



GLASS ACCESSORIES

DOORS AUTOMATIC

FOLDING GLASS

DOORS
REVOLVING

DOORS STAINLESS STEEL ACCESSORIES

MANUAL SWING DOORS

MANUAL SLIDING DOORS

BALUSTRADES HANDRAILS

> MOVABLE PARTITION WALLS

SPECIAL ARCHITECTURAL CONSTRUCTIONS Extending Your Space...
Is Our Business!
designing, producing,
building...
...your glass world!

At INTERMETAL S.A. we have the ability and capacity to undertake the most demanding projects made of glass and steel.

Our twenty years depth expertise and dedication in the design, manufacture and trade of glass systems and accessories, allowed us to develop a knowledge that is highly respected in our sector.

The challenges of modern glass constructions, give us the motivation to constantly improve our products and services beyond our customers' expectations.

The customer orientation and our philosophy ensure our clients' satisfaction, providing superior quality products, on time.



FLEXIBLE GLASS DOORS GLASS SYSTEMS & ACCESSORIES





INDEX

PARKING GLASS DOORS		FOLDING GLASS DOORS	
04	SYSTEM PR-200	14	SYSTEM FN ·200
06	SYSTEM PR-150	16	SYSTEM FN-150
08	SYSTEM PR ·125	18	SYSTEM FN ·100
10	SYSTEM PR-100	20	SYSTEM FN·M200
12	SYSTEM FRP-75	22	SYSTEM PANORAMA



INAL SYSTEM PR-200

FLEXIBLE GLASS DOOR WITH HEAVY DUTY RAIL



INAL® Frameless Movable Glass System, parking-type, with heavy duty certified aluminum rail 70 mm x 80 mm with embedded stainless steel sliding beam & certified stainless steel rollers.

Unlimited design possibilities for parking areas (vertical, diagonal or parallel parkings).

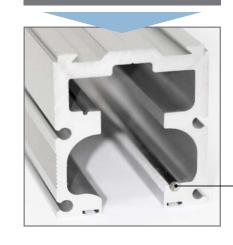
Ability to create swing door panel with overhead concealed door closer in intermediate sections of openings (PR200/ SOC). Weather proofing along the entire length of the panel (PR-F200).

Locking with Inox front bolts or side bolts in a wide range, also locking with double locking lock mechanism.

Available in **Do It Yourself (DIY)** or Made to measure upon request.

TECHNICAL SPECIFICATIONS PR 200		
Glass Type	Tempered or Laminated	
Glass thickness	10- 12mm	
Panel weight	max 120kg	
Maximum panel width	1,00m	
Maximum opening height	3,50m	
Turn of DD200 Customs	PR-F200 (Front Locking)	
Type of PR200 System	PR-S200 (Side Locking)	
	Lock Mechanism with Cylinder key	
Type of locking	Lock Mechanism with half cylinder and knob	
	Stainless bolt	
Finishing	Natural anodized, Satin anodized, Powder coating	
Without floor guide		
No glass cuttings required		

INAL PATENT



Heavy duty aluminum rail 70x80 with embedded stainless steel sliding beam STRENGTH TEST: 3.450kgr (165/049.01-1 N.T.U.A.).







(165/049.01-2 N.T.U.A.).



Swing - Sliding door panel with overhead concealed door closer in intermediate sections of openings (PR200/SOC)



Parking Area Unlimited design possibilities for parking areas

TYPES OF LOCKING



Lock Mechanism with Cylinder Key



Stainless Bolt

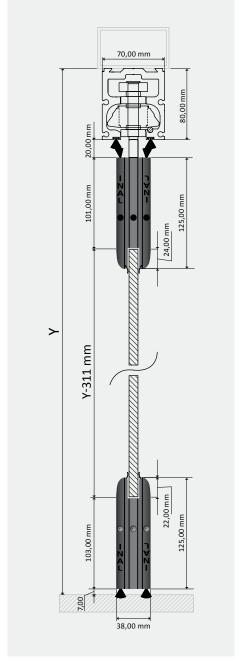


Lock Mechanism with Half Cylinder and knob



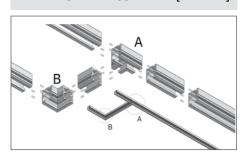
Side Cap with Stainless Bolt (Side Locking)

PR200



NO GLASS CUTTINGS REQUIRED WITHOUT FLOOR GUIDE

PARKING RAIL ASSEMBLY [DIY KIT]



GLASS (TEMPERED) DIMENSION CALCULATION

Glass height (mm) = Y - 311mm, (Y = from the bottom of the steel beam)

Opening width (mm) = O.W. Number of panels (pcs) = P.N.

