

CCCIUS®

CATALOG
2019

we modernized
your space

01 Part Accesories

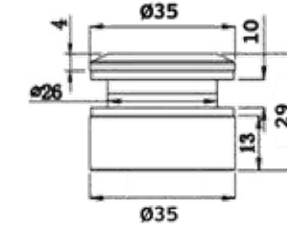
02	Railing Glass	18	Sliding Door Lock
04	Cubicle Toilet	19	Waterseal
07	Connector for Tube	20	Floor Hinge
08	Glass Clip	21	Semi Automatic Door
09	Shower Hinge Stainless Steel	23	Automatic Door
11	Shower Hinge Brass	25	Door Closer
12	Grandle	25	Advertising Screw
13	Sliding Door Handle	26	Floor Pivot
13	Knob Handle	27	Spider Fitting
13	Kop Kaca	30	Spider Fitting 16 cm
14	Patch Fitting	32	Folding Door
15	Door Handle 150 cm	34	Bi Folding Door
17	Door Handle	35	Canopy
		35	Balustrade

02 Set Products

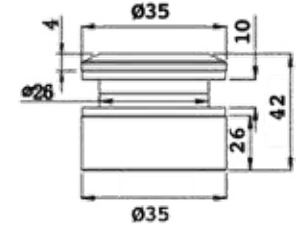
■	Non Automatic Sliding Door	■	Sliding Door Corner Screen
38	OSD 038 & OSD 049	48	OSD 078
39	OSD 330 & 3114		
40	OSD 404 & OSD 408		
■	Sliding Door Sngle Screen		
42	OSD 054		
44	OSD 066		
46	OSD 078		



CCIUS® RAILING GLASS



OGR 0390-1 (3cm)
Tombol Railing Tangga



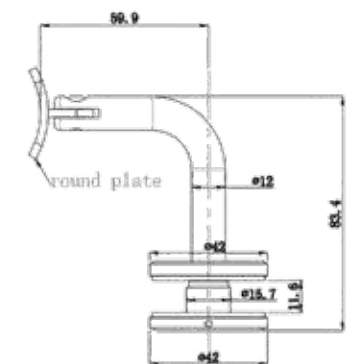
OGR 0390-2 (4cm)
Tombol Railing Tangga



F : Bentuk ujung datar



R : Bentuk ujung melengkung



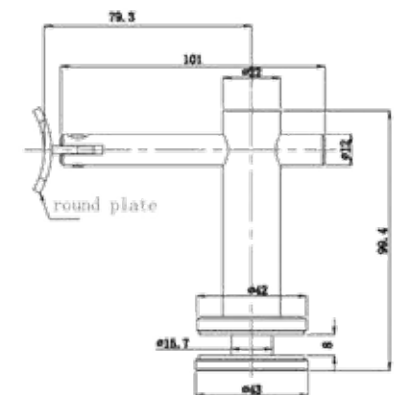
OGR 0100R/F
Railing Tangga



F : Bentuk ujung datar



R : Bentuk ujung melengkung



OGR 0200R/F
Railing Tangga Flexible



CCIUS[®]

CUBICLE TOILET



OCTA 1 F

OCTA 1 R

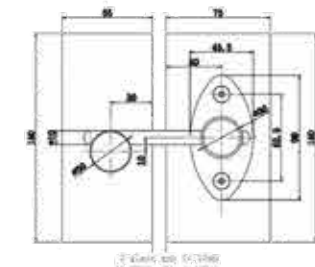
OCTA 1



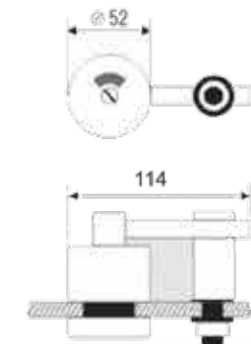
Spesifikasi OCTA 1



OCTA 2

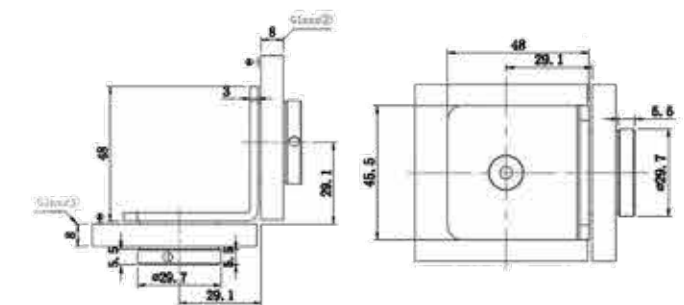


OCTA 2B



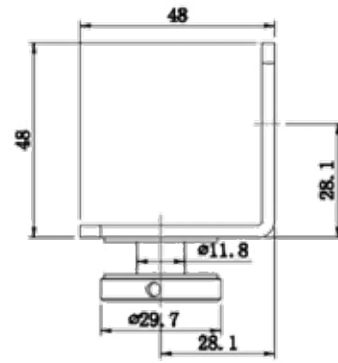
OCTA 3 G

Clip kaca ke kaca

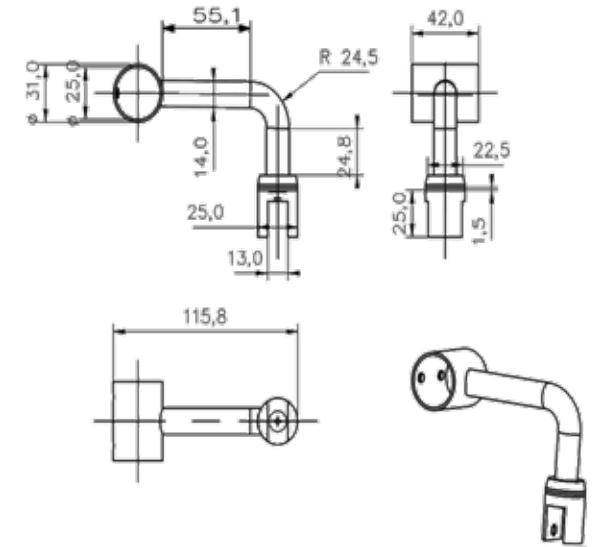




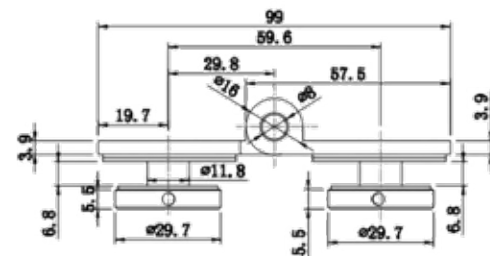
OCTA 3 W
Clip kaca ke tembok



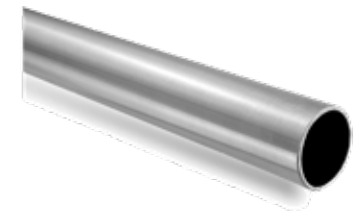
OCTA 9 B



OCTA 6

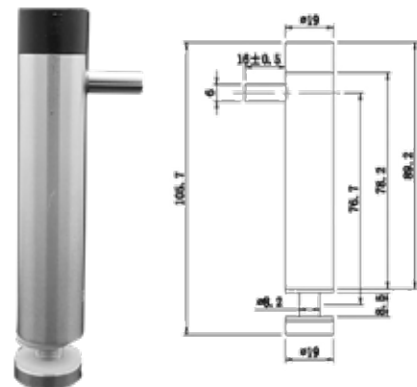


OCT 906 B



Pipa 25mm (1 inch)

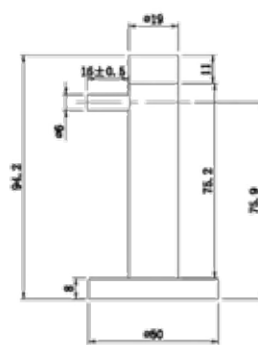
Sebagai alternatif :
Bisa menggunakan penguat pipa 19 mm (3/4 inch), dengan accesories connector for tube



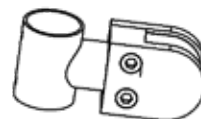
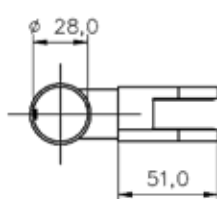
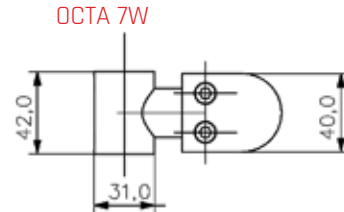
OCTA 7G



