

Product Datasheet

POLYESTER ENCLOSURE INTEGRATED CANOPY



Integrated Canopy Single Door



Integrated Canopy Double Door



Integrated Canopy Metering Enclosure

GRP Integrated Canopy Enclosures used for outdoor application with weatherproof and antistatic properties, finding their major application in the protection of LV electrical distribution panels housed in them. The canopy is built-in and integrated to the frame of the enclosure and is joint free. The joint free design provides a more reliable protection solution. This product includes 3 different ranges which come in Single, Double and Metering enclosures. Certified to the standards of the Power and Water utility authorities, Integrated canopy enclosures are primarily utilized for front and single access to compact switchboards. Our multiple options allow our customers to customize the final product to meet their requirement.

Features	Specifications	Other Options
 Ingress Protection	IP-55 BS EN 60529:1992 and NEMA 4x Certified	IP-65/66 and lower, NEMA 4X and lower
 Weatherproof	UV resistant - ASTM G154 Certified	
 High Impact Resistant	IK8, BS EN 62262-22002 Certified	IK10, Anti-Vandal sandwich construction with encapsulated plywood
 Fire Retardant and Self Extinguishing	UL 94, BS 476:Part 7:1997 Class 2 Certified	Higher fire resistance upto Class 0
 Anti-Static	IEC-60079-0 Certified	
 Wall Thickness	3-4mm generally and 5-6mm at stress points	Increased wall thickness
 Semi-gloss External Gelcoat Finish	Light grey RAL 7035	Alternate RAL colors available on request refer to RAL Color chart on page 5
 Long Life & High Temperature Resistant Rubber Seal	EPDM rubber gasket installed	Please refer page 7
 Corrosion Resistant	Galvanized steel or other material	Please refer page 6
 Customizable	Alternate sizes, accessories and options to match required specifications	Please refer page 6

