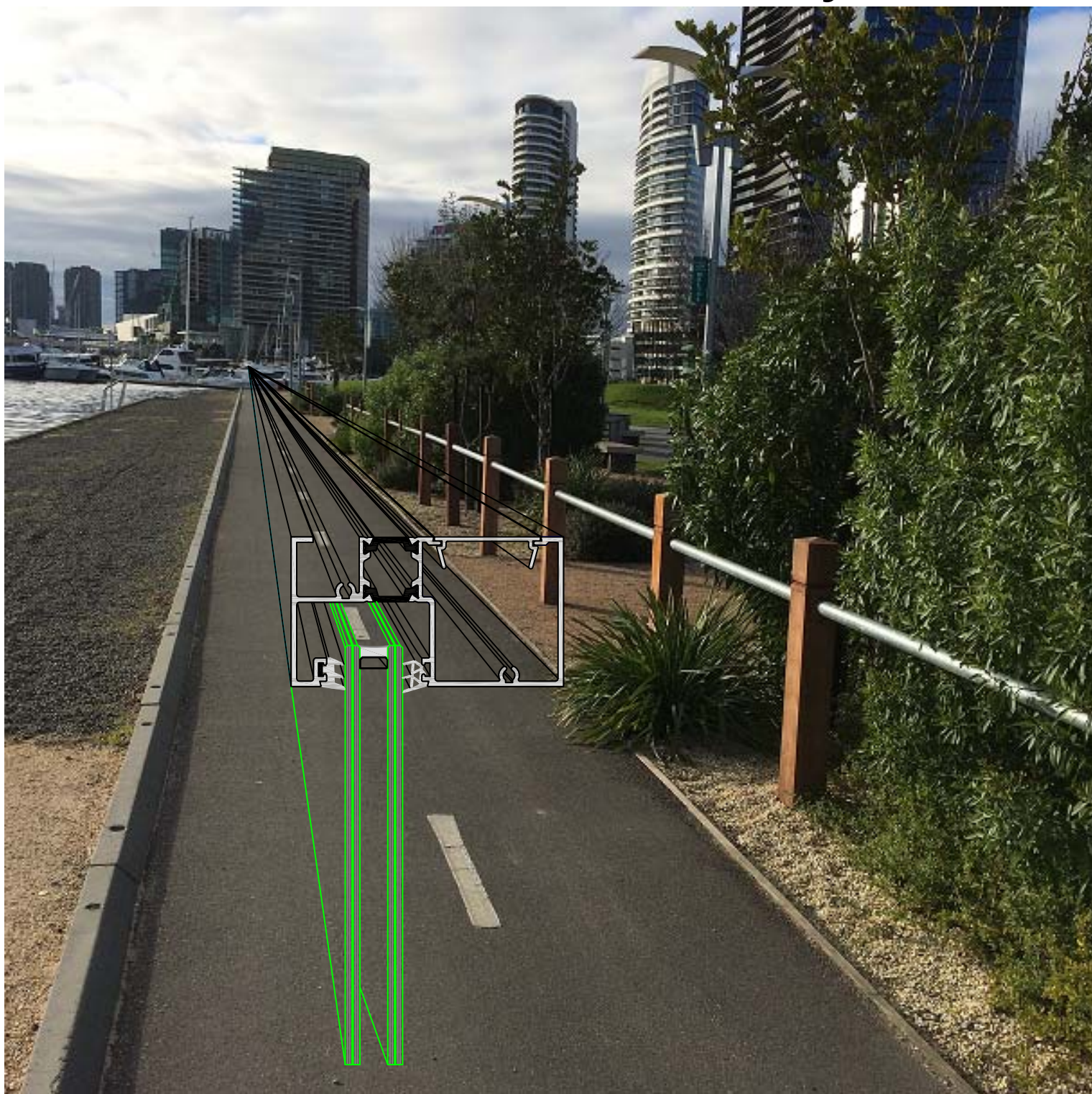


path[®]

thermal  break window system



rapid
ALUMINIUM

COMMERCIAL CATALOGUE
WINDOWS & DOORS

SUPPORTED BY:
V6 softtech

DATE ISSUED - SEPTEMBER 2020

About Rapid Aluminium:

Established in 1989, Rapid Aluminium has grown from a sole powdercoating company, today to a major distributor and finisher of an extensive range of aluminium profiles and extrusions for the architectural and commercial building industry.

Our head office in Victoria includes our main warehouse and powdercoating workshop. We think of it as our "beating heart" of aluminium. From here, our service flows to all corners of Australia via our regional centres. It's a strange concept but aluminium is our lifeblood and it flows in our veins.

