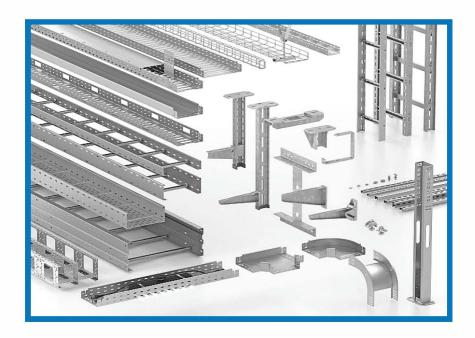
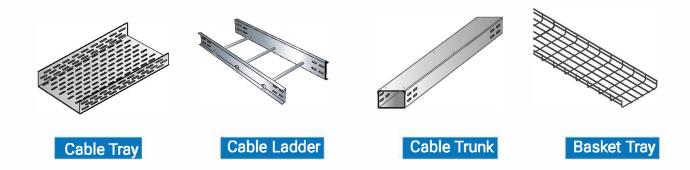
# **Cable Management System**

There are a wide variety of containment systems available to organize and store cables within an installation. They tend not to be used exclusively for a particular type of wiring system, and the containment system chosen is often as much decided by the budget and practical considerations of the building it is being installed in as the cabling type itself.



A complete range of cable management systems for any large stock instal-lation of standard cable trunking, tray and basket bespoke one of the solutions designed and manufactured in house taking note of all international & GCC standards.



## **Standards And Definitions**

In this publication, reference is made to the standards listed below. Copies are available from the indicated sources.



#### **American National Standards Institute (Ansi)**

11 West 42nd Street New York, NY 10036





#### **National Fire Protection Association (Nfpa)**

Batterymarch Park
Quinchy, Ma 02269
Ansi/Nfpa 70-93 National Electrical Code
And Other Equivalent / Relative Standards

#### **American Society For Testing Materials**

1916 Race Street Philadelphia, PA 1903

ASTM A 123 - 89 Zinc (Hot – Dip Galvanized) coatings on Iron & Steel Products.

ASTM A 525 - 87 Genera requirements, Steel sheet, Zinc - coated (Galvanized) by Hot-Dip process.

ASTM B 633 - 98 Electrodeposited coatings of Zinc on Iron and Steel.

ASTM B 766 - 86 Electrodeposited coatings of cadmium.

And other equivalent / relative standards





#### National Electrical Manufacturer's Association (Nema)

IEC-61537 - Requirements and tests for cable tray systems (such as; all metal cable trays including wire mesh cable tray and non-metallic cable trays) for the support, accommodation of cables and possibly other electrical equipment in electrical and/or communication systems.

And other equivalent/relative standard

## **Material & Product Standards**

#### **MATERIALS**

Mild Steel - Plain

A. Hot rolled steel plates, sheets and colls s235 jr, As per:

EN 10025-2 / DIN 17100 / BS 4360 / ASTM A653 I ASTM A 1011 ASTM A 1011-011-01 a/ JIS 3101 / JIS 3106 / GB 700 / T1 591

ASTM A 907 / ASTM A 572 M.

#### B. Cold Rolled Steel DC 01, As per:

EN 10130 / DIN 1623, Part 2 / BS 1449 :1 / ASTM A 1008 JIS G3141 / GB 699, EN 10131 / ASTM A 568M.

\*Note: All outdated standards / codes are replaced with new/ latest versions and the final product shall comply with the latest version

#### Mild Steel - Galvanized

C. Continuosly Pre-Galvanized Hot-Di pp Zinc Coated Steel DX 51 D +Z, As per :

EN 10327 / DIN 17162 / BS 2989 / ASTM /A527M / ASTM A653 M JIS G 3302. EN 10326 / EN 10142 / ASTM A 526, 527, 528 / ASTM A 146

D. Electro Galvanized Steel ( Electrolytic Coating ) DC01 + ZE As per :

EN 10152 / DIN 17163 / ASTM A591 / JIS G3313 JIS G3141 / BS 1449 : 1 / EN 10131.