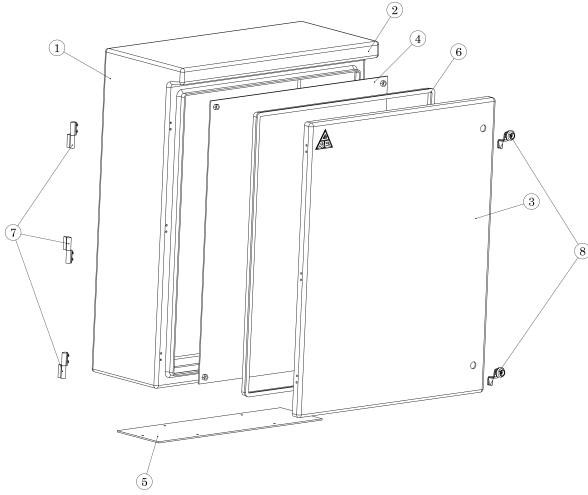


View Our Product Catalogue

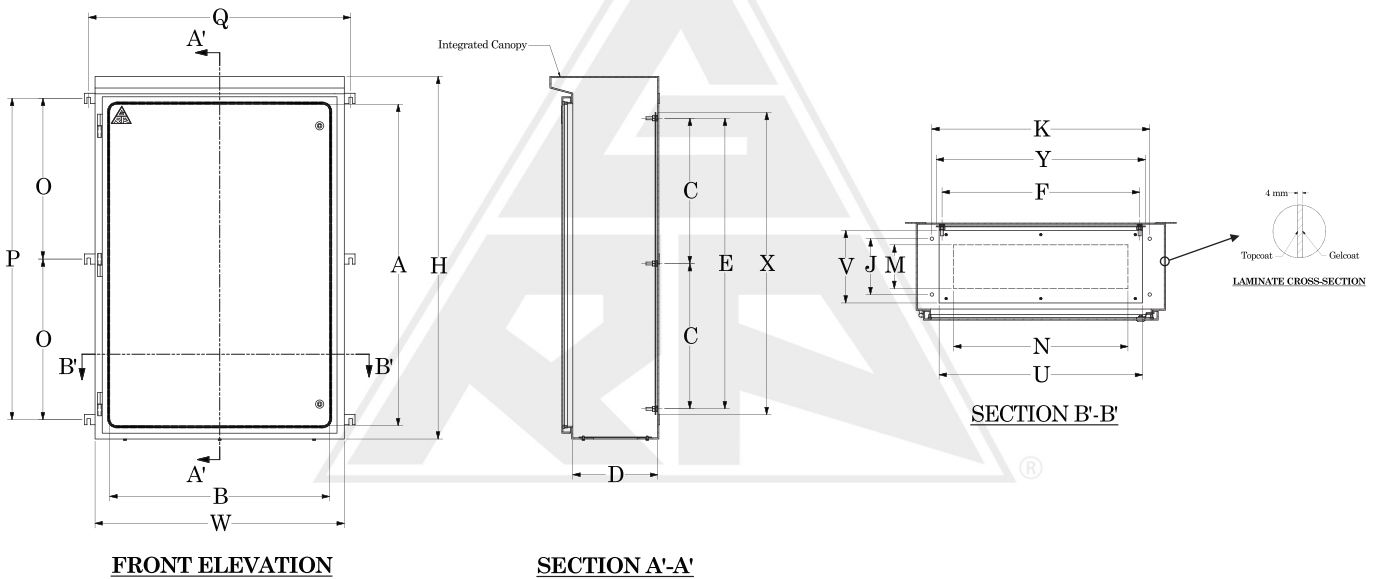


POLYESTER ENCLOSURE-INTEGRATED CANOPY

Integrated Canopy Single Door



1. GRP enclosure body
2. GRP integrated canopy
3. GRP door
4. G.I mounting plate
5. G.I gland plate
6. EPDM rubber gasket
7. Zinc die cast lift off type hinges
8. Zinc die cast square key lock



Measurements

All dimensions in mm

SI No.	Product Reference	Internal Size			Clear Opening		C/C of Studs			Mounting Plate Size		Gland Plate Cut Out		Gland Plate Size		C/C of Wall Brackets			C/C of Foundation Bolts		Total Weight (Kg ± 1) *
		H	W	D	A	B	C	E	F	X	Y	N	M	U	V	O	P	Q	K	J	
1	ICS 050040020	500	400	200	380	300	-	350	300	390	340	300	80	350	130	-	395	445	300	150	11.5
2	ICS 050035035	500	350	350	400	250	-	350	250	390	290	250	150	300	200	-	395	395	250	300	11.5
3	ICS 060060030	600	600	300	490	500	-	450	480	490	520	450	150	500	200	-	495	645	500	250	15
4	ICS 070055025	700	550	250	590	450	-	490	430	530	470	400	120	450	170	-	595	595	450	200	14
5	ICS 100060025	1000	600	250	880	500	-	800	480	840	520	400	120	450	170	-	895	645	500	200	25
6	ICS 100080030	1000	800	300	870	690	-	800	680	840	720	600	150	650	200	-	895	845	700	250	30

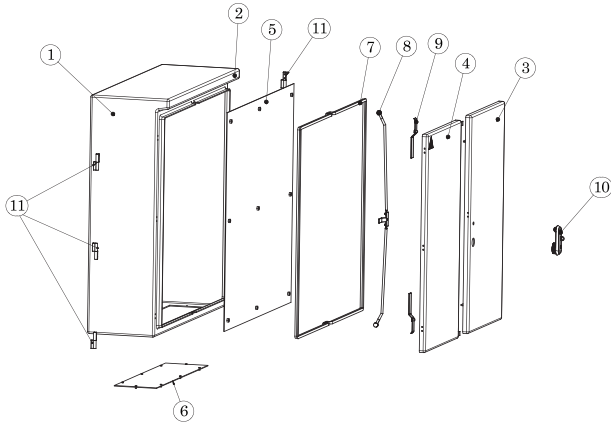
Sizes mentioned are standard sizes. Customized sizes are available, please submit your enquiry online or email us at sales@grpindustries.com

