INTRODUCTION

KHEREIJI SHOWROOMS COMPANY was established nearly two decades ago with a commitment to supply world class electrical products to aid the economic growth and development of Saudi Arabia.

Years of painstaking business planning and well outlined marketing strategy, effective networking and top quality customer service have progressed KSC as a leading electrical material supplier in the KINGDOM OF SAUDI ARABIA.

KSC went the extra mile and started its own manufacturing plant in 1997, KSC had become a full service company by offering locally manufactured top quality Steel Support System. Cable Trays, Ladders, Trunking and support accessories are manufactured locally with the highest standards to meet the growing demands of commercial, residential power generation and petro-chemical industries, etc.

KSC professional and technical support are well known to the market being committed to quality for all types of manufacturing. Advanced computer aided design technology is used extensively in the production of cost efficient range of products to provide maximum accuracy and control to final despatch.

We have a complete control over every stage in the manufacturing process from initial design. Flexibility to offer a special customer requirements with our CNC machines are unique with no additional outlay.

We believe that the key to our business success lies in our ensuring that we satisfy your definition of quality in every aspect of our business activities.

CONTENTS

TECHNICAL INFORMATION:

STANDARD FINISHES OF KSC CABLE MANAGMENT SYSTEMS:

1. Pre Galvanised (mill galvanised) to BS EN 10142 & 10143 Formerly known as BS 2989

This finish is usually used in normal atmosphere pollutants. In contradiction of what many people think, it can also be used in the presence of moisture as the cable ladder or tray is protected from corrosion by two ways.

A. The existing layer of zinc which isolate the steel from the effect of the external environment.
B. The existing zinc will also protect the bare exposed steel in points like cut edges or bad handling by immediately surrounding the exposed points, preventing corrosion to occur.The exposed points will be protected as long as the zinc local to the damage is existing.

Of course the protective life of the exposed points depend upon three major factors.

A. The thickness of coating zinc where the greater the thickness is the better preservation will occur.
B. The condition of exposure where the greater the exposed points the shorter protective life is going to last.
C. The environment surrounding the exposure, harsh environmental circumstances like chemical, industrial plant and coastal environment where the effect of salt, moisture will reduce the protective life.

2. Hot Dip Galvanised after Fabrication to BS EN 1461 : 1999 (Formerly known as BS 729)

When the materials are dipped in a molten zinc bath after factory fabrication work has been completed on where a steel thickness above 1.5 mm and 3.0 mm will require an average Of 390 g/m2 of surface area.

In other words, an average zinc coating thickness of 55 microns is required for above 1.5 mm upto 3.00 mm steel thickness and 45 microns for upto 1.5 mm steel thickness.

Hot dip galvanized finished can be used in a tougher environment of the pre-galvanised finishes due to the absence of cut edges or weld points.

3. Stainless Steel

Stainless steel is superior in withstanding the very aggressive condition. It is well known of its efficiency as anti-corrosion metal usually used in an offshore oil installation, chemical plants and marine locations.

4. Epoxy Coating

Epoxy resin offers, hard adherents coating which is non-flammable it is extremely resistant to corrosion, acids and alkalis. It is not effected by salt air, however a continuous sun light causes some surface degradation where the finish becomes chalky.

5. PVC Coating (Polyvinyl Chloride)

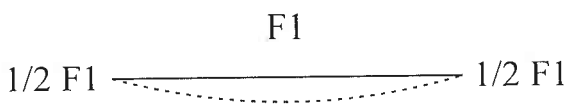
PVC coating provides electrical insulation to the cable trays, it offers a good resistance to sea water and sea oil, its major disadvantage is the poor resistance to organic solvents. PVC is a flammable material.

6. Aluminium

DEFLECTION:

Deflection is directly proportional to the load it is carrying.For more information, the following points should be considered deflection shall be kept into ascertain level. It is obvious that where it is the greatest. For safe and sustained insulation tray or ladder under load usually measured at the mid-span position. Deflection, by definition is the vertical displacement of a cable when selection of cable ladder or tray system.

1. Concentrated point loads, especially at the mid-span has the most significant effect in terms of deflection displacement.



Twice of the similar concentrated point load distributed uniformly will be the equivalent of the same point load at mid-span in terms of deflection value.

2. Deflection is directly proportional to 4th power of support spacing(span) e.g. if the span is doubled the deflection increases by (2 ^ 4) = 16 times of the previous value,

However, it should be mentioned that the carrying capacity of the cable ladder or tray will be reduced by only the square of the increasing span. For the similar example, load carrying capacity will be reduced only by (2 ^ 2) = 4 times of the previous value.

Practically most of the times cable ladders or trays are connected in continuous run which will considerably increases the rigidity of the system. The analysis of such a system is very complex comparing to single cable ladder or tray analysis.

Nevertheless it is assumed that the deflection of one cable ladder or tray system across one span is doubled of what it is for a continuous interconnected cable ladder carrying the same distributed load.

TYPES AND LOCATION OF SUPPORTS:

1. Simple beam:

Two beams which are located on the two end of the cable ladder or tray to give the necessary support.

TYPES AND LOCATION OF SUPPORTS:

2. Continuous Beam

Expressed where more than two beams are supporting a single or interconnected multiple cable ladder or tray. This method assures safe and more reliable support.

In order to find out the best place for joints. Firstly, we should determine the location of the maximum bending momentum which always take place at the mid-span and at the two supporting points. This is why, the opinion which assumes joint is best located at the point of support is mistaken as it is a point which is subjected to the maximum stress.

Undoubtedly, the joint as a weak point of cable ladder / tray system should always be located at the place where momentum (stress) is minimum which is 1/4th of the span (distance between the two beams) on either side of the support. However, other accessories like Bends, Tees,... etc must always be located over the point of support.

THERMAL EXPANSION AND CONTRACTION:

In a place where the daily or the annual temperature differences are considerable, it is important to use the expansion connectors to avoid any harm or damage to cable ladder or tray system installation. The following table illustrates the proportional relationship between the temperature difference and the expansion displacement.

Maximum spacing between expansion joints that provides for one inch movement.

TEMPERATURE DIFFERENCE:

Degree	*(c)Steel*	*(m)Aluminium*
3.89	156	79
10.00	78	40
23.89	52	26.5
37.78	39	20
51.62	31	16
65.56	26	13
79.44	22	11

(Eng. Information 11-15-1984)

e.g. when temperature difference is 10 C, every 78 meter long of steel cable ladder an expansion of one inch 25.4mm will take place.

ELECTRICAL PROPERTIES.

Cable ladder or cable tray should not be used as part of the main grounding system, however it is preferred to be used as an additional part of the grounding system where it will support the existing main grounding, when installing a cable ladder or tray system, A special attention should be given to coupling points to ensure the good contact and resistance value. Using earth continuity strap is always preferable between every interconnected cable ladder or trays to ensure the best resistance value. When the type of finishes used, isolates the metal part of the cable ladders or trays at coupling points e.g. epoxy or PVC coating, fixing of earth continuity strap becomes a must.

MECHANICAL PROPERTIES

1. Cable ladder and ventilated cable trays offer a good ventilation to the cables which will accordingly increase the current carrying capacity of the cables.

2. Cable ladder and tray systems offer a reliable and easy way of fixing the cables. Simply by using the cable cleats or cable ties, we can prevent any undesired movements of the cables.

For appropriate selection of cable ladders or trays the following should be considered.

1. Weight of the total load (total weight of the cable) in kg/m.
2. Weight of the cable ladders or the cable trays (dead load).
3. If exist, weight of snow or ice per meter depending on the geographic location and weather data.
4. Speed of the wind should be considered depending also on the location of the cable ladder or trays system.

All the above mentioned items should be represented by kg/m unit their summation will be multiplied by a safety factor which is usually 3 to decide the suitable type of cable ladder or tray. The type of support and distance of the span will be chosen accordingly.

Note: Item No. 1 or 2 for both indoor and outdoor installation while item No. 3 and 4 for outdoor installation only.

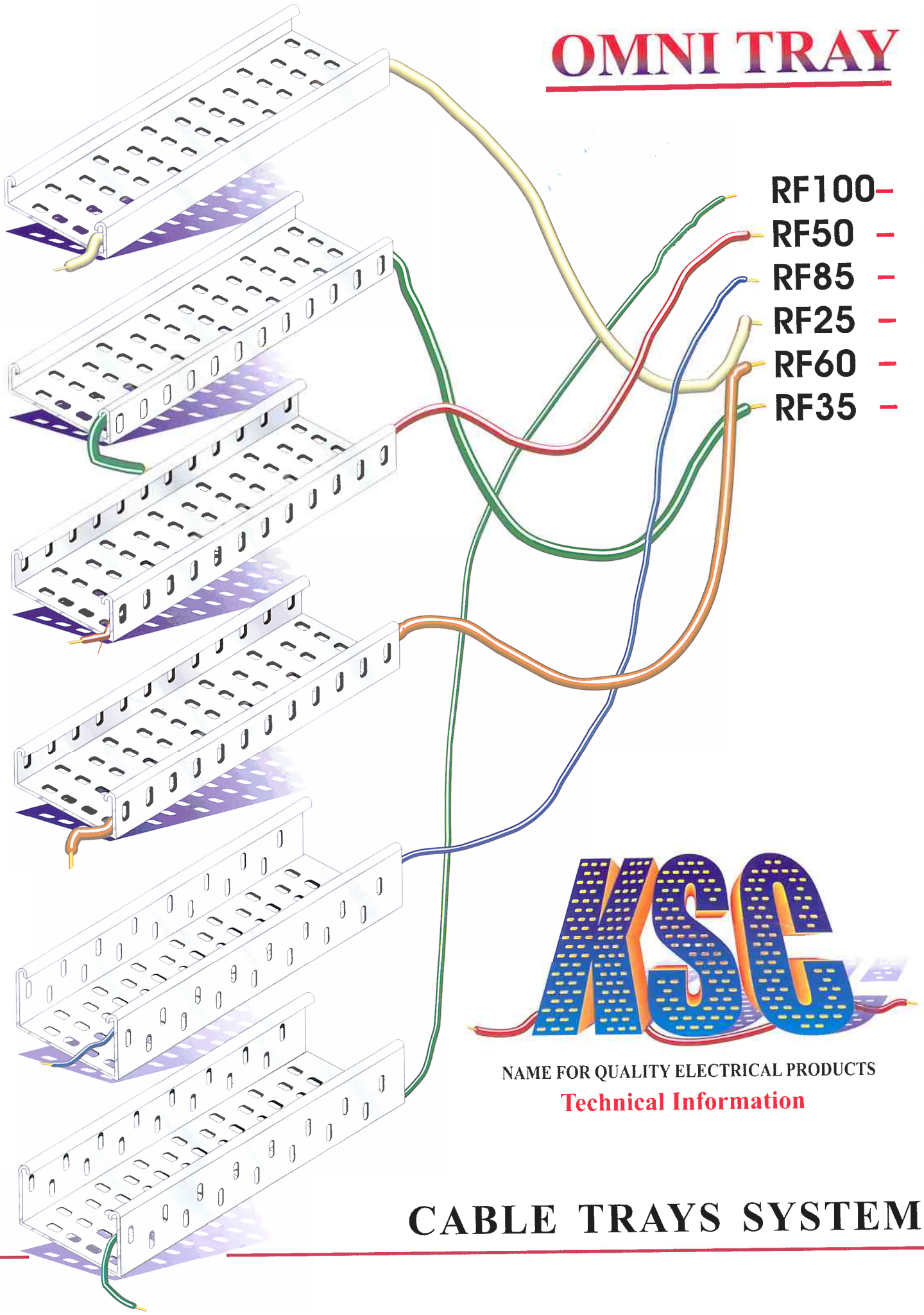
When installing a cable ladder or tray system, a special care should be given to maintain the alignment of the system 100% balanced, otherwise the load will not be distributed uniformly on the supports which might cause a serious problem to the system.

The relationship between the size of cable trays and the installed cables. When selecting the size of the cable tray the following should be considered:

1. The overall cable diameter should be fairly less than the cable tray heights.

2. If more than one cable is to be installed at least a distance of twice of the overall diameter should be left between the two cables in order to achieve the unity group factors of one, otherwise because of the group factor value will be less than one, the current carrying capacity will be decreased accordingly. The shorter the distance is, the lower the current carrying capacity will be.

OMNI TRAY



NAME FOR QUALITY ELECTRICAL PRODUCTS

Technical Information

CABLE TRAYS SYSTEM

KSC OMNI TRAY CABLE TRAYS:

KSC Omnitray Cable trays are divided into two categories:

1. Classic range:

Available in three different flange heights

A. Heavy duty cable tray (50mm height return flange)
B. Medium duty cable tray (35mm height return flange)
C. Medium duty cable tray (25mm height return flange)
D. Straight flange cable tray

2. Esteem range:

where the height of the return flange, the thickness and the design of accessories are different from the classic range (for more details see the pages 23 - 40).

General information of KSC Omnitray Cable trays standards:

Standard length: 2.44 Mtr

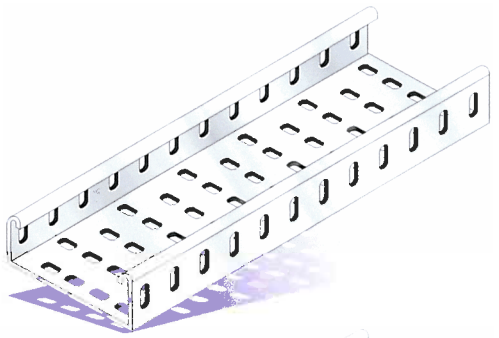
Material: Hot rolled steel sheet to BS: 1449

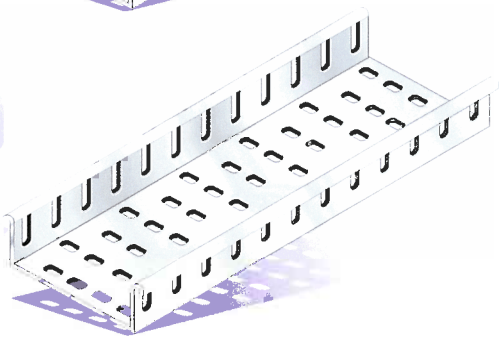
Finishes: *1.* Mill galvanised to EN 10142/10143 (Formerly known as BS 2989)
2. Hot dip galvanised after fabrication to BS EN1461:1999 (Formerly known as BS 729)
3. Epoxy coating
4. PVC coating
5. Stainless steel
6. Aluminium

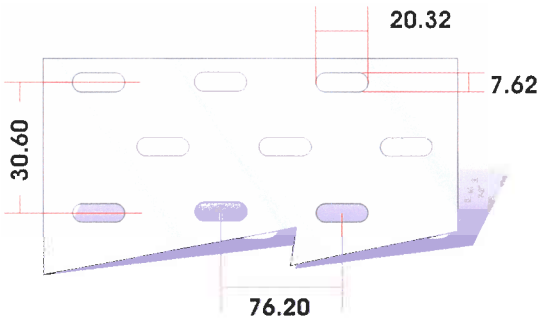
1. CLASSIC

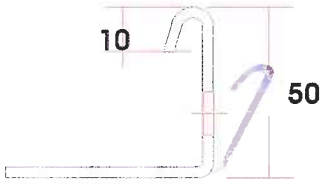
A. HEAVY DUTY CABLE TRAY INSIDE & OUTSIDE FLANGE

Width mm	Gauge mm	Weight Kg/m	Part No.	Part No.
76	1.5	2.26	RF50/ 76	RFO50/76
102	1.5	2.63	RF50/102	RFO50/102
152	1.5	3.14	RF50/152	RFO50/152
229	1.5	4.00	RF50/229	RFO50/229
305	1.5	4.76	RF50/305	RFO50/305
457	2.0	8.53	RF50/457	RFO50/457
610	2.0	10.66	RF50/610	RFO50/610
762	2.0	12.79	RF50/762	RFO50/762
914	2.0	14.84	RF50/914	RFO50/914

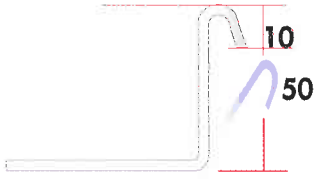








Side hole perforation
Inside Flange



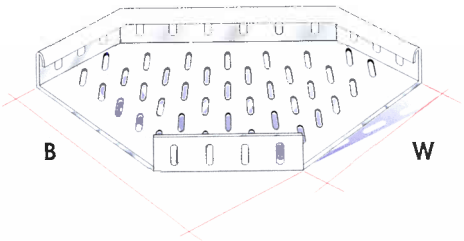
Side hole perforation
Outide Flange

1. CLASSIC

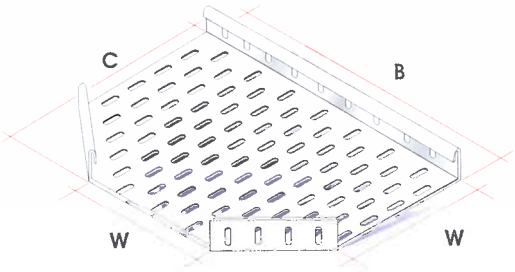
Cable Trays Accessories Inside and Outside Flange

1. 90 Deg Flat Bend
Available in 30,45 & 60 Deg.