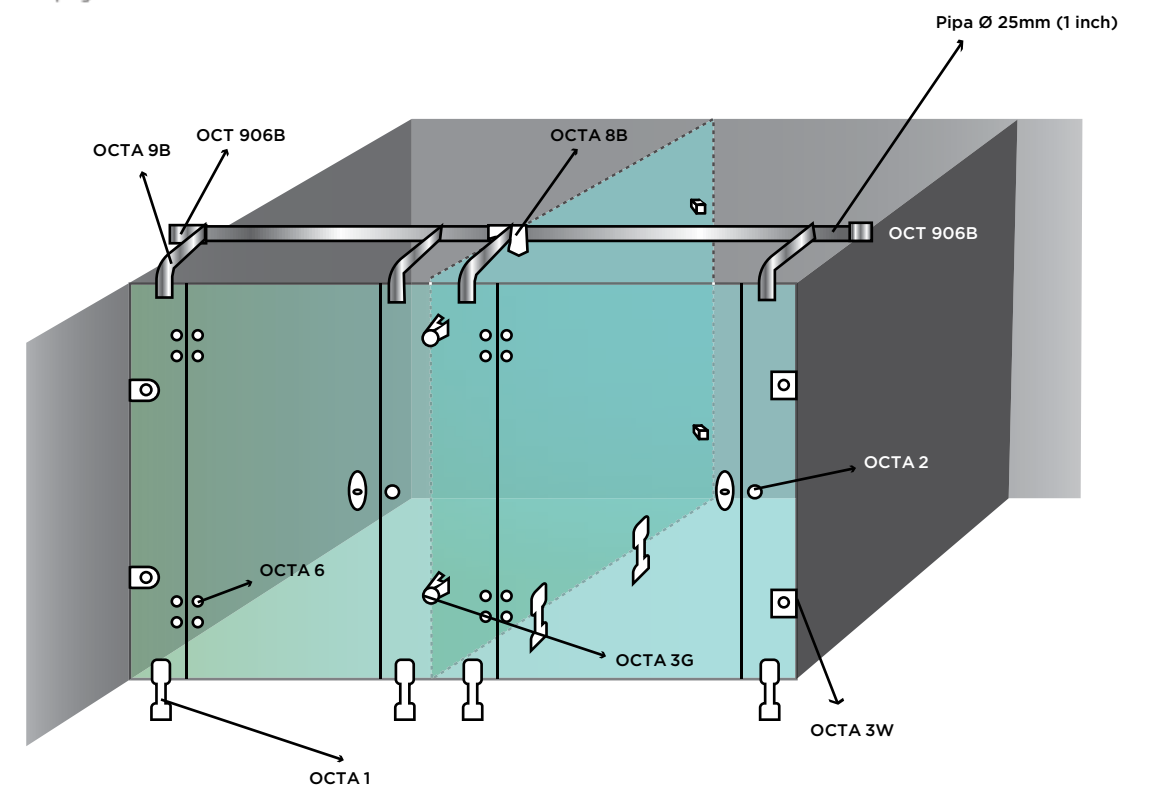
OCTA 7W



OCTA 8 B



Bagian sisi samping dalam interior cubicle toilet

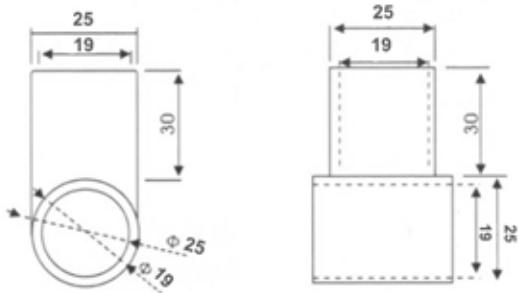


CCIUS® CONNECTOR FOR TUBE

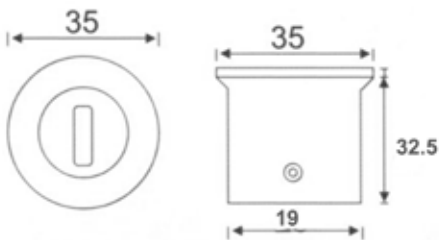
Material : Kuningan
Permukaan : Mengkilap atau satin (hairline)
Ketebalan Kaca : 8 - 10 mm
Diameter Pipa : 3/4 inch (19 mm)



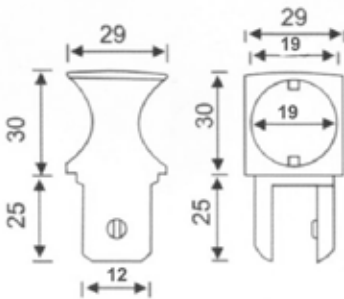
OCT 901
Konektor pipa ke pipa T



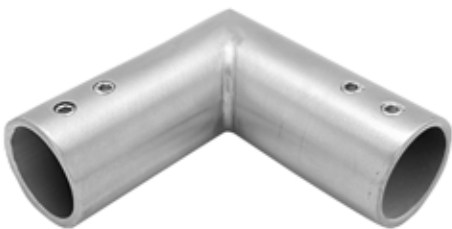
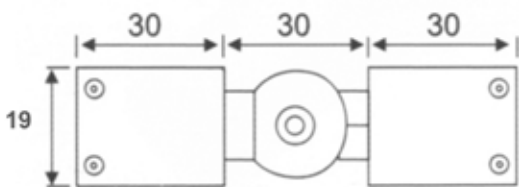
OCT 906 A
Konektor pipa ke tembok



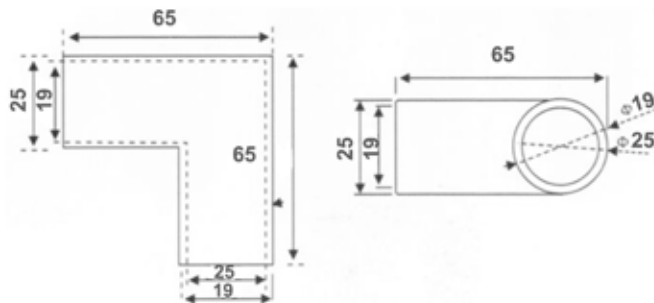
OCT 907 A
Konektor pipa ke kaca



OCT 908 A
Konektor pipa ke kaca fleksible



OCT 353
Konektor pipa ke pipa 90°

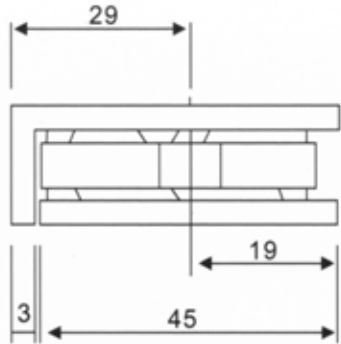


CCIUS® GLASS CLIP

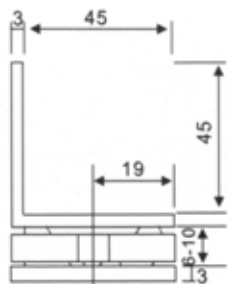
Bahan : Stainless Steel #304
Permukaan : Mengkilap atau satin (hairline)
Ketebalan kaca : 8 - 10 mm
Untuk : Kaca tempered



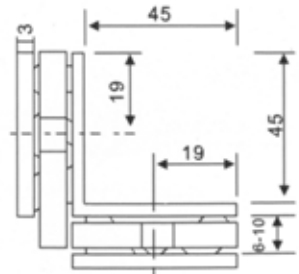
OGC 008
Glass clip U



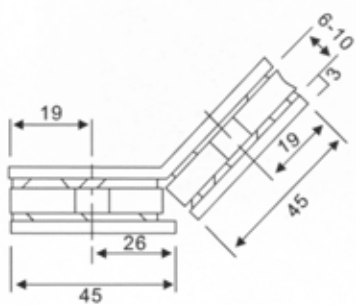
OGC 009
Glass clip ke tembok 90°



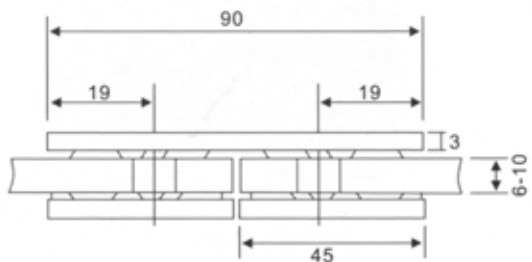
OGC 010
Glass clip kaca ke kaca 90°



OGC 012
Glass clip kaca ke kaca 135°



OGC 014
Glass clip kaca ke kaca 180°

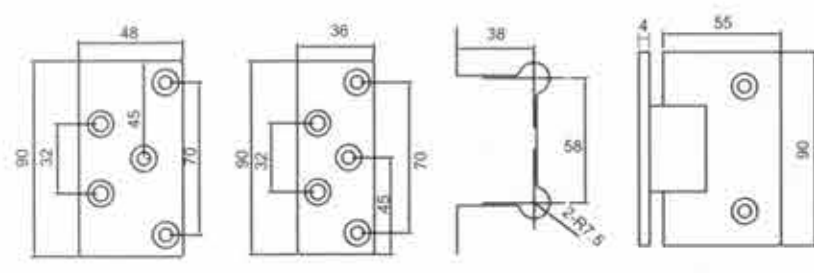


CCIUS[®] SHOWER HINGE STAINLESS STEEL

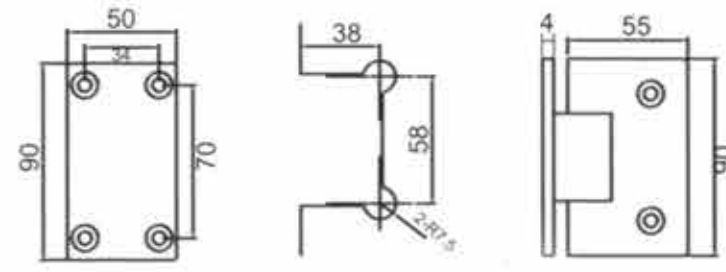
Bahan : Stainless Steel #304
Permukaan : Mengkilap
Fitur : Saat pintu terbuka 25°, maka pintu akan menutup secara otomatis
Beban : 40 kg / pasang
Digunakan Untuk : Tempered Glass
Ketebalan Pintu : 8 - 10 mm



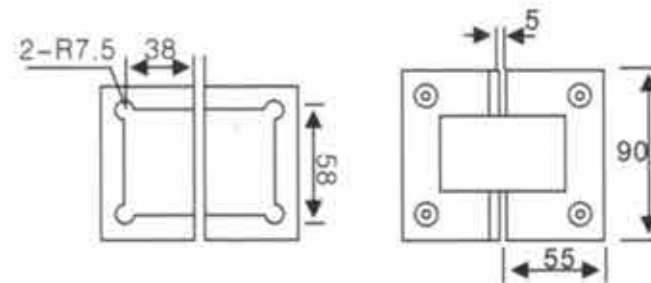
OSH 201
Engsel Kaca ke Tembok (satu sisi, 90°)



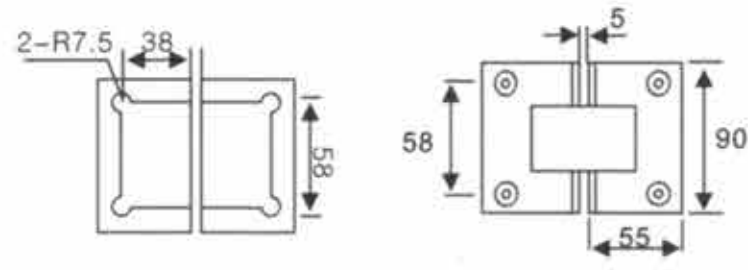
OSH 202
Engsel Kaca ke Tembok (dua sisi, 180°)



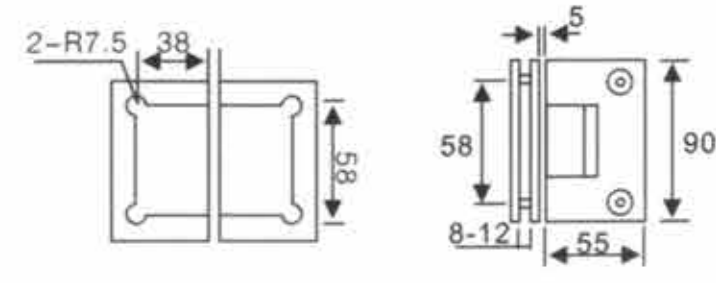
OSH 203
Shower Hinge kaca ke kaca 180° (Plat tengah dua)



OSH 204
Engsel Kaca ke Kaca (135°)



OSH 205
Engsel Kaca ke Kaca (90°)