* All weights mentioned are excluding gland plate and mounting plate

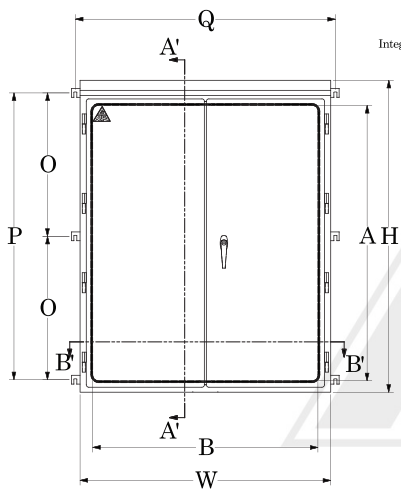
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POLYESTER ENCLOSURE-INTEGRATED CANOPY

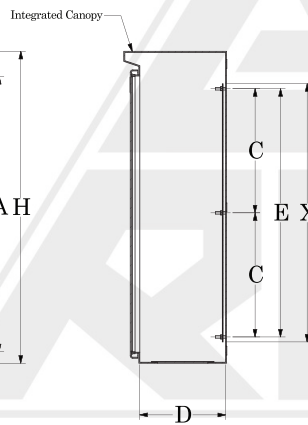
Integrated Canopy Double Door



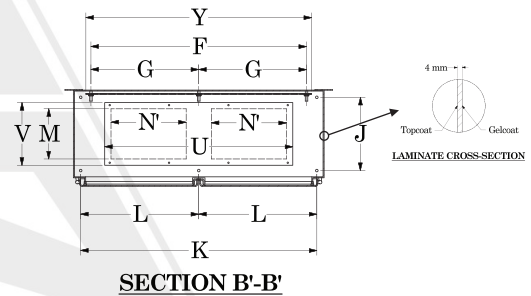
1. GRP enclosure body
2. GRP integrated canopy
3. GRP right door
4. GRP left door
5. G.I mounting plate
6. G.I gland plate
7. EPDM rubber gasket
8. G.I 3 point cam & tie rod
9. G.I internal lock latch
10. Polyamide swing type lock
11. Zinc die cast lift off type hinges



FRONT ELEVATION



SECTION A'-A'



SECTION B'-B'

Measurements

All dimensions in mm

Sl No.	Product Reference	Internal Size			Clear Opening		C/C of Studs**					Mounting Plate Size		Gland Plate Cut Out		Gland Plate Size		C/C of Wall Brackets			C/C of Foundation Bolts			Total Weight (Kg ± 1) *
		H	W	D	A	B	C	E	F	G	X	Y	N'	M	U	V	O	P	Q	K	L	J		
1	ICD 120120030	1200	1200	300	1070	1070	500	1000	1050	525	1040	1090	400	150	1050	200	545	1090	1245	1100	550	250	52	
2	ICD 160165050	1600	1650	500	1480	1530	590	1180	1350	675	1220	1390	485	230	1220	280	745	1490	1695	1550	775	450	83	