We know all there is to know about aluminium shapes, colours and finishes. You can use us as a complete resource for aluminium profiles and extrusions. We design and supply aluminium profiles for all your commercial and partitioning needs. Try the Rapid difference and benefit from our service and experience.

www.rapidal.com.au

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Tel: (03) 9792 0344
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DESIGN REGISTRATION APPLIES

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PAGE - A

The "path" Series Thermal Break System of Windows and Doors are available in both 100mm wide framing and 150mm wide framing, with wide glazing pockets suitable for glazing panels up to 30mm in thickness.

These designs take account of the needs of the local fabricator with cost efficient methods of manufacture and the mating together of different types of frames. Quality tooling and punching machines have also been developed to speed up the machining processes and to assist the fabricator with allocation of labour hours in fabrication and glazing. Please ask your, "Rapid Aluminium" Account Sales Person for details of available Tooling.

Rapid Aluminium are committed to quality products and have a program for testing of our window and door products to compliance with Australian Building codes and standards. Testing results will be available as each test is completed.

Aluminium Extrusions

All Aluminium Extrusions in this catalogue are extruded in compliance with the specifications of Australian Standards AS-NZS1866-1997.

Our standard Aluminium Extrusion Alloy is 6063. T5. Other alloys and hardness are available on request and availability from our PMI China Plant.

Finish.

Rapid Aluminium can offer extrusions in mill finish, or Anodised, or Powder Coating finishes. Aluminium extrusions supplied in mill finish would be required to have a locally applied finish, by the Customer. Bulk Extrusion Orders can also be supplied with Warranty Anodising or Powder Coating.

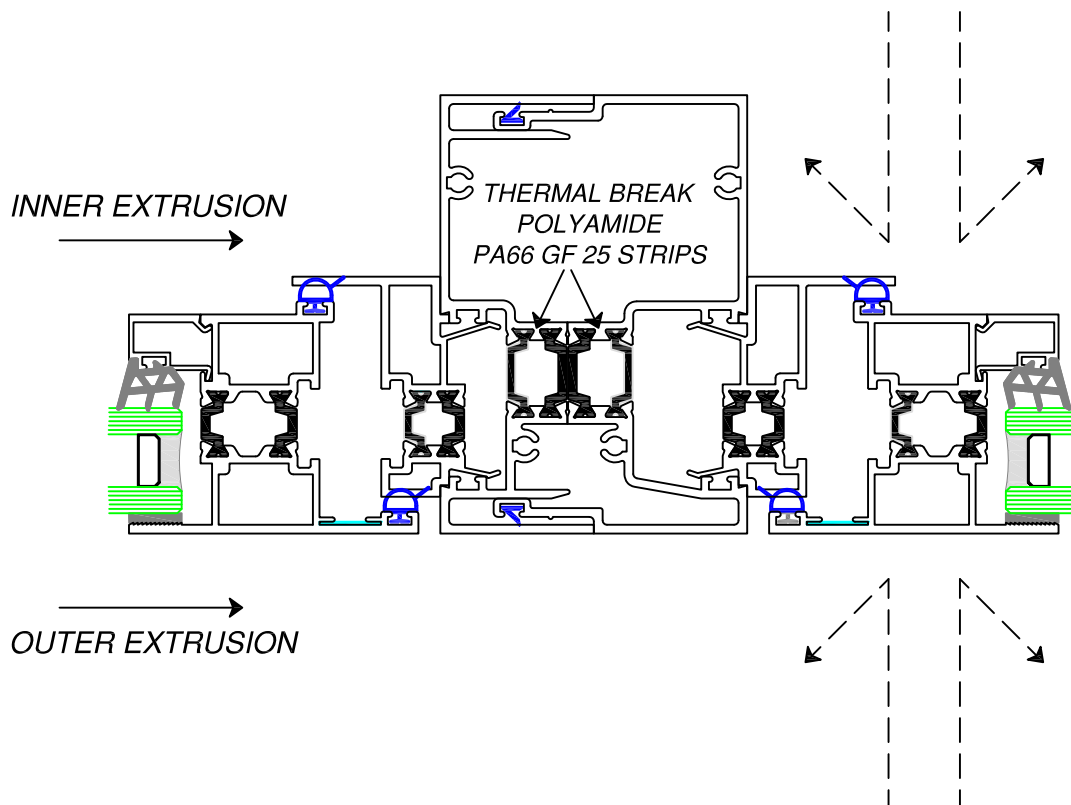
Hardware.

The "path" Thermal Break Windows and Doors are designed to accept most types of hardware items. PMAA do stock "Doric" Wheels and a selected range of "Doric" Locks and Handles. Other hardware items are shown in our catalogue and are available on request.

It is the responsibility of the customer to have an Engineer check the final design of a Window or Door for compliance with the relevant Building Code.