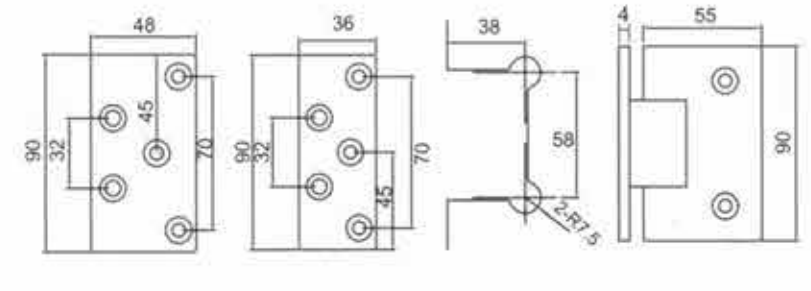


CCIUS[®] SHOWER HINGE STAINLESS STEEL

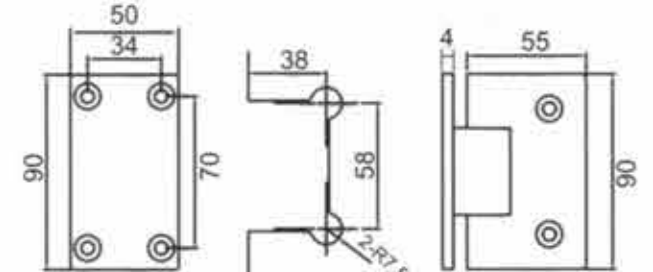
Bahan : Stainless Steel #304
Permukaan : Mengkilap
Fitur : Saat pintu terbuka 25°, maka pintu akan menutup secara otomatis
Beban : 40 kg / pasang
Digunakan Untuk : Tempered Glass
Ketebalan Pintu : 8 - 10 mm



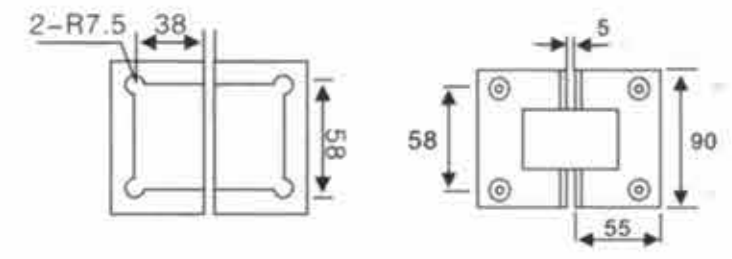
OSH 301
Engsel Kaca ke Tembok (satu sisi, 90°)



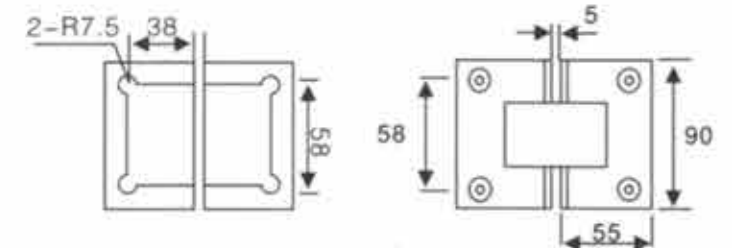
OSH 302
Engsel Kaca ke Tembok (satu sisi, 90°)



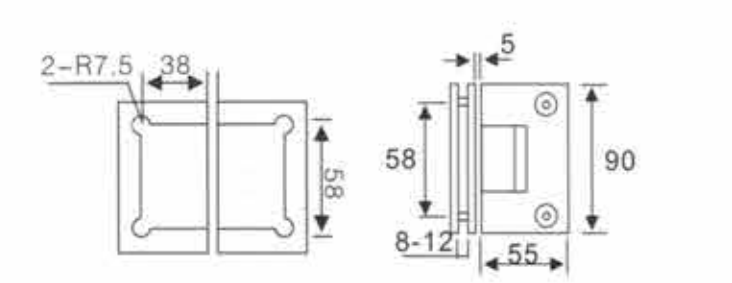
OSH 303
Engsel Kaca ke Kaca (180°)



OSH 304
Engsel Kaca ke Kaca (135°)



OSH 305
Engsel Kaca ke Kaca (90°)





PSB Singapore

CCIUS® SHOWER HINGE BRASS / KUNINGAN

Bahan : Kuningan
Permukaan : Chrome (mengkilap)
Fitur : Saat pintu terbuka 25°, maka pintu akan menutup secara otomatis
Menahan Beban : 40 kg / pasang
Digunakan Untuk : Tempered Glass
Ketebalan Pintu : 8 - 10 mm



OSH 211
Engsel Kaca ke Tembok (satu sisi, 90°)



OSH 212
Engsel Kaca ke Tembok (dua sisi, 180°)



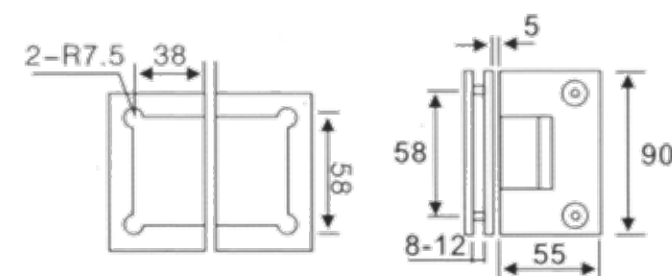
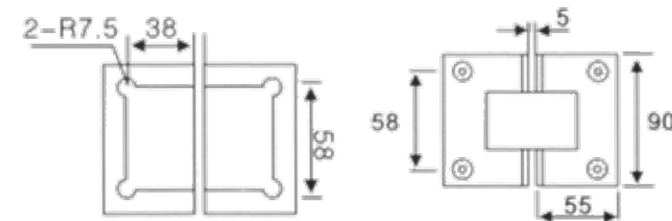
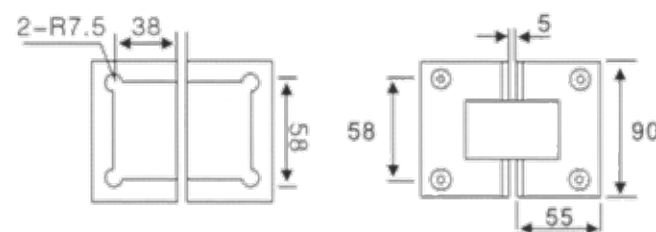
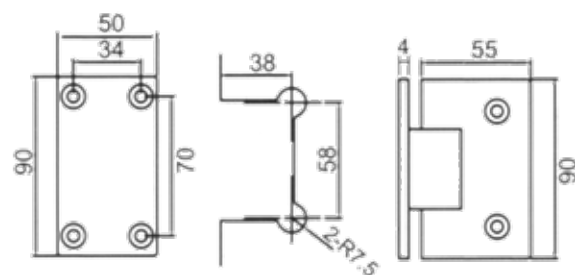
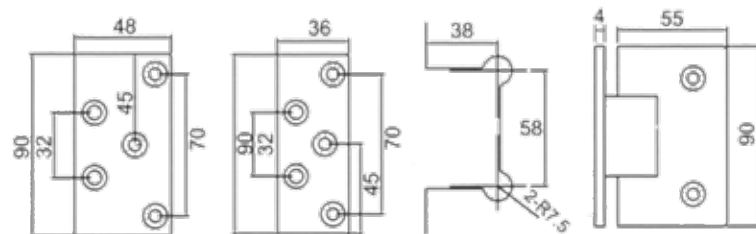
OSH 213
Engsel Kaca ke Kaca (180°)



OSH 214
Engsel Kaca ke Kaca (135°)



OSH 215



CCIUS® GRANDLE

Bahan : Stainless Steel #304
Untuk : Kaca Tempered
Permukaan : Mengkilap atau Satin (Hairline)
Ketebalan pintu : 8 - 10 mm



238 A
Single



238
Double



A 126
Single



A 127
Double

Bahan Untuk : Besi (Babet)
: Kaca Tempered

Permukaan : Mengkilap
Ketebalan pintu : 8 - 10 mm



S 1590 S
Single



S 1590 D
Double



937 A
Double



937 B
Single

CCIUS®

SLIDING DOOR
HANDLE

Bahan

: Stainless Steel #304

Untuk

: Kaca Tempered

Permukaan

: Mengkilap atau satin (hairline)

Ketebalan pintu

: 8 - 10 mm



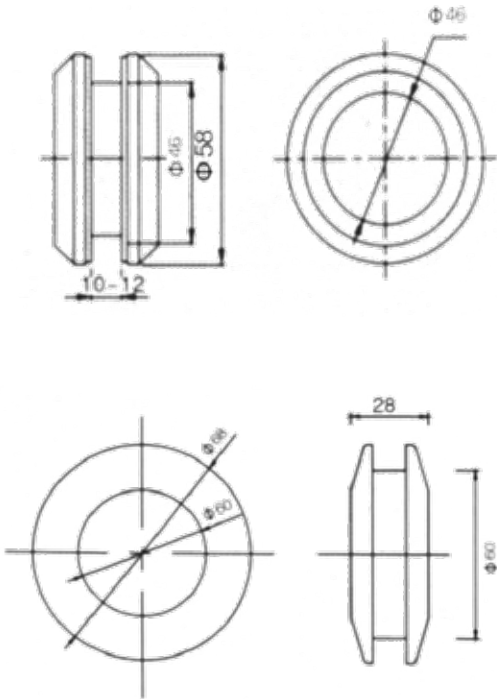
OSDH 134 C (10 mm)

Handle Pintu Sliding Diameter Ø 46 mm



OSDH 274 (10 mm)

Handle Pintu Sliding Diameter Ø 59 mm



CCIUS®

KNOB HANDLE

Bahan

: Stainless Steel #304

Untuk

: Kaca Tempered

Permukaan

: Mengkilap atau satin (hairline)

Ketebalan pintu

: 8 - 10 mm



OKH 138A

Handle Knob

CCIUS®

KOP KACA



Kop Kaca 3 mata

Bahan

: Aluminium

Permukaan

: Mengkilap

Maksimum daya angkat saat kaca pada posisi:

Horizontal : 150 kg

Vertikal

: 135 kg

CCIUS®

PATCH FITTING



PSB Singapore



OPT 10



OPT 10 A



OPT 20



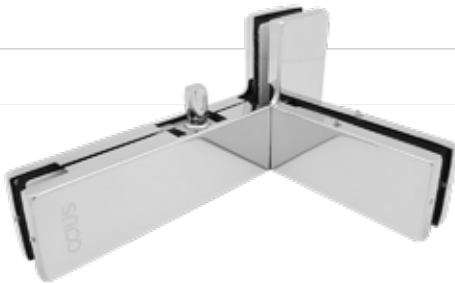
OPT 30



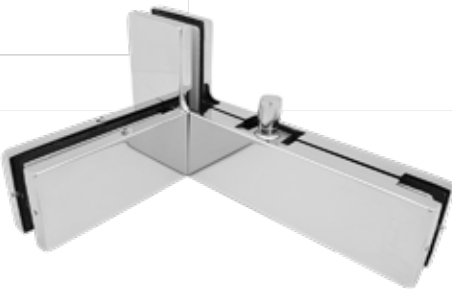
OPT 40



OPT 24



OPT 41 L

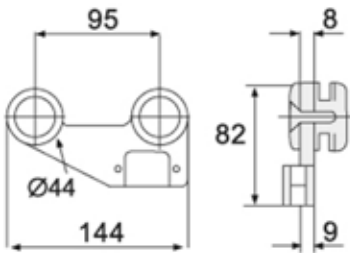


OPT 41 R

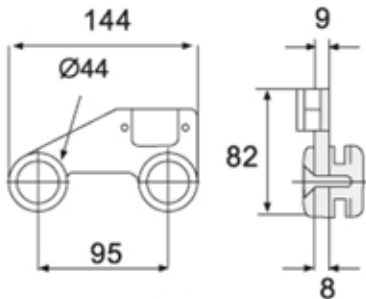
*untuk mengetahui keterangan hasil test & sertifikasi dari PSB Singapore silahkan lihat di halaman ii



