.563</td></tr><tr><td>Jx</td><td>cm⁴</td><td>6.09</td></tr><tr><td>Jy</td><td>cm⁴</td><td>18.03</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	1.563	Jx	cm ⁴	6.09	Jy	cm ⁴	18.03			
WEIGHT	g/m	1.563													
Jx	cm ⁴	6.09													
Jy	cm ⁴	18.03													
90529		SASH	<table><tr><td>WEIGHT</td><td>g/m</td><td>1.358</td></tr><tr><td>Jx</td><td>cm⁴</td><td>4.03</td></tr><tr><td>Jy</td><td>cm⁴</td><td>16.05</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	1.358	Jx	cm ⁴	4.03	Jy	cm ⁴	16.05			
WEIGHT	g/m	1.358													
Jx	cm ⁴	4.03													
Jy	cm ⁴	16.05													
90540*		SASH / FIX	<table><tr><td>WEIGHT</td><td>g/m</td><td>1.545</td></tr><tr><td>Jx</td><td>cm⁴</td><td>3.03</td></tr><tr><td>Jy</td><td>cm⁴</td><td>14.71</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	1.545	Jx	cm ⁴	3.03	Jy	cm ⁴	14.71			
WEIGHT	g/m	1.545													
Jx	cm ⁴	3.03													
Jy	cm ⁴	14.71													
90541*		GLASS SUPPORT Assembly with 90540	<table><tr><td>WEIGHT</td><td>g/m</td><td>0.182</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	0.182									
WEIGHT	g/m	0.182													



ALUMINIUM PROFILE

90542*		Aluminum Accessories Assembly with 90540	WEIGHT g/m	0.444
90543*		Aluminum Accessories Assembly with 90540	WEIGHT g/m	0.456
90544*		Aluminum Accessories Assembly with 90540	WEIGHT g/m	0.524
90545*		Aluminum Accessories Assembly with 90540	WEIGHT g/m	1.157
90546*		Aluminum Accessories Assembly with 90540	WEIGHT g/m	0.487
90516		Transom Cover	WEIGHT g/m	0.316
90559		Glazing Adaptor 14 mm	WEIGHT g/m	0.492

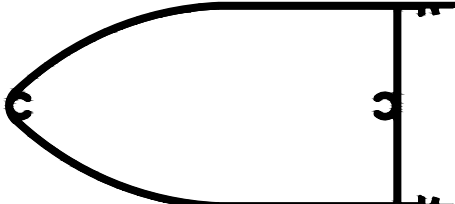
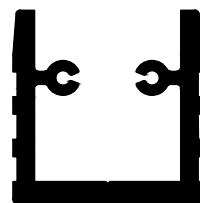
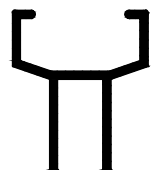
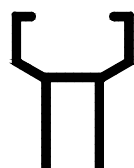
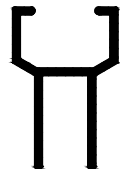


ALUMINIUM PROFILE

90514		Cover Radius Profile 20 mm	WEIGHT g/m 0.274
90513		Cover Profile 15 mm	WEIGHT g/m 0.258
90560		Glazing Adaptor 20 mm	WEIGHT g/m 0.183
90515		Cover Profile 20 mm	WEIGHT g/m 0.291
90512		Pressure Plate	WEIGHT g/m 0.445
90561*		TUBE 80 x 20	WEIGHT g/m 1.529
90511		Bull Nose Cover Profile 80 mm	WEIGHT g/m 0.984

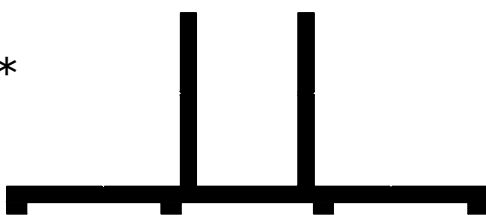
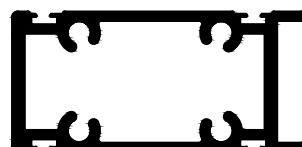
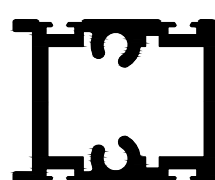


ALUMINIUM PROFILE

90557		Bull Nose Cover Profile 120 mm	<table><tr><td>WEIGHT</td><td>g/m</td><td>1.335</td></tr><tr><td>Jx</td><td>cm ⁴</td><td></td></tr><tr><td>Jy</td><td>cm ⁴</td><td></td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	1.335	Jx	cm ⁴		Jy	cm ⁴				
WEIGHT	g/m	1.335													
Jx	cm ⁴														
Jy	cm ⁴														
90562*		Cleat Profile	<table><tr><td>WEIGHT</td><td>g/m</td><td>1.815</td></tr><tr><td colspan="2"></td><td></td></tr><tr><td colspan="2"></td><td></td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	1.815									
WEIGHT	g/m	1.815													
90533		Glass Toggle Profile	<table><tr><td>WEIGHT</td><td>g/m</td><td>0.390</td></tr><tr><td colspan="2"></td><td></td></tr><tr><td colspan="2"></td><td></td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	0.390									
WEIGHT	g/m	0.390													
90563		Glass Spacer 18 mm	<table><tr><td>WEIGHT</td><td>g/m</td><td>0.162</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	0.162									
WEIGHT	g/m	0.162													
90530		Glass Spacer 16 mm	<table><tr><td>WEIGHT</td><td>g/m</td><td>0.156</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	0.156									
WEIGHT	g/m	0.156													
90547		Glass Spacer 14 mm	<table><tr><td>WEIGHT</td><td>g/m</td><td>0.153</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	0.153									
WEIGHT	g/m	0.153													
90532		Glass Toggle Profile	<table><tr><td>WEIGHT</td><td>g/m</td><td>0.710</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	0.710									
WEIGHT	g/m	0.710													

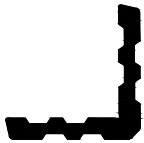
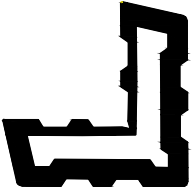
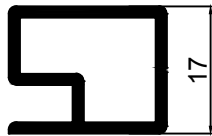


ALUMINIUM PROFILE

90548*		Bracket Profile	<table><tr><td>WEIGHT</td><td>g/m</td><td>9.910</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	9.910									
WEIGHT	g/m	9.910													
90549*		Extension Sleeve Profile 178 mm	<table><tr><td>WEIGHT</td><td>g/m</td><td>4.368</td></tr><tr><td>Jx</td><td>cm⁴</td><td>602.7</td></tr><tr><td>Jy</td><td>cm⁴</td><td>61.5</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	4.368	Jx	cm ⁴	602.7	Jy	cm ⁴	61.5			
WEIGHT	g/m	4.368													
Jx	cm ⁴	602.7													
Jy	cm ⁴	61.5													
90550*		Extension Sleeve Profile 128 mm	<table><tr><td>WEIGHT</td><td>g/m</td><td>3.558</td></tr><tr><td>Jx</td><td>cm⁴</td><td>211.2</td></tr><tr><td>Jy</td><td>cm⁴</td><td>40.3</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	3.558	Jx	cm ⁴	211.2	Jy	cm ⁴	40.3			
WEIGHT	g/m	3.558													
Jx	cm ⁴	211.2													
Jy	cm ⁴	40.3													
90551*		Extension Sleeve Profile 91 mm	<table><tr><td>WEIGHT</td><td>g/m</td><td>2.960</td></tr><tr><td>Jx</td><td>cm⁴</td><td>101.5</td></tr><tr><td>Jy</td><td>cm⁴</td><td>30.8</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	2.960	Jx	cm ⁴	101.5	Jy	cm ⁴	30.8			
WEIGHT	g/m	2.960													
Jx	cm ⁴	101.5													
Jy	cm ⁴	30.8													
90552*		Extension Sleeve Profile 55.5 mm	<table><tr><td>WEIGHT</td><td>g/m</td><td>2.215</td></tr><tr><td>Jx</td><td>cm⁴</td><td>43.7</td></tr><tr><td>Jy</td><td>cm⁴</td><td>28.2</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	2.215	Jx	cm ⁴	43.7	Jy	cm ⁴	28.2			
WEIGHT	g/m	2.215													
Jx	cm ⁴	43.7													
Jy	cm ⁴	28.2													
90553*		Glass Holder 33.7 mm	<table><tr><td>WEIGHT</td><td>g/m</td><td>0.270</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	0.270									
WEIGHT	g/m	0.270													
90554*		Glass Holder 26 mm	<table><tr><td>WEIGHT</td><td>g/m</td><td>0.265</td></tr><tr><td colspan="3"></td></tr></table>	WEIGHT	g/m	0.265									
WEIGHT	g/m	0.265													



ALUMINIUM PROFILE

90534 	CHAMPERING CORNER JOINT FOR SASH	<table border="1"> <tr> <td>WEIGHT</td><td>g/m</td><td>1.991</td></tr> <tr> <td colspan="3" style="height: 60px;"></td></tr> </table>	WEIGHT	g/m	1.991			
WEIGHT	g/m	1.991						
90555 	CHAMPERING CORNER JOINT FOR SASH	<table border="1"> <tr> <td>WEIGHT</td><td>g/m</td><td>0.918</td></tr> <tr> <td colspan="3" style="height: 60px;"></td></tr> </table>	WEIGHT	g/m	0.918			
WEIGHT	g/m	0.918						
90556* 	CHAMPERING CORNER JOINT FOR SASH	<table border="1"> <tr> <td>WEIGHT</td><td>g/m</td><td>4.696</td></tr> <tr> <td colspan="3" style="height: 60px;"></td></tr> </table>	WEIGHT	g/m	4.696			
WEIGHT	g/m	4.696						
90557 	SPANDREL 19 MM	<table border="1"> <tr> <td>WEIGHT</td><td></td><td>0.331</td></tr> <tr> <td colspan="3" style="height: 60px;"></td></tr> </table>	WEIGHT		0.331			
WEIGHT		0.331						
90558 	SPANDREL 17 MM	<table border="1"> <tr> <td>WEIGHT</td><td>g/m</td><td>0.315</td></tr> <tr> <td colspan="3" style="height: 60px;"></td></tr> </table>	WEIGHT	g/m	0.315			
WEIGHT	g/m	0.315						
90564* 	Pressure Plate	<table border="1"> <tr> <td>WEIGHT</td><td>g/m</td><td>0.450</td></tr> <tr> <td colspan="3" style="height: 60px;"></td></tr> </table>	WEIGHT	g/m	0.450			
WEIGHT	g/m	0.450						
		<table border="1"> <tr> <td>WEIGHT</td><td>g/m</td><td></td></tr> <tr> <td colspan="3" style="height: 60px;"></td></tr> </table>	WEIGHT	g/m				
WEIGHT	g/m							

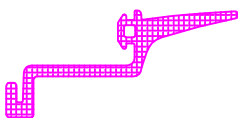
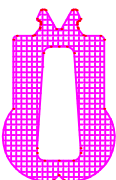


GASKET

QXG018		EPDM GASKET 2mm	WEIGHT g/m	
QXG014		EPDM GASKET 3mm	WEIGHT g/m	
QXG017		EPDM GASKET 4mm	WEIGHT g/m	
QXG024		EPDM GASKET 5mm	WEIGHT	
QXG019		EPDM GASKET 7mm	WEIGHT g/m	
QXG023		EPDM GASKET 8mm	WEIGHT g/m	
QXG012		EPDM GASKET 9mm	WEIGHT g/m	



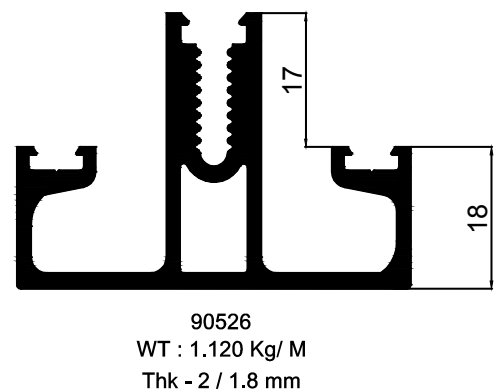
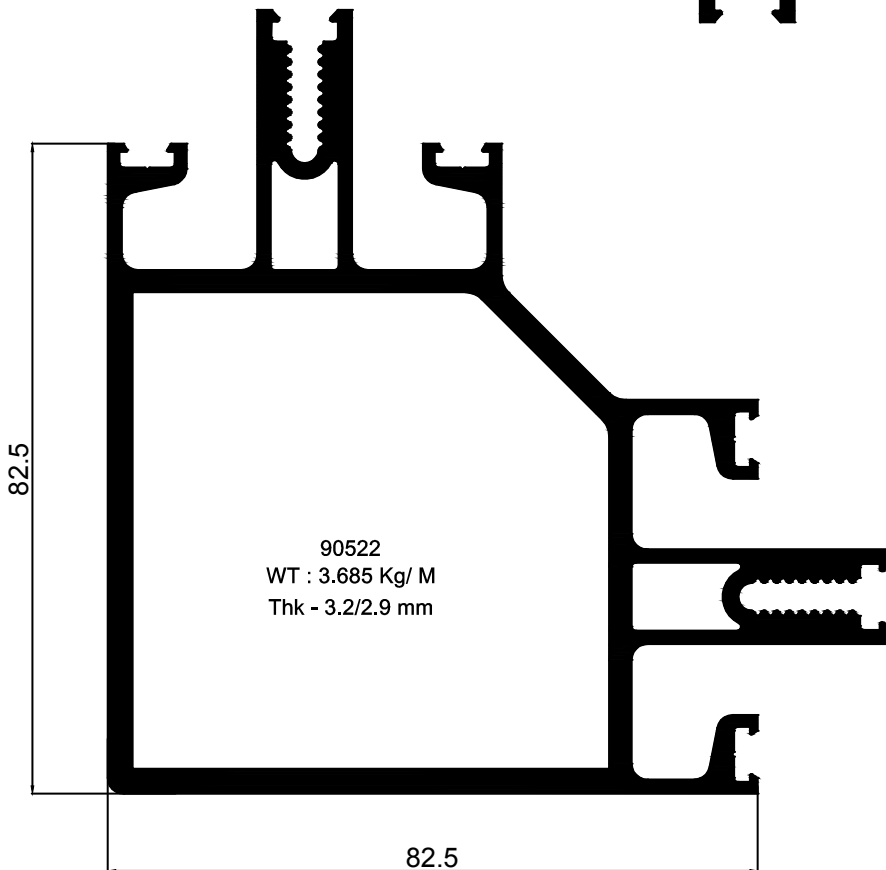
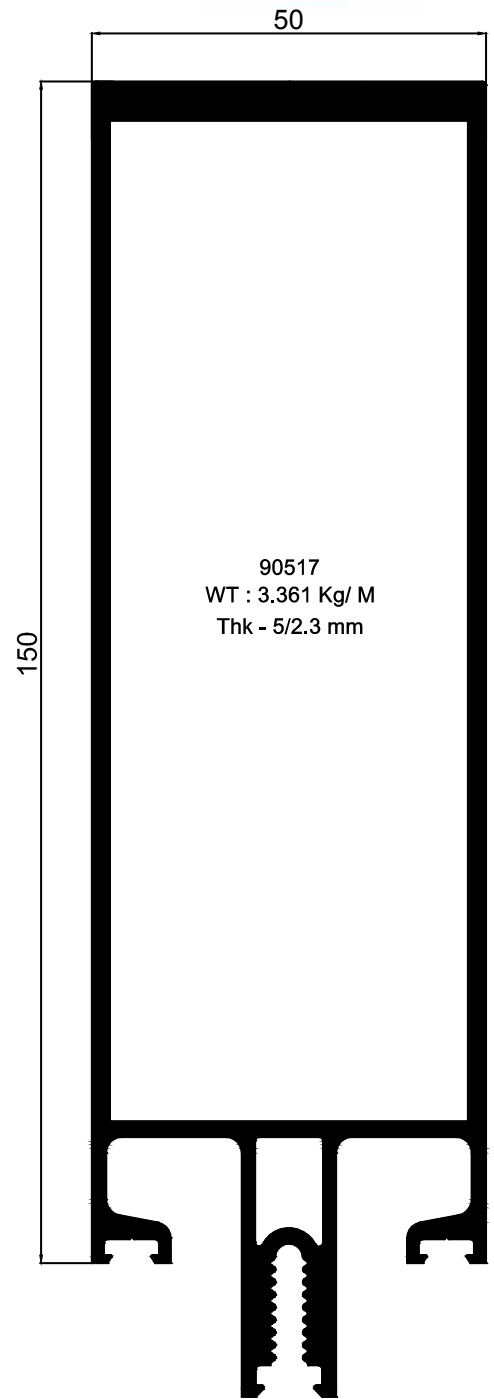
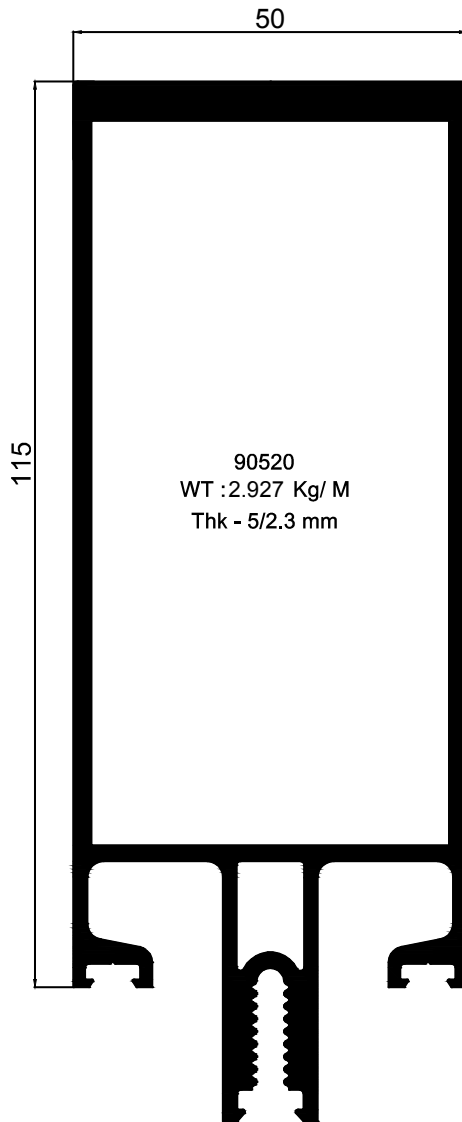
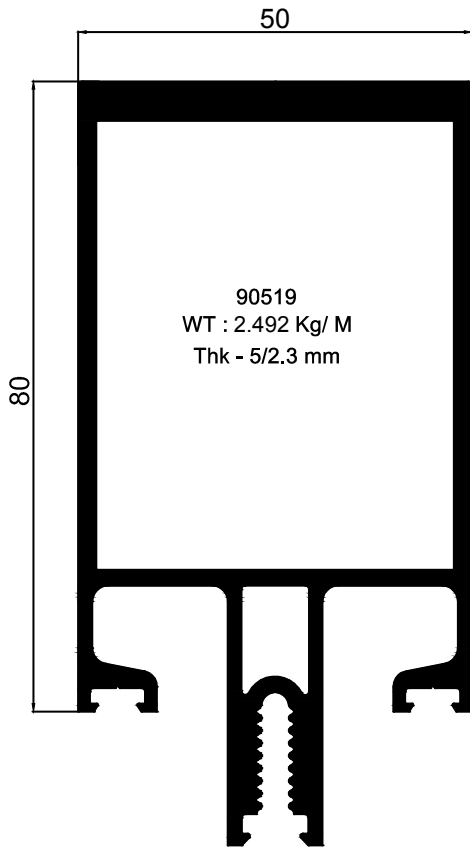
GASKET

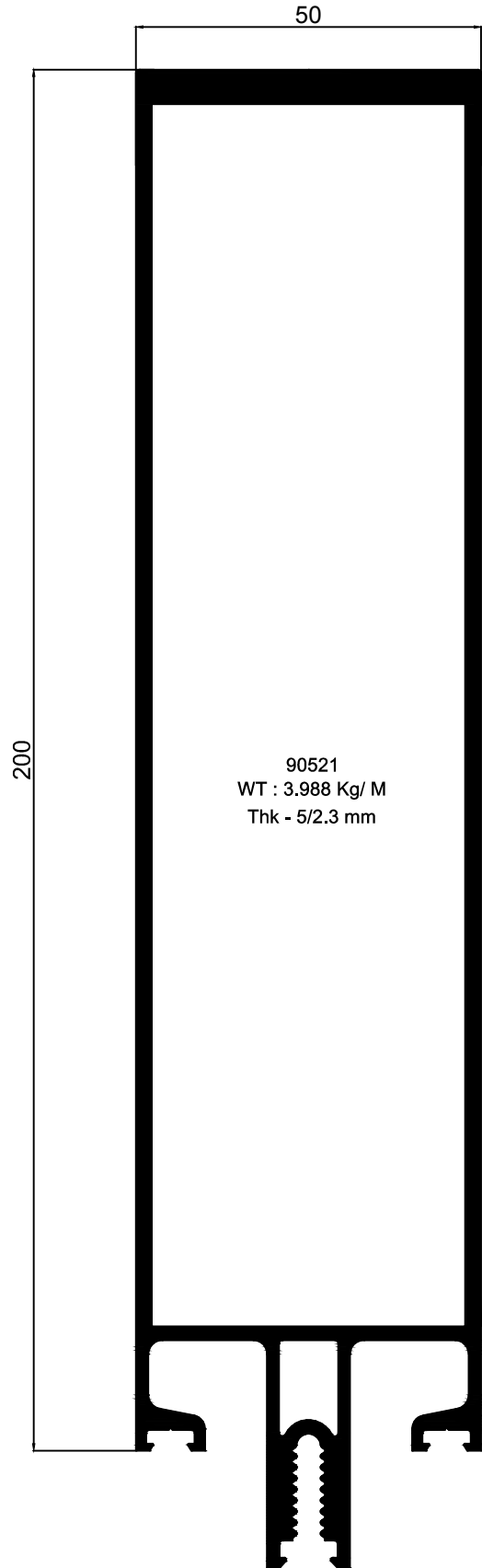
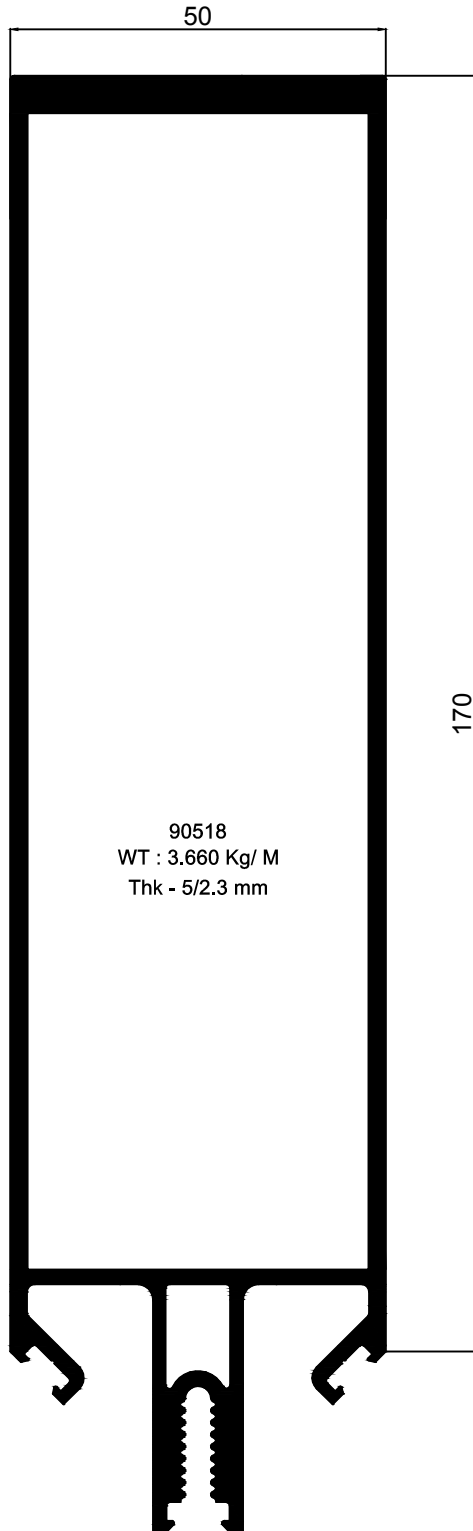
QXG009		EPDM GASKET Connection Gasket	WEIGHT g/m	
QXG016		EPDM GASKET	WEIGHT g/m	
QXG015		EPDM GASKET	WEIGHT g/m	
QXG021		EPDM GASKET	WEIGHT	
QXG013		EPDM GASKET 20mm Middle	WEIGHT g/m	
QXG022		EPDM GASKET	WEIGHT g/m	
QXG020		EPDM GASKET	WEIGHT g/m	