All items contained in this manual are subject to "Rapid Aluminium" normal Terms and Conditions, a copy of which is available on request. While Rapid Aluminium make every effort to ensure the accuracy of the drawings and measurements contained in this manual, we neither Warrant nor Guarantee this accuracy and you should undertake your own measurements and not place any reliance on or act in consequence of the contents herein.


Aluminium Extrusions to Fabricate Performance Energy Efficient Windows and Doors.



Quality Aluminum Extrusions joined together using Technoform PA66.GF 25 Dry Impact Resistant Thermal Break Strip allows the Designer / Fabricator the opportunity to provide High Energy Windows and Doors to their Building Project. The polyamide material divides the internal aluminium extrusion from the external aluminium extrusion, thus avoiding heat dispersion through the window and door panels.

Polyamide is an excellent thermal insulator.

Both the thermal properties and the acoustic values of a window and door are greatly improved.

path thermal  break window and door systems greatly reduce the requirement for artificial heating or cooling, when designing your building.

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ALLOY 6063

Description of Alloy

Alloy 6063 provides a good combination of extrudability and mechanical properties. Its excellent extrudability allows thin-walled hollow shapes, intricate solid and other shapes that are usually difficult to extrude with satisfactory finish, to be produced more easily. It responds well to polishing, chemical brightening, anodizing and dyeing.

Characteristics

Welding:	Alloy 6063 is readily welded by the MIG and TIG processes. The recommended filler alloy, particularly when welding exposed surfaces that will be anodized for decorative purpose, is 5356. Alloy 4043 may be used in other cases.
Rivets:	Alloy 6053-T61
Machining:	Readily machined in all temper given.
Forming:	All tempers may be formed, the softer tempers accepting more severe forming.
Corrosion:	Excellent resistance to the atmosphere, particularly for architectural applications.

Tempers Available

Extrude Shapes T1, T4, T5 and T6

Other Alloys & Tempers Are
Available
Please Check with Sales
Office

Chemical Composition

Alloy 6063 is a heat-treatable aluminium-magnesium-silicone alloy.

%	si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others	
									Each	Total
Min	0.20									
Max	0.60	0.35	0.10	0.10	0.90	0.10	0.10	0.10	0.05	0.15

Mechanical Properties

Temper	Size (or) Thickness (3mm)		Tensile Strength (Mpa) min		Elongation %
	Over mm	Up To	UTS (Min)	Yield (Min)	
T1		12	115	60	12
	12	25	110	55	10
T4		12	130	70	12
	12	25	120	70	10
T5		12	150	110	8
	12	25	145	105	6
T6		12	205	170	8
	12	25	150	130	6

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Material Data Sheet

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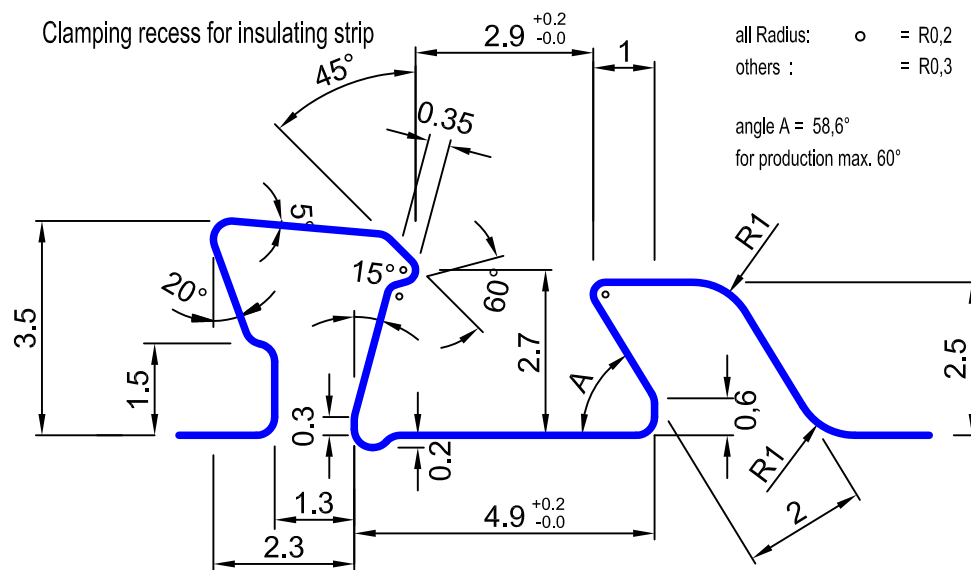
TECHNOFORM BAUTEC
Insulating Profiles made of PA 66 GF25-Dry Impact Resistant