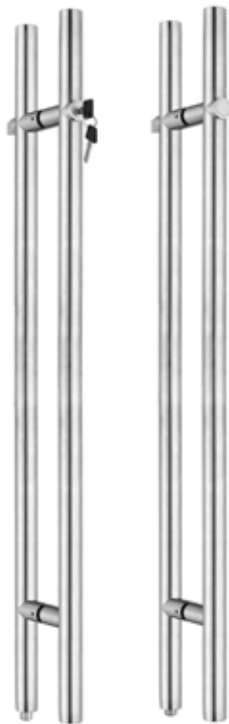
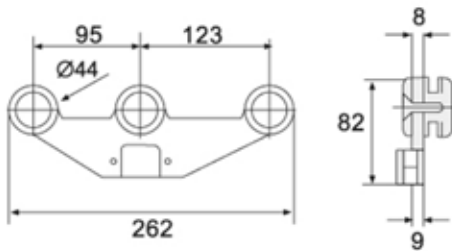
OPT 10HD



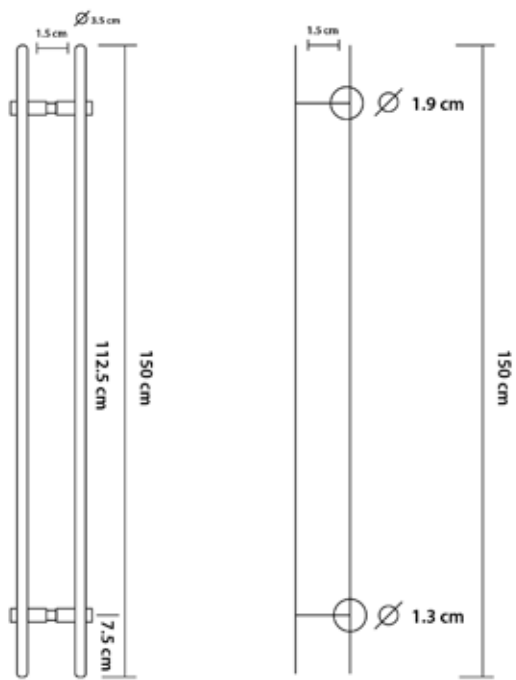
OPT 20HD



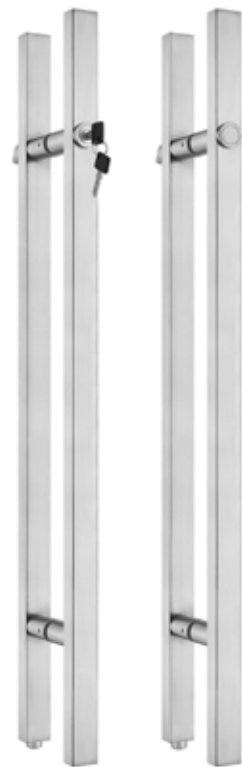
OPT 30HD



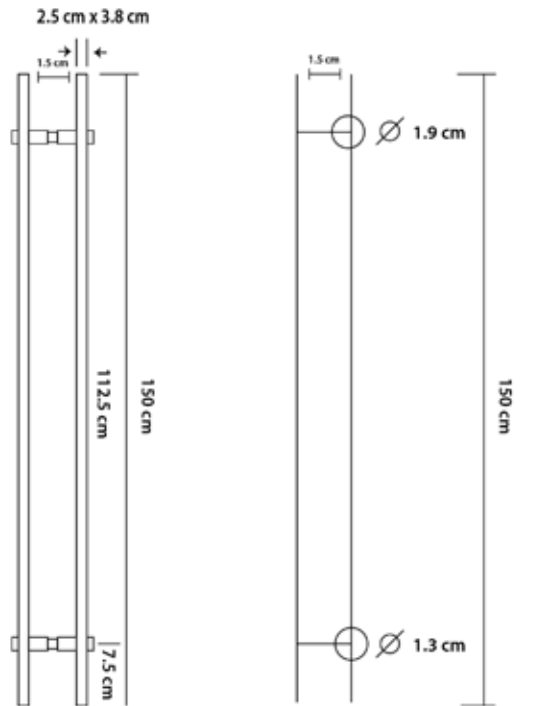
Door Handle Bulat 150 cm



Spesifikasi Door Handle Bulat 150 cm



Door Handle Kotak 150 cm



Spesifikasi Door Handle Kotak 150 cm



ODH 158

Terdiri dari 3 varian :
Handle C 20 cm
Handle C 30 cm
Handle C 35 cm



ODH 159

Terdiri dari 2 varian :
Handle 50x20
Handle 45x15



ODH 160

Terdiri dari 2 varian :
Handle 40 cm
Handle 60 cm



ODH 170

Terdiri dari 2 varian :
Handle 50x20
Handle 45x15



ODH 183



Handle H

Terdiri dari 5 varian :
Handle H 120 cm (as 100 cm)
Handle H 100 cm (as 80 cm)
Handle H 80 cm (as 60 cm)
Handle H 60 cm (as 40 cm)
Handle H 50 cm (as 35 cm)



OSDL A194
Single



OSDL A195
Double



OSDL 134 G



OSDL 513
Single



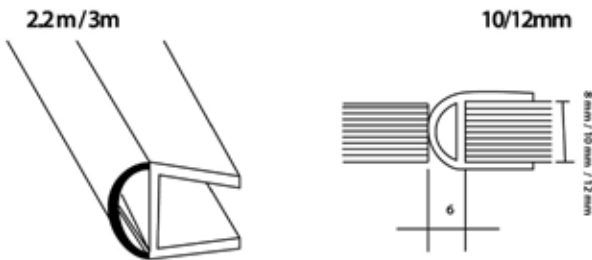
OSDL 514
Double



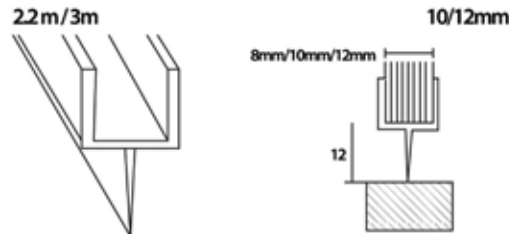
OSDL 515
Single



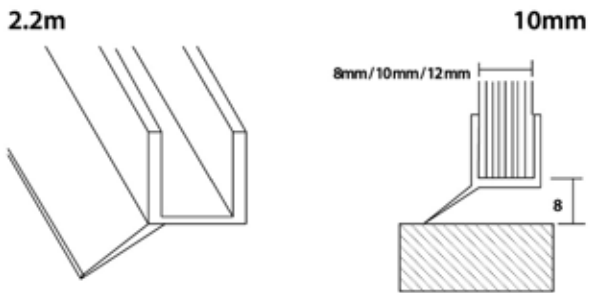
OSDL 516
Double



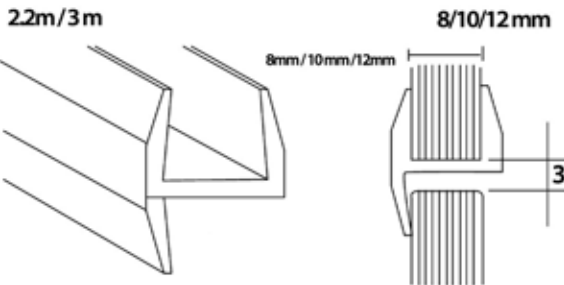
B700
Waterseal 2.2m (8,10,12 mm) ; 3m (12 mm)



B701
Waterseal 2.2m (8,10 mm) ; 3m (12 mm)



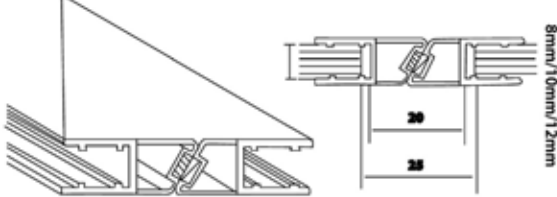
B702
Waterseal 2.2m (10 mm)



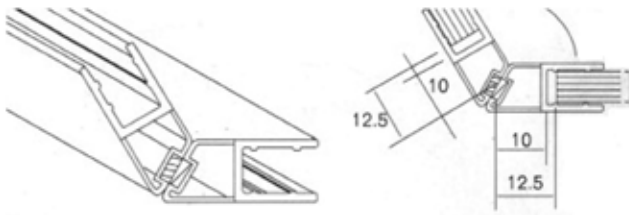
B703
Waterseal 2.2m (8,10,12 mm) ; 3m (12 mm)



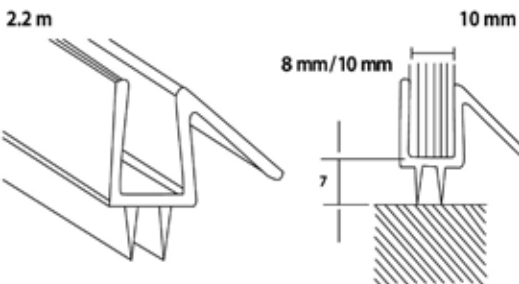
B704
Waterseal 2.2m (8,10 mm) ; 3m (12 mm)



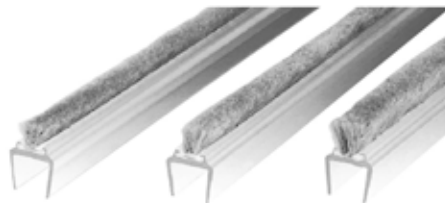
B710
Waterseal Magnet 90° / 180° : 2.2 m



B711
Waterseal Magnet 135° / 2.2 m (10 mm)



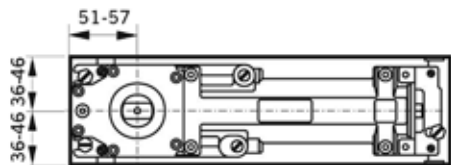
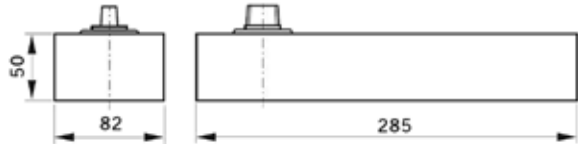
B723
Waterseal 2.2 m (10 mm)