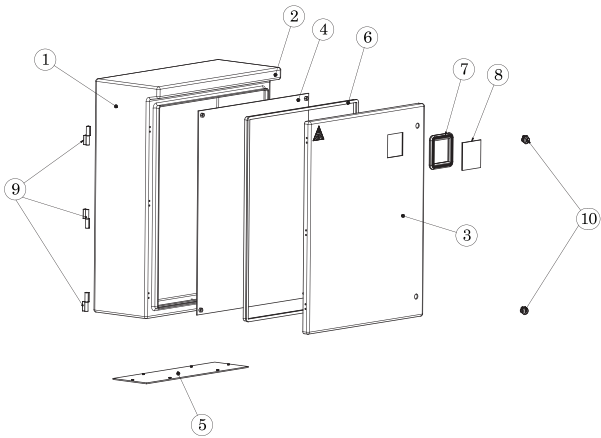
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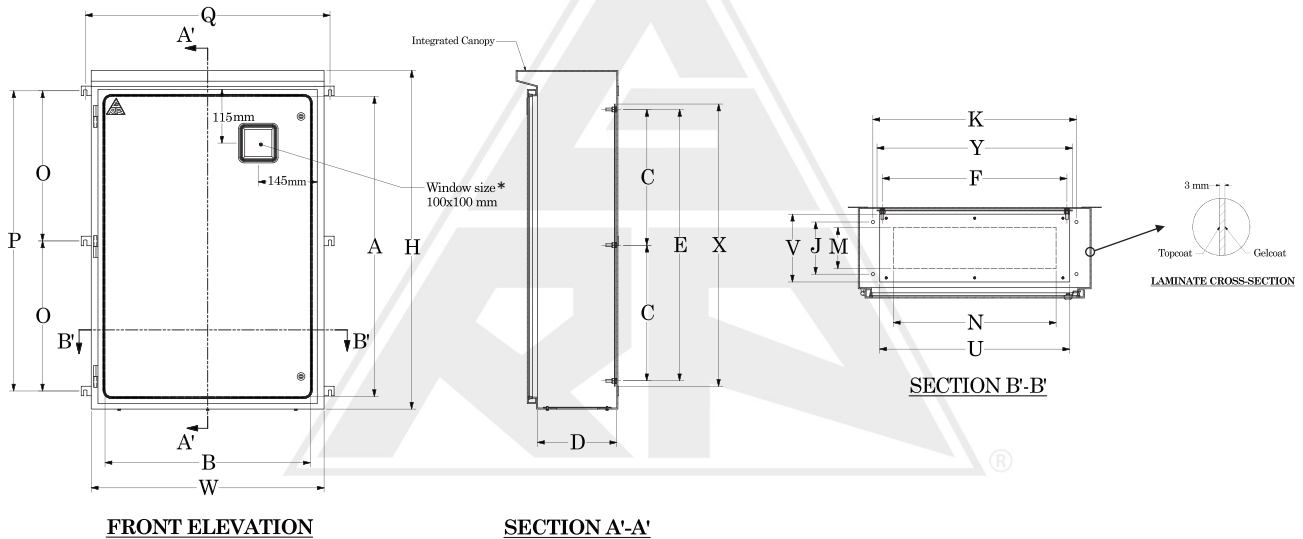
** If mounting plates are not supplied by GRP, location of studs can vary on the basis of client requirements

POLYESTER ENCLOSURE-INTEGRATED CANOPY

Integrated Canopy Metering Enclosure



1. GRP enclosure body
2. GRP integrated canopy
3. GRP door
4. G.I mounting plate
5. G.I gland plate
6. EPDM rubber gasket
7. EPDM window gasket
8. Toughened glass window
9. Zinc die cast lift off type hinges
10. Zinc die cast square key locks



* Window size and location can be customized according to the Client's requirement

Measurements

All dimensions in mm

SI No.	Product Reference	Internal Size			Clear Opening		C/C of Studs			Mounting Plate Size		Gland Plate Cut Out		Gland Plate Size		C/C of Wall Brackets			C/C of Foundation Bolts		Total Weight (Kg ± 1) *
		H	W	D	A	B	C	E	F	X	Y	N	M	U	V	O	P	Q	K	J	
1	ICM 050040020	500	400	200	380	300	-	350	300	390	340	300	80	350	130	-	395	445	300	150	9.5
2	ICM 050035035	500	350	350	400	250	-	350	250	390	290	250	150	300	200	-	395	395	250	300	9.5
3	ICM 060060030	600	600	300	490	500	-	450	480	490	520	450	150	500	200	-	495	645	500	250	13
4	ICM 070055025	700	550	250	590	450	-	490	430	530	470	400	120	450	170	-	595	595	450	200	12
5	ICM 100060025	1000	600	250	880	500	-	800	480	840	520	400	120	450	170	-	895	645	500	200	23
6	ICM 100080030	1000	800	300	870	690	-	800	680	840	720	600	150	650	200	-	895	845	700	250	28

Sizes mentioned are standard sizes. Customized sizes are available, please submit your enquiry online or email us at sales@grpindustries.com

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POLYESTER ENCLOSURE-INTEGRATED CANOPY

Material Properties of Glass Reinforced Polyester

Weather Proof

Rigid Construction

Corrosion Resistant

High Impact Resistant

Suitable for outdoor use -10°C to +80°C and 100% humidity

Mechanical Data

Titles	Values	Unit	Test Method
Tensile Strength	110 ± 25	Mpa	BS 2782:P10, Method - 1003
Flexural Strength	170 ± 25	Mpa	BS 2782:P10, Method - 1005
Impact Strength	IK8 = 5 joule impact		BSEN 62262:2002 IK8
Tensile Modulus	8000	Mpa	ISO 527-1/2-1993
Flexural Modulus	7000	Mpa	ISO 178-1993
Hardness (Barcol 934-1)	40-45		ASTMD-2583-1987
Tensile Elongation	1.8	% length	ISO 527-1/2-1993
Co-efficient of Thermal Expansion	26 x 10 ⁻⁶	m/°C	
Thermal Conductivity (k)	0.2	W/mK	

