TIC GROUP

We Power Your Business!

TIC Modular System Co., Ltd

TIC Engineering Co., Ltd

TIC Electric Corporation Co., Ltd

MDB Type Test XEnergy, EDB, SDB, MCE, PB, MV Switchgear
Cable ladders. Cable trays. Wireways. Cable trunking. Pull boxes. Junction Boxes. acc.

MOELLER

EATON

Powering Business Worldwide

xEnergy

Electrical switchboards

Cable tray systems

Full pre/after service & Maintenance

About us

TIC is celebrating its 18th Anniversary!
1996 - TIC Modular formation
2000 - TIC Engineering was born
2009 - TIC Electric company realized

What we do

We Power your business!
TIC Modular Systems was established in 1996 and later blossomed into 3 layers to bring you the customer a full service experience in electrical design, manufacturing, maintenance and service. TIC is Thai owned and managed.

Registered Capital: 20 000 000 Baht
Plant Area : 11000 m2
Office Area : 1200 m2
Capacity/Mth : 150 M Baht

The Family

TIC MODULAR SYSTEMS CO., LTD
Electrical Switchboards designer and manufacturer. Varied product range consisting of:

MDB, EDM, SDB, MSB, MCCB, PB, MVSB, Forms 2-4 of indoor and outdoor components

TIC ENGINEERING CO., LTD
Design and manufacturing experts specializing in cable tray systems and paneling. Steel framed...

Cable ladders, Cable trays, Wireways, Cable trunking, Pull boxes, Junction boxes

TIC ELECTRIC CORPORATION CO., LTD
After sales Service and preventive maintenance specialist

Table of Content

TIC, who, where, what and why...

TIC was established to manufacture switchboards and control panels for the local commercial and industrial sector. It is Thai owned and managed.

TIC is functionally structured, systems oriented and supported by a team of professionals who take real pride in what they do and in the company they represent.

Our Mission is to not just put power where it needs to be but to go beyond and exceed the customers' expectations.
TIC strives to:
Smile
Bring quotations to you on time
Deliver products that meet all required specifications
Provide accurate as built drawings
Keep on budget
Deliver, install, train, and commission on time
Provide rapid and detailed response to support request

TIC remains dedicated to finding new and better ways to meet customer needs that go beyond general products specifications. Our sales and technical Engineers help assure the product meets both the code and expectations of the customer.

Workshop Facilities are Modern and highly automated, using CNC and MMC machines. With the use of this technology TIC offers exact precision likeness from the requested design.

Cable Systems and Paneling are constructed of BS standard sheet steel and surfaces are painted with an epoxy/polyester powder coat for protection against corrosion.

At TIC we take pride in bringing power from the grid and then forwarding it exactly to where you want it, how you want it and when you want it. Not only that, we pride ourselves on not just meeting the safety standards but exceeding them!

TIC maintains a very dedicated and professional team from the very time we meet and greet and exchange business cards to the time you call us back and say we need some customer service or a repair. That's more than enough to keep you with the TIC family however it doesn't stop there, read on.

xEnergy

Our Factory


E.T.N


MAIN-CB


TIC
TIC

TIC Team


Senior and Executive Management


Marketing Team


Sales Team


TIC eastern Team


We love our job!

TIC MODULAR SYSTEM CO.,LTD

Specialist in the design and manufacturing of electrical switchboards.
TIC modular products include:

Main Distribution Boards, Emergency Distribution Boards, Sub Distribution Boards, Motor Control Center Boards, low and medium voltage panels and switchboards, low voltage switch gear control and assemblies.

Licensed Type tested by Moeller Germany

Indoor and outdoor Panels

MDB, EMDB, DB

TIC ENGINEERING CO., LTD

Specialist in the design and manufacturing of Cable tray Systems

If you're seeking to deliver power safely and efficiently throughout buildings of any type, size or infrastructure then don't hesitate to call our team of professionals at TIC.

CABLE LADDER TYPE

STANDARD ; Refer to BS EN, ASTM, E.I.T, NEMA VE1, ISO

MATERIALS ; ☐ Hot Rolled Mild Steel Sheet

☐ Stainless Steel Sheet (LS Type)

FINISHING ; ☐ Painting by Electro-Static Spraying

with Epoxy/Polyester Powder Paint

Coating 60-80 µM. Thickness (LP Type)

PRE-TREATMENT ☐ Zinc Phosphate

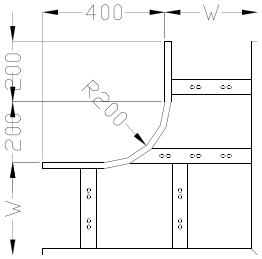
☐ Electroplated Zinc to BSEN 12329 (LEP Type)

☐ Hot-Dip Galvanized Average 55-65 µM Thickness to ISO 1461 or ASTM A123/A123M (LH Type)

TECHNICAL DATA

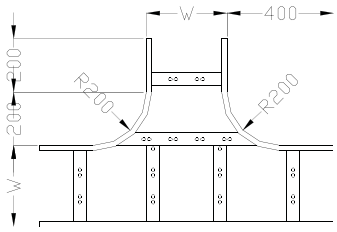
TYPE (WxHxL)	Thickness (mm.)	WEIGHT(kg./m.)			BENDING STRENGTH (kg.)		
		STRAIGHT	cover		SUPPORT DISTANCE (m.)		
			T=1.6 mm.	T=2.0 mm.	1.5 m.	2.0 m.	3.0 m.
200 x 100 x 3000	2.0	6.18	2.83	3.77	1371.75	1083.00	737.05
300 x 100 x 3000	2.0	6.68	4.00	5.34	1292.85	1020.50	695.25
400 x 100 x 3000	2.0	7.18	5.17	6.91	1220.00	963.80	656.60
500 x 100 x 3000	2.0	7.68	6.34	8.48	1167.45	921.95	628.75
600 x 100 x 3000	2.0	8.18	7.51	10.05	1105.20	872.95	595.75
700 x 100 x 3000	2.0	8.68	8.68	11.62	1022.40	801.95	545.90
800 x 100 x 3000	2.0	9.18	9.85	13.19	975.45	770.75	526.95
900 x 100 x 3000	2.0	9.68	11.02	14.76	912.45	720.50	488.60
1000 x 100 x 3000	2.0	10.18	12.19	16.33	849.00	671.50	456.65

90° Horizontal Bend



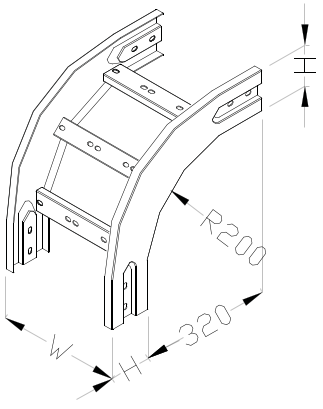
TYPE 90 HB (WxH)	THICKNESS (mm.)	WEIGHT (kg.)		
		FITTING	COVER	
			T=1.6 mm.	T=2.0 mm.
90 HB 200 x 100	2.0	6.16	3.08	4.12
90 HB 300 x 100	2.0	7.28	4.66	6.22
90 HB 400 x 100	2.0	8.99	6.48	8.64
90 HB 500 x 100	2.0	10.26	8.53	11.37
90 HB 600 x 100	2.0	12.42	10.81	14.41
90 HB 700 x 100	2.0	13.83	13.33	17.77
90 HB 800 x 100	2.0	15.25	16.09	21.45
90 HB 900 x 100	2.0	16.66	19.08	25.44
90 HB 1000 x 100	2.0	18.06	22.30	29.74

HORIZONTAL TEE



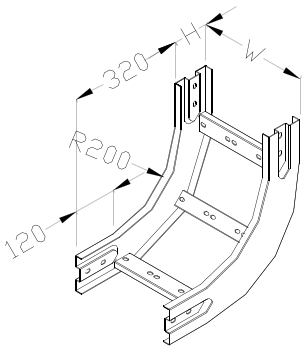
TYPE HT (WxH)	THICKNESS (mm.)	WEIGHT (kg.)		
		FITTING	COVER	
			T=1.6 mm.	T=2.0 mm.
HT 200 x 100	2.0	7.80	4.42	5.88
HT 300 x 100	2.0	9.26	6.45	8.58
HT 400 x 100	2.0	10.41	8.71	11.60
HT 500 x 100	2.0	11.57	11.20	14.94
HT 600 x 100	2.0	18.61	13.94	18.57
HT 700 x 100	2.0	14.92	16.90	22.53
HT 800 x 100	2.0	17.42	20.11	26.80
HT 900 x 100	2.0	18.87	23.54	31.38
HT 1000 x 100	2.0	20.32	27.22	36.28