No:	Characteristics	Reference Standard	Unit	Samples Prepared From Extruded Insulating Strips		
				Dry 1	Humidity Equilibrium 2	Dry 1
1	Melting Temperature	EN ISO 11357-3	°C	min. 250	min. 250	min. 250
2	Density	EN ISO 1183-1 or -3	g/cm ³	1.3 +/- 0.05	1.3 +/- 0.05	1.3 +/- 0.05
3	Annealing Residue (glass fibre content)	EN ISO 1172	%	25 +/-4	25 +/-4	25 +/-4
4	Shore Hardness D	EN ISO 868	—	82 +/-4	78 +/-4	84 +/-4
5	Impact Strength	EN ISO 179-1 3) DIN 53453 4)	kJ/m ²	min. 30 or without break	min. 40 or without break	min. 35
6	Tensile Strength	EN ISO 527-2 and -4	N/mm ²	min. 80	min. 50	min. 110
7	Young`s Modulus	EN ISO 527-2 and -4	N/mm ²	min. 4,500	min. 2,000	min. 6,000
8	Elongation at Break	EN ISO 527-2 and -4	%	min. 3	min. 7	min. 3

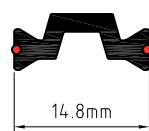
1) Sample water content less than 0.2% by weight. 2) fast conditioning [EN ISO 1110] 3) Method 1fU. 4) Standard small specimen [50mm x 6mm x wall thickness]

Technoform Aluminium Groove for Standard Profiles

Clamping recess for insulating strip

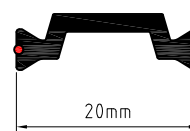


PROFILE "A"



378600
With Glue
Strip

PROFILE "B"