Physical Data

Titles	Values	Unit	Test Method
Water Absorption (7days)	31	mg	BS 2782, Part4: Method 430 A-83
External Finish	Plain semi gloss UV resistant		
Internal Finish	Reasonably smooth flowcoat finish		
Gel Coat Thickness	350-450	microns	
Glass Content	35 ± 5	% weight	BS 2782 P10, Method 1002
Loss on Ignition	65 ± 5	% weight	BS 2782 P10, Method 1002

Standard Colors

RAL 7035

RAL 9010

RAL 1015

RAL 7032

RAL 3000

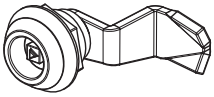
Other Options Available

RAL 1000	RAL 1001	RAL 1002	RAL 1003	RAL 1004	RAL 1005	RAL 1006	RAL 1007	RAL 7008	RAL 7009
RAL 1011	RAL 1012	RAL 1013	RAL 1014	RAL 1015	RAL 1016	RAL 1017	RAL 1018	RAL 7021	RAL 7022
RAL 1019	RAL 1020	RAL 1021	RAL 1023	RAL 1024	RAL 1027	RAL 1028	RAL 1032	RAL 7033	RAL 7034
RAL 1033	RAL 1034	RAL 1037	RAL 2000	RAL 2001	RAL 2002	RAL 2003	RAL 2004	RAL 7042	RAL 7043
RAL 2008	RAL 2009	RAL 2010	RAL 2011	RAL 2012	RAL 3000	RAL 3001	RAL 3002	RAL 8007	RAL 8008
RAL 3003	RAL 3004	RAL 3005	RAL 3007	RAL 3009	RAL 3011	RAL 3012	RAL 3013	RAL 8019	RAL 8022
RAL 3014	RAL 3015	RAL 3016	RAL 3017	RAL 3018	RAL 3020	RAL 3022	RAL 3027	RAL 9003	RAL 9004
RAL 3031	RAL 4001	RAL 4002	RAL 4003	RAL 4004	RAL 4005	RAL 4006	RAL 4007	RAL 7003	RAL 7004
RAL 4008	RAL 4009	RAL 5000	RAL 5001	RAL 5002	RAL 5003	RAL 5004	RAL 5005	RAL 7012	RAL 7013
RAL 5007	RAL 5008	RAL 5009	RAL 5010	RAL 5011	RAL 5012	RAL 5013	RAL 5014	RAL 7026	RAL 7030
RAL 5015	RAL 5017	RAL 5018	RAL 5019	RAL 5020	RAL 5021	RAL 5022	RAL 5023	RAL 7037	RAL 7038
RAL 5024	RAL 6000	RAL 6001	RAL 6002	RAL 6003	RAL 6004	RAL 6005	RAL 6006	RAL 8001	RAL 8002
RAL 6007	RAL 6008	RAL 6009	RAL 6010	RAL 6011	RAL 6012	RAL 6013	RAL 6014	RAL 8014	RAL 8015
RAL 6015	RAL 6016	RAL 6017	RAL 6018	RAL 6019	RAL 6020	RAL 6021	RAL 6022	RAL 8025	RAL 8028
RAL 6024	RAL 6025	RAL 6026	RAL 6027	RAL 6028	RAL 6029	RAL 6032	RAL 6033	RAL 9011	RAL 9016
RAL 6034	RAL 7000	RAL 7001	RAL 7002	RAL 7003	RAL 7004	RAL 7005	RAL 7006	RAL 7031	RAL 7032
RAL 7010	RAL 7011	RAL 7044	RAL 8000	RAL 9005	RAL 9010	RAL 7031	RAL 7032	RAL 7039	RAL 7040
RAL 7023	RAL 7024	RAL 8011	RAL 8012	RAL 7005	RAL 7006	RAL 7039	RAL 7040	RAL 8003	RAL 8004
RAL 7035	RAL 7036	RAL 8023	RAL 8024	RAL 7015	RAL 7016	RAL 8003	RAL 8004	RAL 8016	RAL 8017
RAL 9017	RAL 9018	RAL 9001	RAL 9002						