90° VERTICAL OUTSIDE BEND



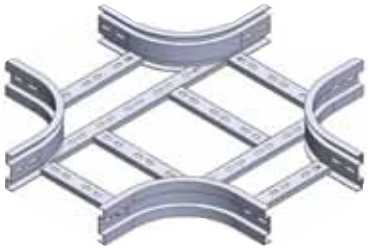
TYPE 90 VO (WxH)	THICKNESS (mm.)	WEIGHT (kg.)		
		FITTING	COVER	
			T=1.6 mm.	T=2.0 mm.
90 VO 200 x 100	2.0	4.92	2.09	2.62
90 VO 300 x 100	2.0	5.37	2.97	3.71
90 VO 400 x 100	2.0	5.82	3.85	4.80
90 VO 500 x 100	2.0	6.27	4.73	5.89
90 VO 600 x 100	2.0	6.72	5.61	6.98
90 VO 700 x 100	2.0	7.17	6.49	8.07
90 VO 800 x 100	2.0	7.62	7.37	9.16
90 VO 900 x 100	2.0	8.07	8.25	10.25
90 VO 1000 x 100	2.0	8.52	9.13	11.34

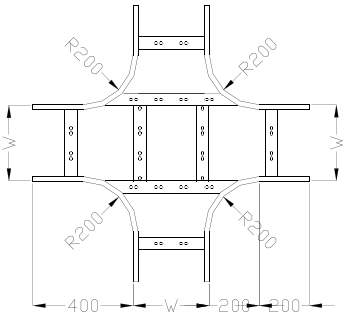
90° VERTICAL INSIDE BEND



TYPE 90 VI (WxH)	THICKNESS (mm.)	WEIGHT (kg.) FITTING	COVER T=1.6 mm.	COVER T=2.0 mm.
90 VI 200 x 100	2.0	4.92	1.63	2.04
90 VI 300 x 100	2.0	5.37	2.31	2.88
90 VI 400 x 100	2.0	5.82	2.99	3.72
90 VI 500 x 100	2.0	6.27	3.67	4.56
90 VI 600 x 100	2.0	6.72	4.35	5.40
90 VI 700 x 100	2.0	7.17	5.03	6.24
90 VI 800 x 100	2.0	7.62	5.71	7.03
90 VI 900 x 100	2.0	8.07	6.39	7.92
90 VI 1000 x 100	2.0	8.52	7.07	8.76

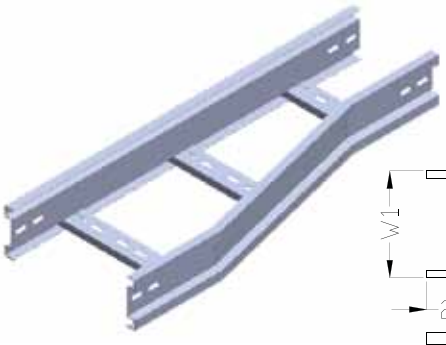
HORIZONTAL CROSS

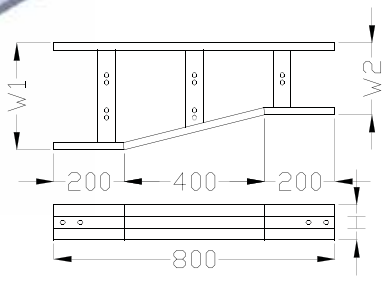




TYPE HX (WxH)	THICKNESS (mm.)	WEIGHT (kg.) FITTING	COVER T=1.6 mm.	COVER T=2.0 mm.
HX 200 x 100	2.0	9.45	5.78	8.01
HX 300 x 100	2.0	10.94	8.49	11.31
HX 400 x 100	2.0	12.13	11.20	14.91
HX 500 x 100	2.0	13.33	14.14	18.84
HX 600 x 100	2.0	15.41	17.32	23.08
HX 700 x 100	2.0	16.76	20.73	27.64
HX 800 x 100	2.0	19.29	24.38	32.50
HX 900 x 100	2.0	20.78	28.27	37.68
HX 1000 x 100	2.0	22.27	32.39	43.18

HORIZONTAL REDUCE





TYPE HR (WxH)	THICKNESS (mm.)	WEIGHT (kg.) FITTING	COVER T=1.6 mm.	COVER T=2.0 mm.
HR 300,W2 x 100	2.0	5.34	2.83	3.77
HR 400,W2 x 100	2.0	5.79	3.71	5.02
HR 500,W2 x 100	2.0	6.23	4.71	6.27
HR 600,W2 x 100	2.0	6.68	5.45	7.52
HR 700,W2 x 100	2.0	7.13	6.19	8.77
HR 800,W2 x 100	2.0	7.58	6.93	10.02
HR 900,W2 x 100	2.0	8.03	7.67	11.27
HR 1000,W2 x 100	2.0	8.43	8.41	12.52

FITTING FOR CABLE TRAY

STANDARD ; Refer to BS EN, ASTM, E.I.T, NEMA VE1, ISO

MATERIALS ; ☐ Cold Rolled Mild Steel Sheet

☐ Hot Rolled Mild Steel Sheet

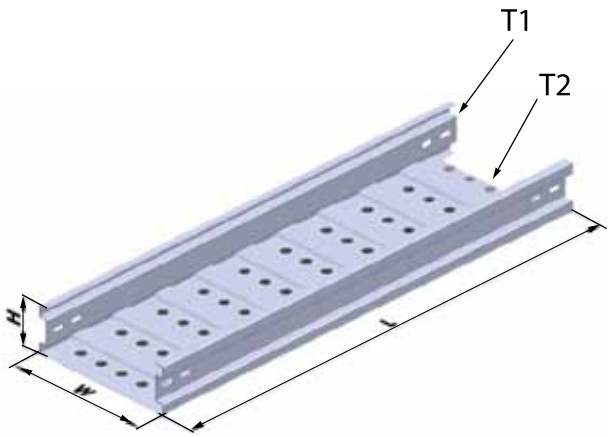
☐ Stainless Steel Sheet (VS Type)

FINISHING ; ☐ Painting by Electro-Static Spraying with Epoxy/Polyester Powder Paint Coating 60-80 µM. Thickness (VP Type)

PRE-TREATMENT ☐ Zinc Phosphate

☐ Electroplated Zinc to BSEN 12329

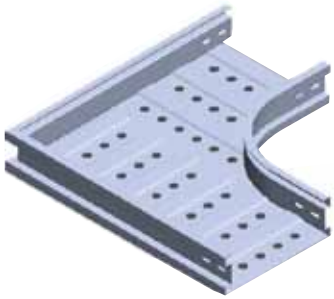
☐ Hot-Dip Galvanized Average 55-65 µM Thickness to ISO 1461 or ASIM A123/A123M (LH Type)

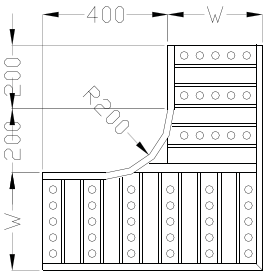


TECHNICAL DATA

TYPE (WxHxL)	Thickness T1/T2 (mm.)	WEIGHT(kg./m.)			BENDING STRENGTH (kg.)		
		STRAIGHT	cover		SUPPORT DISTANCE (m.)		
			T=1.6 mm.	T=2.0 mm.	1.5 m.	2.0 m.	3.0 m.
200 x 100 x 2440	1.6/1.2	5.52	2.83	3.77	1205.50	928.00	638.95
300 x 100 x 2440	1.6/1.2	6.34	4.00	5.34	1367.35	1079.95	726.70
400 x 100 x 2440	1.6/1.2	7.16	5.17	6.91	1450.80	1146.15	769.85
500 x 100 x 2440	1.6/1.2	7.98	6.34	8.48	1512.65	1202.10	806.45
600 x 100 x 2440	2.0/1.6	12.55	7.51	10.05	1605.20	1268.11	850.00
700 x 100 x 2440	2.0/1.6	13.78	8.68	11.62	1735.35	1370.90	919.75
800 x 100 x 2440	2.0/1.6	15.01	9.85	13.19	1842.10	1455.50	976.35
900 x 100 x 2440	2.0/1.6	16.24	11.02	14.76	1960.70	1548.95	1039.15
1000 x 100 x 2440	2.0/1.6	17.47	12.19	16.33	2065.20	1631.50	1096.55

