# CABLE MANAGEMENT SYSTEM



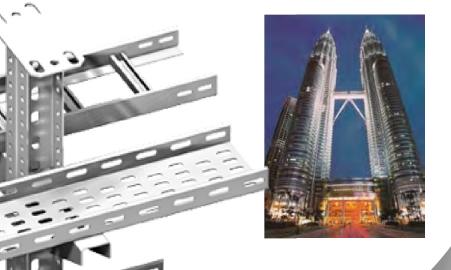
### Oil & Gas Infrastructure

### and Building Applications











## DILIGENT ENERGY Private Limited

# CABLE SUPPORT SYSTEM INTRODUCTION

Diligent Energy (PVT) LTD is manufacturer according to ISO 9001 quality system for supply to primarily the oil, gas, generation, industries and commercial buildings.

metal fittings on all our products. We practices stringent quality control at every stage of production, guaranteed to meet your specification and requirement and work closely with engineers and consultants to determine the most suitable system for installation.

Materials are available in stainless 304, 316, 316L, Carbon Steel with Hot Dipped Galvanized or Powder Coating finish. DE system of cable support includes strut channels, concrete insert, cantilever arms, trapeze and brackets.

DE incorporates several ranges of Cable Support System including Ladders, Trays, Trunkings, Wire Mesh Trays, Channels, Concrete Inserts, Cantilever Arms, Trapeze, Cleats, Fasteners and accessories.

#### CABLE TRAYS

Perforated Type
 Straight Trench Type
 Bend and Risers
 T Joints and Reducers

#### CABLE LADDER

★ Flange in Type
 ★ Flange out Type
 ★ Installation Accessories

#### **CABLE MESH**

Especially design of cable mesh for food, chemical and processing industries in different sizes and grades with stainless steel rods.

#### CABLE TRUNKING

Totally enclosed, generally used indoor.



#### Loading Specifications Uniformly Distributed Loads

Choose a Cable Support System by our required cable load and designed support span. Standard Classification in Table 1 shows the minimum working load with 1.5 safety factor. Cable Support System are meant for supporting of cables, not used as walkways.

↑ ◆ Span Length (Clear Span) ◆ ↑											
	Working Load Lbs/ft (kg/m)		oort Span eet (m)	Class Designation Per 3.1							
50	(74.4)	8	(2.44)	8A							
75	(111.6)	8	(2.44)	8B							
100	(148.8)	8	(2.44)	8C							
50	(74.4)	12	(3.66)	12A							
75	(111.6)	12	(3.66)	12B							
100	(148.8)	12	(3.86)	12C							
50	(74.4)	16	(4.87)	16A							
75	(111.5)	16	4.87)	16B							
100	(148.8)	16	(4.87)	16C							
50	(74.4)	20	(6.09)	20A							
75	(111.6)	20	(6.09)	20B							
100	(148.8)	20	(6.09)	20C							

Span/L	_oad De	sign	atio	n on	DE	Cab	le La	dde	r and	d Tra	y	
Side Rail Height	8A	8B	8C	12A	12B	12C	16A	16B	16C	20A	20B	200
38mm 50mm	FB38 FB50 HRF50	FB38 FB50 HRF50	FB38 FB50 HRF50									
75mm	CPL75 C175 HL75 FB75	CPL75 C175 HL75 FB75	HL75 FB75									
100mm	CPL100 CI100 CT100 HRF100 HL100	CPL100 CI100 CT100 HRF100 HL100	CPL100 CI100 CT100 HRF100 HL100	CPL100 CI100 CT100 HL100	HL100	HL100						
125mm	CPL125 CI125 CT125 HL125	CPL125 CI125 CT125 HL125	CPL125 CI125 CT125 HL125	CPL125 CI125 CT125 HL125	CPL125 CI125 CT125 HL125	CPL125 CI125 CT125 HL125	HL125	HL125	HL125	HL125	HL125	
150mm	CPL150 CI150	CPL150 CI150	CPL150 CI150	CPL150 CI150	CPL150 CI150	CPL150 CI150	CPL150 CI150	CPL150 CI150	CPL150 CI150	CPL150 CI150		
	CT150 HL150 AI150	CT150 HL150 AI150	CT150 HL150 AI150	CT150 HL150 AI150	CT150 HL150 AI150	CT150 HL150 AI150	CT150 HL150 AI150	CT150 HL150 AI150	CT150 HL150 AI150	CT150 HL150 AI150	HL150 Al150	HL18 AI15
160mm	HL160	HL160	HL160	HL160	HL160	HL160	HL160	HL160	HL160	HL160	HL160	HL16

Table 1

## **Family of Quality**





We take pride of our quality. We have spectrometer to check all incoming materials, stringent QC and total quality management.