Glass width (mm) = {O.W. - [(P.N. x 3mm) + 25mm]} / P.N.

GLASS (LAMINATED) DIMENSION CALCULATION

Glass height (mm) = Y - 304mm, (Y = from the bottom of the steel beam)

Opening width (mm) = O.W. Number of panels (pcs) = P.N.

Glass width (mm) = {O.W. - [(P.N. x 3mm) + 25mm]} / P.N.

INAL SYSTEM PR-150

FLEXIBLE GLASS DOOR WITH PARKING



INAL® Frameless Movable Glass System, parking-type, with middle size aluminum rail, 52 mm x 59 mm with embedded stainless steel sliding beam & stainless steel rollers.

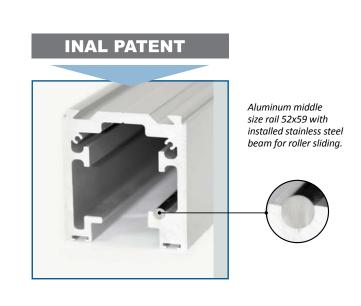
Unlimited design possibilities for parking areas (vertical, diagonal or parallel parkings).

Ability to create swing door panel with overhead concealed door closer in intermediate sections of openings (PR150/ SOC). Weather proofing along the entire length of the panel (PR-F150).

Locking with Inox front bolts or side bolts in a wide range, also locking with double locking lock mechanism.

Available in **Do It Yourself (DIY)** or Made to measure upon request.

TECHNICAL SPECIFICATIONS PR 150		
Glass Type	Tempered or Laminated	
Glass thickness	10 mm	
Panel weight	max 85kg	
Maximum panel width	1,00m	
Maximum opening height	2,80m	
T	PR-F150 (Front Locking)	
Type of PR150 System	PR-S150 (Side Locking)	
	Lock Mechanism with Cylinder key	
Type of locking	Lock Mechanism with half cylinder and knob	
	Stainless bolt	
Finishing	Natural anodized, Satin anodized, Powder coating	
Without floor guide		
No glass cuttings required		



FLEXIBLE GLASS DOORS GLASS SY







Polycarbonated or PVC weather proofing profiles between the glass, in full panel length.



Swing door with floor spring upon request.

TYPES OF LOCKING



Lock Mechanism with Cylinder Key



Stainless Bolt

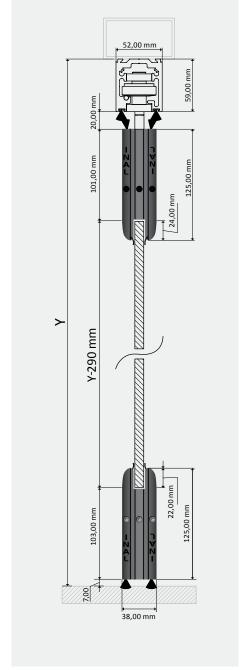


Lock Mechanism with Half Cylinder and knob



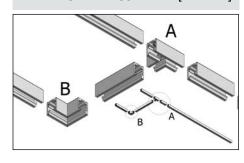
Side Cap with Stainless Bolt (Side Locking)

PR150



NO GLASS CUTTINGS REQUIRED WITHOUT FLOOR GUIDE

PARKING RAIL ASSEMBLY [DIY KIT]



GLASS (TEMPERED) DIMENSION CALCULATION

Glass height (mm) = **Y - 290mm**, (Y = from the bottom of the steel beam)

Opening width (mm) = O.W. Number of panels (pcs) = P.N.

Glass width (mm) = {O.W. - [(P.N. x 3mm) + 25mm]} / P.N.

GLASS (LAMINATED) DIMENSION CALCULATION

Glass height (mm) = Y -, 283mm (Y = from the bottom of the steel beam)

Opening width (mm) = O.W. Number of panels (pcs) = P.N.

Glass width (mm) = {O.W. - [(P.N. x 3mm) + 25mm]} / P.N.