POLYESTER ENCLOSURE-INTEGRATED CANOPY

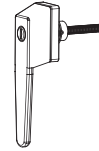
ACCESSORIES

Lock Options



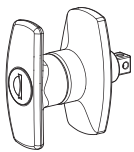
SQUARE KEY LOCK

Nickel Chrome Plated Zinc Die Cast
Nickel Chrome Plated SS 316



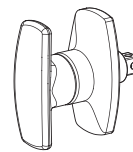
HEAVY DUTY
HANDLE LOCK

Black Powder Coated Zinc Die Cast



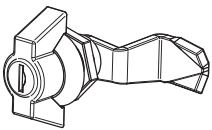
T-HANDLE LOCK WITH KEY

Polyamide with Steel Cylinder
Nickel Chrome Plated Mild Steel
Nickel Chrome Plated SS316



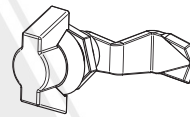
T-HANDLE LOCK
WITHOUT KEY

Polyamide
Nickel Chrome Plated Mild Steel
Nickel Chrome Plated SS316



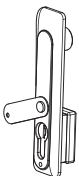
WING TYPE LOCK WITH KEY

Polyamide with Steel Cylinder



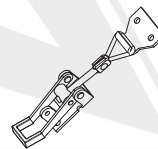
WING TYPE LOCK
WITHOUT KEY

Polyamide



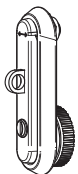
SS SWING TYPE LOCK

Polyamide with Steel Cylinder
SS 316 with Cylinder



TOGGLE LATCH

SS 316



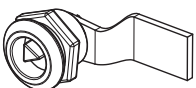
POLYAMIDE SWING TYPE LOCK

Polyamide with Steel Cylinder
SS 316 with Cylinder



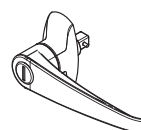
INTERNAL LOCK LATCH

SS 316
Galvanized Iron



TRIANGULAR KEY LOCK

Nickel Chrome Plated Zinc Die Cast
Nickel Chrome Plated SS 316



HANDLE TYPE LOCK

Nickel Chrome Plated Zinc Die Cast
Nickel Chrome Plated SS316

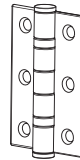
POLYESTER ENCLOSURE-INTEGRATED CANOPY

Hinges



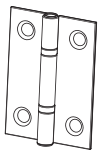
LIFT-OFF TYPE

Zinc Die Cast
SS 316
Chrome Plated SS 316



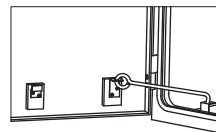
BUTT TYPE 3 INCHES

SS 316
SS 304



BUTT TYPE 2 INCHES

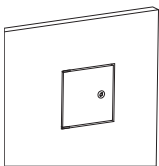
SS 316
SS 304



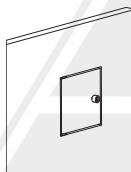
MANUAL WIND STAY

SS 316
Galvanized Iron

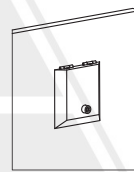
Shutters



SHUTTER WITH SQUARE
KEY LOCK

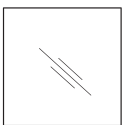


SHUTTER WITH KNOB HANDLE



FLAP SHUTTER

Glass Windows



GLASS WINDOW

Toughened Glass
Polycarbonate



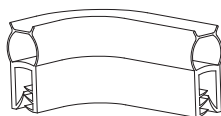
GLASS WINDOW WITH GASKET

Toughened Glass
Polycarbonate

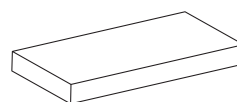
Gaskets



V TYPE



BULB TYPE



FLAT TYPE



PROFILE TYPE

POLYESTER ENCLOSURE-INTEGRATED CANOPY

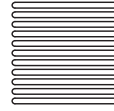
Ventilators



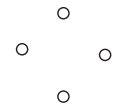
IP 43 VENTILATOR



IP 54 VENTILATOR

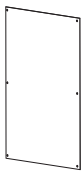


SLOTTED NATURAL VENTILATION



SMALL HOLES NATURAL VENTILATION

Plates / Mounting Studs



MOUNTING PLATE

Galvanized Iron Epoxy Painted
Galvanized Iron Powder Coated
Galvanized Iron
Stainless Steel (SS 304)
Stainless Steel (SS 316)

