



- **PSD** supply and install Kommerling, Europe's leading manufacturer of PVCu window and door profiles.
- Kommerling guarantee that their profiles will suffer no product defect in any climate for 10 years.

HEAD OFFICE

Tel: 076 60 80 44

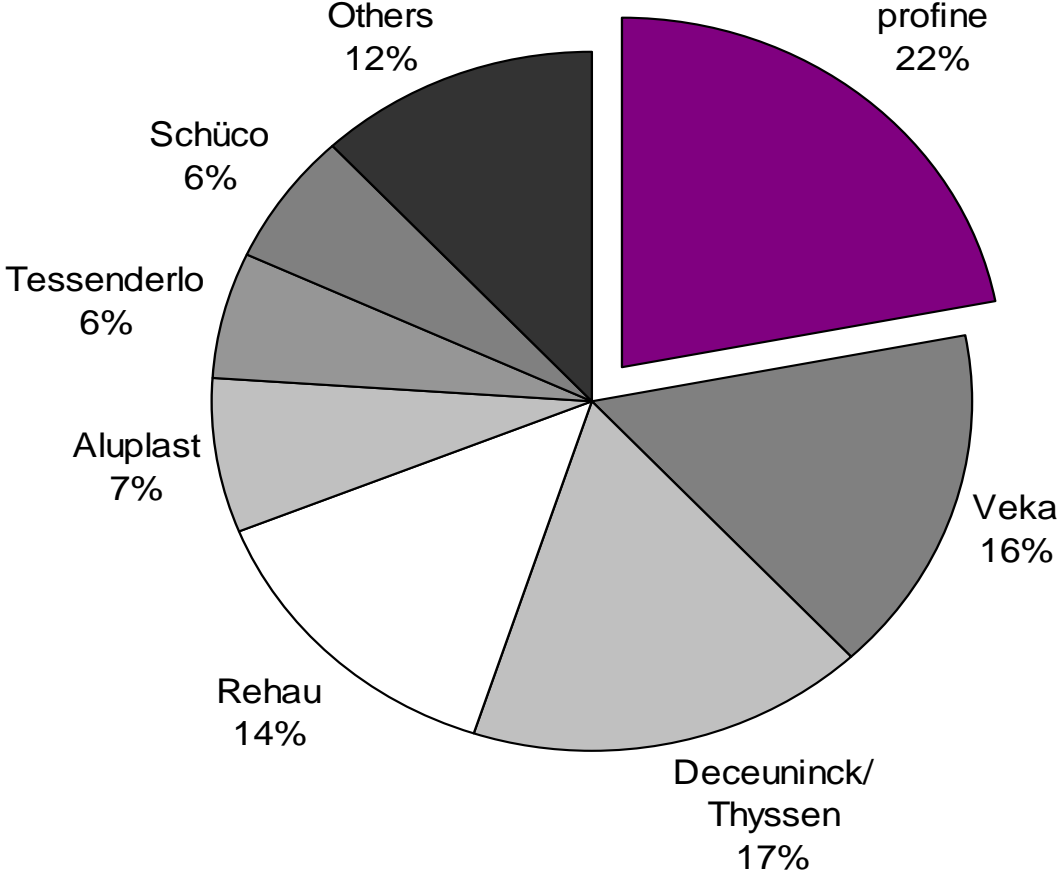
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profine – Market shares in Europe





PSD

Project Supplies Direct



- The Kommerling Gold system for both PVCu casement doors and casement windows.

PSD



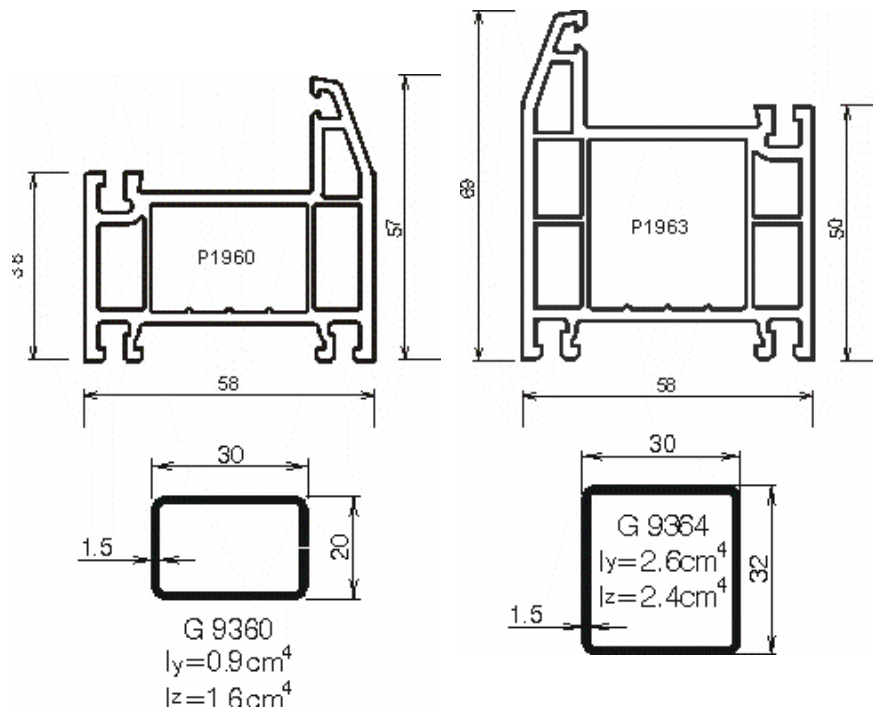
58mm Gold Asea system



- A universal system to make inward opening and outward opening windows, which achieves great success in UK and many Asian countries
- Slope designing optimize the appearance of the window by slimmer vision
- Compatible glazing and gasket structure accept glass from 4 to 32mm
- Unique design of Z-style transom can realize the ideal joint no matter welding or mechanism coupling
- Co-extruded glazing bead with lips makes the tight sealant and easy-working on assembly
- The coming door solution will make the system consummate
- Color co-extrusion technology available
- Foil lamination technology available
- Outstanding advantage for its economic



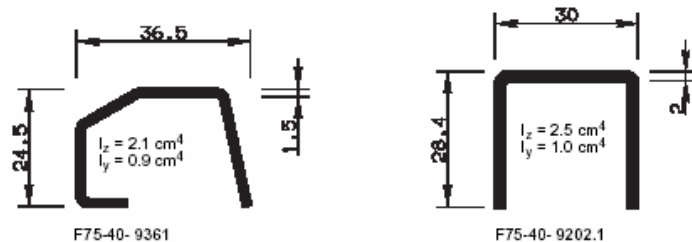
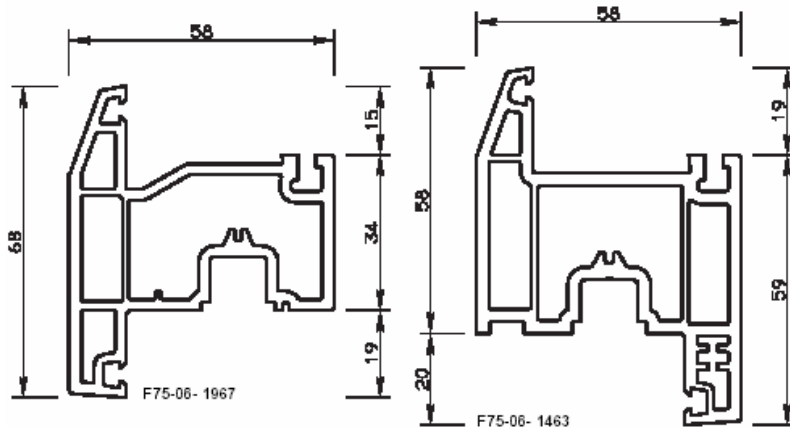
Frame



- Frame can be used for both outer and inner function
- 3 chamber, main chamber for reinforcement
- Slope designing optimize the appearance of the window by slimmer vision
- Glass thickness from 4 to 32mm
- 2.7mm wall thickness supply attractive cost economy and estimable strength
- Good thermal insulation performance, K-value not more than 1.7 W/(m²*K)
- Corner strength exceed 4500N



Sash



- Slope designing optimize the appearance of the window by slimmer vision
- Glass thickness from 4 to 32mm

Outward opening sash

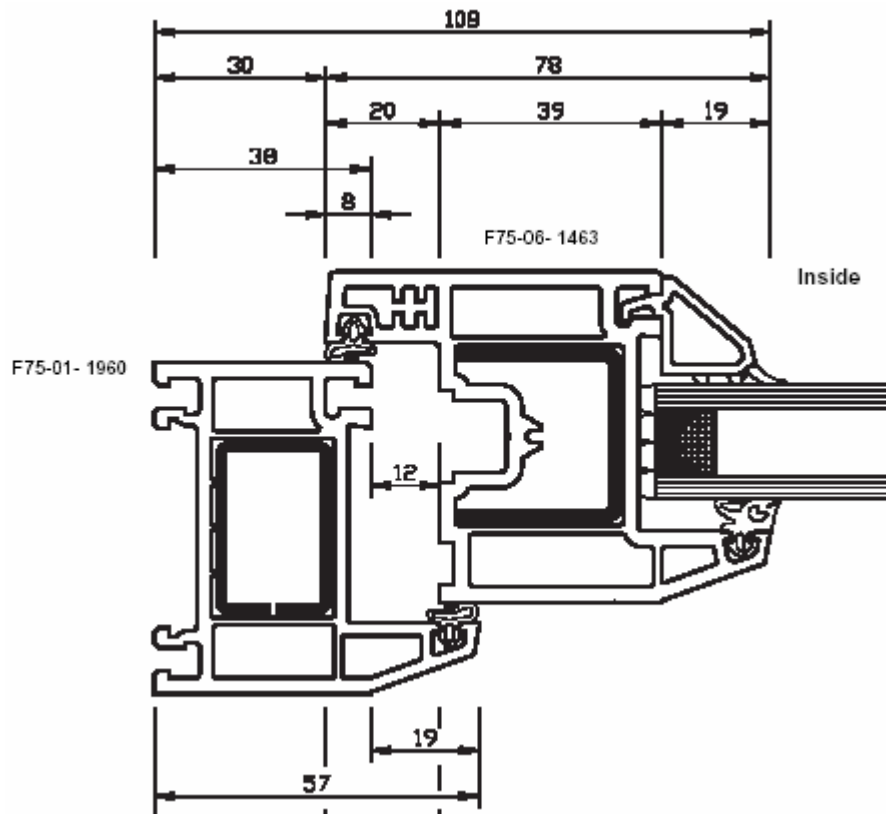
- 2 chamber, 2.7mm wall thickness, slim outline but extension reinforcement space
- 16mm standard groove fit commercial hardware (espeagnolettes and friction hinges)
- Slope rebate helps to drain out water
- Max sash size up to 1600 x 800mm (by friction stay)