INAL SYSTEM PR-125

FLEXIBLE GLASS DOOR WITH PARKING



INAL® Frameless Movable Glass System, parking-type, with upper 70 mm and lower 125 mm aluminum profile. Aluminum middle size rail, 52 mm x 59 mm with embedded stainless steel sliding beam & stainless steel rollers.

Unlimited design possibilities for parking areas (vertical, diagonal or parallel parkings).

Ability to create swing door panel with overhead concealed door closer in intermediate sections of openings (PR150/ SOC). Weather proofing along the entire length of the panel (PR-F125).

Locking with Inox front bolts or side bolts in a wide range, also locking with double locking lock mechanism.

Available in **Do It Yourself (DIY)** or Made to measure upon request.

TECHNICAL SPECIFICATIONS PR 125		
Glass Type	Tempered or Laminated	
Glass thickness	10mm	
Panel weight	max 80kg	
Maximum panel width	0,95m	
Maximum opening height	2,80m	
T (22425.0)	PR-F125 (Front Locking)	
Type of PR125 System	PR-S125 (Side Locking)	
	Lock Mechanism with Cylinder key	
Type of locking	Lock Mechanism with half cylinder and knob	
	Stainless bolt	
Finishing	Natural anodized, Satin anodized, Powder coating	
Without floor guide		
No glass cuttings required		

Aluminum middle size rail 52x59 with embedded stainless steel beam for roller sliding.

PR125





Stainless steel roller PR100 with clamp support.



Weather proofing brush between top rail and top profile & between bottom profile and the floor.



Top profile 70mm, bottom profile 125mm



Ability to join two openings in 90° degrees angle, without a vertical column.

TYPES OF LOCKING



Lock Mechanism with Cylinder Key



Lock Mechanism with Half Cylinder and knob



Stainless Bolt

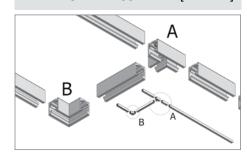


Side Cap with Stainless Bolt (Side Locking)

59,00 r 49,00 mm Y-233 mm 103,00 r 2,00 38,00 mm

NO GLASS CUTTINGS REQUIRED WITHOUT FLOOR GUIDE

PARKING RAIL ASSEMBLY [DIY KIT]



GLASS (TEMPERED & LAMINATED) DIMENSION CALCULATION

Glass height (mm) = Y - 233mm, (Y = from the bottom of the steel beam) Opening width (mm) = O.W. Number of panels (pcs) = P.N.

Glass width (mm) = **{O.W. – [(P.N. x 3mm) + 25mm]} / P.N.**

INAL SYSTEM PR-100

MINI FLEXIBLE GLASS DOOR WITH PARKING



INAL® Frameless Movable Glass System, parking-type, with middle size aluminum rail, 52 mm x 59 mm with embedded stainless steel sliding beam & stainless steel rollers.

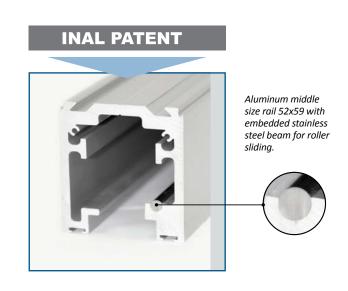
Unlimited design possibilities for parking areas (vertical, diagonal or parallel parkings).

Ability to create swing door panel with overhead concealed door closer in intermediate sections of openings (PR150/ SOC). Weather proofing along the entire length of the panel (PR-F100).

Locking with Inox front bolts or side bolts in a wide range, also locking with double locking lock mechanism.

Available in **Do It Yourself (DIY)** or Made to measure upon request.

TECHNICAL SPECIFICATIONS PR 100		
Glass Type	Tempered or Laminated	
Glass thickness	10mm	
Panel weight	max 80kg	
Maximum panel width	0,95m	
Maximum opening height	2,80m	
Type of PR100 System	PR-F100 (Front Locking)	
Type of locking	Stainless bolt	
Finishing	Natural anodized, Satin anodized, Powder coating	
Without floor guide		
No glass cuttings required		



FLEXIBLE GLASS DOORS GLASS SY





Stainless steel roller PR100 with clamp support.



Maximum view with use of top and bottom aluminum profiles only 70mm.



Without floor guide. Only top rail.