\*Note: All outdated standards / codes are replaced with new/ latest versions and the final product shall comply with the latest version



#### Stainless Steel

F. Austenitic Stainless Steels AISI 304 & 316 As per:

ASTM A240 / EN 10088 - 2 / DIN 17400 / BS 1449-2 ASTM A480 / ASTM A666 / ISO 3506 / EN 10028-7 JIS G4304

F.1 Stainless Steel Fasteners EN 3506

F.2 Stainless Steel Wire BS 1554, ASTM A 276

#### **Aluminium**

G. Aluminium 5052 & 6063

\*Note: All outdated standards / codes are replaced with new/ latest versions and the final product shall comply with the latest version

## **FINISHES**

- 1. HOT DIP Galvanization After Fabrication As per: ASTM A 123 / ASTM A 153 / ISO 1461 BS 729 / DIN 50976
- 2. ZINC Electroplating After Fabrication As per : ASTM B633 / EN 12329 / ISO 4042 / BS 1706 / BS 3382 DIN 50961
- 3. Powder Coating: Epoxy / Polyester / Epoxy & Polyester BS 3900 / 2409 / ISO 1519 / ISO 1520

\*Note: All outdated standards / codes are replaced with new/ latest versions and the final product shall comply with the latest version

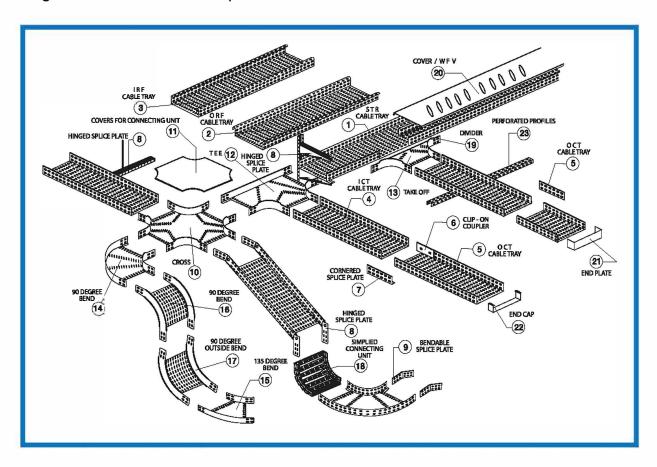




# **Cable Tray System**

Heavy duty return flang Cable Tray is ideal for use in situations where greater strength and rigidity are required. The side flange of 50 mm depth and with a 10 mm return, is to carry heavier cables with fewer supports.

The special couplings quickly, Lock into position and make the flanges continuos, the other flange heights are also available on request.

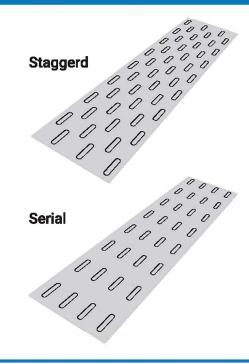


# **Product Range**

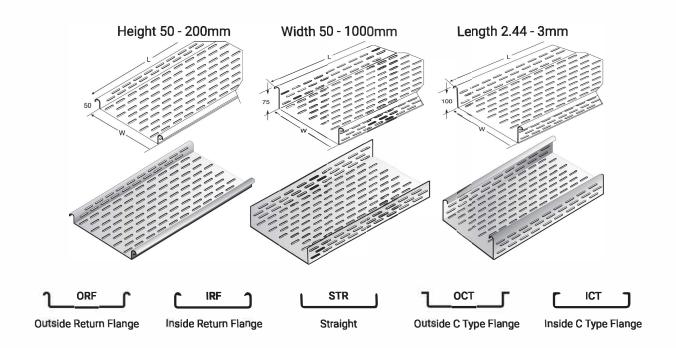
- LCT (1.00mm Thickness)
- Medium Duty
  HCT (1.20mm Thickness)
- Heavy Duty
  HCT (1.50mm Thickness)
- Very Heavy Duty
  VCT (2.00mm Thickness)