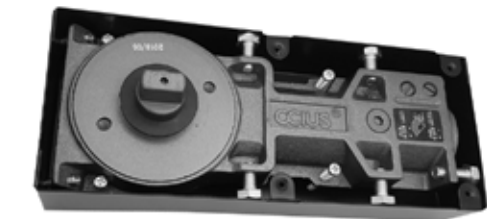
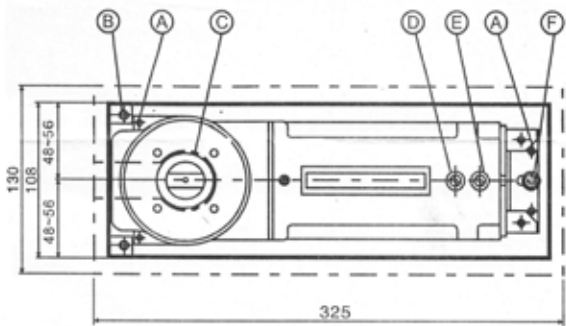
B560
Mohair : 12mm (2.2 m dan 3 m)



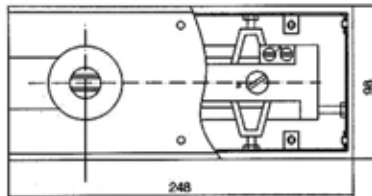
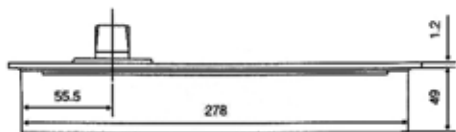
OFH 75



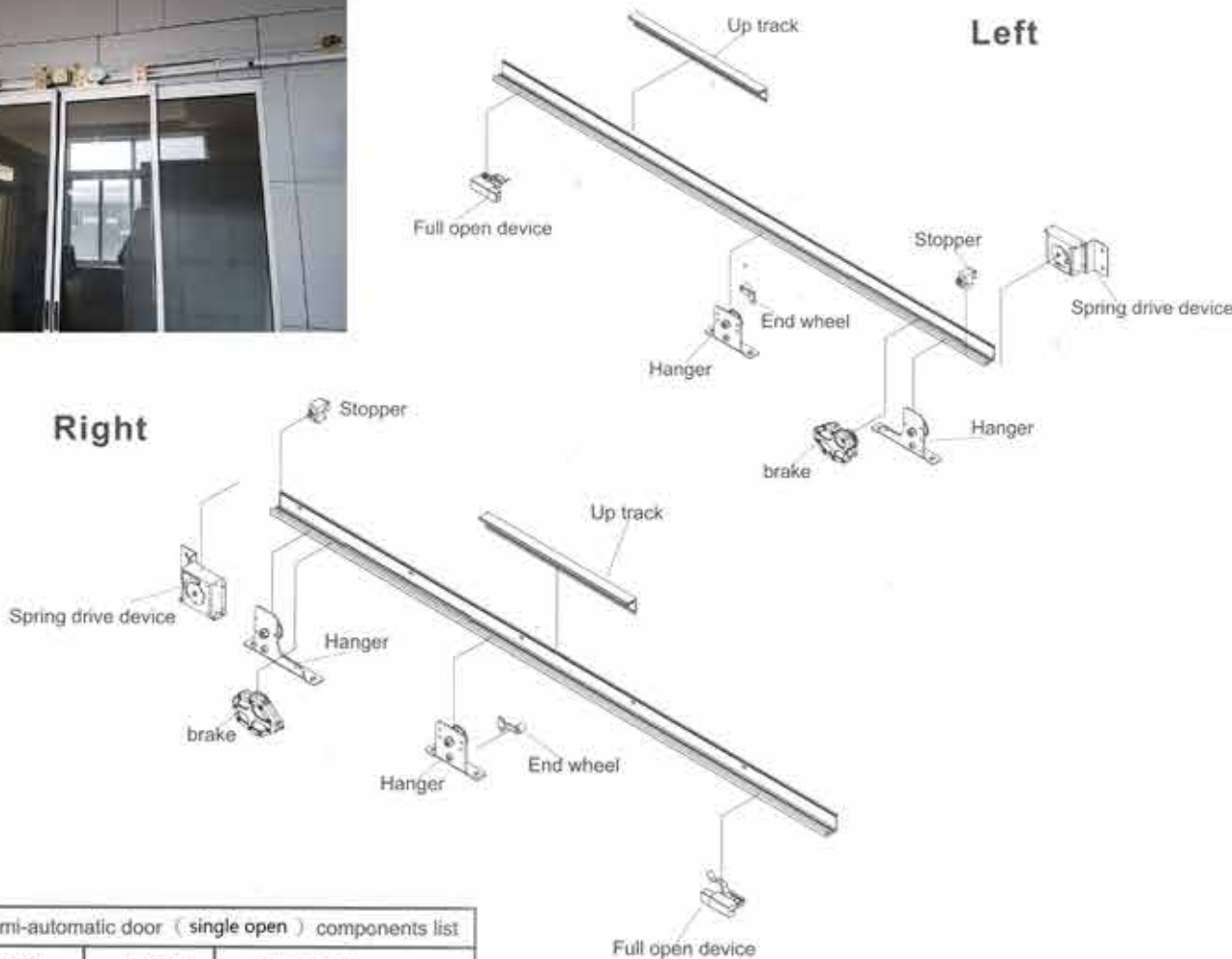
OFH 84



OFH 211

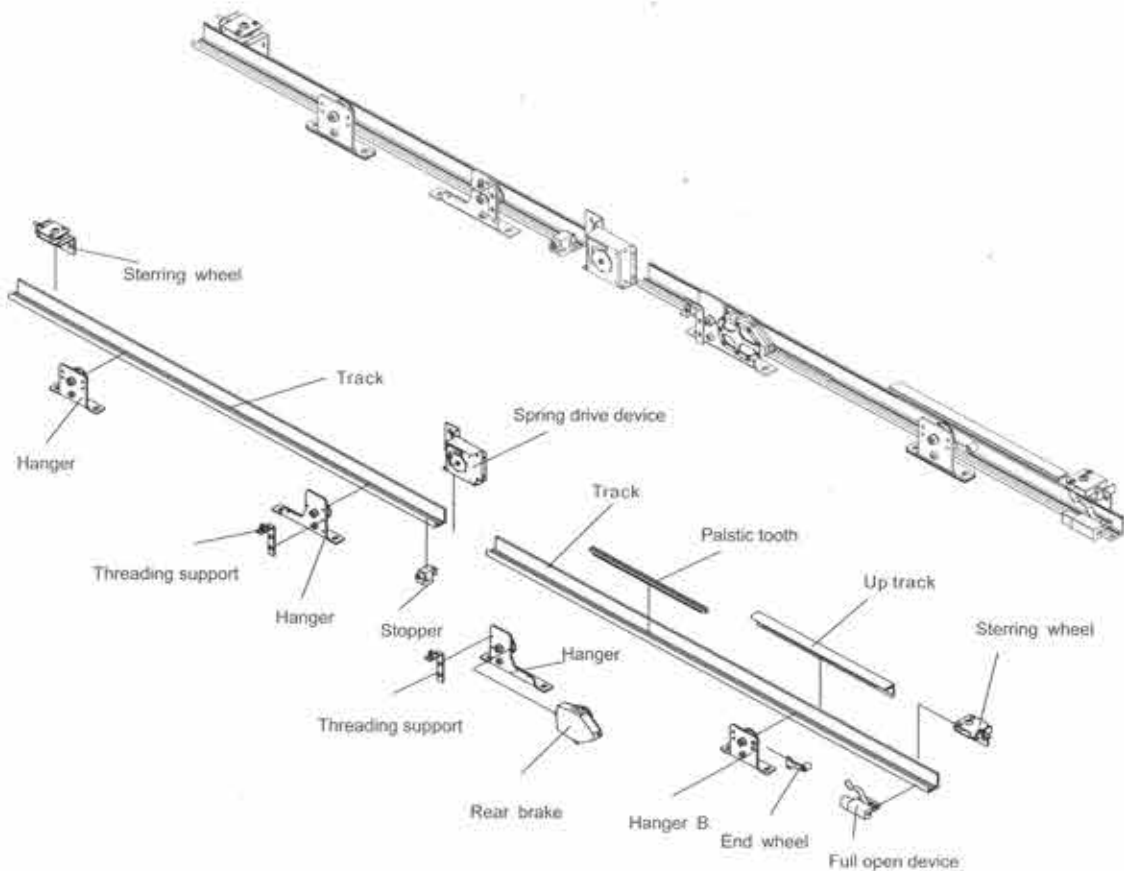


	OFH 75V	OFH 84 EN3	OFH 84 EN4	OFH 211
Max. Door Weight	<1100mm	950mm	<1100 mm	800mm
Max. Door Height	120 kg	100 kg	100 kg	80 kg



Semi-automatic door (single open) components list		
Description	Quantity	Nuts and bolts
2.1meter track	1 pcs	
Plastic tooth belt	1 pcs	
Track of plastic tooth	1 pcs	
Sterring wheel	-	
Hanger A	1 pcs	2pcs hex screw
Hanger B	1 pcs	2pcs hex screw
Hanger shim	4 pcs	
Spring drive device	1 pcs	
Stopper	1 pcs	
Door guide	1 pcs	M5 tapping screw
Threading support	-	
Rear brake	1 pcs	2 pcs M5 * 1.9 cross screw suit
Rope	1 pcs	
Full open device	1 pcs	1 pcs M5 cross screw
End wheel	1 pcs	
		8 pcs M8 * 2.2 cross screw suit

Door weight	10-80 kgs/leaf
Door width	700-1200 mm
Closing drive system	spiral spring type
Controlling system	fluid friction resistance type
Durability	more than 1 million open/close operations
Spring thickness	0.265 mm
Rail length	2200 mm
Always open function	yes



Semi-automatic door (double open) components list		
Description	Quantity	Nuts and bolts
2.1meter track	2 pcs	
Plastic tooth belt	2 pcs	
Track of plastic tooth	1 pcs	
Sterring wheel	2 pcs	
Hanger A	2 pcs	4 pcs hex screw
Hanger B	2 pcs	4 pcs hex screw
Hanger shim	8 pcs	
Spring drive device	1 pcs	
Stopper	1 pcs	
Door guide	2 pcs	M5 tapping screw
Threading support	2 pcs	2 pcs M5 cross screw
Rear brake	1 pcs	2 pcs M5 * 1.9 cross screw suit
Rope	2 pcs	
Full open device	1 pcs	1 pcs M5 cross screw
End wheel	1 pcs	
		8 pcs M8 * 2.2 cross screw suit

Door weight	20-80 kgs/leaf
Door width	700-1200 mm
Closing drive system	spiral spring type
Controlling system	fluid friction resistance type
Durability	more than 1 million open/close operations
Spring thickness	0.385 mm
Rail length	4400 mm
Always open function	yes