Width mm	B mm	Gauge mm	Weight kg.	Inside Part No.	Outside Part No.
76	236	1.5	0.85	RFB50/ 76	RFBO50/76
102	262	1.5	1.12	RFB50/102	RFBO50/102
152	312	1.5	1.56	RFB50/152	RFBO50/156
229	389	1.5	2.07	RFB50/229	RFBO50/229
305	465	1.5	2.83	RFB50/305	RFBO50/305
457	632	1.5	5.10	RFB50/457	RFBO50/475
610	785	1.5	7.35	RFB50/610	RFBO50/610
762	937	1.5	9.93	RFB50/762	RFBO50/762
914	1089	1.5	12.95	RFB50/914	RFBO50/914



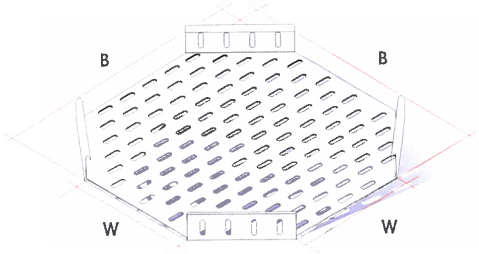
2. Equal Tee



Width mm	B mm	C mm	Gauge mm	Weight kg.	Part No.	Part No.
76	396	236	1.5	1.49	RFT50/76	RFTO50/76
102	422	262	1.5	1.86	RFT50/102	RFTO50/102
152	472	311	1.5	2.25	RFT50/152	RFTO50/152
229	549	389	1.5	3.10	RFT50/229	RFTO50/229
305	625	465	1.5	3.86	RFT50/305	RFTO50/305
457	807	632	1.5	7.50	RFT50/457	RFTO50/457
610	960	785	1.5	9.10	RFT50/610	RFTO50/610
762	1112	937	1.5	12.09	RFT50/762	RFTO50/762
914	1264	1089	1.5	15.74	RFT50/914	RFTO50/914

3. Equal Four Way Cross

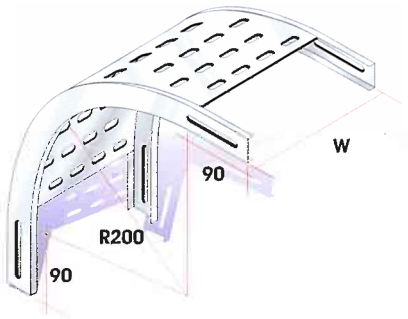
Width mm	B mm	Gauge mm	Weight kg.	Inside Part No.	Outside Part No.
76	396	1.5	1.98	RFX50/ 76	RFXO50/ 76
102	422	1.5	2.14	RFX50/102	RFXO50/102
152	472	1.5	2.69	RFX50/152	RFXO50/152
229	549	1.5	3.51	RFX50/229	RFXO50/229
305	625	1.5	4.45	RFX50/305	RFXO50/305
457	807	1.5	7.18	RFX50/457	RFXO50/457
610	960	1.5	10.01	RFX50/610	RFXO50/610
762	1112	1.5	13.33	RFX50/762	RFXO50/762
914	1264	1.5	17.13	RFX50/914	RFXO50/914



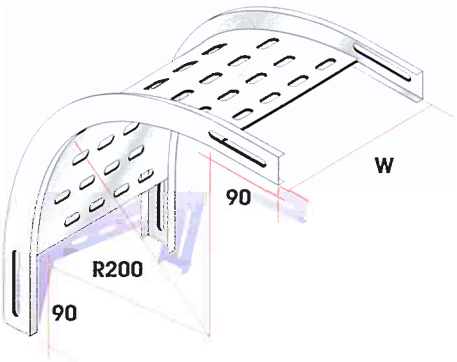
1. CLASSIC

4. 90Deg Internal Risers
Available in 30,45 & 60 Deg. Inside and Outside Flange

Width mm	Gauge mm	Weight kg.	Inside Part No.	Outside Part No.
76	1.5	1.25	RFIR50/ 76	RFIRO50/76
102	1.5	1.46	RFIR50/102	RFIRO50/102
152	1.5	1.70	RFIR50/152	RFIRO50/152
229	1.5	2.08	RFIR50/229	RFIRO50/229
305	1.5	2.43	RFIR50/305	RFIRO50/305
457	1.5	3.17	RFIR50/457	RFIRO50/457
610	1.5	3.92	RFIR50/610	RFIRO50/610
762	1.5	4.64	RFIR50/762	RFIRO50/762
914	1.5	5.10	RFIR50/914	RFIRO50/914



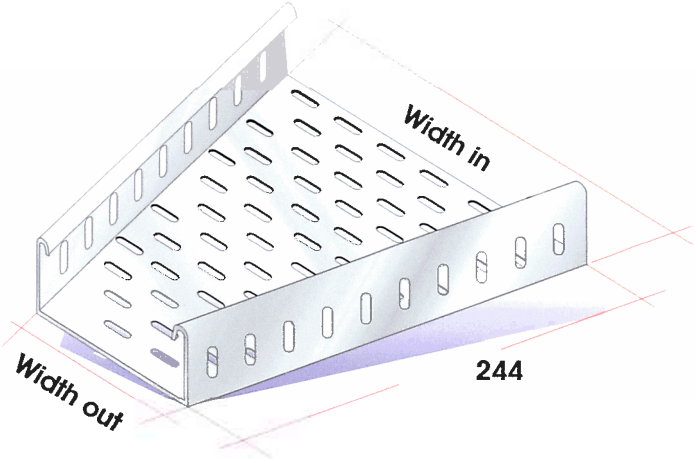
5. 90Deg External Risers
Available in 30,45 & 60 Deg.



Width mm	Gauge mm	Weight kg.	Inside Part No.	Outside Part No.
76	1.5	1.34	RFOR50/ 76	RFORO50/76
102	1.5	1.46	RFOR50/102	RFORO50/102
152	1.5	1.70	RFOR50/152	RFORO50/152
229	1.5	1.90	RFOR50/229	RFORO50/229
305	1.5	2.43	RFOR50/305	RFORO50/305
457	1.5	3.17	RFOR50/457	RFORO50/457
610	1.5	3.40	RFOR50/610	RFORO50/610
762	1.5	4.20	RFOR50/762	RFORO50/762
914	1.5	5.37	RFOR50/914	RFORO50/914

6. Reducers

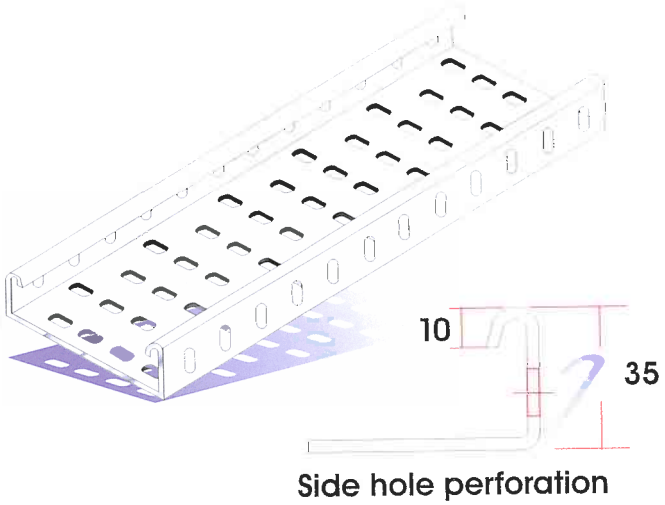
RFR50 W1 / W2
To specify reducer, only determine the width in as W1, width out as W2
E.G. RFR50/457-305 - Inside Flange
RFRO/457-305 - Outside Flange



1. CLASSIC

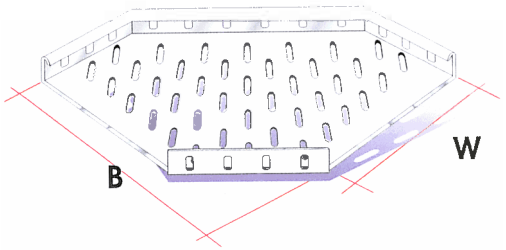
B. Medium Duty Cable Tray 35mm Flange Height

Width mm	Gauge mm	Part No.
76	1.0	RF35/ 76
102	1.0	RF35/102
152	1.0	RF35/152
229	1.0	RF35/229
305	1.2	RF35/305
457	1.5	RF35/457
610	1.5	RF35/610
762	1.5	RF35/762

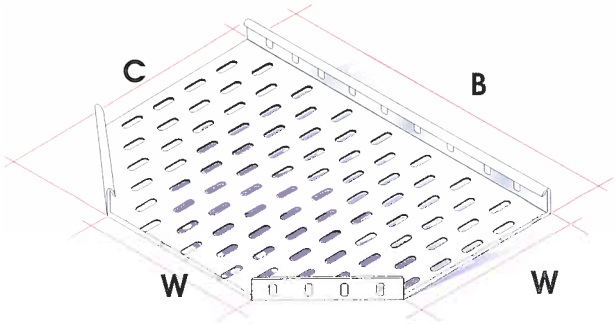


1. 90 Deg. Flat Bend
Available in 30, 45 & 60 Deg

Width mm	B mm	Gauge mm	Part No.
76	236	1.0	RFB35/ 76
102	262	1.0	RFB35/102
152	312	1.0	RFB35/152
229	389	1.0	RFB35/229
305	465	1.2	RFB35/305
457	632	1.5	RFB35/457
610	785	1.5	RFB35/610
762	937	1.5	RFB35/762



2. Equal Tee

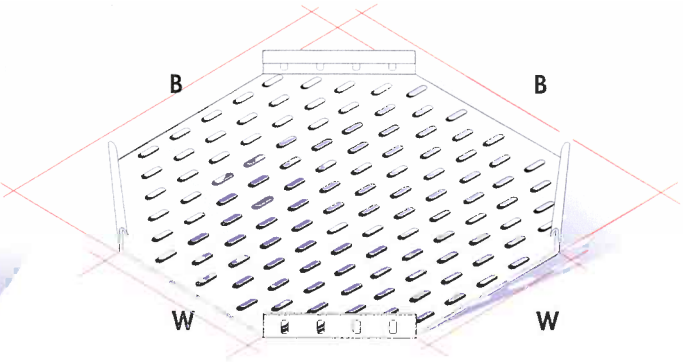


Width mm	B mm	C mm	Gauge mm	Part No.
76	396	236	1.0	RFT35/ 76
102	422	262	1.0	RFT35/102
152	472	312	1.0	RFT35/152
229	549	389	1.0	RFT35/229
305	625	465	1.2	RFT35/305
457	807	632	1.5	RFT35/457
610	960	785	1.5	RFT35/610
762	1112	937	1.5	RFT35/762

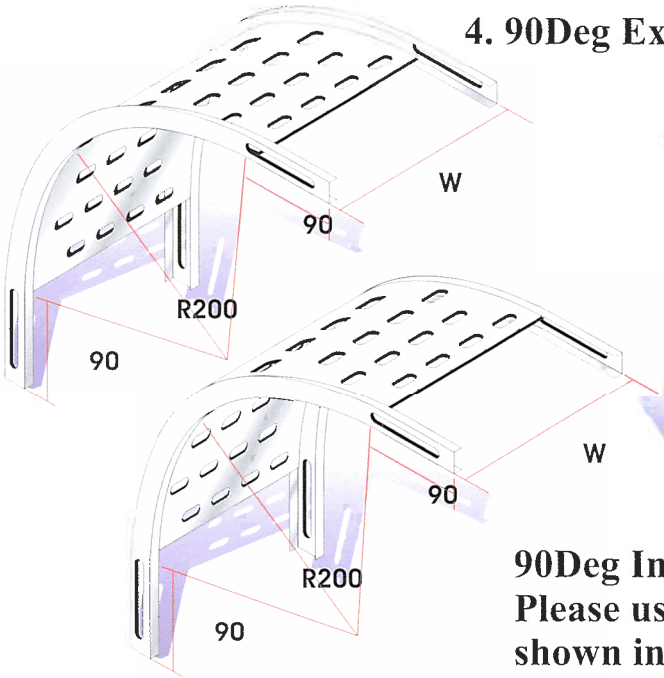
1. CLASSIC

3. Equal Four Way Cross

Width mm	B mm	Gauge mm	Part No.
76	396	1.0	RFX35/ 76
102	422	1.0	RFX35/102
152	472	1.0	RFX35/152
229	549	1.0	RFX35/229
305	625	1.2	RFX35/305
457	807	1.5	RFX35/457
610	960	1.5	RFX35/610
762	1112	1.5	RFX35/762



4. 90Deg External Risers. Available in 30,45 & 60 Deg.

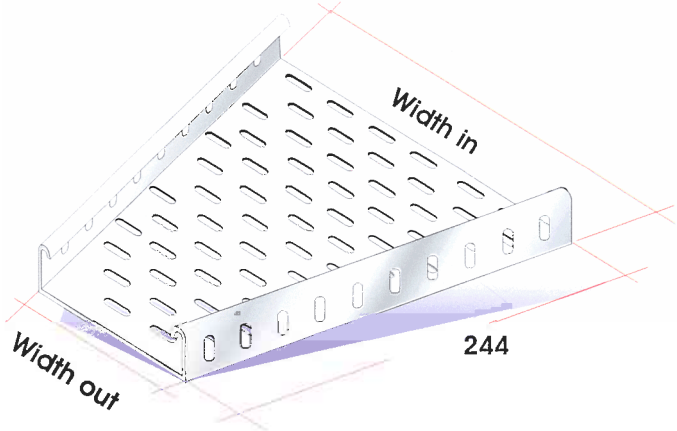


Width mm	Gauge mm	Part No.
76	1.0	RFOR35/ 76
102	1.0	RFOR35/102
152	1.0	RFOR35/152
229	1.0	RFOR35/229
305	1.2	RFOR35/305
457	1.5	RFOR35/457
610	1.5	RFOR35/610
762	1.5	RFOR35/762

90Deg Internal Risers. Available in 30,45 & 60 Deg. Please use IR inplace of OR for internal risers as shown in above table for external risers.