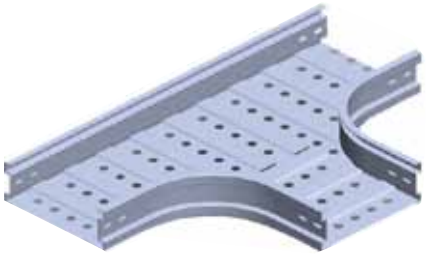
90° HORIZONTAL BEND

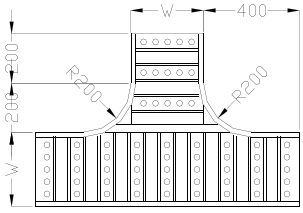




TYPE 90 HB (WxH)	THICKNESS T1/T2 (mm.)	WEIGHT (kg.)		
		FITTING	COVER	
			T=1.6 mm.	T=2.0 mm.
90 HB 200 x 100	1.6/1.2	5.79	3.08	4.12
90 HB 300 x 100	1.6/1.2	7.25	4.66	6.22
90 HB 400 x 100	1.6/1.2	8.88	6.48	8.64
90 HB 500 x 100	1.6/1.2	10.68	8.53	11.37
90 HB 600 x 100	2.0/1.6	17.42	10.81	14.41
90 HB 700 x 100	2.0/1.6	20.58	13.37	17.77
90 HB 800 x 100	2.0/1.6	23.98	16.09	21.45
90 HB 900 x 100	2.0/1.6	27.66	19.08	25.44
90 HB 1000 x 100	2.0/1.6	31.60	22.30	29.74

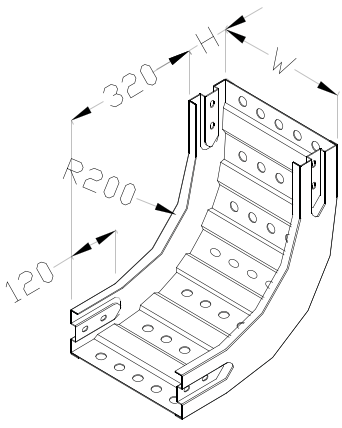
HORIZONTAL TEE





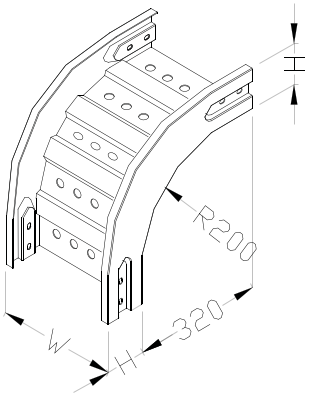
TYPE HT (WxH)	THICKNESS T1/T2 (mm.)	WEIGHT (kg.)		
		FITTING	COVER	
			T=1.6 mm.	T=2.0 mm.
HT 200 x 100	1.6/1.2	7.91	4.42	5.87
HT 300 x 100	1.6/1.2	9.55	6.45	8.58
HT 400 x 100	1.6/1.2	11.40	8.71	19.60
HT 500 x 100	1.6/1.2	13.45	11.20	14.94
HT 600 x 100	2.0/1.6	21.30	13.94	22.53
HT 700 x 100	2.0/1.6	24.96	16.90	22.53
HT 800 x 100	2.0/1.6	28.93	20.11	26.80
HT 900 x 100	2.0/1.6	33.21	23.54	31.38
HT 1000 x 100	2.0/1.6	37.79	27.22	36.28

90° VERTICAL INSIDE BEND



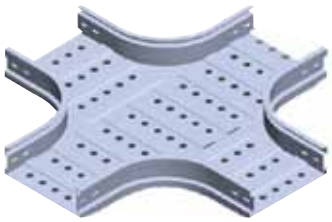
TYPE 90 VI (WxH)	THICKNESS T1/T2 (mm.)	WEIGHT (kg.)		
		FITTING	COVER	
			T=1.6 mm.	T=2.0 mm.
90 VI 200 x 100	1.6/1.2	5.15	1.63	2.04
90 VI 300 x 100	1.6/1.2	5.72	2.31	2.88
90 VI 400 x 100	1.6/1.2	6.29	2.99	3.72
90 VI 500 x 100	1.6/1.2	6.86	3.67	4.56
90 VI 600 x 100	2.0/1.6	9.10	4.35	5.40
90 VI 700 x 100	2.0/1.6	9.95	5.03	6.24
90 VI 800 x 100	2.0/1.6	10.79	5.71	7.08
90 VI 900 x 100	2.0/1.6	11.63	6.39	7.92
90 VI 1000 x 100	2.0/1.6	12.47	7.07	8.76

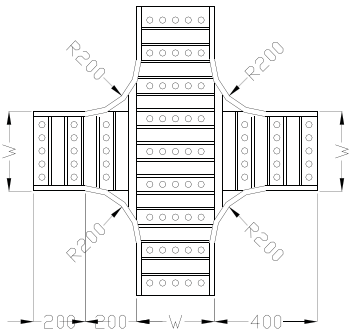
90° VERTICAL OUTSIDE BEND



TYPE 90VO (WxH)	THICKNESS T1/T2 (mm.)	WEIGHT (kg.)		
		FITTING	COVER	
			T=1.6 mm.	T=2.0 mm.
90VO 200 x 100	1.6/1.2	4.90	2.09	2.62
90VO 300 x 100	1.6/1.2	5.34	2.97	3.71
90VO 400 x 100	1.6/1.2	5.78	3.85	4.80
90VO 500 x 100	1.6/1.2	6.22	4.37	5.89
90VO 600 x 100	2.0/1.6	7.98	5.61	6.98
90VO 700 x 100	2.0/1.6	8.64	6.49	8.07
90VO 800 x 100	2.0/1.6	9.30	7.37	9.16
90VO 900 x 100	2.0/1.6	9.96	8.25	10.25
90VO 1000 x 100	2.0/1.6	10.62	9.13	11.34

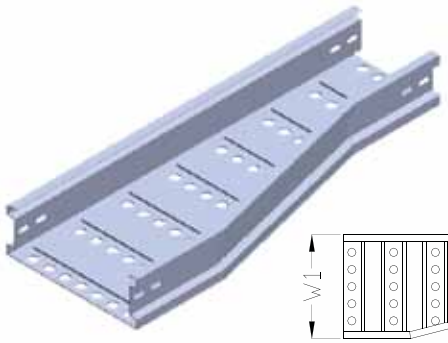
HORIZONTAL CROSS

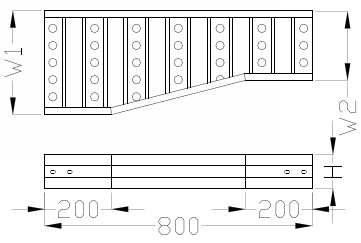




TYPE HX (WxH)	THICKNESS T1/T2 (mm.)	WEIGHT (kg.)		
		FITTING	COVER	
			T=1.6 mm.	T=2.0 mm.
HX 200 x 100	1.6/1.2	10.34	5.78	8.01
HX 300 x 100	1.6/1.2	12.14	8.49	11.31
HX 400 x 100	1.6/1.2	14.14	11.20	14.91
HX 500 x 100	1.6/1.2	16.35	14.14	18.84
HX 600 x 100	2.0/1.6	24.46	17.32	23.08
HX 700 x 100	2.0/1.6	28.38	20.73	27.64
HX 800 x 100	2.0/1.6	32.61	24.38	32.50
HX 900 x 100	2.0/1.6	37.14	28.27	37.68
HX 1000 x 100	2.0/1.6	41.98	32.39	43.18