\* Custom Sizes Also Avaliable

## **Types Of Perforation**

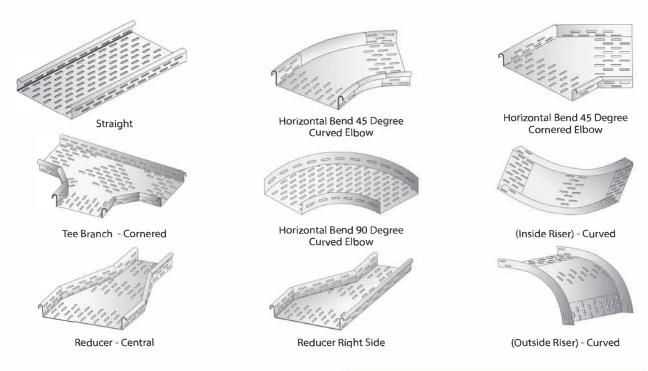


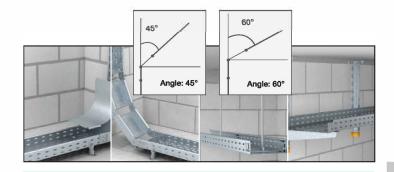
# **Cable Tray With Different Dimensions**

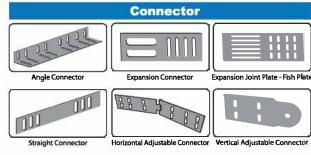


# **Cable Tray Fitting & Accessories**

#### **Corners and Curved**





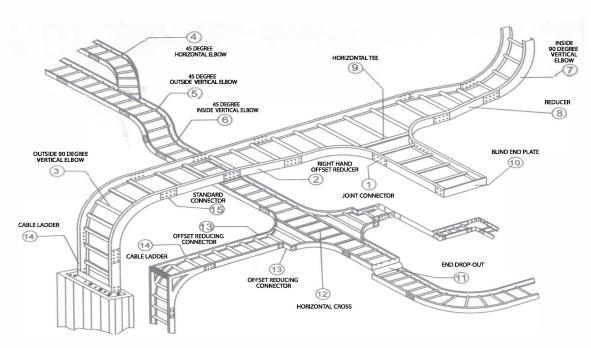


# **Cable Ladder System**

Cable ladder is a more reliable, less expensive solution for supporting cable, which is easier to maintain, proves more adaptable to changing needs, and is more suitable for harsh and corrosive environments.

In specifying cable ladder, you will be choosing a highly versatile solution which delivers quality and performance over the long term.