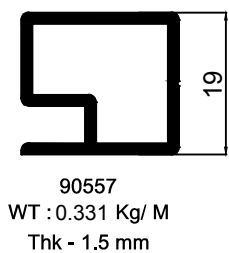
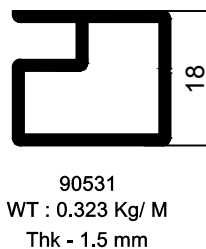
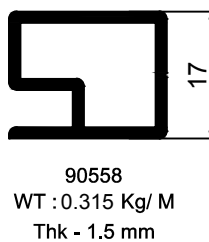
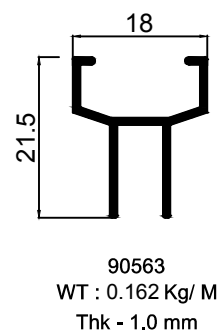
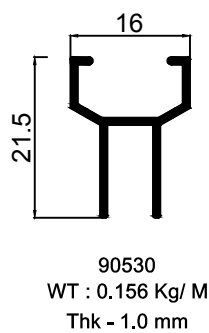
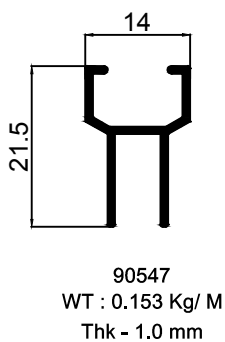
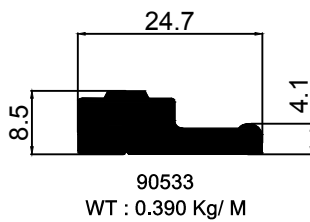
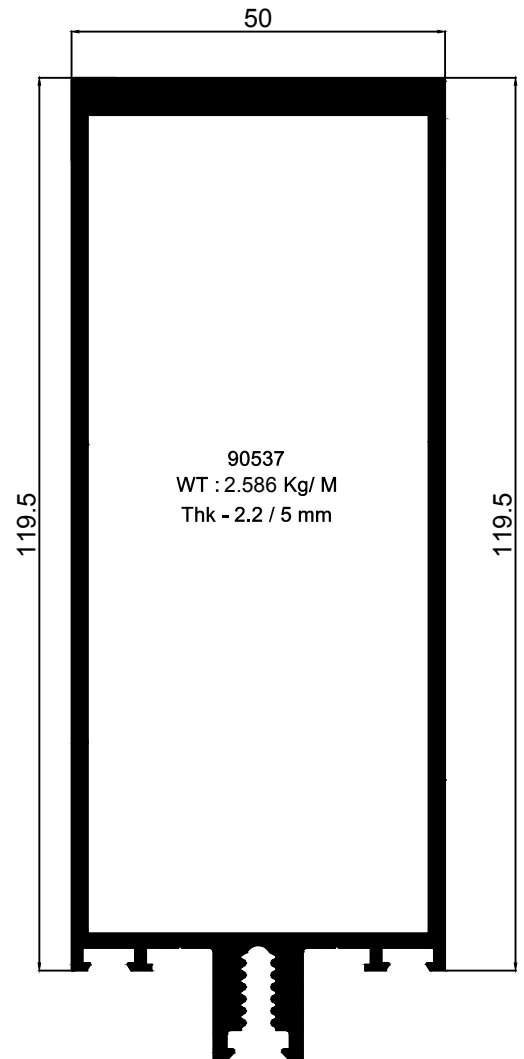
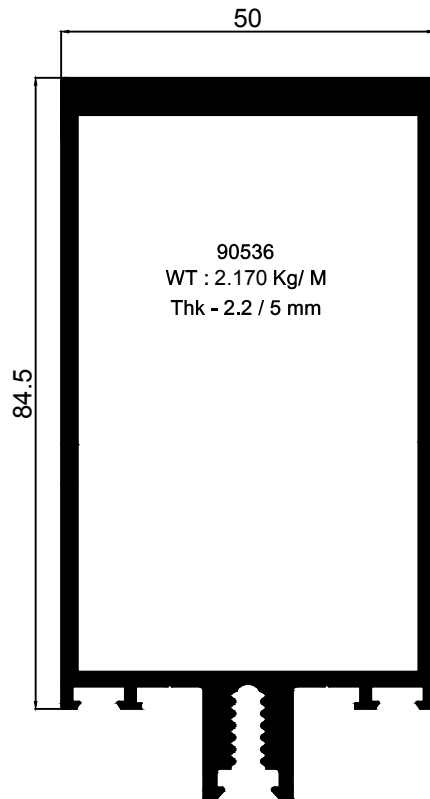
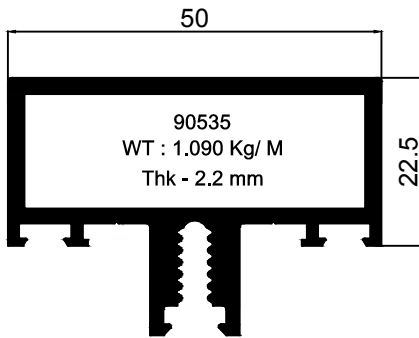


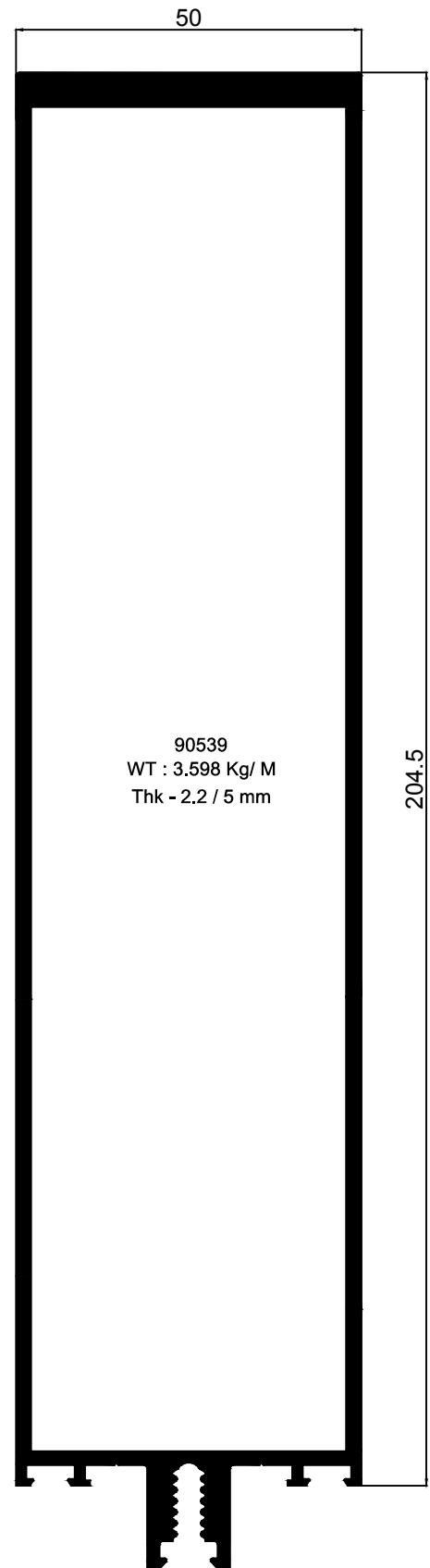
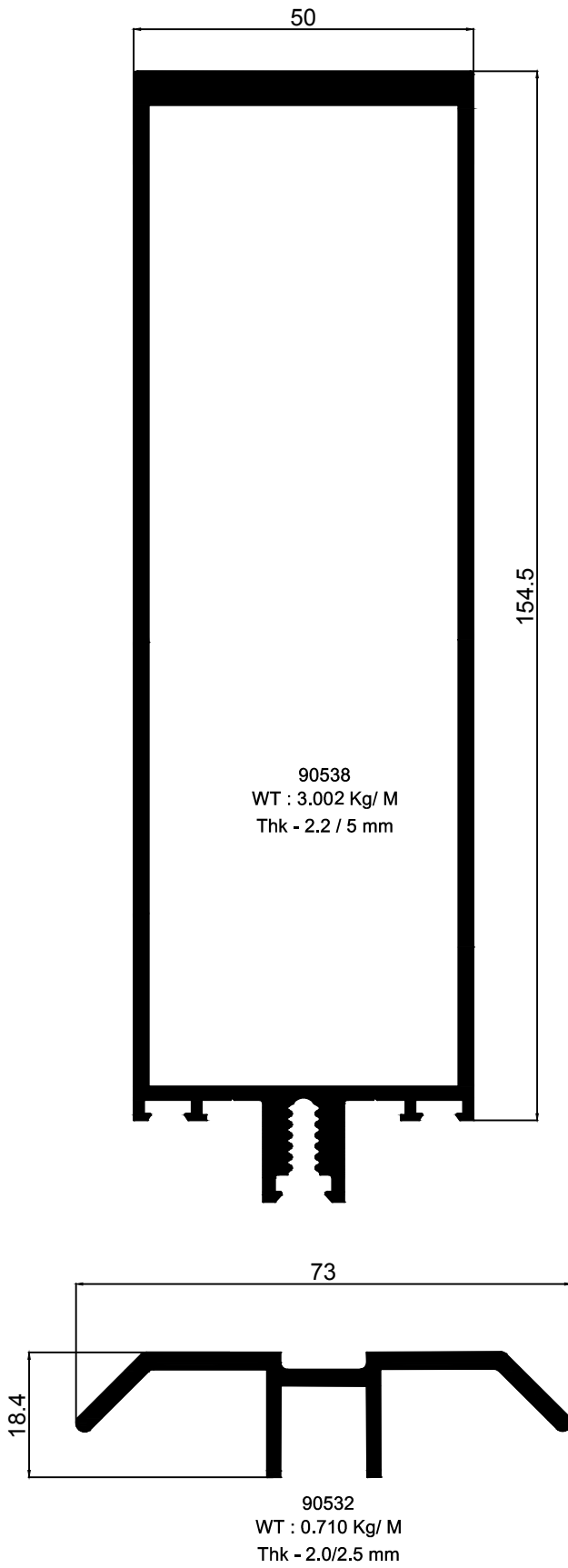
ALUMINIUM POLYAMIDE

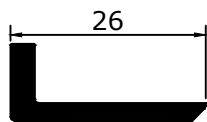
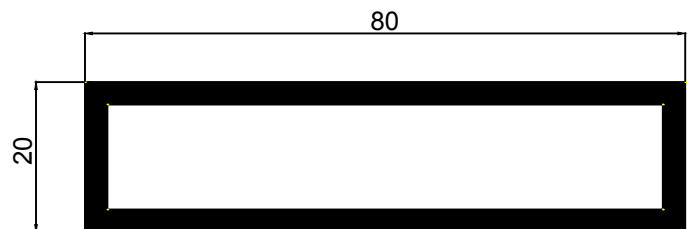
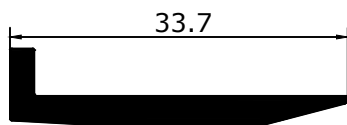
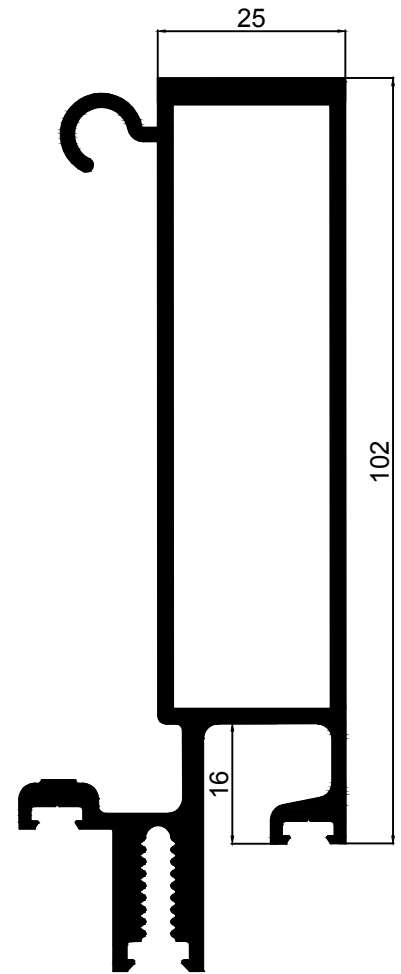
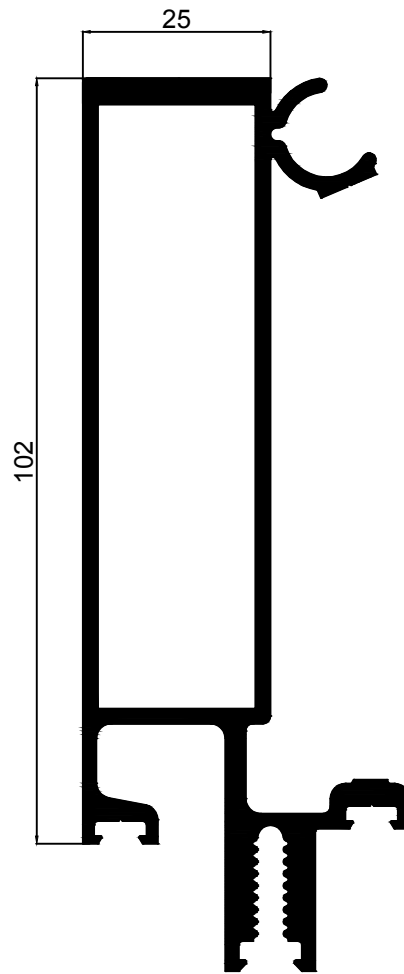
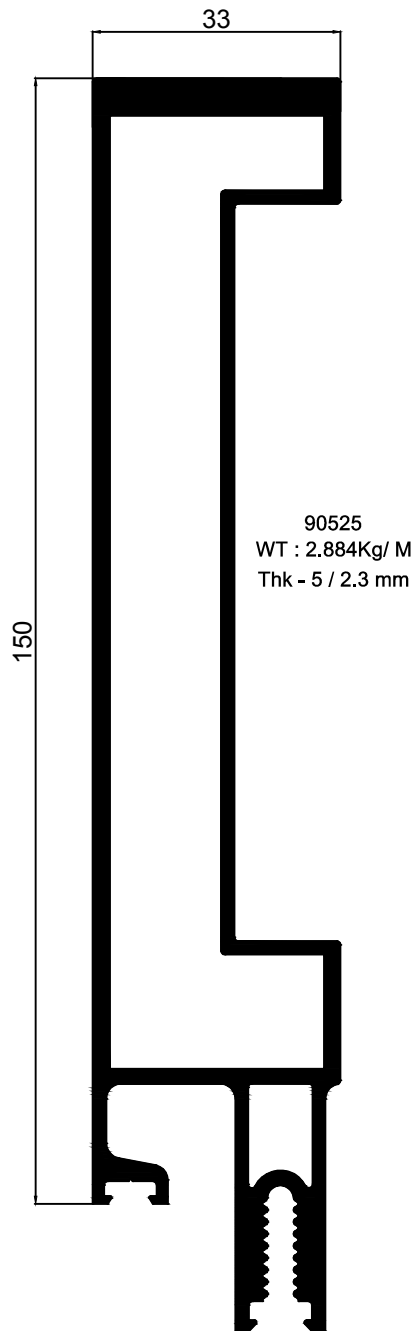
QXB001 fm 121 	Weather Strip / Brush	<table border="1"> <tr> <td>WEIGHT</td><td>g/m</td><td></td></tr> <tr> <td colspan="3" style="height: 60px;"></td> </tr> </table>	WEIGHT	g/m				
WEIGHT	g/m							
		<table border="1"> <tr> <td>WEIGHT</td><td>g/m</td><td></td></tr> <tr> <td colspan="3" style="height: 60px;"></td> </tr> </table>	WEIGHT	g/m				
WEIGHT	g/m							
QXP004 	Polyamide Strip 13mm	<table border="1"> <tr> <td>WEIGHT</td><td>g/m</td><td></td></tr> <tr> <td colspan="3" style="height: 60px;"></td> </tr> </table>	WEIGHT	g/m				
WEIGHT	g/m							
QXP005 	Polyamide Strip 15mm	<table border="1"> <tr> <td>WEIGHT</td><td></td><td></td></tr> <tr> <td colspan="3" style="height: 60px;"></td> </tr> </table>	WEIGHT					
WEIGHT								
QXP006 	Polyamide Strip 19mm	<table border="1"> <tr> <td>WEIGHT</td><td>g/m</td><td></td></tr> <tr> <td colspan="3" style="height: 60px;"></td> </tr> </table>	WEIGHT	g/m				
WEIGHT	g/m							
		<table border="1"> <tr> <td>WEIGHT</td><td>g/m</td><td></td></tr> <tr> <td colspan="3" style="height: 60px;"></td> </tr> </table>	WEIGHT	g/m				
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WEIGHT	g/m							

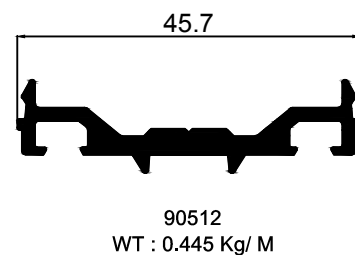
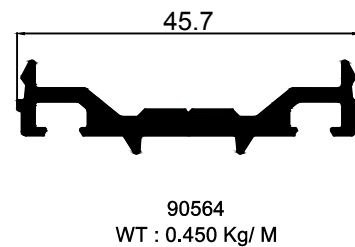
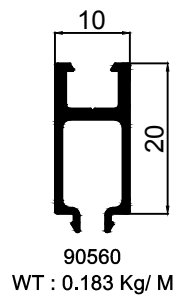
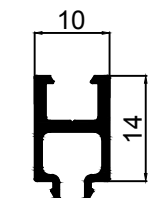
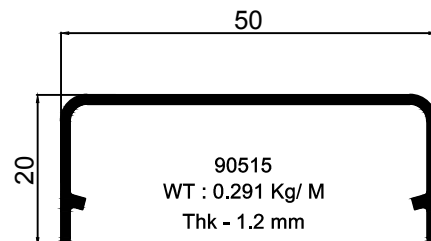
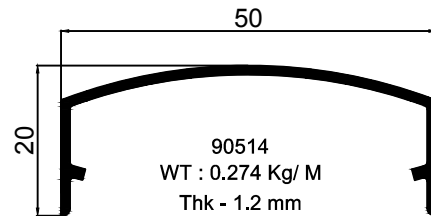
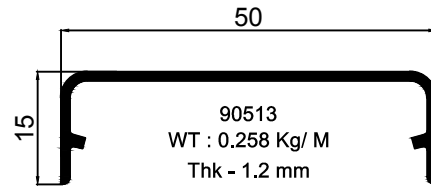
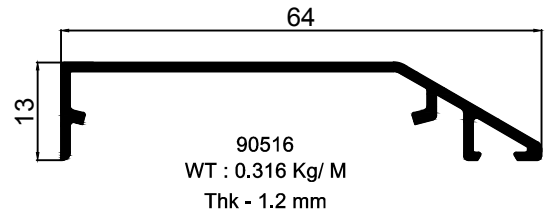
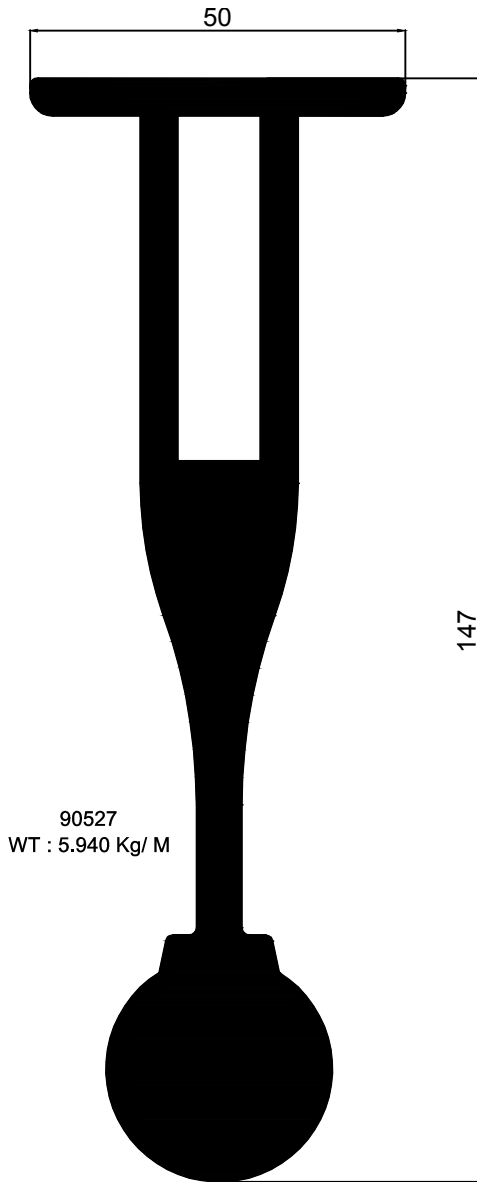


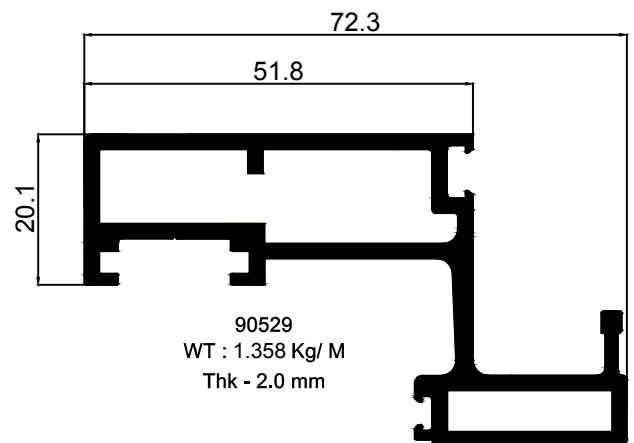
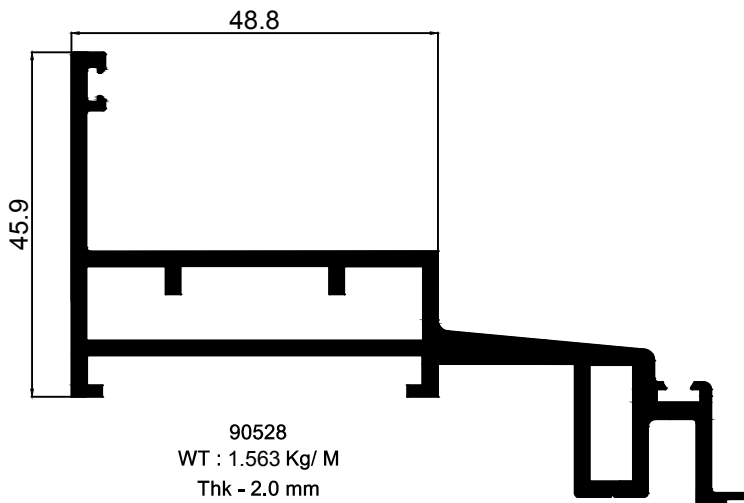
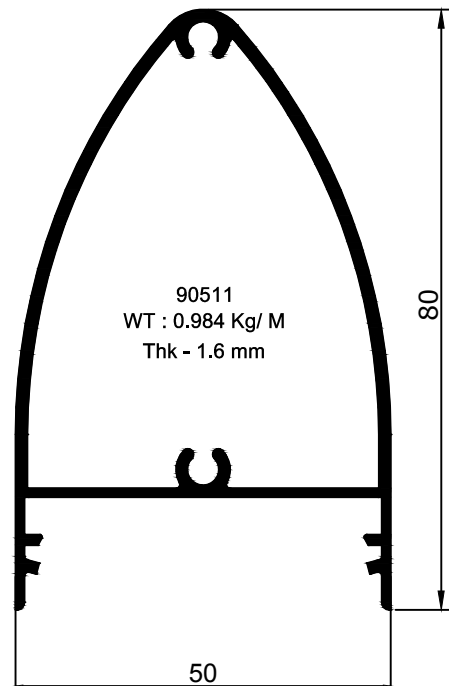
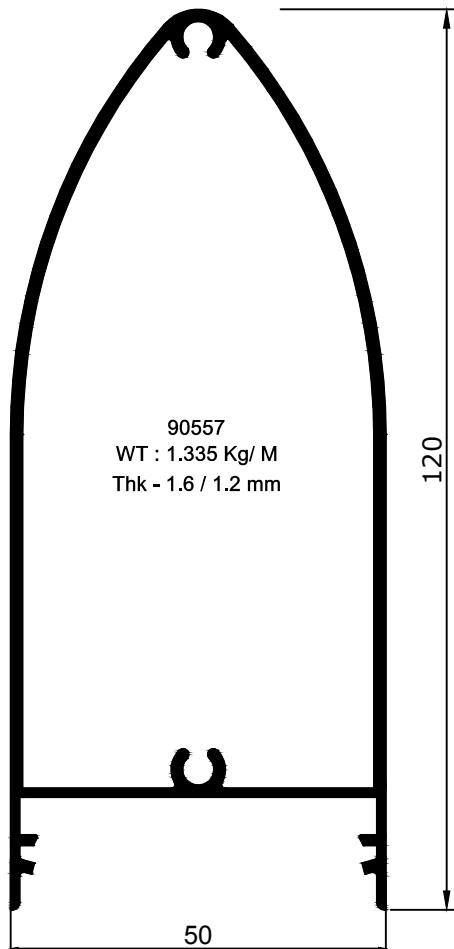


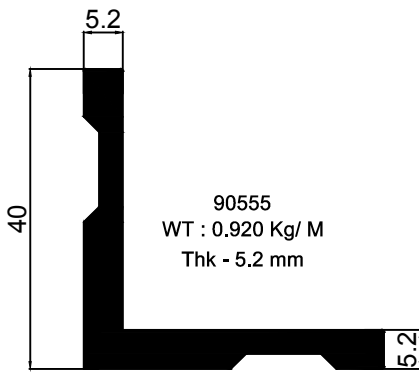
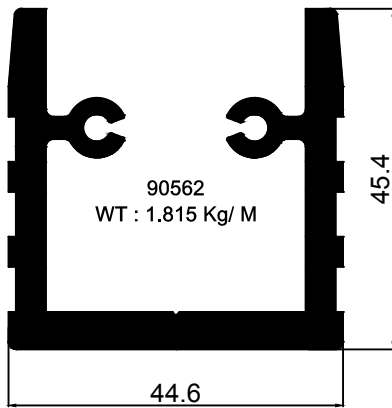