5. Reducers

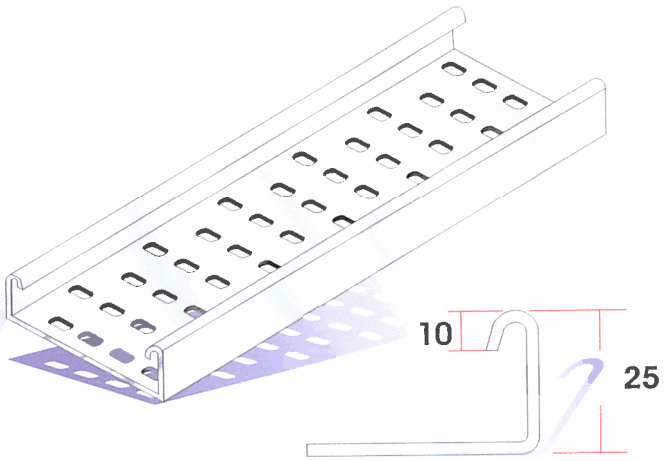
RFR35 W1 / W2
To specify reducer, only determine the width in as W1, width out as W2
E.G. RFR35/457-305



1. CLASSIC

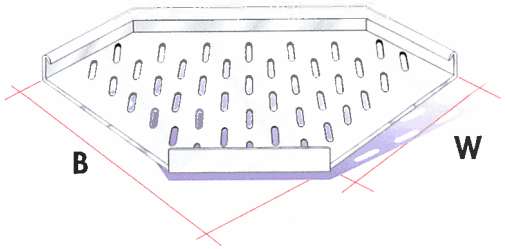
C. Medium Duty Cable Tray 25mm Flange Height

Width mm	Gauge mm	Weight Kg/m	Part No.
76	1.0	1.03	RF25/ 76
102	1.0	1.31	RF25/102
152	1.0	1.69	RF25/152
229	1.0	2.27	RF25/229
305	1.2	3.37	RF25/305
457	1.5	5.87	RF25/457
610	1.5	7.58	RF25/610
762	1.5	9.29	RF25/762

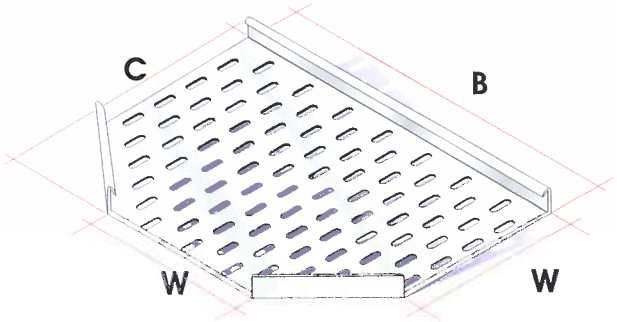


1. 90 Deg. Flat Bend
Available in 30, 45 & 60 Deg

Width mm	B mm	Gauge mm	Part No.
76	236	1.0	RFB25/ 76
102	262	1.0	RFB25/102
152	312	1.0	RFB25/152
229	389	1.0	RFB25/229
305	465	1.2	RFB25/305
457	632	1.5	RFB25/457
610	785	1.5	RFB25/610
762	937	1.5	RFB25/762



2. Equal Tee

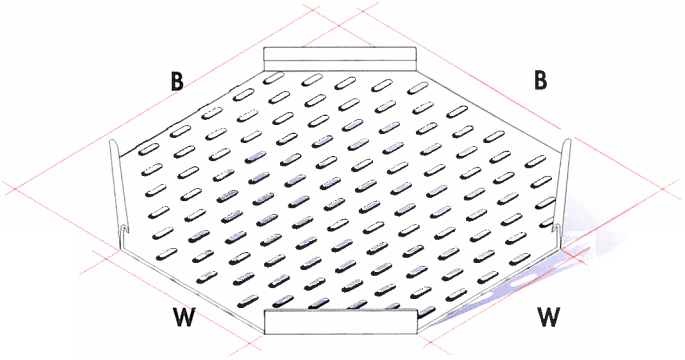


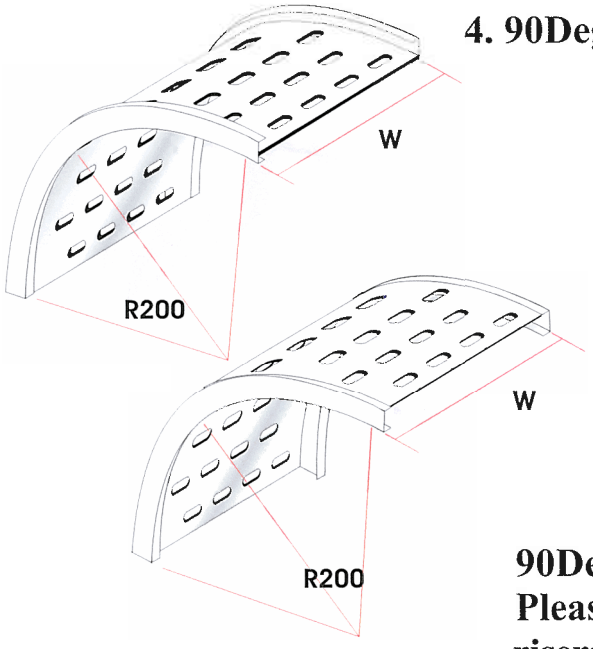
Width mm	B mm	C mm	Gauge mm	Part No.
76	396	236	1.0	RFT25/ 76
102	422	262	1.0	RFT25/102
152	472	312	1.0	RFT25/152
229	549	389	1.0	RFT25/229
305	625	465	1.2	RFT25/305
457	807	632	1.5	RFT25/457
610	960	785	1.5	RFT25/610
762	1112	937	1.5	RFT25/762

1. CLASSIC

3. Equal Four Way Cross

Width mm	B mm	Gauge mm	Part No.
76	396	1.0	RFX25/ 76
102	422	1.0	RFX25/102
152	472	1.0	RFX25/152
229	549	1.0	RFX25/229
305	625	1.2	RFX25/305
457	807	1.5	RFX25/457
610	960	1.5	RFX25/610
762	1112	1.5	RFX25/762





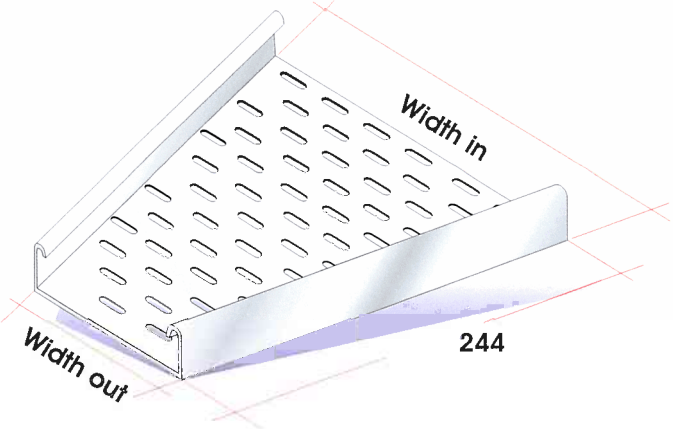
4. 90Deg External Risers. Available in 30,45 & 60 Deg.

Width mm	Gauge mm	Part No.
76	1.0	RFOR25/ 76
102	1.0	RFOR25/102
152	1.0	RFOR25/152
229	1.0	RFOR25/229
305	1.2	RFOR25/305
457	1.5	RFOR25/457
610	1.5	RFOR25/610
762	1.5	RFOR25/762

90Deg Internal Risers. Available in 30,45 & 60 Deg. Please use IR for internal risers and OR for external risers as shown in above table for external risers.

5. Reducers

RFR25 W1 / W2
To specify reducer, only determine the width in as W1, width out as W2
E.G. RFR25/457-305

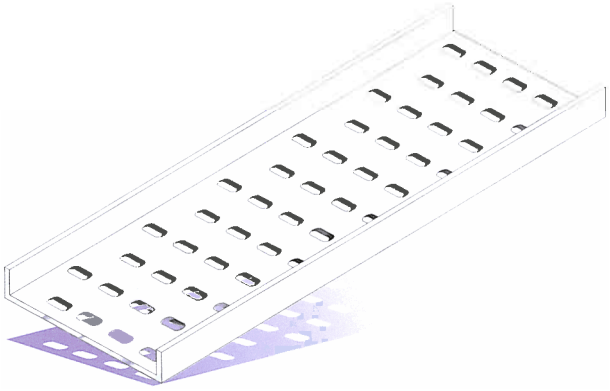


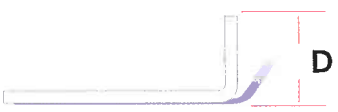
1. CLASSIC

D. Standard Straight Flange Cable Trays

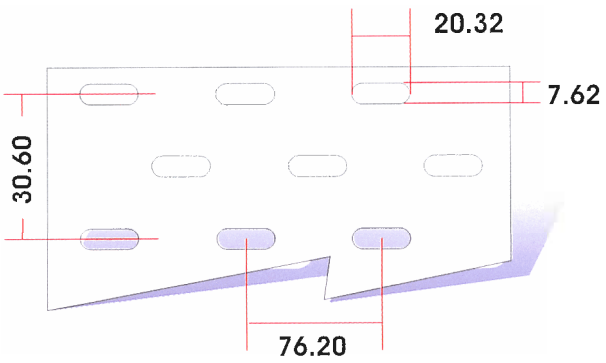
Gauge mm | Part No. | Width mm | Weight kg/m

Width mm	Gauge mm	Weight kg/m	Part No.
51	0.9	0.51	SSL/51
51	1.5	0.88	SSL/51
76	0.9	0.60	SSL/76
76	1.5	1.03	SSL/76
102	0.9	0.73	SSL/102
102	1.5	1.25	SSL/102
152	0.9	0.98	SSL/152
152	1.05	1.69	SSL/152
229	1.2	1.78	SSL/229
229	1.5	2.35	SSL/229
305	1.5	3.18	SSL/305
457	1.5	5.68	SSL/457
457	2.0	6.68	SSL/457
610	2.0	9.78	SSL/610
762	2.0	12.13	SSL/762
914	2.0	14.42	SSL/914





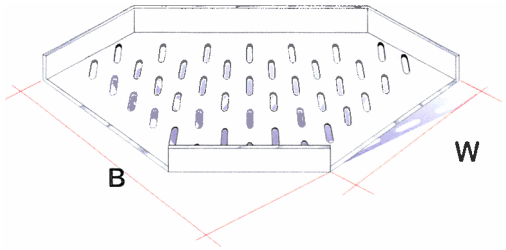
Flange height, D, for tray and accessories up to 229mm wide is 13mm. For tray from 305mm up to 914mmwide, flange height is 19mm.



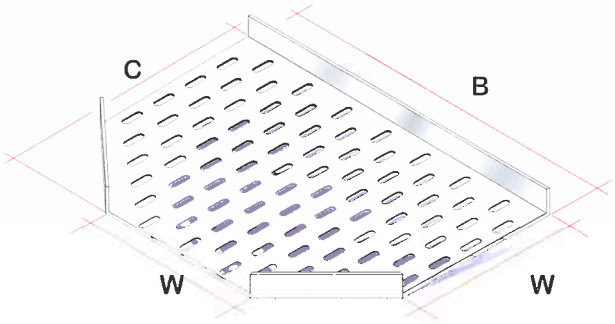
1. CLASSIC

1. 90Deg Flat Bend
Available in 30, 45 & 60Deg

Width mm	B mm	Gauge mm	Part No.
51	99	1.5	SSLB/51
76	124	1.5	SSLB/76
102	150	1.5	SSLB/102
152	200	1.5	SSLB/152
229	277	1.5	SSLB/229
305	353	1.5	SSLB/305
457	505	1.5	SSLB/457
610	658	1.5	SSLB/610
762	810	1.5	SSLB/762
914	962	1.5	SSLB/914



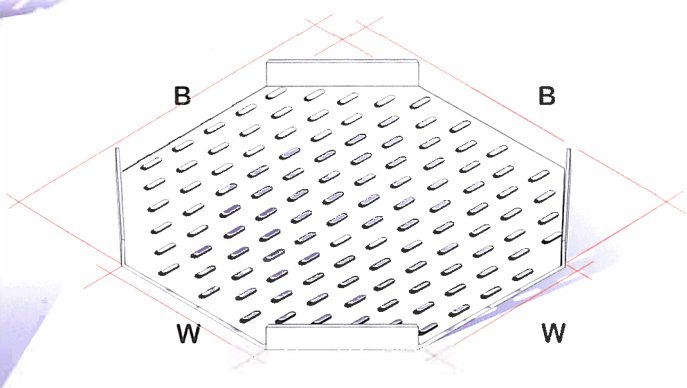
2. Equal Tee



Width mm	B mm	C mm	Gauge mm	Part No.
51	147	99	1.5	SSLT/51
76	172	124	1.5	SSLT/76
102	198	150	1.5	SSLT/102
152	248	200	1.5	SSLT/152
229	325	277	1.5	SSLT/229
305	401	353	1.5	SSLT/305
457	533	505	1.5	SSLT/457
610	706	658	1.5	SSLT/610
762	858	810	1.5	SSLT/762
914	1010	962	1.5	SSLT/914

3. Equal Four Way Cross

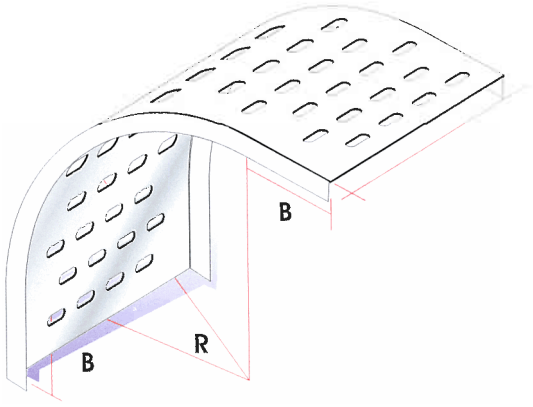
Width mm	B mm	Gauge mm	Part No.
51	147	1.5	SSLX/51
76	172	1.5	SSLX/76
102	198	1.5	SSLX/102
152	248	1.5	SSLX/152
229	325	1.5	SSLX/229
305	401	1.5	SSLX/305
457	553	1.5	SSLX/457
610	706	1.5	SSLX/610
762	858	1.5	SSLX/762
914	1010	1.5	SSLX/914



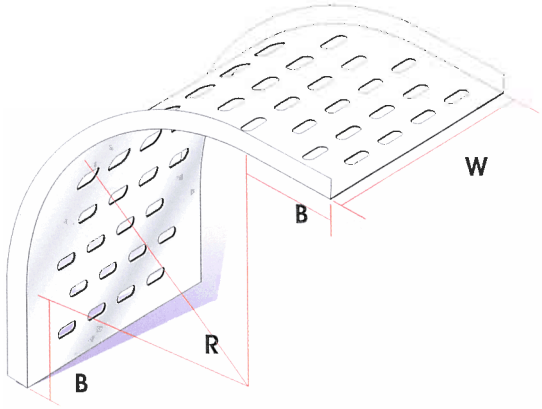
1. CLASSIC

4. 90Deg Internal Risers
Available in 30, 45 & 60Deg

Width mm	B mm	R mm	Gauge mm	Part No.
51	102	81	1.5	SSLIR/51
76	102	81	1.5	SSLIR/76
102	102	81	1.5	SSLIR/102
152	102	81	1.5	SSLIR/152
229	114	97	1.5	SSLIR/229
305	127	226	1.5	SSLIR/305
457	127	226	1.5	SSLIR/457
610	127	226	1.5	SSLIR/610
762	127	226	1.5	SSLIR/762
914	127	226	1.5	SSLIR/914



