Building Profile

THE ALP GROUP

ALP Overseas Private Limited

THE ALP GROUP

Our Plants

ALP NISHIKAWA CO. PVT. LTD. - (Plant) Lalru, Punjab, India

ALP OVERSEAS PVT. LTD. - (Plant) Rudrapur, UK, India

ALP AEROFLEX INDIA PVT. LTD. - (Plant) Rudrapur, UK, India

ALP FPI PARTS PVT. LTD. - (Plant) Neemrana, Rajasthan, India

ALP POLYMER PARK PVT. LTD. - Neemrana, Rajasthan, India

ALP NISHIKAWA CO. PVT. LTD. - (Plant) Ahmedabad, Gujarat, India

ALP AFRICA (PTY) LTD. - (Plant) South Africa

APS COMPANY LIMITED- (Plant) Thailand

ALP Seals –
Your Protection Against Weather Elements !!

THE ALP GROUP

ALP Group was established in 1984 and pioneered the EPDM Rubber Technology in India with the objective of providing the best sealing technology solutions to Indian and Overseas customers for the Building and Construction Industry. Our Ultramodern Plant and Production facilities consist of :

1. Intermix Mills for mixing compounds according to customers' specifications
2. Ultra High Frequency Extrusion Lines
3. Moulding Machines
4. R & D Lab equipped with state-of-the-art testing and laboratory equipments like Tensile Testers, Money Viscometer, Hampden Ozone Chamber, Micro Hardness Testers, Swing Die Rheometers et cetera.
5. Design Department equipped with Catia V-3D Computers.

Today, the Group is the largest manufacturer of EPDM, Silicone, TPR, TPE-V and PVC Seals and Gaskets in India. ALP is there with you around every edge and corner !! We are the company you turn to for custom made solutions to all your problems – from Co-Extruded Profiles in Dual Hardness to Silicone Sealant Compatible EPDM Rubber Extrusions, which exhibit excellent adhesion to Dow Corning, Tremco & GE Momentive Silicone Sealants, from Taped EPDM Rubber Extrusions for Structural Glazing to Fire Retardant Gaskets – we have an answer to all your problems. Our extensive experience enables us to deliver cutting edge solutions for all your needs – sealing solutions from ceiling to the cellar we have a seal for every edge & every corner.

ALP has lived upto its reputation of a Leading Sealing Systems provider by bringing Coloured EPDM Technology to India. We offer a wide range of Door and Window Sealing Systems, Curtain Walling Gaskets (both for Stick Systems and Unitized Systems), Seals for Patio and Swing Entrance Door Systems, Facade Systems, Conservatories and Green Houses, Skylights and Sliding Door and Window systems.

Project	:	Gold Crest
Gaskets by	:	ALP Overseas
Client	:	ETA Star Properties
Consultant	:	W.S. Atkins
Contractor	:	Al Miraikhi Cont. Co.
Floor	:	3G+2P+39 storey

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ALP Seals –
Sealing Solutions from Cellar to Ceiling

Project : Iris Blue Tower
Gaskets by : ALP Overseas
Client : Sheth Estate International
Consultant : NEB
Contractor : Al Ahmadia Cont. Co.
Floor : 3B+G+38+Mech

PRODUCT RANGE

- EPDM Solid/Dense Rubber Profiles.
- EPDM Sponge Rubber Profiles.
- EPDM Co-Extruded Gaskets in Dual Durometer Hardness.
- Coloured EPDM Rubber Extrusions.
- Silicone Rubber Extrusions.
- Coloured Silicone Rubber Extrusions.
- EPDM Rubber Extrusions with Tape.
- Silicone Sealant Compatible EPDM Rubber Gaskets.
- Moulded Corners.
- Moulded Window Frames.
- Flocked Glass Run and Polyurethane Coated Rubber Profiles for Sliding Door & Window Systems.
- EPDM Rubber Mouldings like Drainage Caps.
- EPDM Rubber Profiles for Stick and Unitized Systems.

VALUE ADDED SERVICES AVAILABLE:

- Specialized Design Centre with Catia V Computers.
- Design Engineers available on call.
- Gasket/Seal Consultant available on call for professional advice on Making "Weather Proof" and "Monsoon Proof" Designs.
- Expert advise on selection of Polymer.
- Expert advise on Compatibility of various Polymers with Various Substrates.

EPDM Profiles

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EPDM stands for Ethylene Polypropylene Diene Monomer and it is a synthetic hydrocarbon based organic rubber which exhibits outstanding resistance to ultra violet radiation in sunlight and ozone & heat resistance. It has an exceptionally high ability to accept loading and reagents, fillers and plasticizers. EPDM is basically a thermoset rubber, which contains Ethylene and Polypropylene along with a third Monomer.

EPDM is widely accepted as the perfect material for rubber profiles used in Structural Glazing by Aluminum Fabricators and Door Window Manufacturers. The typical properties of EPDM Rubber are as follows :

ASTM SPECIFIED POLYMER PROPERTIES	**EPDM**
Density Mg/m^3	0.86
Colourability	Good
ASTM SPECIFIED PHYSICAL PROPERTIES ENVIRONMENTAL RESISTANCE	**EPDM**
Hardness, Durometer	30~95 Shore A
Tensile Strength Reinforced (Mpa)	<18
Tear Strength	Fair
100% Modulus (Mpa)	0.69~700
Elongation %	100~700
Compression Set % (Method B)	20~60
Resilience, Rebound (low temp)	Good
Resilience, Rebound (high temp)	Very Good
Flame	Poor
Ozone	Outstanding
Hysteresis	Good
Flex Cracking	Very Good
Tear	Fair-Good
Abrasion	Good-Excellent
Impact	Very Good
Heat Aging	Outstanding
Oxidation	Outstanding
Water	Excellent

Project : 3B-G+34 Comm./Resd. Tower on Plot No. C3
Gaskets by : ALP Overseas
Client : ETA Star Properties
Consultant : DAR
Contractor : Ascon

ALP Seals –
With you Around Every Corner

Project : Madina Tower
Gaskets by : ALP Overseas
Client : Reef Real Estate
Consultant : KEO International
Contractor : Emirates Belbadi Cont. Co.
Floor : 2+1+29 storey

ASTM SPECIFIED POLYMER PROPERTIES	EPDM
Radiation	Good
Resistance to Alkalies	Good-Excellent
Resistance to Acids(Dilute)	Excellent
Resistance to Acids (Concentrated)	Fair-Good
Oils & Gasoline	Poor
ELECTRICAL PROPERTIES	**EPDM**
Vol Res, Ohm-cm	$2X10^{16}$
THERMAL PROPERTIES	**EPDM**
Operating Temperature	$-35^{0}C$ to $+120^{0}C$

The typical properties of an EPDM Rubber gasket are as follows:

S. No.	Characteristics Tested	Standard Followed	ASTM/ Customer's Specifications	Observed Values
1	Hardness Shore A	ASTM-D2240	70±5	73
2	Tensile Strength (Kgf/cm^2)	ASTM-D412	70Min	84
3	Elongation at Break (%)	ASTM-D412	250Min.	273
4	Tear Strength (Kgf/cm)	ASTM-D624	15Min.	24
5	100% Modulus (Kgf/cm^2)	ASTM-D412	20 Min.	25
6	Specific Gravity	ISO-2781	1.25±0.05	1.25
7	Age Resistance At $70^{0}C$ For 70 Hrs	ASTM-D573		
I	ΔHardness	ASTM-D2240	+10,-5	+5
II	ΔTensile Strength (%)	ASTM-D412	-25 Max.	+10
III	ΔElongation At Break (%)	ASTM-D412	-35 Max.	-21
8	Compression Set (%) At $70^{0}C$ For 22 Hrs	ASTM-D395	50 Max.	34
9	Ozone Resistance	ASTM-D1149	NO	NO
I	O_3 Concentration 50pphm		VISIBLE	VISIBLE
II	Test Temperature $40^{0}C$		CRACKS	CRACKS
III	Elongation (%)20			
IV	Duration 72 Hrs			

ALP Seals –
Cutting Edge Technology –
If you have a Corner – We have a seal for It

THE ALP GROUP

ALP's expertise lies in, application analysis by our 'Marketing Experts' and Design Engineers. ALP actively solicits and invites its customers to visit our plant and facilities and meet our design engineers or we will travel to meet you to discuss your application requirements. Our Marketing Experts and Design Engineers are available for consultation on any job

Compound assessment and Recommendation :
We will analyze your application to recommend the most effective material, even if it requires custom formulations - from UL-94 approved Fire Resistant Gasket to Silicone Sealant Compatible Compounds. ALP offers compounds that meet ASTM, DIN, BS, JASO, EN and almost any other specifications.

Testing and Evaluation :
ALP has an In-House Testing Laboratory and it is approved by the Government of India. We offer In-House Test Facilities and in the unlikely eventuality that some special tests cannot be done, the same are arranged in reputable testing facilities in India, Europe and USA.

Die Development :
ALP has its own Die Shop and Tool Room, where Dies and Moulds are developed according to customers' specifications.

Project	:	Concord Tower
Gaskets by	:	ALP Overseas
Client	:	32 Group
Consultant	:	Arif & Bintoak
Contractor	:	Al Rostamani Pegel L.L.C.
Floor	:	G+2P+38 storey

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Coloured EPDM

ALP is the first and only Company in India and Middle East to introduce the Coloured EPDM Technology in the above mentioned markets.

Project	:	Reef Tower
Gaskets by	:	ALP Overseas
Client	:	Reef Real Estate
Consultant	:	KEO International
Contractor	:	Emirates Belbadi Cont. Co.
Floor	:	3B+G+31+ Mech.

Silicone

Chemists at Corning Glass and General Electric were investigating heat-resistant materials for use as resinous binders when they synthesized the first silicone polymer. Corning Glass formed a joint venture with Dow Chemical in 1943 to produce the new class of silicone materials.

Silicone Rubber offers good resistance to extreme temperatures from -55^{0}C to +300^{0}C at extreme temperatures, the tensile strength, elongation, tear strength and compression set can be far superior to conventional rubbers although still low relative to other materials. Organic rubber has a carbon to carbon backbone which can leave them susceptible to UV, Ozone, Heat and Other Ageing factors that Silicone Rubber can withstand well. It is the ideal elastomer of choice in many extreme environments.

The disadvantages are that compared to organic rubber, silicone rubber has very low tensile strength. Silicone Rubber is an inert material and when properly handled silicone does not stain, corrode or in any way adversely effect material with which it comes in contact. Conventionally silicones have been classified as slow Burning.

Silicone Strength

- Outstanding Resistance to High Heat.
- Excellent Flexibility at Low Temperatures.
- Low Compression Set.
- Very Good Electrical Insulation.
- Excellent Resistance to Weather, Ozone, Sunlight and Oxidation.
- Superior Colour Stability.
- Flame Retardant.

Silicone Limitations

- Poor Resistance to Abrasion, Tear and Cut Growth.
- Low Tensile Strength.
- Inferior Resistance to Oil, Gasoline and Solvents.
- Poor Resistance to Alkalis and Acids.

Project	:	Burlington Tower
Gaskets by	:	ALP Overseas
Client	:	Deyaar
Consultant	:	Arex
Contractor	:	Emirates Man
Floor	:	3B+G+4P+35 Typical Floors
Location	:	United Arab Emirates

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Silicone Sealant
Compatible EPDM Rubber Extrusions

What is Compatibility?

Compatibility is defined as the ability of two materials to exits in contact or close proximity to each other while having no deleterious or adverse effects on each other.

Examples of compatible Materials : Glass and Aluminium, Wood and Plastics, Brass and Wood, Plastics and Aluminium, Porcelain and Paper, et cetra.

Examples of Incompatible Material: Acid and Aluminium, Sugar and Water, Different Groups of Blood, Ice and Heat, Wax and Heat, Petrol and Fire, et cetra.

Reasons of Incompatibility between EPDM and Silicone Sealants :

- EPDM is an Organic Product. It has to be plasticized with Process Oils and other plasticizers like Calcium Carbonate, Stearic Acid, Carbon and many other curatives and chemicals to make flexible gaskets out of it.
- Silicone Sealants are "Non-Oil" based Inorganic Products and one of the most excellent adhesives for bonding Aluminium with Glass.
- When "Organic" EPDM Gaskets "Plasticized" with "Process Oils" come in contact with "Inorganic" "Non-Oil Based" Silicone Sealants the "Oil and Plasticizers" from EPDM Gaskets move/ migrate into the Silicone Sealants and contaminate it.

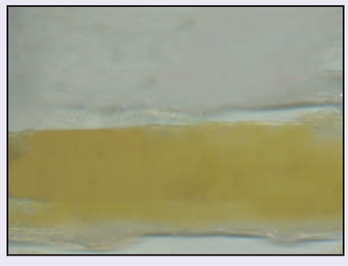
What are the symptoms of Incompatibility ?

The first symptom is that the Silicone Sealant begins to change colour, since something (the plasticizers) is moving/ migrating from the EPDM Gasket into Silicone Sealant. This colour change is reported by Lab Researchers on a Zero to Five Point Scale as follows:

Scale Grading	Colour Change	Change Description
0	None	No Change from Control
1	Very Very Slight	Change So Slight that you are Not Sure if it is Real
2	Very Slight	Faint Colour Generally Yellow
3	Slight Light Colour	Commonly Yellow, Orange, Pink or Brown
4	Severe	Distinct Colour possibly Red or Purple in addition to Yellow, Orange, Pink or Brown.
5	Very Severe	Dark Colours may be Black As Well as Other Colours Mentioned Above.

Colour Change :

- Colour change indicates a chemical reaction between the Gasket material and "Structural Silicone Sealants."
- This reaction may in the long term, cause a complete loss of adhesion between the glass and the substrate when they are exposed to heat and ultraviolet in the sunlight.



- Experience shows that Organic rubbers such as EPDM and Neoprene cause colour change and loss of adhesion and therefore are judged "Incompatible" with "Silicone Sealants" in Structural Glazing Systems.

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Loss of Adhesion :

- The second symptom of Incompatibility is “Loss of Adhesion”.
- This may lead to significant deterioration in the silicone sealant's adhesive strength or adhesion or bonding with glass and metal surface.
- ACCEPTABLE ADHESION is required to limit air and water infiltration in the Building.
- In other words adhesion may be required to make sure that the System will be "Weather Tight".

ASTM C-1087 Test:

- The standard test for determining compatibility of liquid applied sealants with accessories used in Structural Glazing Systems is ASTM C-1087 test.
- Researchers prepare Test Specimens with a Black Sealant in contact with a gasket specimen, alongwith a light coloured or translucent sealant, placed together on a clean glass substrate.
- After the sealant has cured for one week, the test specimens are exposed to Ultra Violet Radiation and Heat.
- The test specimens are removed after 21 days and cooled to Room Temperature. They are examined for any colour change and pulled back at a 90 degrees angle to determine the mode of failure – Cohesive or Adhesive Failure.

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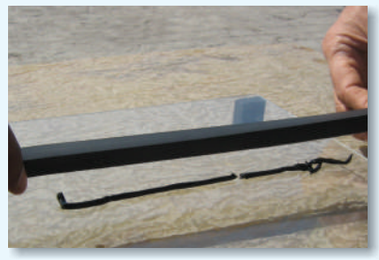
Cohesive Versus Adhesive Failure :

100% COHESIVE FAILURE

- EPDM Rubber gasket has passed. Gasket did not loose adhesion. Job can be repaired, Repair instructions : Re apply silicone sealant in space made by 90 Degree angle and Re-Seal the Gasket with the substrate.
- Compatible Gasket : Weathertight Building

100% ADHESIVE FAILURE

- EPDM Gasket failed. EPDM Gasket lost adhesion.
- Job cannot be repaired. Even if you reapply silicon sealant in space made by 90 Degree Angle, the gasket will "OPEN UP" again, since it does not adhere with the silicone sealant, due to migration of Fluids/ Plasticiers/ Oils
- Incompatible Gasket : Infiltartion of Rain Water, Dust, Heat, etc. in the system

COMPATIBILITY KEY TO LONGEVITY :

The Structural Glazing Systems Adhesion, Weatherability and Durability, as well as aesthetic implications, over the long term depend upon all products being compatible through out the Projects Life. Without adequate testing the Glazier owns the job and all responsibility associated with it.