957300
With Glue
Strip

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SECTION : A

*Selection of Extrusions, Hardware
and Assembly Details*

Pages: A01 to A47

SECTION : B

*Strength Charts - Computations - WERS Ratings
- Test Reports*

Pages: B01 to B12

SECTION : C

Cutting Sheets - Machining Details

Pages C01 to C26

SECTION : D

*Performance Reports
Doors - Windows - Glass Selection*

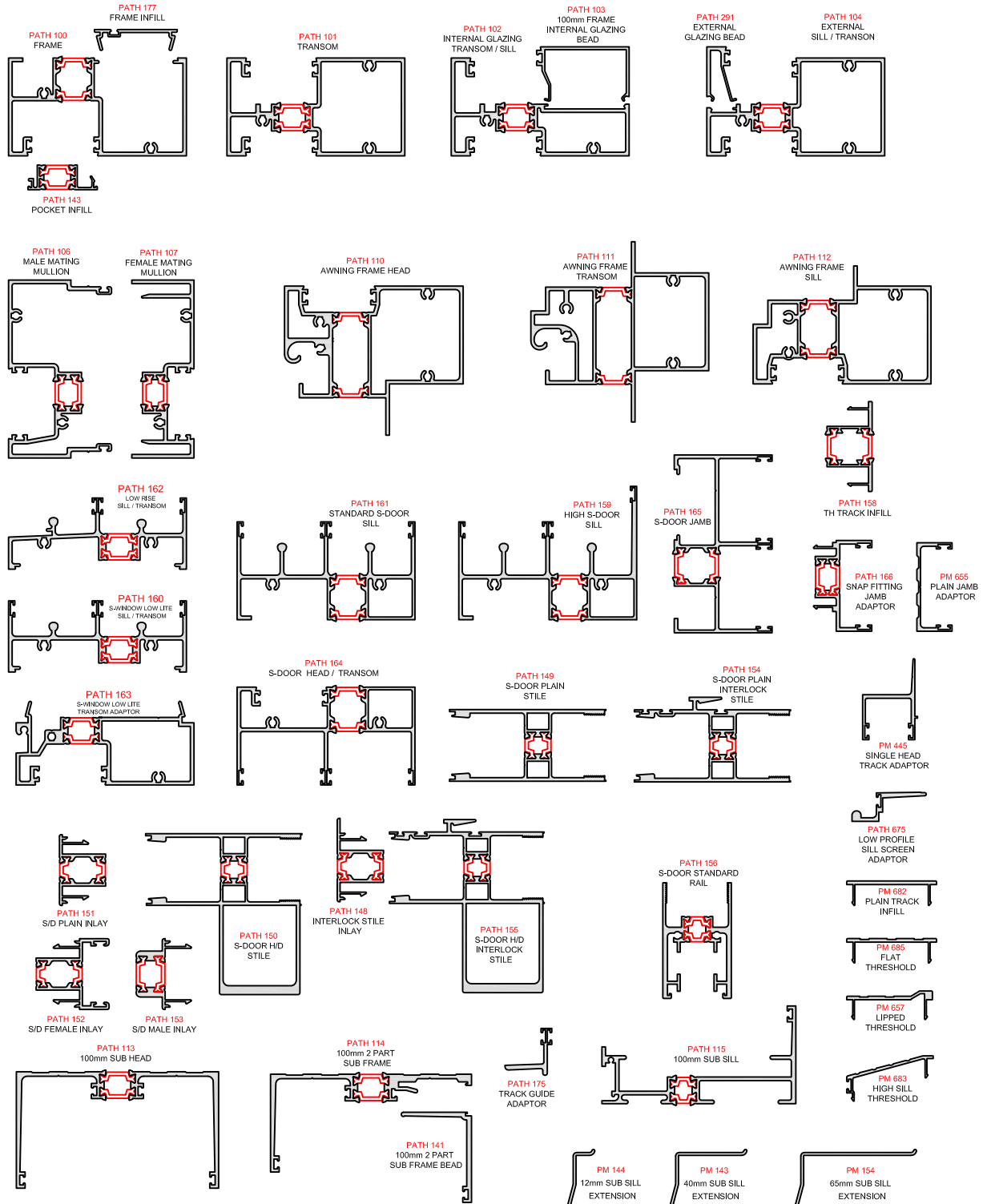
Pages D01 to D10

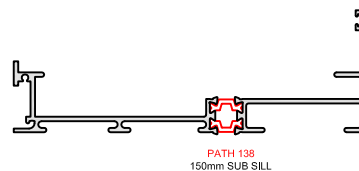
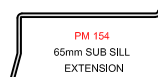
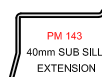
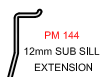
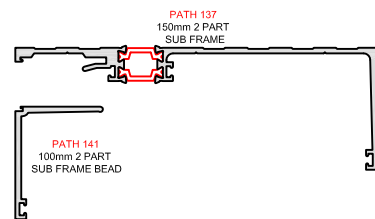
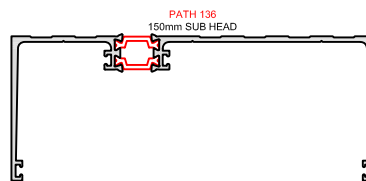
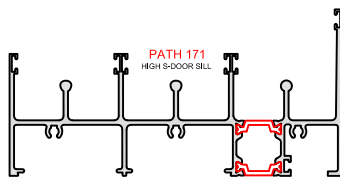
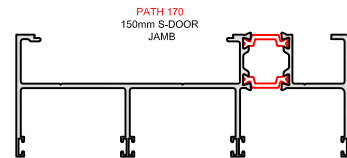
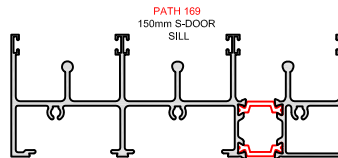
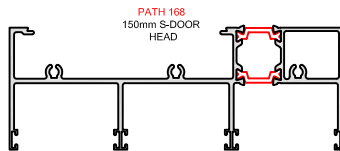
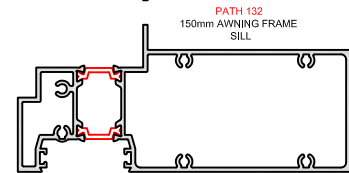
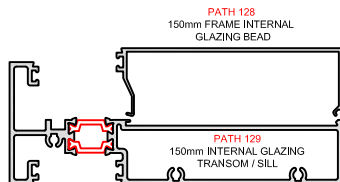
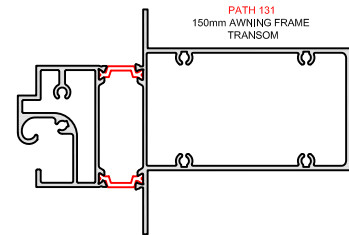
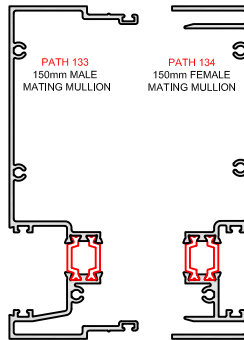
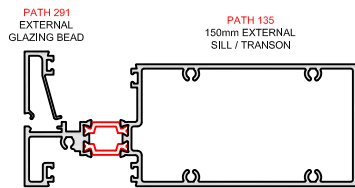
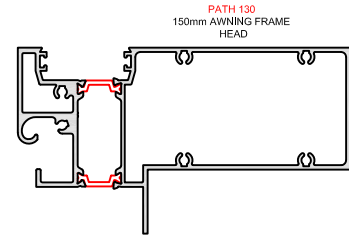
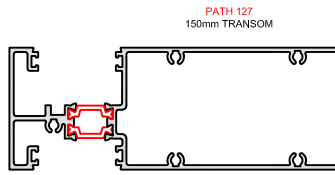
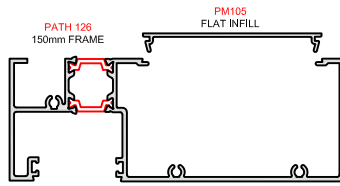
*A Catalogue of:
Aluminium Extrusions to Fabricate Performance Energy
Efficient Windows and Doors.*