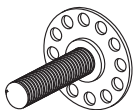
Stainless Steel (SS 316 L)
Aluminum
Brass
GRP
Marine Plywood



GLAND PLATE

Galvanized Iron Epoxy Painted
Galvanized Iron Powder Coated
Galvanized Iron
Stainless Steel (SS 304)
Stainless Steel (SS 316)

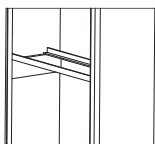
Stainless Steel (SS 316 L)
Aluminum
Brass
GRP



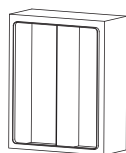
MOUNTING STUD

Galvanized Iron
SS 316

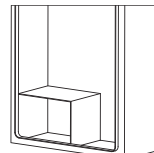
Partitions and Chambers



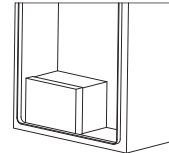
ANGLE RACK



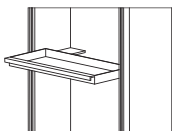
GRP PARTITION



EQUIPMENT CHAMBER



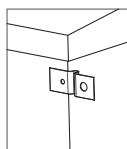
EQUIPMENT CHAMBER WITH LID



SLIDING RACK

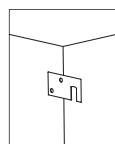
POLYESTER ENCLOSURE-INTEGRATED CANOPY

Fixing Arrangements



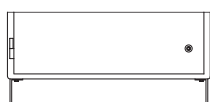
SS 316

STEP TYPE WALL
MOUNTING BRACKET



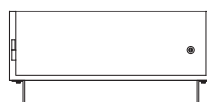
SS 316

FLAT TYPE WALL
MOUNTING BRACKET



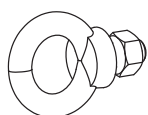
PEDESTAL TYPE 1

Galvanized Iron
GRP



PEDESTAL TYPE 2

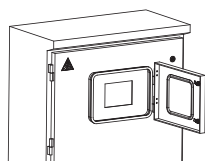
Galvanized Iron
GRP



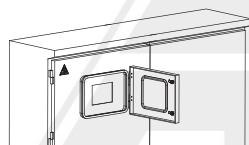
LIFTING HOOK

SS 316
Galvanized Iron

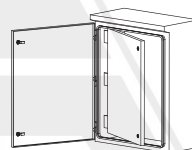
Additional Doors



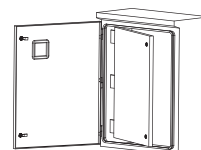
EXTERNAL HINGED DOOR
(SINGLE DOOR)



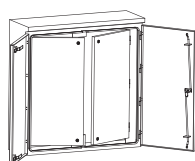
EXTERNAL HINGED DOOR
(SINGLE DOOR)



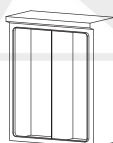
INTERNAL DOOR
(SINGLE DOOR)



INTERNAL DOOR
(METERING)

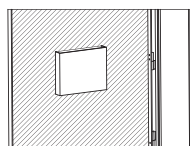


INTERNAL DOOR
(DOUBLE DOOR)

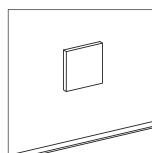


GRP PARTITION

Miscellaneous Add-ons



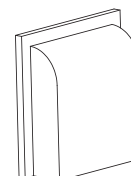
DRAWING POCKET



INTERNAL PADDING



EXTERNAL PADDING

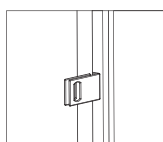


GRP HOOD



DRAIN

SS 316



PAD LOCK

SS 316
Aluminium