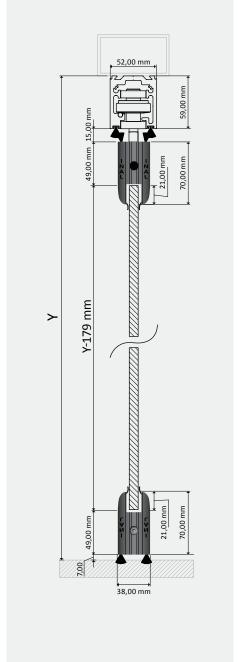
Swing door with floor spring upon request. Extra additional lock upon request.

TYPE OF LOCKING



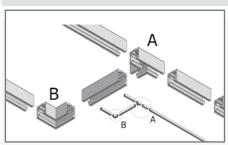
Locking is achieved with the use of stainless bolt at the internal side of each panel.

PR100



NO GLASS CUTTINGS REQUIRED WITHOUT FLOOR GUIDE

PARKING RAIL ASSEMBLY [DIY KIT]



GLASS (TEMPERED & LAMINATED) DIMENSION CALCULATION

Glass height (mm) = Y - 179mm, (Y = from the bottom of the steel beam)

Number of panels (pcs) = P.N. Opening width (mm) = O.W.

Glass width (mm) = {O.W. - [(P.N. x 3mm) + 26mm]} / P.N.

INAL SYSTEM FRP.75 & FRP.75/R60

MOVABLE GLASS DOOR WITH FRAME & PARKING



INAL® Framed System FRP-75 use the top rail and rollers of heavy duty series PR200 for openings up to 3,00 m height. The INAL® Framed System FRP-75/R60 is available for middle sized openings, up to 2,50 height and use top rail of PR 100 series and rollers of PR 150 series.

Special aluminum profiles create a strong frame enables us to use variety of glasses such as tempered up to 12mm, laminated up to 6+6, double glazing with a total thickness of up to 18mm.

High resistance rubbers are used for weather proofing between framed panels.

Ability to create swing door panel with overhead concealed door closer in intermediate sections of openings(FRP 75/ SOC). Locking with Inox front bolts in a wide range, also locking with double locking lock mechanism.

TECHNICAL SPECIFICATIONS				
	FRP-75	FRP-75/R60		
Glass Type	Double Glazing Tempered or Laminated			
Glass thickness	max 18mm			
Panel weight	max 100kg	75kg		
Maximum panel width	1,00m	0,90m		
Maximum opening height	3,00m	2,80m		
Type of FRP 75 & FRP75/R60 System	Front Locking			
Torrest leading	Lock Mechanism with Cylinder key			
Type of locking	Stainless bolt			
Finishing	Natural anodized, Satin anodized, Powder coating			
Without floor guide				
No glass cuttings required				

FRP-75

INAL PATENT



Heavy duty aluminum rail 70x80 with embedded stainless steel sliding beam STRENGTH TEST: 3.450kgr (165/049.01-1 N.T.U.A.).

FRP-75/R60

INAL PATENT



Middle size Aluminum rail 52x59 with embedded stainless steel beam for roller sliding



FRP-75



Stainless steel roller PR200 with clamp support. STRENGTH TEST: 4.600kgr (165/049.01-2 N.T.U.A.).



FRP-75/R60

Stainless steel roller PR150 with clamp

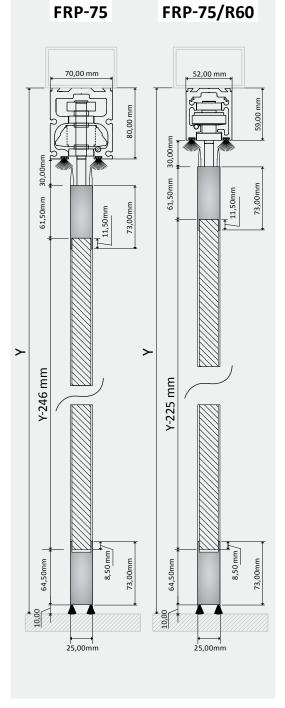
Stainless steel 304 accessories. (Available upon request at stainless steel 316).



Handle to the swing panel, upon request.



Special specification and high resistance rubbers.



NO GLASS CUTTINGS REQUIRED WITHOUT FLOOR GUIDE

Swing door with floor spring, upon request.