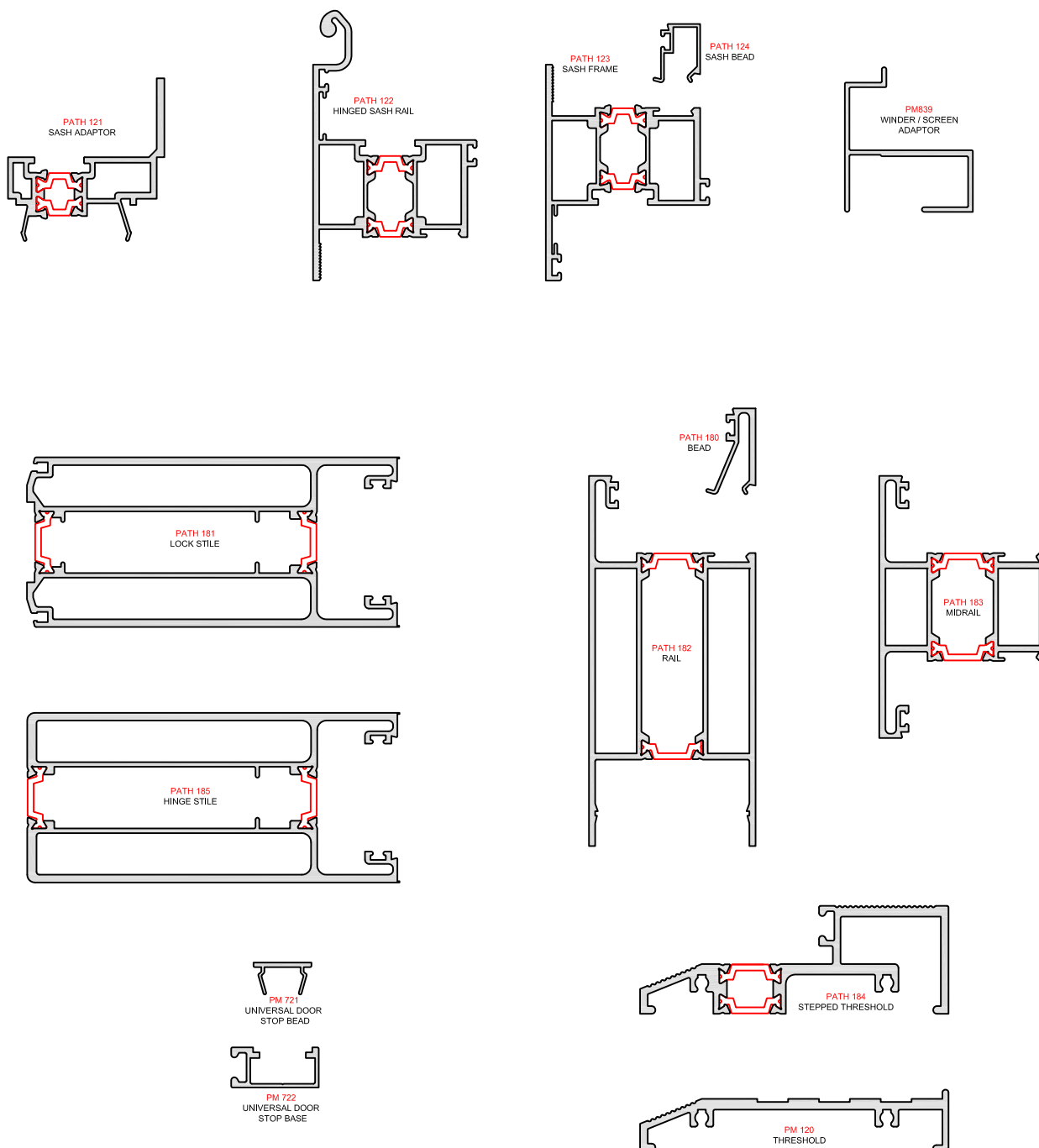
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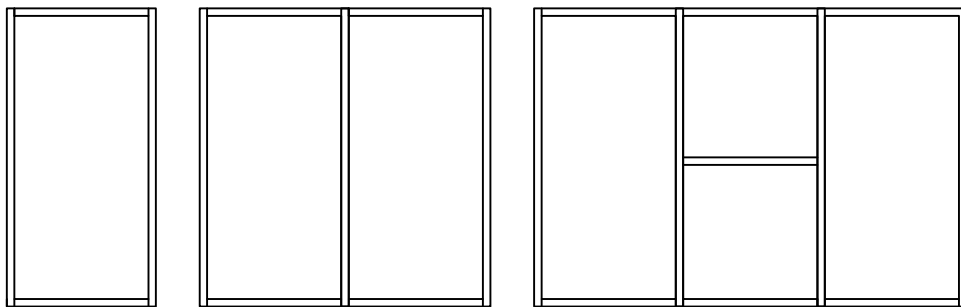