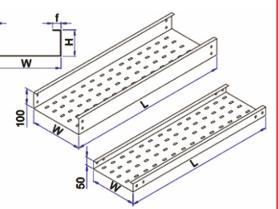




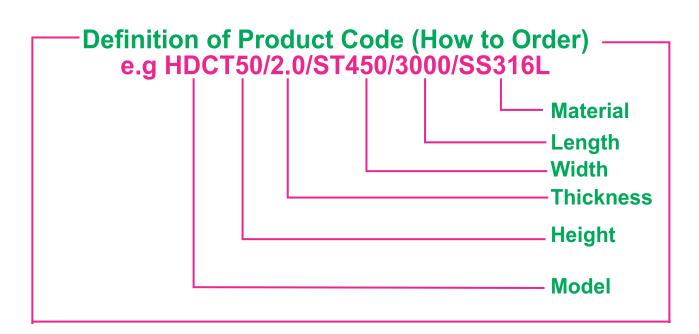
### **Metallic Cable Tray**

Length Dimension of slot : 7x20mm Coupler Fastener

- : 2438mm or 3000mm
- : 1.0mm 2.0mm (Thinkness)
- : M6x16L carriage Bolt c/w Serrated Flange Nut (4 Sets Per Coupler)



Model	Height, H (MM)	Width, W (MM)	Thickness, (MM)	Material	Coating
HDCT	50 75 100	50–900 50–900 50-900	1.0-2.0 1.0-2.0 1.0-2.0	Stainless Steel 304 Stainless Steel 316 Stainless Steel 316 Mild Steel PreGalvanized Electro Galvanized MS Sheet	Hot Dip Galvanize Powder Coated Epoxy Coated

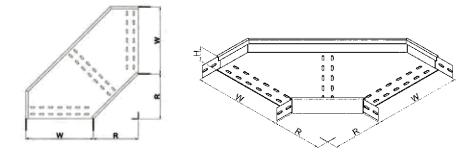


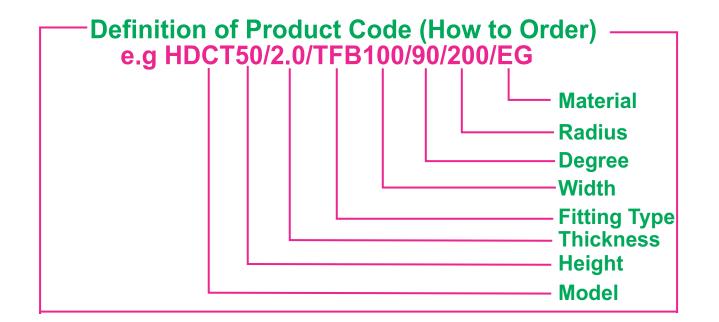
### **Horizontal Elbow**

 Segment Degree
 : 30, 45, 60 and 90

 Standard Radius (R) mm
 : 100, 200 and 300

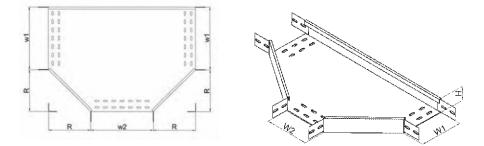
 Standard Width (W) mm
 : 100 - 900

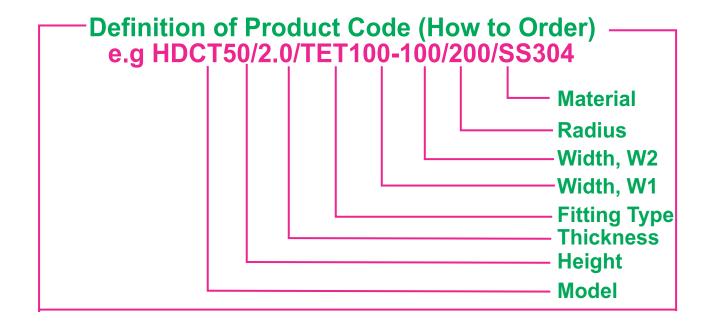




### **Equal / Unequal Tee**

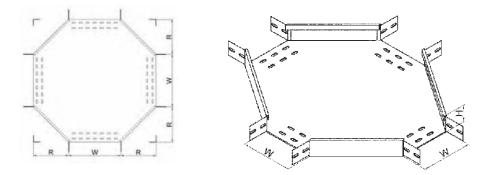
Standard Radius (R) mm: 30, 45, 60 and 90Standard Width (W1/W2) mm: 100 - 900Tee:W1 = W2 Equal (Part No : ET)W1  $\neq$  W2 Unequal (Part No : UET)