Gambar Penerapan Automatic Door OADC 100



Gambar Penerapan Automatic Door OADC V50



OADC 100
Automatic Door Closer

Technical Parameters

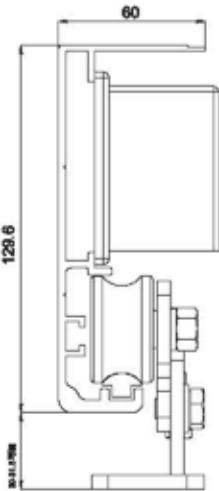
Power Supply Voltage	AC220V± 10%,50Hz 40W
Opening Speed	25° / Sec-45° / Sec
Closing Speed	25° / Sec-45° / Sec
Open the door to keep time	0-10 Sec
For Door Width	< 1100 mm

Technical Parameters

Open Method	All variety of sensors and access control
Opening Speed	Automatic anti-opening meet resistance
Closing Speed	< 30 N
Operating Noise	≤ 55 dB



OASD V50
Automatic Sliding Door

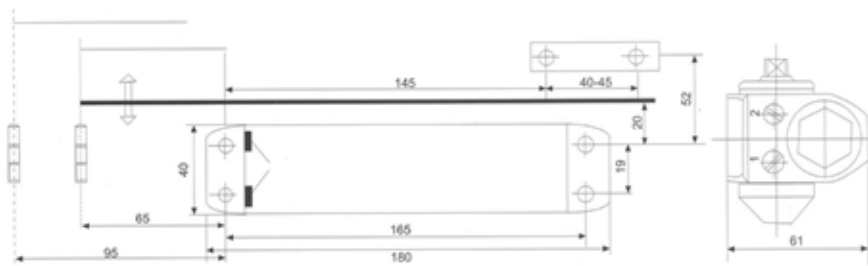


Max door weight (single)	1*160kgs
Max door weight (double)	2*150kgs
Door leaf width	400-2000mm
Opening speed	100-500mm/s (adjustable)
Closing speed	100-500mm/s (adjustable)
Motor details	34v55ww 2300 rpm
Holding time	0-20s (adjustable)
Voltage	AC100V-220V 50-60 Hz
Operating Temperature	-100 ⁰ -70C ⁰

CCIUS® DOOR CLOSER



ODC 801



Technical Data
Model : ODC 801
Application : All metal & plastic door
Door Size x Height : 950 mm
Weight : ≤60 kg
Functional : 900 Hold-open/ Non Hold-open
Variant Colour : Darkbrown & Silver



ODC 2000



Technical Data
Model : ODC 2000
Application : All metal & plastic door
Door Size x Height : 900 mm
Weight : ≤60 kg
Functional : Non Hold-open
Variant Colour : Darkbrown & Silver

CCIUS® ADVERTISING SCREW

Bahan : Stainless Steel #304
Permukaan : Brushed (Satin)



Diameter : ø 19 mm ø 25
Ukuran : 25, 30, 40, 50 mm mm

Advertising Screw

CCIUS® FLOOR PIVOT

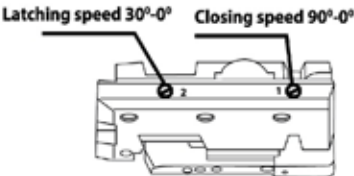
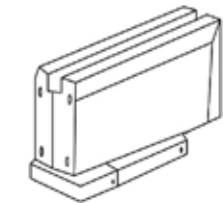
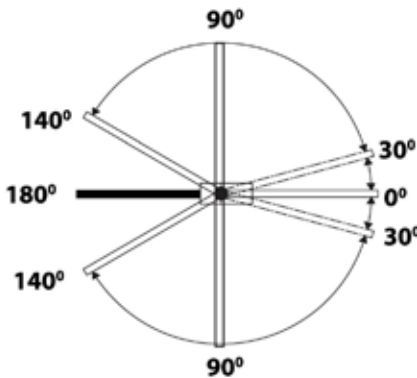


01.

Hold Open Model :
Hold Open Position and
Maximum Opening Angle 90°

02.

Speed Adjustment :
Latching Speed 300-00
Closing Speed 900-00



Model No.	Fungsi	Lebar Pintu	Berat Pintu	Dimensi
OFP 3071	Hold open 90°	≤ 1000mm	80 kg	173 x 52 x 95



PSB Singapore

CCIUS[®] SPIDER FITTING



OSF 2201 (11 cm)
Spider kaki 1 (11cm)



OSF 2201 (16 cm)
Spider kaki 1 (16cm)

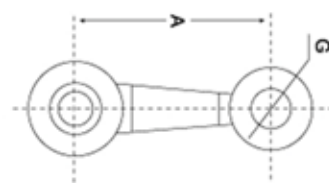


OSF 2202
Spider kaki 2 (90°)

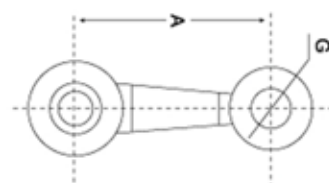


OSF 2202
Spider kaki 2 (180°)

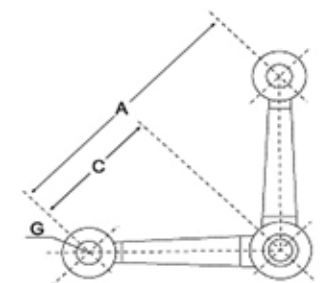
Bahan : Stainless Steel #304



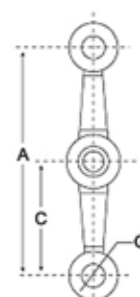
	A	G
Spec.	110	Ø25



	A	G
Spec.	160	Ø25



	A	C	G
Spec.	220	110	Ø25



	A	C	G
Spec.	220	110	Ø25



PSB Singapore

CCIUS[®] SPIDER FITTING



OSF 2203
Spider kaki 3



OSF 2204
Spider kaki 4

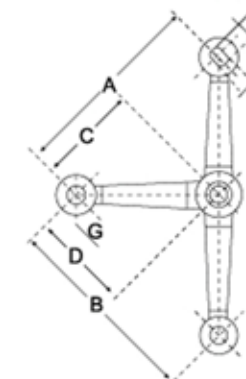


SFA 001

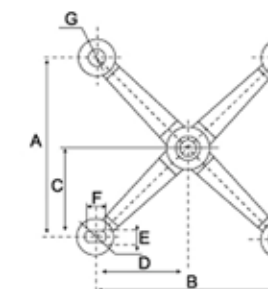


SFA 005

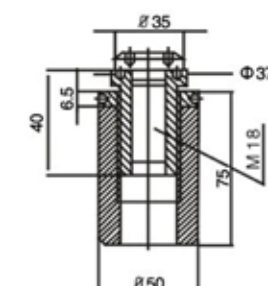
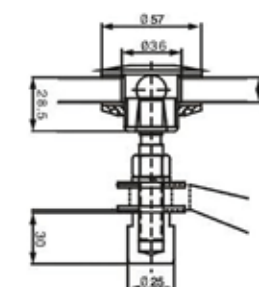
Bahan : Stainless Steel #304

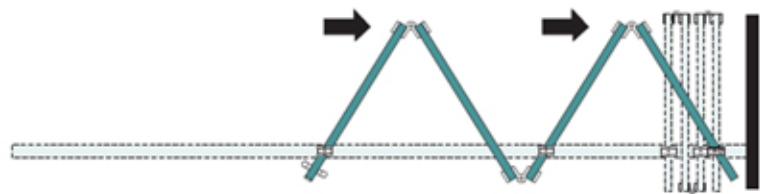


	A	B	C	D	E	F	G
Spec.	220	220	110	110	17	27	2-Ø25

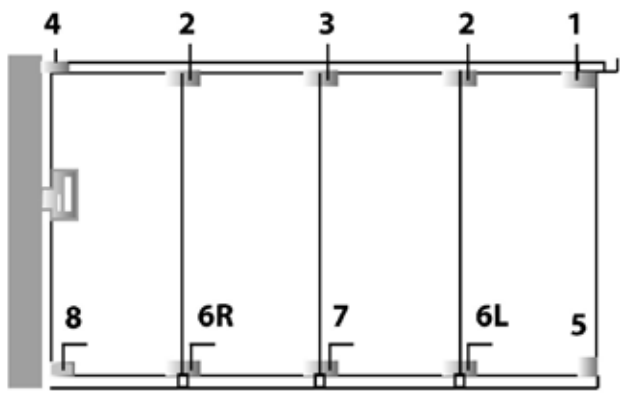


	A	B	C	D	E	F	G
Spec.	220	220	110	110	17	27	2-Ø25

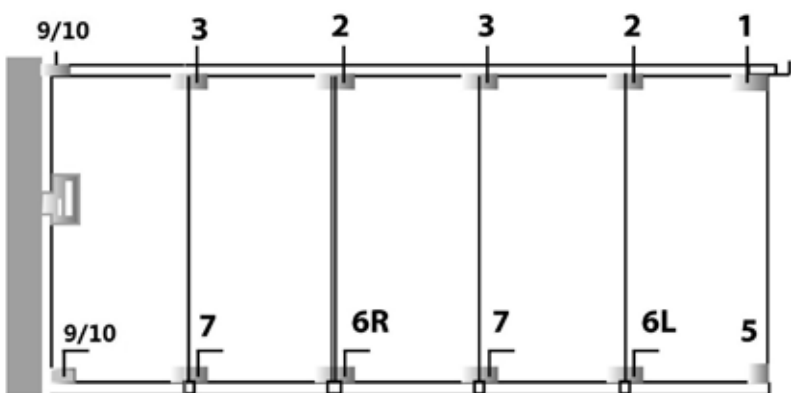




Max Door Leaf Height : 2500 mm
Max Door Leaf Width : 700 mm'
Max Door Leaf Load : 60 kg