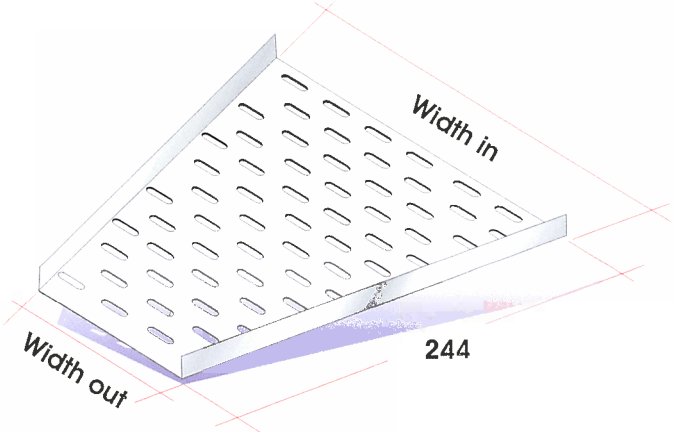
5. 90Deg External Risers
Available in 30, 45 & 60deg



Width mm	B mm	R mm	Gauge mm	Part No.
51	102	81	1.5	SSLOR/51
76	102	81	1.5	SSLOR/76
102	102	81	1.5	SSLOR/102
152	102	81	1.5	SSLOR/152
229	114	97	1.5	SSLOR/229
305	127	226	1.5	SSLOR/305
457	127	226	1.5	SSLOR/457
610	127	226	1.5	SSLOR/610
762	127	226	1.5	SSLOR/762
914	127	226	1.5	SSLOR/914

6. Reducers

SSLR W1-W2
RFR25 W1 / W2
To specify reducer, only determine the width in as W1, width out as W2
E.G. SSLR/610-305



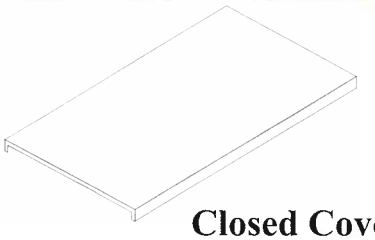
D. Cable Tray Covers & Couplers

Covers are available in both closed and louvered designs. Both designs protect cable installations from mechanical damage, heavy accumulations of dust and direct sunlight. The louvered (groups of 4) design allows air to circulate around cables. Hence increasing its current carrying capacity.

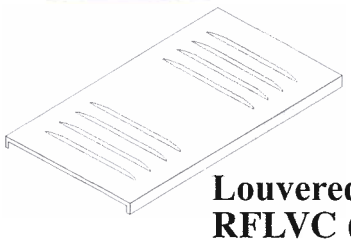
Width mm	Kg m	Part No Closed Type	Part No Louvered Type
76	1.16	RFCC/76	RFLVC/76
102	1.36	RFCC/102	RFLVC/102
152	1.82	RFCC/152	RFLVC/152
229	3.62	RFCC/229	RFLVC/229
305	4.62	RFCC/305	RFLVC/305
457	6.63	RFCC/457	RFLVC/457
610	8.62	RFCC/610	RFLVC/610
762	14.00	RFCC/762	RFLVC/762
914	16.65	RFCC/914	RFLVC/914

1. Fish Plates Full

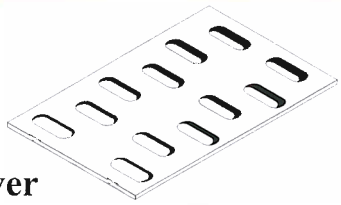
Width mm	Part No	Width mm	Part No
76	FP/76	305	FP/305
102	FP/102	457	FP/457
152	FP/152	610	FP/610
229	FP/229	914	FP/914



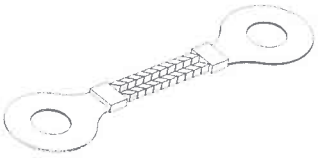
Closed Cover
RFCC



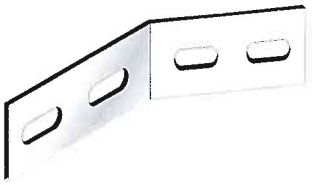
Louvered Cover
RFLVC (12)



Fish Plate FP

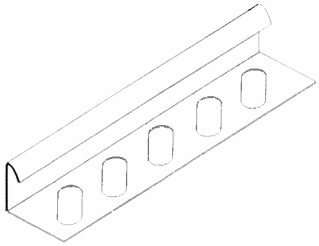


2. Earth Continuity Connector
ES/ECS

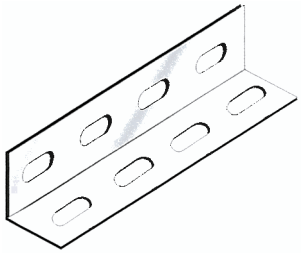


3. Cranked Coupler
RFH*/CC-INT

4. Cover Bracket
CB/H*MG



5. External Coupler
RFH*/EXT



6. Angle Coupler
XSLSC/H*

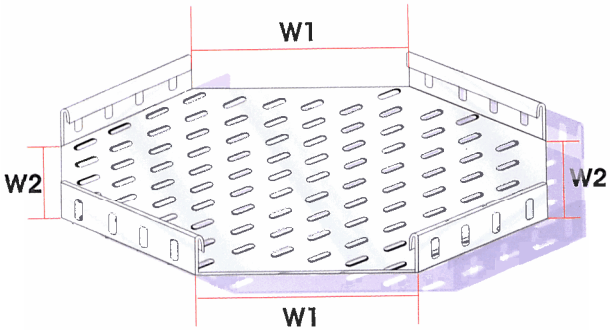
7. Straight Coupler
RFH*/SC

H indicates height of the tray.

1. CLASSIC

Cable Trays Accessories

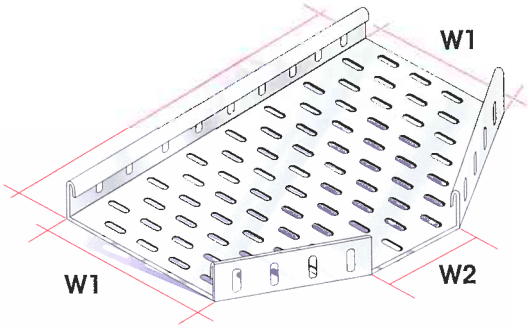
1. Unequal Cross



RFUXH*/W1-W2

W1 mm	W2 mm	Gauge mm	Part No.
102	152	1.5	RFUXH*/102-152
152	305	1.5	RFUXH*/152-305
229	457	1.5	RFUXH*/229-457
457	610	1.5	RFUXH*/457-610

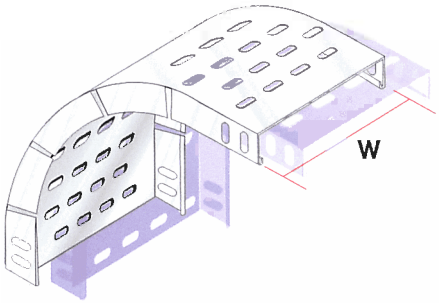
2. Unequal Tee



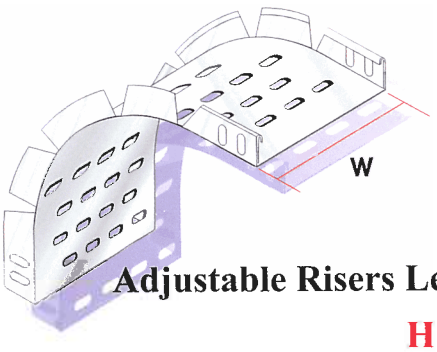
RFUTH*/W1-W2

W1 mm	W2 mm	Gauge mm	Part No.
152	102	1.5	RFUTH*/152-102
305	152	1.5	RFUTH*/305-152
457	229	1.5	RFUTH*/457-229
610	457	1.5	RFUTH*/610-457

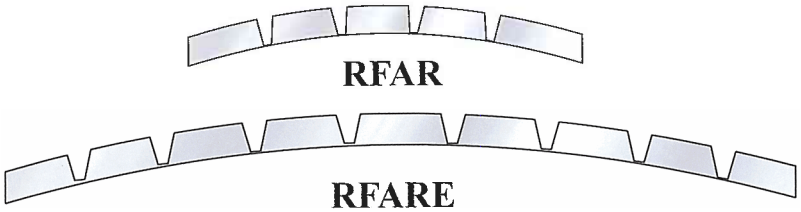
3. Inside Adjustable Riser



4. Outside Adjustable Riser



Width mm	Part No.	Part No.
102	RFARH*/102	RFAREH*/102
152	RFARH*/152	RFAREH*/152
229	RFARH*/229	RFAREH*/229
305	RFARH*/305	RFAREH*/305
457	RFARH*/457	RFAREH*/457
610	RFARH*/610	RFAREH*/610



RFAR

RFARE

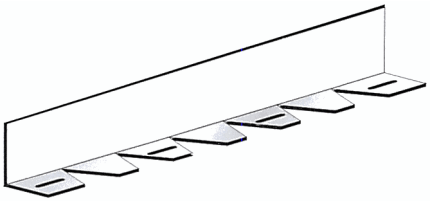
Adjustable Risers Length -554mm & Extra Long-1087mm When Straight.

H indicates height of the tray.

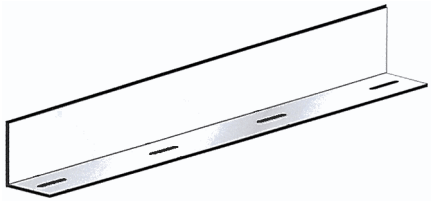
Use O Before H (Height) for outside flange

1. CLASSIC

Cable Trays Accessories



Horizontal Fittings Barrier
• RFHB/H*



Vertical Fittings Barrier
• RFVB/H*

H indicates height of the tray.

1. Fish Plates - Shorts

Thickness 1.5mm

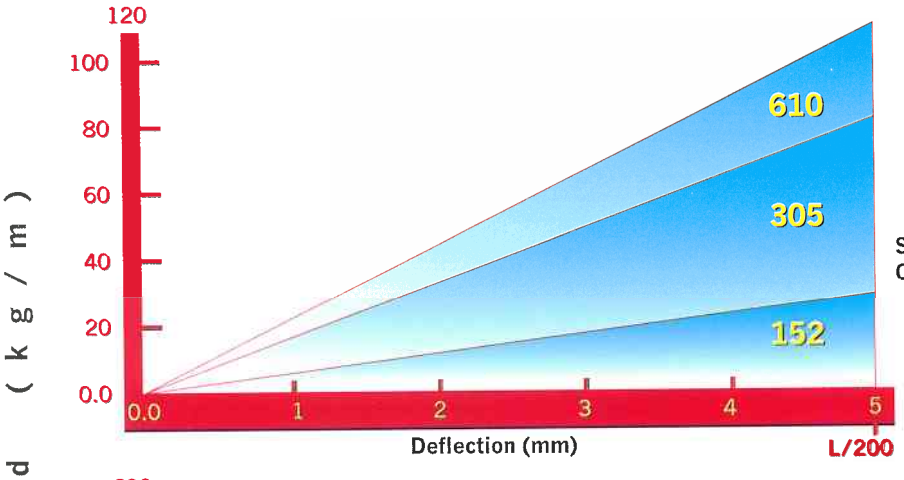
Width mm	Part No
152	FP/152-72-C
229	FP/229-149-C
305	FP/305-225-C
457	FP/457-377-C
610	FP/610-530-C
762	FP/762-682-C
914	FP/914-834-C

2. Fish Plates - Shorts

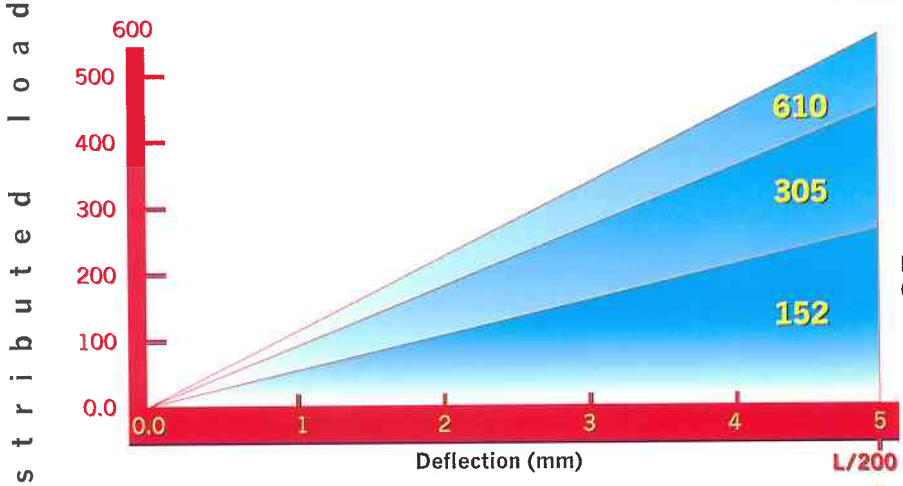
Thickness 2.0mm

Width mm	Part No
152	FP/152-72
229	FP/229-149
305	FP/305-225
457	FP/457-377
610	FP/610-530
762	FP/762-682
914	FP/914-834

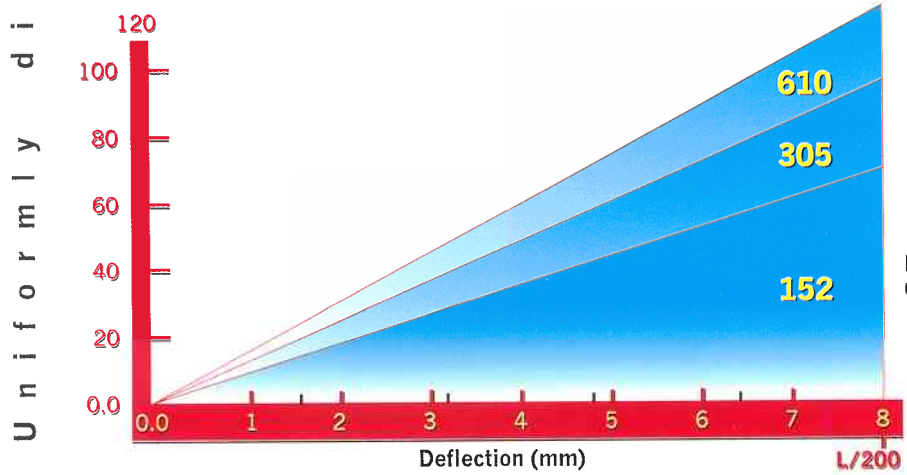
These graphical presentations have been prepared following extensive testing with KSC Omni - tray products, but reference should be made to "System Design Considerations. Each graph show variation of tray type, width and span. The defection representing 1/200 of span is shown as L/200 and is the generally accepted limit of deflection for visually acceptable considerations. Deflections shown are for KSC Omnitray uniformly loaded across width and along length, measured at mid span within central spans of continuously coupled arrangement of more than four spans.
The values stated are for guidance but must not be taken to form a guarantee, implication of warranty, or liability in any circumstance, should the performance of product actually vary when installed.