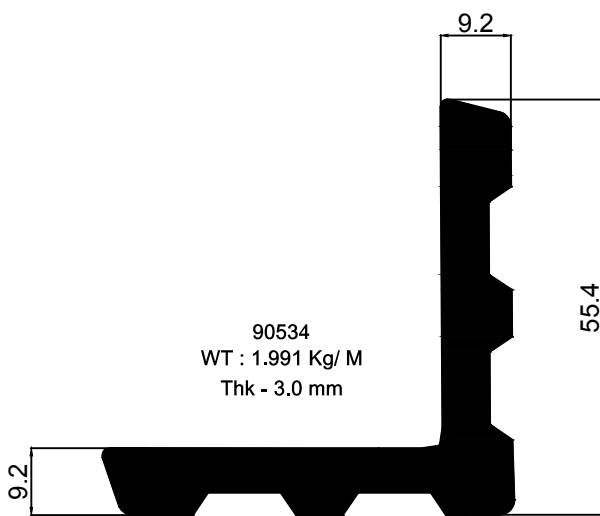








Crimping Corner For 90529



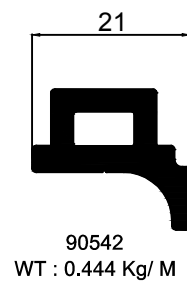
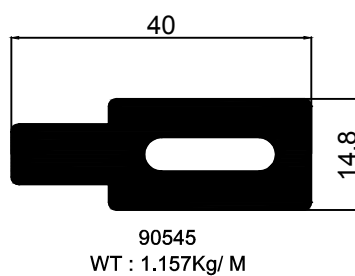
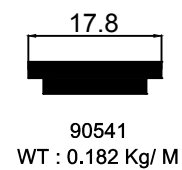
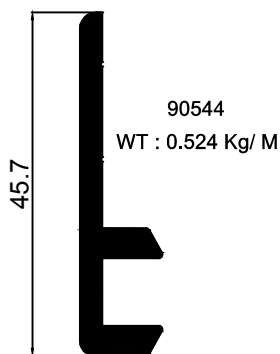
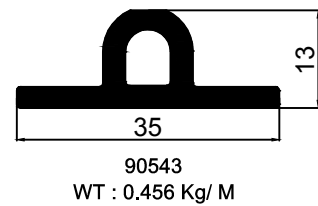
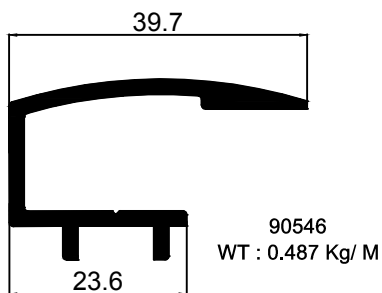
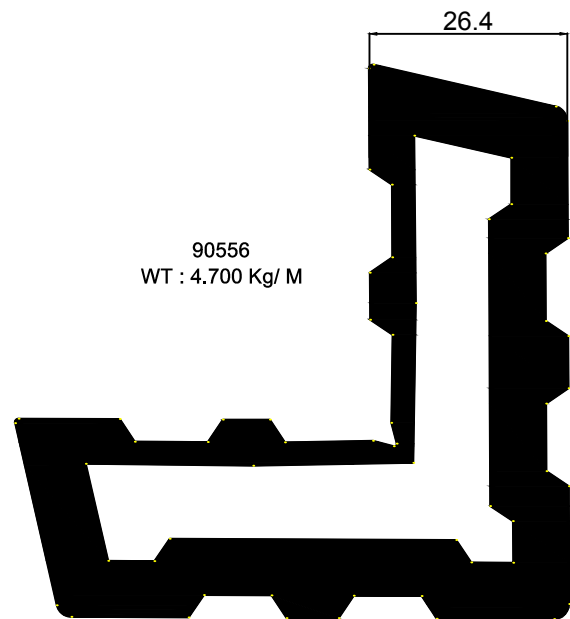
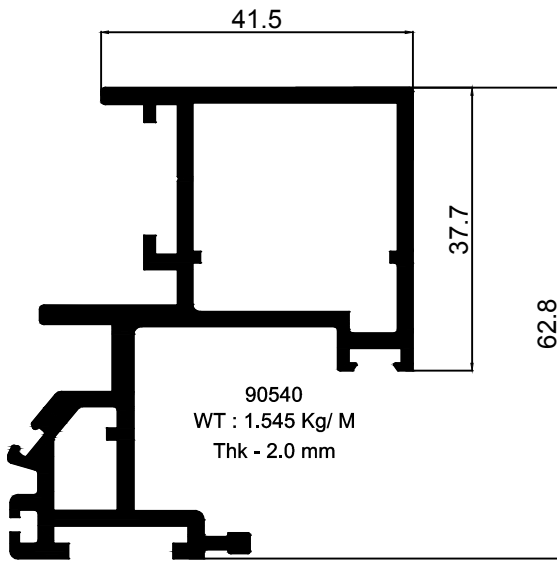
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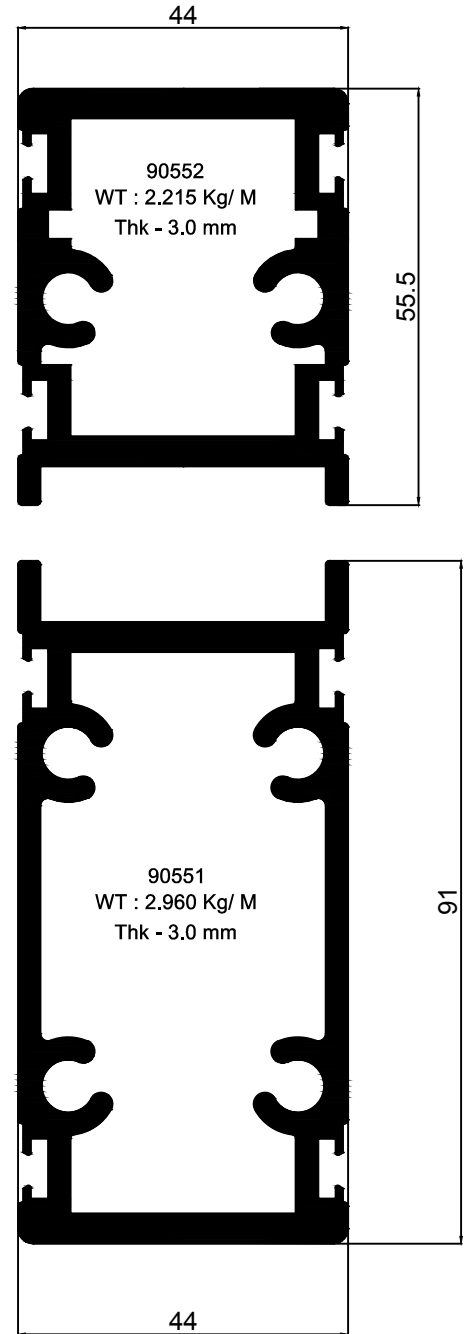
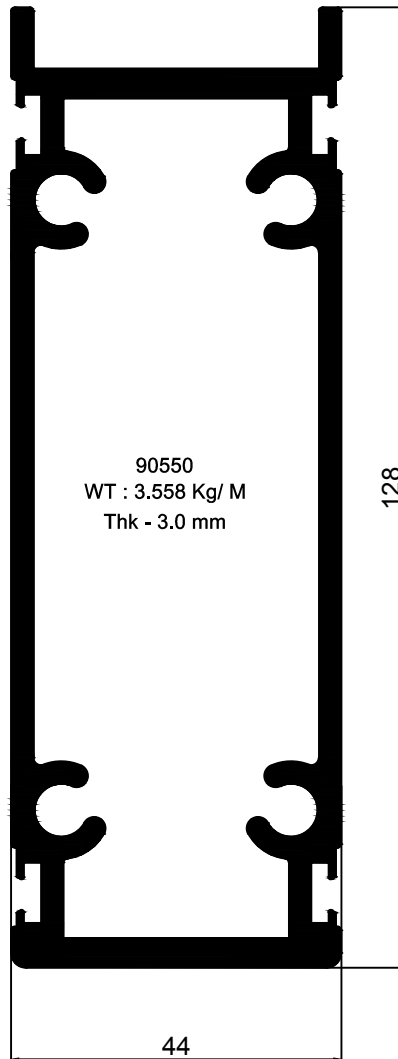
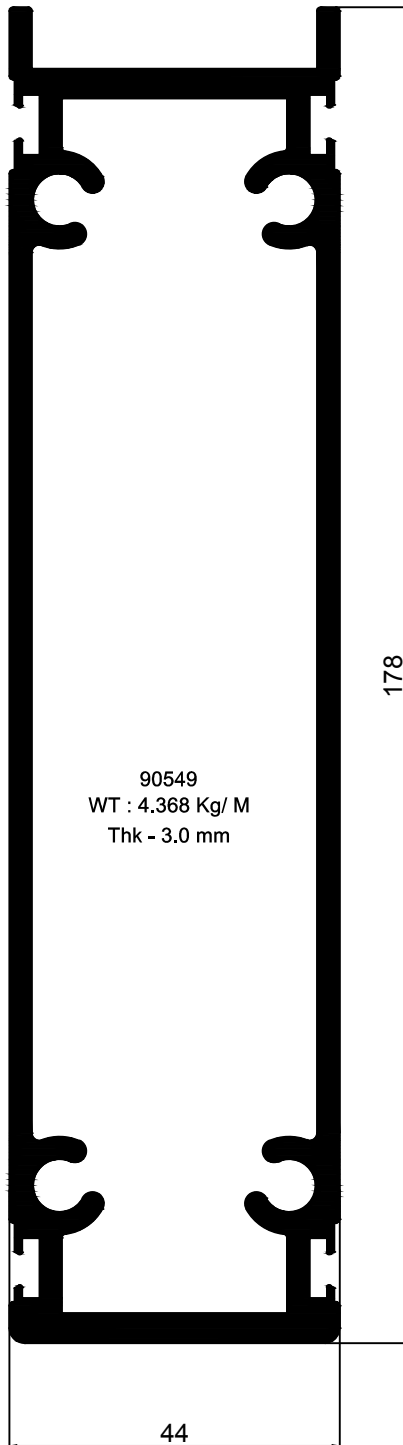
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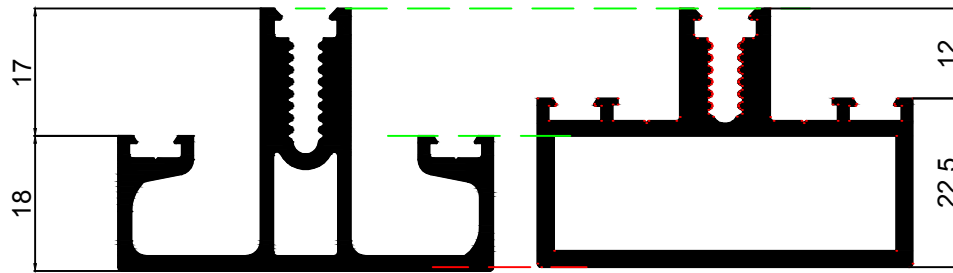
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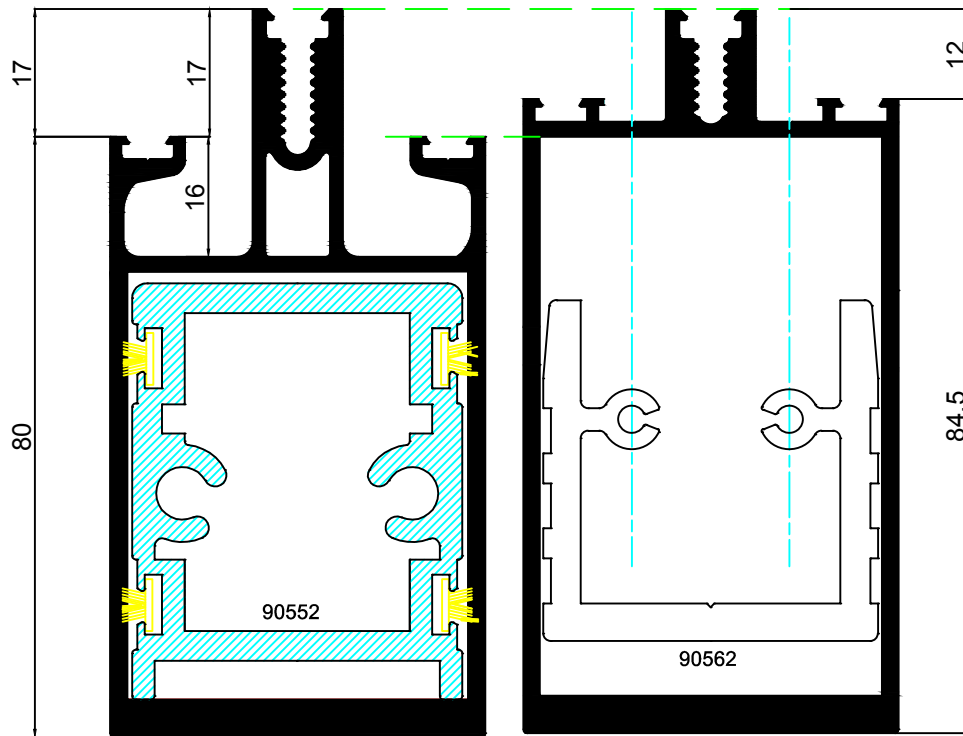






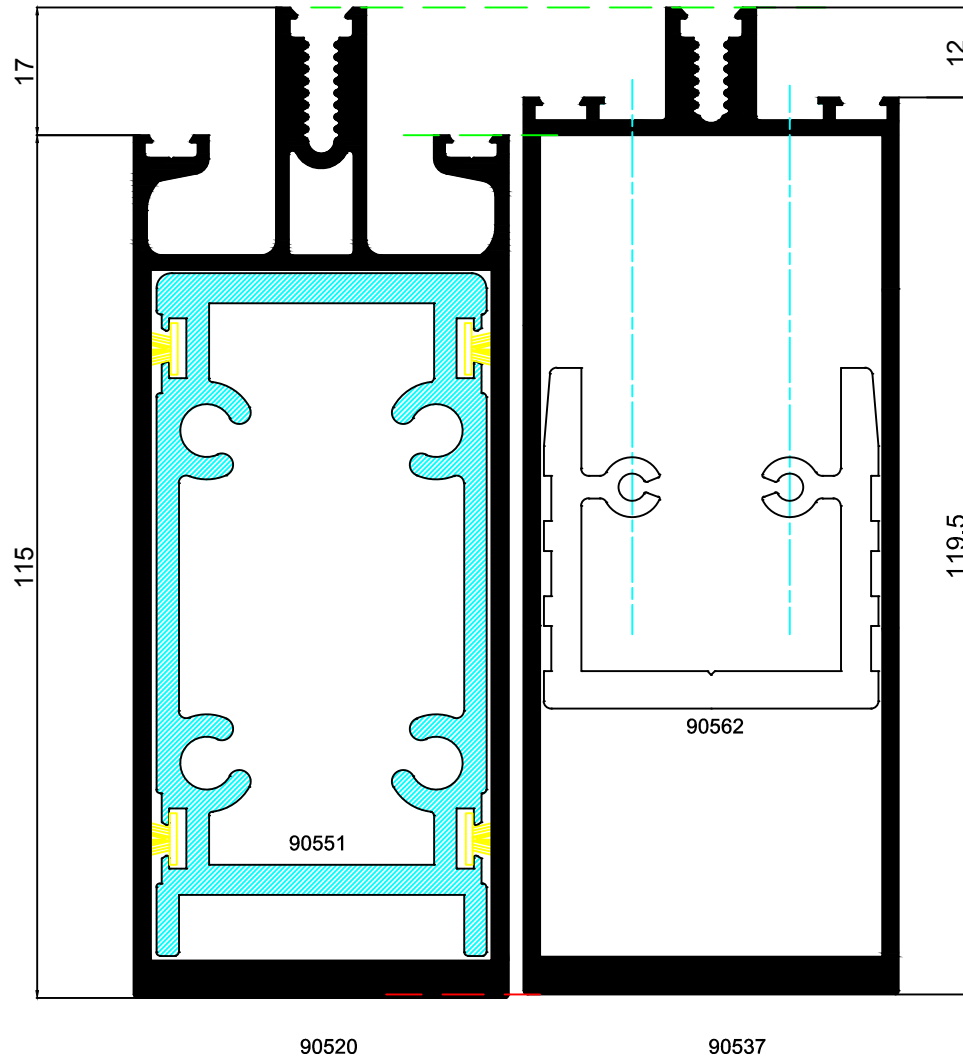
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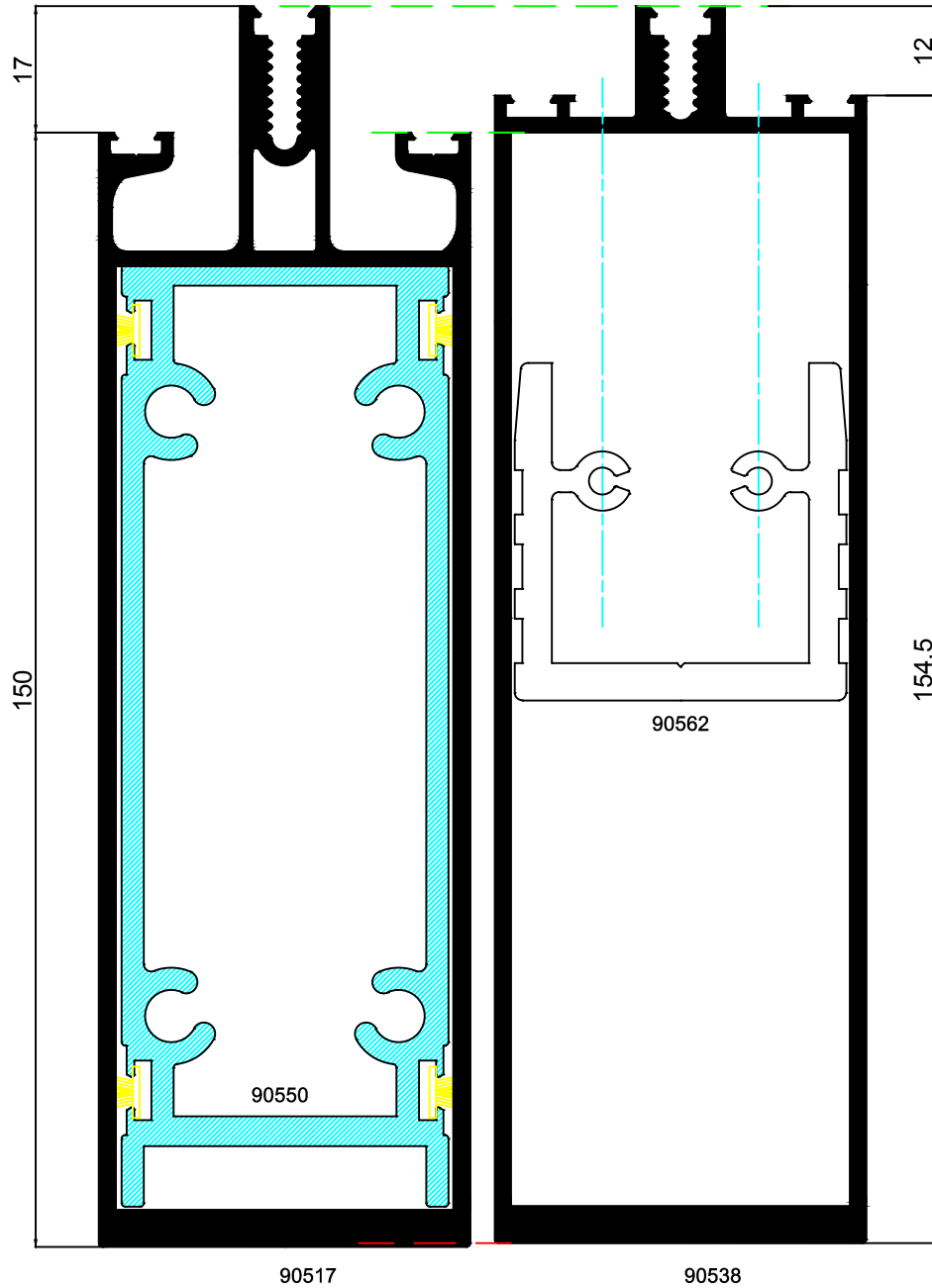
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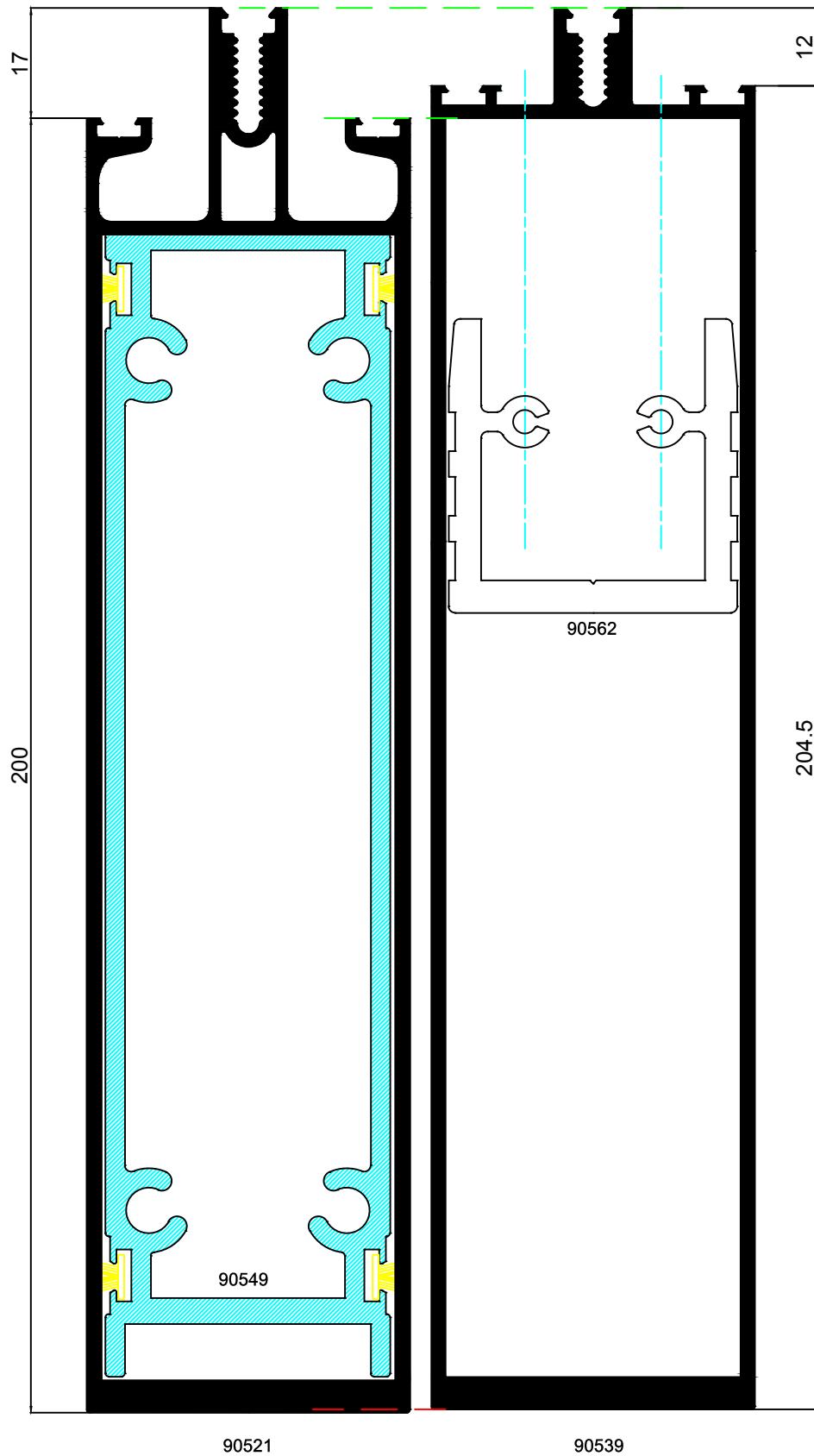


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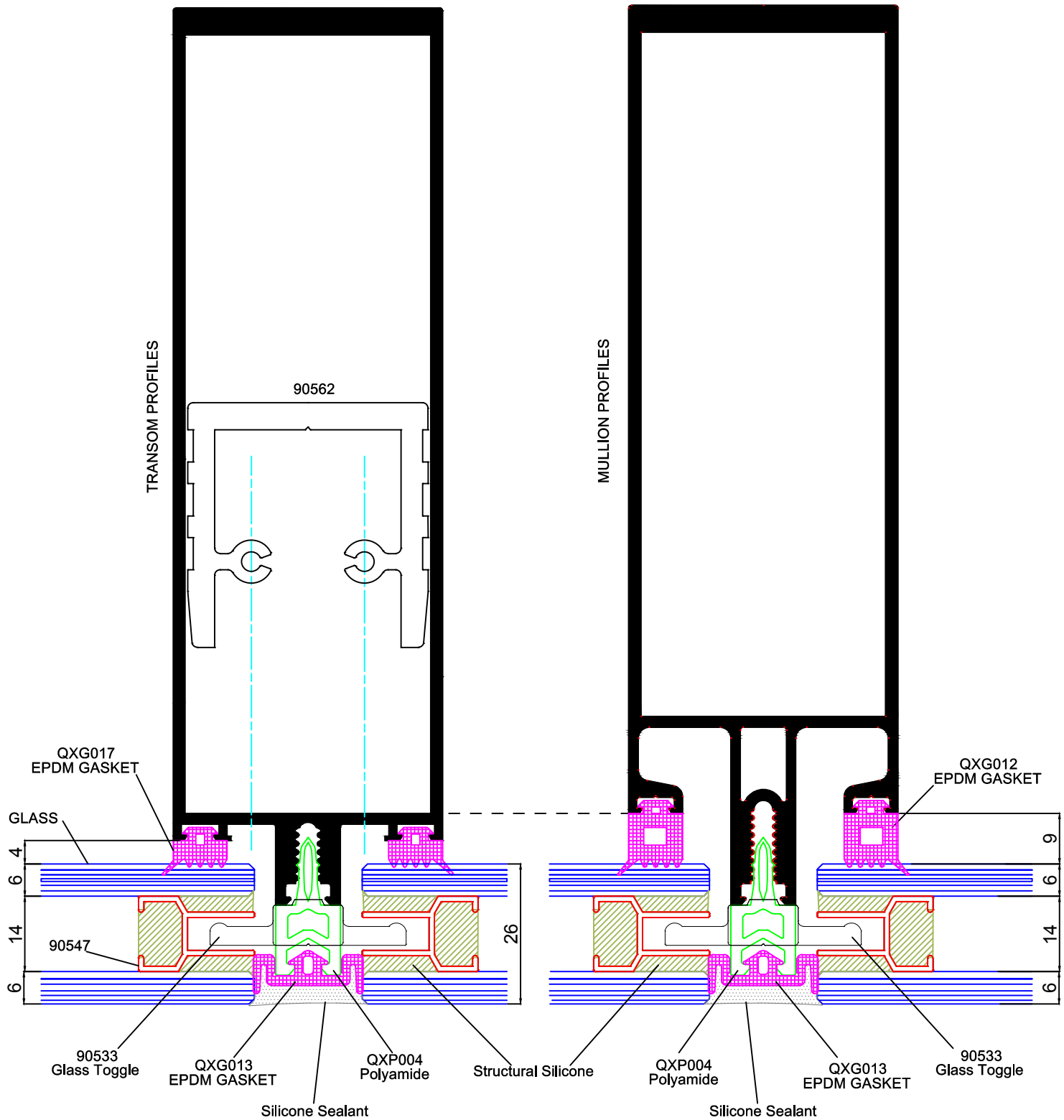








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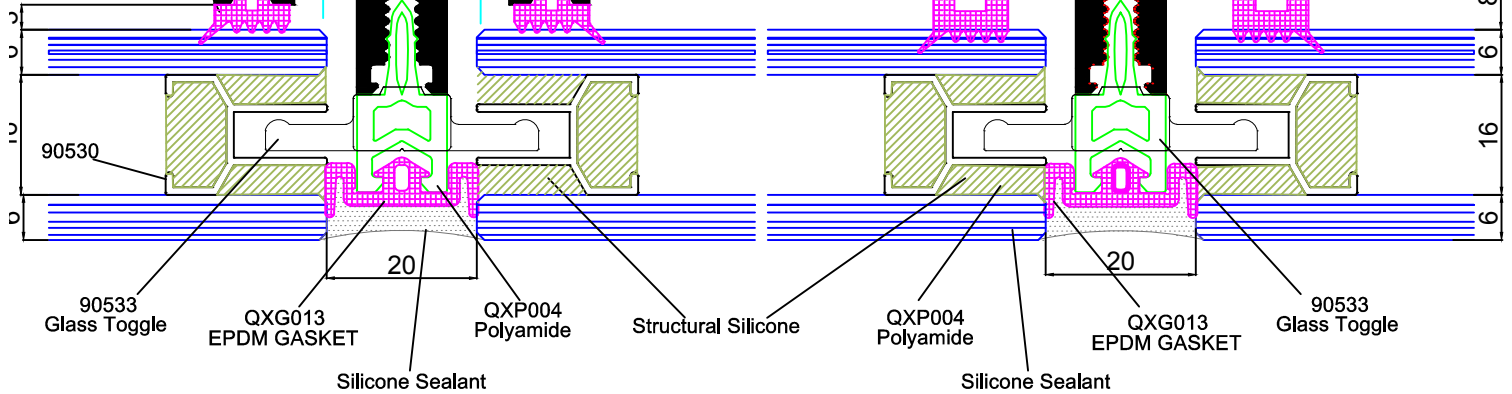
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MULLION PROFILES