ALP has pioneered the Silicone Sealant Compatible EPDM Compound in the Indian and Middle East Market

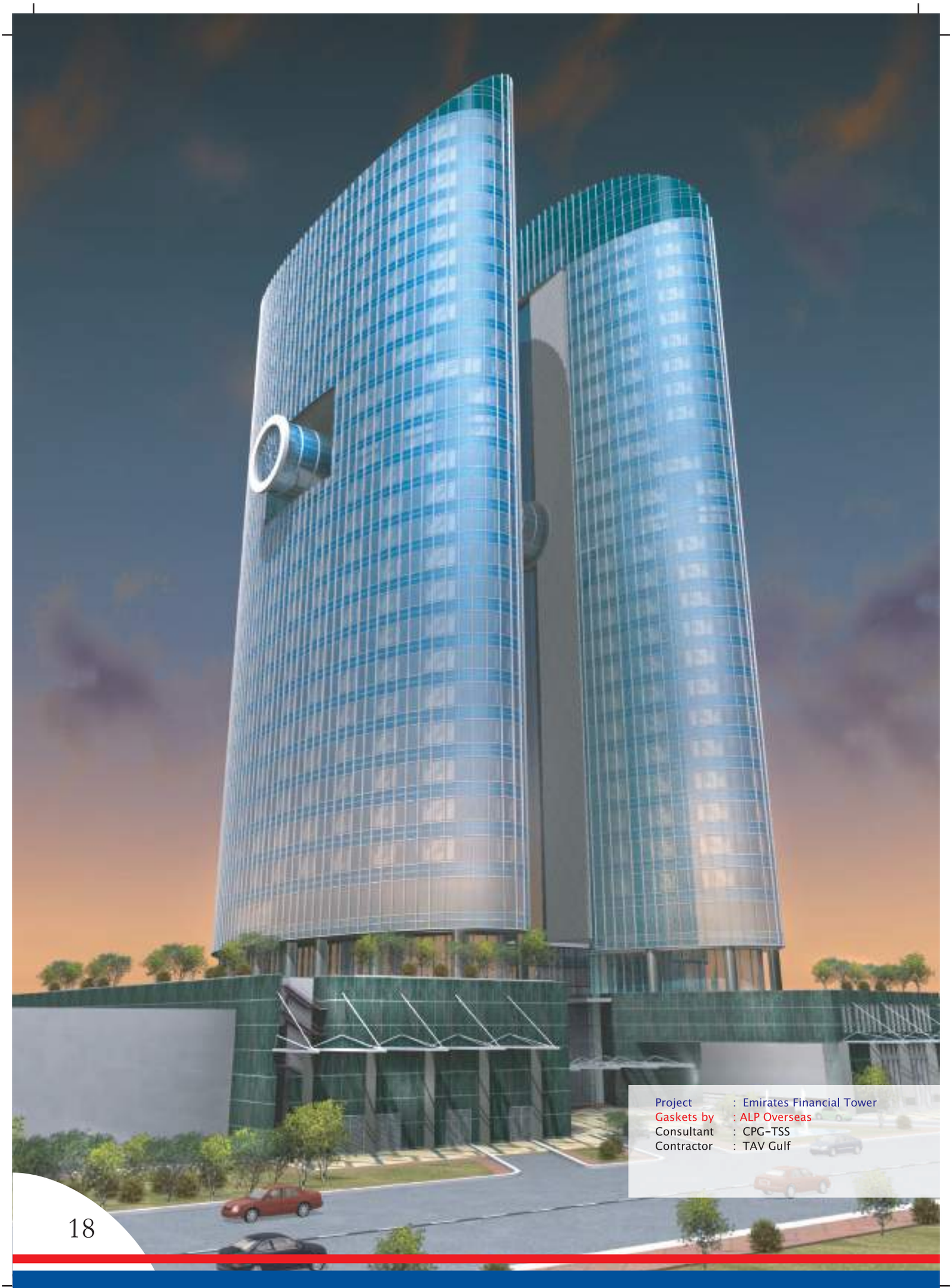
ARCHITECT'S GUIDE TO SELECTION OF MATERIALS

PROPERTIES		NATURAL RUBBER	SBR	BUTYL	EPDM	NBR	SILICONE	NEOPRENE	HYPALON
Tensile Strength	Pure Gum	Over 3,000	Below 1,000	Over 1,500	Over 3,000	Below 1,000	Below 1,500	Over 3,000	Over 2,510
(PSI)	Black Loaded	Over 3,000	Over 2,000	Over 2,000	Over 3,000	Over 2,000		Over 3,000	Over 3,000
Hardness Range	(Shore A)	30-90	40-90	40-75	40-90	40-96	40-85	40-95	40-95
Specific Gravity	Base Materials	0.93	0.94	0.92	0.85	1.00		1.23	1.28
Adhesion to Metal		Excellent	Excellent	Good	Good	Excellent		Excellent	Excellent
Tear Resistance		Good	Fair	Good	Good	Fair	Poor	Good	Fair
Abrasion Resistance		Excellent	Good	Good	Good	Good	Poor	Excellent	Excellent
Compression Set		Good	Good	Fair	Good	Good	Fair	Fair	Fair
Rebound	Cold	Excellent	Good	Bad	Good	Good	Excellent	Very Good	Good
	Hot	Excellent	Good	Very Good	Good	Good	Excellent	Very Good	Good
Dielectric Strength		Excellent	Excellent	Excellent	Excellent	Poor	Good	Good	Excellent
Electrical Insulation		Good	Good	Good	Excellent	Poor	Excellent	Fair	Good
Permeability to Gases		Fair	Fair	Very Low	Poor	Fair	Fair	Low	Very Low
Acid Resistance		Fair	Fair	Excellent	Good	Good	Excellent	Good	Very Good
SOLVENT RESISTANCE	Aliphatics	Poor	Poor	Poor	Poor	Excellent	Poor	Good	Good
	Aromatics	Poor	Poor	Poor	Poor	Good	Poor	Fair	Fair
	Ketones	Good	Good	Good	Good	Poor	Fair	Poor	Poor
	Lacquer	Poor	Poor	Poor	Poor	Fair	Poor	Poor	Poor
RESISTANCE TO Swell in Lubricating Oil		Poor	Poor	Poor	Poor	Very Good	Fair	Good	Good
Oil & Gasoline		Poor	Poor	Poor	Poor	Excellent	Fair	Good	Good
Animal & Vegetable Oils		Poor	Poor	Excellent	Good	Excellent	Fair	Good	Good
Water Absorption		Very Good	Good	Very Good	Good	Fair	Good	Good	Very Good
Oxidation		Good	Good	Excellent	Excellent	Good	Excellent	Excellent	Excellent
Ozone		Fair	Fair	Excellent	Excellent	Fair	Excellent	Excellent	Outstanding
Sunlight Aging		Poor	Poor	Very Good	Excellent	Poor	Excellent	Very Good	Outstanding
Heat Aging		Good	Very Good	Excellent	Excellent	Excellent	Outstanding	Excellent	Excellent
Flame		Poor	Poor	Poor	Poor	Poor	Fair	Good	Good
Heat		Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Cold		Excellent	Excellent	Good	Excellent	Good	Excellent	Good	Good

PROJECTS

Project : Rose Tower
Gaskets by : ALP Overseas
Aluminium Fabricator : ALICO

Project	: Saba Twin Tower
Gaskets by	: ALP Overseas
Client	: Saba Real Estate
Consultant	: RMJM
Contractor	: Arabian Construction Co.
Floor	: G+3+30 storey



Project : Emirates Financial Tower
Gaskets by : ALP Overseas
Consultant : CPG-TSS
Contractor : TAV Gulf

Project : Iris Bay Tower
Gaskets by : ALP Overseas
Client : Sheth Estate International
Consultant : Atkins
Contractor : TAV Gulf

Project	: Liberty House
Gaskets by	: ALP Overseas
Client	: ETA Star Properties
Consultant	: Holford Associates
Contractor	: Ascon
Floor	: B+G+36 storey

Project	:	Metropolis Tower
Gaskets by	:	ALP Overseas
Client	:	Deyaar
Consultant	:	LACASA
Contractor	:	Emirates Man Contracting
Floor	:	3B+G+4P+22 Typical Floors Commercial & Office building on Plot No. BB.A03.031 at Business Bay

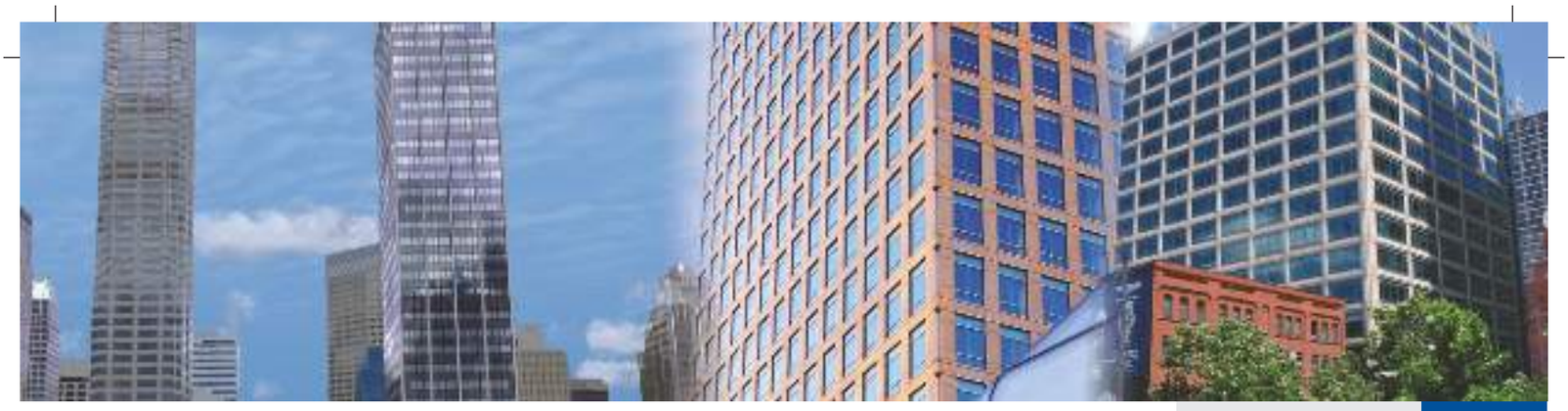
Project	: Marinascape
Gaskets by	: ALP Overseas
Client	: Trident International Holdings
Consultant	: Archon
Contractor	: Larsen & Toubro
Floor	: 25/33 floors

Project : Dubai Marina Mall
Gaskets by : ALP Overseas
Aluminum Fabricator : Multiforms L.L.C.

Project : The Liwa Centre
Gaskets by : ALP Overseas
Location : Abu Dhabi

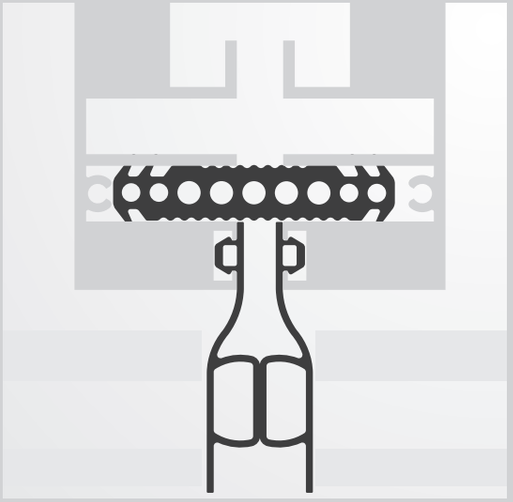
Project	: Tiffany Tower
Gaskets by	: ALP Overseas
Client	: Tiffany Realty
Consultant	: W.S. Atkins
Contractor	: Al Rostamani Pegel L.L.C.
Floor	: G+3P+38+Mech storey

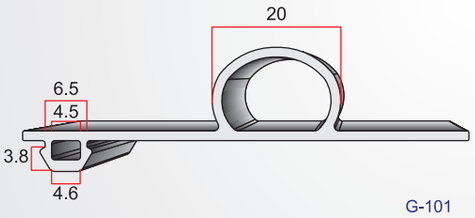
Schuco Unitized System



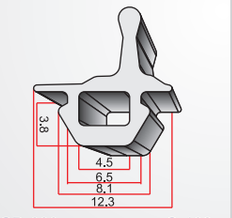
Metal Plan Unitized System

GD-029 G-100





G-101



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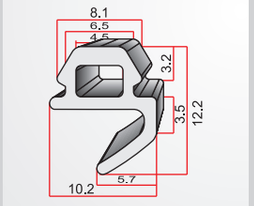

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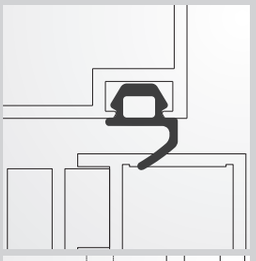

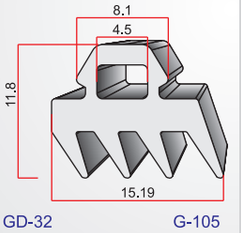

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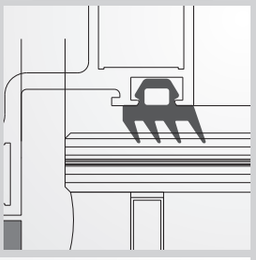

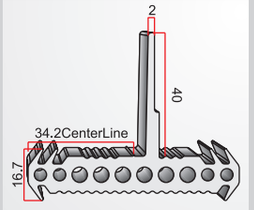

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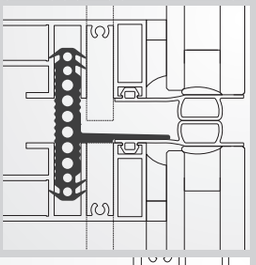

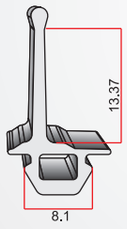

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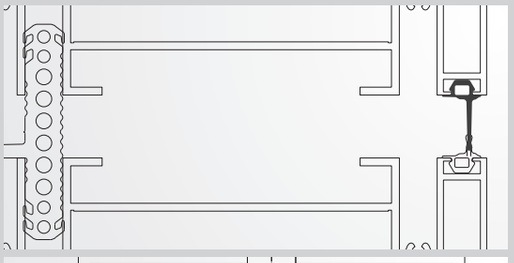