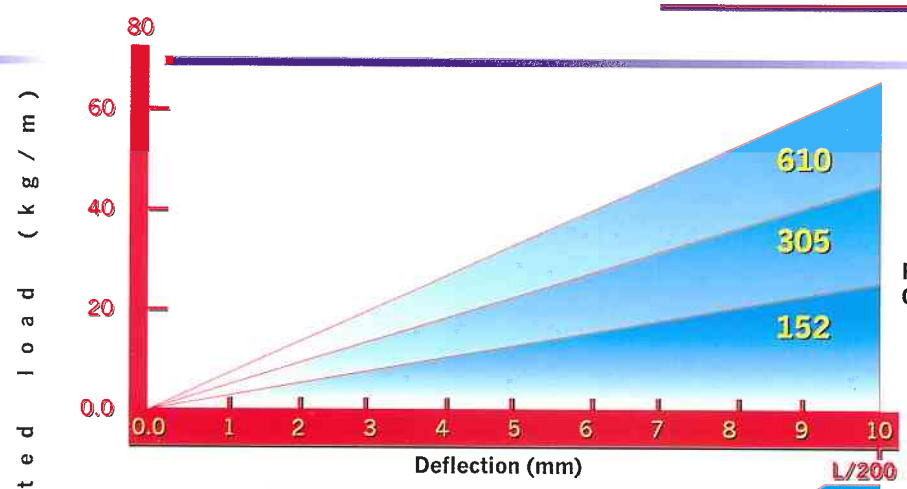
Standard KSC
Omnitray 1.0 metre span



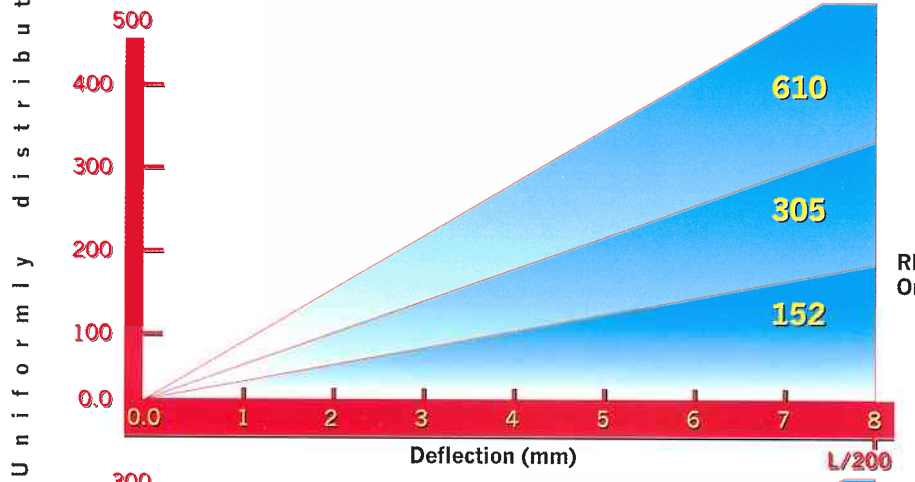
Rf35 KSC
Omnitray 1.0 metre span



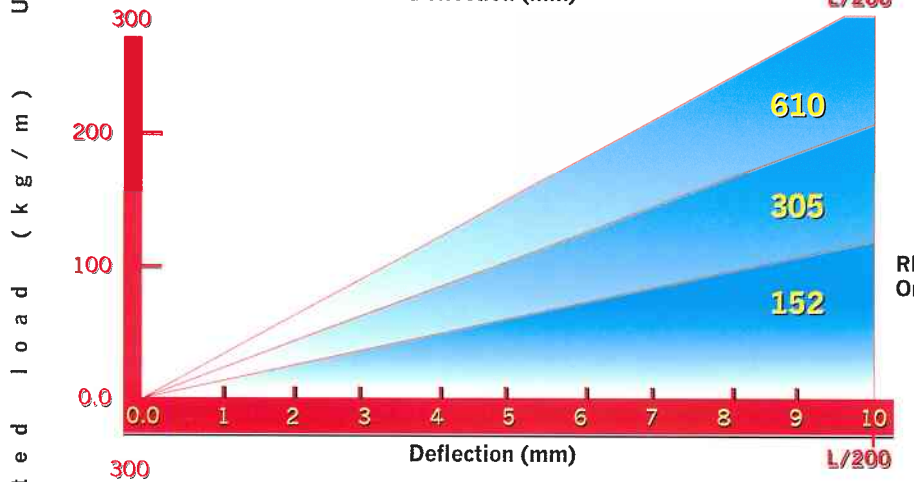
RF35 KSC
Omnitray 1.5 metre span



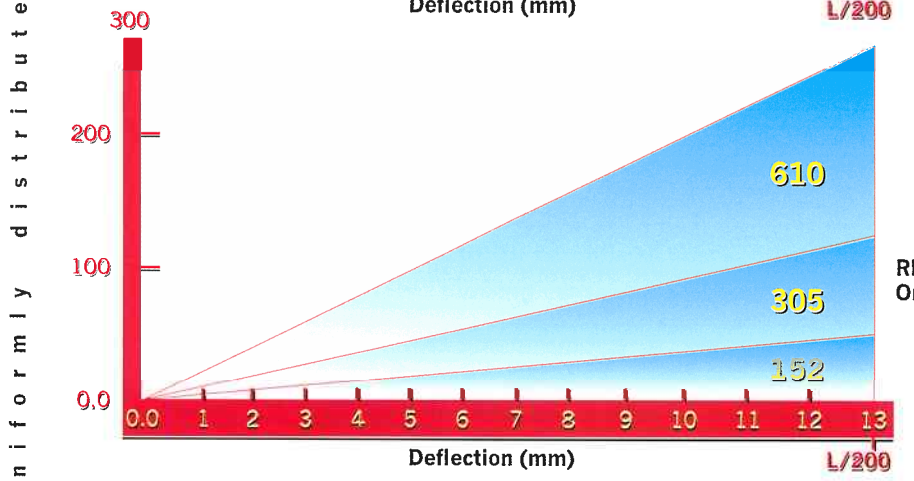
RF35 KSC
Omnitray 2.0 metre span



RF50 KSC
Omnitray 1.5 metre span



RF50 KSC
Omnitray 2.0 metre span



RF50 KSC
Omnitray 2.5 metre span

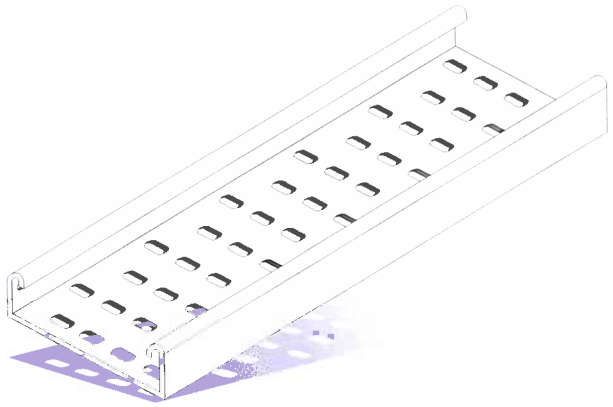
2. ESTEEM

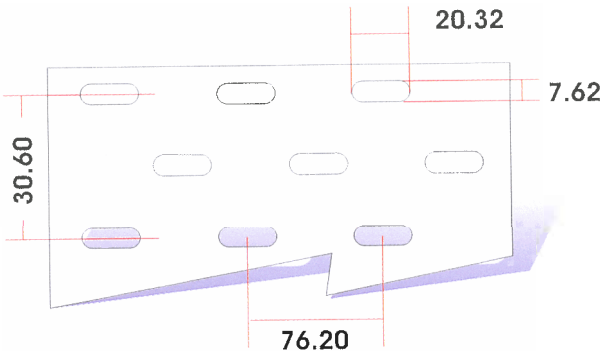
A. RETURN FLANGE TYPE CABLE TRAYS

1. Flange height: 25, 35, 50, 60, 85, 100 &110mm. *2.* Flange type: Inside or Outside (unless otherwise requested by customer inside return flange will be supplied as KSC standard). *3.* Material: Hot rolled steel sheet to BS 1449. *4.* Standard length: 2.44 or 3 Mtr *5.* Finishes: *A.* Pre-galvanised to BS EN 10142 / 10143 *B.* Hot dip galvanised after fabrication to BS EN 1461. *C.* Epoxy coating *D.* Pvc coating *E.* Stainless steel.

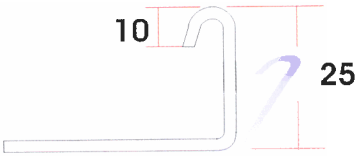
1. 25mm Flange Height

Width mm	Gauge mm	Part No.
76	1.0	XRF25/76A
76	1.2	XRF25/76B
102	1.0	XRF25/102A
102	1.2	XRF25/102B
152	1.0	XRF25/152A
152	1.2	XRF25/152B
229	1.0	XRF25/229A
229	1.2	XRF25/229B
305	1.0	XRF25/305A
305	1.2	XRF25/305B
400	1.2	XRF25/400B
400	1.5	XRF25/400C
457	1.5	XRF25/457C
457	2.0	XRF25/457D
500	1.5	XRF25/500C
500	2.0	XRF25/500D
610	1.5	XRF25/610C
610	2.0	XRF25/610D
762	2.0	XRF25/762D
914	2.0	XRF25/914D





Standard thickness mm	Symbol
1.0	A
1.2	B
1.5	C
2.0	D



Width & thickness other than shown are made upon customer's request/specification as example below

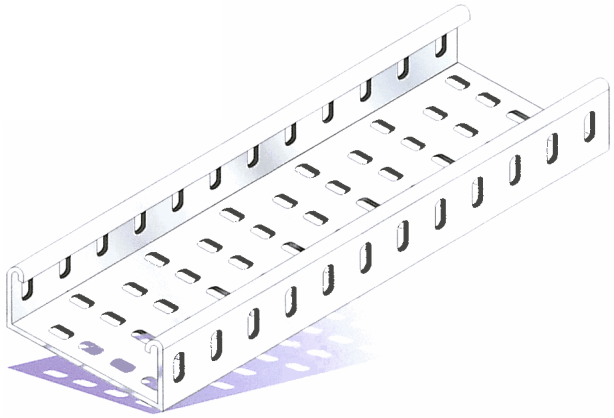
E.G. XRF25/250-C

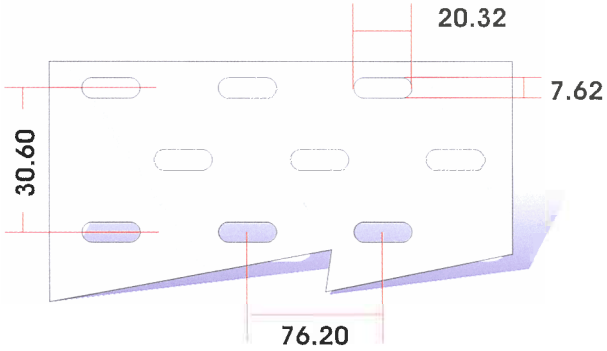
.RETURN FLANGE TYPE CABLE TRAY
25mm HEIGHT
1.5mm GAUGE
250mm WIDTH

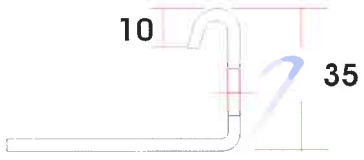
2. ESTEEM

2. 35mm Flange Height

Width mm	Gauge mm	Part No.
76	1.0	XRF35/76A
76	1.2	XRF35/76B
102	1.0	XRF35/102A
102	1.2	XRF35/102B
152	1.0	XRF35/152A
152	1.2	XRF35/152B
229	1.0	XRF35/229A
229	1.2	XRF35/229B
305	1.0	XRF35/305A
305	1.2	XRF35/305B
400	1.2	XRF35/400B
400	1.5	XRF35/400C
457	1.5	XRF35/457C
457	2.0	XRF35/457D
500	1.5	XRF35/500C
500	2.0	XRF35/500D
610	1.5	XRF35/610C
610	2.0	XRF35/610D
762	2.0	XRF35/762D
914	2.0	XRF35/914D







Side hole perforation

Standard thickness mm	Symbol
1.0	A
1.2	B
1.5	C
2.0	D

Width & thickness other than shown are made upon customer's request/specification as example below

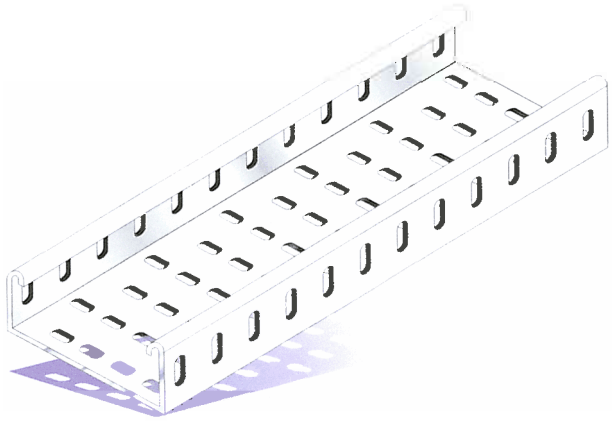
E.G. XRF35/250-C

.RETURN FLANGE TYPE CABLE TRAY
35mm HEIGHT
1.5mm GAUGE
250mm WIDTH

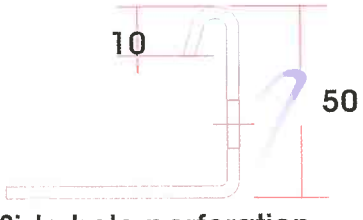
2. ESTEEM

3. 50mm Flange Height

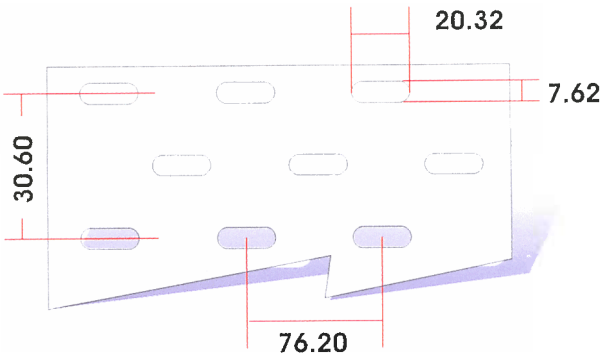
Width mm	Gauge mm	Part No.
76	1.0	XRF50/76A
76	1.2	XRF50/76B
102	1.0	XRF50/102A
102	1.2	XRF50/102B
152	1.0	XRF50/152A
152	1.2	XRF50/152B
229	1.0	XRF50/229A
229	1.2	XRF50/229B
305	1.0	XRF50/305A
305	1.2	XRF50/305B
305	1.5	XRF50/305C
400	1.2	XRF50/400B
400	1.5	XRF50/400C
457	1.5	XRF50/457C
457	2.0	XRF50/457D
500	1.5	XRF50/500C
500	2.0	XRF50/500D
610	1.5	XRF50/610C
610	2.0	XRF50/610D
762	2.0	XRF50/762D
914	2.0	XRF50/914D



Standard thickness mm	Symbol
1.0	A
1.2	B
1.5	C
2.0	D



Side hole perforation



Width & thickness other than shown are made upon customer's request/specification as example below