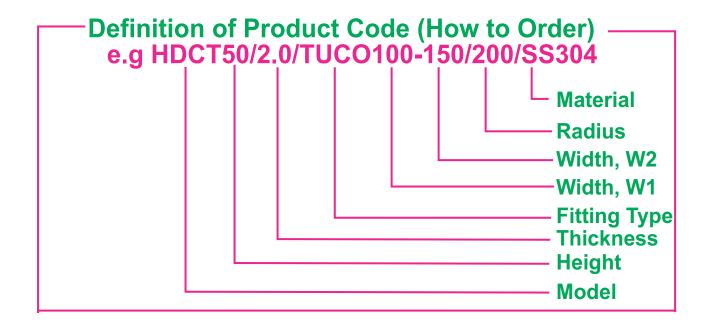


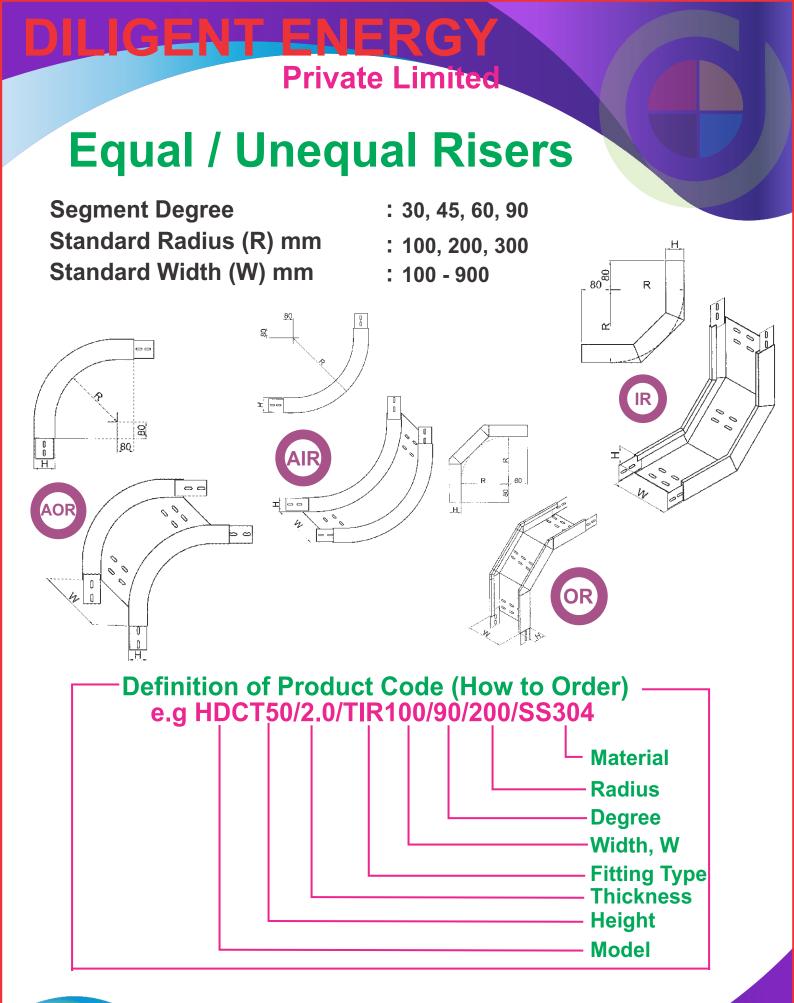


## Equal / Unequal Crossova

Standard Radius (R) mm: 100, 200, 300Standard Width (W1/W2) mm: 100 - 900Crossover:W1 = W2 Equal (Part No : CO)W1  $\neq$  W2 Unequal (Part No : UCO)