TYPES OF LOCKING

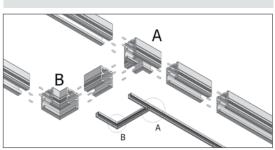


Security lock for the swing panel.



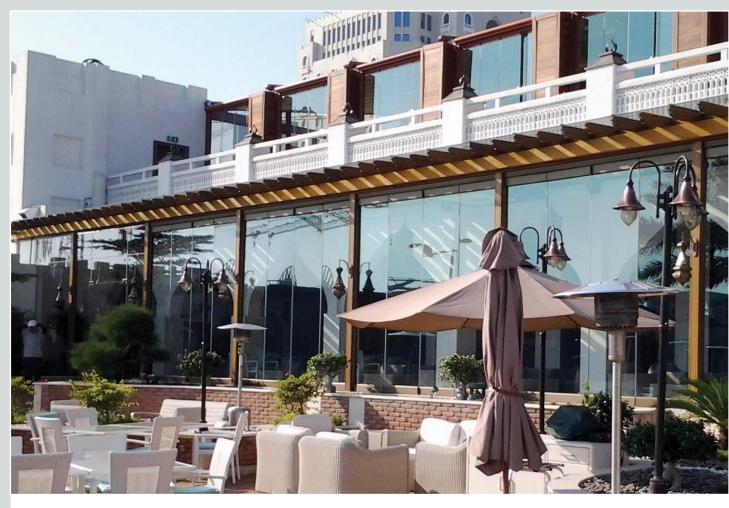
Internal locking bolt in each panel.

PARKING RAIL ASSEMBLY [DIY KIT]



INAL SYSTEM FN-200

FOLDING GLASS DOOR WITH HEAVY DUTY RAIL



INAL® Frameless Folding door System, heavy type, with heavy duty certified aluminum rail 70 mm x 80 mm with embedded stainless steel sliding beam & certified stainless steel rollers.

INAL Folding System FN200 use a heavy duty aluminum hinge at the upper and lower profile. The special design and high quality of hinges ensure functionality, duralility and lifetime operation.

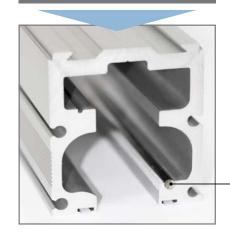
Weather proofing with polycarbonate profiles between the panels.

Locking with Inox front bolts in a wide range, also locking with double locking lock mechanism.

Available in **Do It Yourself (DIY)** or Made to measure upon request.

TECHNICAL SPECIFICATIONS FN 200		
Glass Type	Tempered or Laminated	
Glass thickness	10- 12mm	
Panel weight	max 90kg	
Maximum panel width	1,00m	
Maximum opening height	3,50m	
Type of FN200 System	(Front Locking)	
	Lock Mechanism with Cylinder key	
Type of locking	Lock Mechanism with half cylinder and knob	
	Stainless bolt	
Finishing	Natural anodized, Satin anodized, Powder coating	
Without floor guide		
No glass cuttings required		

INAL PATENT



Heavy duty aluminum rail 70x80 with embedded stainless steel sliding beam STRENGTH TEST: 3.450kgr (165/049.01-1 N.T.U.A.).







Stainless steel roller PR200 with clamp support. STRENGTH TEST: 4.600kgr (165/049.01-2 N.T.U.A.).



Heavy duty hinge between the panels.



INAL special rail with properly installed stainless steel beam, provides easy and silent function.

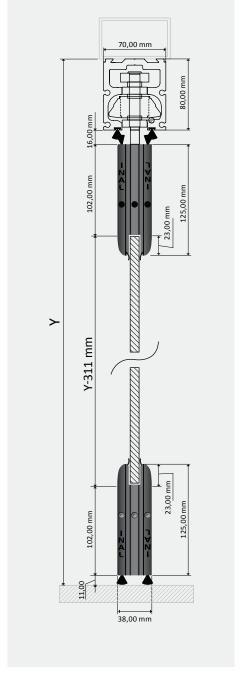


No parking area is required.



Type of locking: Stainless bolt or lock mechanism with cylinder key or Lock mechanism with half cylinder and knob.