Inward opening sash

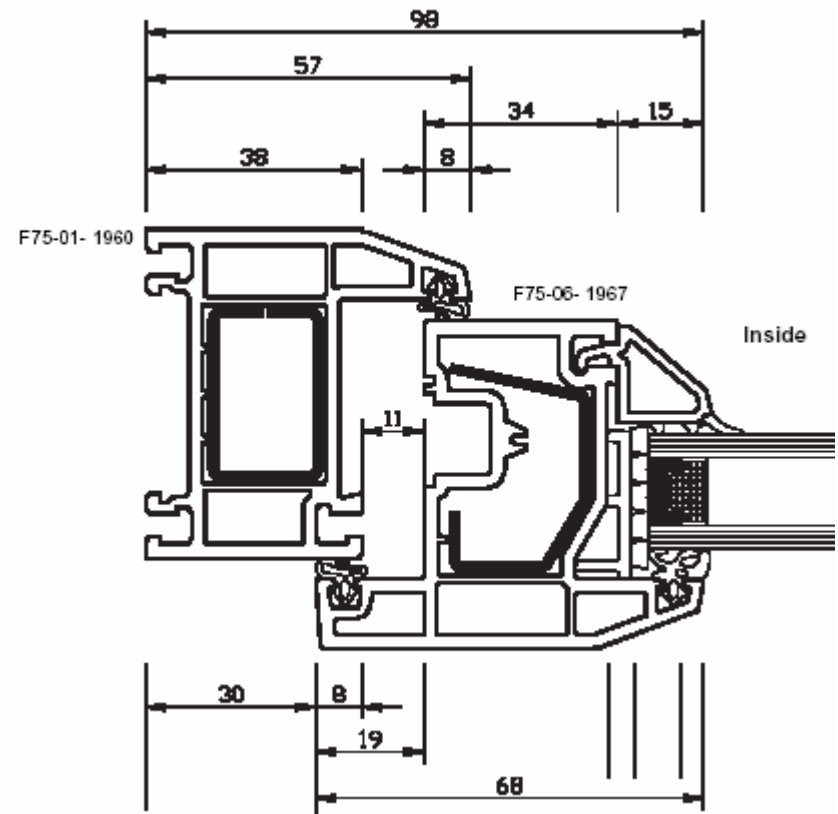
- 3 chamber get a good thermal insulation performance, K-value not more than 1.7 W/(m²*K)
- 2.8mm wall thickness supply attractive cost economy and estimable strength
- Corner strength exceed 4500N
- Max sash size up to 2100 x 800mm (tilt&turn)



Section of window



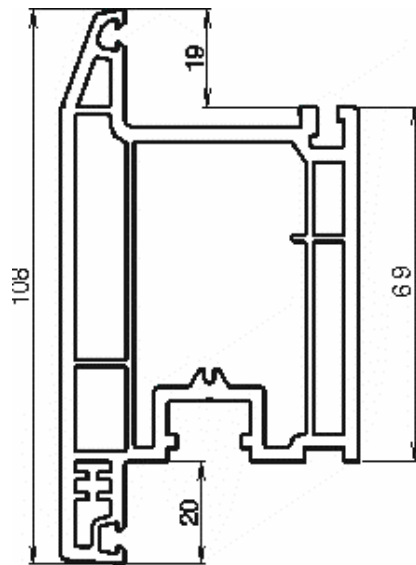
Inward opening



Outward opening

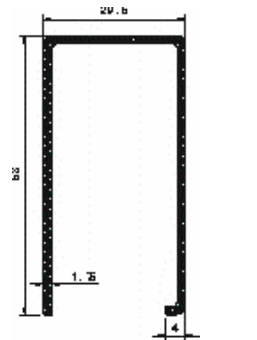


Door sash (expected in March, 2007)

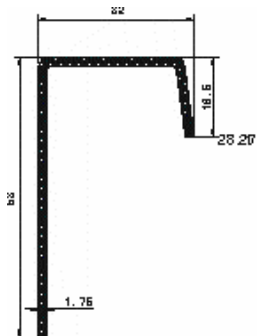


P1959

Outward opening door sash



G xxx
 $I_y = 8.9 \text{ cm}^4$
 $I_z = 4.2 \text{ cm}^4$



G xxx
 $I_y = 5.7 \text{ cm}^4$
 $I_z = 2.4 \text{ cm}^4$

- Slope designing optimize the appearance of the window by slimmer vision
- Glass thickness from 4 to 32mm

Outward opening sash (expected in March, 2007)

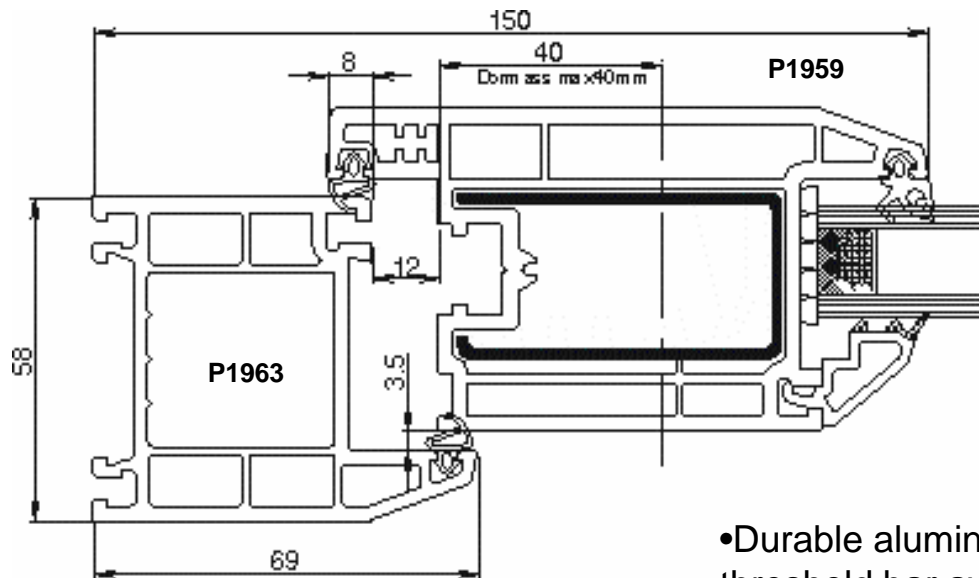
- 3 chamber, 2.8mm wall thickness, enhanced thermal insulation property
- Big space in width (Dormass max 40mm) easily hold special hardware which with core-lock function
- 2 different steel reinforcement available
- Max sash size up to 2100 x 1000mm

Inward opening sash

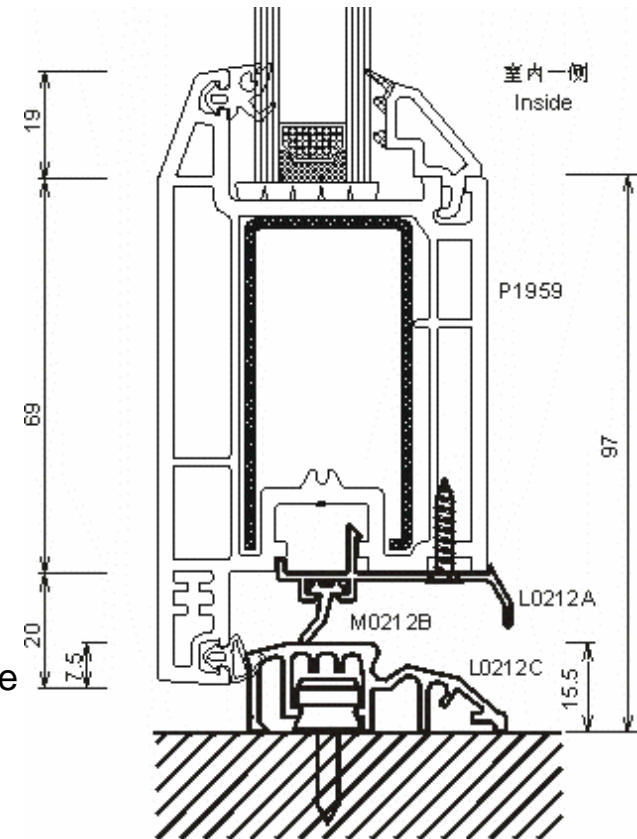
(In designing, expected in middle of 2007)



Section of outward opening door

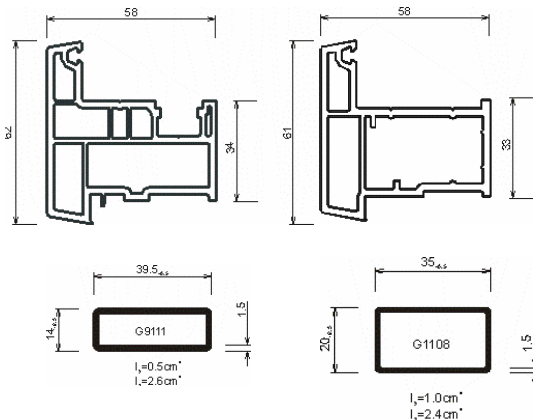
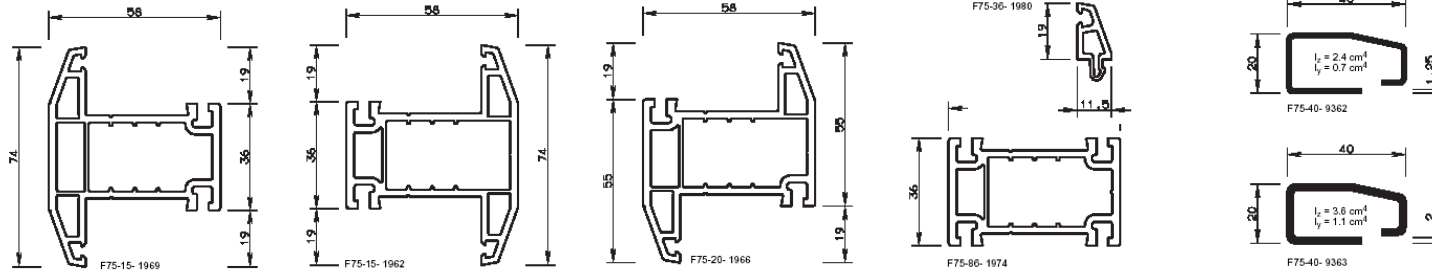