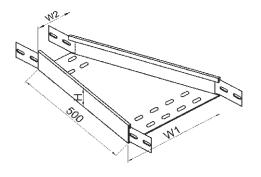


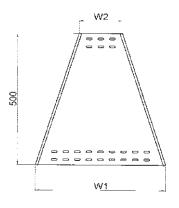




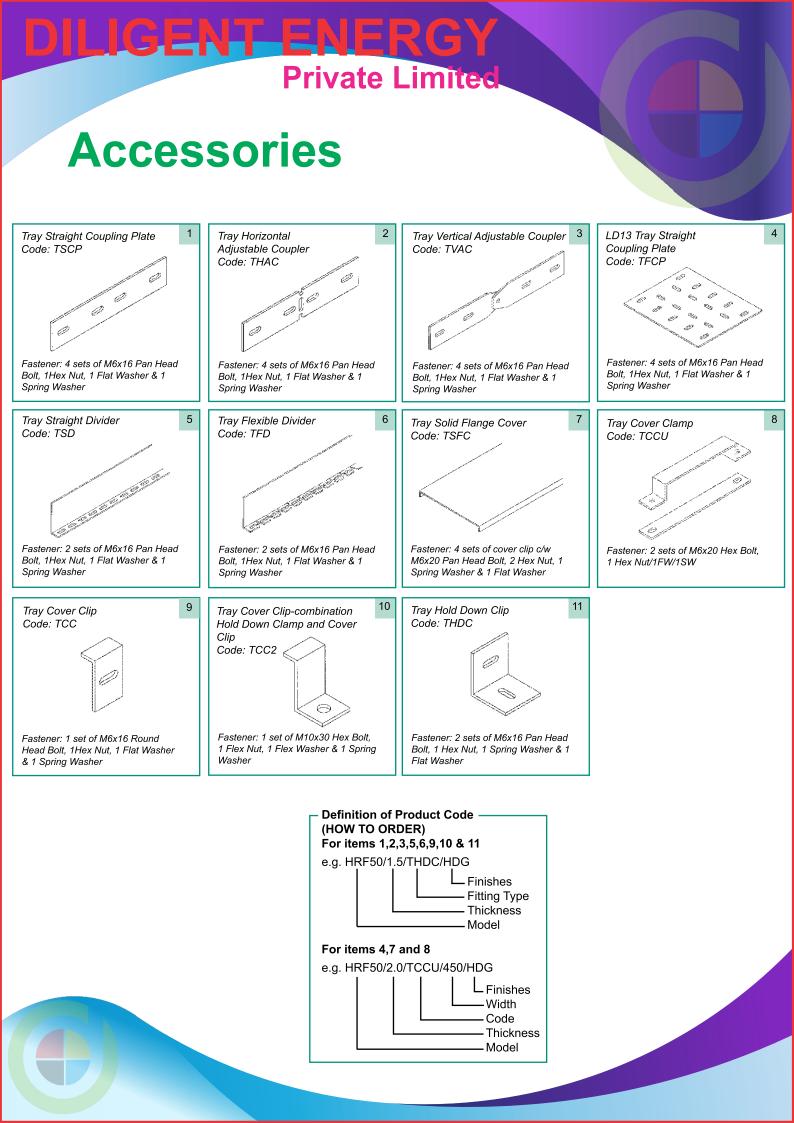
### Reducers

Standard Width (W1/W2) mm: 100 - 900Standard Length mm: 500





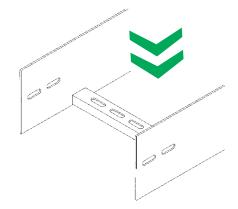




## **Metallic Cable Ladder**

M/s Diligent (PVT) LTD is manufacturer of different kind of ladder.

- F Series Ladder, Flat Bar Type
- >>> Open C Type Ladder
- Inward C Type Ladder
- H Series Ladder, Heavy Duty Return Flange Type



60 <sup>60</sup>

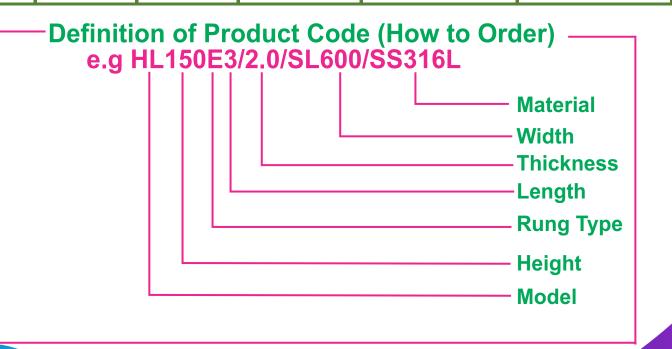
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### Metallic Cable Ladder

Length	: 2438mm or 3657mm	
Ladder Rung Type	:A to E (1.5 or 2.0mm)	
Rung Spacing	: 230 or 300mm (9" or 12")	
Ladder Rung Slot	s : 7x20mm or 11x35mm (Opti	onal)
Joint Plate	: 1.5mm or 2.0mm	
Fastener	: M10x20L Carriage Bolt c/w Flange Nut (8 sets per joint	Serrated plate)

Model	Height, H (MM)	Width, W (MM)	Thickness, (MM)	Material	Coating
	50	100-900	1.0-3.0	Stainless Steel 304 Stainless Steel 316	
HL	75	100-900	1.0-3.0	Stainless Steel 316 Mild Steel	Hot Dip Galvanize Powder Coated
	100	100-900	1.0-3.0	PreGalvanized Electro Galvanized	Epoxy Coated
	125	100-900	1.0-3.0	MS Sheet	
	150	100-900	1.0-3.0		



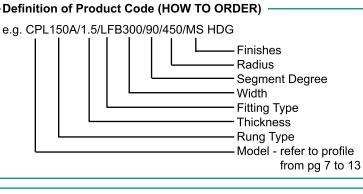
### Ladder Horizontal Elbow

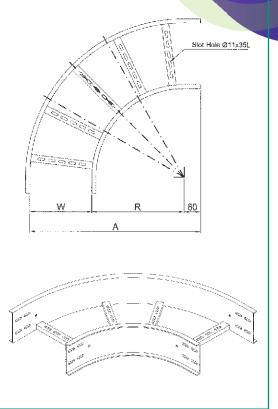
Fitting Type	Н	Н	Н	Н	Н	W
/LFB150	75	100	125	150	160	150
/LFB300	75	100	125	150	160	300
/LFB450	75	100	125	150	160	450
/LFB600	75	100	125	150	160	600
/LFB750	75	100	125	150	160	750
/LFB900	75	100	125	150	160	900

#### Radius (R), mm:

150, 200, 300, 450, 500, 600, 750, 900, 1000 & 1200

Segment Degree: 30°, 45°, 60°, 90°

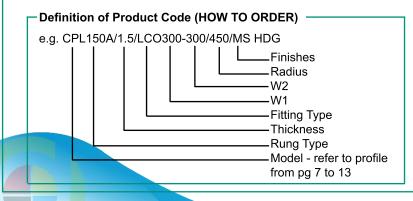


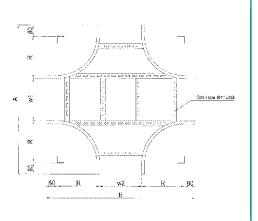


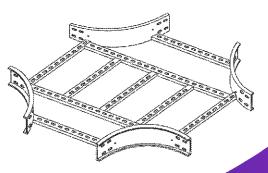
### Ladder Crossover

Fitting Type	Н	Н	Н	Н	Н	W1	W2
/LCO150	75	100	125	150	160	150	150
/LCO300	75	100	125	150	160	300	300
/LCO450	75	100	125	150	160	450	450
/LCO600	75	100	125	150	160	600	600
/LCO750	75	100	125	150	160	750	750
/LCO900	75	100	125	150	160	900	900