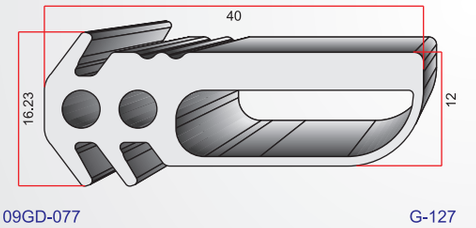

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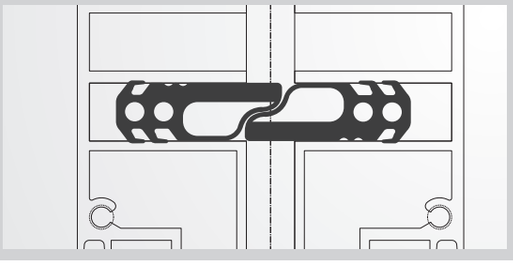
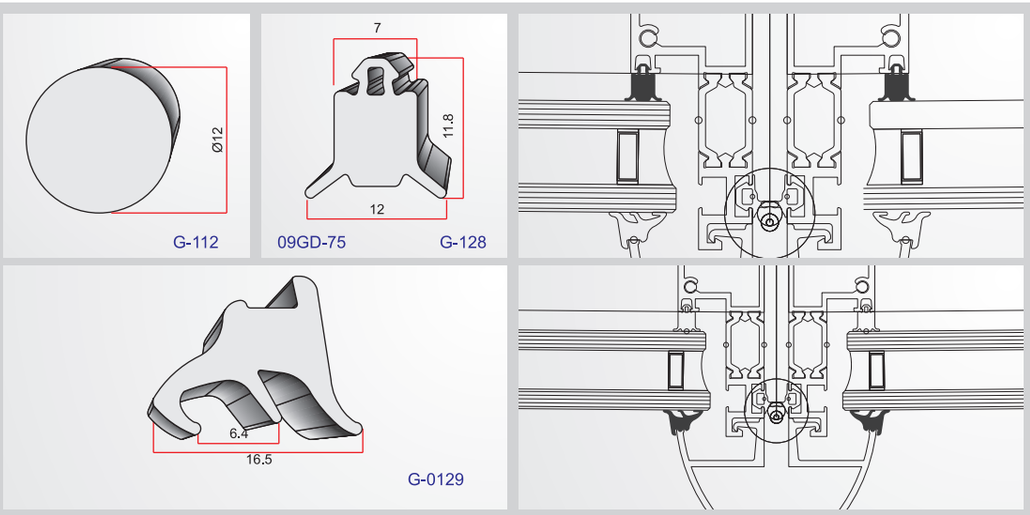
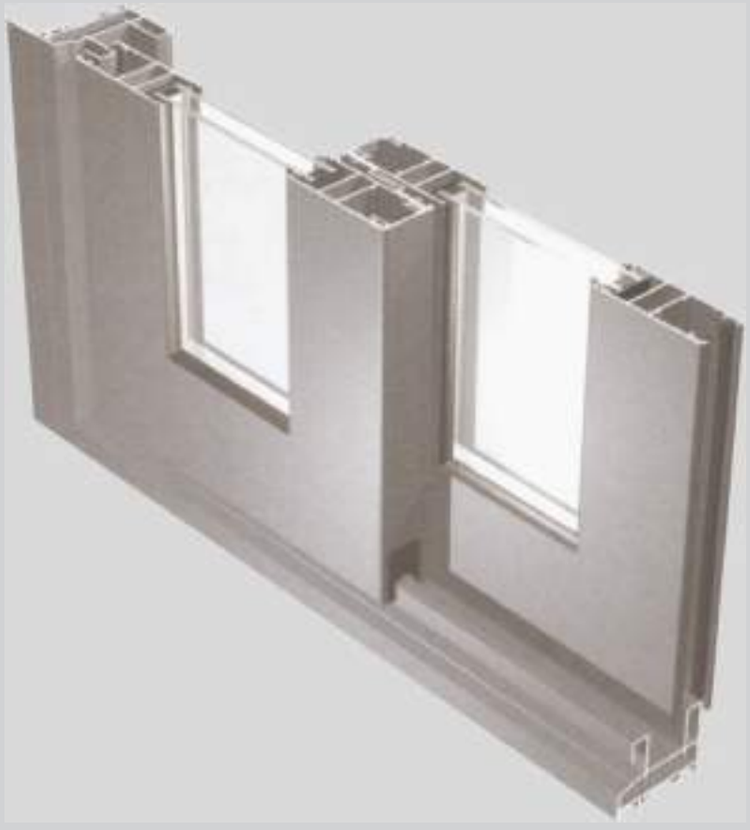
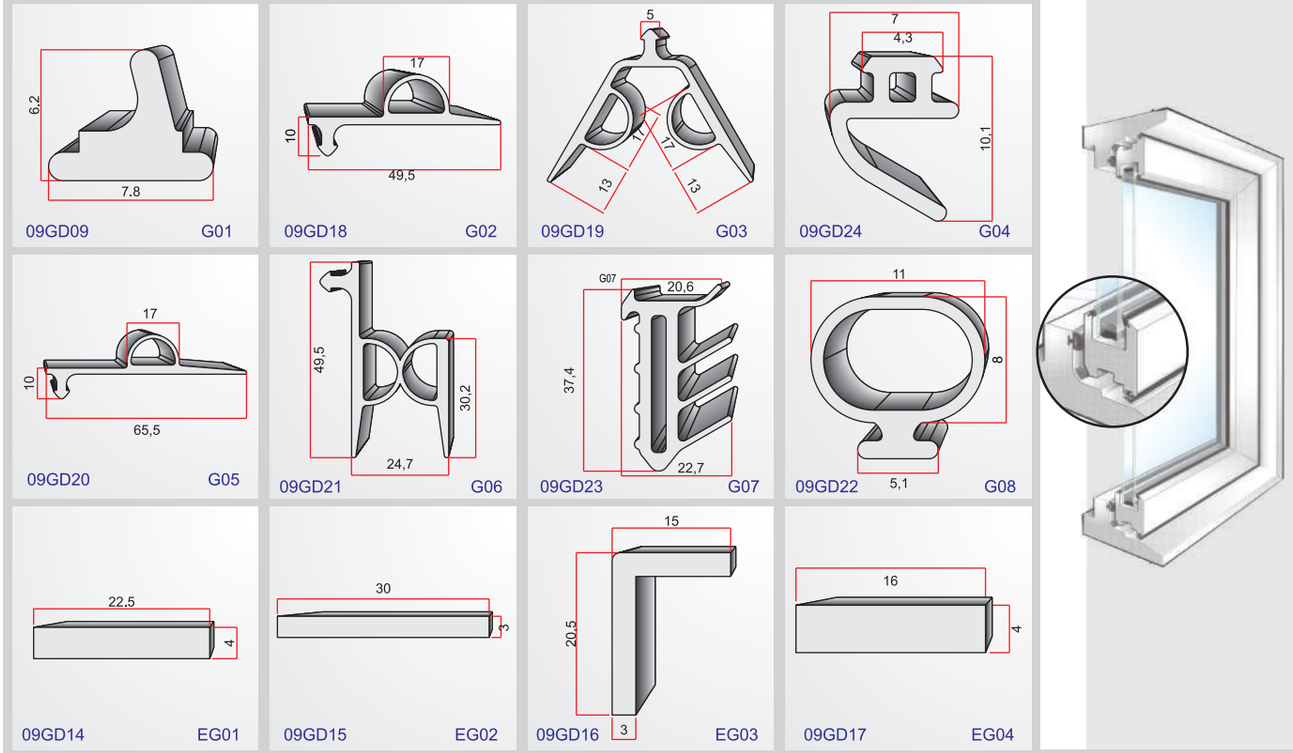


Metal Plan Unitized System

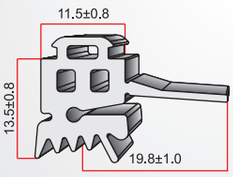




Other Unitized System



Gutmann System



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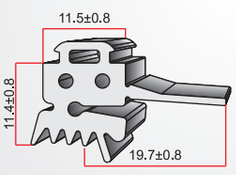

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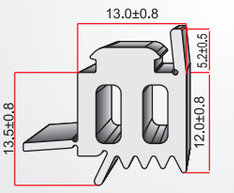

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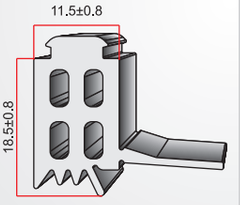

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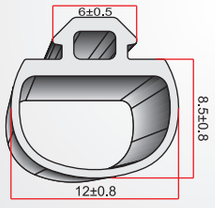

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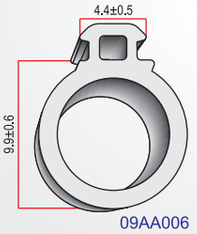

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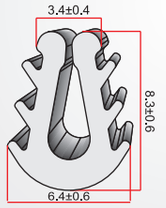

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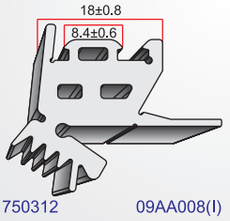

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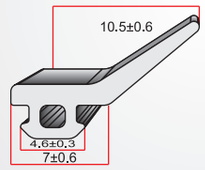

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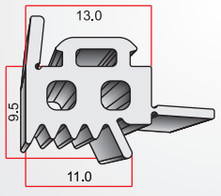

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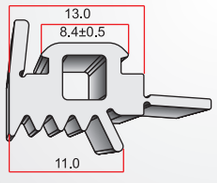

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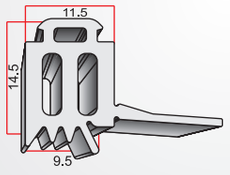
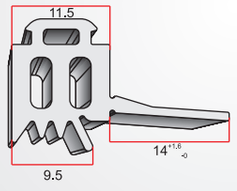


750112 09AA011



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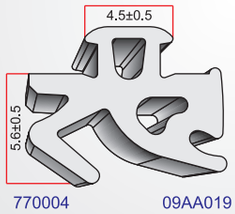

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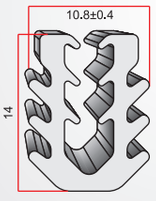

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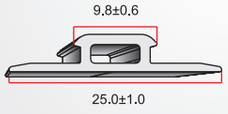

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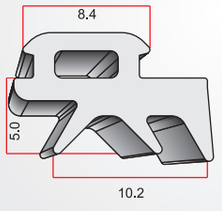

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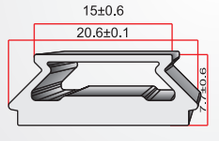

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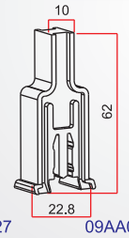
EPDM Rubber Mouldings



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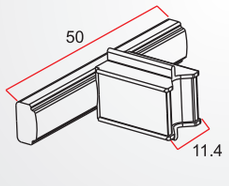

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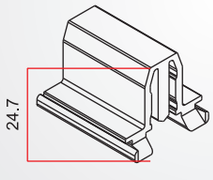

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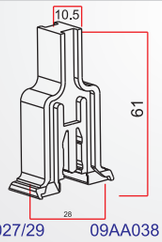

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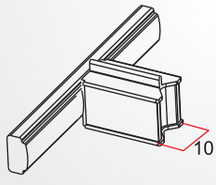

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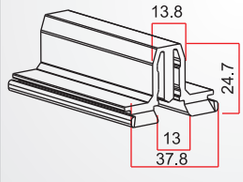

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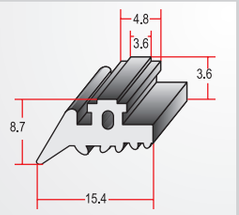
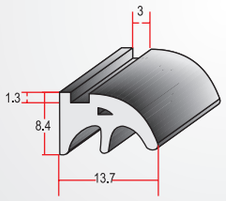
Gulf Extrusion System



GE#:600.13.001 | ALP-09029/10



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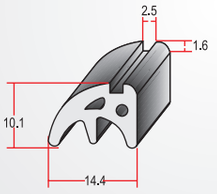
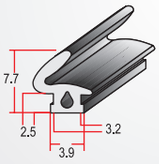
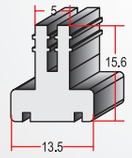


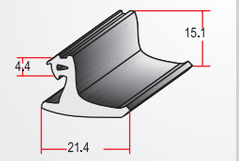
GE#:600.13.003 | ALP-09029/02



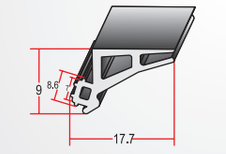
CW/70/RUB3
GE#:600.13.004 | ALP-09029/14



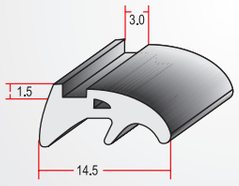
GE#:T-RUB-1(BIG) | ALP-09029/33



GE#:600.13.005 | ALP-09029/16



GE#:600.13.006 | ALP-09029/04



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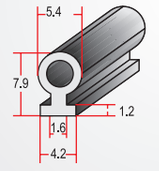

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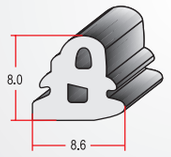

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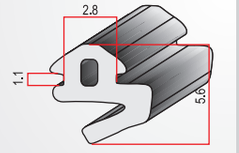

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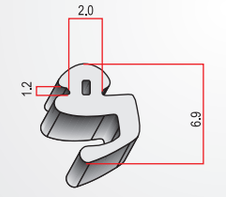

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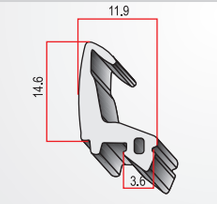

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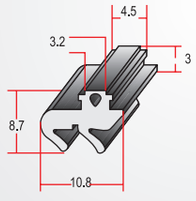

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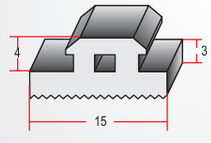
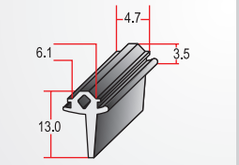


GE#:09029/11R | ALP-09029/35



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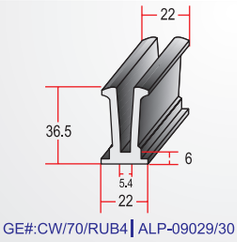

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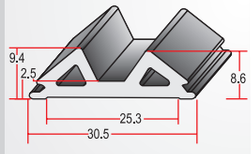
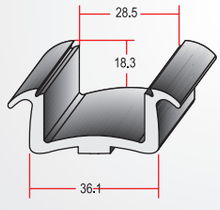
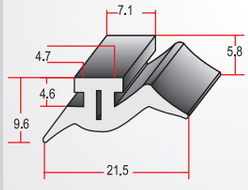


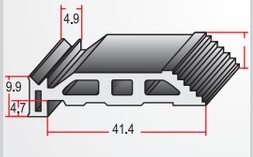
GE#:900.13.004 | ALP-09020/07



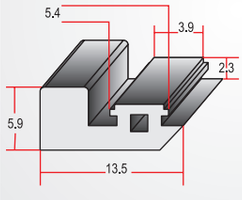
GE#:900.13.005 | ALP-09029/06



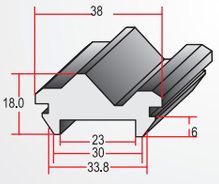
GE#:Pressure Plate | ALP-09039/02



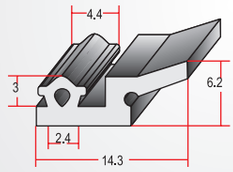
GE#:900.13.006 | ALP-09020/06



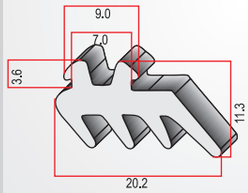
GE#:900.13.007 | ALP-09029/22



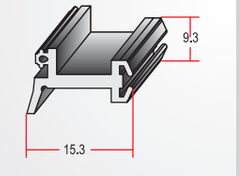
GE#:900.13.008 | ALP-09029/24



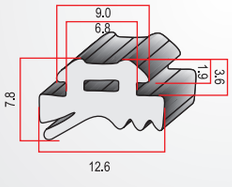
GE#:10566 | ALP-09029/26



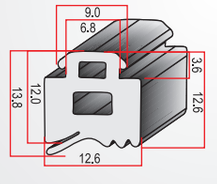
GE#:Curtain Wall | ALP-19041



GE#:10560 | ALP-09029/28



GE#:Pressure Plate | ALP-19039



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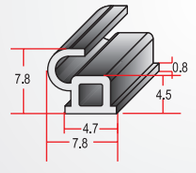
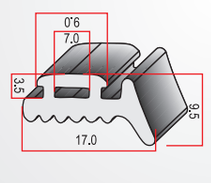
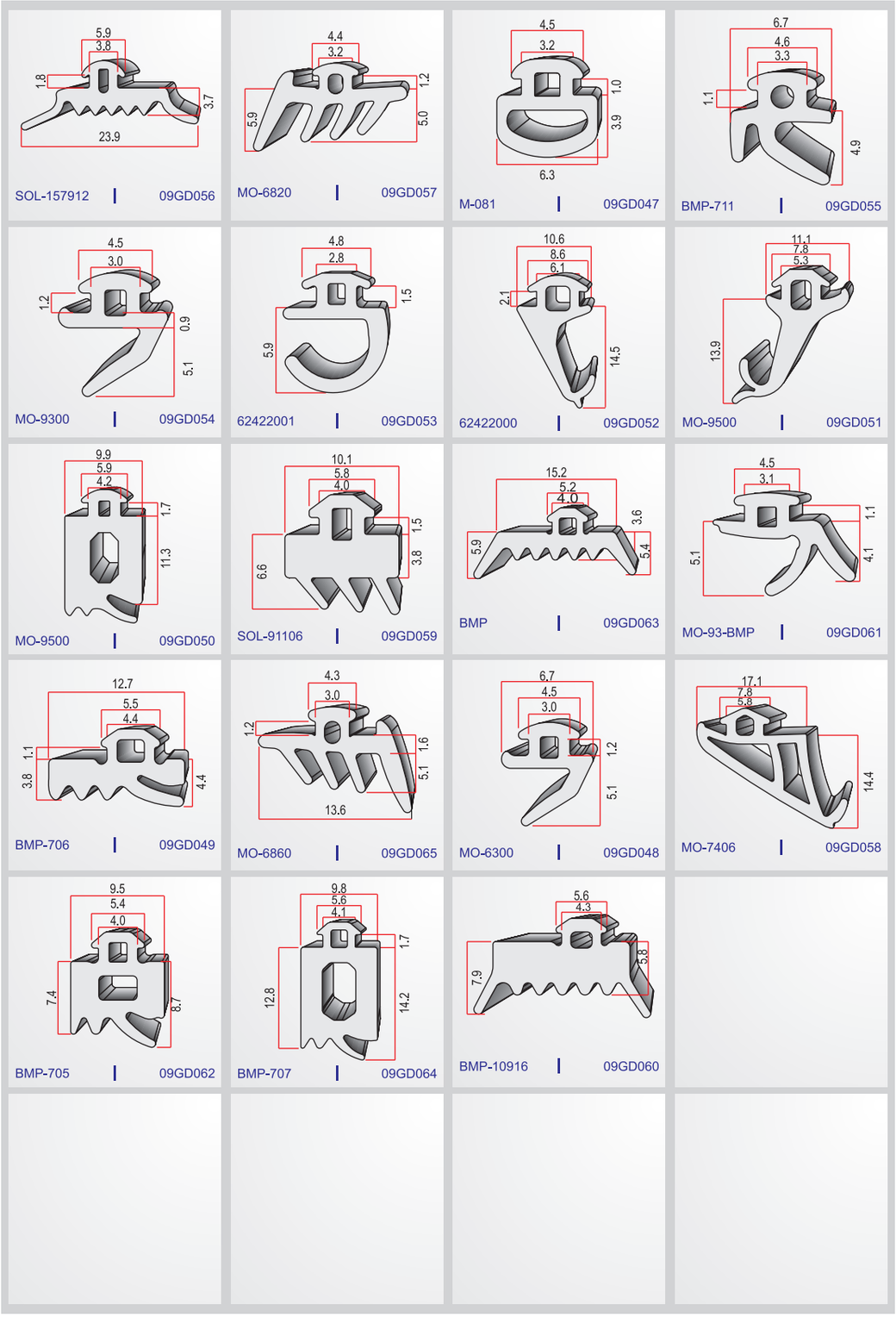