- Durable aluminum threshold bar available
- Optional simple MD seal solution improve thermal resistance





Transom, mullion, universal profile



Transom

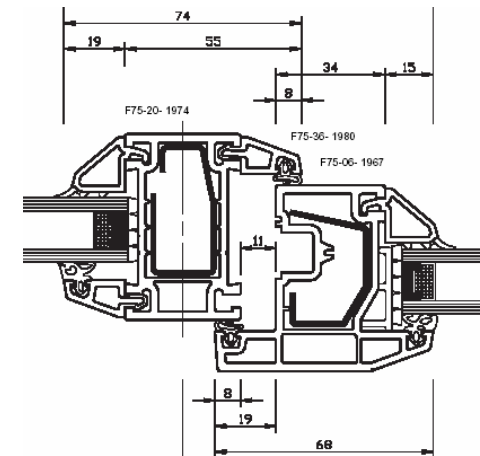
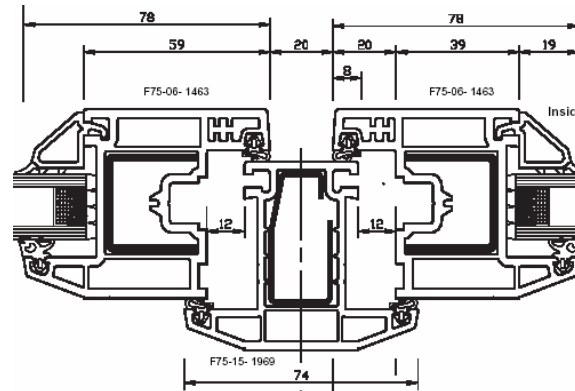
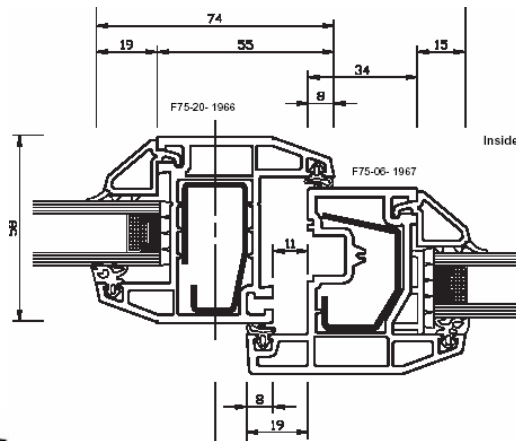
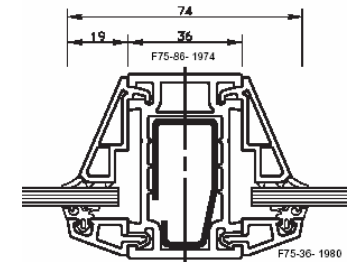
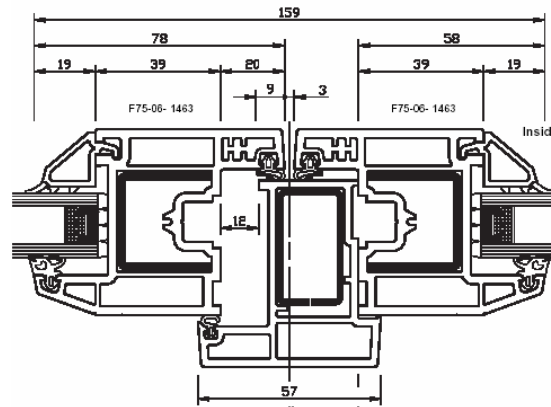
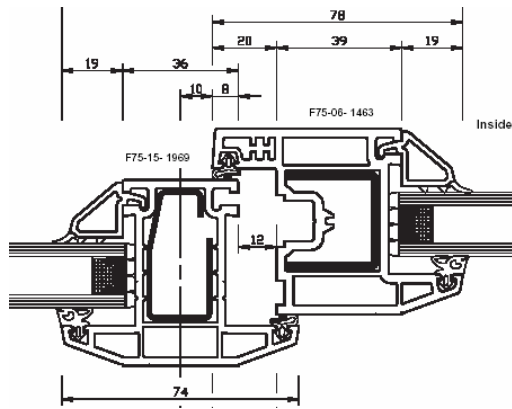
- Easy deal with complicated outward opening window design by means of particular T-transom, Z-transom and smart universal frame etc.
- Slope designing optimize the appearance of the window by slimmer vision
- Compatible glazing and gasket structure accept glass from 4 to 32mm
- Wall thickness 2.7mm
- 2 chamber, big chamber of steel reinforcement

Dummy mullion

- 2 different design for your favorite hardware solution
- 2.5mm wall thickness

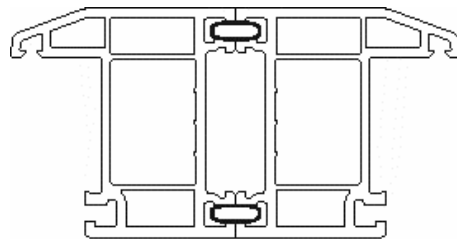
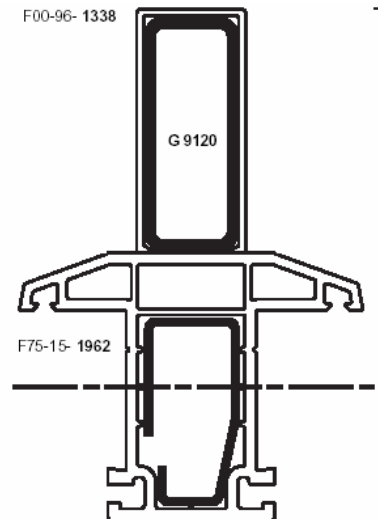
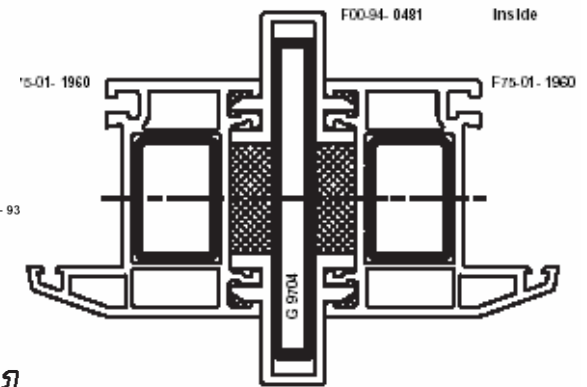
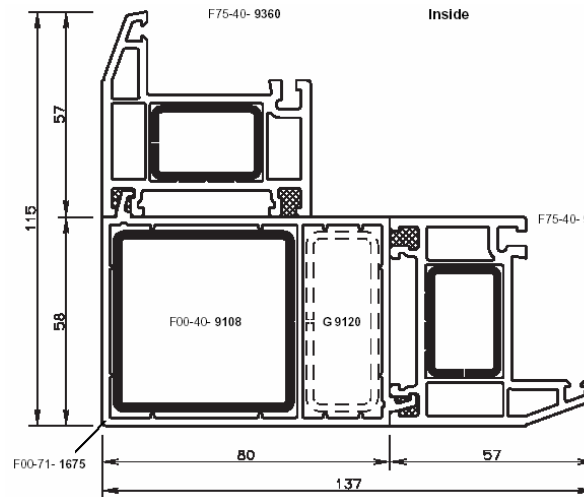
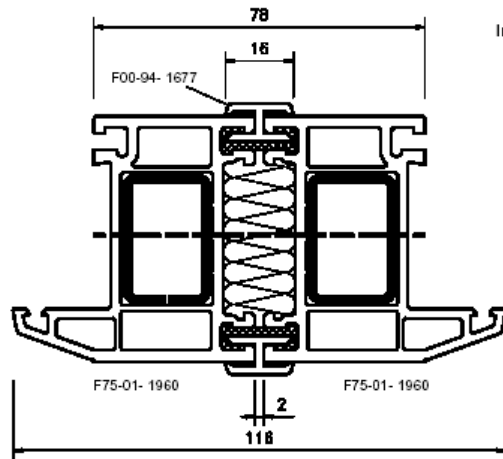