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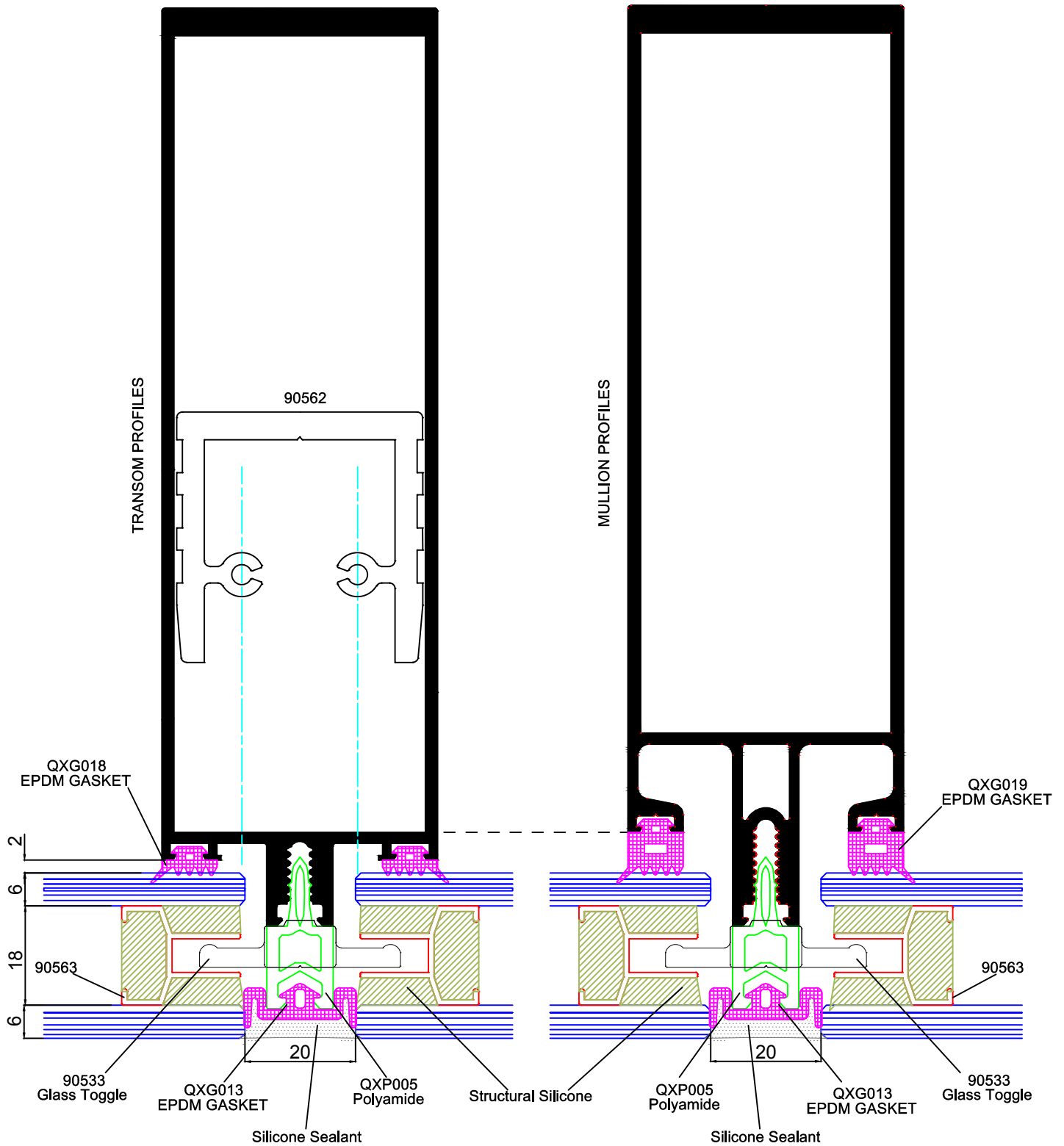
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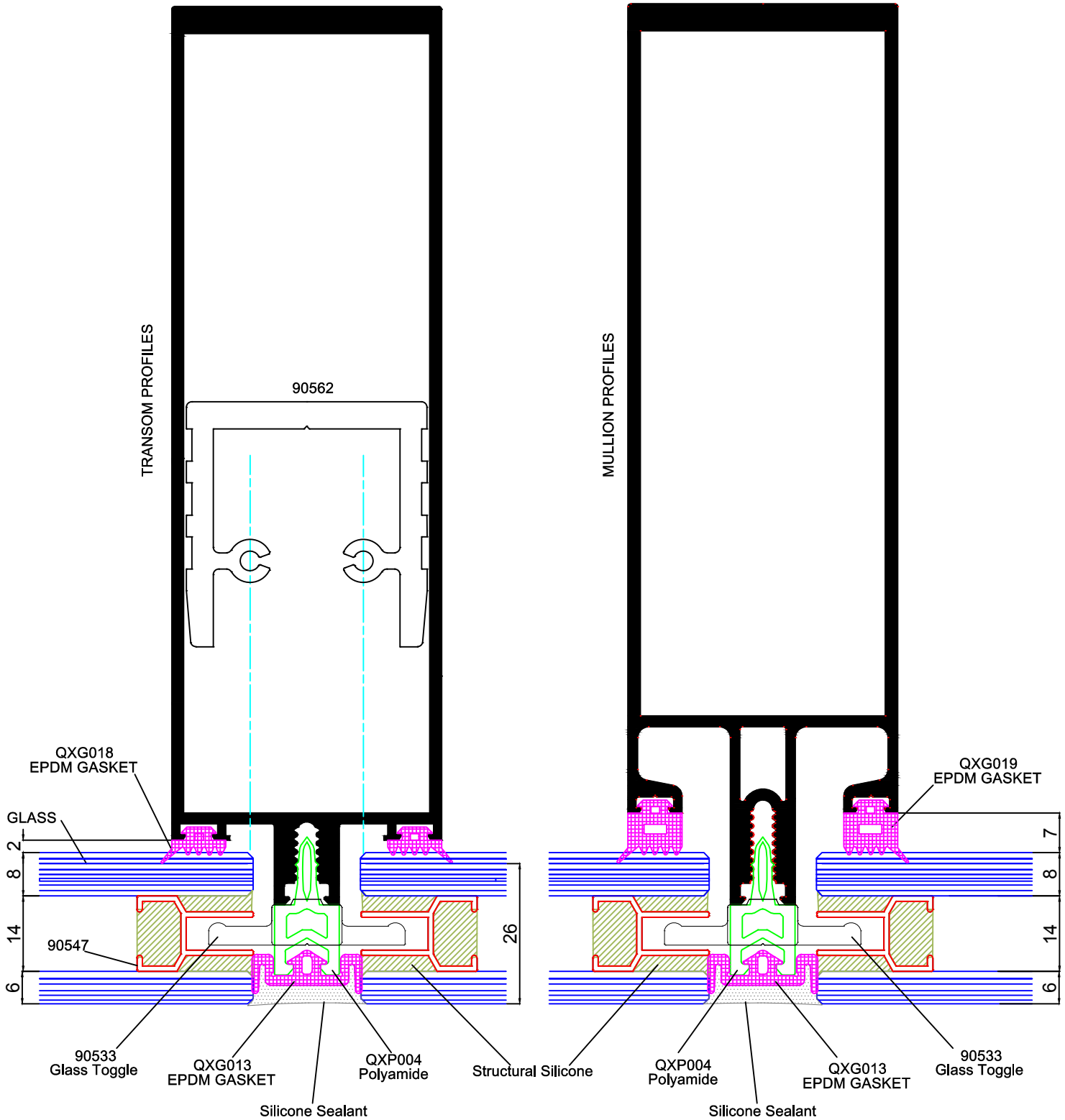
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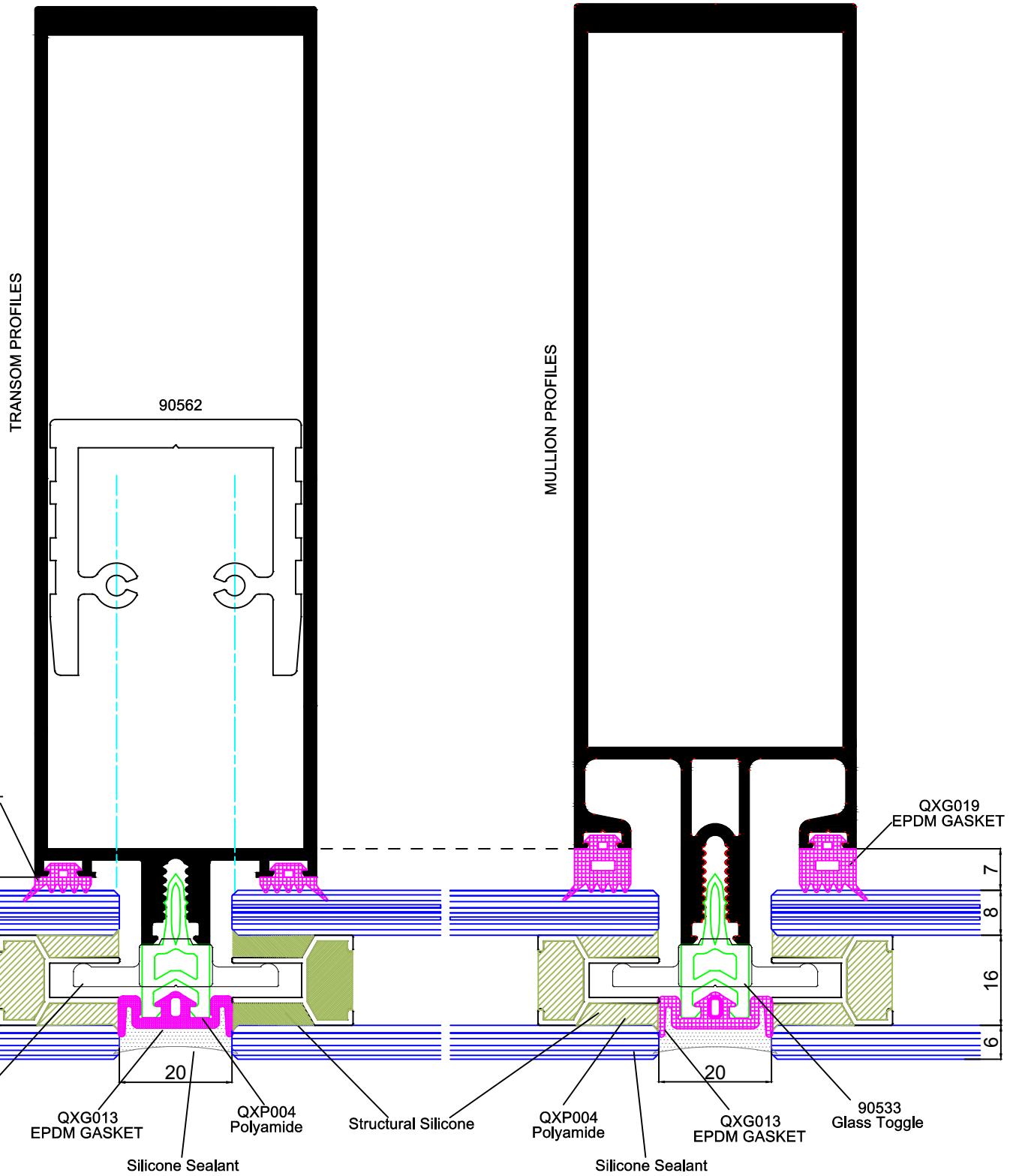
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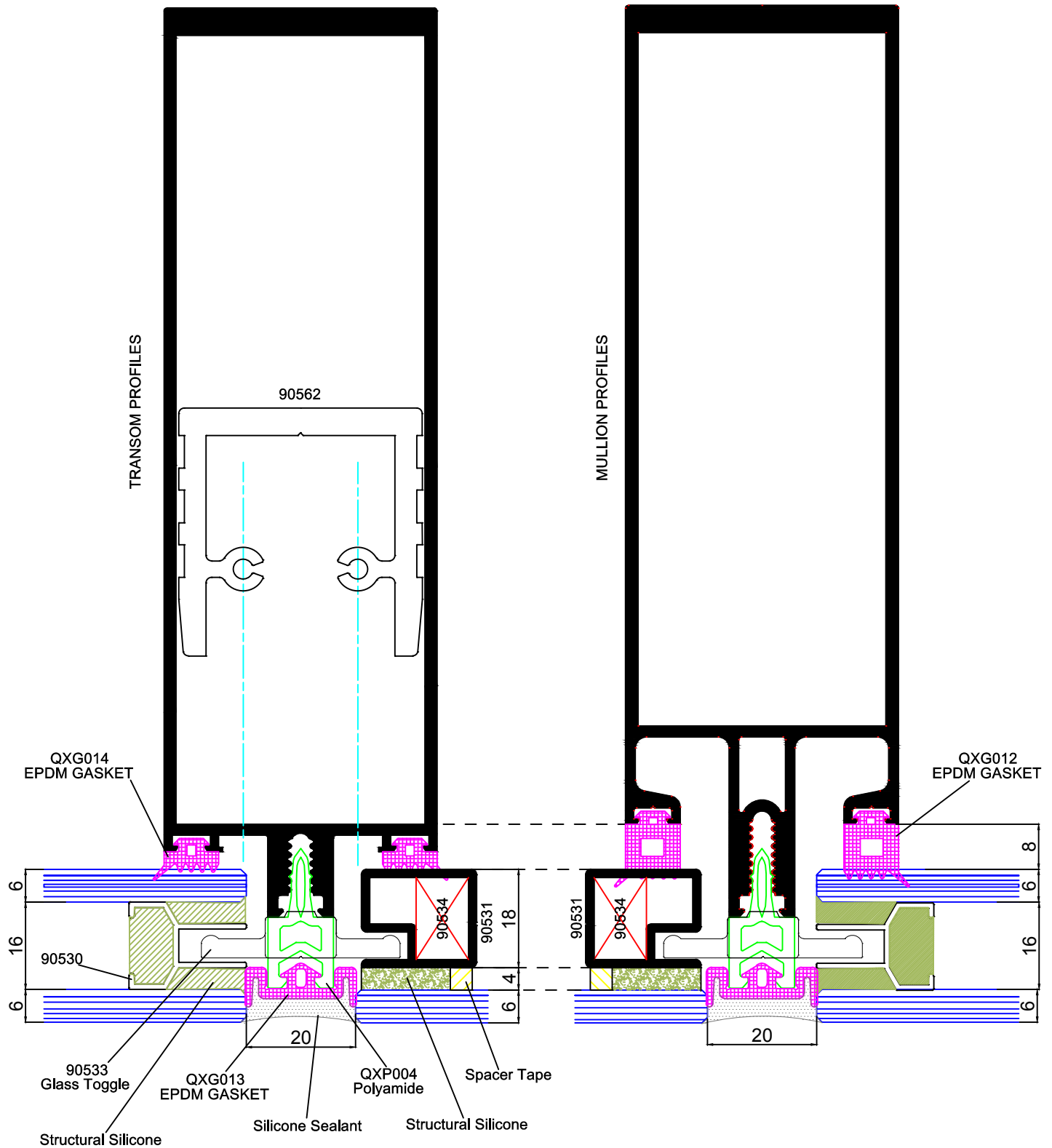
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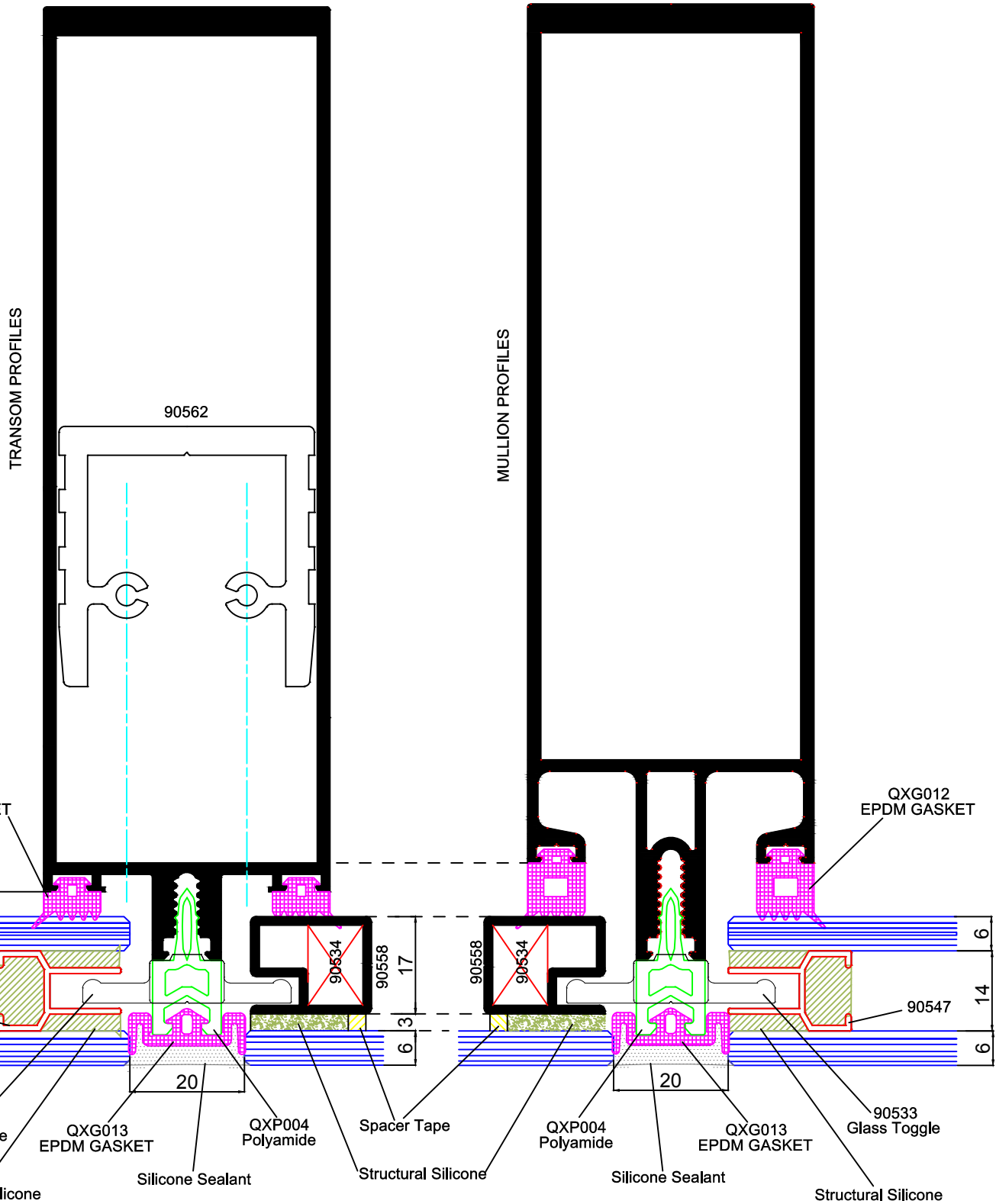
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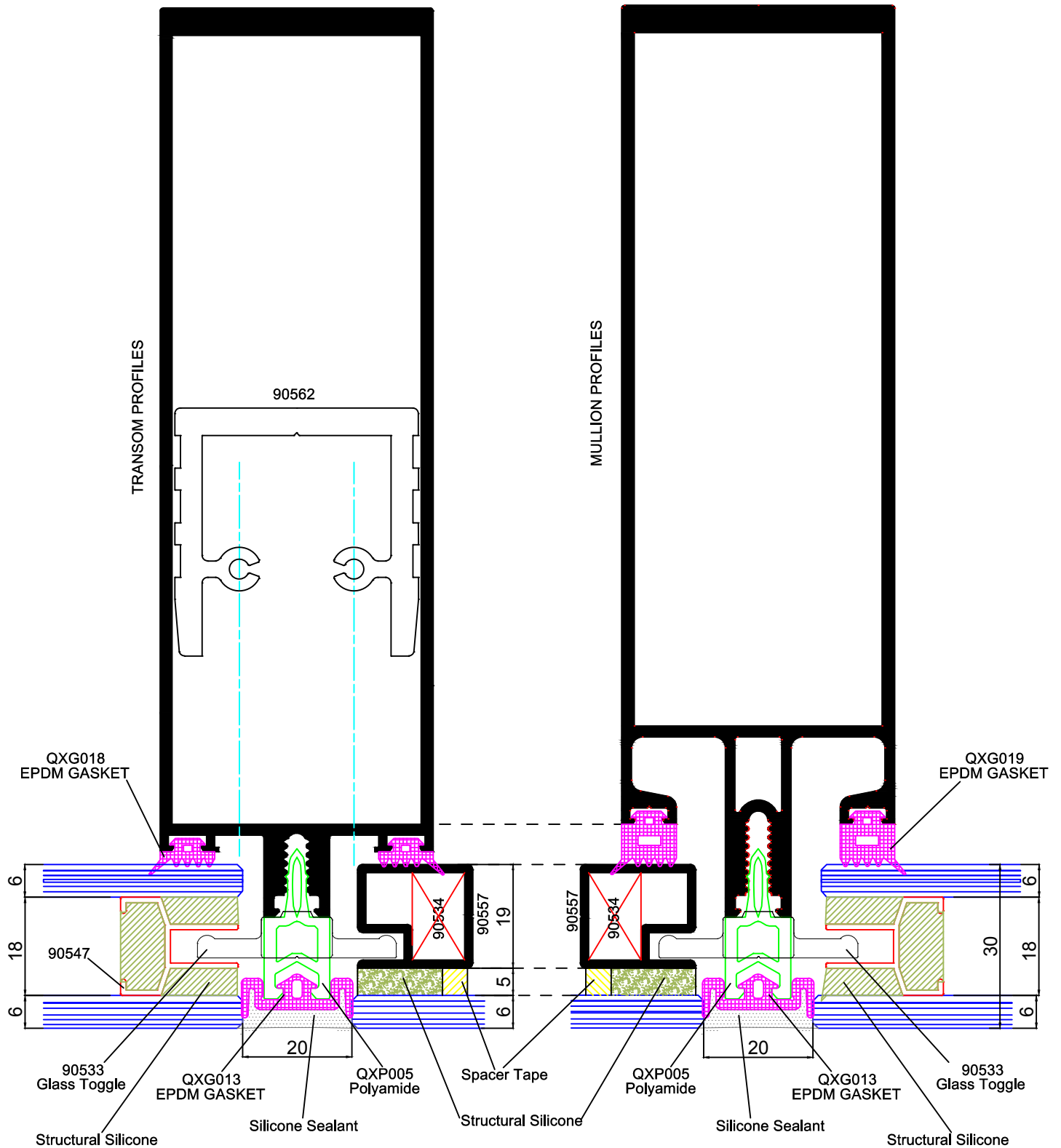
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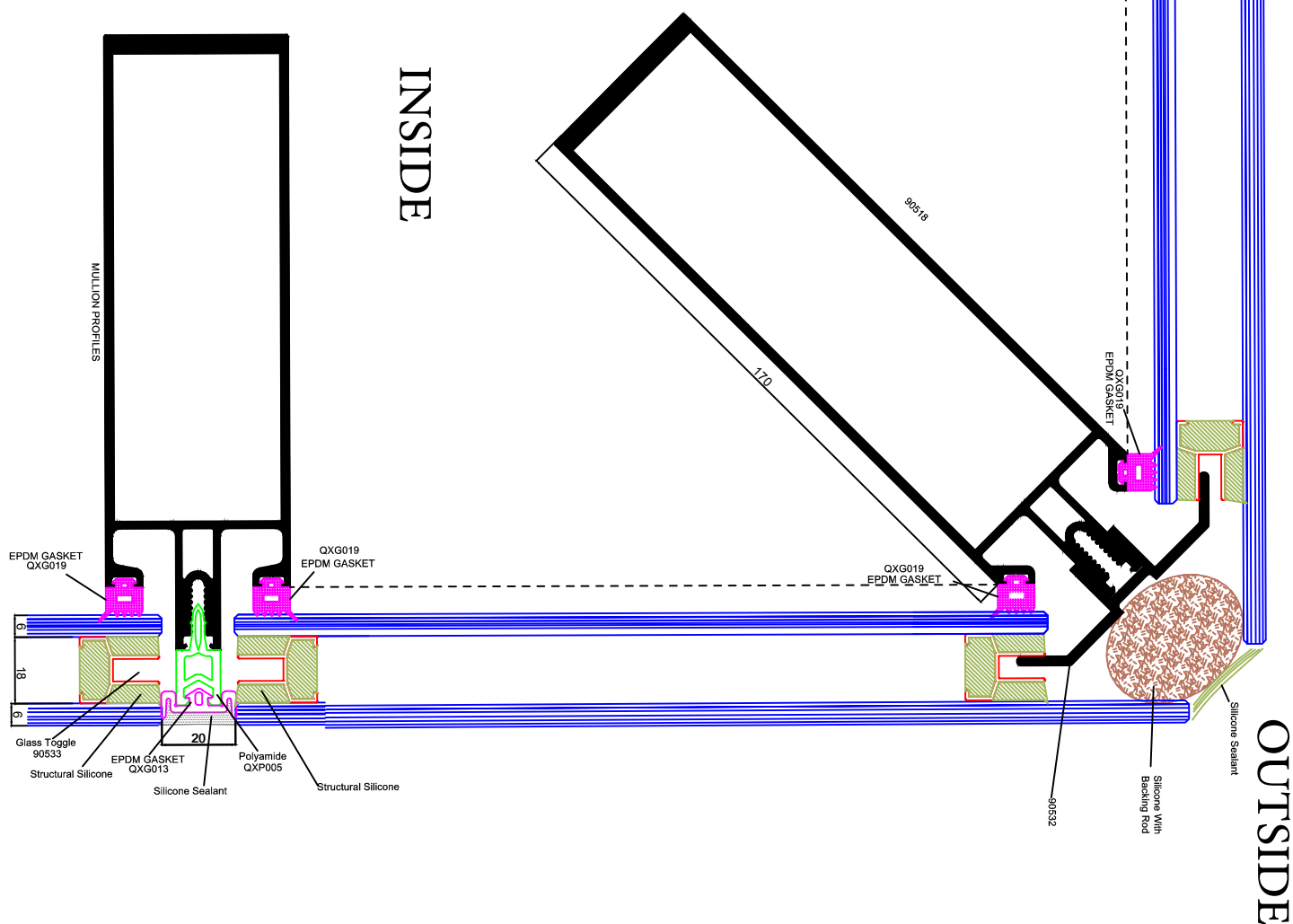
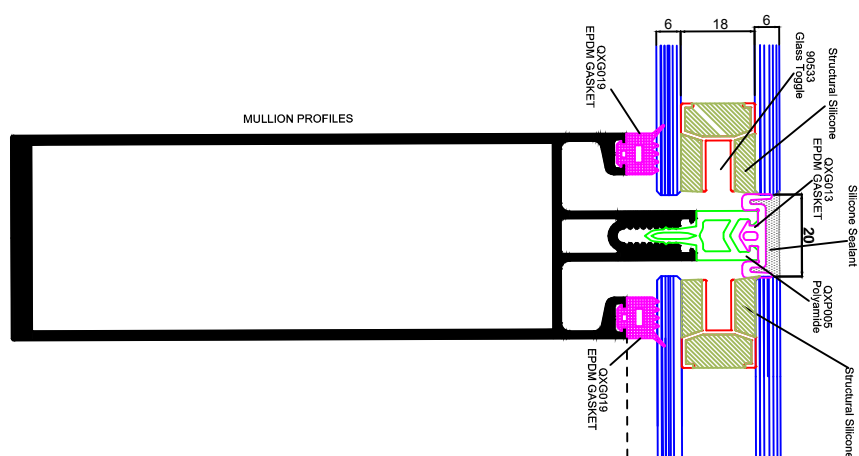
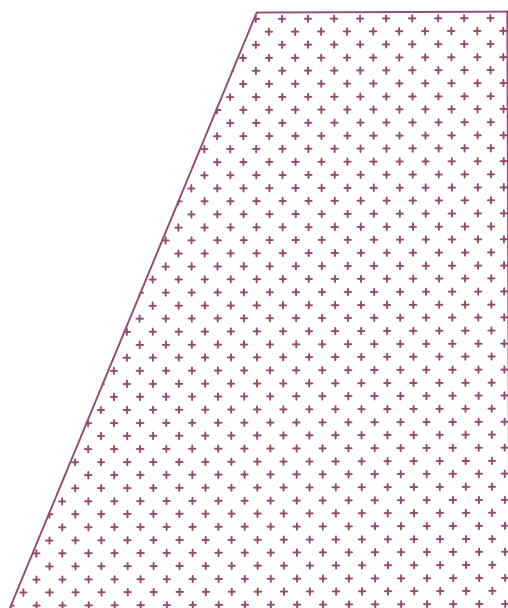
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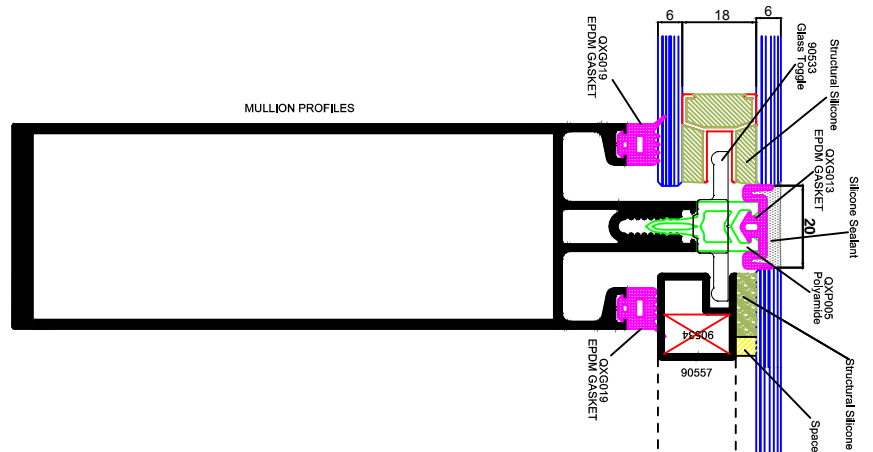
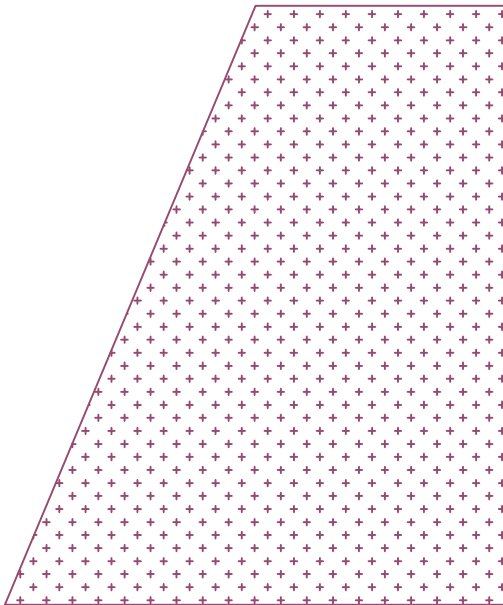