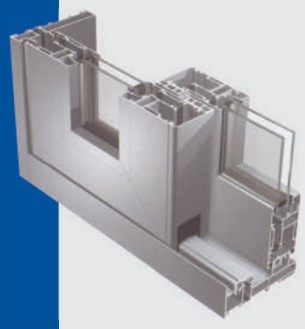
GE#:P-Rubber | ALP-09053/01



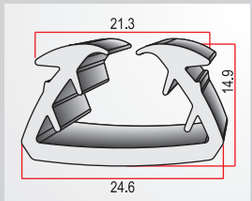
GE#:Curtain Wall | ALP-19054

Alumil System

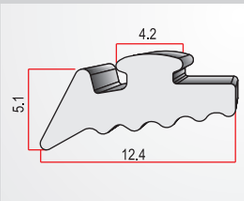




Balexco System



E-2108 | 09GD041



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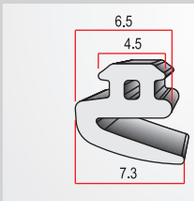

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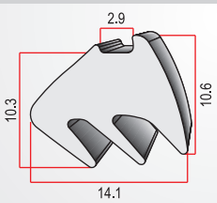

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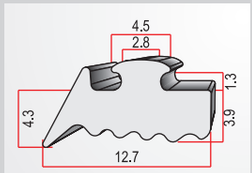
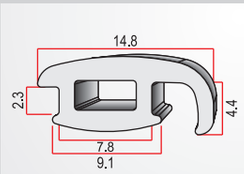


E-2112 | 09GD038



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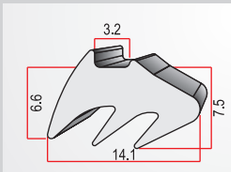

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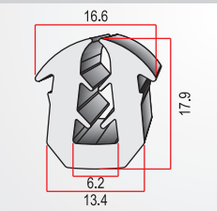
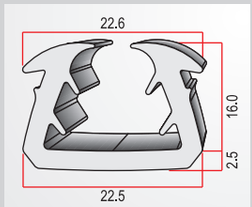


E-2105 | 09GD045



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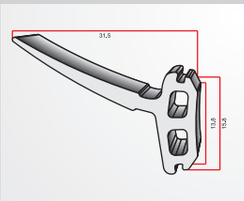
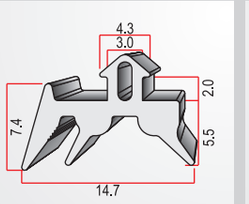
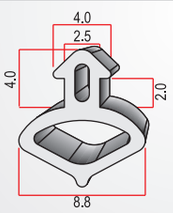


E-2114 | 09GD046

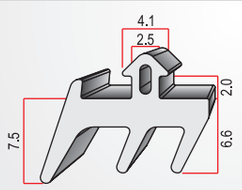
Indian System



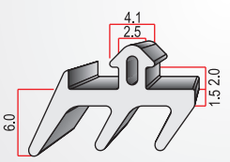
ALP19130



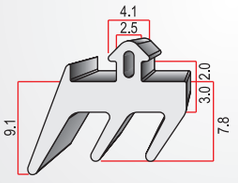
ALP19214



ALP19243



ALP19244



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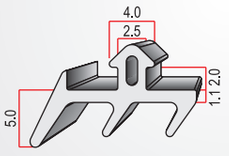

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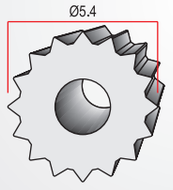
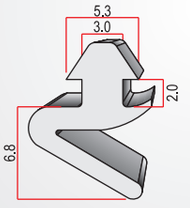
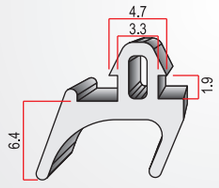


ALP19256



ALP19160



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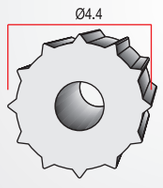

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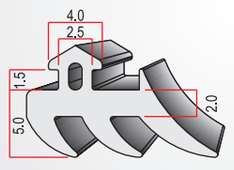
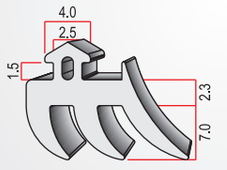


ALP19221



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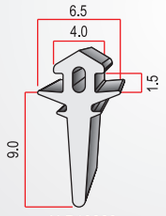

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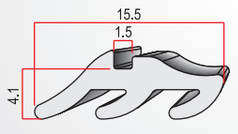

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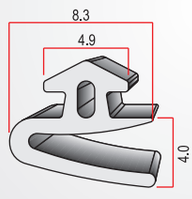

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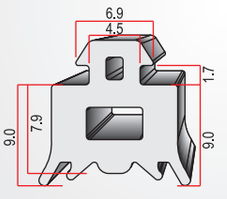
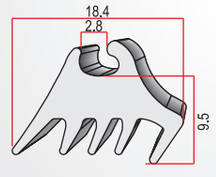


ALP09GE085



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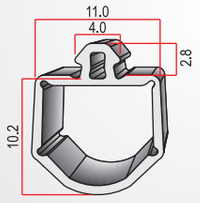

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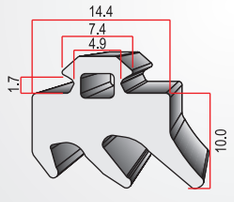

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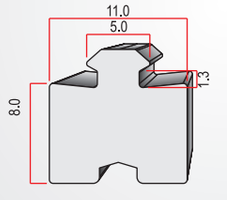

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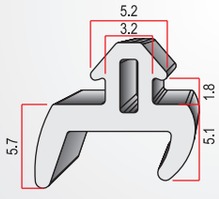

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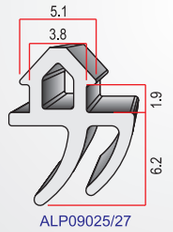
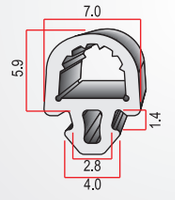
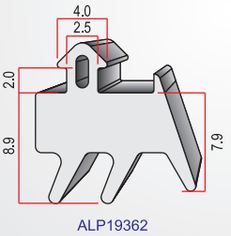


ALP09025/27

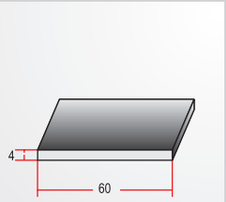


ALP09GE098

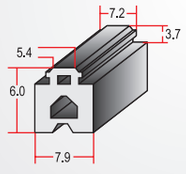


ALP19362

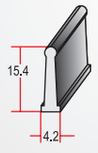
Indian System



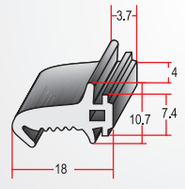
ALP-09043/03



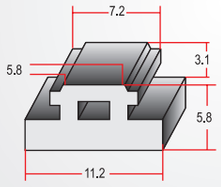
ALP-09045/02A



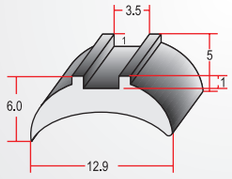
ALP-09045/03



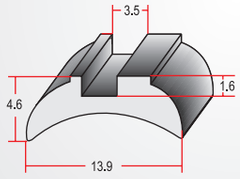
ALP-09045/05



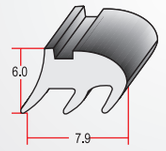
ALP-09045/07



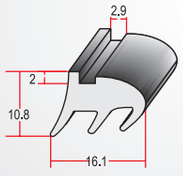
ALP-09045/08



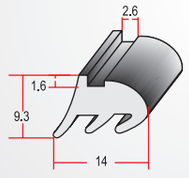
ALP-09045/08A



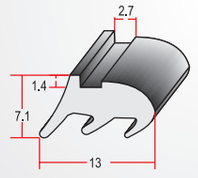
ALP-09045/09



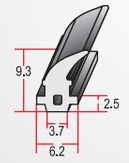
ALP-09045/10



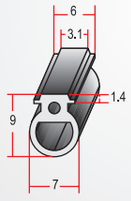
ALP-09045/11



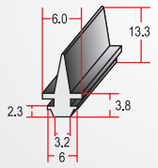
ALP-09045/12



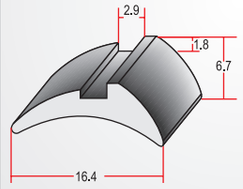
ALP-09045/17N



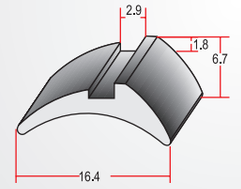
ALP-09045/18



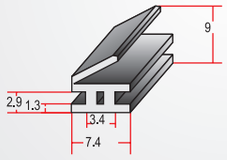
ALP-09045/19



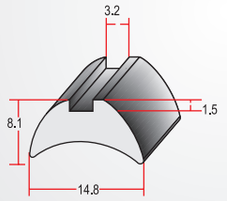
ALP-09045/20A



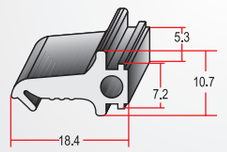
ALP-09045/20B



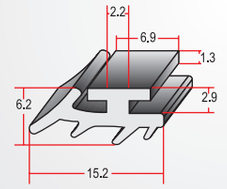
ALP-09045/21



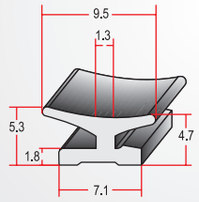
ALP-09045/22



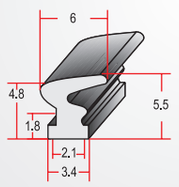
ALP-09046/02



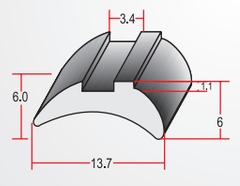
ALP-09046/03



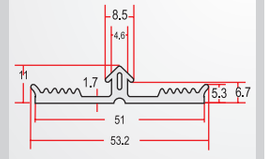
ALP-09046/04



ALP-09046/05

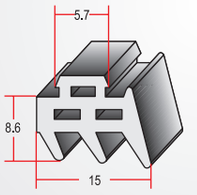


ALP-09046/06

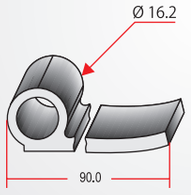


ALP-09048/01

Miscellaneous Gaskets



ALP-09024/17



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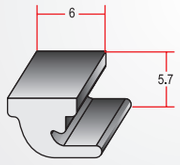

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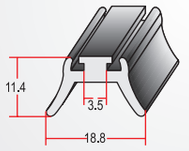

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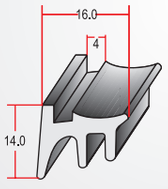

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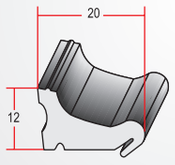

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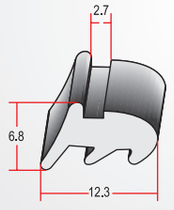

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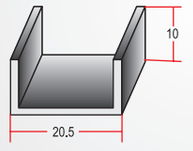

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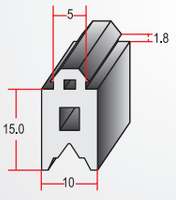

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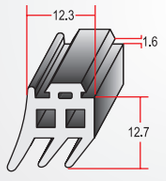
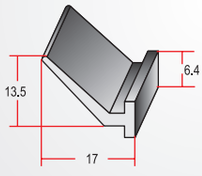


ALP-09024/23

ALP-09024/24



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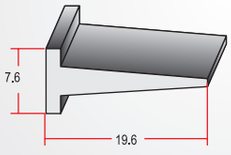

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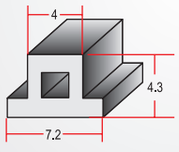

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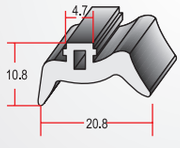

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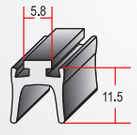
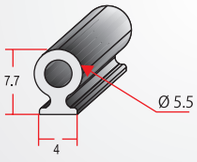


ALP-09029/5



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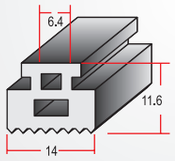

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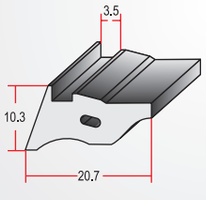

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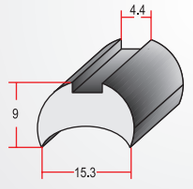

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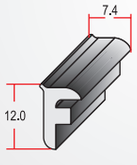

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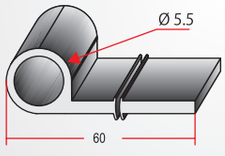

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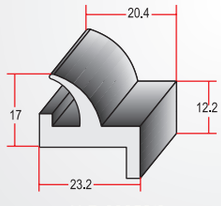

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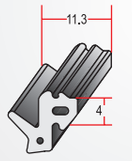
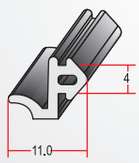
ALP-09054/1

Miscellaneous Gaskets



ALP-09054/2

ALP-09054/3



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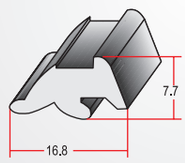

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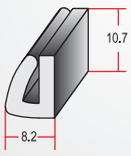

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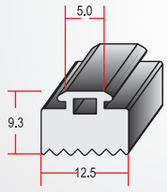

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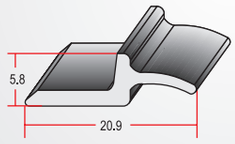

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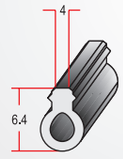

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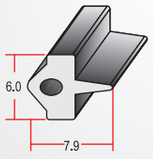

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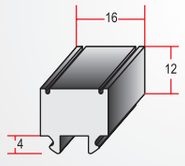

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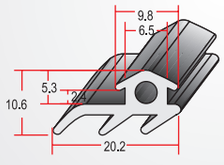

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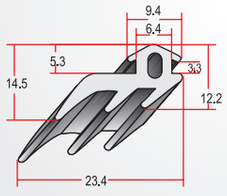

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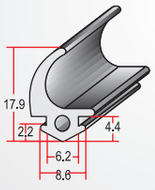

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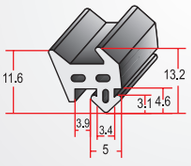