Section of transom

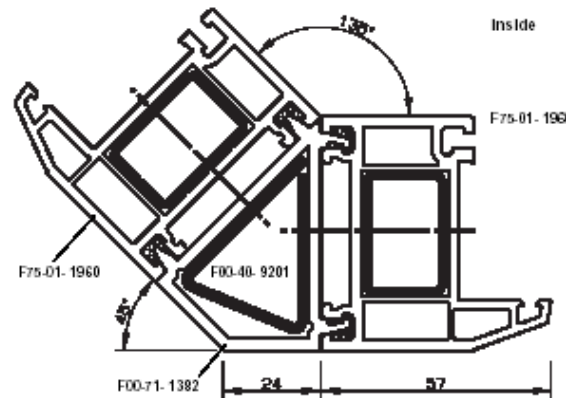




Combination



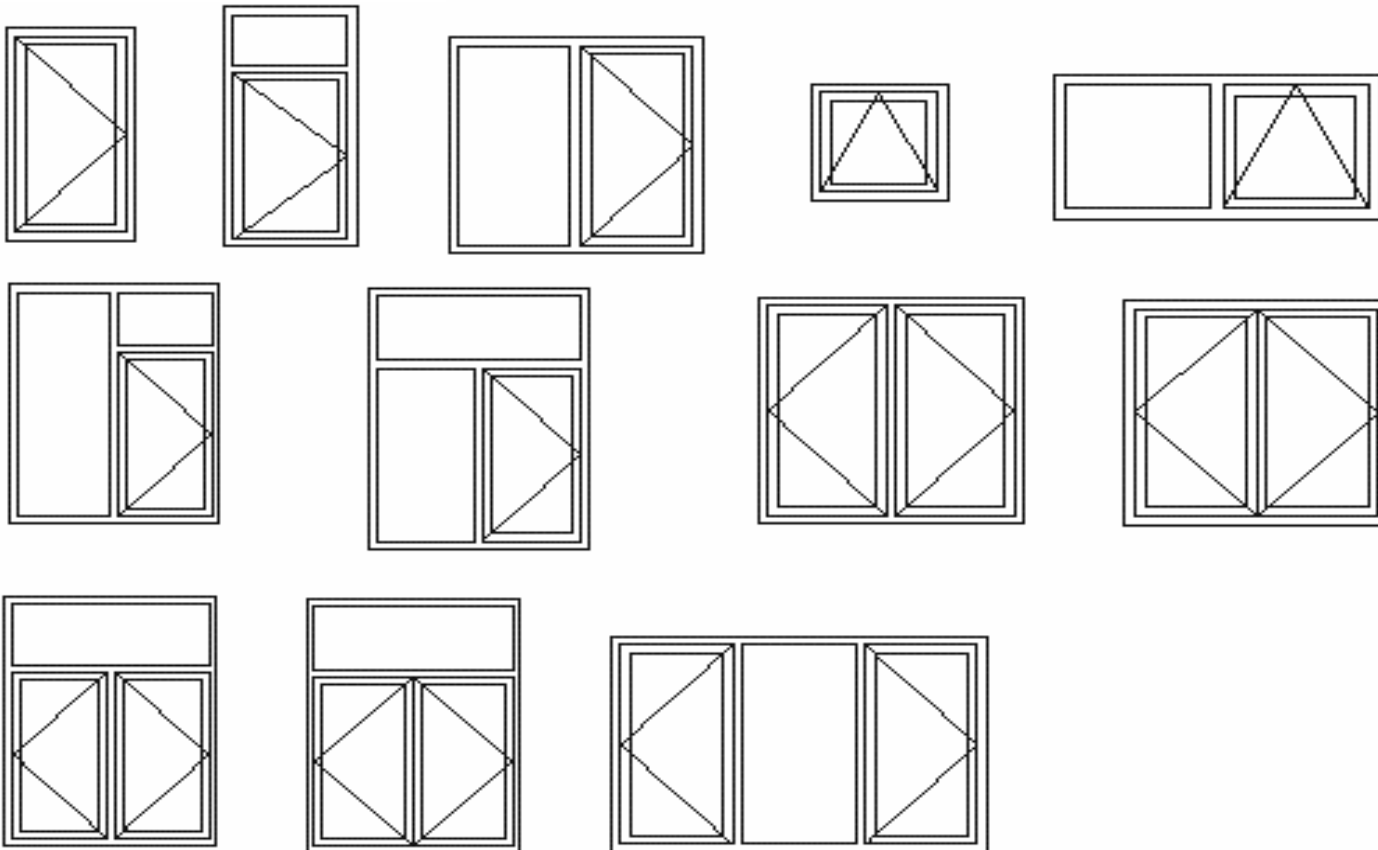
P1248





Typical window type

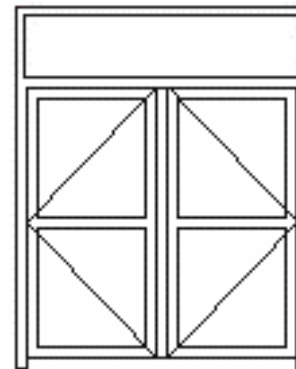
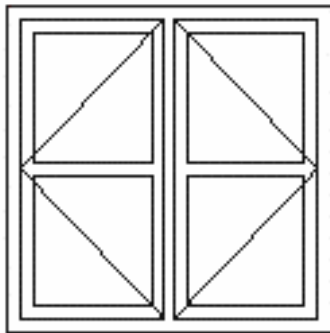
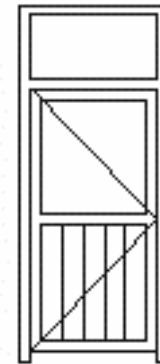
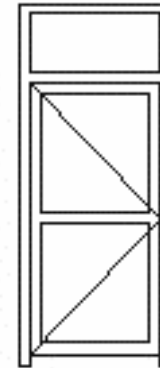
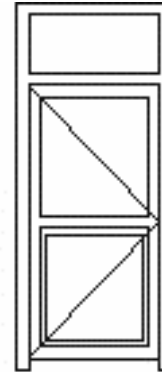
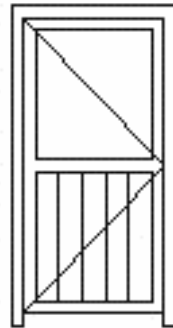
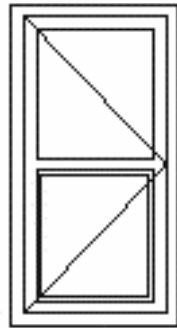
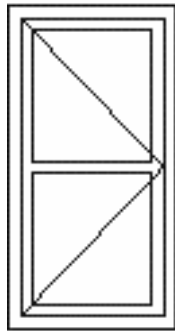
Outward opening window





Typical door type

Outward opening door





Glazing table and Gasket



F00-45-9075



F00-45-9044



F00-45-9072



F00-45-9045



F00-45-9073



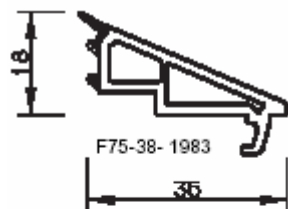
F00-45-9040



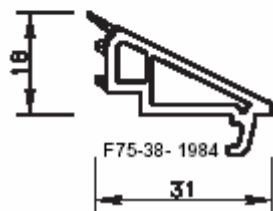
F00-45-9043



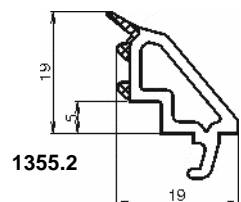
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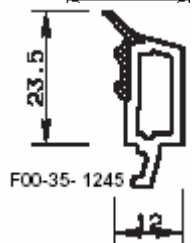
F75-38-1983



F75-38-1984



1355.2



F00-35-1245

Glazing gasket combination			
Glazing rebate 45.5 mm			
Glass thickness	Glazing gaskets		
	... 9075 ... 9044	... 9072 ... 9045	... 9073
2,5	... 1983		
3	... 1983		
3,5	... 1983		
4	... 1983		
4,5	... 1983	... 1983	
5	... 1983	... 1983	
5,5		... 1983	
6		... 1983	
6,5	... 1984	... 1983	
7	... 1984		... 1983
7,5	... 1984		... 1983
8	... 1984		... 1983
8,5	... 1984	... 1984	
9	... 1984	... 1984	
9,5		... 1984	
10		... 1984	
10,5		... 1984	
11			... 1984
11,5			... 1984
12			... 1984

18,5	... 1355.2		
19	... 1355.2		
19,5	... 1355.2		
20	... 1355.2		
20,5	... 1355.2	... 1355.2	
21	... 1355.2	... 1355.2	
21,5		... 1355.2	
22		... 1355.2	
22,5		... 1355.2	
23			... 1355.2
23,5			... 1355.2
24			... 1355.2
24,5			
25			
25,5			
26			
26,5	... 1245		
27	... 1245		
27,5	... 1245		
28	... 1245		
28,5	... 1245	... 1245	
29	... 1245	... 1245	
29,5		... 1245	
30		... 1245	
30,5		... 1245	
31			... 1245
31,5			... 1245
32			... 1245

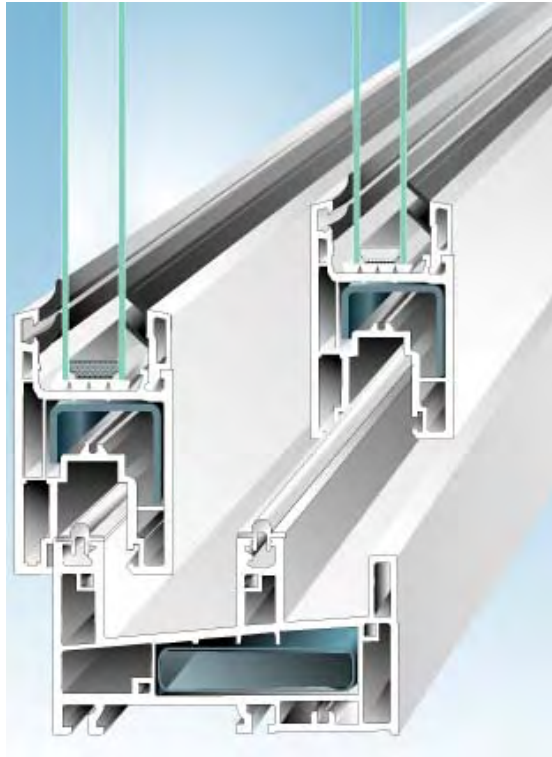


- The Kommerling Ortaprofile (or SF3) is a high performance sliding window profile.





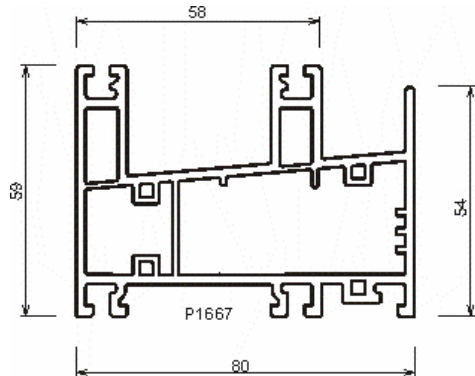
80-88mm Orta system



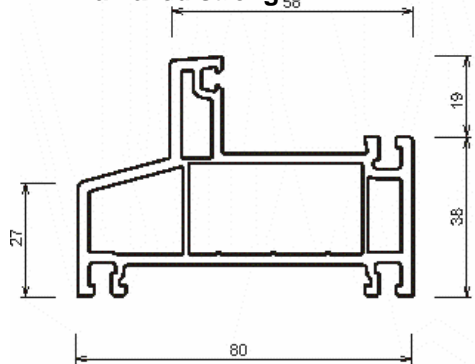
- A very successful horizontal sliding system Asian countries
- 5 frames are available from 1 system to meet various demand
- Slope rebate of frame assist to drain out water quickly
- Co-extruded sash and glazing bead with lips makes the tight sealant and easy-working on assembly
- Mosquito net could be put either interior or exterior
- 80 and 88mm frame profile realize transom function moreover
- 2.2mm wall thickness offer attractive cost-cut



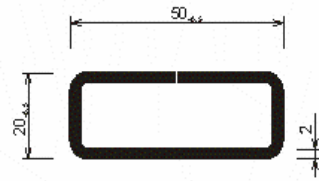
Frame



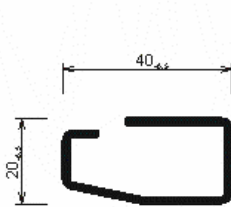
80mm sliding strong frame and transom, with amazed strength