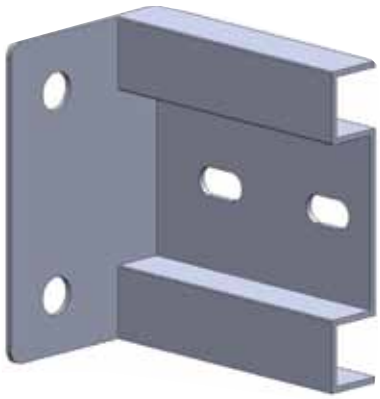
HORIZONTAL REDUCE

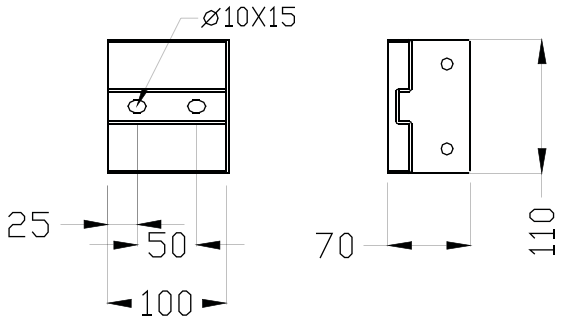




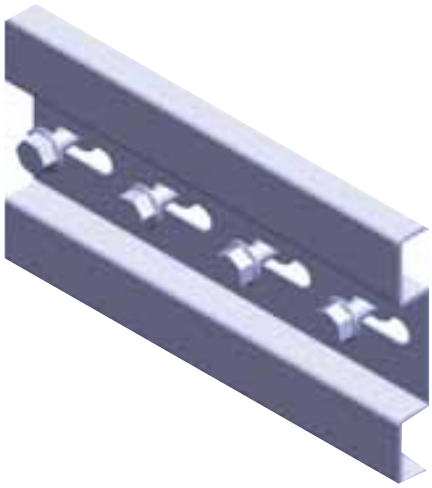
TYPE HR (W1,W2X100)	THICKNESS T1/T2 (mm.)	WEIGHT (kg.)		
		FITTING	COVER	
			T=1.6 mm.	T=2.0 mm.
HR 300,W2 x 100	1.6/1.2	4.80	2.83	3.77
HR 400,W2 x 100	1.6/1.2	5.45	3.77	5.02
HR 500,W2 x 100	1.6/1.2	6.10	4.71	6.27
HR 600,W2 x 100	2.0/1.6	6.55	5.45	7.52
HR 700,W2 x 100	2.0/1.6	10.58	6.19	8.77
HR 800,W2 x 100	2.0/1.6	11.56	6.93	10.02
HR 900,W2 x 100	2.0/1.6	12.54	7.67	11.27
HR 1000,W2 x 100	2.0/1.6	13.52	8.41	12.52

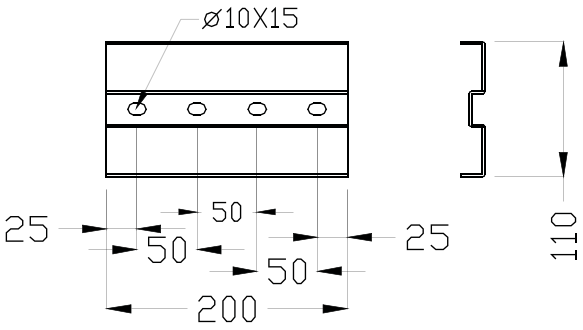
FLANGE END



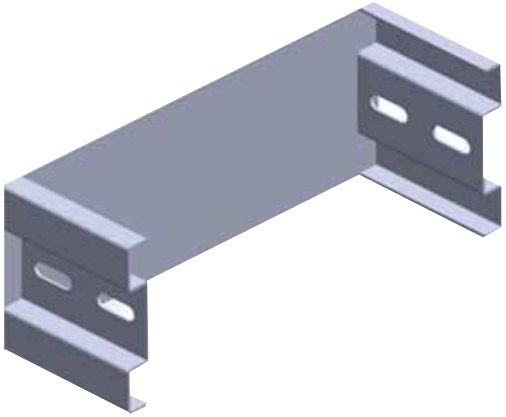


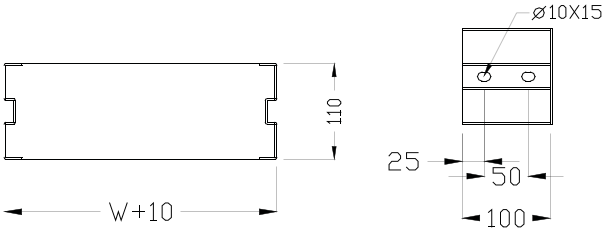
SPLICE PLATE



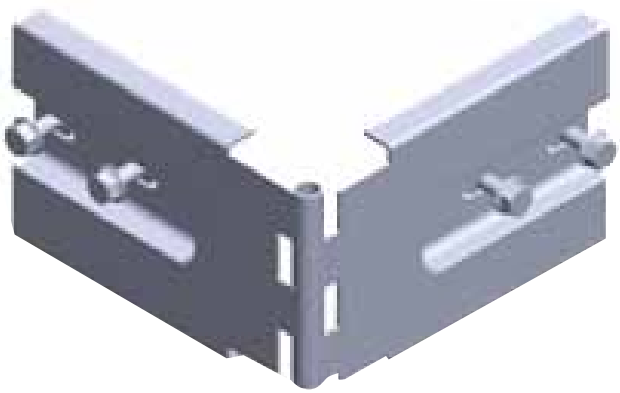


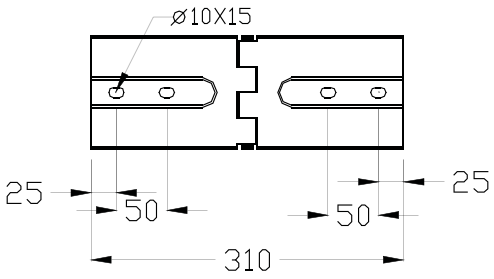
END CAP



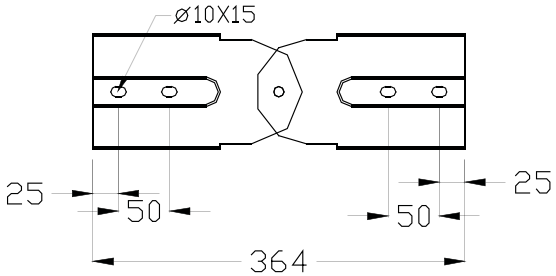


HORIZONTAL ADJUSTABLE





VERTICAL ADJUSTABLE



STEEL WIREWAY WITH COVER

STANDARD ; Refer to BS EN, ASTM, E.I.T, NEMA VE1, ISO

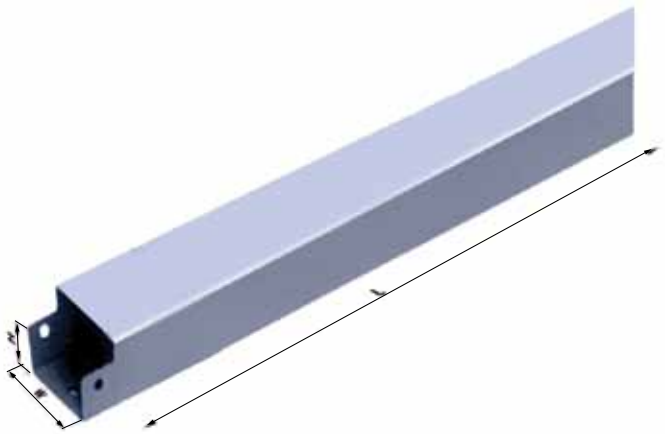
MATERIALS ; ☐ Cold Rolled Mild Steel Sheet

☐ Hot Rolled Mild Steel Sheet

☐ Galvanized Steel Sheet (WG Type)

☐ Aluzinc Steel Sheet (WAL Type)

☐ Stainless Steel Sheet (VS Type)



FINISHING ; ☐ Painting by Electro-Static Spraying

with Epoxy/Polyester Powder Paint

Coating 60-80 µM. Thickness (VP Type)

PRE-TREATMENT ☐ Zinc Phosphate

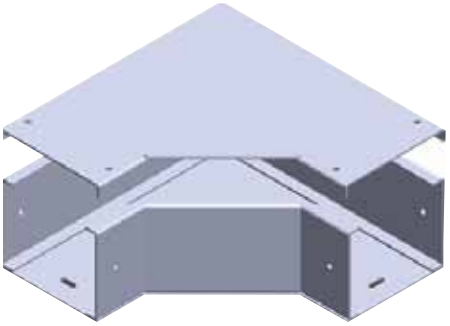
☐ Electroplated Zinc to BSEN 12329 (WEP Type)

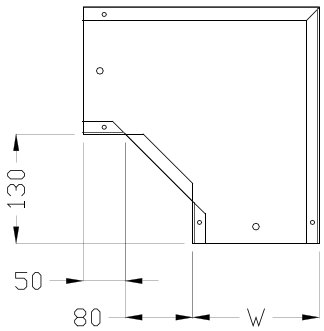
☐ Hot-Dip Galvanized Average 55-65 µM Thickness to ASTM A123/A123M (WH Type)