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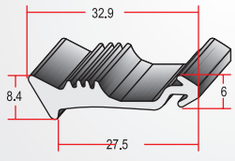

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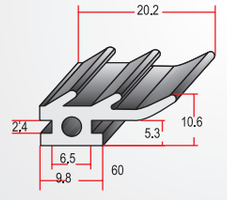

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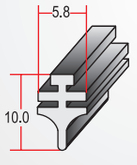

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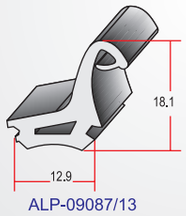
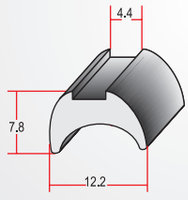
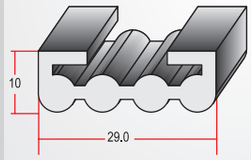


ALP-09087/13



ALP-09087/16



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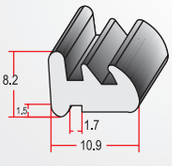

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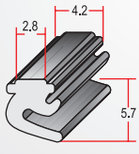

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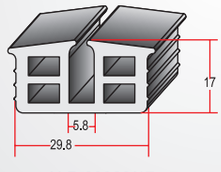

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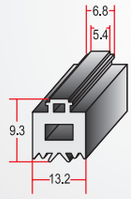
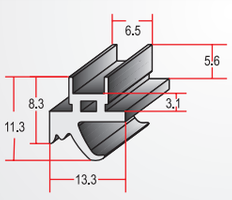


ALP-09023/18

Miscellaneous Gaskets



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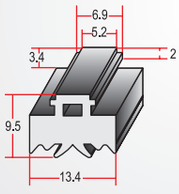
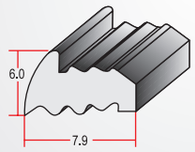


ALP-09023/21



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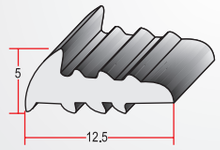

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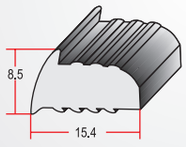

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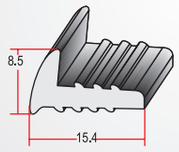
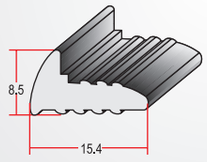


ALP-09024/06



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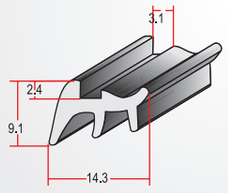

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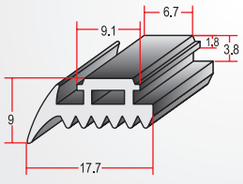

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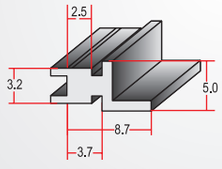
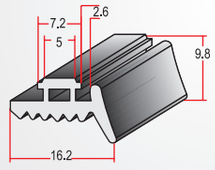


ALP-09024/11



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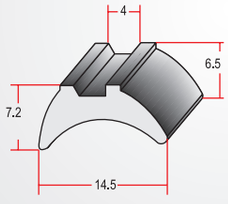
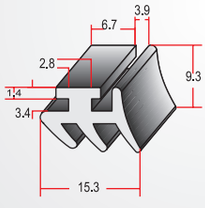
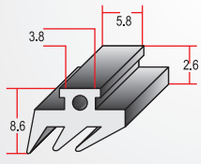


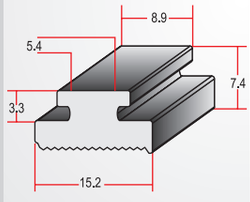
ALP-09028/01



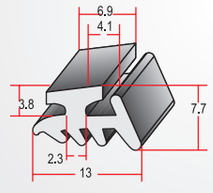
ALP-09028/02



ALP-09028/03

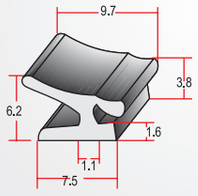


ALP-09029/11



ALP-09028/04

ALP-09028/05



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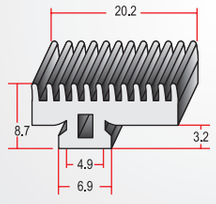

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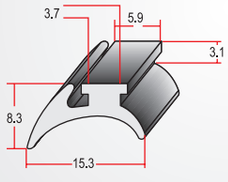
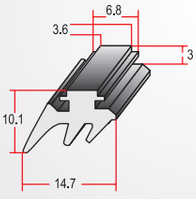


ALP-09029/07



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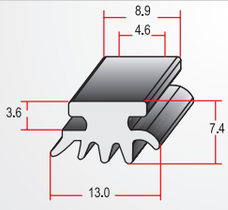

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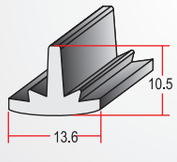

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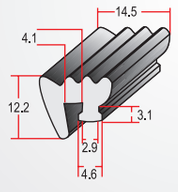
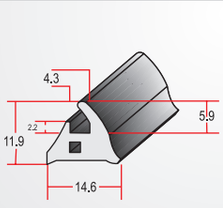


ALP-09037/01

Miscellaneous Gaskets



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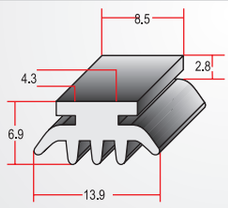

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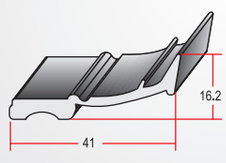

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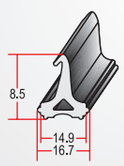

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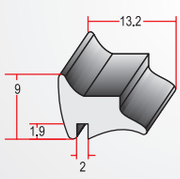

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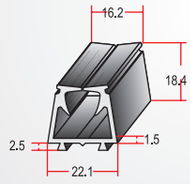
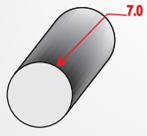


ALP-09040/06



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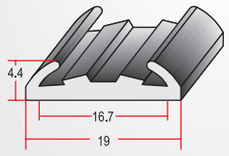

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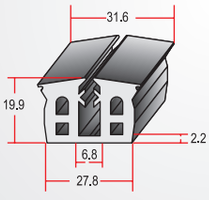
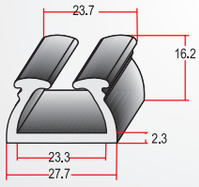


ALP-09041/01



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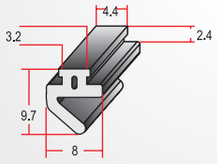

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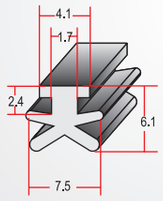

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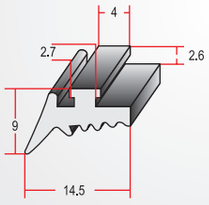
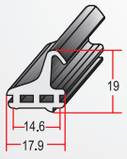


ALP-09041/06



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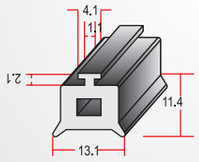

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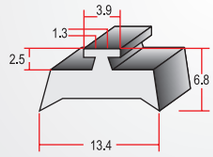
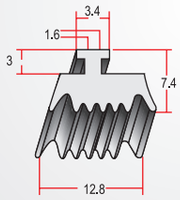


ALP-09041/09



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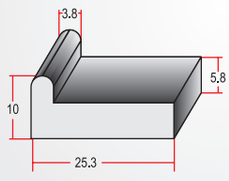
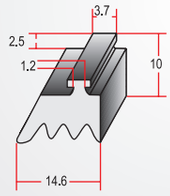


ALP-09041/11



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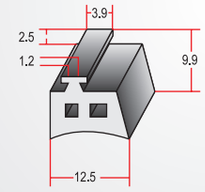

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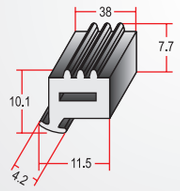

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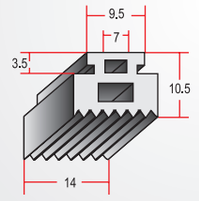

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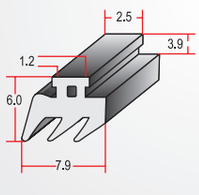

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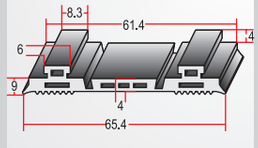
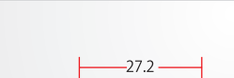


ALP-09043/02

Miscellaneous Gaskets

ALP-09023/02

ALP-09023/04



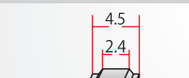
ALP-09023/05

ALP-09023/06

ALP-09023/07

ALP-09023/08

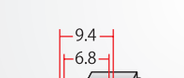
ALP-09023/09



ALP-09023/10

ALP-09023/11

ALP-09020/09



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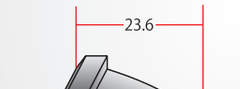

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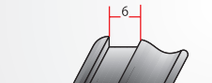

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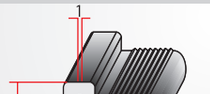


ALP-09020/13

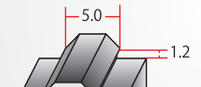
ALP-09021/01

ALP-09021/02

ALP-09021/03

ALP-09023/01

ALP-09023/22



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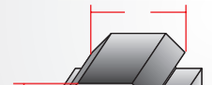


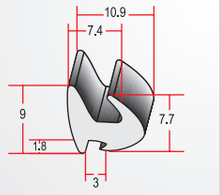
ALP-09024/9

ALP-09024/13

ALP-09024/14

ALP-09024/16

Miscellaneous Gaskets



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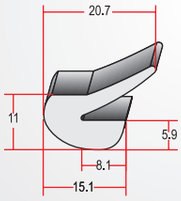

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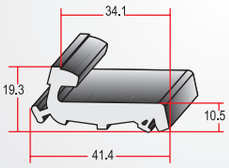

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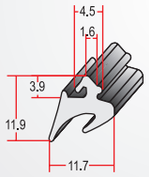

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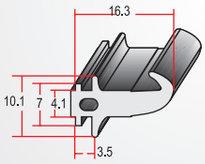

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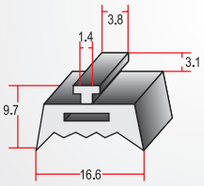
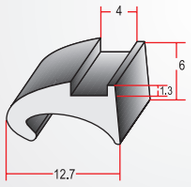


ALP-09051/04



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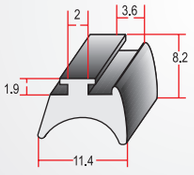
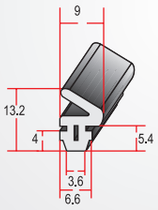


ALP-09051/06



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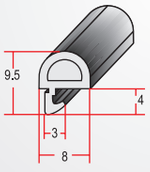

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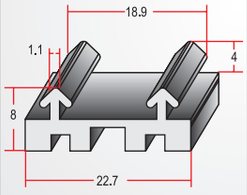

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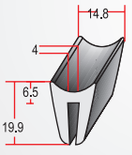

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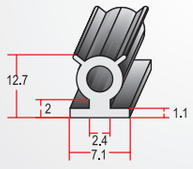

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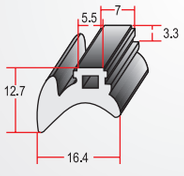
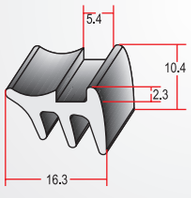
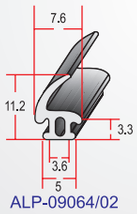


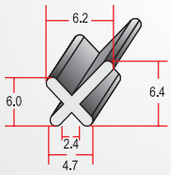
ALP-09058/09



ALP-09064/01



ALP-09064/02



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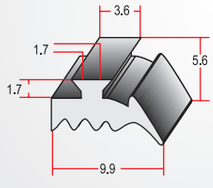

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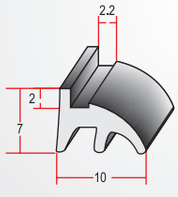

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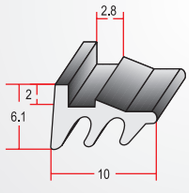

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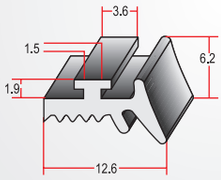

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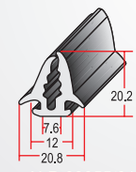

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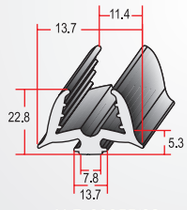

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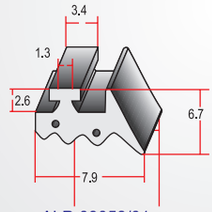
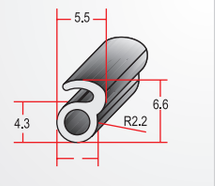


ALP-09058/01

Miscellaneous Gaskets



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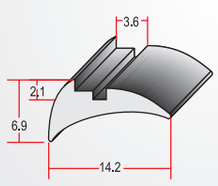

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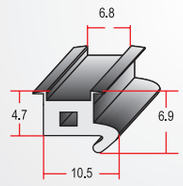

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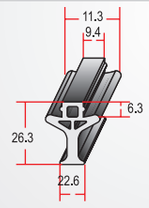

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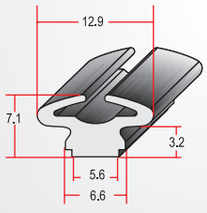

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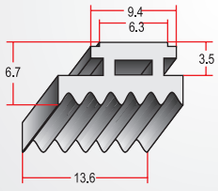

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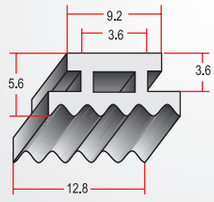

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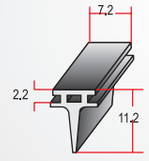

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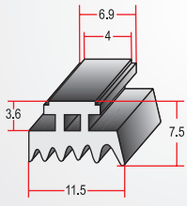

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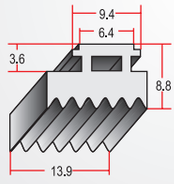

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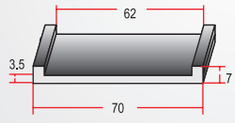

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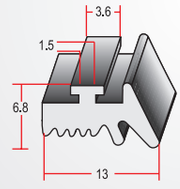

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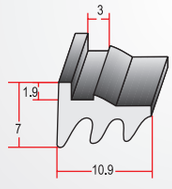

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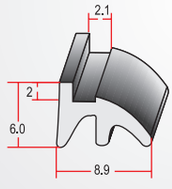

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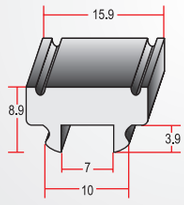

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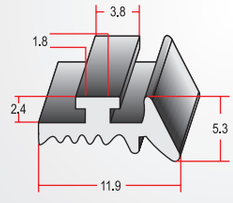

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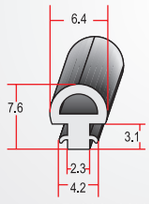

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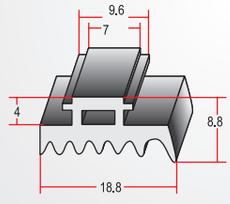
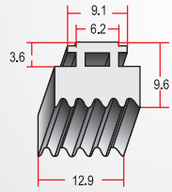


ALP-090 70/14



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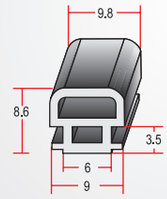

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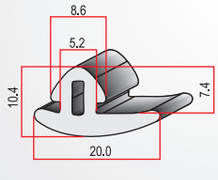

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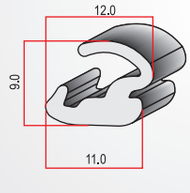

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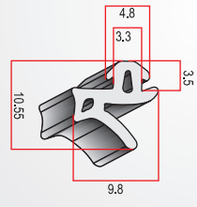
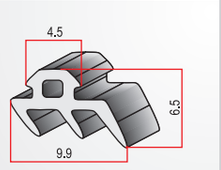