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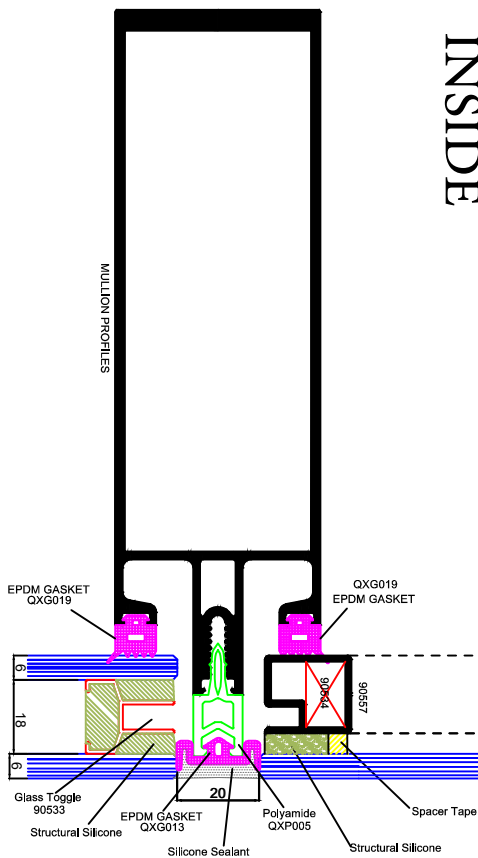


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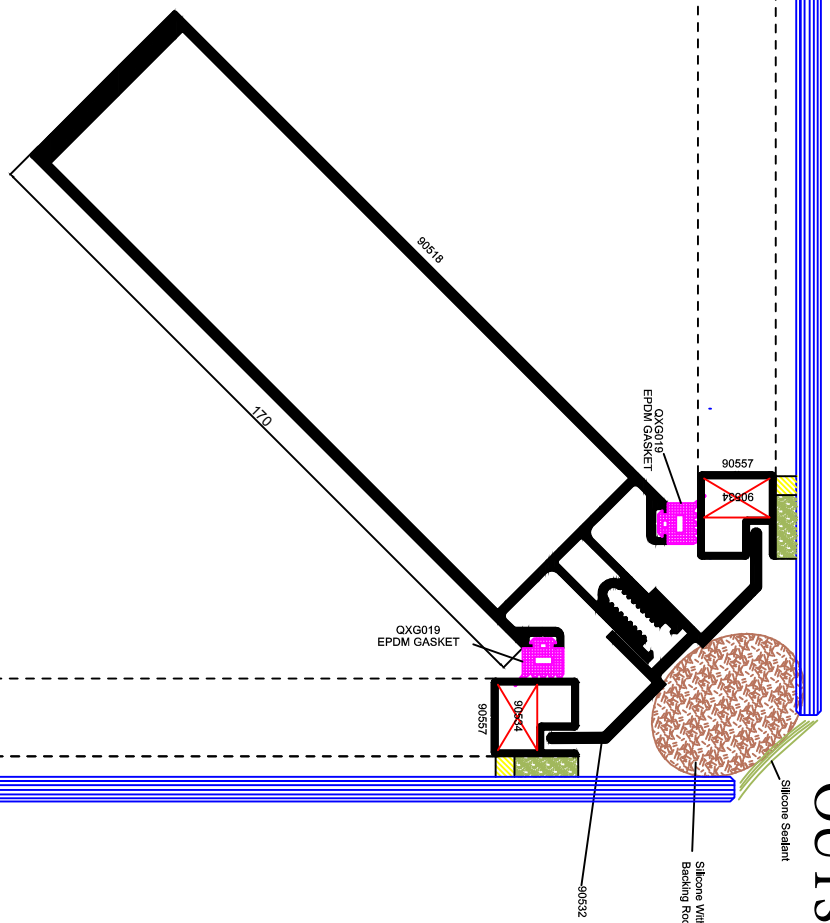


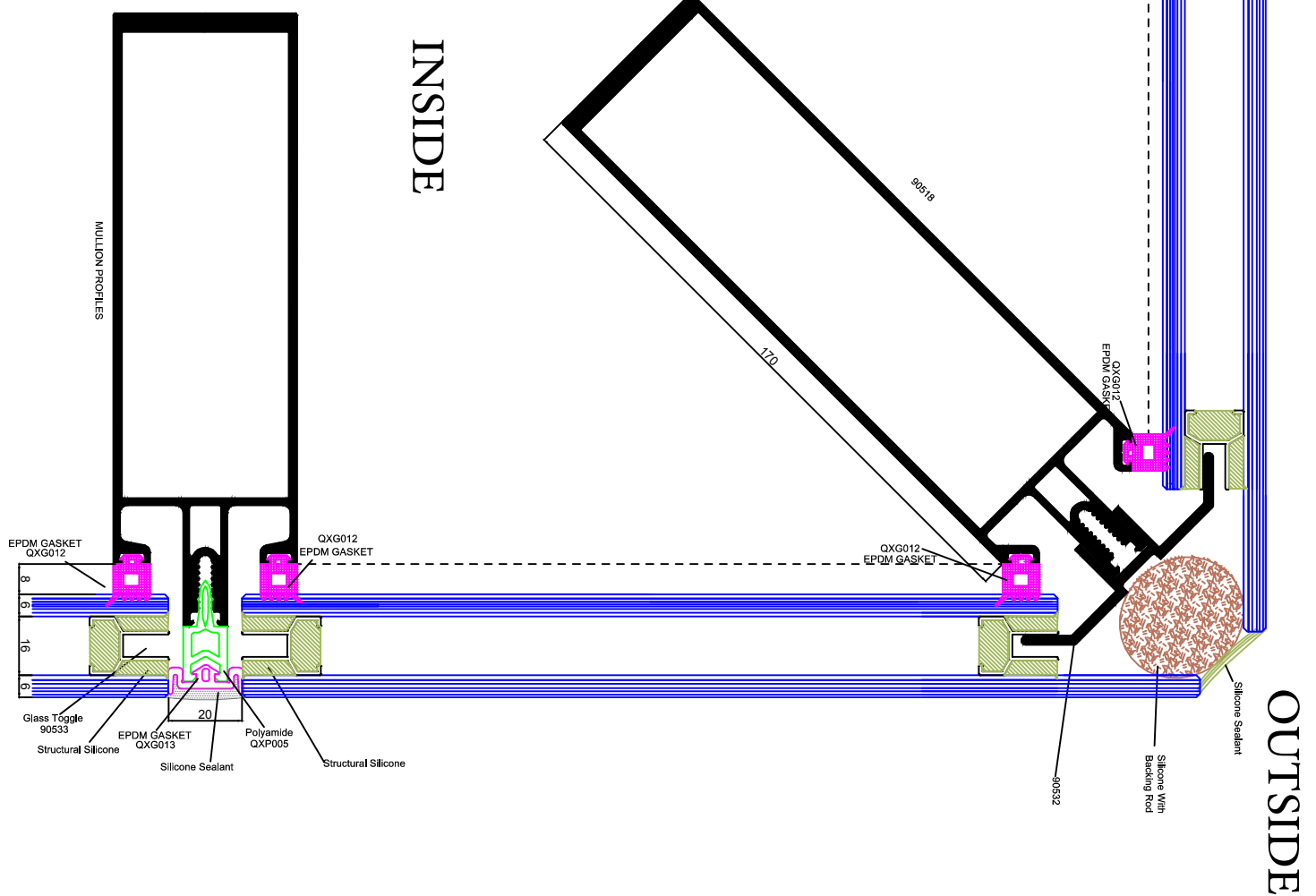
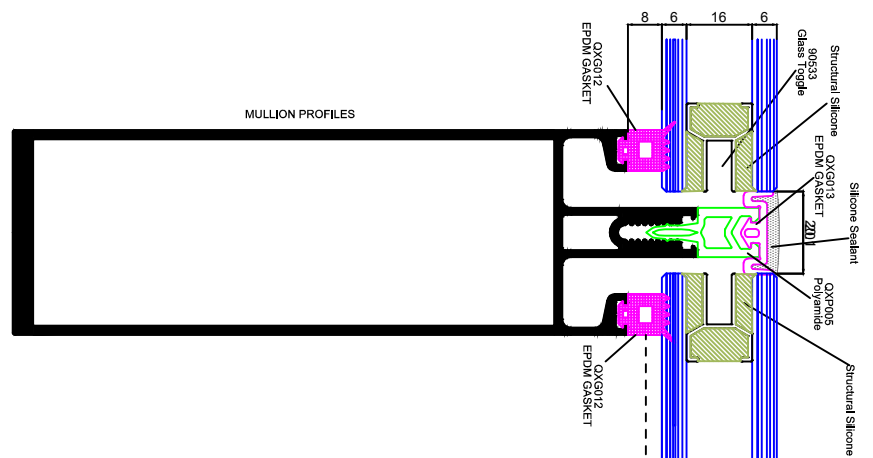
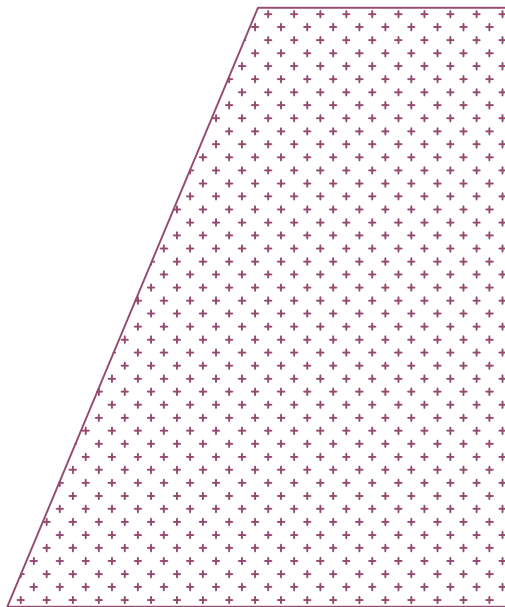


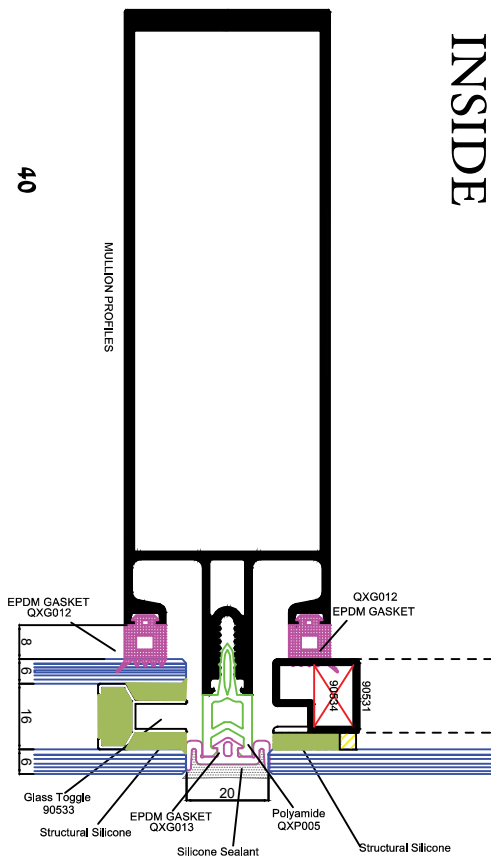
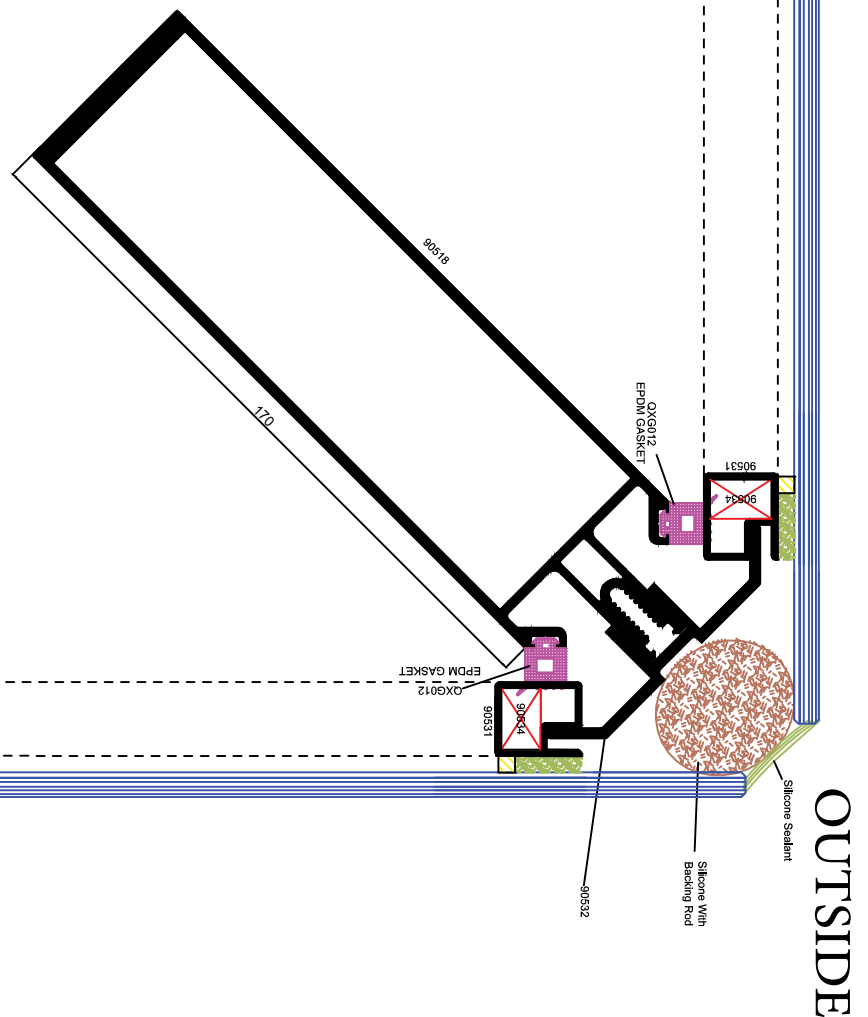
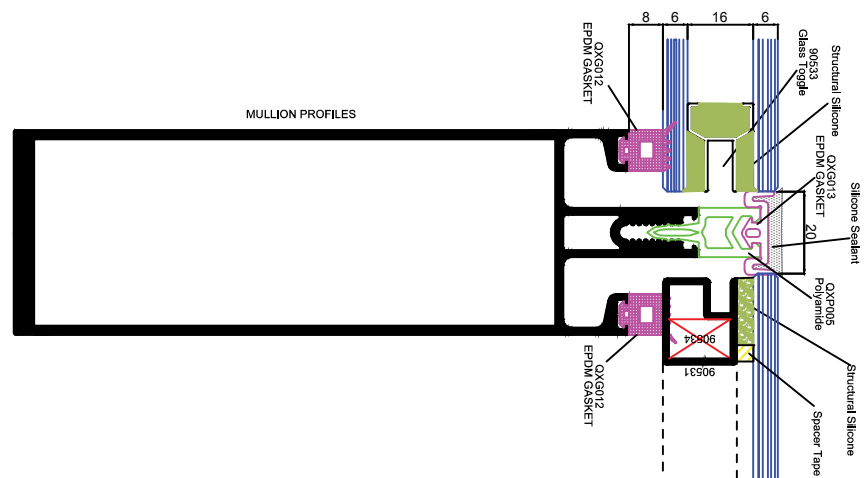
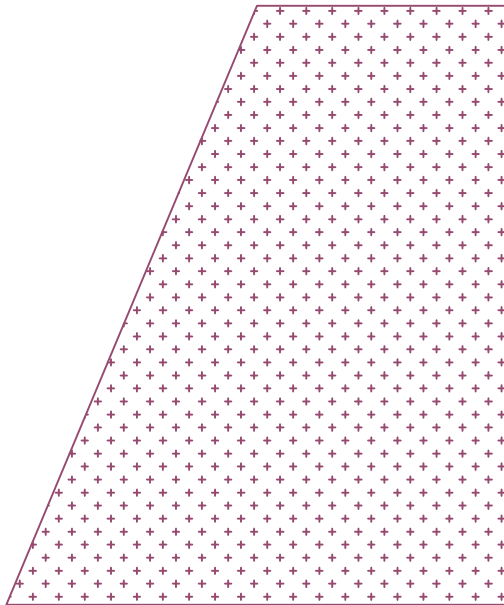
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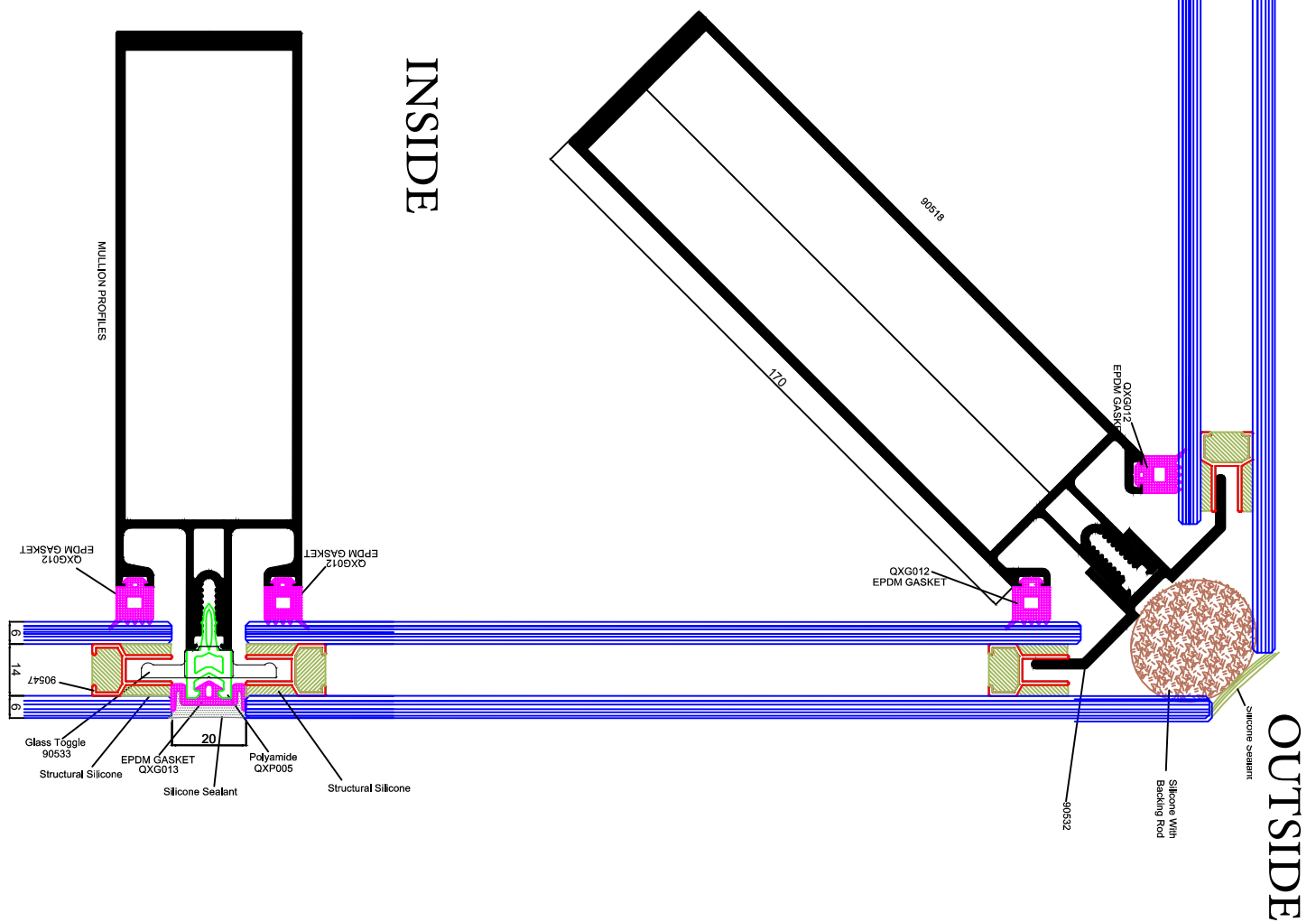
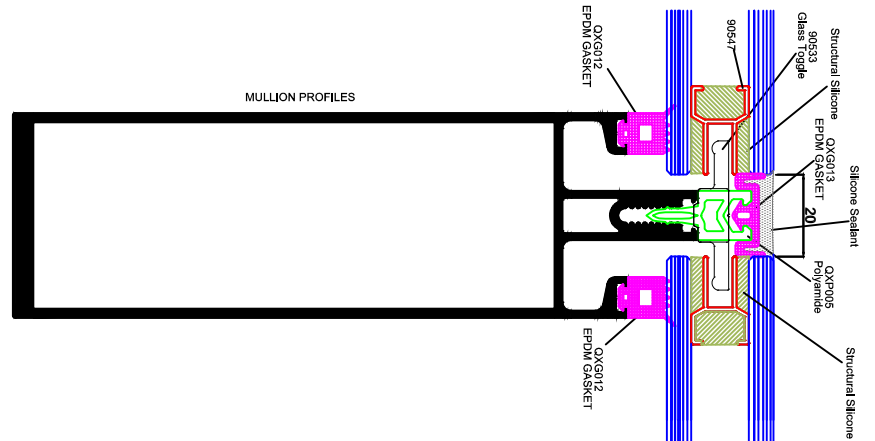
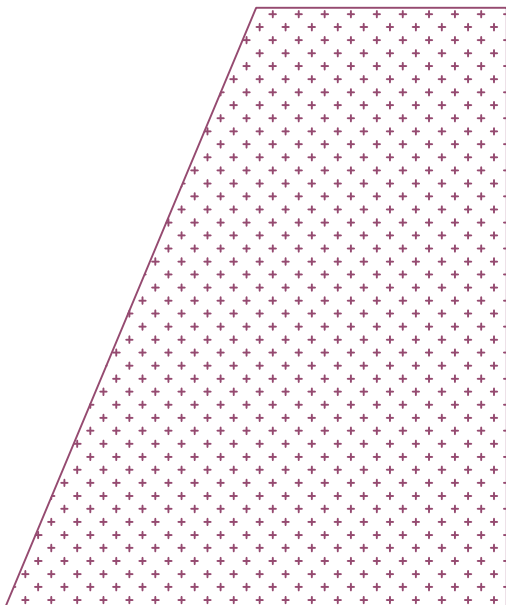