Radius (R), mm : 150, 200, 300, 450, 500, 600, 750, 900, 1000 & 1200 Crossover : W = W Equal W = W Unequal

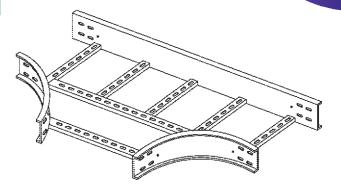


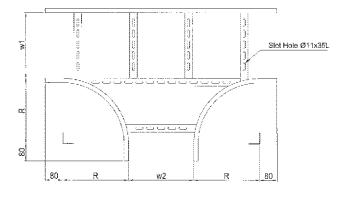




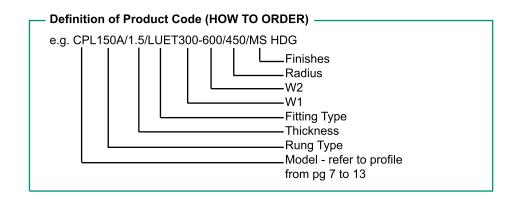
### Ladder Equal / Unequal Teq

Fitting Type	Н	Н	Н	Н	Н	W1	W2
/LET150-150	75	100	125	150	160	150	150
/LUET150-300	75	100	125	150	160	150	300
/LUET150-450	75	100	125	150	160	150	450
/LUET150-600	75	100	125	150	160	150	600
/LUET150-750	75	100	125	150	160	150	750
/LUET150-900	75	100	125	150	160	150	900
/LUET300-150	75	100	125	150	160	300	150
/LET300-300	75	100	125	150	160	300	300
/LUET300-450	75	100	125	150	160	300	450
/LUET300-600	75	100	125	150	160	300	600
/LUET300-750	75	100	125	150	160	300	750
/LUET300-900	75	100	125	150	160	300	900
/LUET450-150	75	100	125	150	160	450	150
/LUET450-300	75	100	125	150	160	450	300
/LET450-450	75	100	125	150	160	450	450
/LUET450-600	75	100	125	150	160	450	600
/LUET450-750	75	100	125	150	160	450	750
/LUET450-900	75	100	125	150	160	450	900
/LUET600-150	75	100	125	150	160	600	150
/LUET600-300	75	100	125	150	160	600	300
/LUET600-450	75	100	125	150	160	600	450
/LET600-600	75	100	125	150	160	600	600
/LUET600-750	75	100	125	150	160	600	750
/LUET600-900	75	100	125	150	160	600	900
/LUET750-150	75	100	125	150	160	750	150
/LUET750-300	75	100	125	150	160	750	300
/LUET750-450	75	100	125	150	160	750	450
/LUET750-600	75	100	125	150	160	750	600
/LET750-750	75	100	125	150	160	750	750
/LUET750-900	75	100	125	150	160	750	900
/LUET900-150	75	100	125	150	160	900	150
/LUET900-300	75	100	125	150	160	900	300
/LUET900-450	75	100	125	150	160	900	450
/LUET900-600	75	100	125	150	160	900	600
/LUET900-750	75	100	125	150	160	900	750
/LET900-900	75	100	125	150	160	900	900





**Radius (R) mm :** 150, 200, 300, 450, 500, 600, 750, 900, 1000 & 1200



### **Ladder Flexible Risers**

These are flexible means of coping on site with difficult installation situations. When used in conjunction with articulated bends and bendable fishplates these accessories can solve most mis-alignment problems. However, minor alignment difficulties may be overcome more simply using vertically hinged connectors.

Articulated risers can be used in a number of ways depending upon the circumstances. They should always be assembled together before being lifted in situ and there are two alternative approaches to installation:

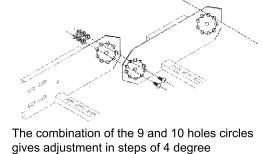
- A. Using the centre bolts the component can be assembled and tightened to an approximation of the required shape then installed and adjusted in situ.
- B. If the required radius is known then the various sections can be locked into predetermined positions during assembly creating a component with a fixed, known radius which can then be installed.

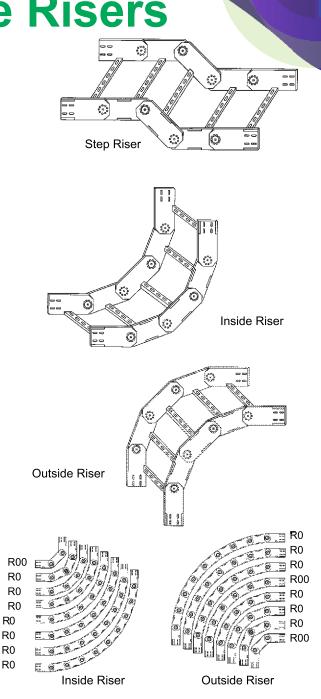
Sets can be split to create assemblies (more vertically hinged connectors will be required) or joined together to create extra long components.