TECHNICAL DATA

TYPE (W x H x L)	BENDING STRENGTH (Kg.)											
	STEEL SHEET THICKNESS (mm.)											
	1.0			1.2			1.6			2.0		
	WEIGHT (Kg./m.)	S.D.(m.)		WEIGHT (Kg./m.)	S.D.(m.)		WEIGHT (Kg./m.)	S.D.(m.)		WEIGHT (Kg./m.)	S.D.(m.)	
		1.5	2.0		1.5	2.0		1.5	2.0		1.5	2.0
75 x 50 x 2440	2.37	276.55	221.25	2.85	370.50	296.40	3.56	583.35	452.20	4.74	906.80	687.80
100 x 50 x 2440	2.76	318.25	254.60	3.32	408.50	326.80	4.15	632.10	490.00	5.53	971.85	725.50
100 x 75 x 2440	3.16	349.50	277.40	3.79	463.35	369.35	4.73	695.30	539.00	6.31	1009.20	767.60
100 x 100 x 2440	3.55	387.00	305.00	4.26	500.80	395.20	5.32	749.95	581.35	7.10	1067.45	798.75
150 x 100 x 2440	4.33	395.00	334.40	5.20	562.00	443.70	6.33	796.30	627.00	8.78	1105.85	817.70
200 x 100 x 2440	5.12	418.00	357.20	6.14	602.15	477.90	7.68	852.95	661.20	10.24	1197.65	921.30
250 x 100 x 2440	-	-	-	7.08	645.17	514.70	8.86	884.90	696.80	11.81	1265.50	980.40
300 x 100 x 2440	-	-	-	8.02	690.97	554.88	10.04	930.85	743.65	13.38	1326.10	1012.50
350 x 100 x 2440	-	-	-	8.96	736.77	595.06	11.22	987.45	785.40	14.95	1377.45	1067.80
400 x 100 x 2440	-	-	-	9.9	782.57	635.24	12.40	1046.35	823.90	16.52	1419.95	1113.40
450 x 100 x 2440	-	-	-	10.84	828.37	675.42	13.58	1076.20	847.40	18.09	1482.60	1128.50
500 x 100 x 2440	-	-	-	-	-	-	14.76	1134.80	900.00	19.66	1530.70	1188.00

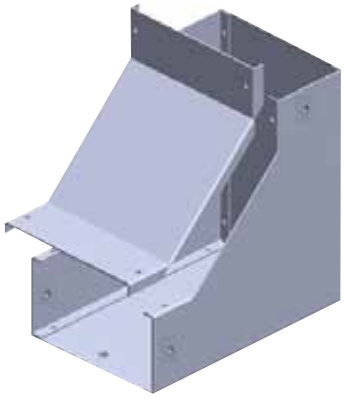
90° HORIZONTAL BEND WITH COVER

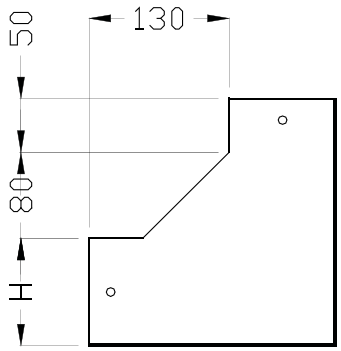




TYPE 90 HB (WxH)	WEIGHT (kg.) THICKNESS (mm.)			
	1.0	1.2	1.6	2.0
90 HB 75 x 50	0.35	0.42	0.56	0.70
90 HB 100 x 50	0.43	0.52	0.69	0.86
90 HB 100 x 75	0.58	0.70	0.93	1.16
90 HB 100 x 100	0.69	0.83	1.10	1.38
90 HB 150 x 100	0.96	1.15	1.51	1.89
90 HB 200 x 100	1.24	1.49	1.98	2.48
90 HB 250 x 100	-	1.89	2.52	3.15
90 HB 300 x 100	-	2.33	3.11	3.89
90 HB 350 x 100	-	-	3.77	4.72
90 HB 400 x 100	-	-	4.49	5.62
90 HB 450 x 100	-	-	5.28	6.60
90 HB 500 x 100	-	-	6.14	7.66

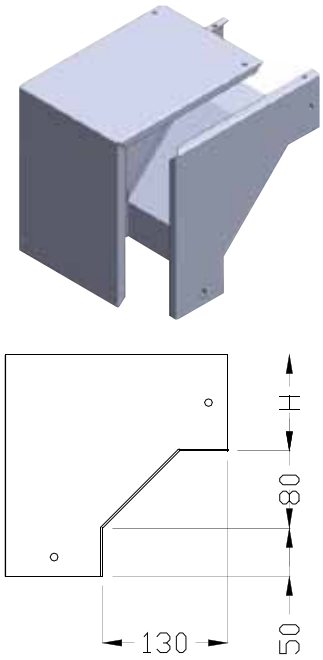
90° VERTICAL INSIDE BEND WITH COVER





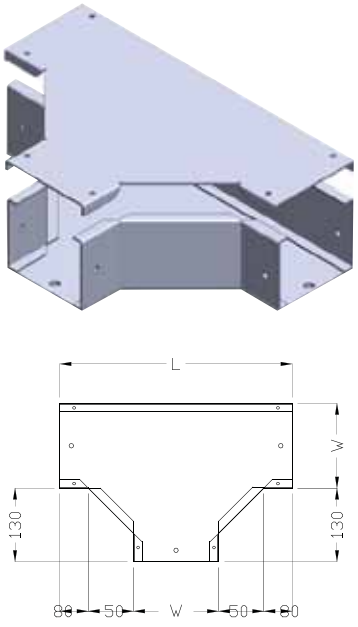
TYPE 90 VI (WxH)	WEIGHT (kg.) THICKNESS (mm.)			
	1.0	1.2	1.6	2.0
90 VI 75 x 50	0.70	0.84	1.13	1.49
90 VI 100 x 50	0.82	0.98	1.31	1.64
90 VI 100 x 75	1.13	1.36	1.80	2.23
90 VI 100 x 100	1.35	1.62	2.17	2.71
90 VI 150 x 100	1.62	1.94	2.60	3.35
90 VI 200 x 100	1.89	2.27	3.03	3.79
90 VI 250 x 100	-	2.60	3.46	4.33
90 VI 300 x 100	-	2.91	3.90	4.87
90 VI 350 x 100	-	-	4.33	5.42
90 VI 400 x 100	-	-	4.96	5.96
90 VI 450 x 100	-	-	5.20	6.50
90 VI 500 x 100	-	-	5.63	7.04

90° VERTICAL OUTSIDE BEND WITH COVER



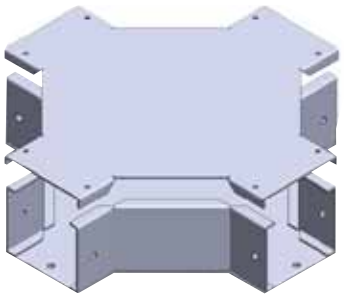
TYPE 90 VO (WxH)	WEIGHT (kg.) THICKNESS (mm.)			
	1.0	1.2	1.6	2.0
90 VO 75 x 50	0.70	0.84	1.13	1.49
90 VO 100 x 50	0.82	0.98	1.31	1.64
90 VO 100 x 75	1.13	1.36	1.80	2.25
90 VO 100 x 100	1.35	1.62	2.17	2.71
90 VO 150 x 100	1.62	1.94	2.60	3.35
90 VO 200 x 100	1.89	2.27	3.03	3.79
90 VO 250 x 100	-	2.60	3.46	4.33
90 VO 300 x 100	-	2.91	3.90	4.87
90 VO 350 x 100	-	-	4.33	5.42
90 VO 400 x 100	-	-	4.76	5.96
90 VO 450 x 100	-	-	5.20	6.50
90 VO 500 x 100	-	-	5.63	7.04

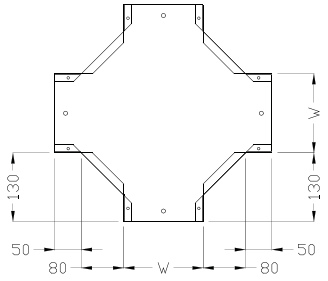
HORIZONTAL TEE WITH COVER



TYPE HT (WxH)	WEIGHT (kg.) THICKNESS (mm.)			
	1.0	1.2	1.6	2.0
HT 75 X 50	1.31	1.57	2.09	2.62
HT 100 X 50	1.55	1.87	2.48	3.10
HT 100 X 75	1.76	2.11	2.82	3.53
HT 100 X 100	1.94	2.33	3.10	3.87
HT 150 X 100	2.49	2.99	3.99	4.98
HT 200 X 100	3.12	3.74	4.99	6.25
HT 250 X 100	-	4.50	6.00	7.50
HT 300 X 100	-	5.44	7.25	9.08
HT 350 X 100	-	-	8.65	10.84
HT 400 X 100	-	-	10.16	12.70
HT 450 X 100	-	-	11.80	14.75
HT 500 X 100	-	-	13.57	16.96