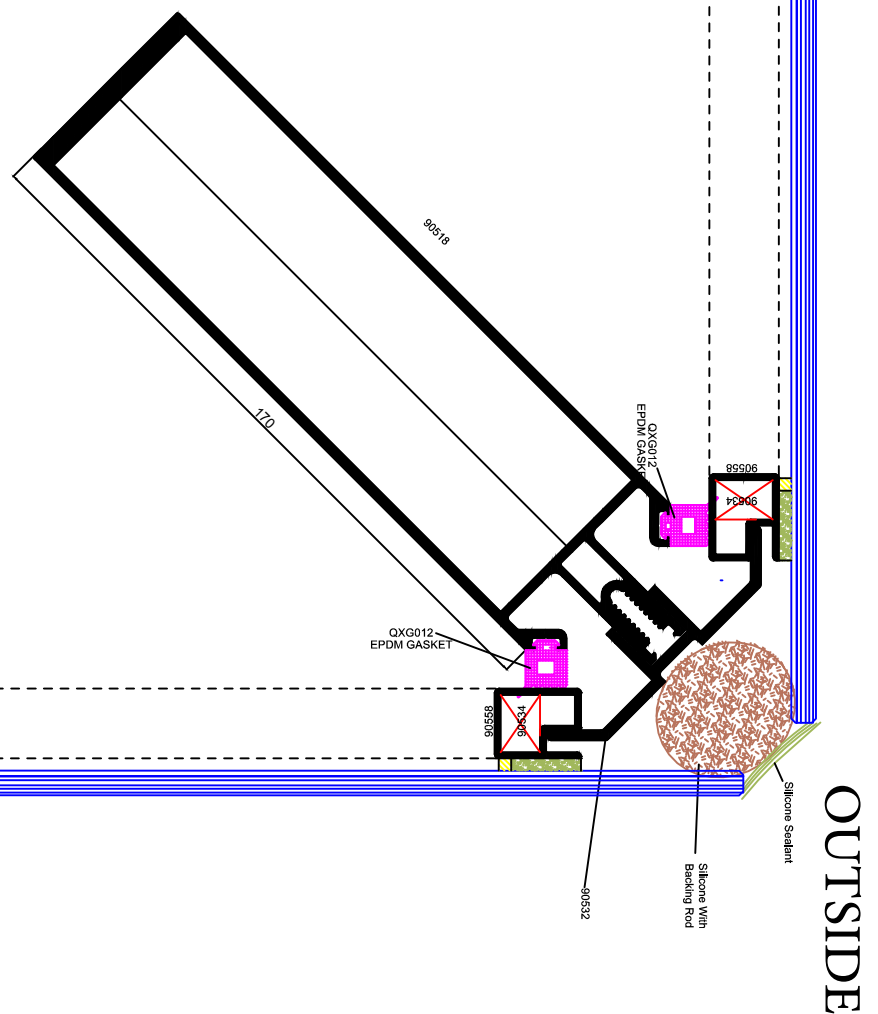
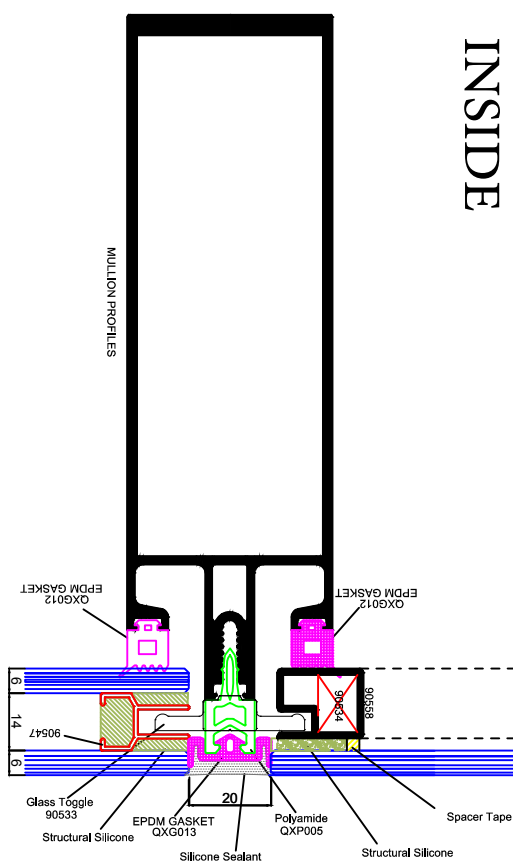
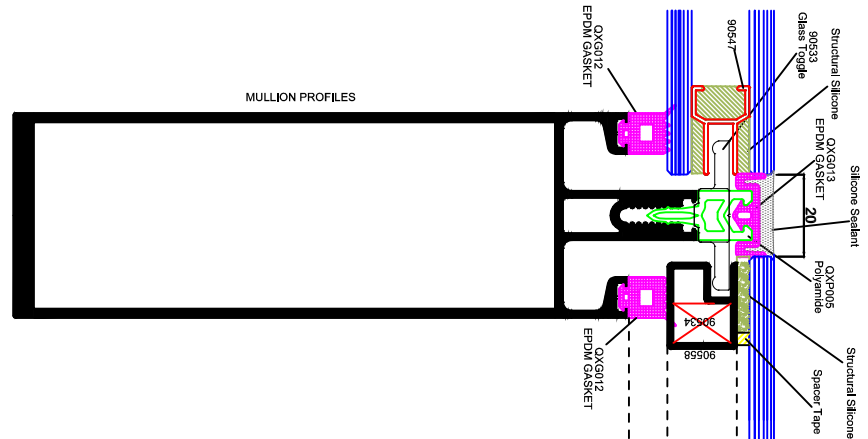
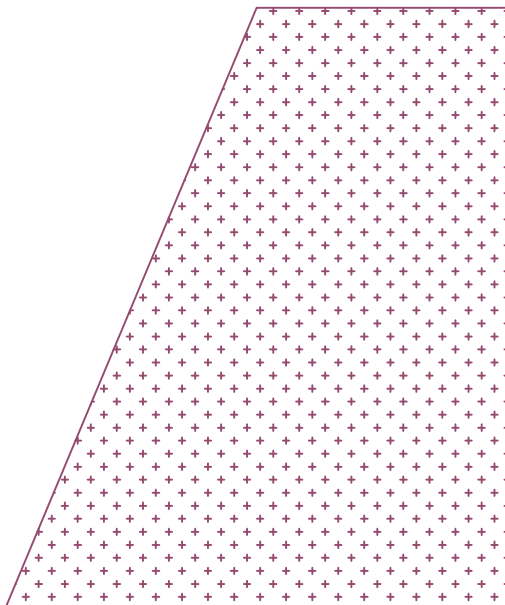
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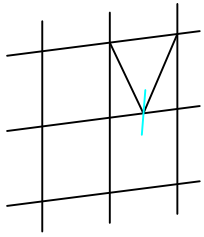






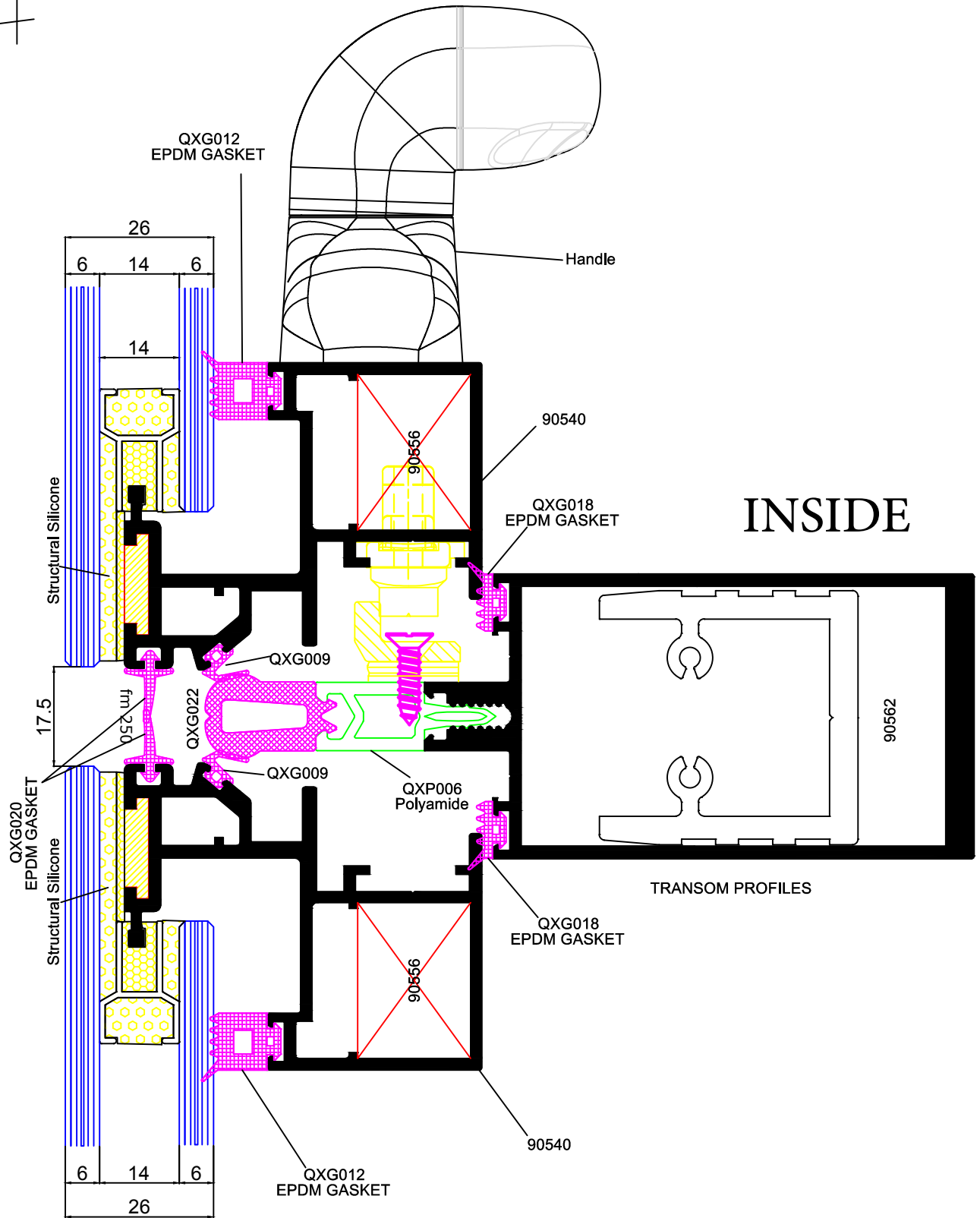


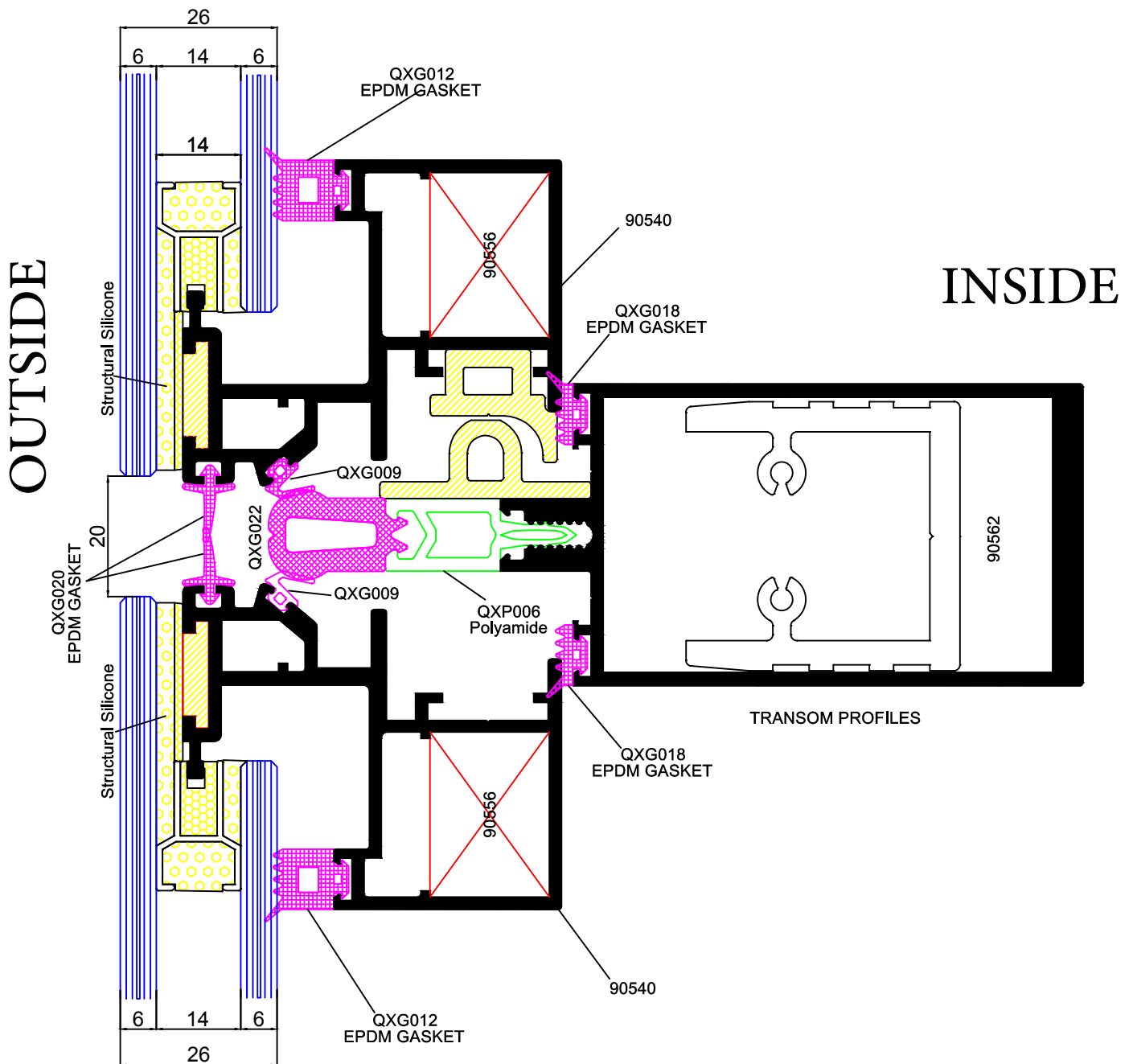
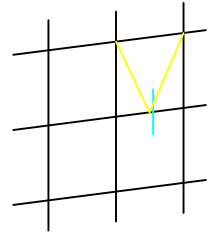


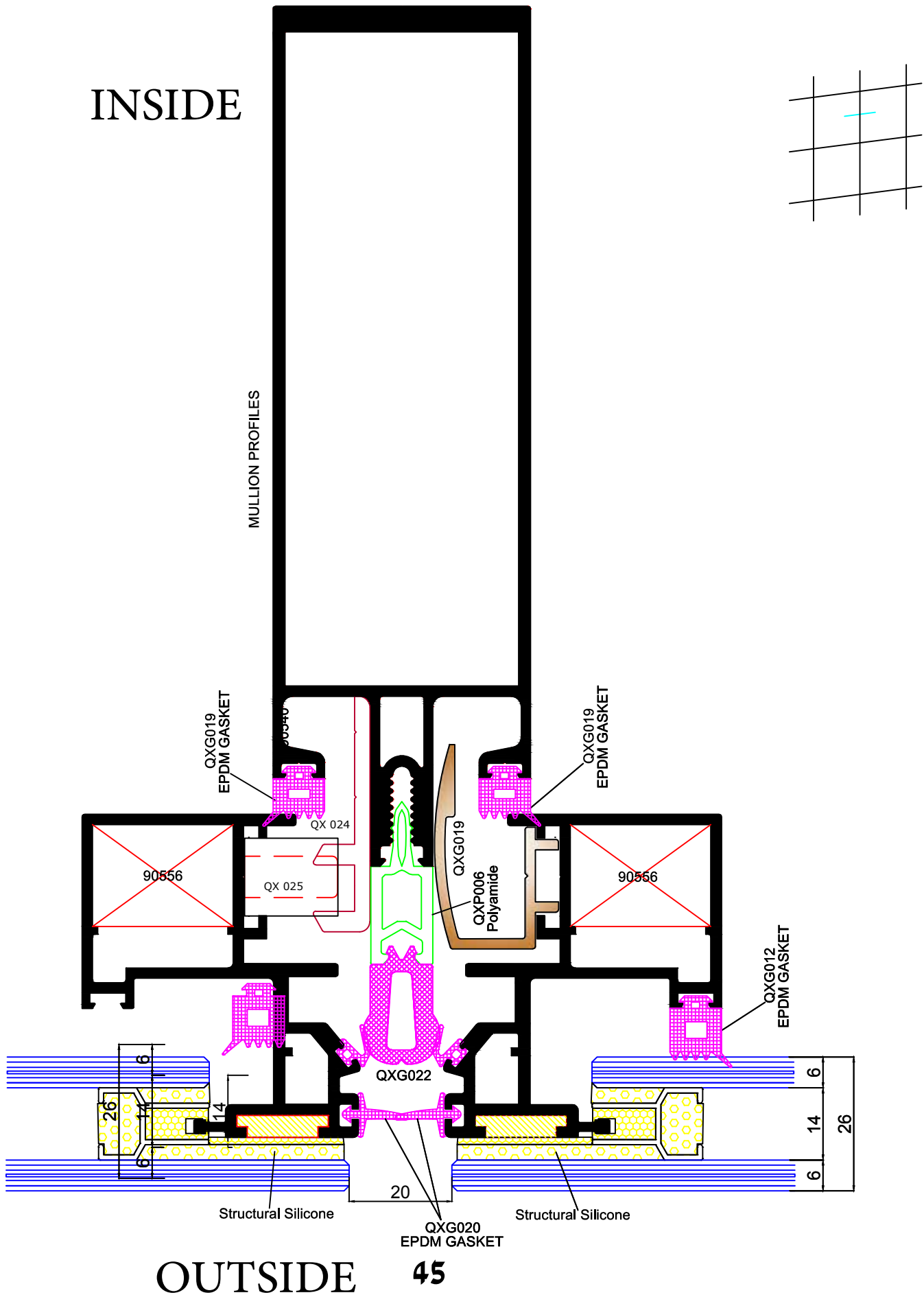


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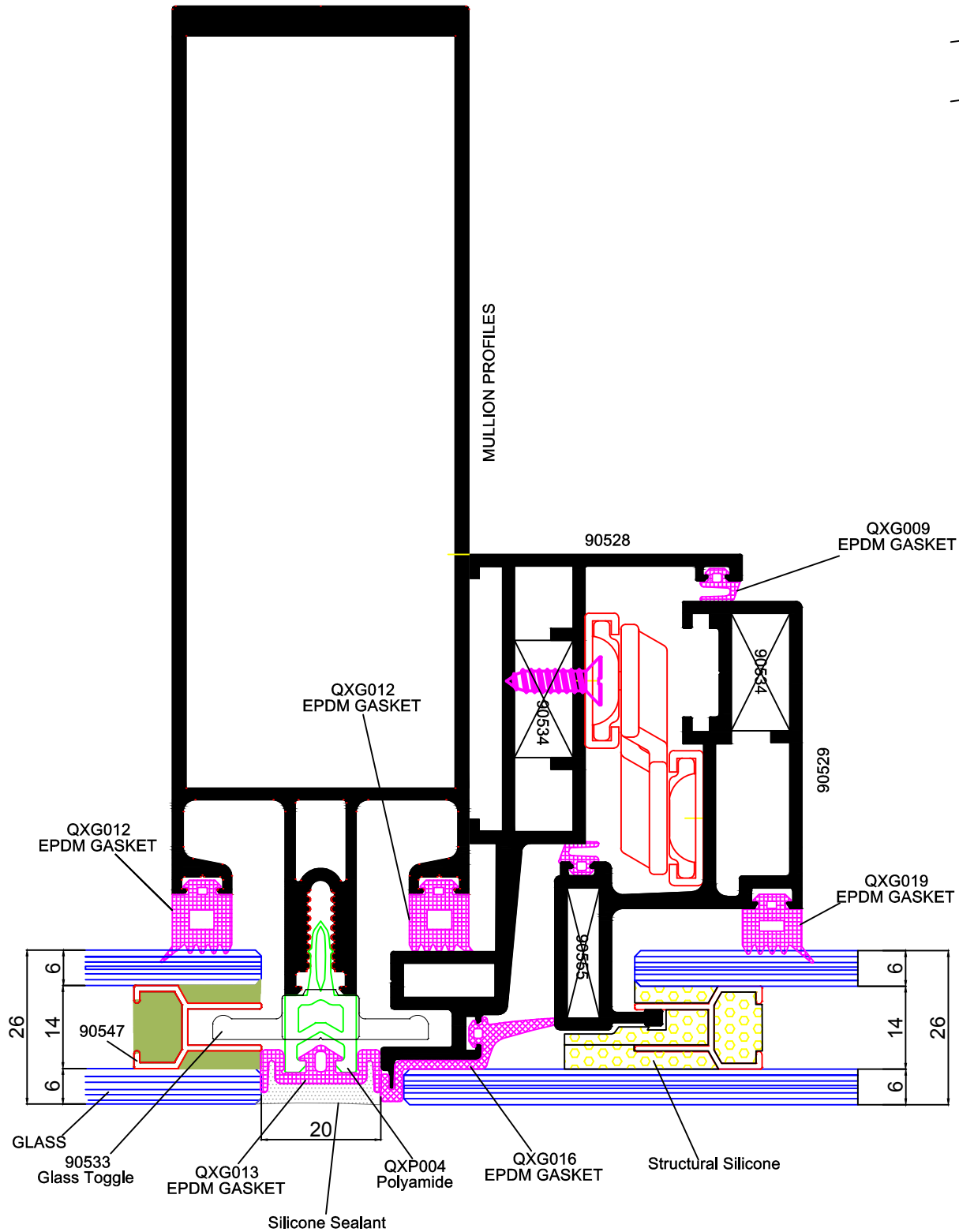
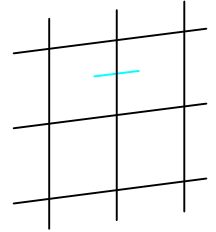




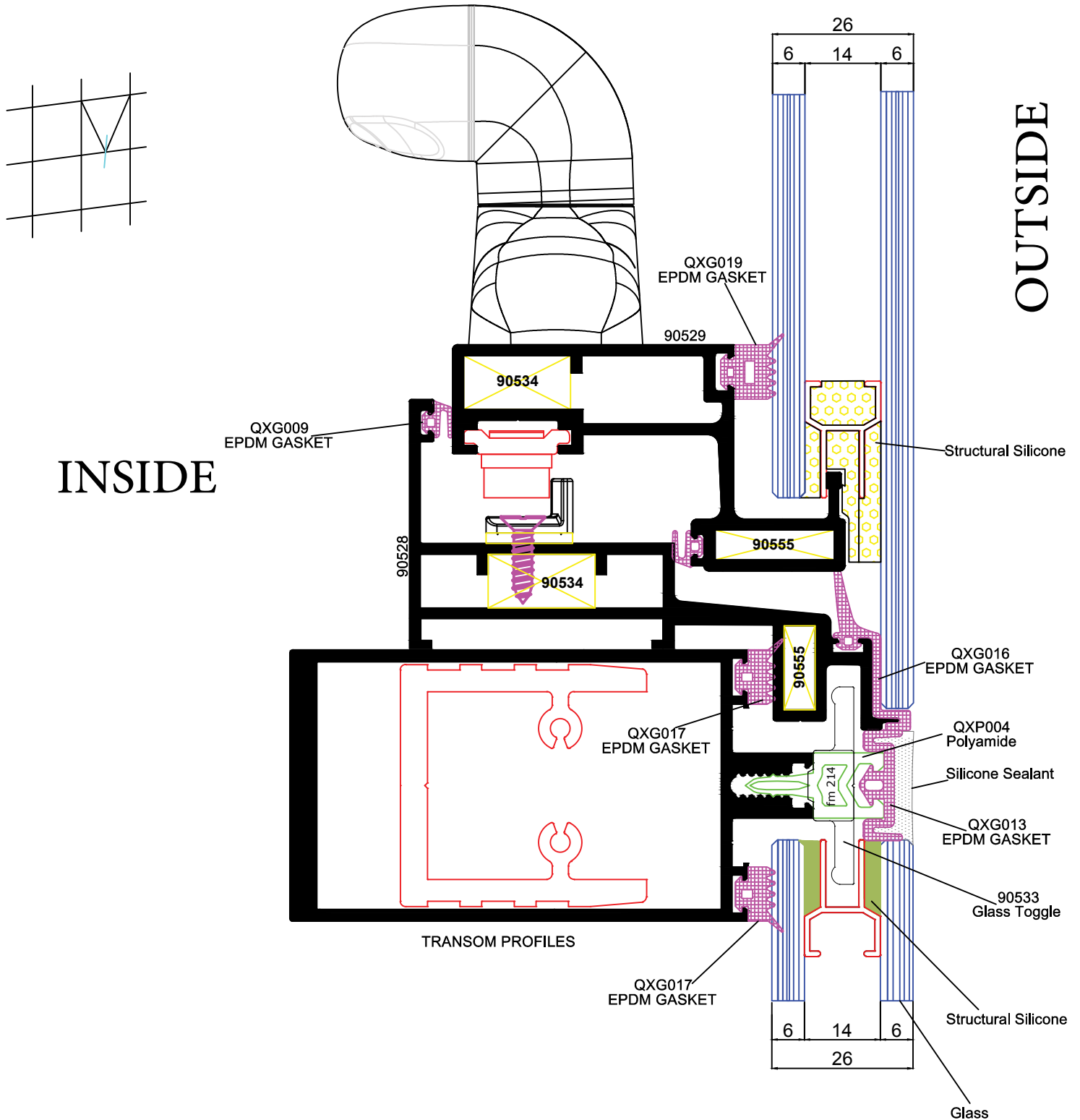




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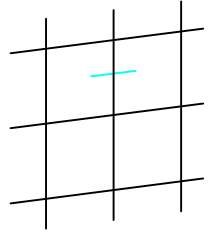