80mm fixed frame

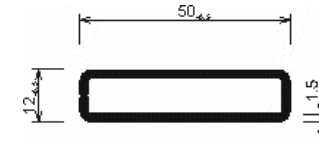
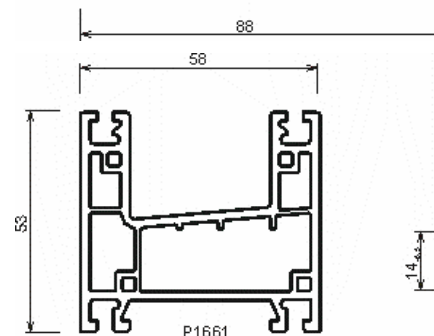
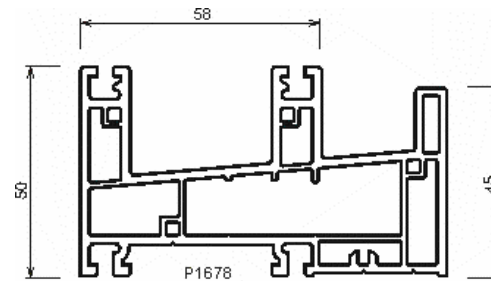
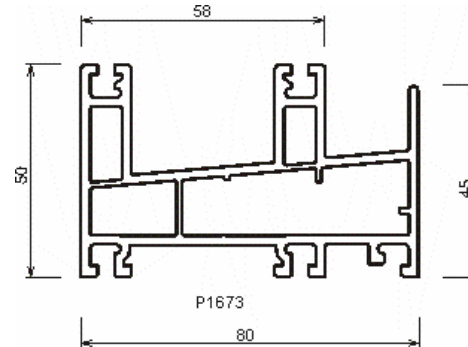


G9120 $I_y=1.7\text{ cm}^4$
 $I_z=7.8\text{ cm}^4$



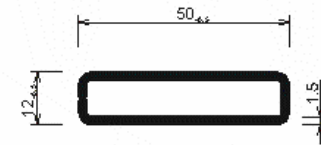
G9362 $\bar{F}1.2$ $I_y=0.7\text{ cm}^4$
 $I_z=2.4\text{ cm}^4$

G9362.1 $\bar{F}1.5$ $I_y=0.8\text{ cm}^4$
 $I_z=2.8\text{ cm}^4$



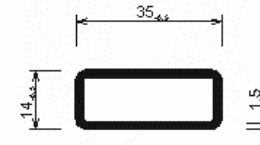
G9146 $I_y=0.4\text{ cm}^4$
 $I_z=4.7\text{ cm}^4$

80mm slim sliding frame, simple but elegant design win successful



G9146 $I_y=0.4\text{ cm}^4$
 $I_z=4.7\text{ cm}^4$

88mm slim sliding frame and transom.

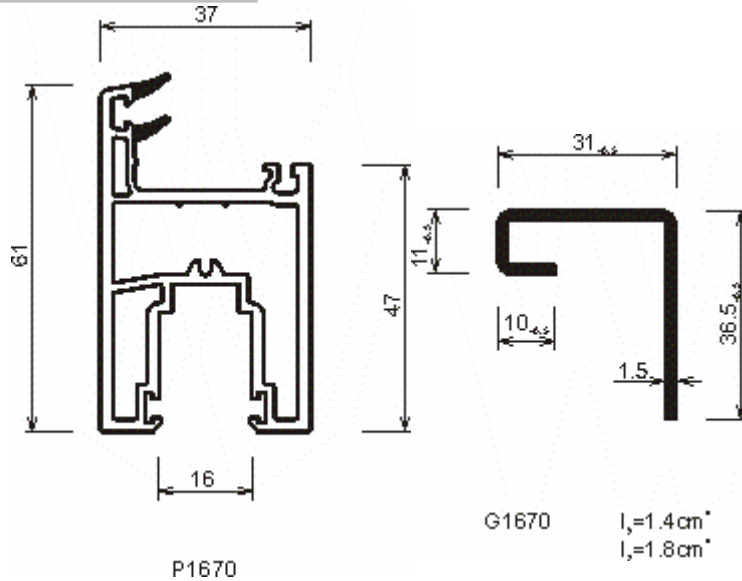


G1661 $I_y=0.4\text{ cm}^4$
 $I_z=1.9\text{ cm}^4$

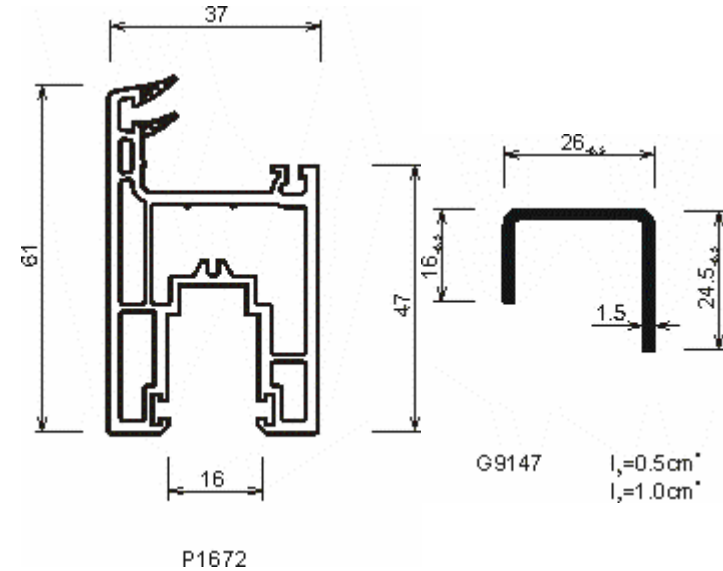
58mm 2 track sliding frame without mosquito net, simple but elegant, optional add-on mosquito track when need



Sash



- Traditional chamber design with extend steel chamber follow function to make sash big enough
- Max sash size reach 1800mm x 650mm (under 1000pa wind pressure condition)
- Co-ex gasket make assembly easily and tight seal
- 16mm standard groove fit not only cam-lock but also advanced espeagnolettes hardware



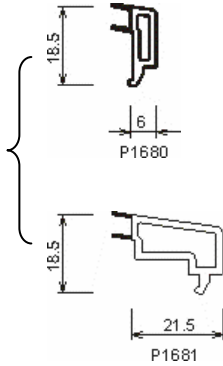
- 2 chamber structure improved water-proof and thermal insulation performance
- Meet general requirement,max sash size reach 1600mm x 650mm (under 1000pa wind pressure condition)
- Co-ex gasket make assembly easily and tight seal
- 16mm standard groove fit not only cam-lock but also advanced espeagnolettes hardware



Glazing table

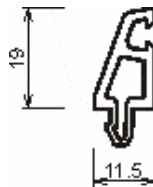


P1670/P1672



Glazing rebate 31mm	
Thickness (mm)	Glazing bead
4	1681
5	1681
6	1681

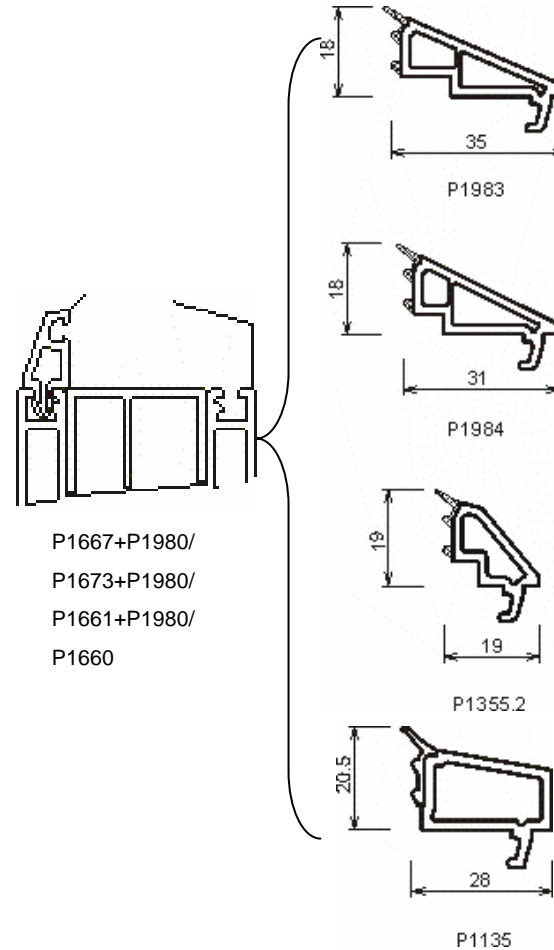
19	1680
20	1680



P1980



P1660



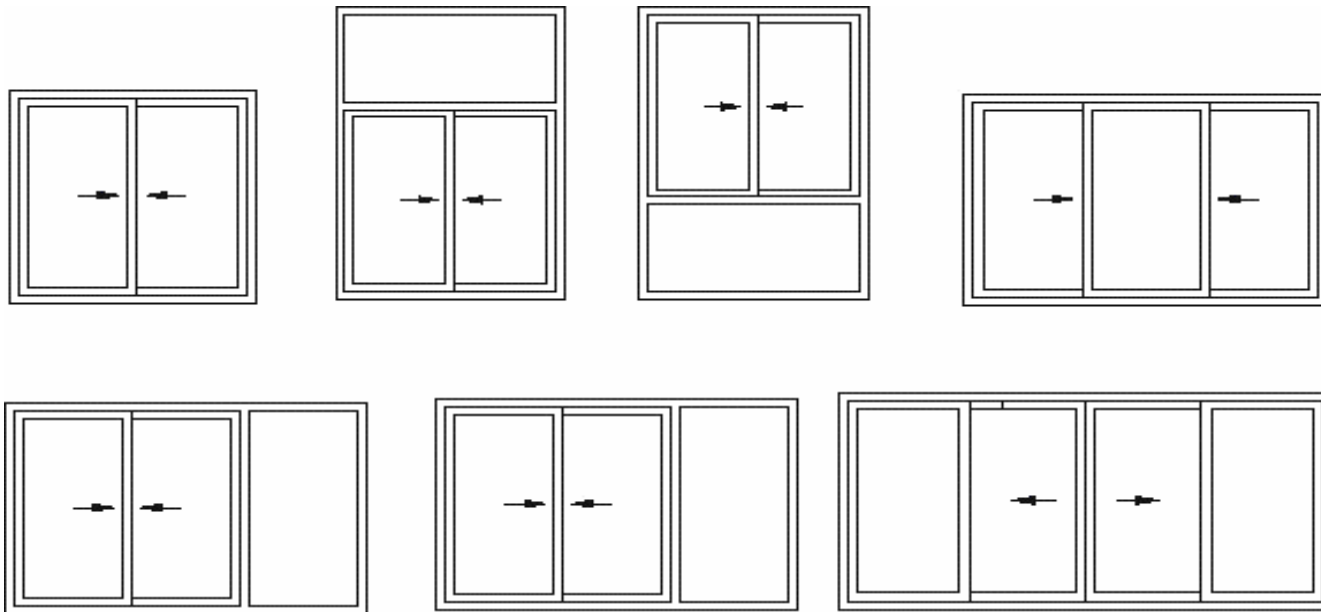
(mm)	9044	9045	9073
4	1983		
5	1983		
6	1983		
7	1984	1983	
8	1984	1983	
9		1983	
10		1984	
11		1984	
12		1984	
13		1984	