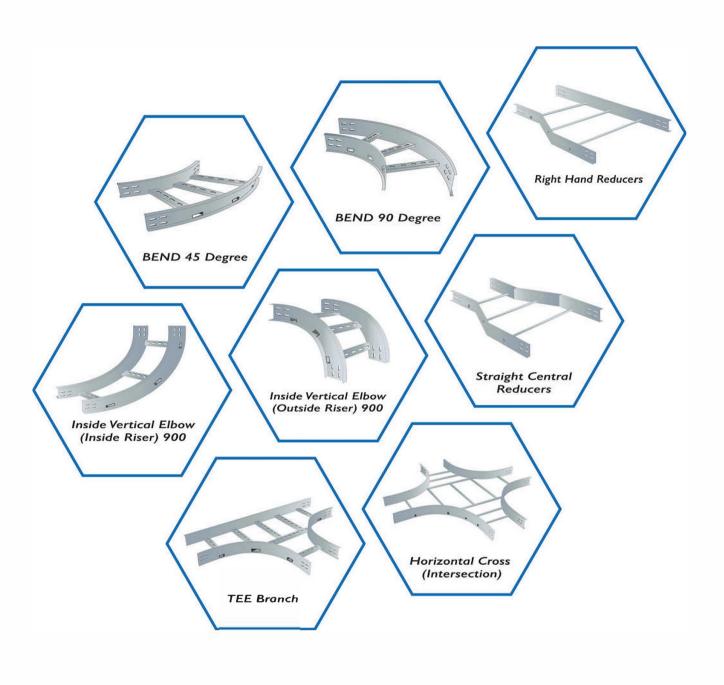
## **Materials Type**

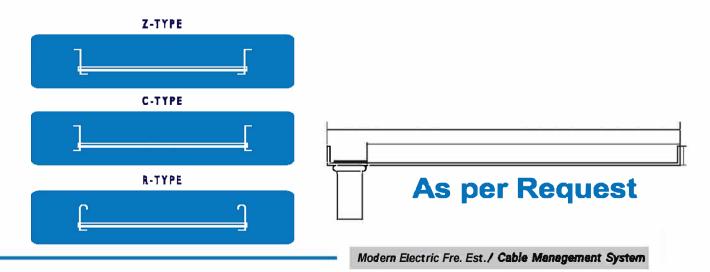
**Aluminium** 

Steel

Stainless Steel

# **Cable Ladder Fitting & Accessories**

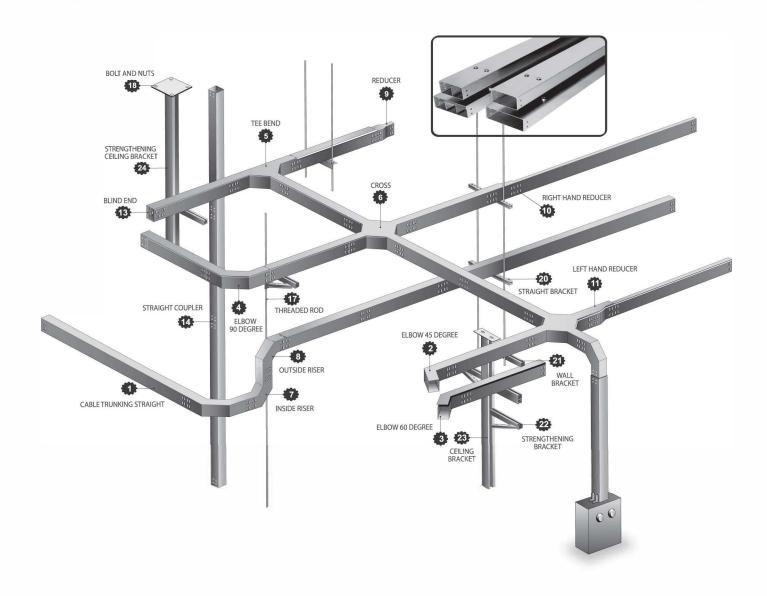




# **Cable Trunk System**

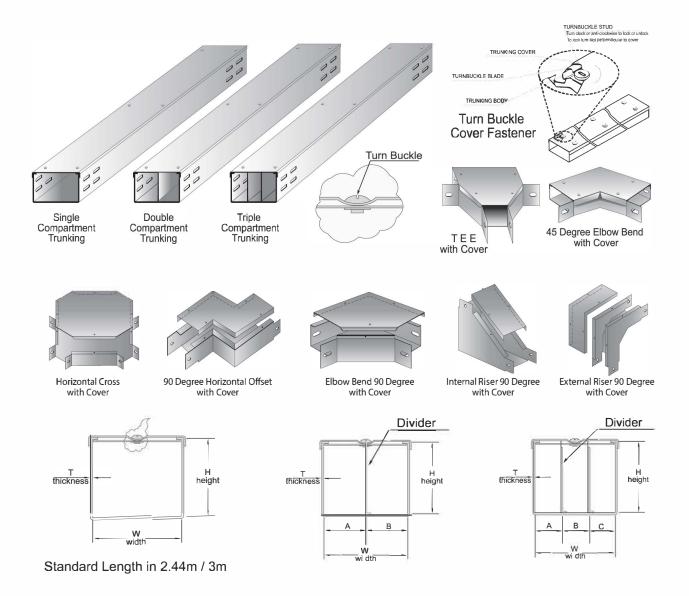
Metal Trunking has a versatile design to suit the client's requirements for laying any sensitive cables, instrument cables, and light duty electrical cables for industrial and commercial buildings, malls, Airports etc.

Metal Trunking are manufactured from various metals like Aluminum, Pre-Galvanized Steel, Hot Dip Galvanized Steel, Stainless Steel 304 & 316L etc. Other choices of finishes are available like with Powder coated finish of various colors as per the project requirements. Our Trunking covers are fixed with screws for ensuring the rigidity of the system and comes with the various type of fittings and accessories to suit the project site requirements.