ALP-19082

Miscellaneous Gaskets



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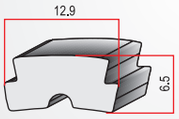
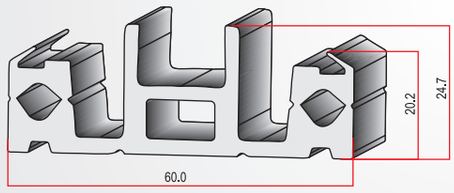
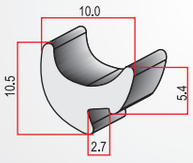


ALP-09024/39



ALP-09024/37



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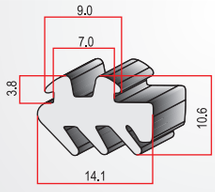

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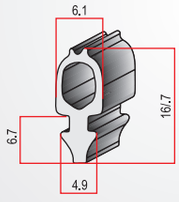

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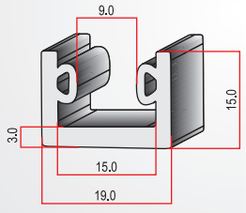

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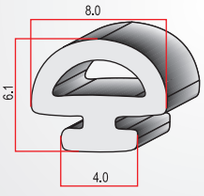

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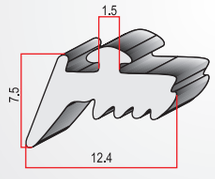

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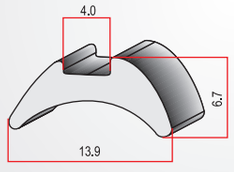

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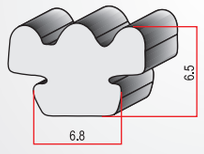

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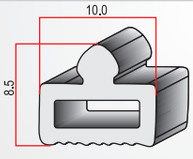

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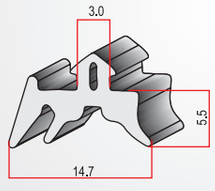

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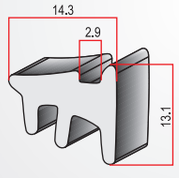

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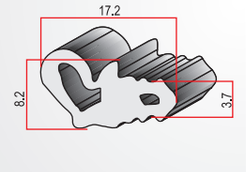
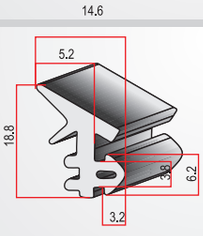
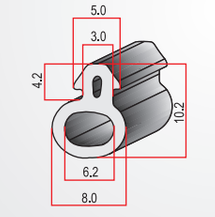


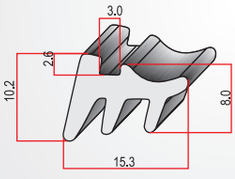
ALP-09021/4



ALP-19031



ALP-19032



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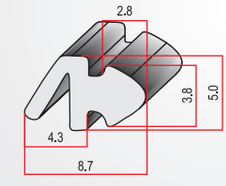

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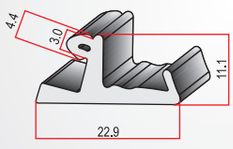
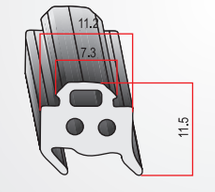


ALP-19044



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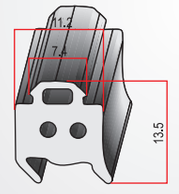

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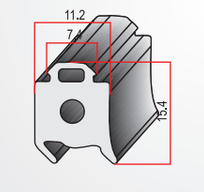
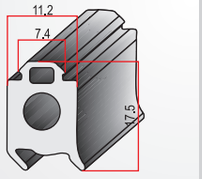


ALP-09029/46

Miscellaneous Gaskets



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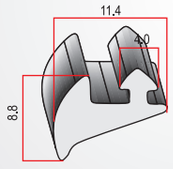
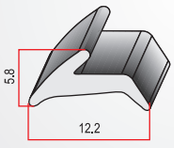
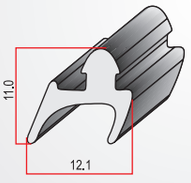


ALP-19150



ALP-19151



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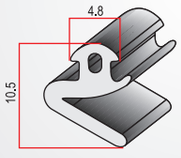

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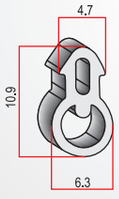

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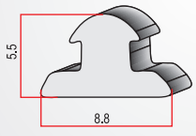

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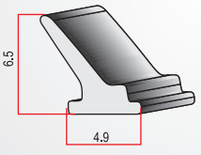

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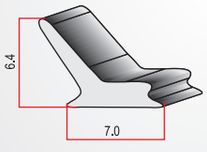

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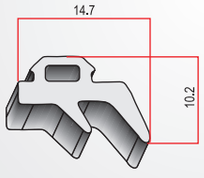
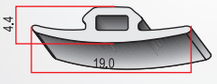
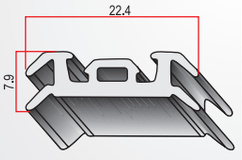


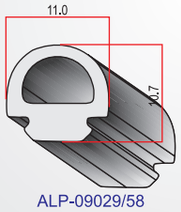
ALP-09029/48



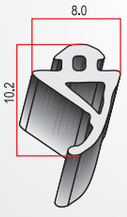
ALP-09029/49



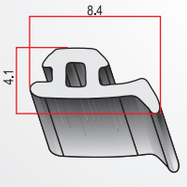
ALP-09029/50



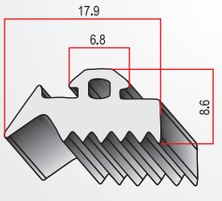
ALP-09029/58



ALP-09029/60



ALP-09029/61



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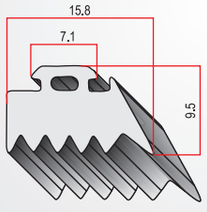
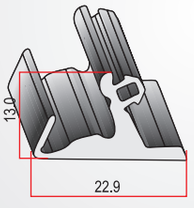
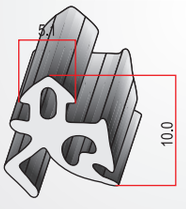


ALP-09023/25



ALP-09087/46



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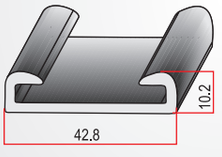
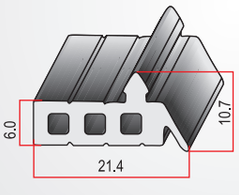
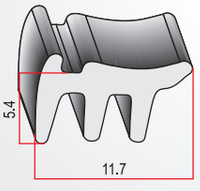


ALP-09087/58



ALP-09077/26



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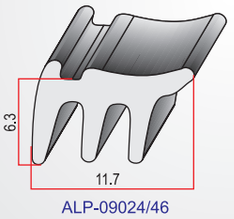
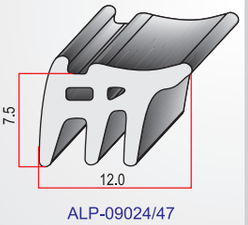
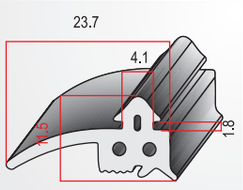


ALP-09024/46



ALP-09024/47

Miscellaneous Gaskets



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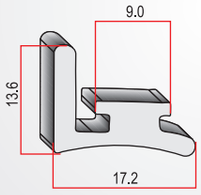

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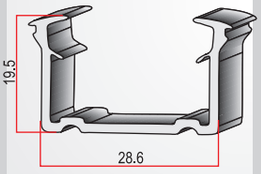

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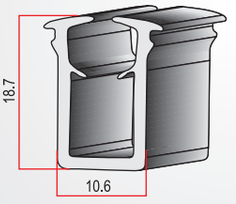

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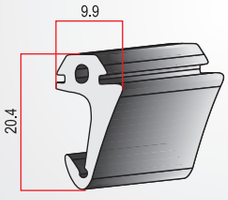
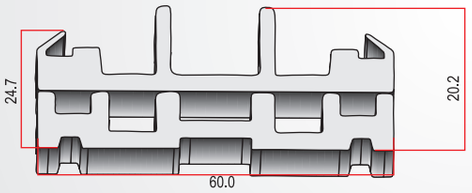
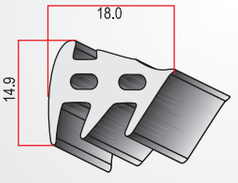


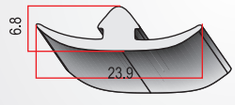
ALP-09024/35



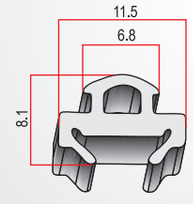
ALP-09024/40



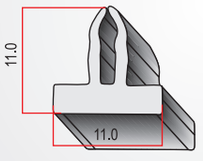
ALP-09024/43



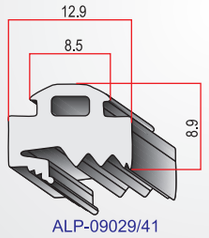
ALP-09024/44



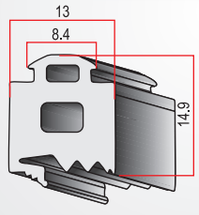
ALP-09029/38



ALP-09029/40



ALP-09029/41



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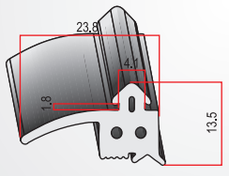
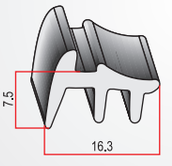
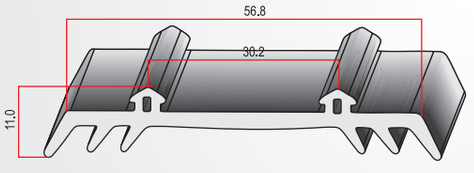


ALP-09024/49

ALP-09024/51



ALP-09024/52



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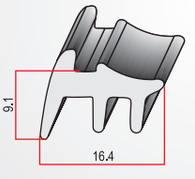
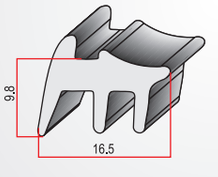


ALP-09024/53



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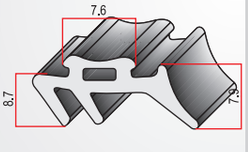
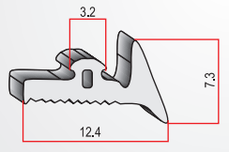
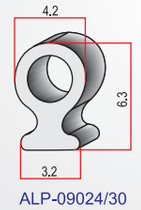


ALP-09024/55



ALP-09024/28



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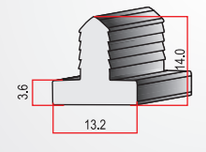
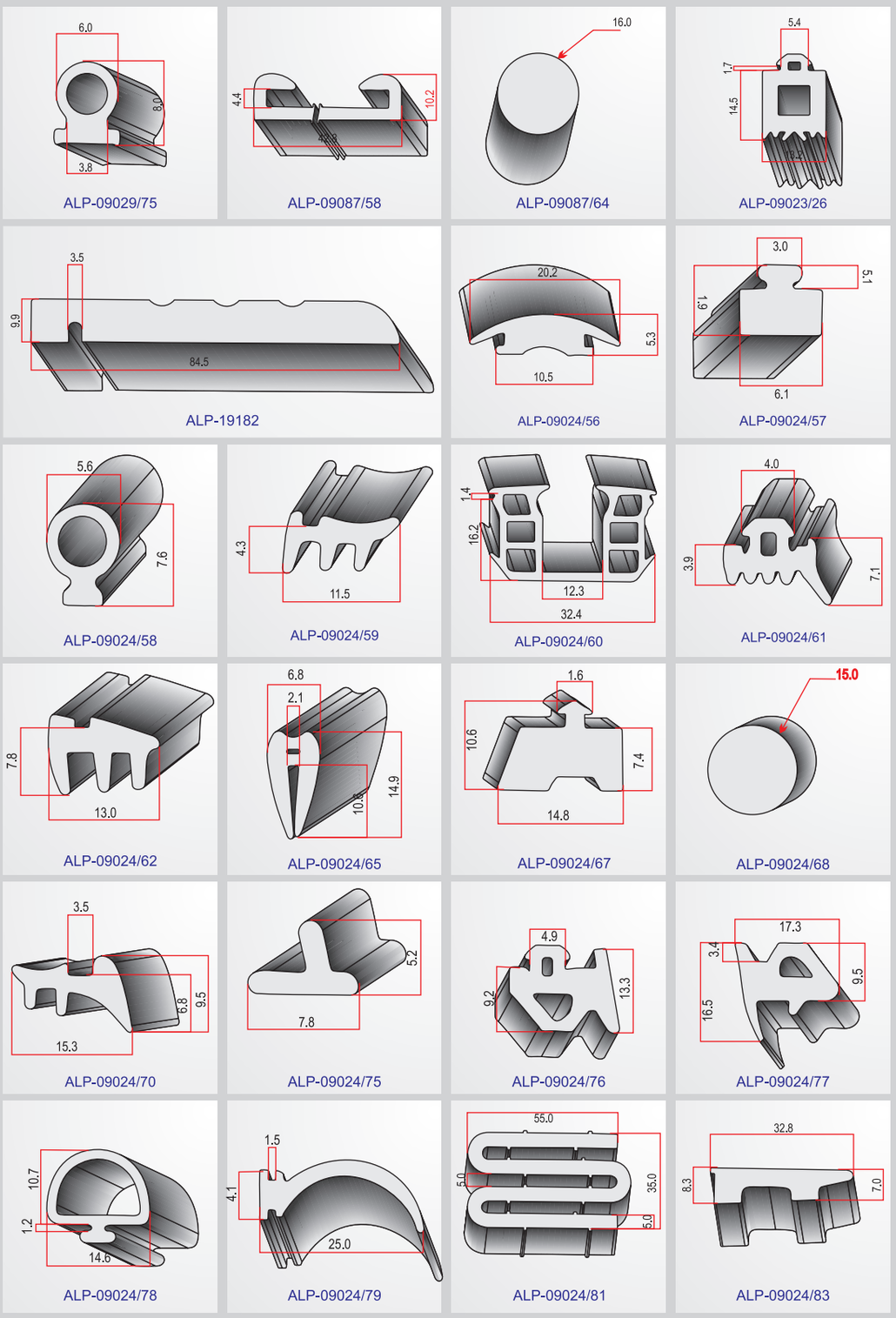
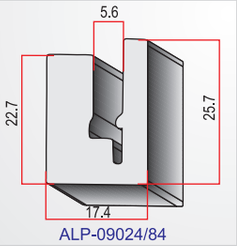


ALP-09029/62

Miscellaneous Gaskets



Miscellaneous Gaskets



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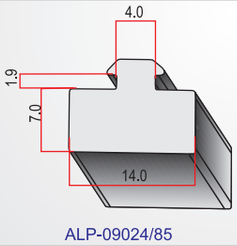
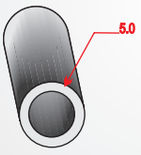
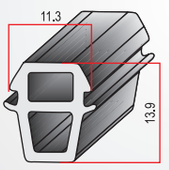


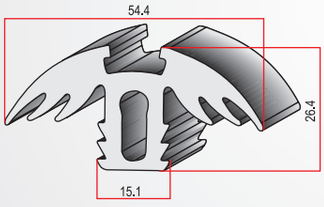
ALP-09024/85



ALP-09024/41



ALP-09024/42



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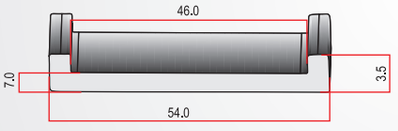

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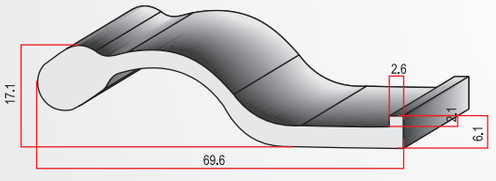
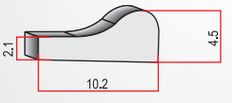


ALP-09084/05



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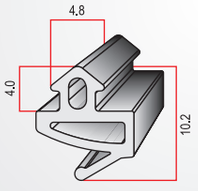
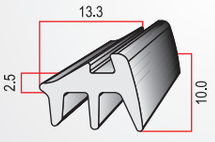