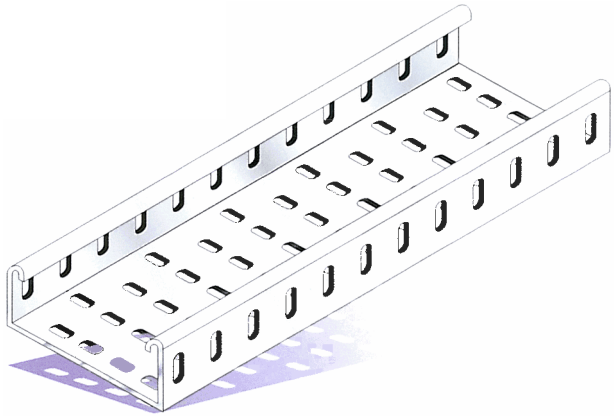
E.G. XRF50/250-C

.RETURN FLANGE TYPE CABLE TRAY
50mm HEIGHT
1.5mm GAUGE
250mm WIDTH

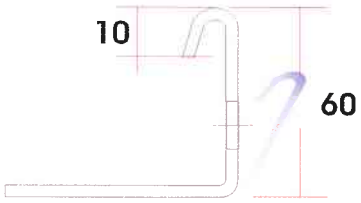
2. ESTEEM

4. 60mm Flange Height

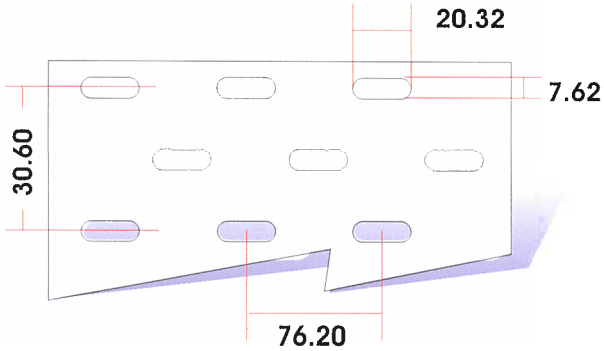
Width mm	Gauge mm	Part No.
76	1.0	XRF60/76A
76	1.2	XRF60/76B
76	1.2	XRF60/76C
102	1.0	XRF60/102A
102	1.2	XRF60/102B
102	1.2	XRF60/102C
152	1.0	XRF60/152A
152	1.2	XRF60/152B
152	1.5	XRF60/152C
229	1.0	XRF60/229A
229	1.2	XRF60/229B
229	1.5	XRF60/229C
305	1.2	XRF60/305B
305	1.5	XRF60/305C
400	1.2	XRF60/400B
400	1.5	XRF60/400C
457	1.5	XRF60/457C
457	2.0	XRF60/457D
500	1.5	XRF60/500C
500	2.0	XRF60/500D
610	1.5	XRF60/610C
610	2.0	XRF60/610D
762	2.0	XRF60/762D
914	2.0	XRF60/914D



Standard thickness mm	Symbol
1.0	A
1.2	B
1.5	C
2.0	D



Side hole perforation



Width & thickness other than shown are made upon customer's request/specification as example below

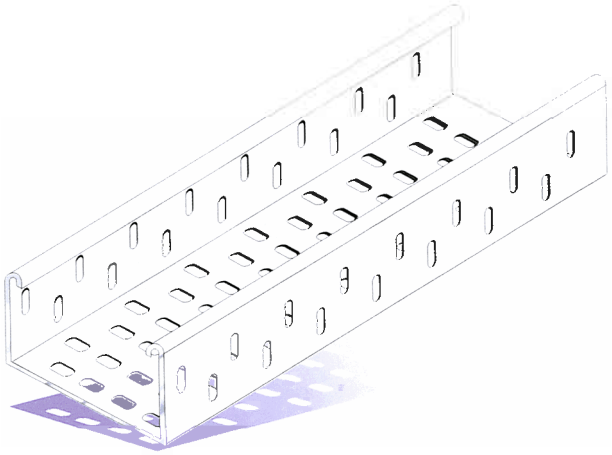
E.G. XRF60/250-C

- XRF60 — .RETURN FLANGE TYPE CABLE TRAY
- 60 — 60mm HEIGHT
- 250 — 250mm WIDTH
- C — 1.5mm GAUGE

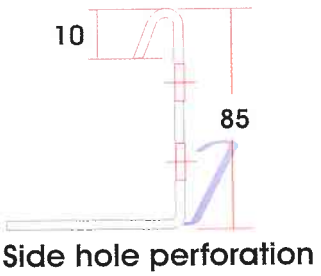
2. ESTEEM

5. 85mm Flange Height

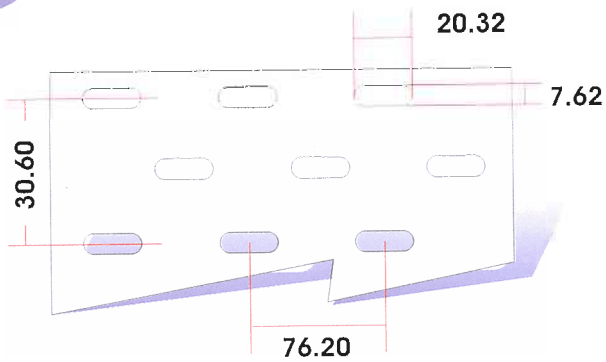
Width mm	Gauge mm	Part No.
76	1.0	XRF85/76A
76	1.2	XRF85/76B
76	1.5	XRF85/76C
102	1.0	XRF85/102A
102	1.2	XRF85/102B
102	1.5	XRF85/102C
152	1.0	XRF85/152A
152	1.2	XRF85/152B
152	1.5	XRF85/152C
229	1.0	XRF85/229A
229	1.2	XRF85/229B
229	1.5	XRF85/229C
305	1.2	XRF85/305B
305	1.5	XRF85/305C
400	1.2	XRF85/400B
400	1.5	XRF85/400C
457	1.5	XRF85/457C
457	2.0	XRF85/457D
500	1.5	XRF85/500C
500	2.0	XRF85/500D
610	1.5	XRF85/610C
610	2.0	XRF85/610D
762	2.0	XRF85/762D
914	2.0	XRF85/914D



Standard thickness mm	Symbol
1.0	A
1.2	B
1.5	C
2.0	D



Side hole perforation



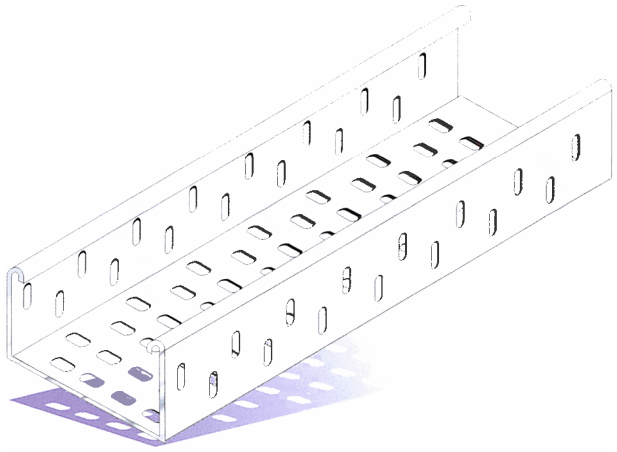
Width & thickness other than shown are made upon customer's request/specification as example below

E.G. XRF85/250-C

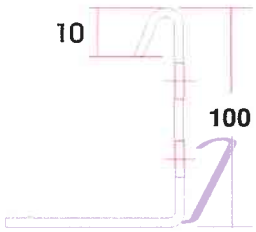
.RETURN FLANGE TYPE CABLE TRAY
85mm HEIGHT
1.5mm GAUGE
250mm WIDTH

6. 100mm Flange Height

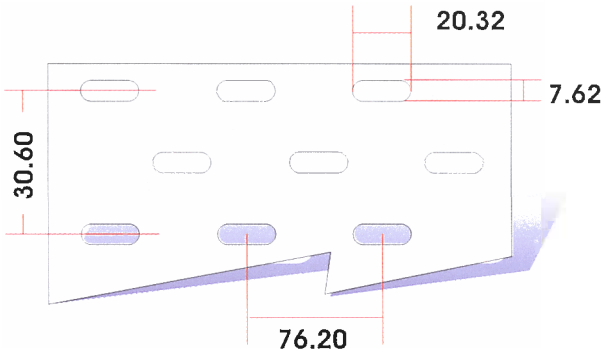
Width mm	Gauge mm	Part No.
102	1.0	XRF100/102A
102	1.2	XRF100/102B
102	1.5	XRF100/102C
152	1.0	XRF100/152A
152	1.2	XRF100/152B
152	1.5	XRF100/152C
229	1.0	XRF100/229A
229	1.2	XRF100/229B
305	1.2	XRF100/305B
305	1.5	XRF100/305C
400	1.2	XRF100/400B
400	1.5	XRF100/400C
457	1.5	XRF100/457C
457	2.0	XRF100/457D
500	1.5	XRF100/500C
500	2.0	XRF100/500D
610	1.5	XRF100/610C
610	2.0	XRF100/610D
762	2.0	XRF100/762D
914	2.0	XRF100/914D



Standard thickness mm	Symbol
1.0	A
1.2	B
1.5	C
2.0	D



Side hole perforation



Width & thickness other than shown are made upon customer's request/specification as example below

E.G. XRF100/250-C

.RETURN FLANGE TYPE CABLE TRAY
100mm HEIGHT
1.5mm GAUGE
250mm WIDTH

2. ESTEEM

ACCESSORIES

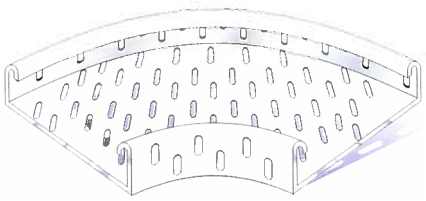
Flange height to be identified along with all other dimensional information for a required type of accessories. Please follow the example mentioned below.

Thickness	1.0	1.2	1.5	2.0
Symbol	A	B	C	D

E.G. XRFB35/76-A

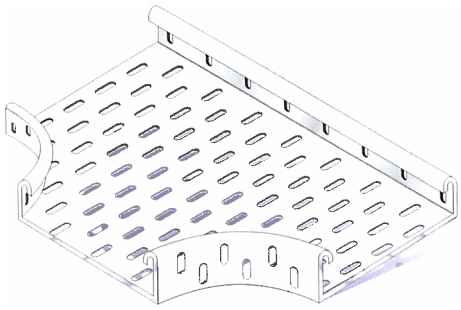
- XRFB — RETURN FLANGE TYPE OF ACCESS.
- 35 — FLANGE HEIGHT
- 76 — WIDTH
- A — 1.5mm THICKNESS

Example
102mm 90deg.
Horizontal Bend.



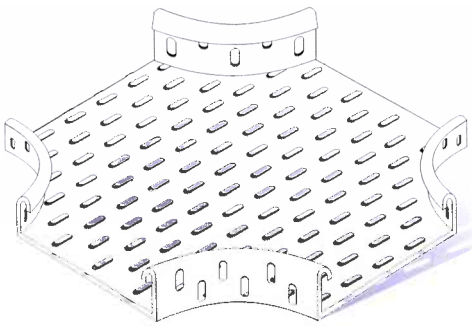
Part No.
XRFB25/102-A
XRFB35/102-A
XRFB50/102-A
XRFB60/152-B
XRFB85/229-B
XRFB100/305C
XRFBO110/457-C

102mm
Horizontal Tee.



Part No.
XRFT25/102-A
XRFT35/102-A
XRFT50/102-A
XRFT60/152-B
XRFT85/229-B
XRFT100/305C
XRFT110/457-C

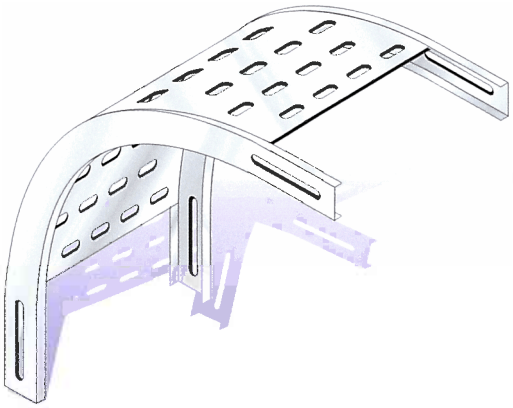
102mm
Horizontal Cross.



Part No.
XRFX25/102-A
XRFX35/102-A
XRFX50/102-A
XRFX60/152-B
XRFX85/229-B
XRFX100/305C
XRFX110/457-C

2. ESTEEM

Example
102mm 90Deg.
Inside Riser.

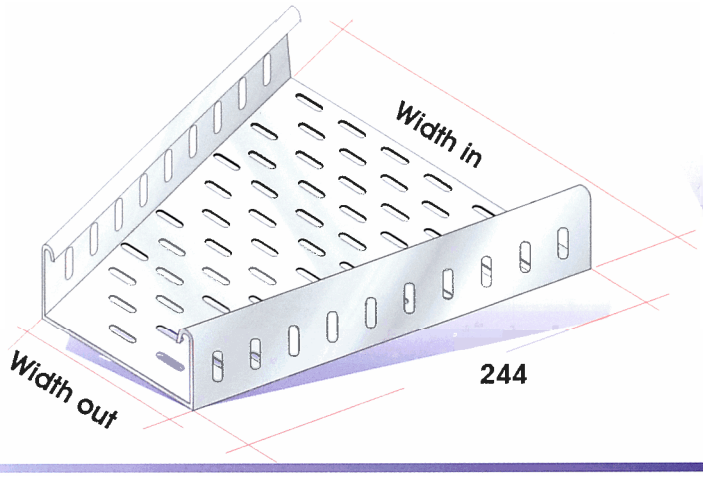


Part No.
RFIR25/102-A
RFIR35/102-A
RFIR50/102-A
RFIR60/152-B
RFIR85/229-B
RFIR100/305C
RFIR110/457-C

102mm 90Deg.
Outside Riser.

Part No.
RFOR25/102-A
RFOR35/102-A
RFOR50/102-A
RFOR60/152-B
RFOR85/229-B
RFOR100/305C
RFOR110/457-C

To specify reducer determine
width in as W1 width out as W2



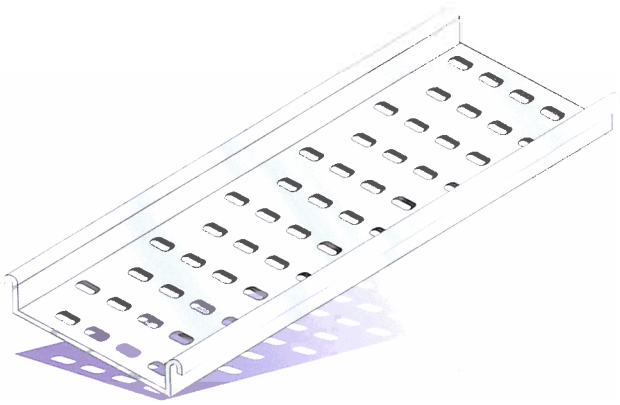
Part No.
RFR25/W1-W2-A
RFR35/W1-W2-A
RFR50/W1-W2-C
RFR60/W1-W2-C
RFR85/W1-W2-C
RFR110/W1-W2-C

2. ESTEEM

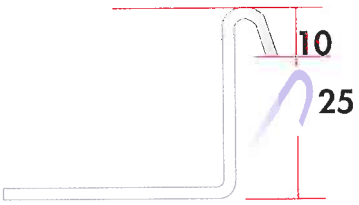
A. Standard Outside Flange

1. 25mm Outside Flange Height

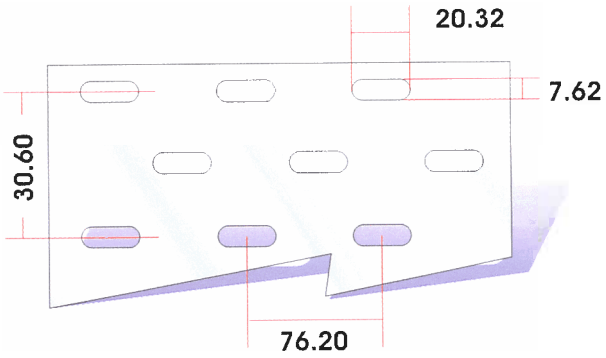
Width mm	Gauge mm	Part No.
76	1.0	XRFO25/76A
76	1.2	XRFO25/76B
102	1.0	XRFO25/102A
102	1.2	XRFO25/102B
152	1.0	XRFO25/152A
152	1.2	XRFO25/152B
229	1.0	XRFO25/229A
229	1.2	XRFO25/229B
305	1.0	XRFO25/305A
305	1.2	XRFO25/305B
305	1.5	XRFO25/305C
400	1.5	XRFO25/400B
400	1.5	XRFO25/400C
457	1.5	XRFO25/457C
457	2.0	XRFO25/547D
500	1.5	XRFO25/500C
500	2.0	XRFO25/500D
610	1.5	XRFO25/610C
610	2.0	XRFO25/610D
762	2.0	XRFO25/762D
914	2.0	XRFO25/914D