15		1135	
16		1135	

18			1135
19			1135
20			1135
21	1355.2		
22	1355.2		
23	1355.2		
24		1355.2	
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27			1355.2
28			1355.2
29			1355.2
30			1355.2

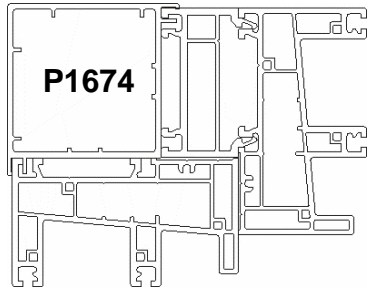


Typical window type

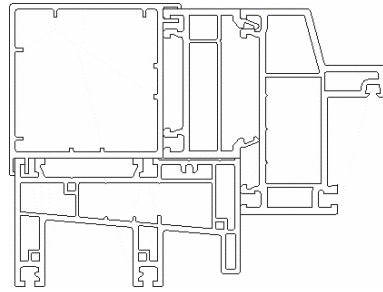




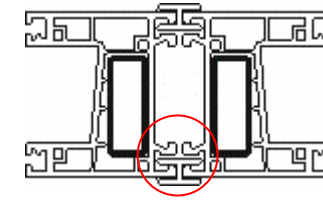
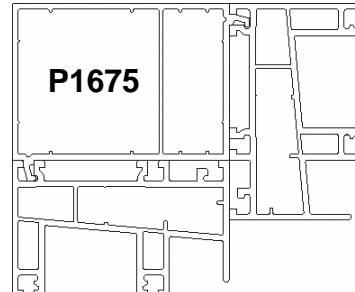
Various combination solution



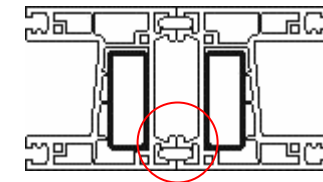
P1674



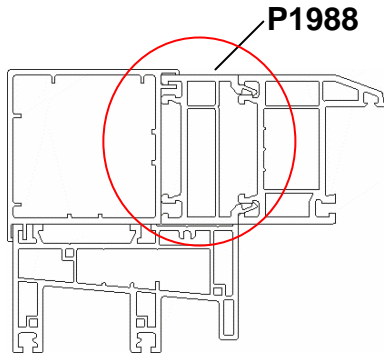
P1675



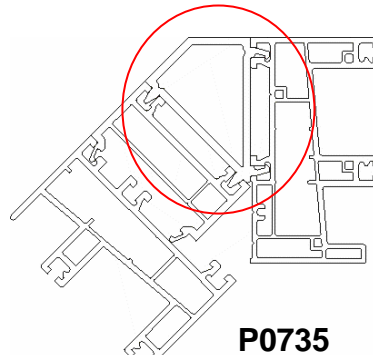
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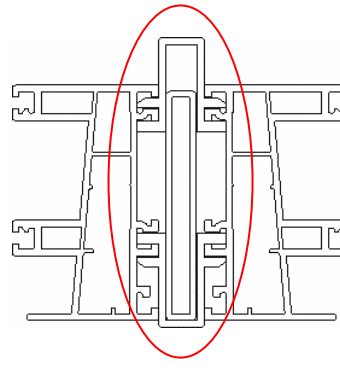
P1248



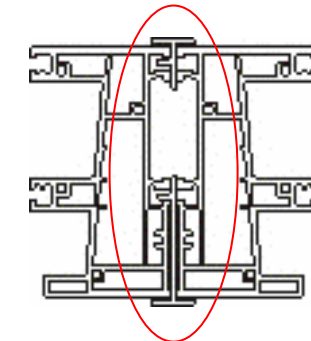
P1988



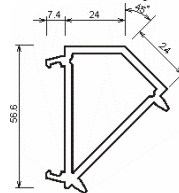
P0735



P0481



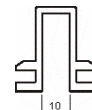
P1987



P1382



G9201



P0481



PSD

Project Supplies Direct

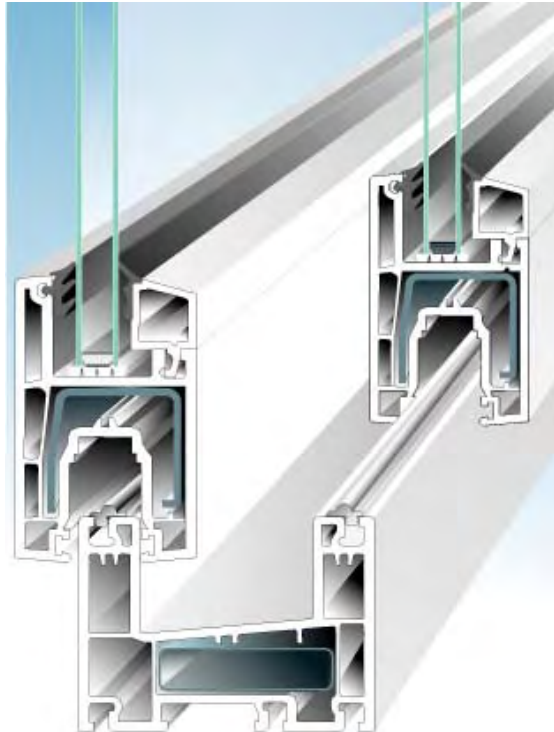


- The Kommerling SF2 profile is strengthened version of the Ortoprofile designed for sliding doors.

PSD



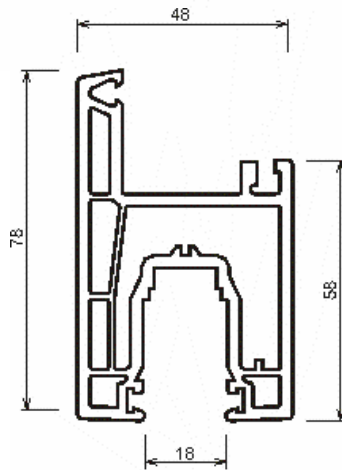
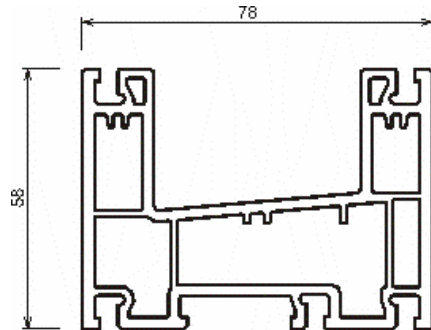
SF2 78mm Sliding window and door



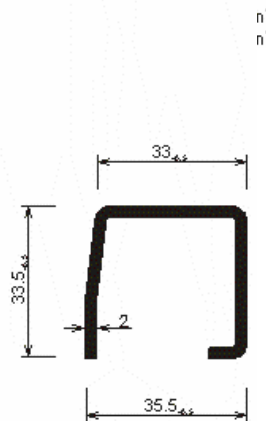
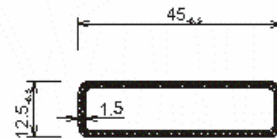
- It is well known as the strongest sliding system in the field
- Excellent performance and durability have been proven by facts in various application since many years
- Mainly are used for big size partition door solution, or big windows in rigorous surroundings
- Single sash size up to 1.2 x 2.2m
- Accept glass from 5mm up to 22mm
- Improved frame profile realize transom function in addition



Frame and sash



P1386



G9116.C $I_x=2,6\text{cm}^4$
 $I_y=4,1\text{cm}^4$

- Compact frame improved from original SF2 frame

- Wall thickness 2.8mm

- Original German designing

- wall thickness 2.8mm

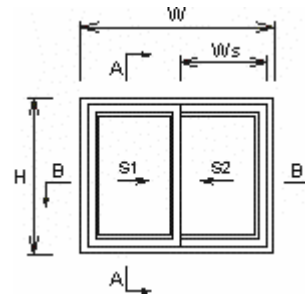
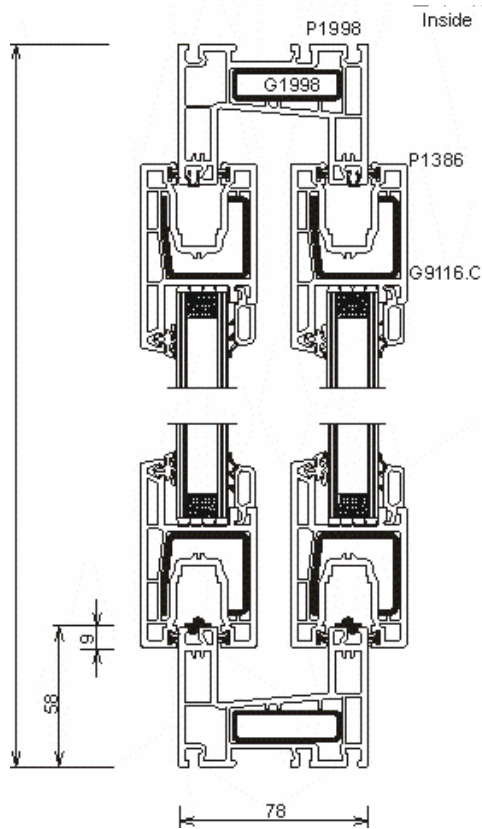
- 2 chamber with big space arrange steel reinforcement