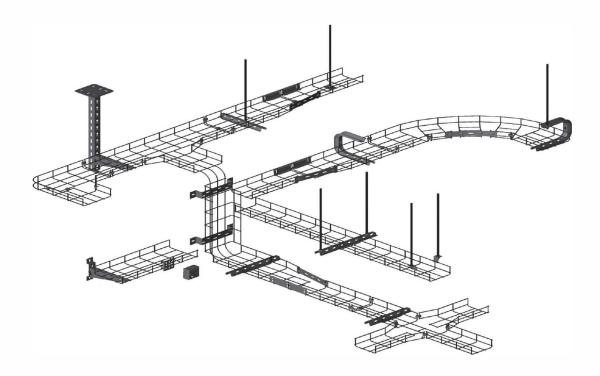


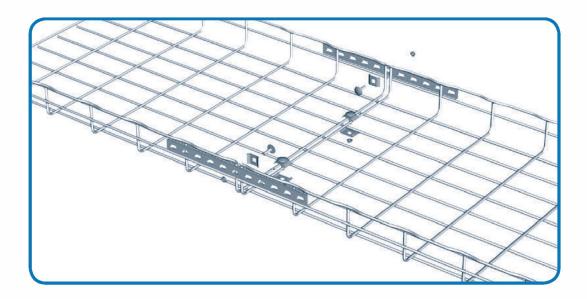
# **Cable Trunk Fitting & Accessories**

# MATERIALS Mill Galvanized Steel Hot-Dip Galvanized Aluminium 1.0 mm 1.5 mm 2. 0mm



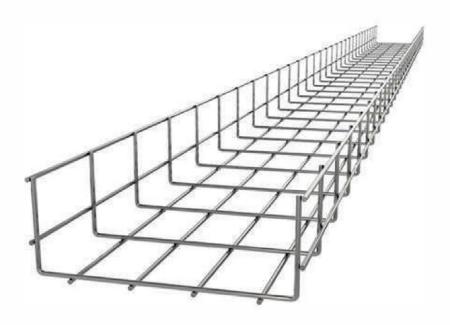
# **Wire Basket System**

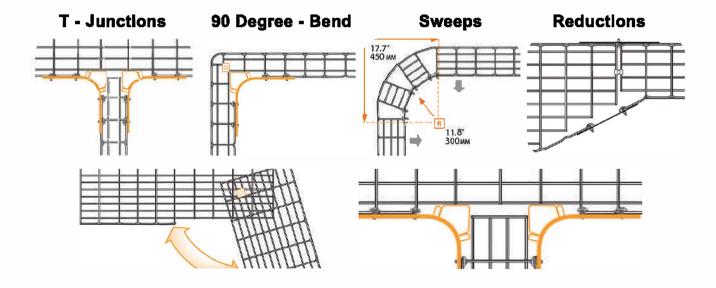




WIRE BASKET system is a flexible, field-adaptable way to manage cables through-out your project. The tray can be cut and bent to the needs of the installer on the jobsite, allowing cable runs to be adjusted as needed. The wide range of sizes offered makes a great choice for everything from a small cable drop to a large trunk of cables. Our tray has the market-preferred "T" weld safety edge, protecting both the cable and the installer during cable installation. It is also UL Classified for providing equipments with enough grounding conductors as per standards.