Standard thickness mm	Symbol
1.0	A
1.2	B
1.5	C
2.0	D



Side Hole perforation



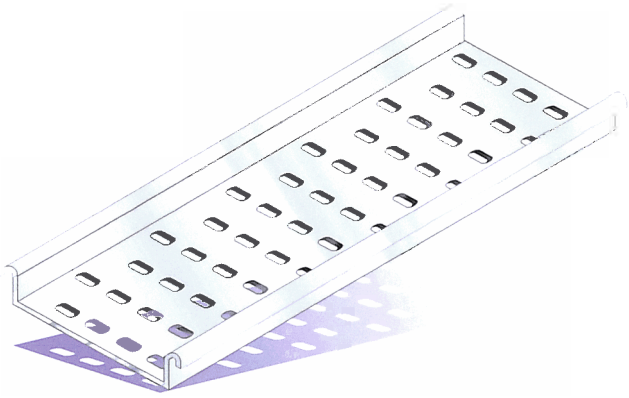
Width & thickness other than shown are made upon customer's request/specification as example below

E.G. XRFO25/250-C

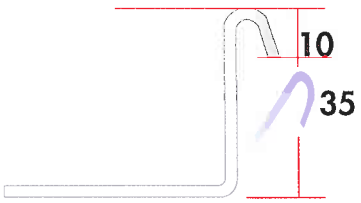
STRAIGHT FLANGE TYPE CABLE TRAY
25mm HEIGHT
1.5mm GAUGE
250mm WIDTH

2. 35mm Outside Flange Height

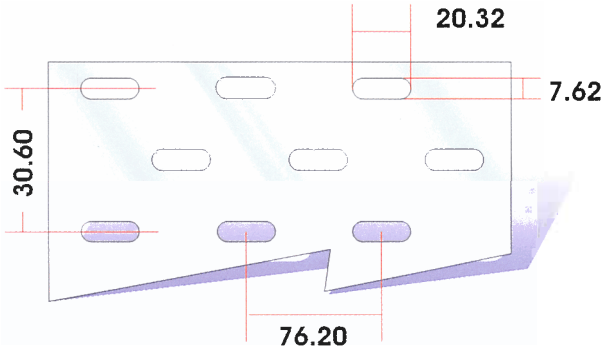
Width mm	Gauge mm	Part No.
76	1.0	XRFO35/76A
76	1.2	XRFO35/76B
102	1.0	XRFO35/102A
102	1.2	XRFO35/102B
102	1.5	XRFO35/102C
152	1.0	XRFO35/152A
152	1.2	XRFO35/152B
152	1.5	XRFO35/152C
229	1.0	XRFO35/229A
229	1.2	XRFO35/229B
229	1.0	XRFO35/229A
305	1.5	XRFO35/305C
305	1.2	XRFO35/305B
305	1.5	XRFO35/305C
400	1.2	XRFO35/400B
400	1.5	XRFO35/400C
457	1.5	XRFO35/457C
457	2.0	XRFO35/457D
500	1.5	XRFO35/500C
500	2.0	XRFO35/500D
610	1.5	XRFO35/610C
610	2.0	XRFO35/610D
762	2.0	XRFO35/762D
914	2.0	XRFO35/914D



Standard thickness mm	Symbol
1.0	A
1.2	B
1.5	C
2.0	D



Side Hole perforation



Width & thickness other than shown are made upon customer's request/specification as example below

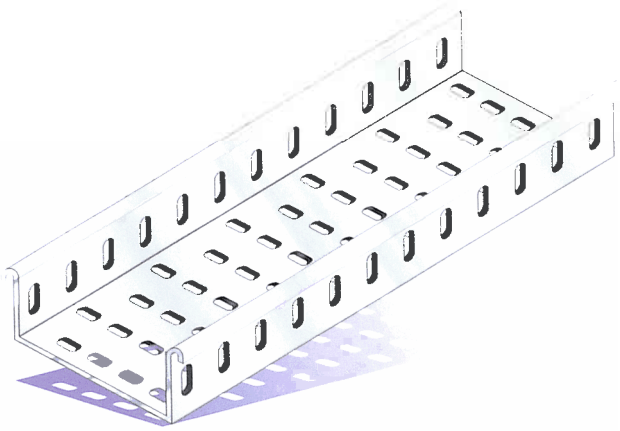
E.G. XRFO35/250-C

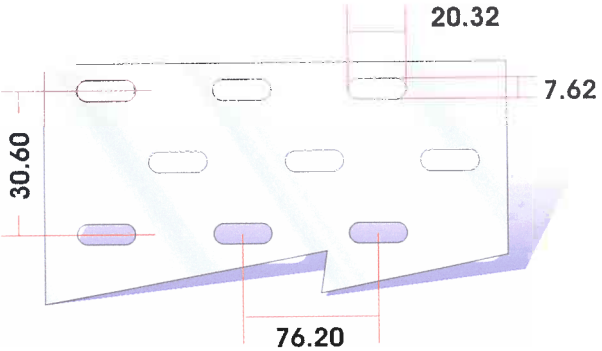
- STRAIGHT FLANGE TYPE CABLE TRAY
- 35mm HEIGHT
- 1.5mm GAUGE
- 250mm WIDTH

2. ESTEEM

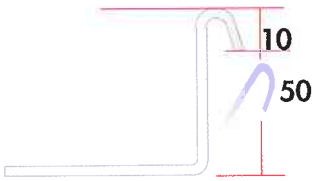
3. 50mm Outside Flange Height

Width mm	Gauge mm	Part No.
76	1.0	XRFO50/76A
76	1.2	XRFO50/76B
76	1.5	XRFO50/76C
102	1.0	XRFO50/102A
102	1.2	XRFO50/102B
102	1.5	XRFO50/102C
152	1.0	XRFO50/152A
152	1.2	XRFO50/152B
152	1.5	XRFO50/152C
229	1.0	XRFO50/229A
229	1.2	XRFO50/229B
229	1.5	XRFO50/229C
305	1.0	XRFO50/305A
305	1.2	XRFO50/305B
305	1.5	XRFO50/305C
400	1.2	XRFO50/400B
400	1.5	XRFO50/400C
457	1.5	XRFO50/457C
457	2.0	XRFO50/457D
500	1.5	XRFO50/500C
500	2.0	XRFO50/500D
610	1.5	XRFO50/610C
610	2.0	XRFO50/610D
762	2.0	XRFO50/762D
914	2.0	XRFO50/914D





Standard thickness mm	Symbol
1.0	A
1.2	B
1.5	C
2.0	D



Side hole perforation

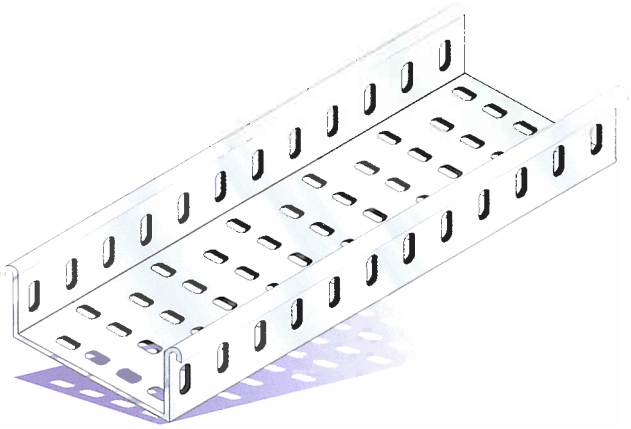
Width & thickness other than shown are made upon customer's request/specification as example below

E.G. XRFO50/550-D

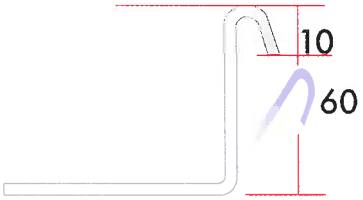
STRAIGHT FLANGE TYPE CABLE TRAY
50mm HEIGHT
2.0mm GAUGE
550mm WIDTH

4. 60mm Outside Flange Height

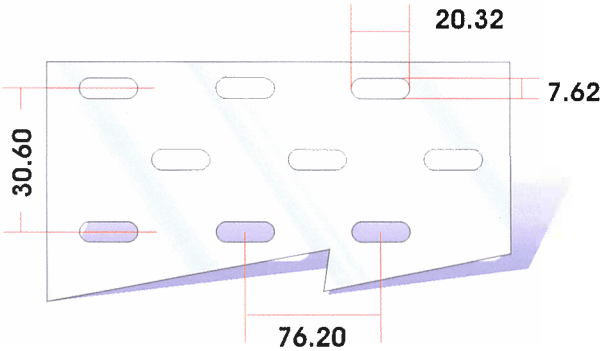
Width mm	Gauge mm	Part No.
76	1.0	XRFO60/76A
76	1.2	XRFO60/76B
76	1.5	XRFO60/76C
102	1.0	XRFO60/102A
102	1.2	XRFO60/102B
102	1.5	XRFO60/102C
152	1.0	XRFO60/152A
152	1.2	XRFO60/152B
152	1.5	XRFO60/152C
229	1.0	XRFO60/229A
229	1.2	XRFO60/229B
229	1.5	XRFO60/229C
305	1.0	XRFO60/305A
305	1.2	XRFO60/305B
305	1.5	XRFO60/305C
400	1.2	XRFO60/400B
400	1.5	XRFO60/400C
457	1.5	XRFO60/457C
457	2.0	XRFO60/457D
500	1.5	XRFO60/500C
500	2.0	XRFO60/500D
610	1.5	XRFO60/610C
610	2.0	XRFO60/610D
762	2.0	XRFO60/762D
914	2.0	XRFO60/914D



Standard thickness mm	Symbol
1.0	A
1.2	B
1.5	C
2.0	D



Side Hole perforation



Width & thickness other than shown are made upon customer's request/specification as example below

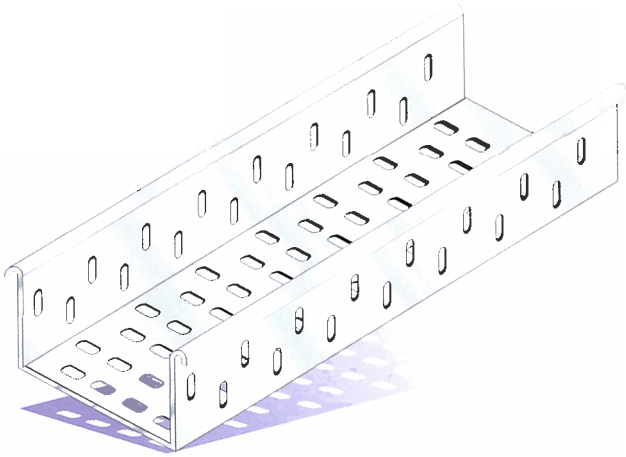
E.G. XRFO60/400-D

STRAIGHT FLANGE TYPE CABLE TRAY
60mm HEIGHT
2.0mm GAUGE
400mm WIDTH

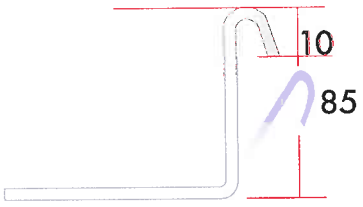
2. ESTEEM

5. 85mm Outside Flange Height

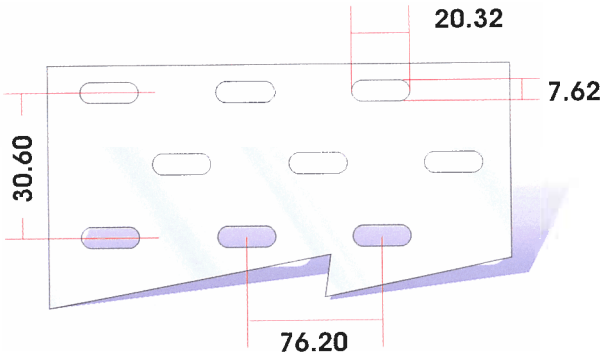
Width mm	Gauge mm	Part No.
102	1.0	XRFO85/102A
102	1.2	XRFO85/102B
102	1.5	XRFO85/102C
152	1.0	XRFO85/152A
152	1.2	XRFO85/152B
152	1.5	XRFO85/152C
229	1.0	XRFO85/229A
229	1.2	XRFO85/229B
229	1.5	XRFO85/229C
305	1.0	XRFO85/305A
305	1.2	XRFO85/305B
305	1.5	XRFO85/305C
400	1.2	XRFO85/400B
400	1.5	XRFO85/400C
457	1.5	XRFO85/457C
457	2.0	XRFO85/457D
500	1.5	XRFO85/500C
500	2.0	XRFO85/500D
610	1.5	XRFO85/610C
610	2.0	XRFO85/610D
762	2.0	XRFO85/762D
914	2.0	XRFO85/914D



Standard thickness mm	Symbol
1.0	A
1.2	B
1.5	C
2.0	D



Side Hole perforation



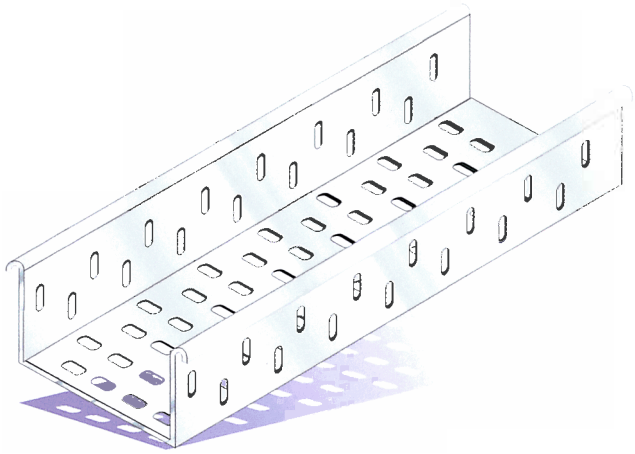
Width & thickness other than shown are made upon customer's request/specification as example below

E.G. XRFO85/700-C

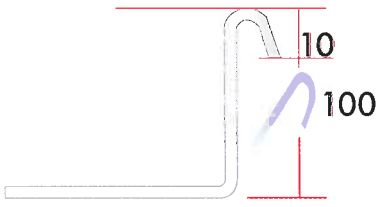
STRAIGHT FLANGE TYPE CABLE TRAY
85mm HEIGHT
1.5mm GAUGE
700mm WIDTH

6. 100mm Outside flange Height

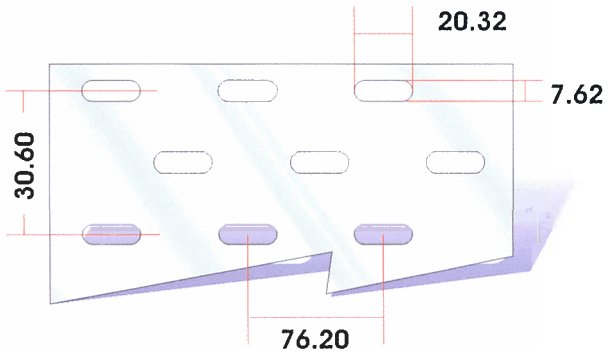
Width mm	Gauge mm	Part No.
152	1.0	XRFO100/152A
152	1.2	XRFO100/152B
152	1.5	XRFO100/152C
229	1.0	XRFO100/229A
229	1.2	XRFO100/229B
229	1.5	XRFO100/229C
305	1.0	XRFO100/305A
305	1.2	XRFO100/305B
305	1.5	XRFO100/305C
400	1.2	XRFO100/400B
400	1.5	XRFO100/400C
457	1.5	XRFO100/457C
457	2.0	XRFO100/457D
500	1.5	XRFO100/500C
500	2.0	XRFO100/500D
610	1.5	XRFO100/610C
610	2.0	XRFO100/610D
762	2.0	XRFO100/762D
914	2.0	XRFO100/914D



Standard thickness mm	Symbol
1.0	A
1.2	B
1.5	C
2.0	D



Side Hole perforation



Width & thickness other than shown are made upon customer's request/specification as example below

E.G. XRFO100/1000-D

STRAIGHT FLANGE TYPE CABLE TRAY
110mm HEIGHT
2.0mm GAUGE
1000mm WIDTH

2. ESTEEM

Outside Flange Accessories

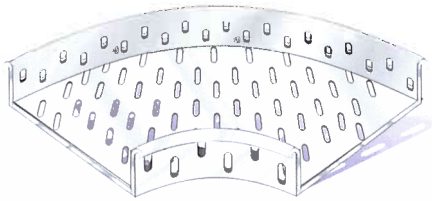
Flange height to be identified along with all other dimensional information for a required type of accessories. Please follow the example mentioned below.