- Glass thickness range from 5 to 23mm

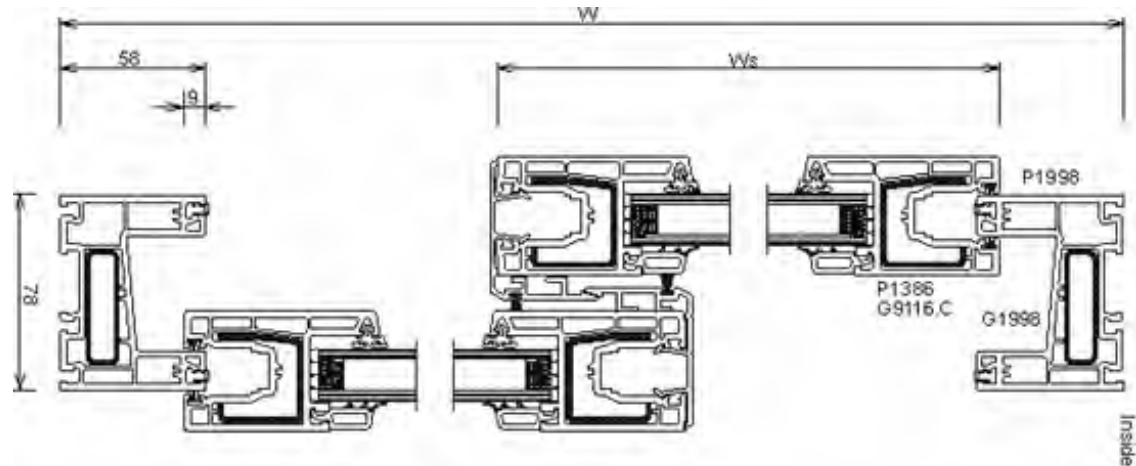
- Maximum sash size up to 2000x1200mm (H x W)



Section drawing of assembly-1

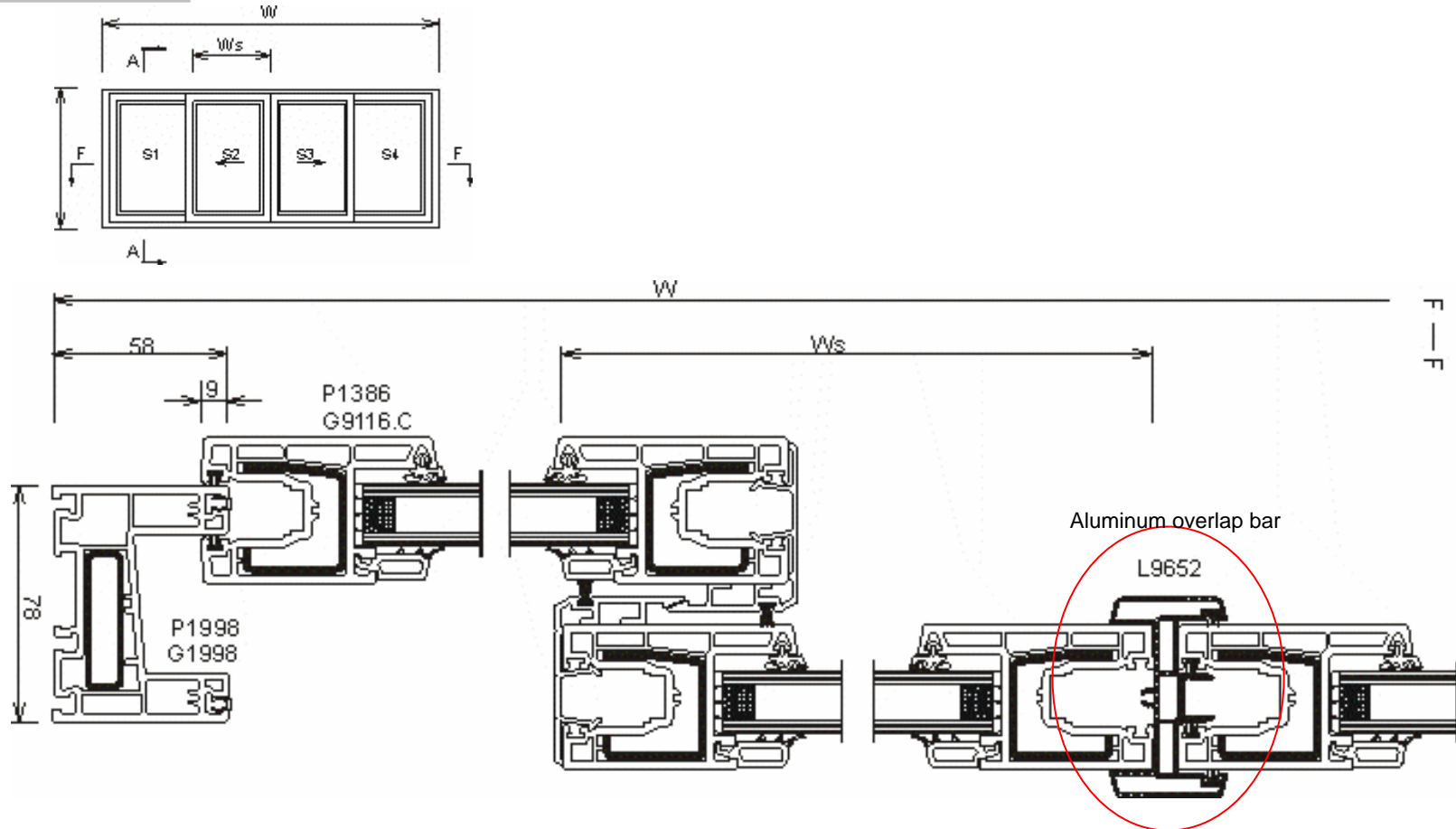


- Separate drainage chamber and Slope rebate of frame assist to drain out water more quickly



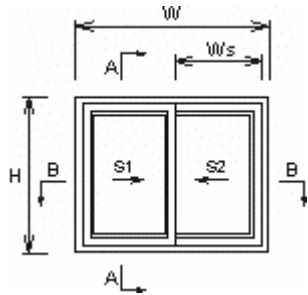


Section drawing of assembly-3

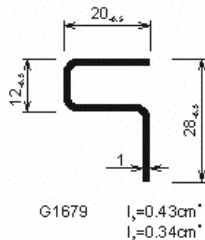
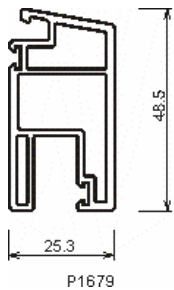




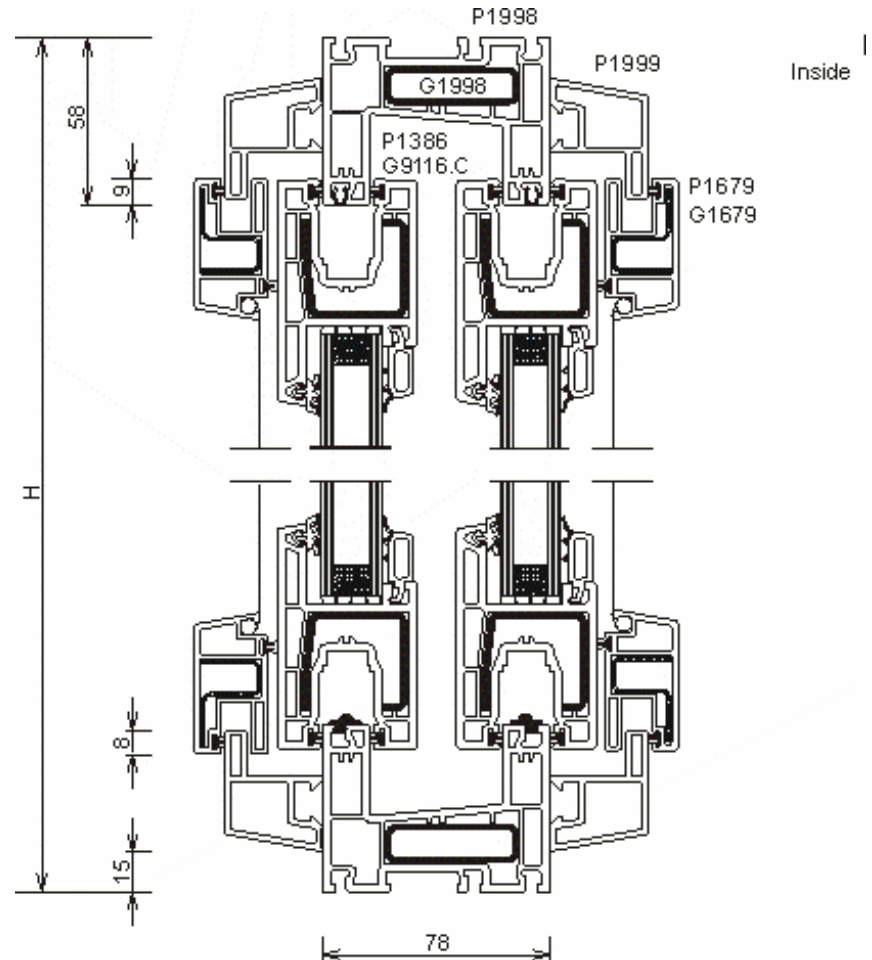
Mosquito screen solution



- Add-on mosquito screen track install on inside or outside
- Sliding roller help screen achieve fluent move
- Maximum screen up to 1800x 850mm



sliding roller
F1679

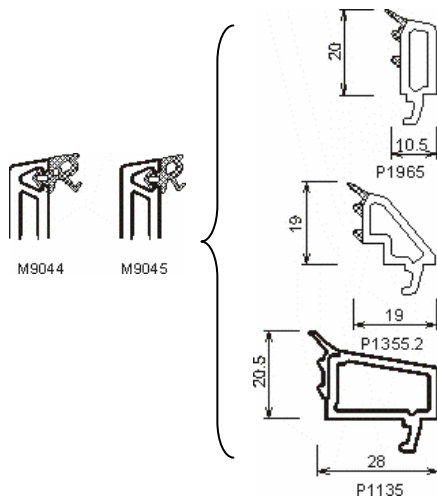




Glazing table

For sash P1386

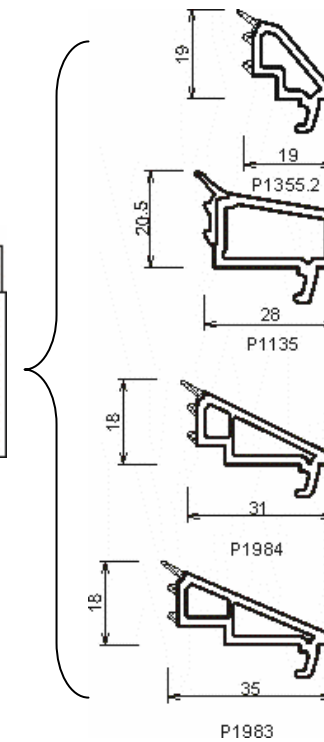
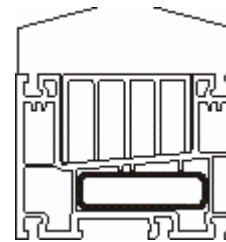
For frame P1998
For frame P1998