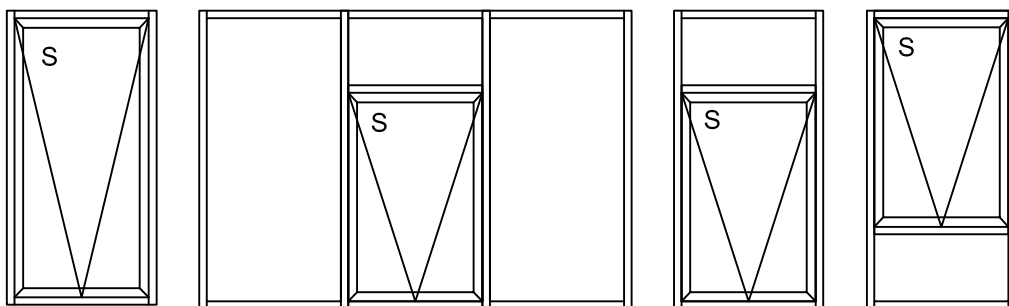
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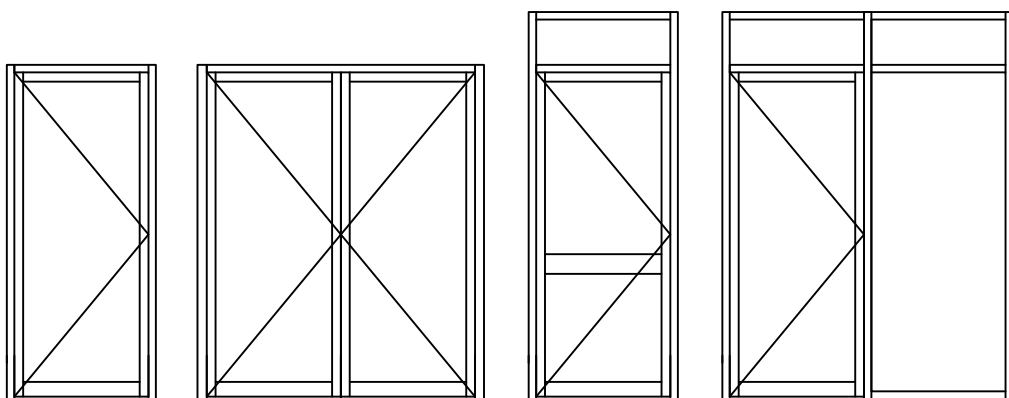
FIXED LITE