Aksesoris yang digunakan jika daun pintu berjumlah genap



Aksesoris yang digunakan jika daun pintu berjumlah ganjil



OFD8100-1



OFD8100-2



OFD8100-3



OFD8100-4



OFD8100-5



OFD8100-6L



OFD8100-6R



OFD8100-7



OFD8100-8



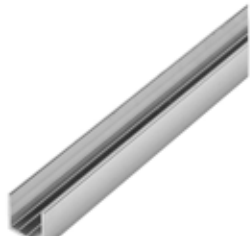
OFD8100-9R



OFD8100-10L



Upper Track



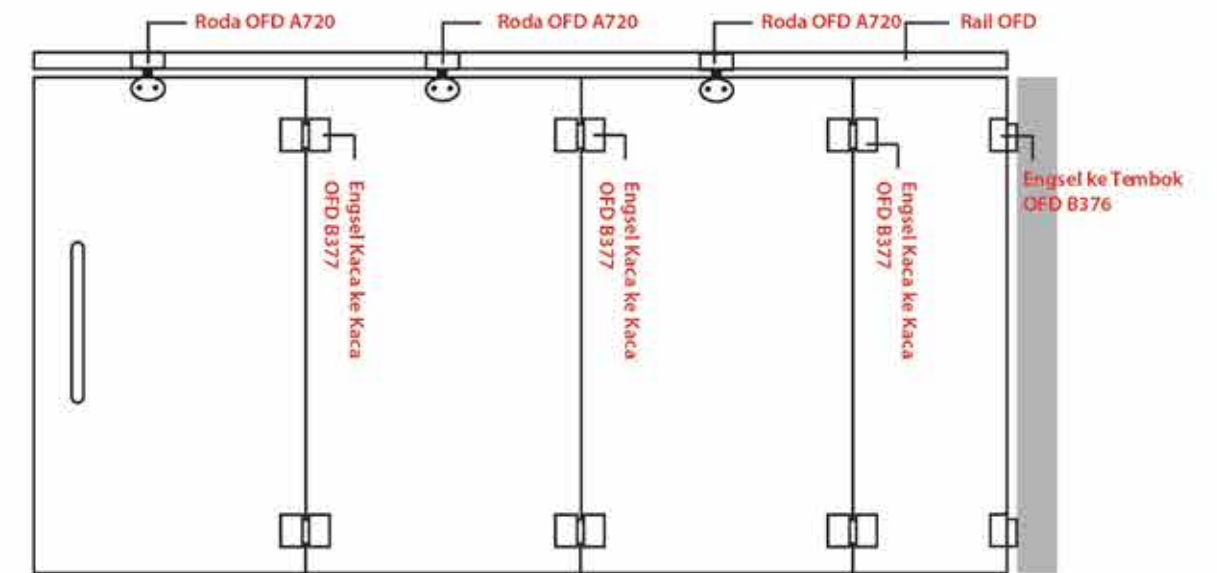
Lower Track



Bracket Folding Door



CCIUS® BI - FOLDING DOOR



Max Door Leaf Height	2500 mm	2500 mm	2500 mm	2500 mm
Max Door Leaf Width	700 mm	700 mm	700 mm	-
Max Door Leaf Load	70 kg	70 kg	70 kg	-



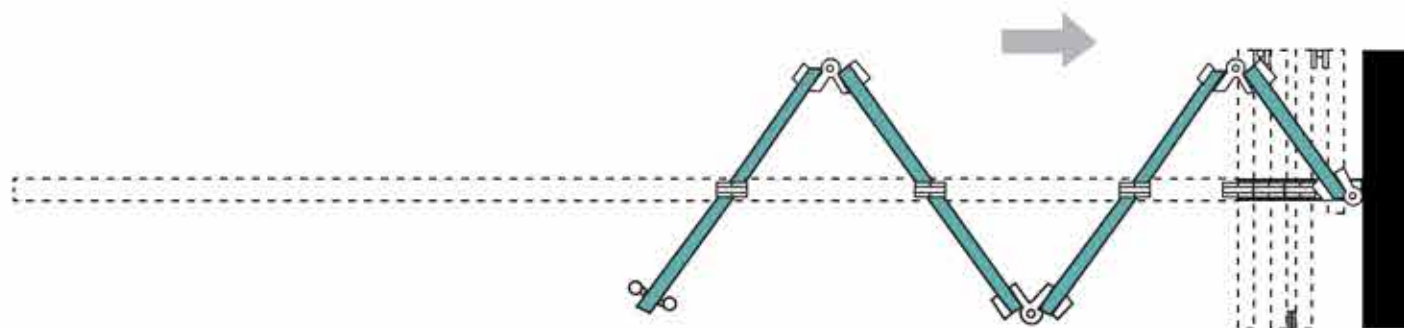
Roda OFD A720
Roda Pintu Lipat



Engsel ke tembok OFD B376
Engsel pintu lipat ke tembok



Engsel ke tembok OFD B377
Engsel pintu lipat ke kaca



Rail OFD
Rail Roda Pintu Lipat



Bracket Atas

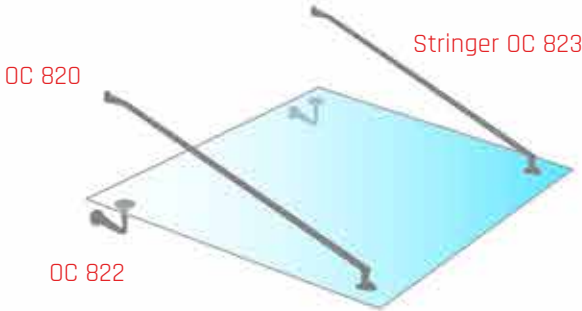


Bracket Sampling

CCIUS® CANOPY



OC 820



OC 820

OC 822

OC 821

Stringer OC 823



OC 821

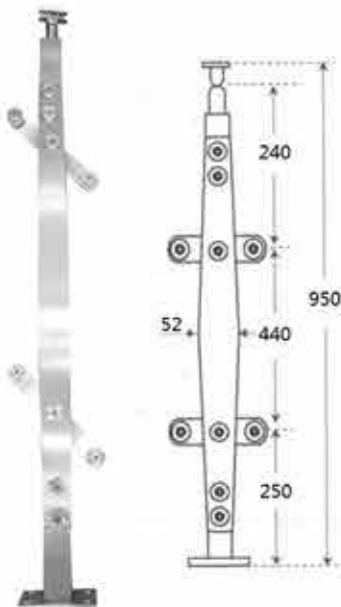


OC 822

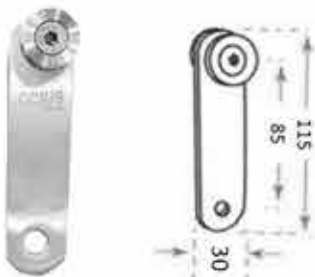


Stringer OC 823

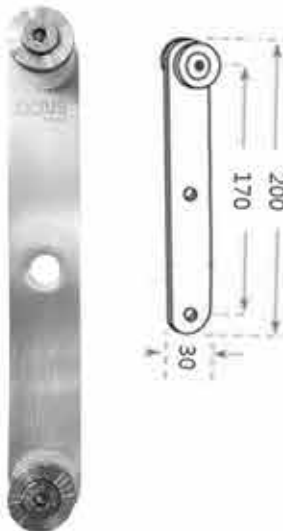
CCIUS® BALUSTRADE



OBL 506



OBL 507



OBL 508

CCIUS®



CCIUS®

NON AUTOMATIC SLIDING DOOR

OSD 038 & OSD 049

Untuk kaca tempered
10-12mm dengan
beban maximum 80
kg/ daun pintu



OSD 038

DIJUAL TERPISAH



Rel 038 / 049 / 330



Bracket 038 / 049 / 330

Untuk kaca tempered
10-12mm dengan
beban maximum 80
kg/ daun pintu



OSD 049



NON AUTOMATIC SLIDING DOOR
OSD 330

Untuk kaca tempered 10-12mm dengan beban maximum 80 kg/ daun pintu



DIJUAL TERPISAH



Rel 330

Bracket



NON AUTOMATIC SLIDING DOOR
OSD 3114

Untuk kaca tempered 10-12mm dengan beban maximum 80 kg/ daun pintu



DIJUAL TERPISAH



Rel 3114

Bracket Atas

Bracket Samping



NON AUTOMATIC SLIDING DOOR
OSD 404 & OSD 408

Untuk kaca tempered 10-12mm dengan beban maximum 100 kg/ daun pintu



OSD 404

DIJUAL TERPISAH



Rel 404 / 408

Untuk kaca tempered 10-12mm dengan beban maximum 150 kg/ daun pintu



OSD 408



Kaca Tempered : 10-12 mm

Beban Max. per Daun Pintu : 140 kg

PRODUK YANG DIJUAL PER SATU SET PAKET YANG TERDIRI DARI :



2 buah
OSA 054-1
Roda 054



4 buah
OSA 054-2*
Bracket pipa ke kaca



4 buah
OSA 054-3*
Bracket pipa ke tembok

*Hanya salah satu saja bracket yang dipilih (ke tembok/ ke kaca)

*Hanya salah satu saja bracket yang dipilih (ke tembok/ ke kaca)



2 buah
OSA 054-4
Door Stoper



1 buah
OSA 054-5
Floor Guide



2 buah
OSA 054-6
Tutup ujung pipa

PRODUK YANG TIDAK TERMASUK DALAM SATU SET PAKET (DIJUAL TERPISAH) :



Round Pipe
Ø 25 mm (1 inch)
ketebalan pipa:
2.2mm



OSDH 274



2 buah
OCT 906B
Ø 25 mm



Kaca Tempered : 10-12 mm Beban Max. per Daun Pintu : 80 kg

PRODUK YANG DIJUAL PER SATU SET PAKET YANG TERDIRI DARI :



2 buah
OSA 066-1
Roda 066



4 buah
OSA 066-2*
Bracket pipa ke kaca



4 buah
OSA 066-3*
Bracket pipa ke tembok

*Hanya salah satu saja bracket yang dipilih (ke tembok/ ke kaca)

*Hanya salah satu saja bracket yang dipilih (ke tembok/ ke kaca)



1 buah
OSA 066-4
Stoper 066 - kiri



1 buah
OSA 066-5
Stoper 066 - Kanan



2 buah
OSA 066-6
Tutup ujung pipa



1 buah
OSA 066-7
Floor Guide

PRODUK YANG TIDAK TERMASUK DALAM SATU SET PAKET (DIJUAL TERPISAH) :



Round Pipe
Ø 25 mm (1 inch)
ketebalan pipa:
2.2mm



OSDH 274



2 buah
OCT 906B
Ø 25 mm



Kaca Tempered

: 8 mm

Beban Max. per Daun Pintu

: 75 kg

Max. Lebar Keseluruhan (per sisi)

: 1800 mm (total lebar pintu & kaca mati)

Lebar Max. Pintu

: 750 mm

Tinggi Max. Pintu

: 2100 mm

PRODUK YANG DIJUAL PER SATU SET PAKET YANG TERDIRI DARI :



2 buah
OSA 078-1
Roda 078



2 buah
OSA 078-2
Kancing 078



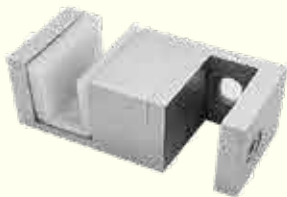
2 buah
OSA 078-3
Roda kecil 078



2 buah
OSA 078-4 (4 cm)
Bracket Hollow ke tembok



2 buah
OSA 078-5 (4 cm)
Door Stopper 078



1 buah
OSA 078-6
Floor Guide Flexible

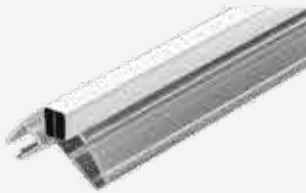
PRODUK YANG TIDAK TERMASUK DALAM SATU SET PAKET (DIJUAL TERPISAH) :