FN200



NO GLASS CUTTINGS REQUIRED WITHOUT FLOOR GUIDE

GLASS (TEMPERED) DIMENSION CALCULATION

Glass height (mm) = Y - 311mm, (Y = from the bottom of the steel beam)

Opening width (mm) = O.W. Number of panels (pcs) = P.N.

Glass width (mm) = **{O.W. – [(P.N. x 3mm) + 20mm]} / P.N.**

GLASS (LAMINATED) DIMENSION CALCULATION

Glass height (mm) = Y - 304mm, (Y = from the bottom of the steel beam)

Opening width (mm) = O.W. Number of panels (pcs) = P.N.

Glass width (mm) = {O.W. - [(P.N. x 3mm) + 20mm]} / P.N.



INAL SYSTEM FN-150

FOLDING GLASS DOOR



INAL® Frameless Folding door System, with middle size aluminum rail 52 mm x 59 mm with embedded stainless steel sliding beam & stainless steel rollers.

INAL® Folding System FN150 use a heavy duty aluminum hinge at the upper and lower profile. The special design and high quality of hinges ensure functionality, duralility and lifetime operation.

Weather proofing with polycarbonate profiles between the panels.

Locking with Inox front bolts in a wide range, also locking with double locking lock mechanism.

Available in **Do It Yourself (DIY)** or Made to measure upon request.

TECHNICAL SPECIFICATIONS FN 150		
Glass Type	Tempered or Laminated	
Glass thickness	10mm	
Panel weight	max 85kg	
Maximum panel width	1,00m	
Maximum opening height	2,80m	
Type of FN150 System	(Front Locking)	
	Lock Mechanism with Cylinder key	
Type of locking	Lock Mechanism with half cylinder and knob	
	Stainless bolt	
Finishing	Natural anodized, Satin anodized, Powder coating	
Without floor guide		
No glass cuttings required		

Aluminum middle size rail 52x59 with embedded stainless steel beam for roller sliding.

FLEXIBLE GLASS DOORS GLASS SYSTI

FN150





Stainless steel roller PR150 with clamp support.



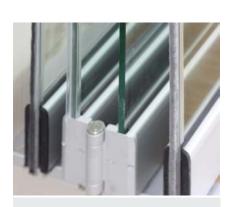
Heavy duty hinge between the panels. Weather proofing brush between top rail and



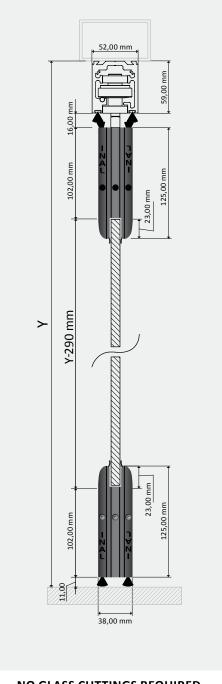
Without floor guide. Only top rail.



Weather proofing brush between bottom profile and the floor.



Storage of folding panels



NO GLASS CUTTINGS REQUIRED WITHOUT FLOOR GUIDE

GLASS (TEMPERED) DIMENSION CALCULATION

Glass height (mm) = Y - 290mm, (Y = from the bottom of the steel beam)

Opening width (mm) = O.W. Number of panels (pcs) = P.N.

Glass width (mm) = **{O.W. – [(P.N. x 3mm) + 20mm]} / P.N.**

GLASS (LAMINATED) DIMENSION CALCULATION

Glass height (mm) = Y - 283mm, (Y = from the bottom of the steel beam)

Opening width (mm) = O.W. Number of panels (pcs) = P.N.

Glass width (mm) = {O.W. - [(P.N. x 3mm) + 20mm]} / P.N.



INAL SYSTEM FN-100

MINI FOLDING GLASS DOOR



INAL® Frameless Folding door System, with upper and lower aluminum profile 70 mm.

Aluminum middle size rail 52 mm x 59 mm with embedded stainless steel sliding beam & stainless steel rollers.

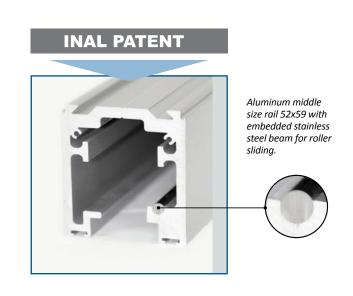
INAL® Folding System FN100 use a heavy duty aluminum hinge at the upper and lower profile. The special design and high quality of hinges ensure functionality, duralility and lifetime operation.