(mm)	9044	9045
3	1135	
4	1135	1135
5	1135	1135
6		1135

12	1355.2	
13	1355.2	1355.2
14	1355.2	1355.2
15		1355.2

20	1965	
21	1965	1965
22	1965	1965
23		1965



(mm)	外側	内側
4	1983	1983
5	1983	1983
6	1983	1983

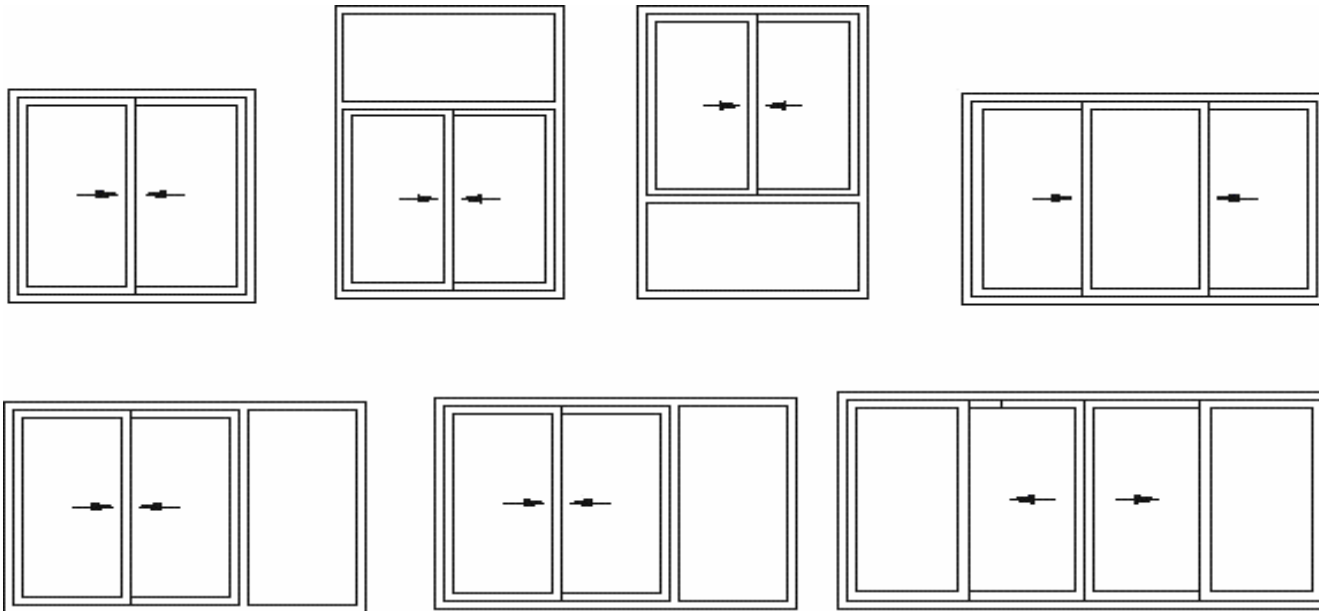
9	1984	1983
10	1984	1983
11	1984	1983
12	1135	1983
13	1135	1983
14	1135	1983

16	1135	1984
17	1135	1984
18	1135	1984

21	1355.2	1983
22	1355.2	1983
23	1355.2	1983



Typical window and door type





PSD

Project Supplies Direct

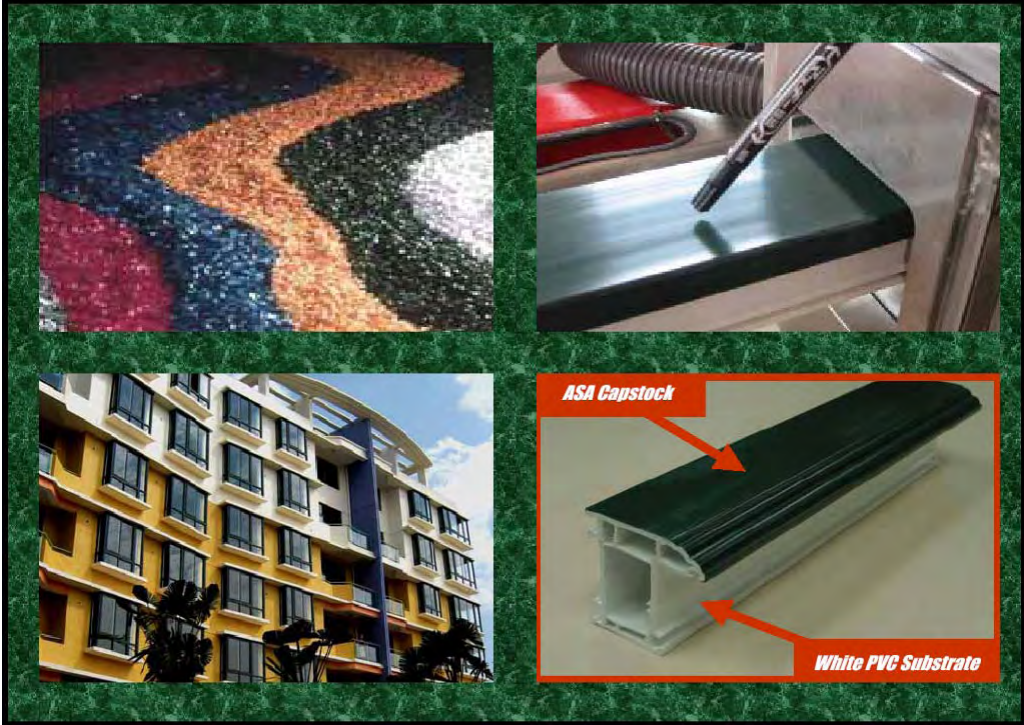


- Additional information.

PSD



Color co-extrusion technology



- Capstock and PVC blend co-extrude by co-extrusion equipment
- Metallic and jewelly impression realized by high gloss surface
- Good weathering resistance
- More economical than foil lamination process
- Excellent impact resistance derived from ASA material (ASA: Arcylonitrile-Styrene-Arcylate)



Color co-extrusion product range



Green



Dark gray



Light gray



Brown

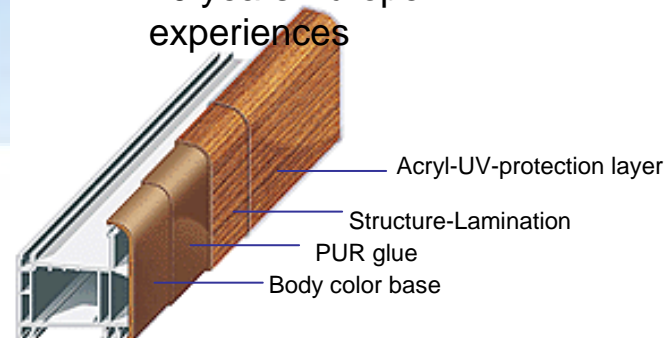
 1960	 1463	 1959	 1960	 1963
 1967	 1173	 1966	 1966	 1963
 1980	 1969	 1962	 1962	 1963
 1974	 1969	 1173	 1173	 1963 Inward opening door
Available at present		Expected March, 2007	Expected July, 2007	Under planing



Foil lamination technology



- Multi-layer film laminated on top of white or color body profile
- Good appearance effects
- Choices of color and pattern
- Good weathering resistance
- MBAS-2 foil had been verified its excellent outdoor performance by 20 years Europe experiences



Ivory 607
(without foil layer)



Light brown 925



Dark brown 928

Standard-Lieferprogramm

Gültig ab 1. April 2006



KÖMMERLING®

Weiß/Creme

Holzstrukturen

Unifarben

Unifarben glatt

	654 weiß ohne Dichtung	654 weiß mit grauer Dichtung	654 weiß mit schwarzer Dichtung	607 Creme ohne Dichtung 607 Creme mit schwarzer Dichtung		015/215 Eiche Dunkel	024/224 Mahagoni	030/230 Eiche Rustikal alt	032/232 Golden Oak	037/237 Eiche Rustikal	038/238 Lärche/Bergkiefer	039/239 Oregon 4	041/241 Oregon 3	052/252 Nussbaum	074/274 Bergeiche	076/276 Streifendouglasie		016/216 Anthrazitgrau	EE16 Anthrazitgrau auf Creme	021/221 Silbergrau	EE21 Silbergrau auf Creme	031/231 Maronibraun	044/244 Weinrot	053/253 Moosgrün	058/258 Tannengrün	EE58 Tannengrün auf Creme	067/267 Cremeweiß	EE67 Cremeweiß auf Creme	088/288 Stahlblau	EE88 Stahlblau auf Creme		050/250 Signalgrau glatt	0AG/2AG Anthrazitgrau glatt	0GA/2GA Achatgrau glatt	0SG/2SG Schiefergrau glatt		
Renolit Farbnummer	-	-	-	-		2140005	2065021	3118088	2178001	3149008	3069041	1192001	2115008	2178007	2052090	3152009		701605	701605	715505	715505	809905	300505	600505	612505	612505	137905	137905	515005	515005		700483	701683	703883	701583		
EuroFutur Classic	1	1	1	1	■ □	1	1	2	1	1		2		1	2	2		1	1	1		2	2	2	1	1	2	1	2	1		2	2	2	2		
EuroFutur Elegance	1	1	2	2	■ ■	1	1	2	1	1		2		1				1						2					2								
EuroFutur AVantgarde	1				■ □	2	2		2	2				2				2	2			2		2													
EuroFutur MD	1	1			■ ■		2		1	2			1						2		1		1														
Eurodur 3S Basic	1	1			■ □		1		1	1								1	1			2		1				1	1								
PremiDoor	1			1	■ ■	1	1	2	1	1		1	2	1	2	2		1	1	1	1	1	2	2	1	1	2	1	2	1		2	2	2	2		
K-vision	1		1	1	■ □													1		1					1		1		1								
RolaPlus	1					Innen	1	1		1	1	2	2		1	2	2																				
Klapppladen	1					Außen	1	1		1	1	2	2		1	2	2		1							2			2								

1 = ab Lager lieferbar

■ □ = einseitige Folierung
■ ■ = beidseitige Folierung

2 = Lieferzeit 15 Arbeitstage ab Auftragseingang, Bereitstellung ab Werk

Das Komplett-Lieferprogramm ist den aktuellen Preislisten zu entnehmen
Farbabweichungen sind drucktechnisch bedingt Stand 2. April 2006



greenline
BLEIFREIER STABILISATOR



- Since 2006: In KTK, extensive use of greenline = chemical stabilizer on the basis of calcium zinc.



- Avoidance of lead or heavy metals during the entire production process



- Fulfilment of the stipulations of the voluntary self-commitment „Vinyl 2010“ issued by the EU Commission already now !