Hollow Pipe
4 cm



OSDH 274



1 set / pasang
Magnetic Seal 8mm



Kaca Tempered
Beban Max. per Daun Pintu
Max. Lebar Keseluruhan (per sisi)

: 8 mm
: 30 kg
: 1200 mm (total lebar pintu & kaca mati)

Lebar Max. Pintu
Tinggi Max. Pintu

: 500 mm
: 2100 mm

PRODUK YANG DIJUAL PER SATU SET PAKET YANG TERDIRI DARI :



4 buah
OSA 078-1
Roda 078



4 buah
OSA 078-2
Kancing 078



4 buah
OSA 078-3
Roda kecil 078



2 buah
OSA 078-4 (3 cm)
Bracket Hollow ke tembok



4 buah
OSA 078-5 (3 cm)
Door Stopper 078



1 buah
OSA 078-6
Hook sudut hollow



2 buah
OSA 069
Floor Guide Flexible

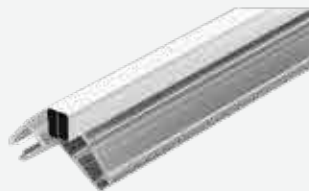
PRODUK YANG TIDAK TERMASUK DALAM SATU SET PAKET (DIJUAL TERPISAH) :



Hollow Pipe 3 cm



OSDH 134



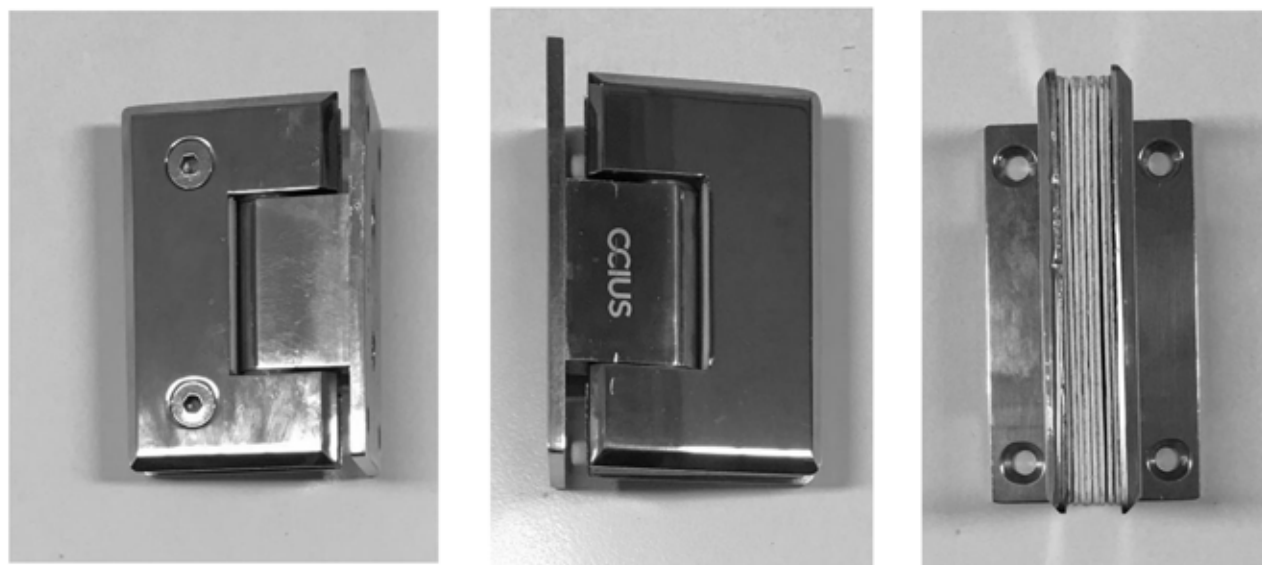
1 set / pasang
Magnetic Seal 8mm



PSB Singapore

SHOWER HINGE

Test Report No. 7191147996-MEC16/02-MHA
dated 20 Oct 2016



Measurement after 60,000 cycles:

S/N	Description	Measurements	Requirements
1	Vertical (distance between datum point and a point on door frame)	150.2mm (Increased by 0.2mm)	-
2	Lateral (distance between datum point and a point on door frame)	150.0mm (no change)	-
2	Limits of allowable wear	Comply (Values are within shaded area of figure G.2.)	Shall comply with requirement of cl. 5.4j of EN 1935
3	Torque require to initiate movement of door at following opening angles: (average of 3 readings)		
	(i) 0°± 5°	1.7 Nm	2.0 Nm(max)
	(ii) 30°± 5°	1.6 Nm	2.0 Nm(max)
	(iii) 60°± 5°	1.8 Nm	2.0 Nm(max)
	(iv) 90°± 5°	1.6 Nm	2.0 Nm(max)

CONCLUSION:

Adopting to BS EN 1935 : 2002, clause 7.5, Building hardware – Single-axis hinges, the results obtained show that the hinge tested **meet with the durability test requirements.**



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Co. Reg : 199002667R

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Singapore 118221
TUV®



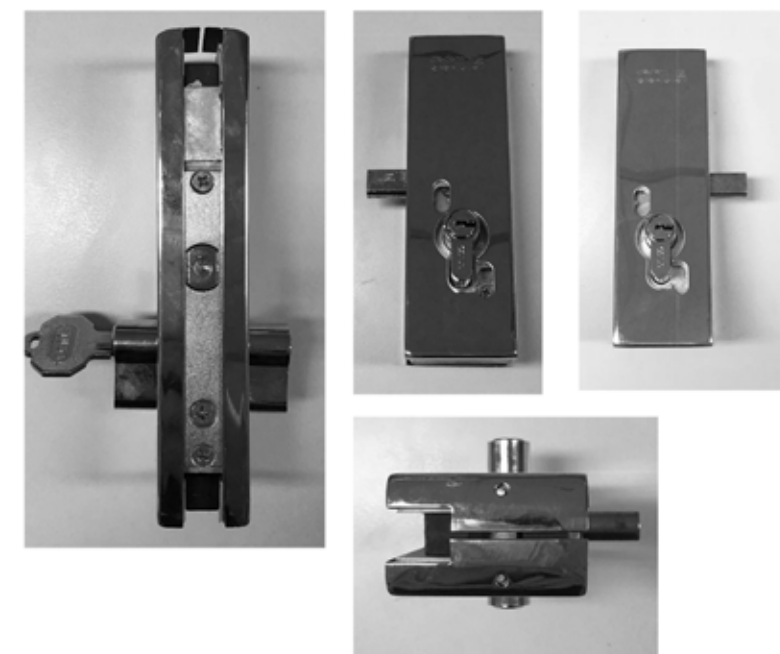
PSB Singapore

PATCH FITTING

Test Report No. 7191152727-MEC16-MHA
dated 15 Dec 2016
(2191053195)

SUBJECT:

Indicative durability test on 'Ocius' OPT 10A stainless steel 304 patch lock submitted by Ocius Hardware.



Descriptions	Sample		Requirements
	A	H	
Durability test on deadbolt	50,000 cycles	50,000 cycles	-
Torque to operate deadbolt after durability test	0.3 Nm	0.3 Nm	Torque shall not exceed: □ M3 via keyhole : 1.5Nm □ M4 via follower : 3Nm
Results (comply/non-compliance): Compy			

CONCLUSION:

Adopting to EN 12209 : 2003, clause 5.3.2, Building hardware – Locks and latches, the results obtained show that the locks tested **meet with the durability of deadbolt mechanism requirements.**



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Regional Head Office:
TUV SUD Asia Pacific Pte. Ltd.
1 Science Park Drive, #02-01
Singapore 118221
TUV®



PSB Singapore

FLOOR HINGE

Test Report No. 7191147996-MEC16/01-MHA
dated 20 Feb 2017
(2191049303)

SUBJECT:

Cyclic movement endurance test on 'Ocius' OFH 84 EN3 floor spring submitted by Ocius Hardware.

Measurement after 500,000 test cycles

Description	Measurements		Requirements (Size 3)
	Right	Left	
Time taken to close from 90° to fully closed position	4.4 (original value : 4.3sec)	4.3 (original value : 4.3sec)	Shall be less than 2 times or more than 0.7 times the original value. (i.e Right: Between 3.0 and 8.6 sec) (i.e Left: Between 3.0 and 8.6 sec)
Between 0° to 4°	Closing moment	22.6	18 to < 26 Nm
	Opening moment	29.7	-
Between 88° to 92°	Closing moment	13.1	6 Nm minimum
	Opening moment	28.3	-
Min. closing torque at max. opening angle permitted by the closer	Closing moment	17.6	4 Nm minimum
Between 0° to 60°	Opening moment	30.1	47 Nm maximum
Between 0° to 4°	Efficiency	76.1	55% minimum
Closing time from 90°			
Adjustability	2.3	2.3	3 sec. or less
	>20		20 sec. or more
Closing overload test	Yes		Able to withstand
Free play at the zero position	1mm	1mm	6mm maximum



Photo : Floor Hinge OFH 84

Observations throughout test

Description	Measurements	Requirements (Size 3)
Fluid leakage	No leakage	No fluid leakage from door closer.
Damage	No damage	No damage to door closer or its arms that would adversely affect its performance.

CONCLUSION :

According to SS 332: 2007: Annex F:- Clause 5.1 - For mechanical performance and durability, the test results obtained showed that the sample tested meet the requirements and is classified as:.

3	8	3	0	1	0
---	---	---	---	---	---



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PSB Singapore

SPIDER FITTING

Test Report No. 7191147996-MEC16/03-SL
dated 29 NOV 2016

SUBJECT:

Load test for Rotule & Spider

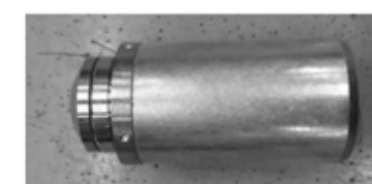


Photo 1 : Rotule

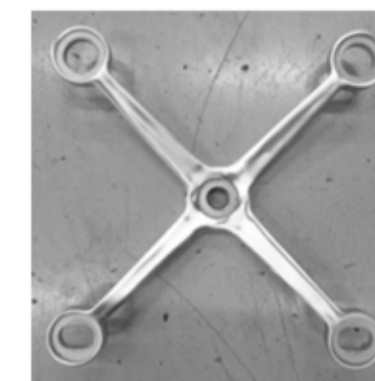


Photo 1 : Spider Fitting

TEST RESULTS:

1. Rotule – Tensile & Shear

Sample reference	Tensile	Shear
Maximum force (kN)	48.9 (4987.8 kgf)	51.9 (5293.8 kgf)
Mode of failure	Stud deformed	Thread damaged

2. Load Test on Spider fitting (Radial & Axial)

Sample reference	Radial	Axial
Maximum force (kN)	6.3 (642.6 kgf)	6.4 (652.8 kgf)
Mode of failure	Spider fixing deform	



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