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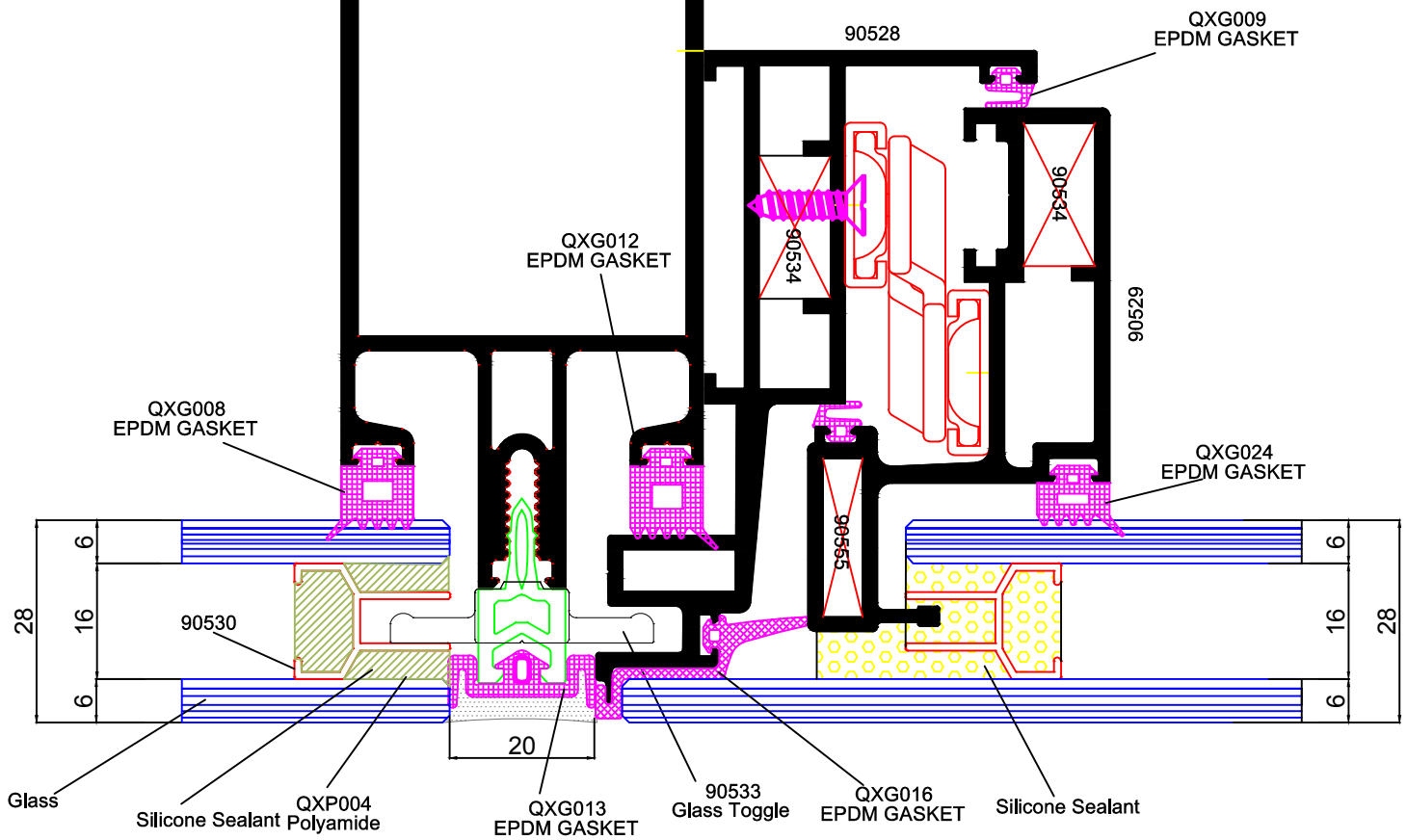




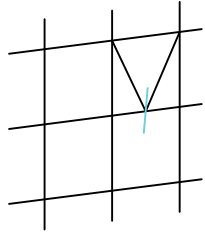
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MULLION PROFILES

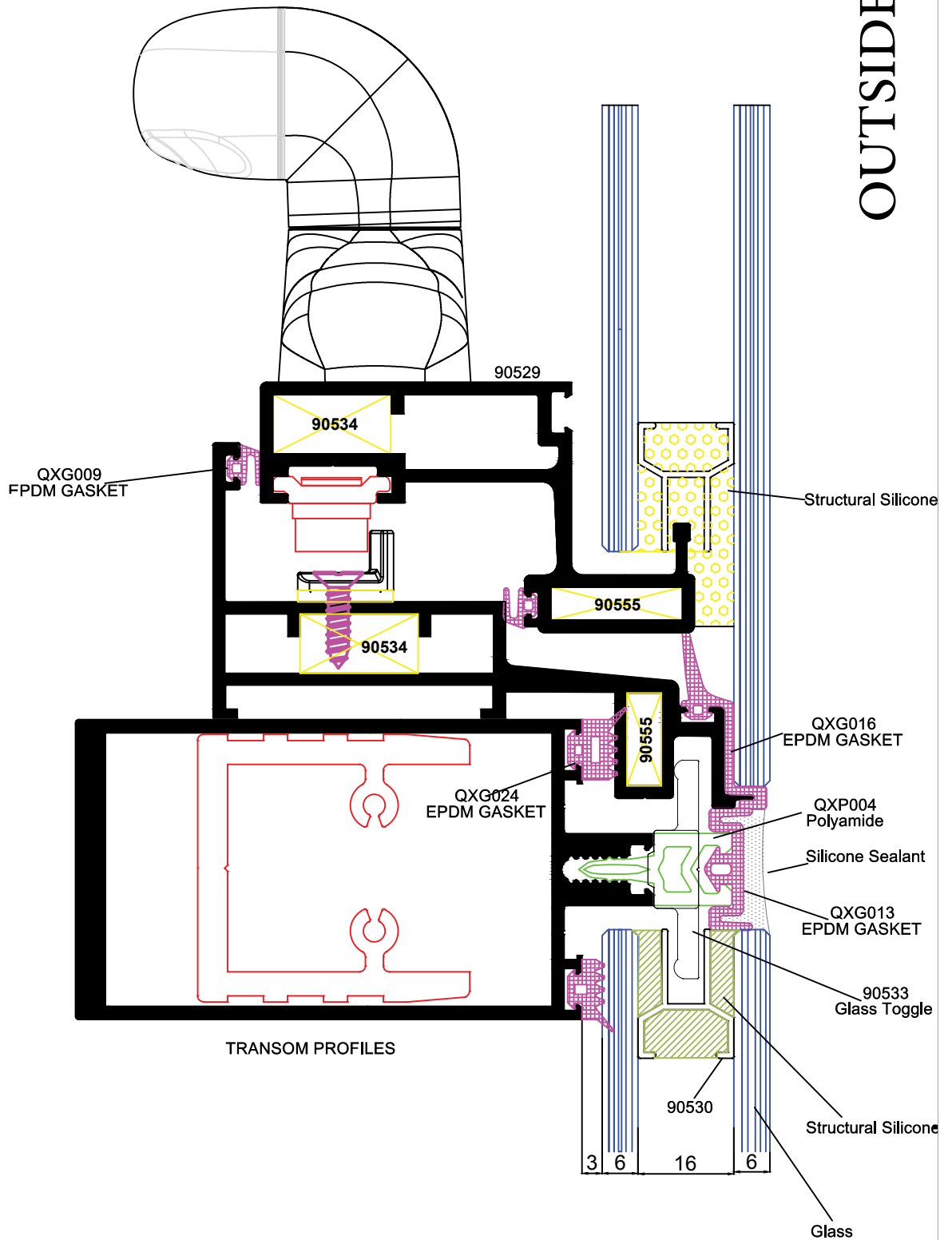


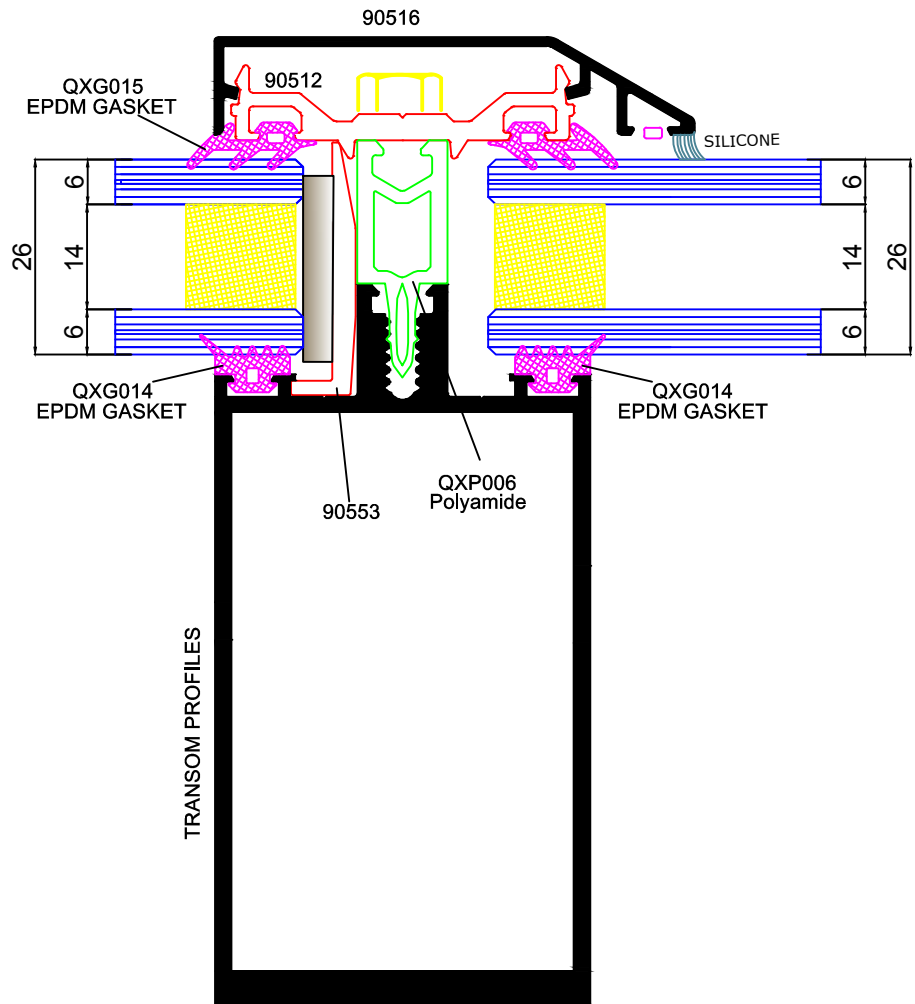
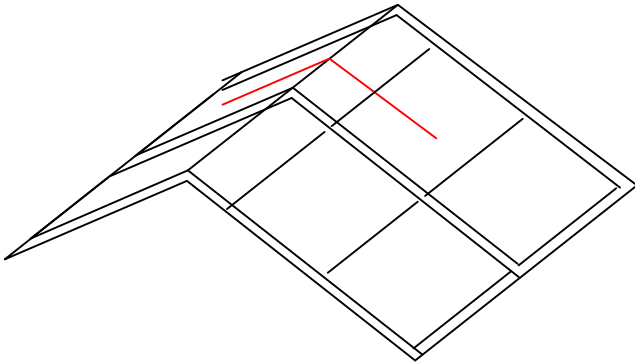
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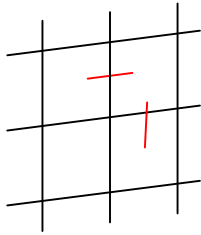


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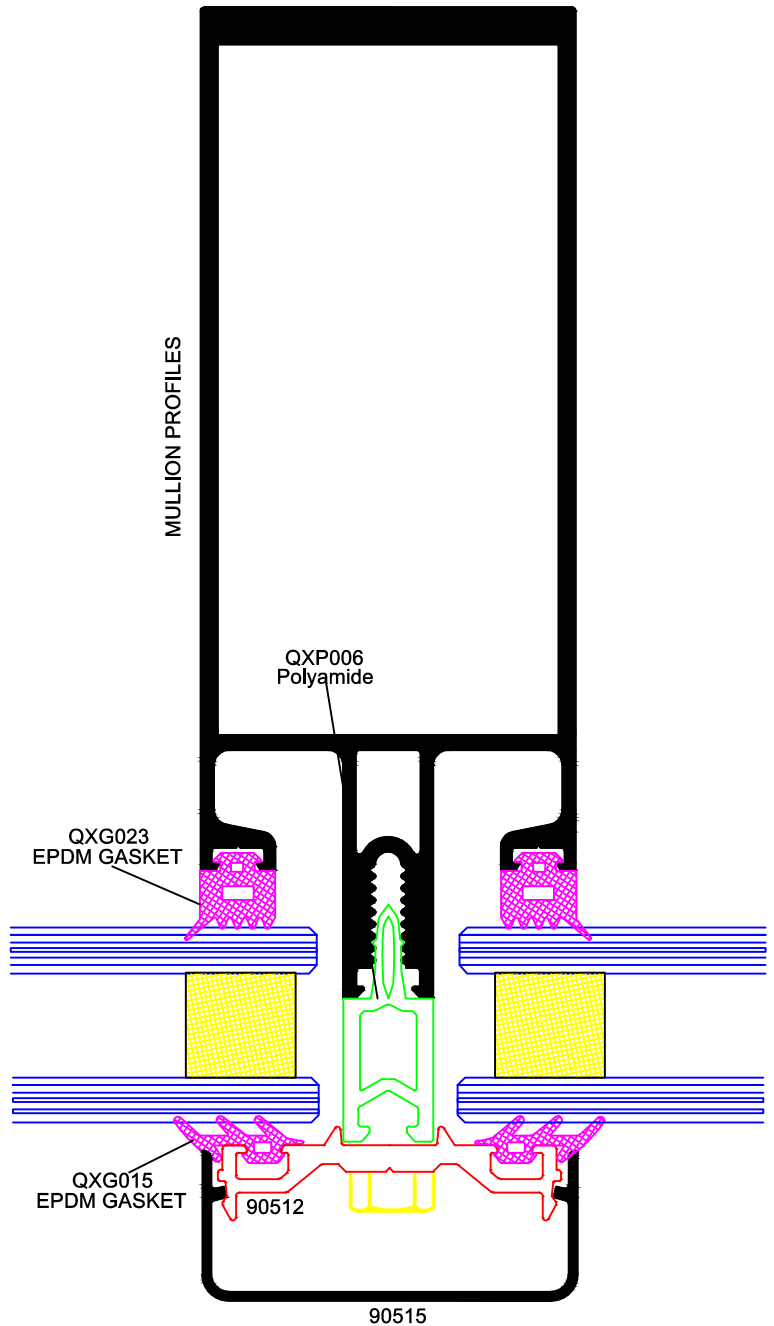
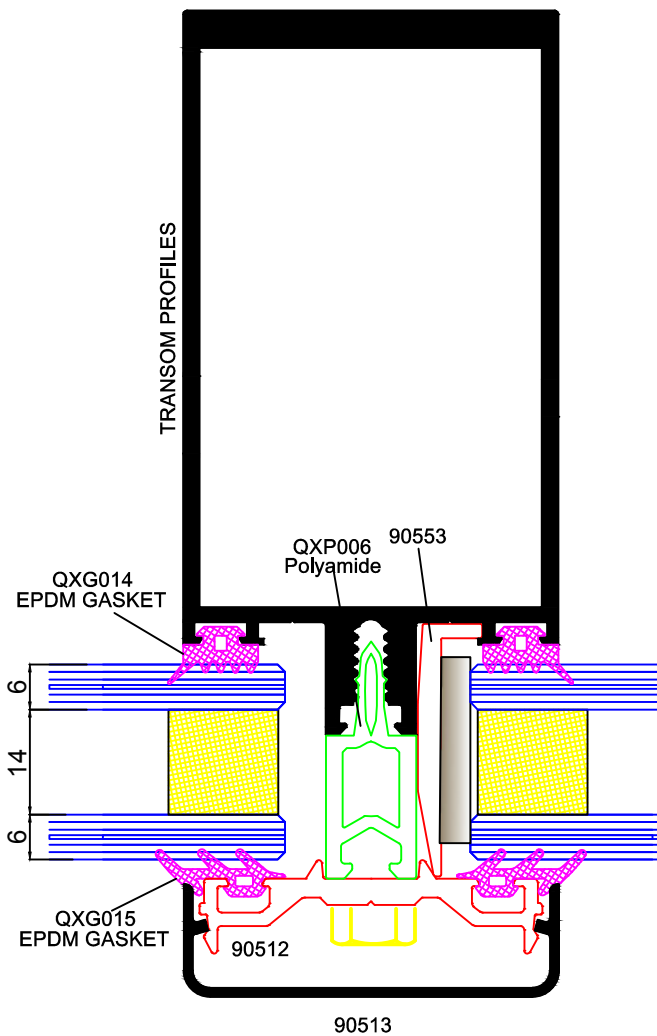
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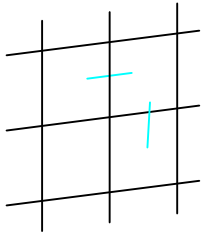




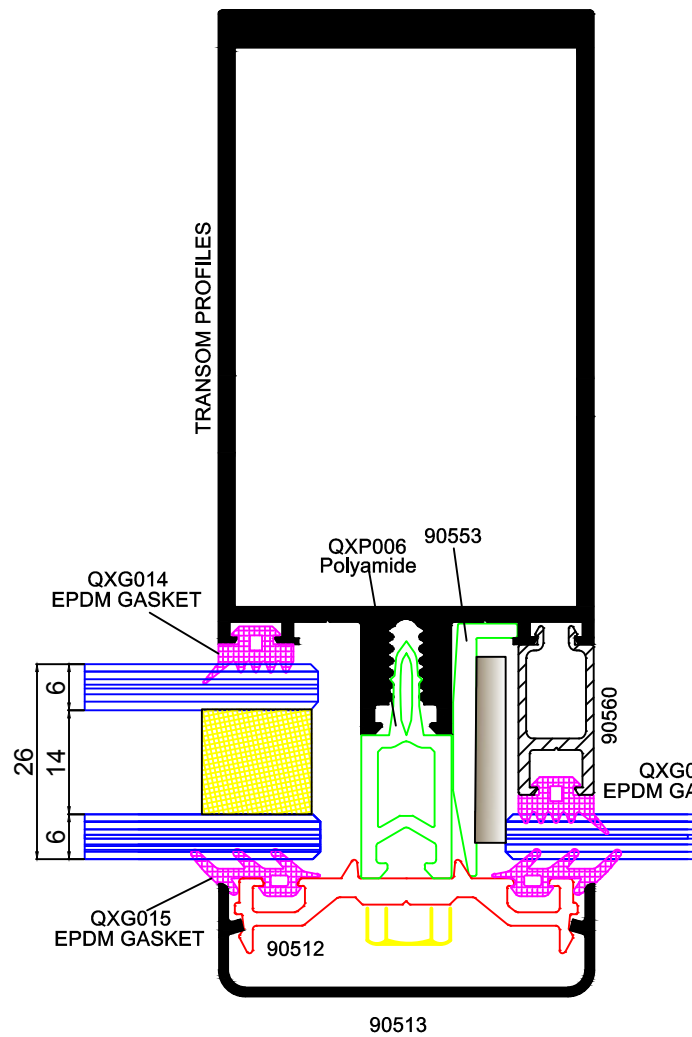
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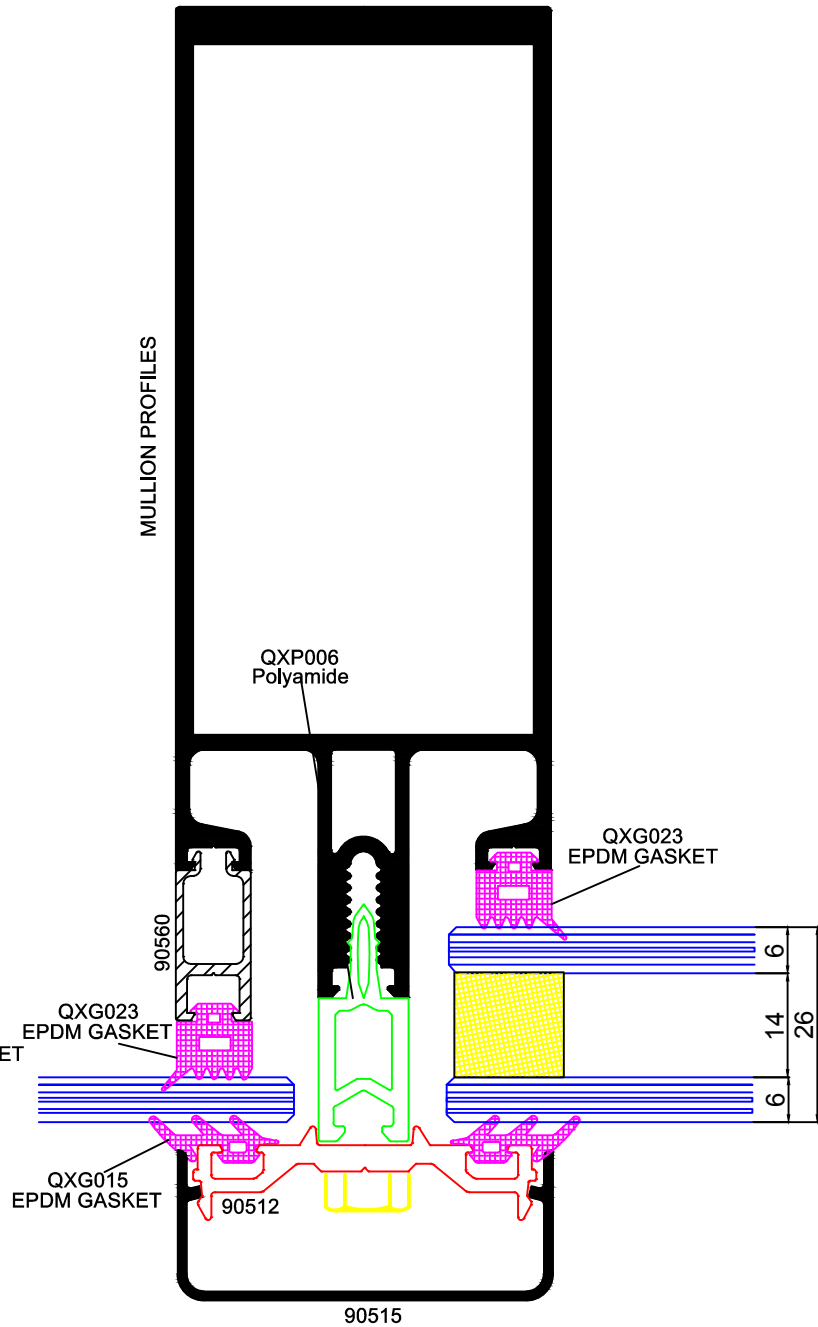
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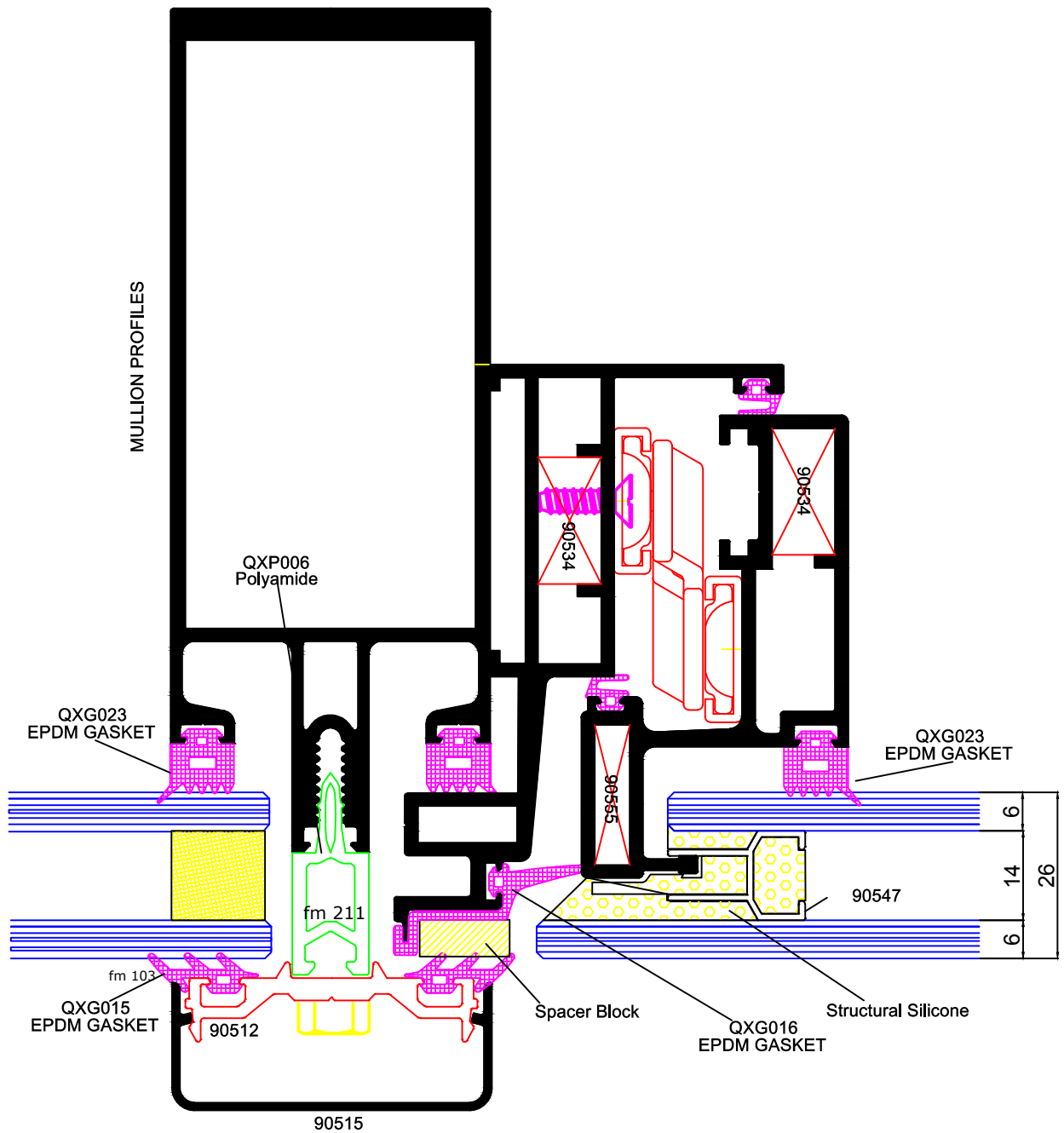
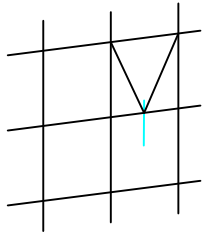
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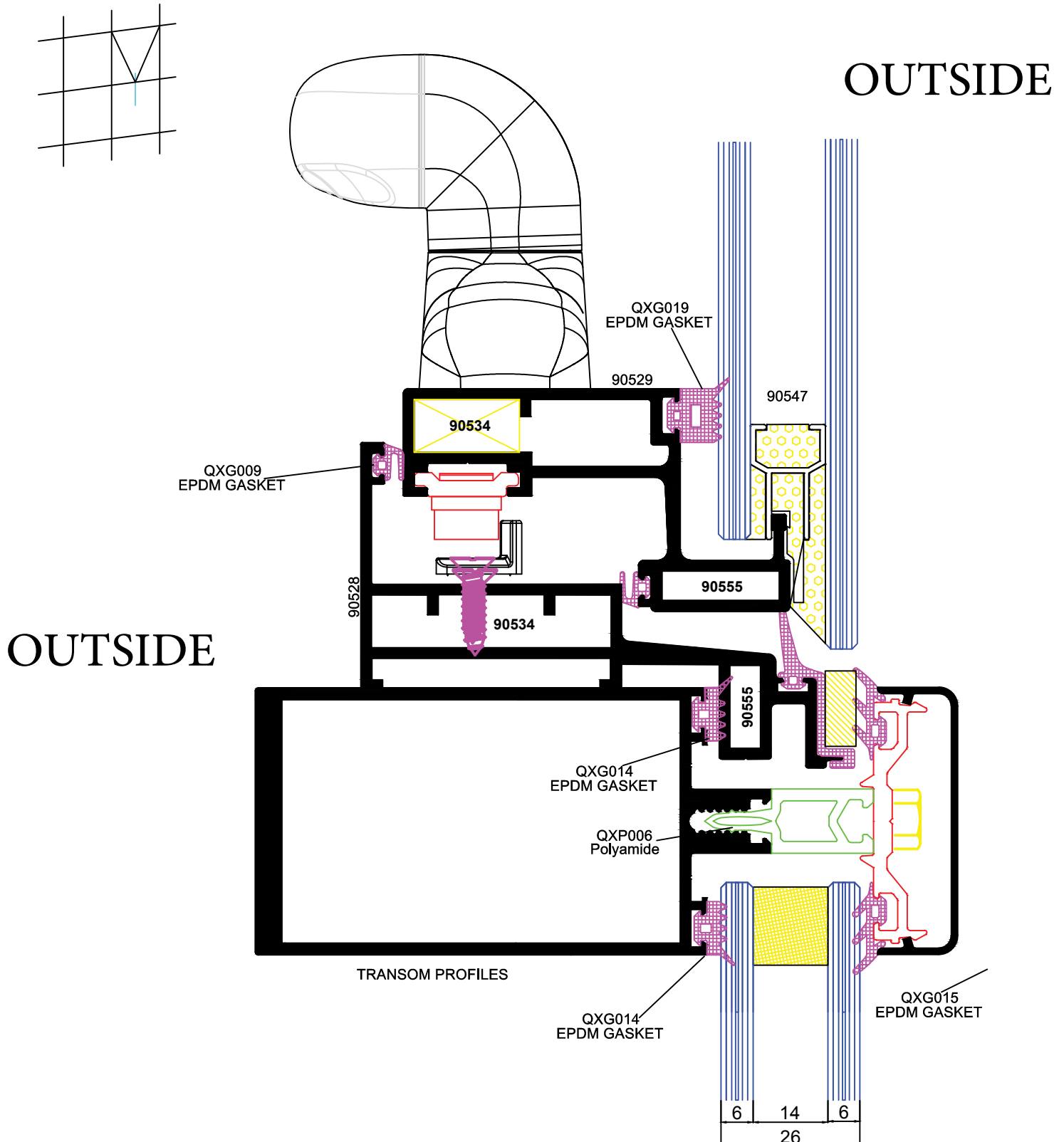