Weather proofing along the entire length of the panel.

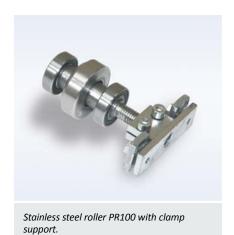
Locking with Inox front bolts in a wide range, also locking with double locking lock mechanism.

Available in **Do It Yourself (DIY)** or Made to measure upon request.

TECHNICAL SPECIFICATIONS FN 100		
Glass Type	Tempered or Laminated	
Glass thickness	10mm	
Panel weight	max 55kg	
Maximum panel width	0,80m	
Maximum opening height	2,70m	
Type of FN100 System	(Front Locking)	
Type of locking	Stainless bolt	
Finishing	Natural anodized, Satin anodized, Powder coating	
Without floor guide		
No glass cuttings required		

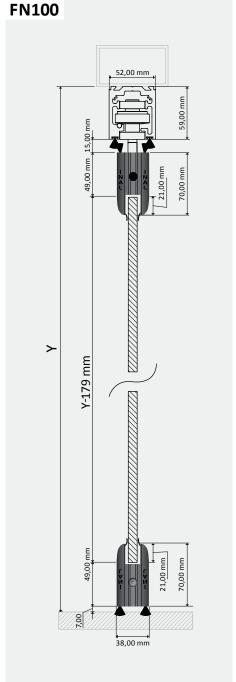








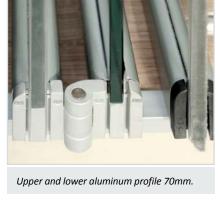
TYPE OF LOCKING

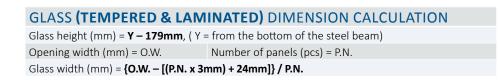


Full length proofing.



NO GLASS CUTTINGS REQUIRED WITHOUT FLOOR GUIDE







INAL SYSTEM FN·M200

FOLDING GLASS DOOR WITH HEAVY DUTY RAIL



INAL® Frameless Folding door System, heavy type, with heavy duty certified aluminum rail 70 mm x 80 mm with embedded stainless steel sliding beam & certified stainless steel rollers.

INAL® Folding System FN M200 use a heavy duty aluminum hinge at the upper and lower profile. The special design and high quality of hinges ensure functionality, duralility and lifetime operation.

The folding of the panels is achieved with the use of a stainless steel heavy duty roller installed in the middle of each panel of the system. So that the panel folding half in and half out.

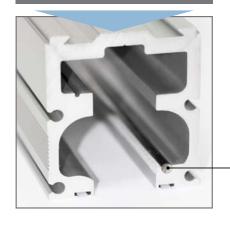
Weather proofing with polycarbonate profiles between the panels.

Locking with Inox front bolts in a wide range, also locking with double locking lock mechanism.

Available in **Do It Yourself (DIY)** or Made to measure upon request.

TECHNICAL SPECIFICATIONS FN M200		
Glass Type	Tempered or Laminated	
Glass thickness	10- 12mm	
Panel weight	max 90kg	
Maximum panel width	1,00m	
Maximum opening height	3,50m	
Type of FNM200 System	(Front Locking)	
	Lock Mechanism with Cylinder key	
Type of locking	Lock Mechanism with half cylinder and knob	
	Stainless bolt	
Finishing	Natural anodized, Satin anodized, Powder coating	
Without floor guide		
No glass cuttings required		

INAL PATENT



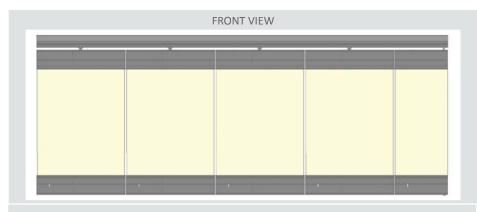
Heavy duty aluminum rail 70x80 with embedded stainless steel sliding beam STRENGTH TEST: 3.450kgr (165/049.01-1 N.T.U.A.).







Stainless steel roller PR200 with clamp support. STRENGTH TEST: 4.600kgr (165/049.01-2 N.T.U.A.).



The first panel of the construction is always about half, length, from the rest panels.



Hanging is achieved with the use of roller at the center of each panel.