# **Wire Basket Fitting & Accessories**

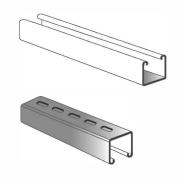




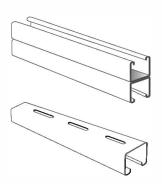
# Fastener, Bolts & Nuts



# **C-Channel Product System**







MILL	- HOT DI	P GALVA	NIZED
	Thickness		Length
1.5 mm	2.0 mm	2.5 mm	3 m

Plain 41x41 mm Slotted 21x41 mm B<sub>2</sub>B

# **C-Channel Accessories**



Base Plate w/ Single Fix



Base Plate w/ Double Fix



Base Plate w/ Double Channel



Base Plate w/ Double Channel Double Fix

#### **Channel Nuts POST BASE**



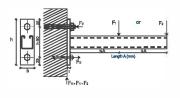




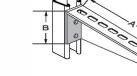


Nut without Spring Nut with Short Spring Nut with Long Spring

Hammer Head Bolt







SBC Beam Clamp

SHELF (Bracket) MS 401

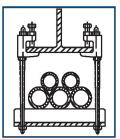
## **Cantilevers Arm Bracket**











CCH 441 41x21x2.5

CCH421 41x41x2.5 B2B

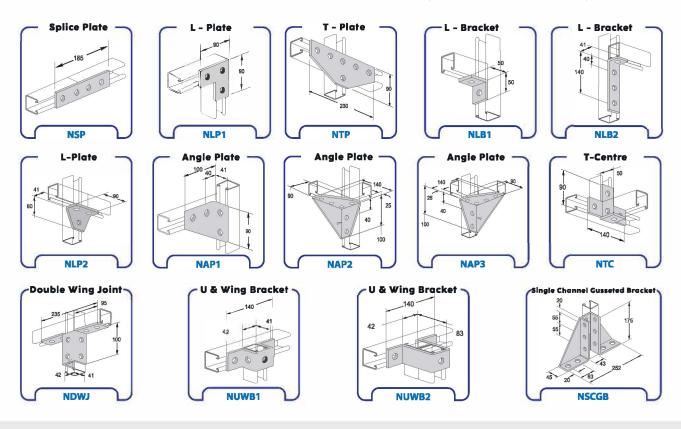
# **C-Channel Fitting**

This Part Offer a Full Section of Fittings and Accessories to complete Metal Framing System.

STANDARD FINISHES: Hot Dip Galvanized, Fitting Specifications

(unless noted): Hole Size 13.0 mm Diameter; Hole Spacing 20.0 mm end

and 48.0 mm on center; Widh 41.0 mm; Thickness, 6.0 mm (Order hardware sepratly).



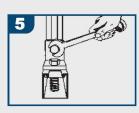
# Strong, Easy, Fast, Economical and Adjustable ...



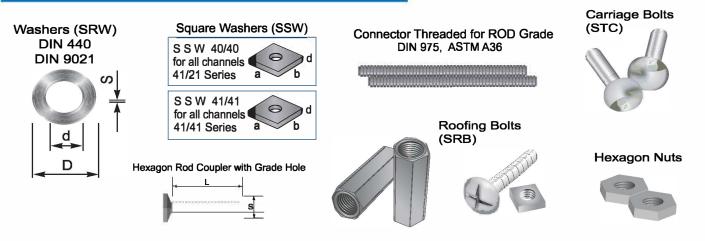








## **Fastener, Bolts & Nuts**



## Covers

Cable Tray covers shall be considered for any of the following purposes:

- Protection from falling objects or debris, as may occur beneath personnel walkways.
- Shielding from ultraviolet rays of the sun and guarding against other weathering elements.
- Minimizing accumulation of foreign contaminants such as ash or other industrial deposits.
- Protection of cables and personnel where a riser tray penetrates a floor or grating.

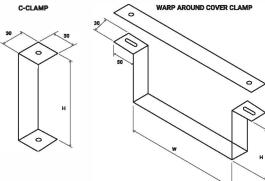
#### Solid Cover / 2000

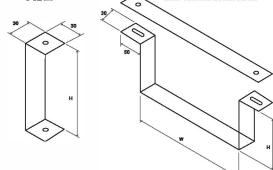


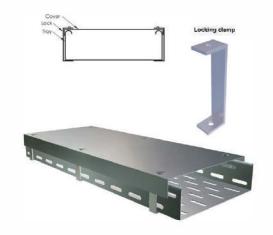
#### **Ventilated Cover / 2010**



## **Ladder Cable Tray Covers with Locking Clamp 2100**







#### **Covers Side Height Types:**

- Solid without flange
- Solid with flange
- Ventilated without flange
- Ventilated with flange

Note - Cable covers are supplied with or without a

15 mm down turned flange. Straight section covers are furnished 3000 mm long. All fitting covers are furnished in solid design only.