Thickness	1.0	1.2	1.5	2.0
Symbol	A	B	C	D

E.G. XRFBO35/76-A

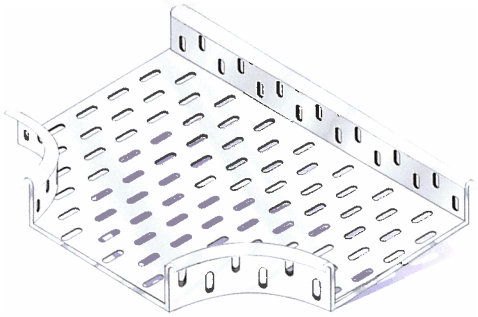
- STRAIGHT FLANGE
- HORIZAONTAL BEND
- 35mm HEIGHT
- 1.0mm THICKNESS
- WIDTH

Example
102mm 90deg.
Horizontal Bend.



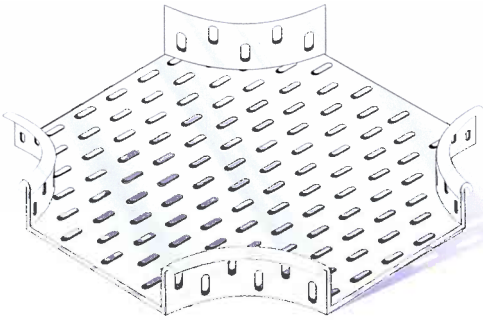
Part No.
XRFBO25/102-C
XRFBO35/102-C
XRFBO50/102-C
XRFBO60/102-C
XRFBO85/102-C
XRFBO110/102-C

102mm
Horizontal Tee.



Part No.
XRFTO25/102-C
XRFTO35/102-C
XRFTO50/102-C
XRFTO60/102-C
XRFTO85/102-C
XRFTO110/102-C

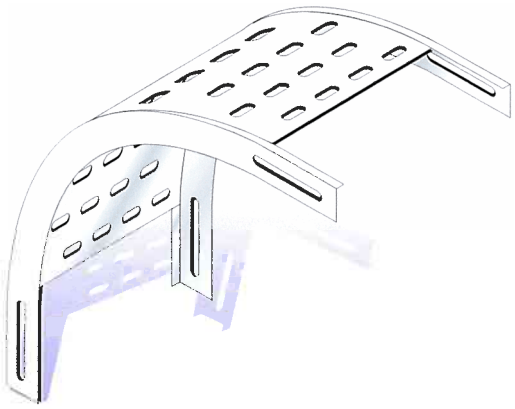
102mm
Horizontal Cross.



Part No.
XRFXO25/102-C
XRFXO35/102-C
XRFXO50/102-C
XRFXO60/102-C
XRFXO85/102-C
XRFXO110/102-C

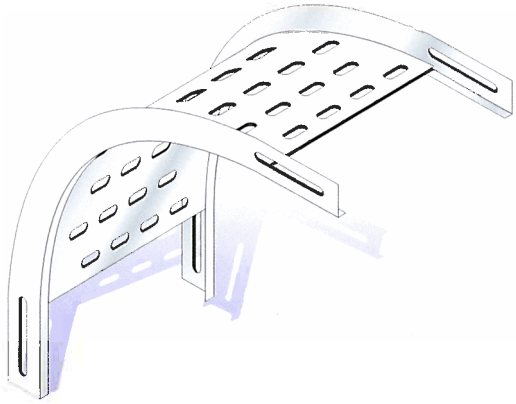
2. ESTEEM

Example
305mm 90Deg.
Inside Riser.



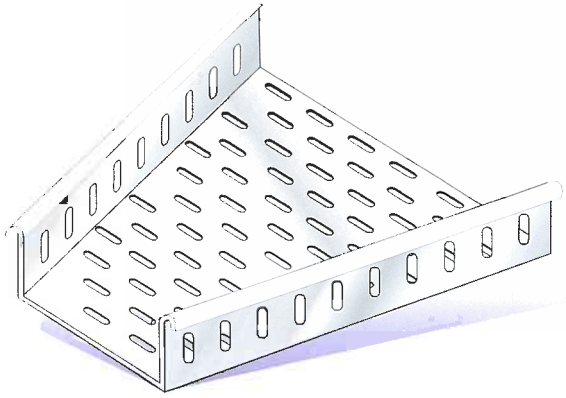
Part No.
RFRO35/305-C
RFRO50/305-C
RFRO60/305-C
RFRO85/305-C
RFRO110/305-C

305mm 90Deg.
Outside Riser.



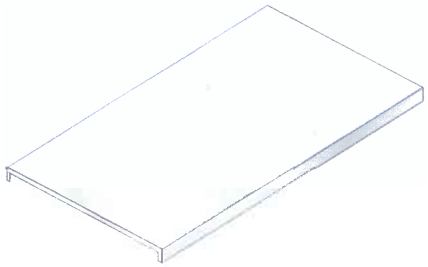
Part No.
RFORO35/305-C
RFORO50/305-C
RFORO60/305-C
RFORO85/305-C
RFORO110/305-C

To specify reducer determine width in as W1 width out as W2

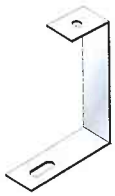


Part No.
RFRO25/W1-W2-C
RFRO35/W1-W2-C
RFRO50/W1-W2-C
RFRO60/W1-W2-C
RFRO85/W1-W2-C
RFRO110/W1-W2-C

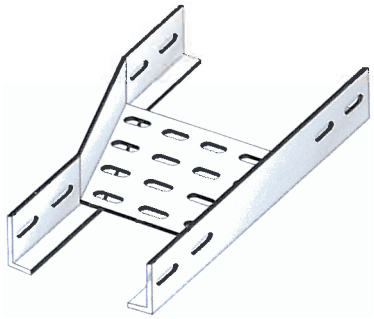
General ancillary items



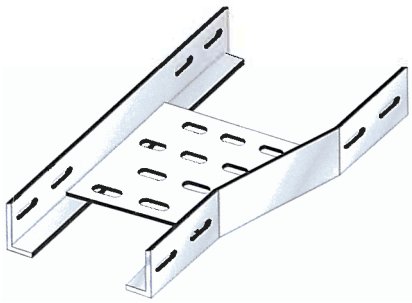
1. Closed cover
RFCC/Width



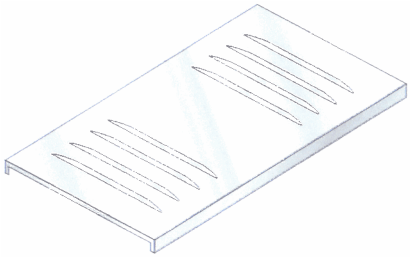
2. Cover bracket
CB/H*-MG



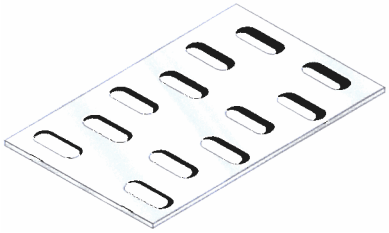
3. Left hand reducer
XRFOH*RHR/W1-W2
RFH*LHR/W1-W2



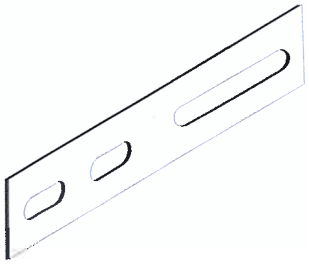
4. Right hand reducer
XRFOH*RHR/W1-W2
RFH*RHR/W1-W2



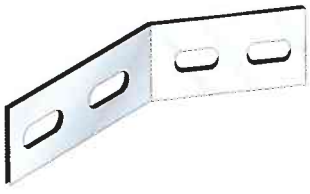
5. Louvered cover
RFLVC/Width



6. Fish plate
FP/Width



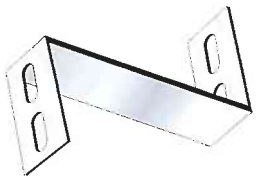
7. Expansion connector
EC/H*



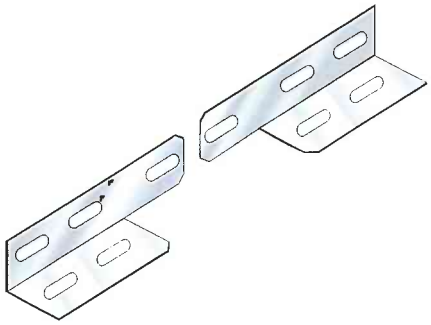
8. Internal Cranked coupler
RFH*/CC - INT

H indicates height of the tray.

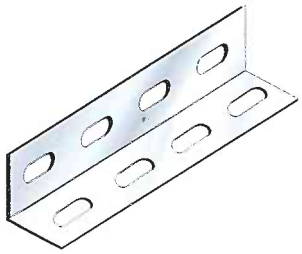
General ancillary items



9. Reducing connector W1-W2 (Difference)
RCH*/Difference

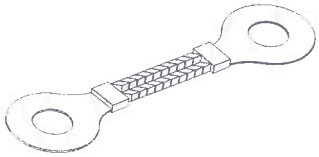


10. Vertical adjustable connector
connector XSLVAC/H*

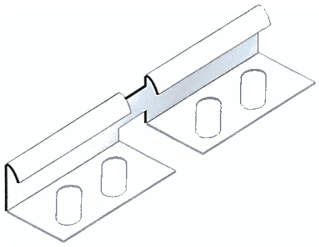


11. Straight coupler
XSLSC/H*

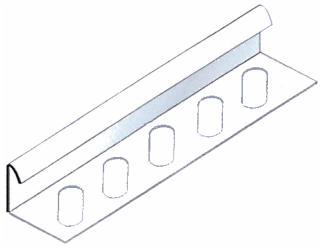
12. Drop out DO/Width



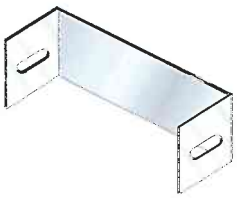
13. Earth Continuity Strap
Braided-ES/ECS
Cable-EC/ECS



14. External Cranked Coupler
RFH*/CC-EXT
For Inside Flange Only

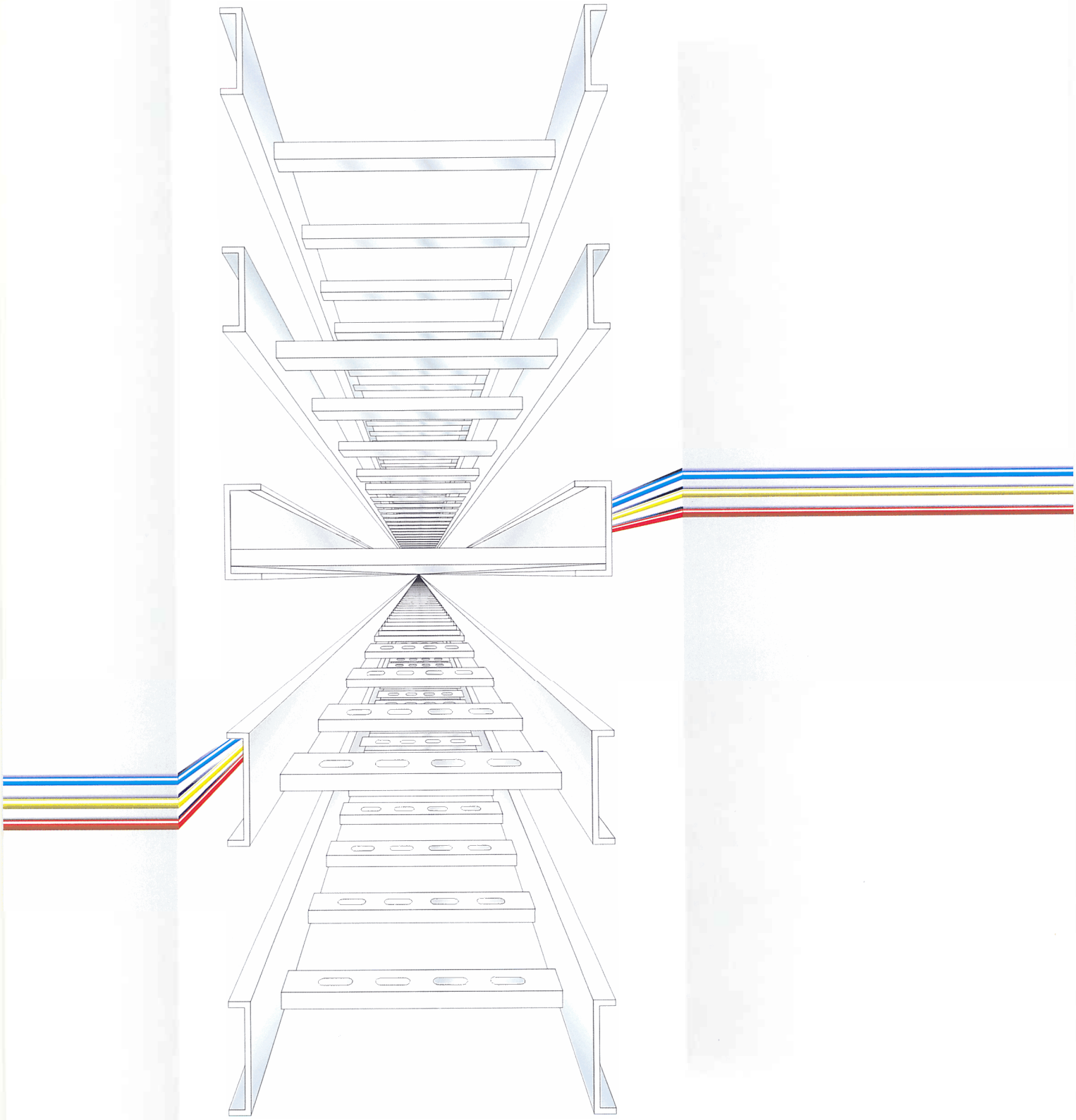


15. External Coupler
RFH*/EXT
For Inside Flange Only



16. Blind end
BEH*/Width

H indicates height of the tray.



Cable Ladder

KSC

Khereiji Showrooms Co.ltd