Totally flexible with angle adjustment of every 4 degree

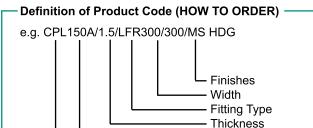
#### Riser Assembly

- (A) Match the square hole with round holes in sequence
- (B) 2 sets of M8 hex bolt/nuts/2 flat washer/1 spring washer to fix at one side
  - 1 no installed to center of the round holes
  - 1 no fix for angular position

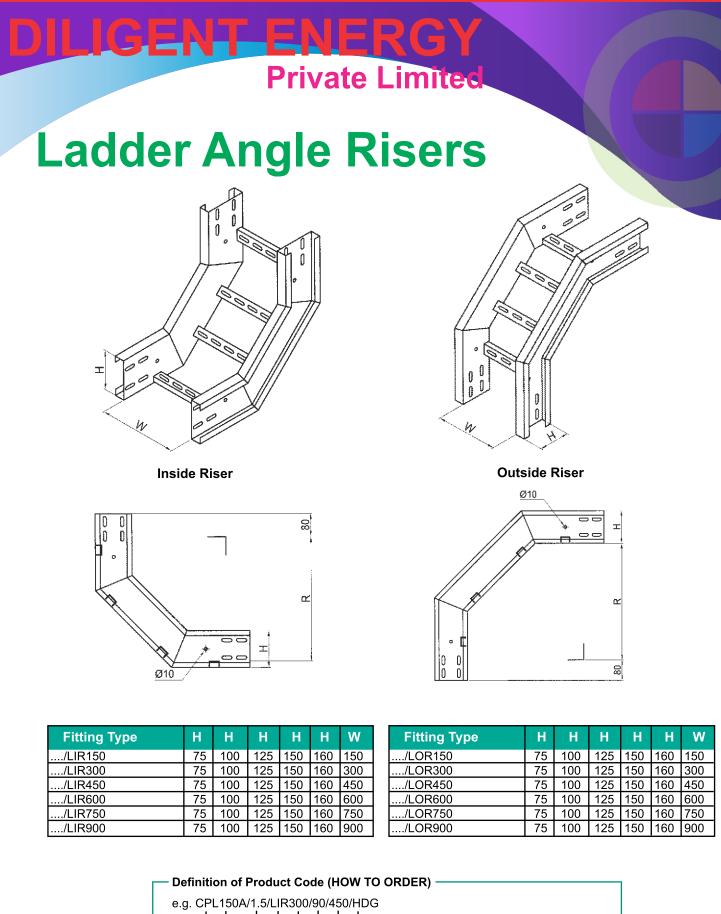


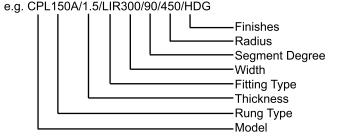


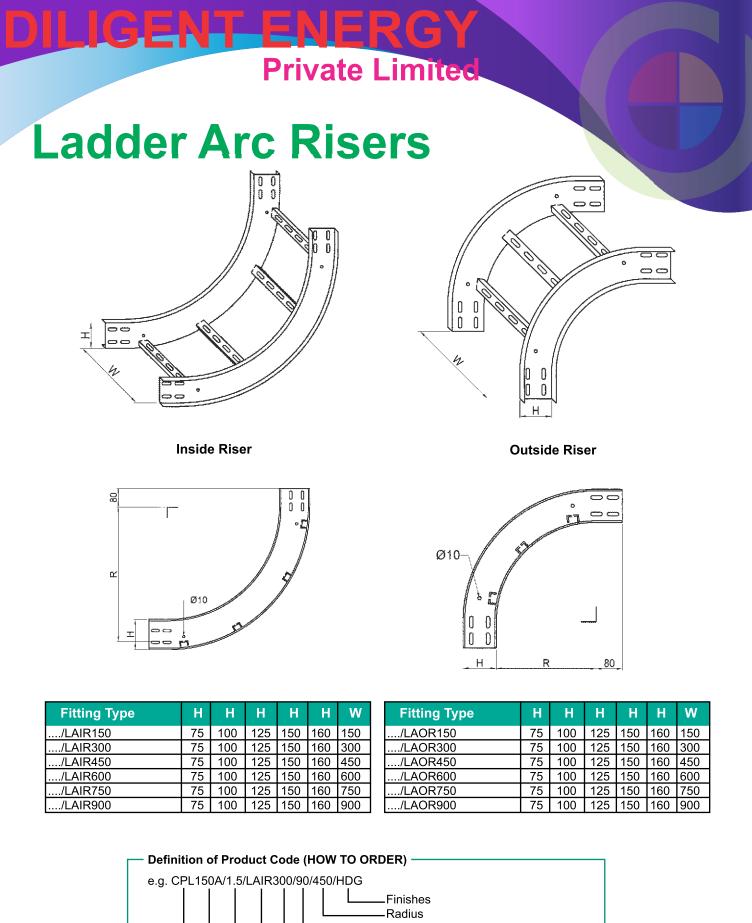
Fitting Type	W
/FR150	150
/FR300	300
/FR450	450
/FR600	600
/FR750	750
/FR900	900



Rung Type Model



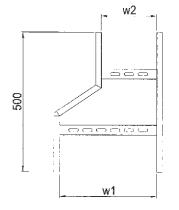






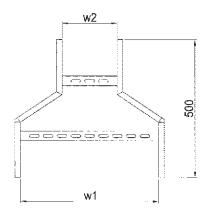
- -----Width
  - -------Fitting Type
  - ------Thickness
  - Rung Type
    - \_\_\_\_\_Model