The panels park at the middle of the opening.

* Also available FNM150 & FNM100

GLASS (TEMPERED) DIMENSION CALCULATION

Glass height (mm) = **Y - 311mm**, (Y = from the bottom of the steel beam)

Number of panels (without the half panel)(pcs) = P.N. Opening width (mm) = O.W.

1st (half panel) glass width (mm) = G.W. 1 Glass width (rest panels) (mm) = G.W. N

G.W.N. = **{O.W. - [(P.N. +1)x 3mm] +73mm]}: (P.N. +0,5)**

G.W. 1 = (G.W.N. : 2) +51mm

GLASS (LAMINATED) DIMENSION CALCULATION

Glass height (mm) = **Y - 304mm**, (Y = from the bottom of the steel beam)

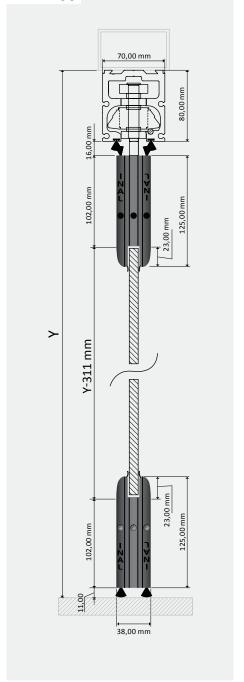
Opening width (mm) = O.W. Number of panels (without the half panel)(pcs) = P.N.

1st (half panel) glass width (mm) = G.W. 1 Glass width (rest panels) (mm) = G.W. N

 $G.W.N. = {O.W. - [(P.N. +1)x 3mm] +73mm]}: (P.N. +0,5)$

G.W. 1 = **(G.W.N. : 2) +51mm**

FNM200



NO GLASS CUTTINGS REQUIRED WITHOUT FLOOR GUIDE



INAL SYSTEM PANORAMA

FOLDING DOOR



Folding door for internal space without profiles. The state-of-the art design provides total sense of freedom in internal spaces. Heavy duty accessories, which ensure the excellent functionality of the system. With or without floor guide, which combines the weather proofing.

Available in **Do It Yourself (DIY)** or Made to measure upon request.

TECHNICAL SPECIFICATIONS PANORAMA		
Glass Type	Tempered	
Glass thickness	8-10-12mm	
Panel weight	max 70kg	
Maximum panel width	1,00m	
Maximum opening height	2,70m	
Type of PANORAMA System	(Front Locking)	
Type of locking	Stainless bolt	
Finishing	Natural anodized, Satin anodized, Powder coating	
With and without floor guide		
Glass cuttings required		

INAL PATENT

Heavy duty aluminum rail 70x80 with embedded stainless steel sliding beam
STRENGTH TEST: 3.450kgr (165/049.01-1 N.T.U.A.).



FLEXIBLE GLASS DOORS GLASS SYSTEMS & ACCESSORIES

PANORAMA





UPPER DOUBLE HINGE CODE 501D



UPPER DOUBLE HINGE WITH ROLLER CODE 501DR



UPPER SINGLE HINGE WITH ROLLER CODE 501MR



LOWER DOUBLE HINGE WITH PIN CODE 502DP



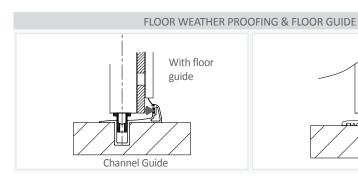
LOWER DOUBLE HINGE WITH BOLT CODE 502DS



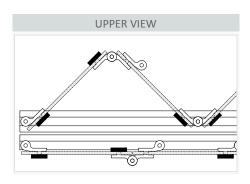
100,00mm 100,00mm

70,00mm

WITH AND WITHOUT FLOOR GUIDE **GLASS CUTTINGS REQUIRED**









www.inal.gr intermetal@inal.gr









FACTORY: STORES: 6, Apolloniou str., Koropi 194 00, Attica-Greece, Tel.: +30 210 6620 400, Fax: +30 210 6620 401 4, Sofokleous str., Kallithea176 71, Athens-Greece, Tel: +30 210 9576 382, Fax: +30 210 9576 473 194, Dimokratias Av., Menidi 136 71, Attica-Greece, Tel: +30 210 2388 066, Fax: +30 210 2388 066