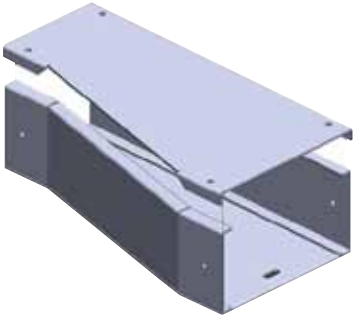
HORIZONTAL CROSS WITH COVER

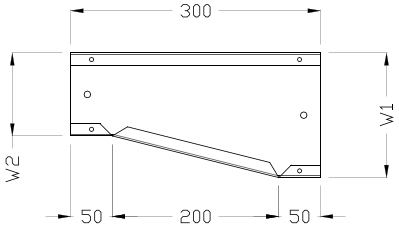




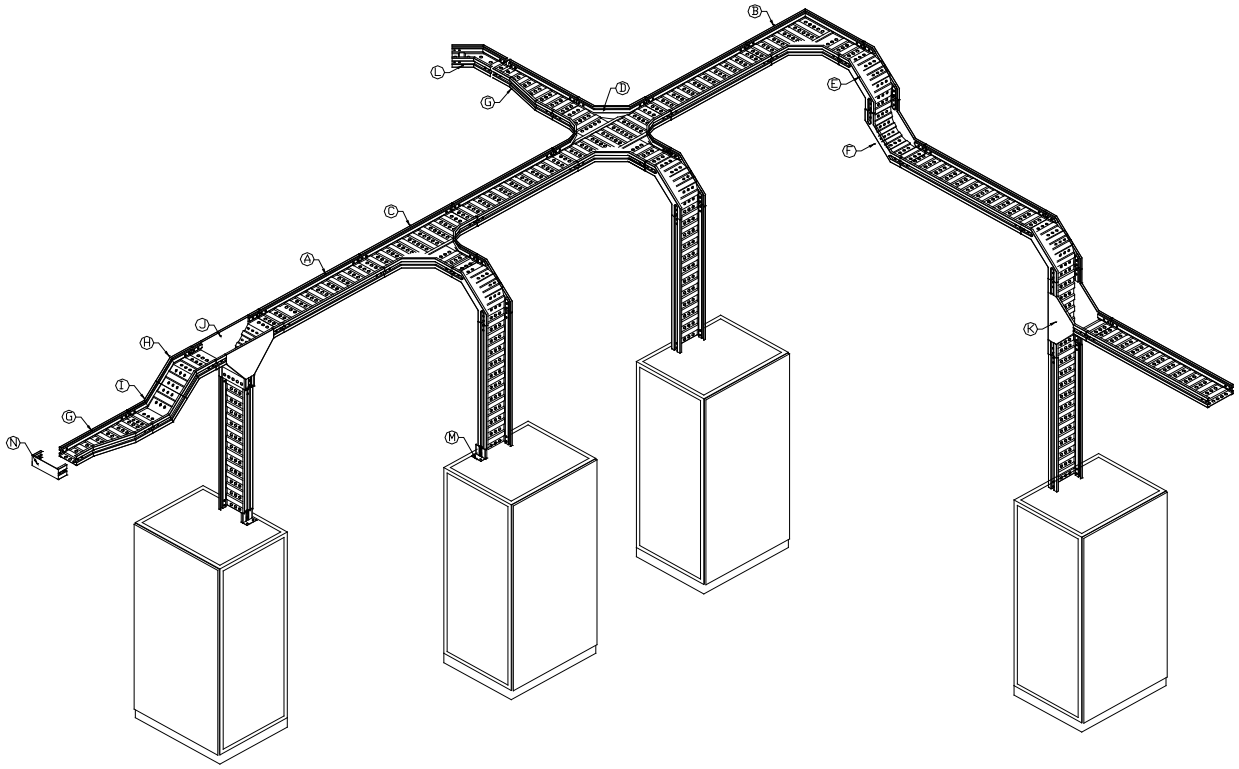
TYPE HX (WxH)	WEIGHT (kg.) THICKNESS (mm.)			
	1.0	1.2	1.6	2.0
HX 75 X 50	1.80	2.16	2.88	3.60
HX 100 X 50	2.08	2.50	3.32	4.15
HX 100 X 75	2.37	2.84	3.79	4.74
HX 100 X 100	2.57	3.08	4.11	5.14
HX 150 X 100	3.18	3.82	5.08	6.35
HX 200 X 100	3.86	4.65	6.17	7.72
HX 250 X 100	-	5.35	7.13	8.91
HX 300 X 100	-	6.35	8.47	10.59
HX 350 X 100	-	-	9.94	12.43
HX 400 X 100	-	-	11.54	14.42
HX 450 X 100	-	-	13.26	16.57
HX 500 X 100	-	-	15.16	18.88