### Ladder Reducers



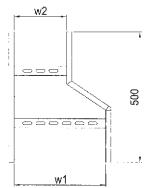
Left Hand Reducer

Fitting Type	Н	Н	Н	Н	Н	W1	W2
/LLR300-150	75	100	125	150	160	300	150
/LLR450-300	75	100	125	150	160	450	300
/LLR450-150	75	100	125	150	160	450	150
/LLR600-450	75	100	125	150	160	600	450
/LLR600-300	75	100	125	150	160	600	300
/LLR600-150	75	100	125	150	160	600	150
/LLR750-600	75	100	125	150	160	750	600



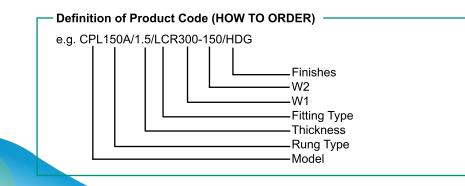
Concentric Reducer

Fitting Type	Н	Н	Н	Н	Н	W1	W2
/LCR300-150	75	100	125	150	160	300	150
/LCR450-300	75	100	125	150	160	450	300
/LCR450-150	75	100	125	150	160	450	150
/LCR600-450	75	100	125	150	160	600	450
/LCR600-300	75	100	125	150	160	600	300
/LCR600-150	75	100	125	150	160	600	150
/LCR750-600	75	100	125	150	160	750	600

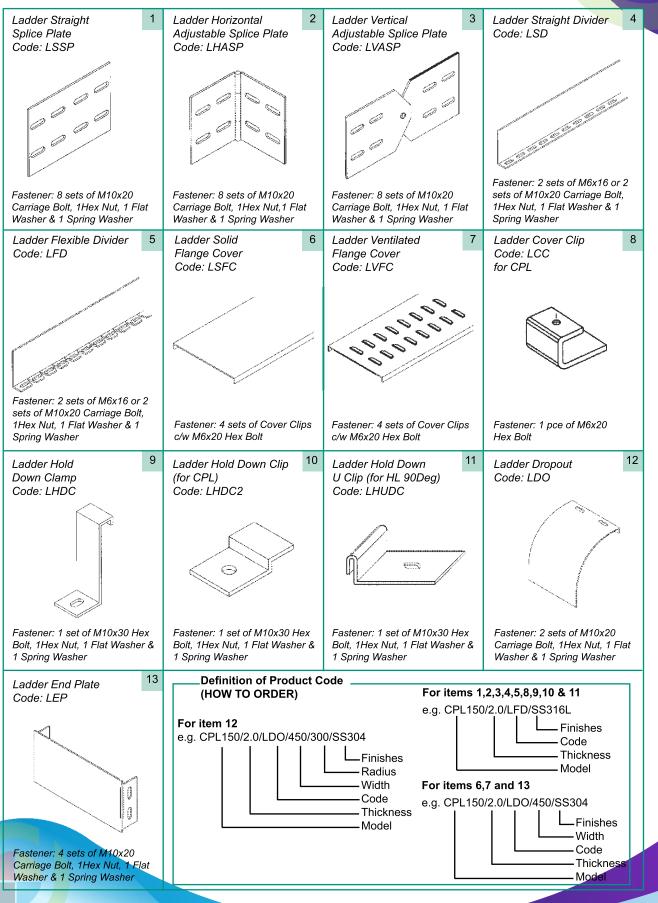


**Right Hand Reducer** 

Fitting Type	Н	Н	Н	Н	Н	W1	W2
/LRR300-150	75	100	125	150	160	300	150
/LRR450-300	75	100	125	150	160	450	300
/LRR450-150	75	100	125	150	160	450	150
/LRR600-450	75	100	125	150	160	600	450
/LRR600-300	75	100	125	150	160	600	300
/LRR600-150	75	100	125	150	160	600	150
/LRR750-600	75	100	125	150	160	750	600