ALP-09GE608



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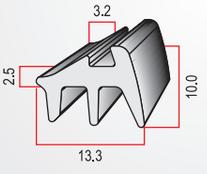

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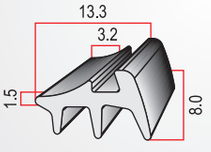

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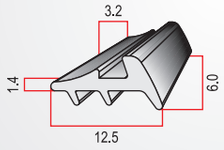

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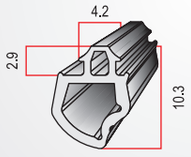

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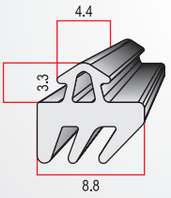

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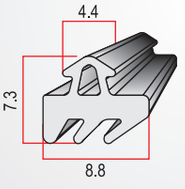

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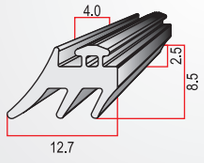

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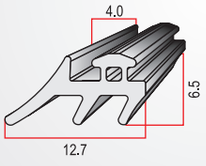

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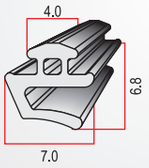

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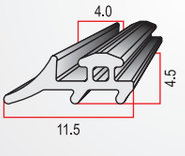

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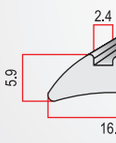
Miscellaneous Gaskets



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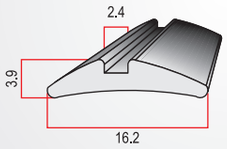

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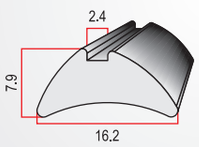

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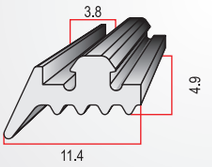

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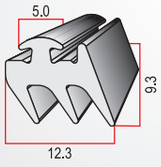

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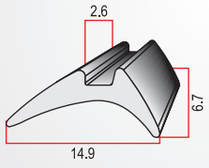

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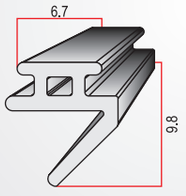

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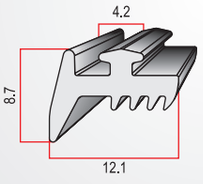

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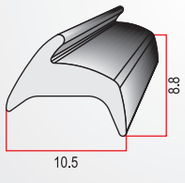

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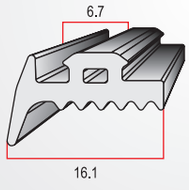

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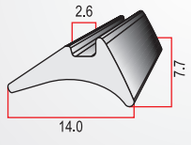

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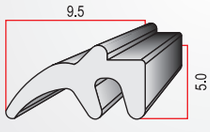

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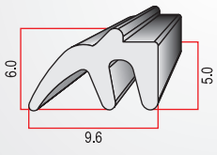

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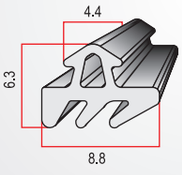

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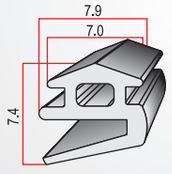

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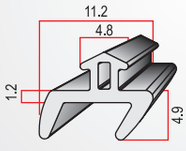

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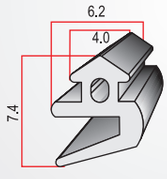

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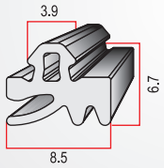

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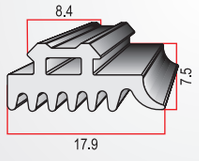

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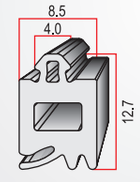

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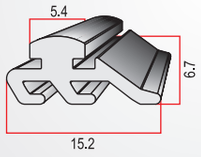

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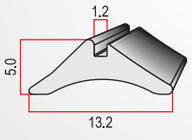

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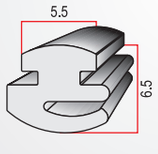

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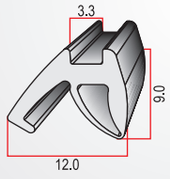

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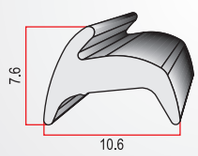
Miscellaneous Gaskets



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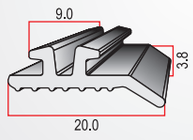

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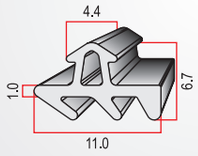

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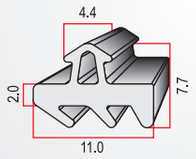

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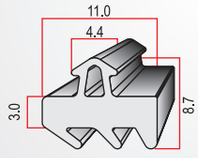

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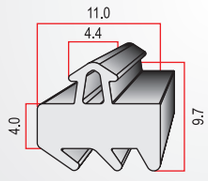

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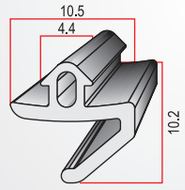

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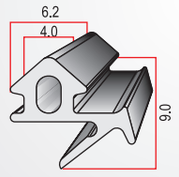

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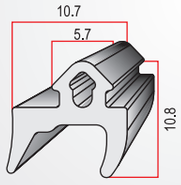

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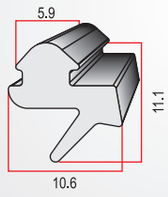

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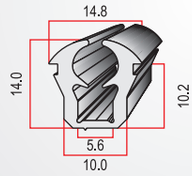

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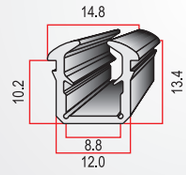

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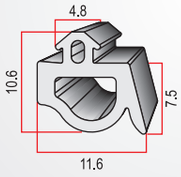

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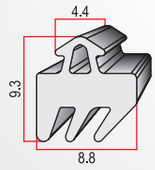

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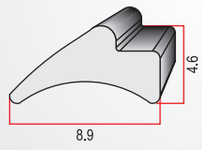

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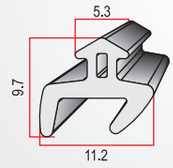
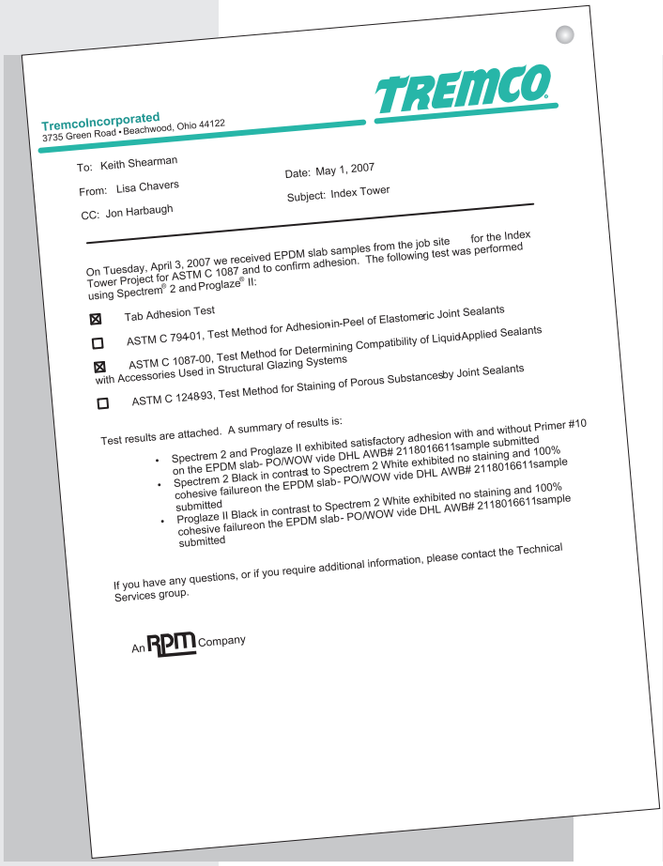


ALP-09GE597

Certificates



TremcoIncorporated
3735 Green Road • Beachwood, Ohio 44122

TREMCO

To: Keith Shearman
From: Lisa Chavers
CC: Jon Harbaugh
Date: May 1, 2007
Subject: Index Tower

On Tuesday, April 3, 2007 we received EPDM slab samples from the job site for the Index Tower Project for ASTM C 1087 and to confirm adhesion. The following test was performed using Spectrem® 2 and Proglaze® II:

☒ Tab Adhesion Test

☐ ASTM C 794-01, Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants

☒ ASTM C 1087-00, Test Method for Determining Compatibility of Liquid-Applied Sealants with Accessories Used in Structural Glazing Systems

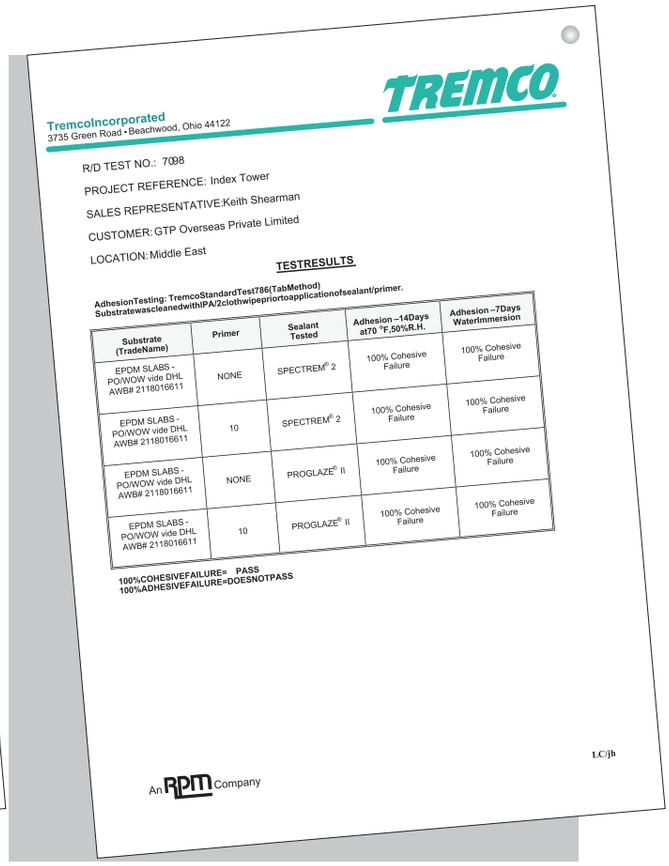
☐ ASTM C 1248-93, Test Method for Staining of Porous Substances by Joint Sealants

Test results are attached. A summary of results is:

- Spectrem 2 and Proglaze II exhibited satisfactory adhesion with and without Primer #10 on the EPDM slab- PO/WOW vide DHL AWB# 2118016611sample submitted
- Spectrem 2 Black in contrast to Spectrem 2 White exhibited no staining and 100% cohesive failureon the EPDM slab- PO/WOW vide DHL AWB# 2118016611sample submitted
- Proglaze II Black in contrast to Spectrem 2 White exhibited no staining and 100% cohesive failureon the EPDM slab- PO/WOW vide DHL AWB# 2118016611sample submitted

If you have any questions, or if you require additional information, please contact the Technical Services group.

An RPM Company



TremcoIncorporated
3735 Green Road • Beachwood, Ohio 44122

TREMCO

R/D TEST NO.: 7098
PROJECT REFERENCE: Index Tower
SALES REPRESENTATIVE: Keith Shearman
CUSTOMER: GTP Overseas Private Limited
LOCATION: Middle East

TESTRESULTS

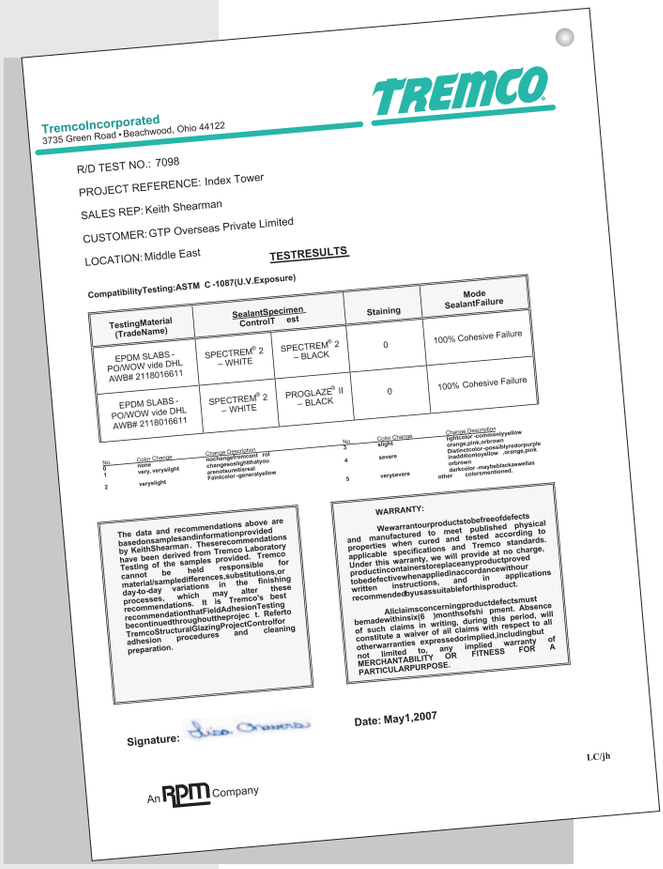
AdhesionTesting: TremcoStandardTest786(TabMethod)
SubstratewascleanedwithIPA/2clothwipepriortoapplicationofsealant/primer.

Substrate (TradeName)	Primer	Sealant Tested	Adhesion –14Days at70 °F,50%R.H.	Adhesion –7Days Waterimmersion
EPDM SLABS - PO/WOW vide DHL AWB# 2118016611	NONE	SPECTREM® 2	100% Cohesive Failure	100% Cohesive Failure
EPDM SLABS - PO/WOW vide DHL AWB# 2118016611	10	SPECTREM® 2	100% Cohesive Failure	100% Cohesive Failure
EPDM SLABS - PO/WOW vide DHL AWB# 2118016611	NONE	PROGLAZE® II	100% Cohesive Failure	100% Cohesive Failure
EPDM SLABS - PO/WOW vide DHL AWB# 2118016611	10	PROGLAZE® II	100% Cohesive Failure	100% Cohesive Failure

100%COHESIVEFAILURE= PASS
100%ADHESIVEFAILURE=DOESNOTPASS

LC/jh

An RPM Company



TremcoIncorporated
3735 Green Road • Beachwood, Ohio 44122

TREMCO

R/D TEST NO.: 7098
PROJECT REFERENCE: Index Tower
SALES REP: Keith Shearman
CUSTOMER: GTP Overseas Private Limited
LOCATION: Middle East

TESTRESULTS

CompatibiltyTesting:ASTM C-1087(U.V.Exposure)

TestingMaterial (TradeName)	SealantSpecimen ControlTest		Staining	Mode SealantFailure
EPDM SLABS - PO/WOW vide DHL AWB# 2118016611	SPECTREM® 2 – WHITE	SPECTREM® 2 – BLACK	0	100% Cohesive Failure
EPDM SLABS - PO/WOW vide DHL AWB# 2118016611	SPECTREM® 2 – WHITE	PROGLAZE® II – BLACK	0	100% Cohesive Failure

No.	Color Change	Change Description
0	none	
1	very, very slight	
2	very slight	
3	slight	
4	severe	
5	very severe	
other	color	Change Description lightcolor-Commonlyyellow orange-pink,ortrown Darkcolor-generallydyedorpurple Lightcolor-mostlyyellow ,orange,pink orbrown darkcolor -maybeblackswellas colorsmentioned.

The data and recommendations above are basedonsamplesandinformationprovided by KeithShearman. Theserecommendations have been derived from Tremco Laboratory Testing of the samples provided. Tremco cannot be held responsible for material/sampledifferences,substitutions,or day-to-day variations in the finishing processes, which may alter these recommendations. It is Tremco's best recommendationthatFieldAdhesionTesting becontinuedthroughoutthisprojec t. Referto TremcoStructuralGlazingProjectControlfor adhesion procedures and cleaning preparation.