HORIZONTAL REDUCE WITH COVER

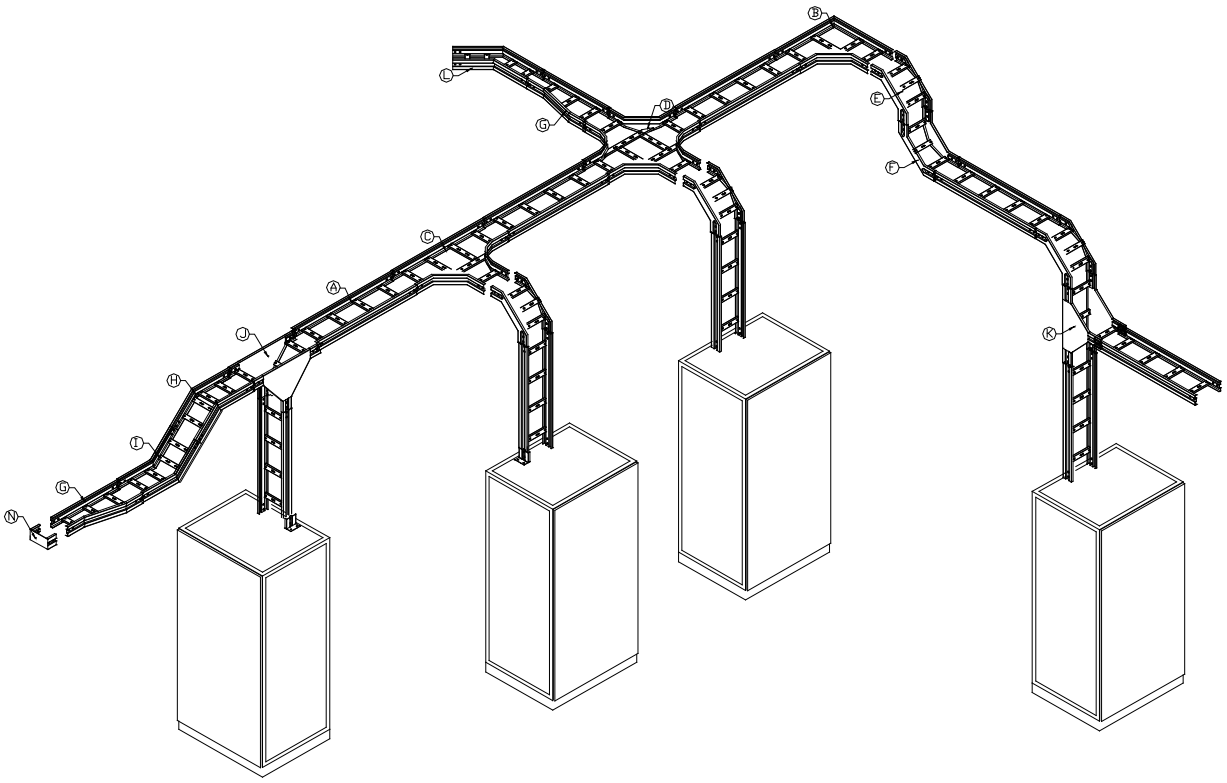




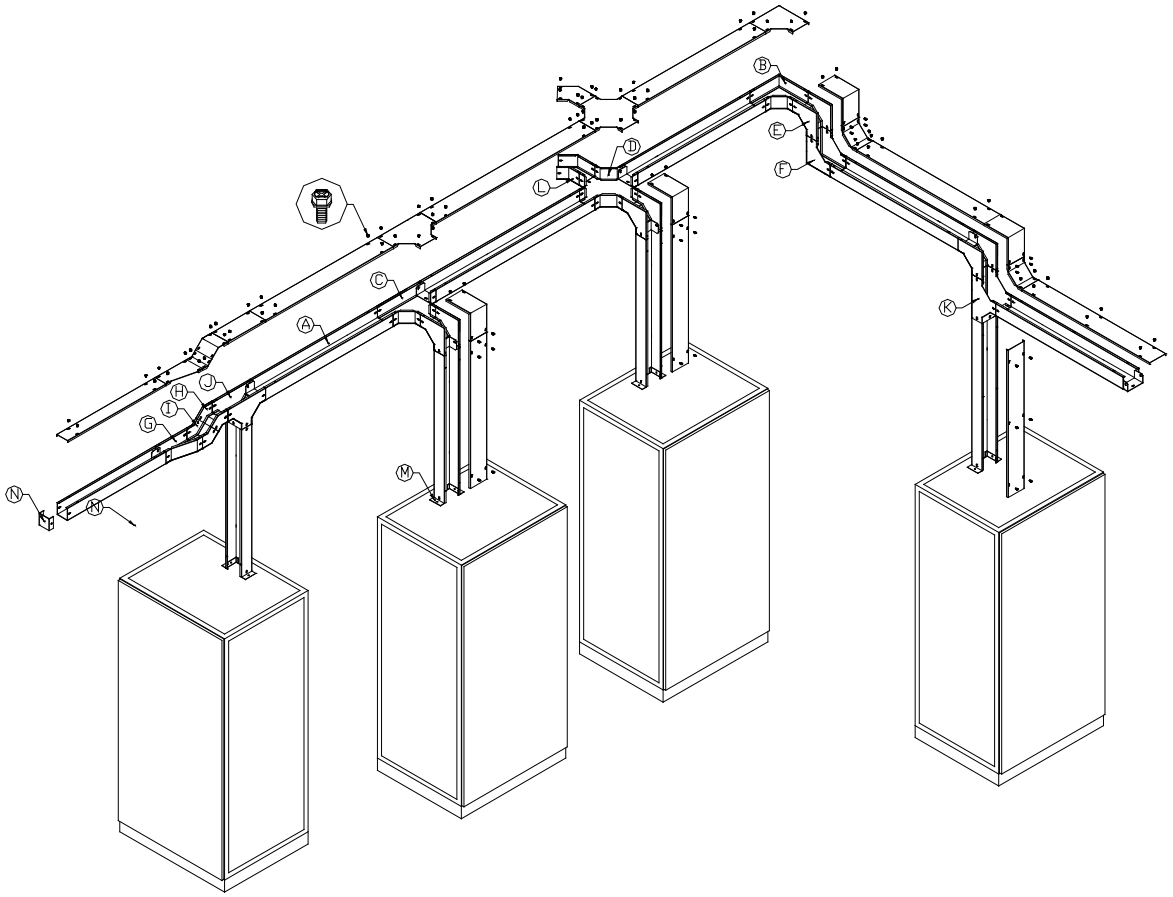
TYPE HR (WxH)	WEIGHT (kg.) THICKNESS (mm.)			
	1.0	1.2	1.6	2.0
HR 100, 75 X 50	0.54	0.65	0.81	1.08
HR 150,100 X 100	0.85	1.02	1.28	1.70
HR 200,W2 X 100	1.00	1.20	1.50	2.00
HR 250,W2 X 100	-	1.31	1.75	2.33
HR 300,W2 X 100	-	1.50	2.00	2.66
HR 350,W2 X 100	-	-	2.25	2.99
HR 400,W2 X 100	-	-	2.50	3.52
HR 450,W2 X 100	-	-	2.75	3.61
HR 500,W2 X 100	-	-	3.00	3.97



ITEM	SPECIFICATION
Ⓐ	STEEL CABLE TRAY
Ⓑ	90° HORIZONTAL BEND
Ⓒ	HORIZONTAL TEE
Ⓓ	HORIZONTAL CROSS
Ⓔ	90° VERTICAL OUTSIDE BEND
Ⓕ	90° VERTICAL INSIDE BEND
Ⓖ	HORIZONTAL REDUCE
Ⓗ	45° VERTICAL OUTSIDE BEND
Ⓘ	45° VERTICAL INSIDE BEND
Ⓙ	VERTICAL TEE BEND
Ⓚ	VERTICAL TEE BEND
Ⓛ	45° HORIZONTAL BEND
Ⓜ	FLANG END
Ⓝ	END CAP



ITEM	SPECIFICATION
Ⓐ	STEEL CABLE LADDER
Ⓑ	90° HORIZONTAL BEND
Ⓒ	HORIZONTAL TEE
Ⓓ	HORIZONTAL CROSS
Ⓔ	90° VERTICAL OUTSIDE BEND
Ⓕ	90° VERTICAL INSIDE BEND
Ⓖ	HORIZONTAL REDUCE
Ⓗ	45° VERTICAL OUTSIDE BEND
Ⓘ	45° VERTICAL INSIDE BEND
Ⓙ	VERTICAL TEE BEND
Ⓚ	VERTICAL TEE BEND
Ⓛ	45° HORIZONTAL BEND
Ⓜ	FLANG END
Ⓝ	END CAP



ITEM	SPECIFICATION
Ⓐ	STEEL WIREWAY WITH COVER
Ⓑ	90° HORIZONTAL BEND WITH COVER
Ⓒ	HORIZONTAL TEE WITH COVER
Ⓓ	HORIZONTAL CROSS WITH COVER
Ⓔ	90° VERTICAL OUTSIDE BEND WITH COVER
Ⓕ	90° VERTICAL INSIDE BEND WITH COVER
Ⓖ	HORIZONTAL REDUCE WITH COVER
Ⓗ	45° VERTICAL OUTSIDE BEND WITH COVER
Ⓘ	45° VERTICAL INSIDE BEND WITH COVER
Ⓙ	VERTICAL TEE BEND WITH COVER
Ⓚ	VERTICAL TEE BEND WITH COVER
Ⓛ	45° HORIZONTAL BEND WITH COVER
Ⓜ	FLANG END
Ⓝ	END CAP

TIC ELECTRIC CORPORATION CO., LTD

SERVICE &MAINTENANCE

THERMOGRAPHY

POWER MEASURING & HARMONICS

COPPER BUSBAR INSPECTION NUT, BOLT, SCREW

SWITCHBOARD CLEANING

CIRCUIT BREAKER INSPECTION

CAPACITOR INSPECTION

INSULATOR INSPECTION

BUSBAR SUPPORT INSPECTION

BREAKER CLEANING

TIC Provides service and maintenance around the clock! 24 hours 7 days a week

Quality Assurance & Quality Control

TIC's QC team is the backbone of the perfect product delivery. Their attention and focus on detail assures high safety, power efficiency and a long lasting product with minimal or no downtime.

Quality Control
Routine Test
According to IEC 60439-1 Standard
1. Wiring, electrical operation
(by inspection and test)
2. Insulation (Dielectric test)
3. Protective measures
4. Insulation resistance
Type Test and Partially Type Test
According to IEC 60439-1 standard
(By 3rd party)
1. Temperature rise limits
2. Dielectric properties
3. Short circuit withstand strength
4. Effectiveness of the protective circuit
5. Clearance and creepage distance
6. Mechanical operation
7. Degree of protection
8. All service and products provided to the following industrials are designed, Built or installed per the client's specifications and or drawings. Our warranties cover "Doing the job in a workmanship manner and in accordance to IEC standard specific to the project or product".
9. All products fabricated and assembled in our shop are custom made per the client's directions.
10. Service control company does not provide standard manufactured products of its own design except for enclosures fabricated to IEC 60439-1 enclosure standards.