## **Abbreviations**

Material	Code
Stanless Steel	SS
Pre-Galvanized	PG
Aluminium	AL
Hot-Dip Galvanized	HD
Electrogalvanization	EG
Powder Coated	PC

Туре	Code
Straight	STR
Inside Return Flange	IRF
Outside Return Flange	ORF
Inside C-Type	ICT
Outside C-Type	Oct
C-Type for trunking	С
Z-Type for trunking	Z
U.	

Thickness	Code
Sheet - 1.0 mm	1.0
Sheet - 1.20 mm	1.2
Sheet - 1.50 mm	1.5
Sheet - 2.0 mm	2.0
Sheet - 5.0 mm	5.0

Lengths	Code
2.4	Α
3	В
3.6	С
	•

# **Order Codes**

## **Cable Trays**

LIGHT DUTY - 1.00 mm Thickness

NLCT - 25 (Side Height 25 mm)

Length - 2400 mm / 3000 mm

Width: 50 - 300 mm

Item code	Cable Tray	Support Distance (m)	Load kN/m
	LCT 50 - 25	1.00	0.65
NI CT 40	width (w): 50 mm	1.20	0.37
NLCT-A0		1.50	0.18
		2.00	0.07

Description

Item number/code	Width	Side Height	Thickness	Side / Flange type	Length	Radius	Material	Finish
NLCT-A0	50	25	1.00	ORF	2.4		PG	PC
Light Duty Cable Tray				Outside Retum Flange			Pre galvanized	Powder coat

Code - Category

Item number/code	Width	Side Height	Thickness	Side / Flange type	Length	Radius	Material	Finish
N	LCT-A0		1.00	ORF	A	Not Required	PG	PC

See Material codes table

Example Order Code: NLCT-A0-1.00-ORF-A-PG

## **Cable Ladders (Aluminium)**

Swaged Tubular Rung-NEMA Class A (52 kg/m by 3,0m) &

8A (95 kg/m by 2.40m)

Side Rail : A 1

Height: 110 mm

Load Depth: 82 mm

Rung - Spacing: 229 mm

Nem Code	Side Rali	Width	Support Diet	Load	Defle	etion	Rung Details
	NEMA - CLASS - 12A	(mm)	(m)	kn/m	RUNG (mm)	RAIL (mm)	ŭ
			2.40	1.35	0.02	7.96	
NCL-A1-00	110 x 20 x 2.0	150	3.00	0.66	0.01	9.95	Tubular Rung:
NCL-A1-00	110 X 20 X 2.0	130	3.70	0.32	0.00	12.22	25 x 1, 5 mm
			4.90	0.10	0.00	16.10	1

**Code Description** 

Item number/code	Width	Side Height	Thickness	Side / Flange type	Length	Rung	Material	Finish
NCL-A1-00	150	20	2.00	Z/C/R	2.40	TR- 25x1.5	HD	PC
Cable Ladder - Aluminium							See Mater	ial codes table

**Code Category** 

Item number/code	Width	Side Height	Thickness	Side / Flange type	Length	Rung	Material	Finish
NCI	-A1-00		2.00	z	Α	TR- 25x1.5	HD	PC
				Z-Type Flanges for side rail	1		See Materia	al codes tabl

Example Order Code: NLCT-A0-1.00-ORF-A-PG

# Cable Ladders (Steel)

Swaged Tubular Rung - STEEL S235 JRG2 NEMA Class 12 A (74 kg/m by 3.70m)

Side Rail: S1

Height: 105 mm

Load Depth: 75 mm

Rung - Spacing: 229 mm

	Side Rail	Width	Support Diet	Load	Deflection	Rung Details
Hem Code	NEMA - CLASS - 12A	(mm)	(m)	KN/m	RUNG (mm)	RAJL (mm)
			2.40	2.72	0.01	6.32
NO. O.A	405-00-00	450	3.00	1.74	0.01	9.99
NSL-S1A	105 x 20 x 2.0	05 x 20 x 2.0 150	3.70	0.89	0.00	12.22
		5	4.90	0.35	0.00	16.33