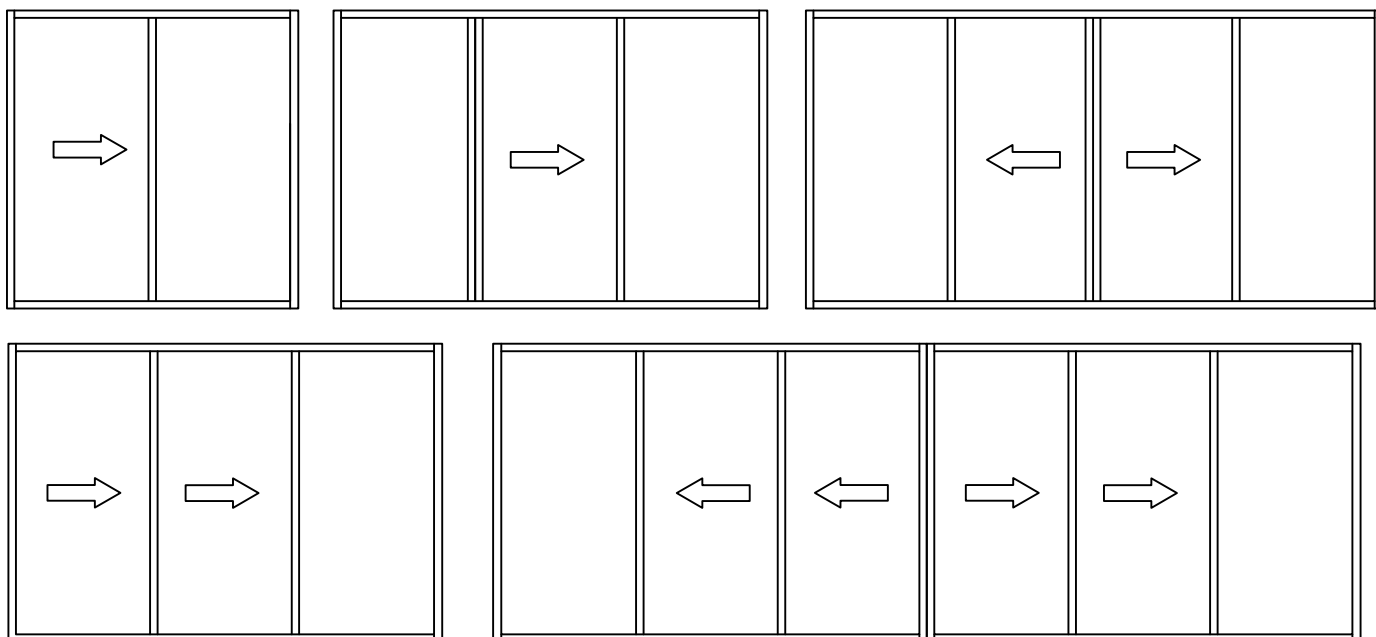
AWNING SASH



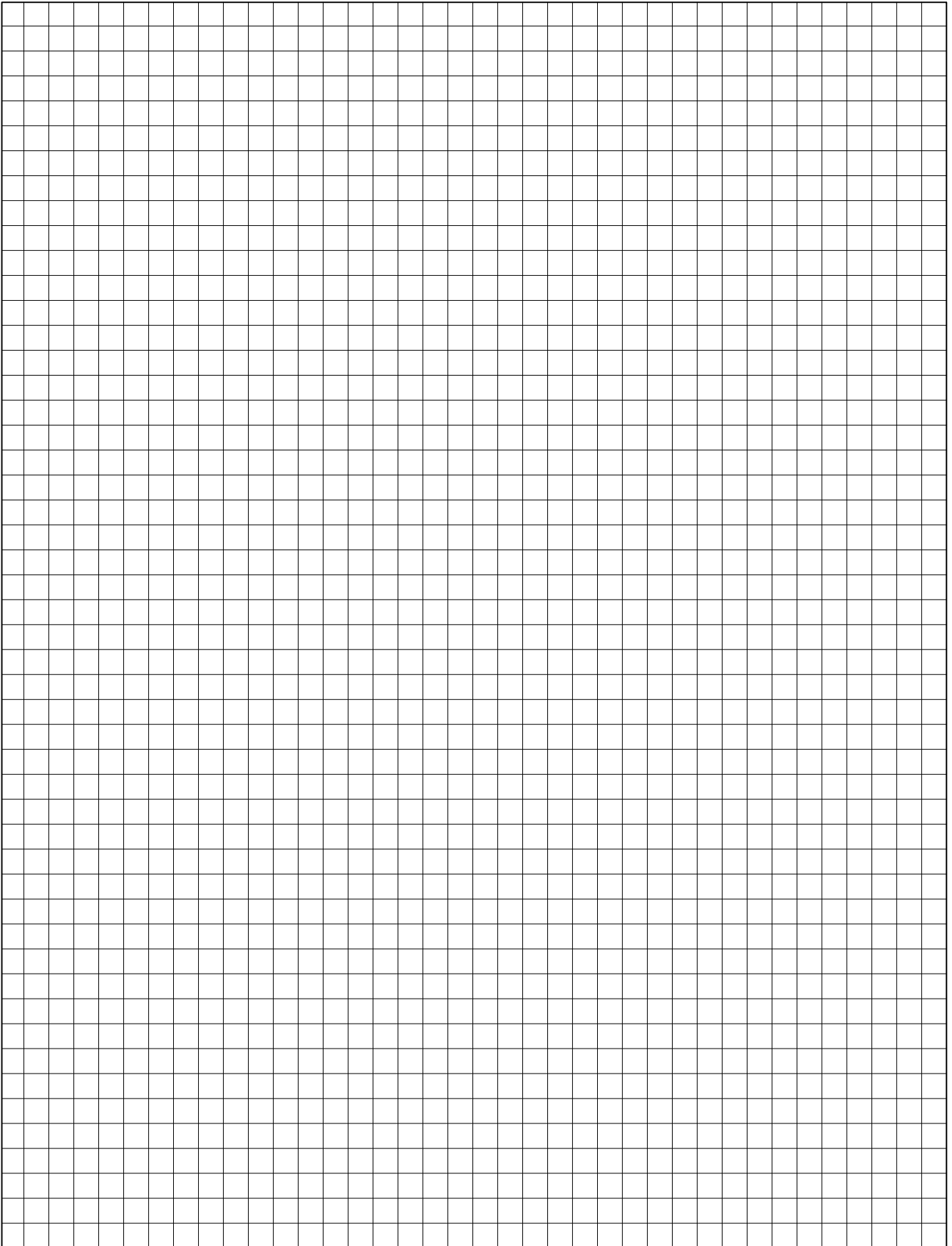
HINGED DOORS



SLIDING DOORS



NOTES:



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