### Ladder Accessories



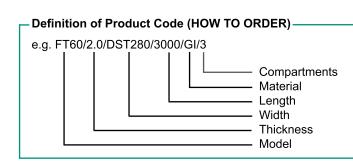
#### **Private Limited** Ladder Accessories 14 15 16 Ladder Hold Down Straight Splice Plate (C Straight Splice Plate (C Ladder Vertical 17 V-Clip - for Returned Type) for Flat Bar Type Type) for Flat Bar Type Adjustable Splice Plate Flanged Type Cable Cable Ladder Non Slotted Cable Ladder Slotted for Flat Bar Type Cable Ladder (45° flanged) Code: LSSP-C1 Code: LSSP-C2 Ladder Non Slotted Code: LHDVC Code: LVASP1 Fastener: 1 set of M6x16 Pan Head Bolt, 1Hex Nut, 1 Flat Fastener: 1 set of M10x20 Hex Fastener: 1 set of M10x30 Hex Fastener: 4 sets of M10x20 Bolt, 1Hex Nut, 1 Flat Washer Carriage Bolt/Hex Nut/Flat Washer & 1 Spring Washer & 8 Bolt, 1Hex Nut, 1 Flat Washer & 1 Spring Washer & 1 Spring Washer Washer/Spring Washer sets of M6 x 20 Hex Bolt 20 Horizontal Adjustable 18 Horizontal Adjustable 19 Cable Ladder Earth Bonding Jumper 21 Splice Plate (with Hinges) Splice Plate (without Reducer Plate Material - Wire Braided for Flat Bar Type Cable Hinges) for Flat Bar Type Code: LEBJ / TEBJ Code: LRP Ladder Non Slotted cable Ladder Slotted Code: LHASP1 Code: LHASP2 Fastener<sup>.</sup> LEBJ - 2 sets of M8x20 Fastener: 1 set of M6x16 Pan Pan Head Bolt/Hex Nut/Flat Head Bolt, 1Hex Nut, 1 Flat Washer/Spring Washer Washer & 1 Spring Washer & 2 TEBJ - 2 sets of M6x16 Fastener: 8 sets of M10x20 sets of M10x20 Carriage Bolt/Hex Fastener: 8 sets of M6x20 Carriage Bolt/Hex Nut/Flat Pan Head Bolt/Hex Nut/Flat Nut/Flat Washer/Spring Washer Washer/Spring Washer Washer/Spring Washer Hex Bolt 25 22 23 Earth Bonding Jumper 24 Edge Protector (Rubber) Cable Ladder Clamp Ladder Cover Clip Material - Green PVC Code: LCCU Code: EPR Code: LCC1 Code: LEBJ / TEBJ 6 Fastener: LEBJ - 2 sets of M8x20 Pan Head Bolt/Hex Nut/Flat Washer/Spring Washer TEBJ - 2 sets of M6x16 Fastener: 2 sets of M6x20 Hex Bolt/Hex Nut/Flat Washer/ Pan Head Bolt/Hex Nut/Flat Fastener<sup>.</sup> Washer/Spring Washer Spring Washer 1 set of M6x20 Hex Bolt 26 Definition of Product Code Cable Tray (HOW TO ORDER) Reducer Plate Code: TRP For item 14,15,16,17,18,19,20,23,25 and 26 e.g. CPL150/2.0/LHDVC/SS316 Finishes Code Thickness -Model For item 21,22 and 24 e.g. CPL0/LEBJ/WIRE BRAIDED Fastener: 4 sets of M6x16 Code Pan Head Bolt/Hex Nut/Flat Model Washer/Spring Washer

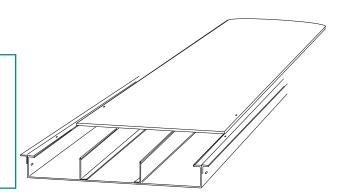
# Floor Distribution System

#### Definition of Product Code (HOW TO ORDER) e.g. UD25/1.0/DST100/2438/GI/2 Compartments Material Length Width Thickness Model

Model	H (mm)	H (mm)	H (mm)	T (mm)	W (mm)	L (mm)	Material
UD	25	32	38	0.8 - 2.0	DST50	1500, 2438 or 3000	Stainless Steel 304 Stainless Steel 316 or 316L
	25	32	38	0.8 - 2.0	DST75	1500, 2438 or 3000	
	25	32	38	0.8 - 2.0	DST100	1500, 2438 or 3000	Aluminium 5052
	25	32	38	0.8 - 2.0	DST150	1500, 2438 or 3000	Mild Steel (HDG or epoxy
	25	32	38	0.8 - 2.0	DST200	1500, 2438 or 3000	coated finish) Pre-Galvanised
	25	32	38	0.8 - 2.0	DST225	1500, 2438 or 3000	Electro Galvanised
	25	32	38	0.8 - 2.0	DST250	1500, 2438 or 3000	
	25	32	38	0.8 - 2.0	DST275	1500, 2438 or 3000	
	25	32	38	0.8 - 2.0	DST300	1500, 2438 or 3000	
	25	32	38	0.8 - 2.0	DST375	1500, 2438 or 3000	

#### Flushfloor Trunking System





ſ	Model	H (mm)	T (mm)	W (mm)	L (mm)	Material	
	FT	60	0.8 - 2.0	DST155	1500, 2438 or 3000	Stainless Steel 304 Stainless Steel 316 or 316L Aluminium 5052 Mild Steel (HDG or epoxy coated finish) Pre-Galvanised Electro Galvanised	
		60	0.8 - 2.0	DST280	1500, 2438 or 3000		
		60	0.8 - 2.0		1500, 2438 or 3000		
	Model	H (mm)	T (mm)		L (mm)		
	FT	28	0.8 - 2.0	DST100	1500, 2438 or 3000		
		28	0.8 - 2.0	DST150	1500, 2438 or 3000		
		28	0.8 - 2.0	DST200	1500, 2438 or 3000		
		28	0.8 - 2.0	DST225	1500, 2438 or 3000		
		28	<b>0.8 -</b> 2.0	DST300	1500, 2438 or 3000		

### DILIGENT ENERGY Private Limited



### **Global Office**

Office # 113, Bin Saloom Building, Al Baraha Dubai - UAE

#### Lahore Office

Office # 321, Subhan Plaza, H-3 Block, Johar Town, Lahore - Pakistan

### **Islamabad Office**

House # 1, Street # 35, Sector G 13/2, Islamabad - Pakistan



info@diligentgroups.com



+92 3 111 195 111