#### **Code Description**

Item number/code	Width	Side Height	Thickness	Side / Flange type	Length	Rung	Material	Finish
NSL-S1A	105	20	2.00	Z/C/R	3.00	TR- 25x1.5	HD	PC
St <del>ee</del> l ladder							See Materi	al codes table

#### **Code Category**

Item number/code	Width	Side Height	Thickness	Side / Flange type	Length	Rung	Material	Finish
NS	L-S1A		2.00	С	В	TR- 25x1.5	HD	PC
				C-Type Flanges for side rail		n	See Materi	al codes table

Example Order Code: NSL-S1A-2.00-C-B-TR-25x1.5HD

## C-Channel Cable Ladders (Steel)

Swaged Tubular Rung - STEEL S235 JRG2

NEMA Class 12 A (74 kg/m by 3.70m)

Side Rail : C1 Height : 105 mm

Load Depth: 75 mm

Rung - Spacing: 229 mm

Item Code	Side Rali	Width	Support Dist	Load	Deflection		Rung Detalis	
	NEMA - CLASS - 12A	(mm)	(m)	KNVm	RUNG (mm)	RAJL (mm)		
NCCL-C1A	105 x 20 x 2.0	150	2.40	2.69	0.01	6.33	: 41 x 21 x	
			3.00	1.70	0.01	9.96	1.5 mm	
			3.70	0.86	0.00	12.28		
			4.90	1.31	0.00	16 13		

**Code Description** 

Item number/code	Width	Side Height	Thickness	Side / Flange type	Length	Rung	Meterial	Finish
NCCF1 A	105	20	2.00	Z/C/R	3.00	41 x 21 x 1.5 mm	HD	PC
C Channel							See Materi	al codes table

**Code Category** 

oode category								
Item number/code	Width	Side Height	Thickness	Side / Flange type	Length	Rung	Material	Finish
NO	CCL- C1A		2.00	R	В	41 x 21 x 1.5 mm	HD	PC
				C-Type Flanges for side rail			See Materi	al codes table

Example Order Code: NCCL-C1A-2.00-R-B-TR-41x21x1.5HD

# **Cable Trunking**

### For Cable Trunking - Length - 2440 mm / 3000 mm

Item number/code	Width	Side Height	Thickness	Side / Flange type	Length	Material	Finish		
NCTR-1C-A	100	50	1.5	Inside / Outside	3.00	HD	PC		
NCTR-2C-A							See Material codes		
NCTR-3C-A						table			
Cable									
Trunk - No of Compartments									

**Code Category** 

Compartment	Width	Side Height	Thickness	Side / Flange type	Length	Material	Finish
	100	50	1.0	Inside / Outside	3.00	HD	PC
Single Compartment	NC	TR-1C-A	1.0	0	В	HD	
Double Compartment	NC	TR-2C-A	1.0	0	В	HD	
Triple Compartment	NC	TR-3C-A	1.0	0	В	HD	

Example Order Code: NCTR-1C-A-1.0-O-B-HD NCTR-2C-A-1.0-O-B-HD NCTR-3C-A-1.0-O-B-HD

## **Basket Tray**

Side Height - 55 (mm)

Item number/code	Width	Side Height	Thickness	spacing	Length	Material	Finish
NBT-A	50	55	4	100	2.40	SS	
Basket Tray						See Mater tal	

**Code Category** 

Width	Side Height	Thickness	spacing	Length	Material	Finish
1	NBT-A	4	10	Α	SS	

Example Order Code: NBT-A-4.00-10-A-SS

SAMPLE CODES FOR ACCESSORIES							
Accessories	Width	Side Height	Thickness	Example Order Code			
Horizontal Bend 45° - NHB 45°	50	50	1.2	NHB-45°-A			
OUTSIDE RISER BEND 45° - ORB 45°	50	50	1.2	ORB-45°-A			
Tee Branch - NTB	50	50	1.2	NTB-A			
Intersection - NI	50	50	1.2	NI-A			
Reducer - NR	100-50	25	1.5	NR-A			

#### Note:

- Please request Technical Data for all items and accessories..
- Any other standard size and finish available on request

Modern Electric Fre. Est. / Cable Management System