WARRANTY:

Wewarrantourproductstobefreeofdefects and manufactured to meet published physical properties when cured and tested according to applicable specifications and Tremco standards. Under this warranty, we will provide at no charge, productincontainerstoreplaceanyproductproved tobedefectivewhenappliedinaccordancewithour written instructions, and in applications recommendedbyusassuitableforthisproduct.

Allclaimsconcerningproductdefectsmust bemadewithinsix(6)monthsofshi pment. Absence of such claims in writing, during this period, will constitute a waiver of all claims with respect to all otherwarranties expressedorimplied,includingbut not limited to, any implied warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULARPURPOSE.

Signature: Lisa Chavers

Date: May1,2007

LC/jh

An RPM Company

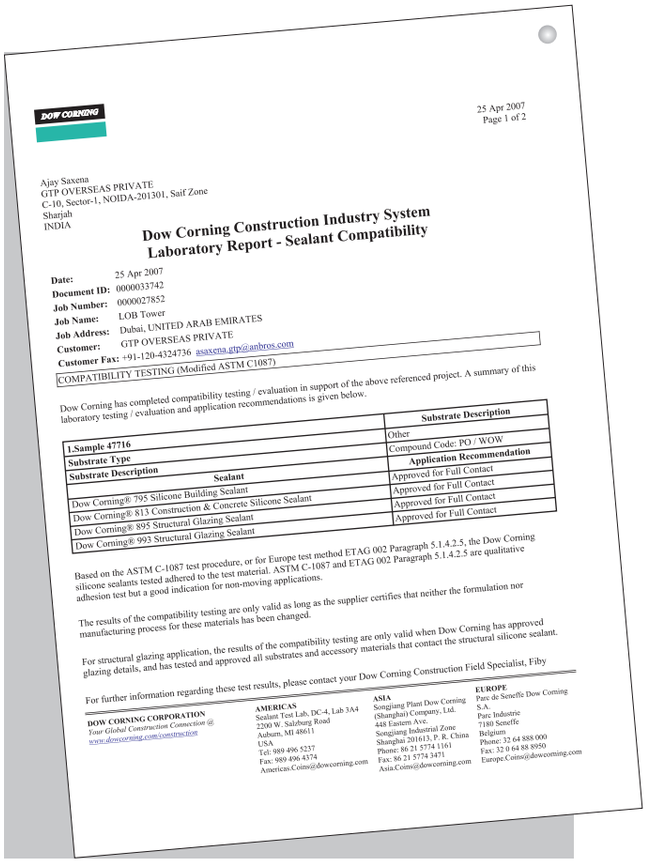
CERTIFICATE

DQS GmbH

Quality Management System

ISO/TS 16949:2002

Certificates



DOW CORNING

25 Apr 2007
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Ajay Saxena
GTP OVERSEAS PRIVATE
C-10, Sector-1, NOIDA-201301, Saif Zone
Sharjah
INDIA

Dow Corning Construction Industry System
Laboratory Report - Sealant Compatibility

Date: 25 Apr 2007
Document ID: 0000033742
Job Number: 0000027852
Job Name: LOB Tower
Job Address: Dubai, UNITED ARAB EMIRATES
Customer: GTP OVERSEAS PRIVATE
Customer Fax: +91-120-4324736 asaxena.gtp@anbros.com

COMPATIBILITY TESTING (Modified ASTM C1087)

Dow Corning has completed compatibility testing / evaluation in support of the above referenced project. A summary of this laboratory testing / evaluation and application recommendations is given below.

1.Sample 47716	Substrate Description
Substrate Type	Other
Substrate Description	Compound Code: PO / WOW
Sealant	**Application Recommendation**
Dow Corning® 795 Silicone Building Sealant	Approved for Full Contact
Dow Corning® 813 Construction & Concrete Silicone Sealant	Approved for Full Contact
Dow Corning® 895 Structural Glazing Sealant	Approved for Full Contact
Dow Corning® 993 Structural Glazing Sealant	Approved for Full Contact

Based on the ASTM C-1087 test procedure, or for Europe test method ETAG 002 Paragraph 5.1.4.2.5, the Dow Corning silicone sealants tested adhered to the test material. ASTM C-1087 and ETAG 002 Paragraph 5.1.4.2.5 are qualitative adhesion test but a good indication for non-moving applications.

The results of the compatibility testing are only valid as long as the supplier certifies that neither the formulation nor manufacturing process for these materials has been changed.

For structural glazing application, the results of the compatibility testing are only valid when Dow Corning has approved glazing details, and has tested and approved all substrates and accessory materials that contact the structural silicone sealant.

For further information regarding these test results, please contact your Dow Corning Construction Field Specialist, Fiby

DOW CORNING CORPORATION
Your Global Construction Connection @
www.dowcorning.com/construction

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Sealant Test Lab, DC-4, Lab 3A4
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Tel: 989 496 5237
Fax: 989 496 4374
Americas.Coims@dowcorning.com

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448 Eastern Ave.
Songjiang Industrial Zone
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Fax: 86 21 5774 3471
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7180 Seneffe
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Fax: 32 0 64 88 8950
Europe.Coims@dowcorning.com

DOW CORNING

25 Apr 2007
Page 2 of 2

Albert, on +32 64888413 at Seneffe, BELGIUM
E-mail: fiby.albert@dowcorning.com

Sincerely
DOW CORNING CORPORATION

Fiby Albert
Construction Lab leader

cc: Serge Sibille, Dow Corning SA, Lyon Cedex 2 FRANCE

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www.dowcorning.com/construction

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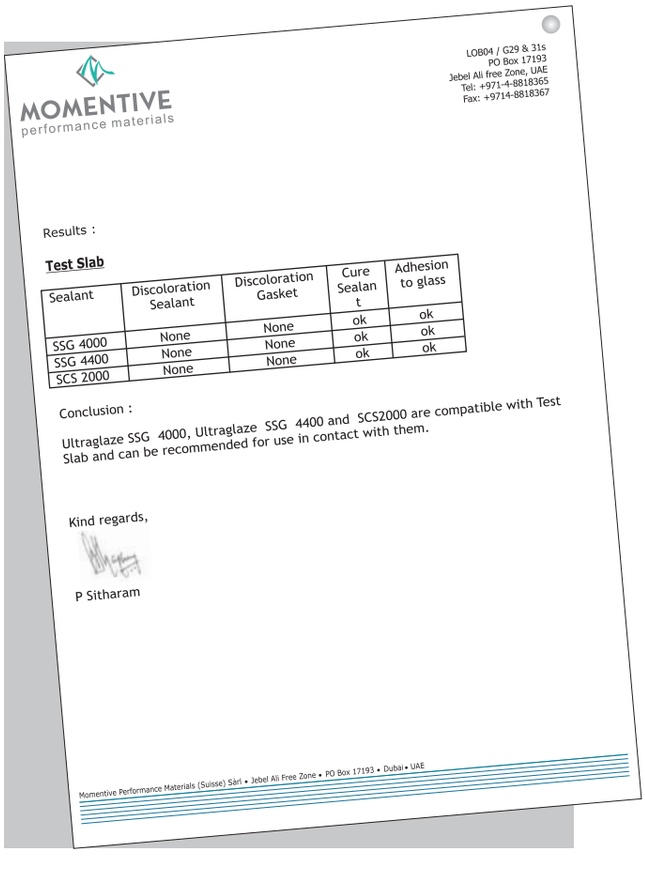


MOMENTIVE
performance materials

LOB04 / G29 & 31s
PO Box 17193
Jebel Ali free Zone, UAE
Tel: +971-4-8818365
Fax: +9714-8818367

Results :

Test Slab

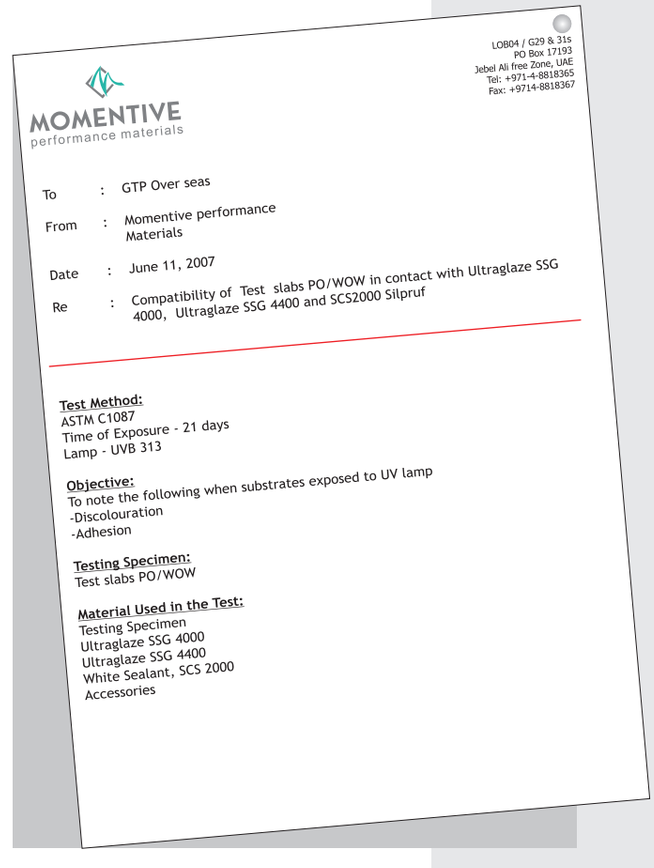
Sealant	Discoloration Sealant	Discoloration Gasket	Cure Sealant	Adhesion to glass
SSG 4000	None	None	ok	ok
SSG 4400	None	None	ok	ok
SCS 2000	None	None	ok	ok

Conclusion :

Ultraglaze SSG 4000, Ultraglaze SSG 4400 and SCS2000 are compatible with Test Slab and can be recommended for use in contact with them.

Kind regards,

P Sitharam



MOMENTIVE
performance materials

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Jebel Ali free Zone, UAE
Tel: +971-4-8818365
Fax: +9714-8818367

To : GTP Over seas

From : Momentive performance Materials

Date : June 11, 2007

Re : Compatibility of Test slabs PO/WOW in contact with Ultraglaze SSG 4000, Ultraglaze SSG 4400 and SCS2000 Silpruf

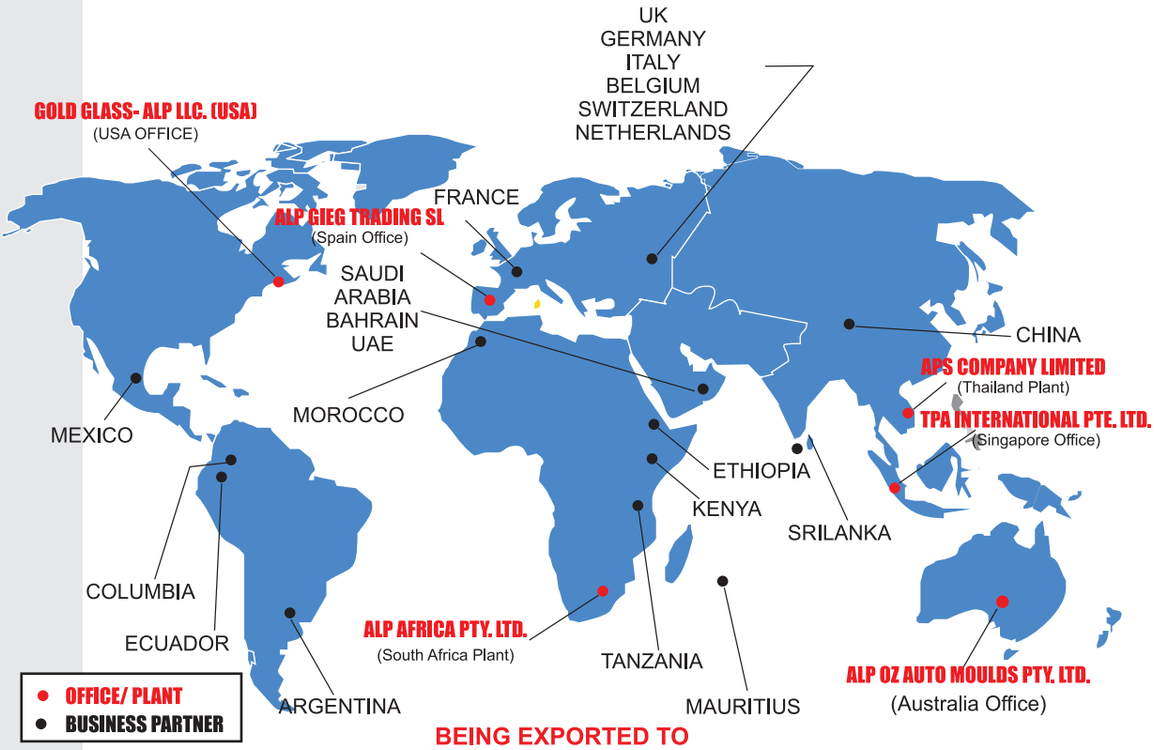
Test Method:
ASTM C1087
Time of Exposure - 21 days
Lamp - UVB 313

Objective:
To note the following when substrates exposed to UV lamp
-Discolouration
-Adhesion

Testing Specimen:
Test slabs PO/WOW

Material Used in the Test:
Testing Specimen
Ultraglaze SSG 4000
Ultraglaze SSG 4400
White Sealant, SCS 2000
Accessories

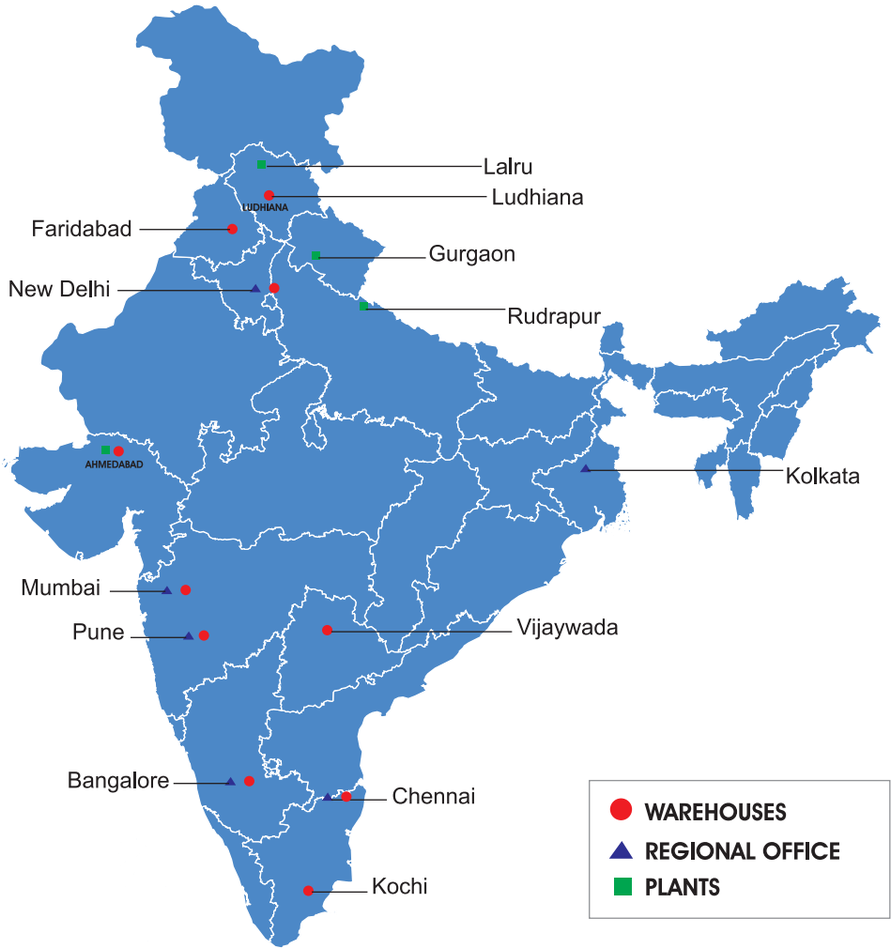
Global Presence



BEING EXPORTED TO

Key markets : Europe, USA, Australia, Middle East & South Africa

Network in India



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Fenesta
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ELGI BUILDING PRODUCTS
SARA ELGI.
ELGI BUILDING PRODUCTS LTD

al karma

THE ALP GROUP

ALP Overseas Private Limited

Plot No. 32, Sector-18, Gurgaon-122 015

Tel.: +91-124-4001020, 4002030

E-mail: marketing@alpoverseas.com, Web: www.alpoverseas.com