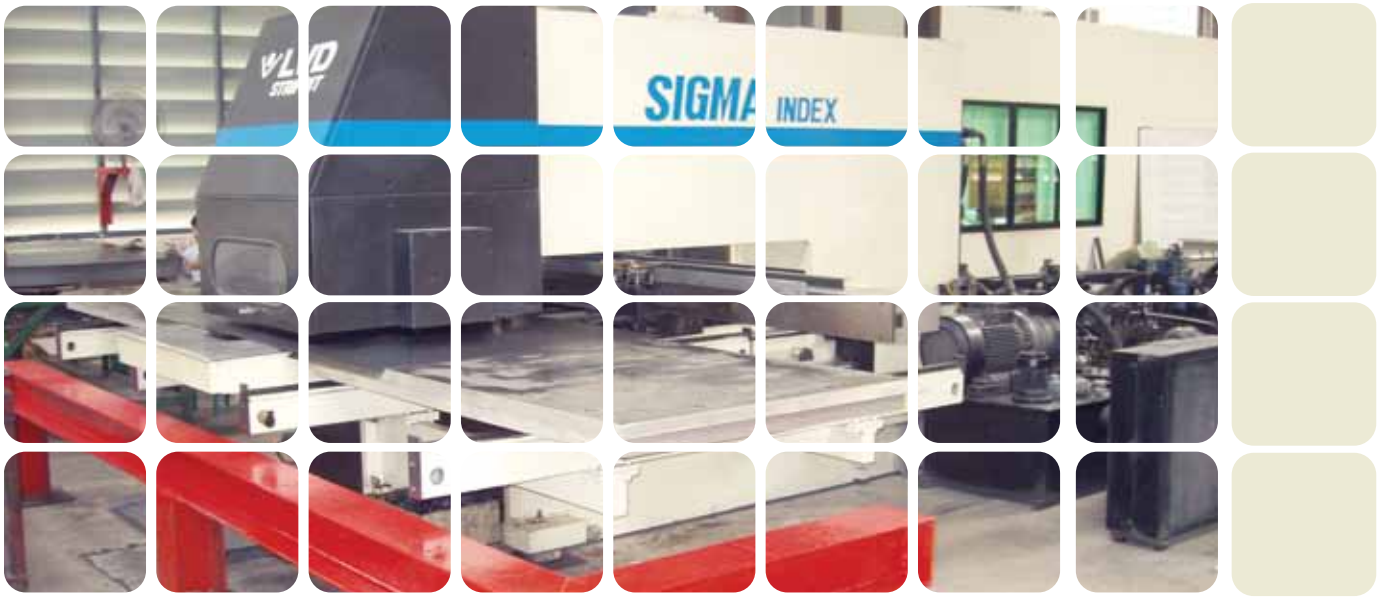
Service & Maintenance






TIC Provides service and maintenance around the clock! 24 hours 7 days a week

Quality Craftsmanship!



CNC Machine

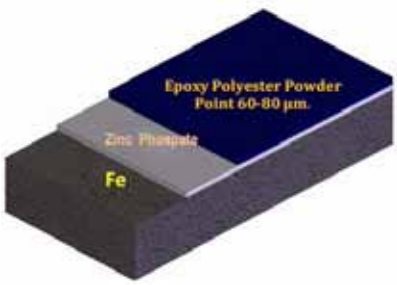
Workshop facilities are modern and highly automated, using CNC and MNC machines offering exact precision likeness from the requested design.

Cable tray systems and Paneling are constructed of BS standard sheet steel and surfaces are painted with and EPOXY/POLYESTER POWDER COAT for protection against corrosion.

Automatic Electrostatic Powder Paint

Epoxy Polyester Power Paint 60-80 microns

Zinc Phosphate



PROPERTIES	STANDARD	EPOXY-POLYSTER(M)
Film thickness(micron)		Avg. 60-80
Impact resistance(kg.-cm.)	ASTM D2794(5/8'bal)	Over 60 kg.-cm
Erichsen test (mm.)	ISO 1520	6 mm.
Bend test (mm.)	ISO 1519	6 mm.
Pencil hardness	ASTM 3363	Over H
Adhesion	ISO 2409	Gt 0 (No loss of adhesion)
Weather resistance		Little of no (chalking)
Heat resistance		Good
Corrosion protecion (zinc phosphated steel)	Salt spray 1500 h. (ASTM B 117)	Rust and Blister should be with in 2 mm.x line
Density (kg/dm^3)		1.20-1.70

EPOXY POLYSTER POWDER COATING is a thermosetting powder coating based on epoxy and polyester resin (hybrid system) offering many gloss levels (5-100%), good flow, good over bake resistance, good resistance to water and detergents and ultra-violet resistance.

Epoxy-polyester coatings provide hard film surfaces. They adhere better to most metal surface, and cover edges and recessed areas more uniformly since they employ the electrostatic spraying system. Epoxy-polyester powder coatings do not produce pin holes or solvent blisters since there is no solvent evaporation during the baking process.

Certificates & Licensing

Certificate of Registration

MOODY INTERNATIONAL

This is to certify that the Quality Management System of:

TIC MODULAR SYSTEM CO., LTD.

99/8 Moo 12, Phutthamonthon 5 Road, Ratking, Sampran, Nakornpathom, 73210 Thailand

has been assessed and found compliant with the requirements of

ISO 9001:2000

Certification Scope:

MANUFACTURE OF ELECTRICAL POWER CONTROL BOARDSAND PANELS.

Certificate No. 6045

Issue Date: 10th May 2007

Expiry Date: 28th January 2010

Authorised Signatory

Moody International Certification Ltd.

ISO 9001:2008

VDE Prüf- und Zertifizierungsinstitut

VDE VERBAND DER ELEKTROTECHNIK ELEKTRONIK INFORMATIONSTECHNIK e.V.

ZERTIFIKAT

CERTIFICATE

Auftraggeber / Hersteller
Client / Manufacturer

TIC Modular System Co., LTD.
99/8 Moo 12, Phutthamonthon 5 Rd., Ratking, Sampran, Nakornpathom 73210, Thailand

Erzeugnis
Product

Niederspannungs-Schaltgerätekombination
Low-voltage switchgear and controlgear assembly

Typenbezeichnung
Type designation

Type Test Model 600 (see testreport)

Technische Merkmale
Technical characteristics

Bemessungsbetriebsspannung 415 V
Rated operational voltage 415 V
Bemessungsbetriebsstrom 5000 A
Rated current 5000 A
Bemessungskurzzeitstrom 65/75 KA, 1s
Rated short-time withstand current 65/75 KA, 1s
Schutzart IP 4 X
Degree of protection IP 4 X

Prüfbericht-Nr. / Test Report No.: 92003/Te-484-00622-94369 - 1999.1219-4.808
Ausstellungsdatum / date of issue: 2005-03-30

Angewandte Normen
Applied standards

DIN EN 60439-1 (VDE 0660 Teil 500): 2000-08
EN 60439-1: 1999 (IEC 60439-1: 1999

Geprüfte Abschnitte
Tested clauses

8.2.1; 8.2.2; 8.2.3; 8.2.4; 8.2.5; 8.2.6; 8.2.7

Ein Muster dieses Erzeugnisses wurde geprüft und mit den angegebenen Normen festgestellt. Der oben genannte Prüfbericht ist Grundlage dieses Zertifikates.
A sample of the product has been tested and found to be in conformity with the applied standards. The above-mentioned Test Report is part of this certificate.
Dieses Zertifikat darf Dritten nur in Verbindung mit dem oben genannten Prüfbericht in vollen Wortlaut und unter Angaben des Ausstellungsdatums zur Kenntnis gegeben werden.
This certificate may only be passed to a third party in combination with the above mentioned Test Report in its complete wording and the date of issue.

VDE Prüf- und Zertifizierungsinstitut
VDE Testing and Certification Institut
Arbeitsorg. P1
Dipl.-Ing. (FH)

Für den Binnenmarkt der Europäischen Union (EU) ist das VDE-Prüfzeichen unter der Kenn-Nr. 0366 nutzbar/ erteilt.
The VDE Testing and Certification Institute has been notified with the Identification Number 0366 for the Internal Market of the European Union (EU).

D-63069 Offenbach am Main, 12. Mai 2005
Merianstraße 28

VDE Testing and Certification Institute

Type-Tested and partially type-tested Assemblies according to IEC 60439-1 (Edition 4.1, 2004-04)

ใบอนุญาต

แสดงเครื่องหมายมาตรฐานอันเนื่องมาจากอุตสาหกรรม

ตามกฎกระทรวงกำหนดมาตรฐานอันเนื่องมาจากอุตสาหกรรม พ.ศ. ๒๕๓๕

ออกให้ตามมาตรา ๒๐ แห่งพระราชบัญญัติมาตรฐานอันเนื่องมาจากอุตสาหกรรม พ.ศ. ๒๕๓๕

TIS 1436-2540
IEC 60439-1 : 1999
EN 60439-1 : 1999

TIS 1436-2540

Project References 2014-2013

Life Ratchadapisek

Sansiri

Okura Prestige

ททบ.5 (EE)

อาคารหอพักนิสิตหลังใหม่ ม.จุฬา

The Salaya

CNC INTERNATIONAL

Baxter

Thai Beverage New Can Line #3

CNC INTERNATIONAL

ระบบขนส่งมวลชน
กรุงเทพ สีลม S11,S12

PTT data center

Thai Tobacco

KCE New Factory

Project References 2013- 2010

Siam Paragon

Red Bull

Siam Niramit

Beer Chang

Platinum Shopping Mall

Suvarnabhumi

Siam Ocean

Tesco Lotus

SCG Chemical

TIC

YOUR POWER SOLUTION EXPERTS

Manufactured & Distributed
by
TIC ENGINEERING CO.,LTD
TIC MODULAR SYSTEM CO.,LTD
TIC ELECTRIC CORPORATION CO.,LTD
99/9 Moo 12 Puttamonthon 5 Road, Raiking, Sampran Nakornpathom 73210 THAILAND
Telephone : (662)-813-6951-60 Facsimile : (662)-811-7860
www.ticcorp.net