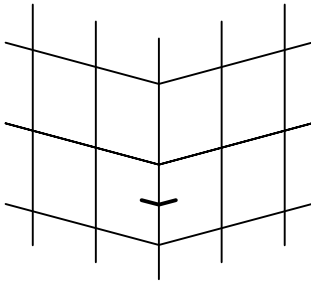
MULLION PROFILES



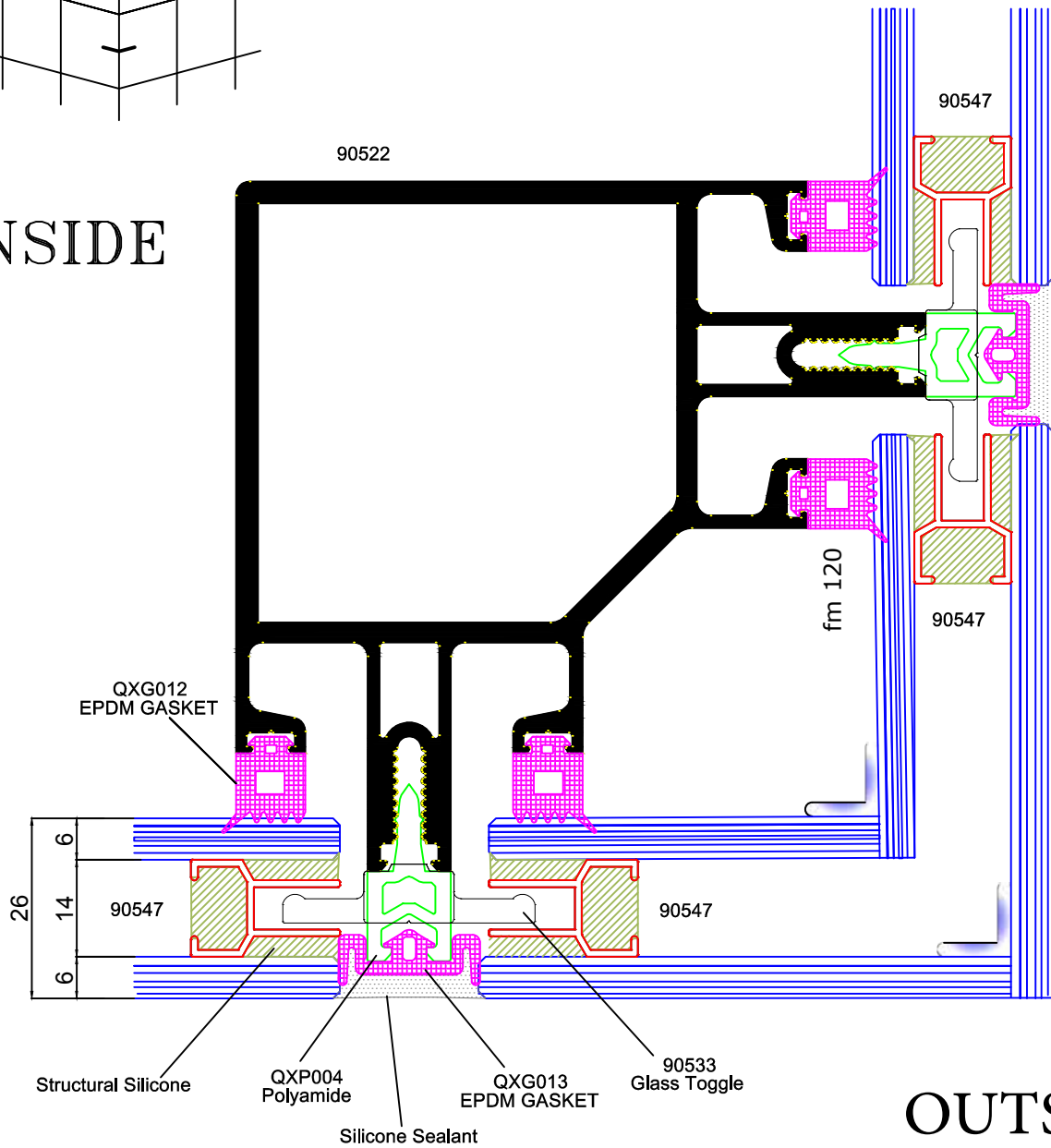
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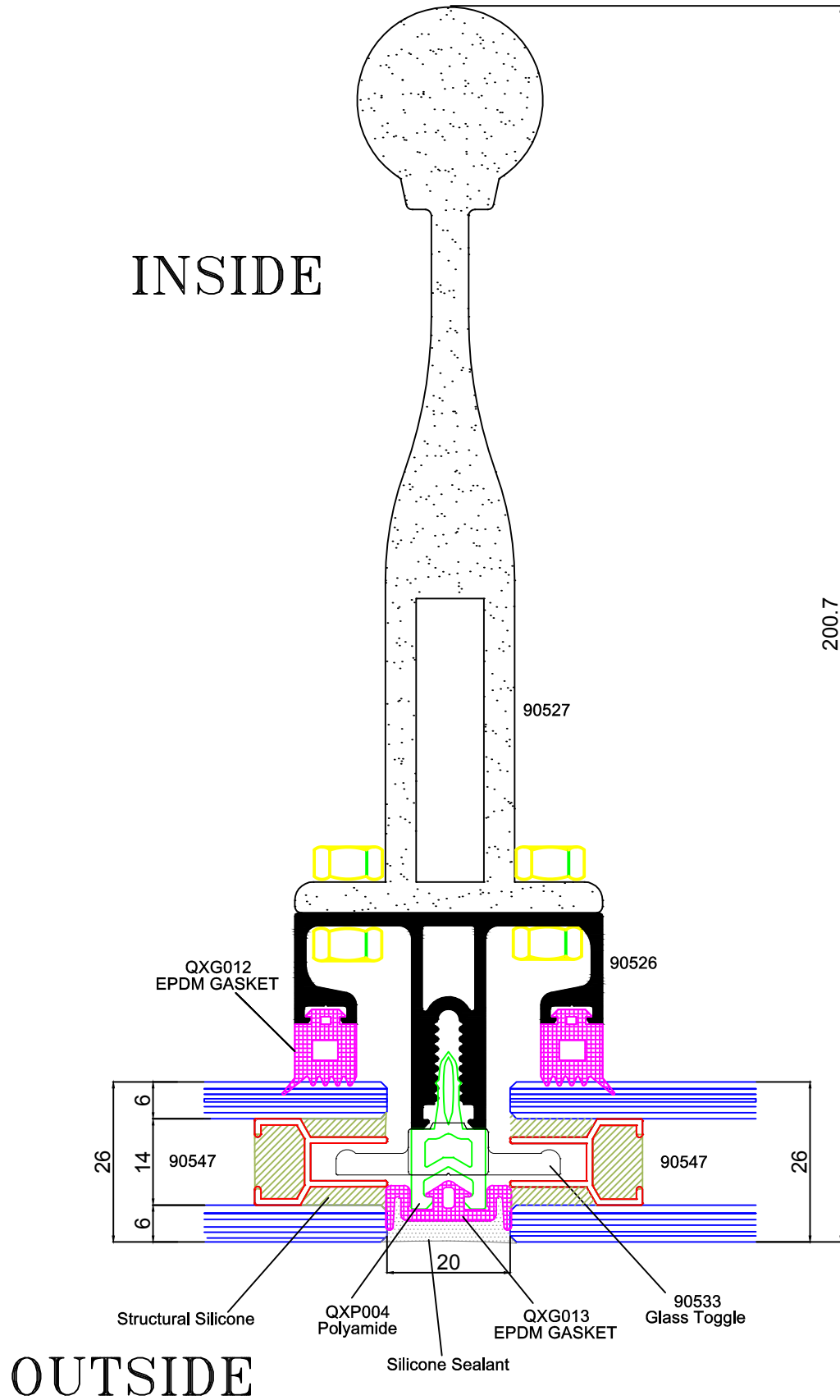


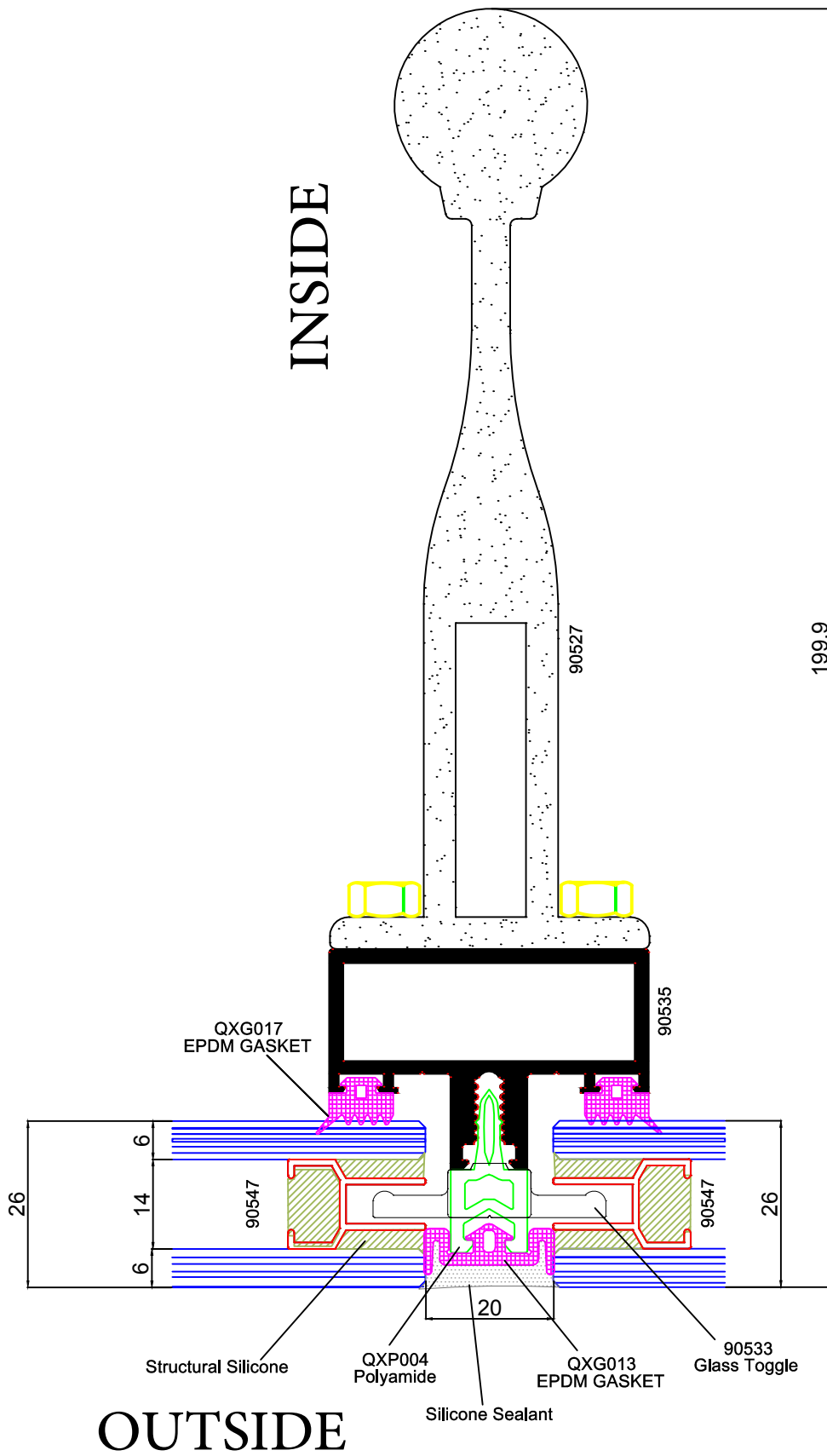


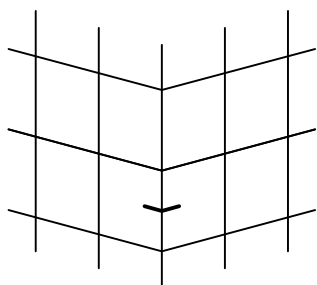
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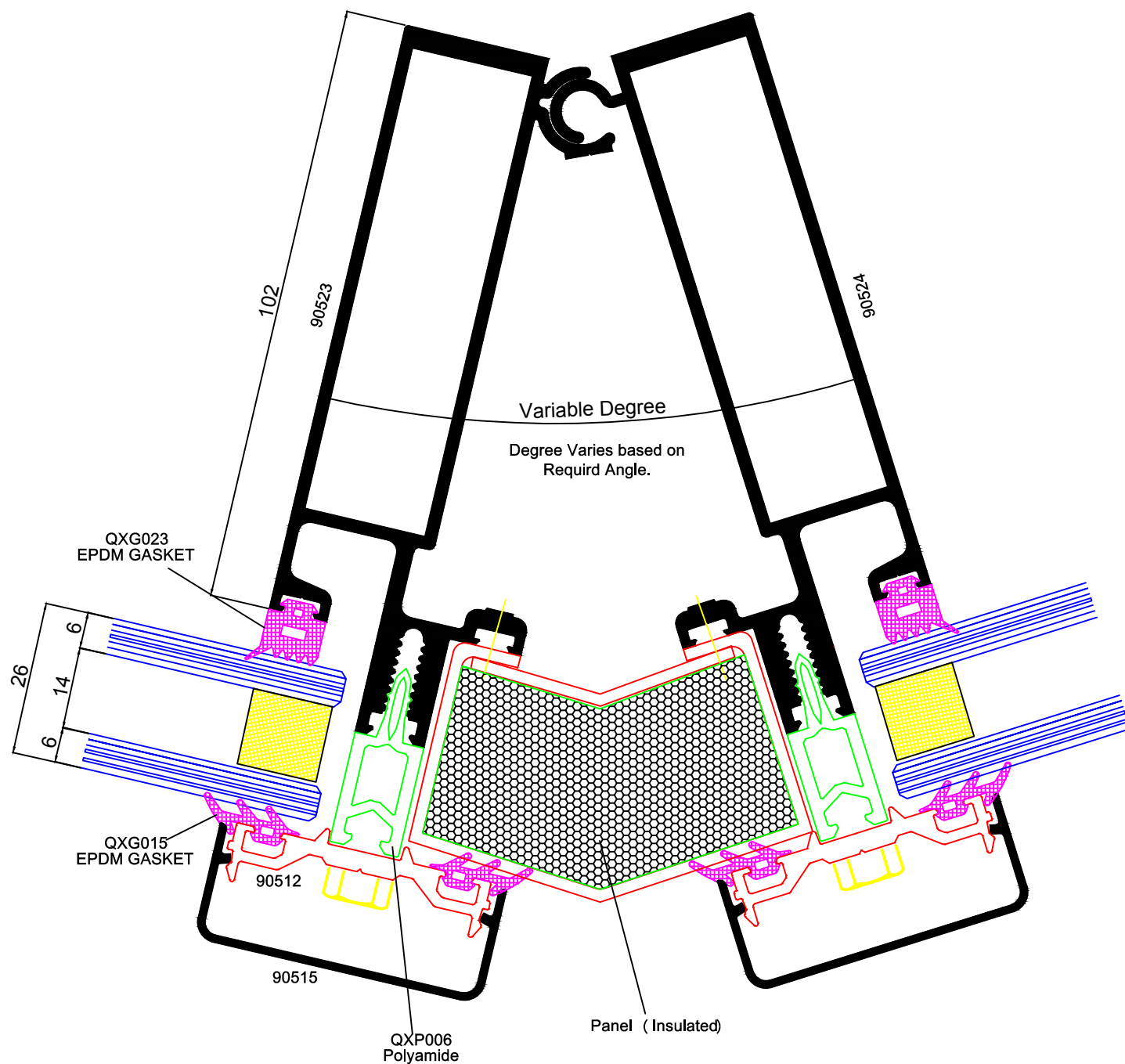
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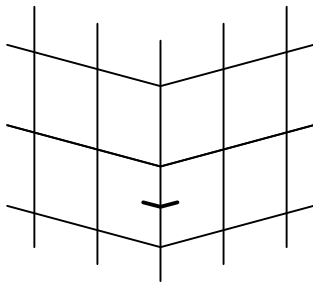




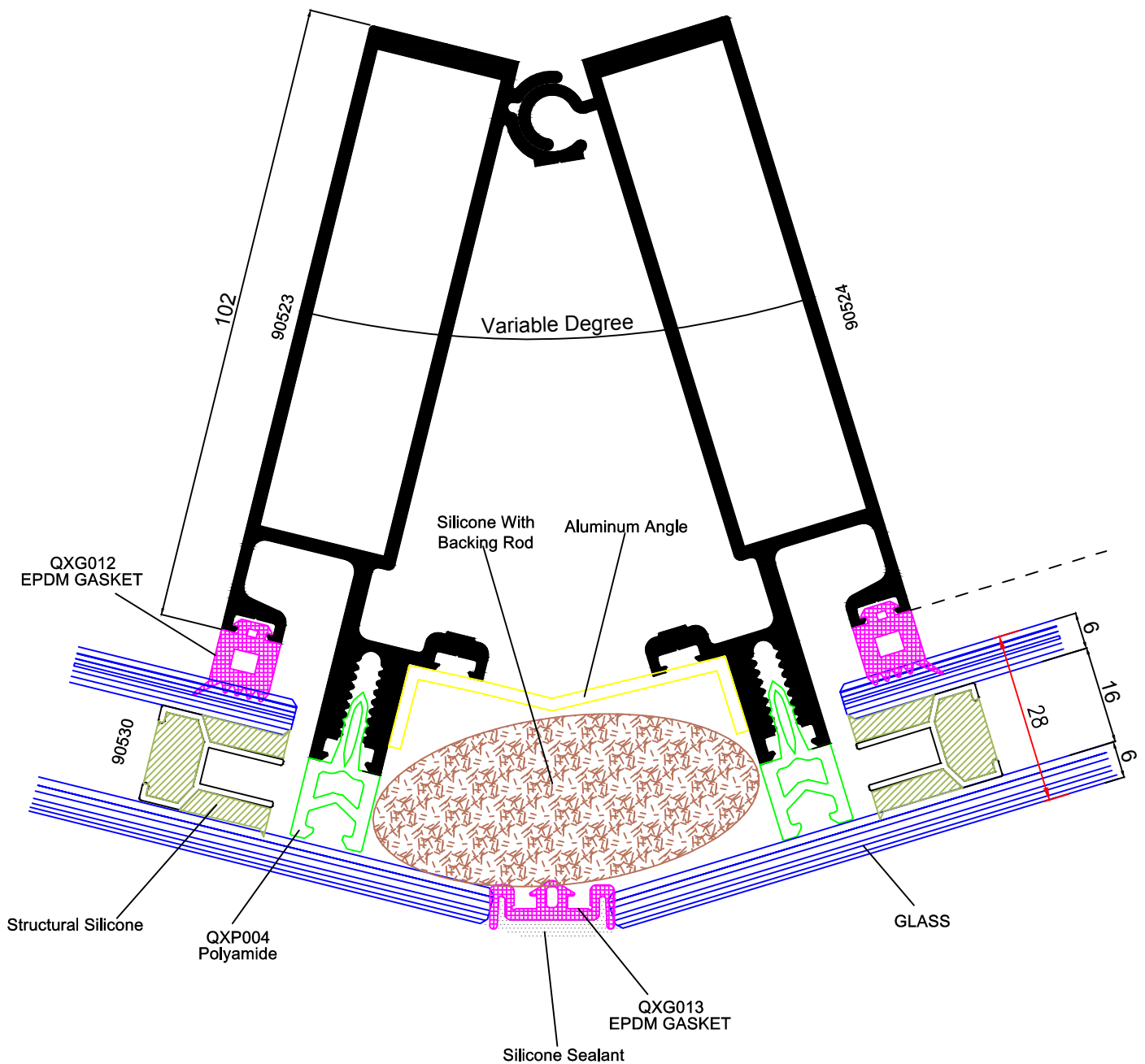
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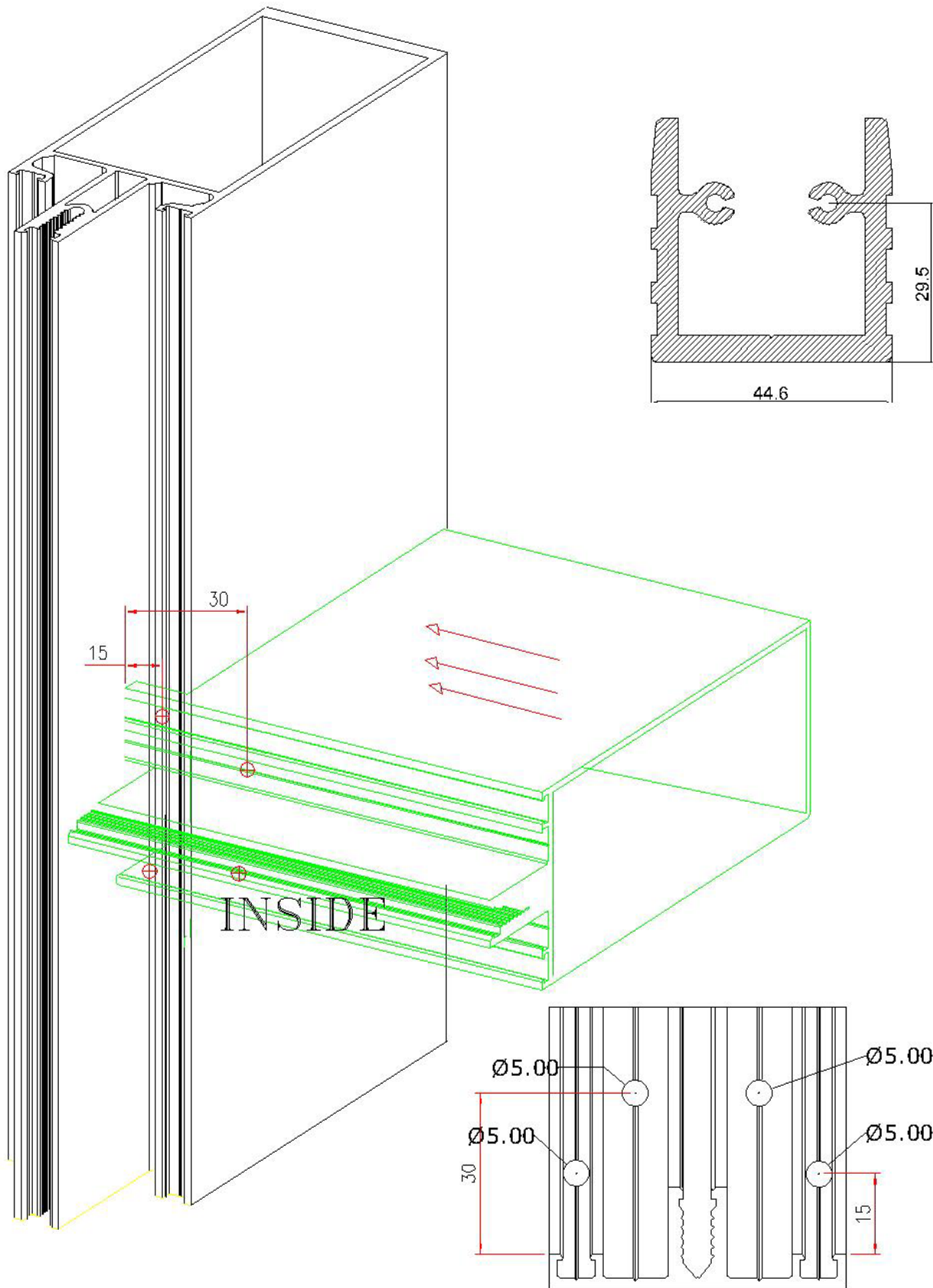
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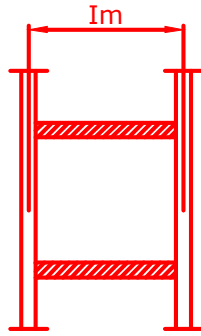


INSIDE



OUTSIDE





I_m = Distance between two consecutive mullions

