

# One Piece Cable Tray

Aluminum, Pre-Galvanized, Hot Dip Galvanized and Stainless Steel

## Ventilated Trough

- Formed from a pre-punched sheet to produce a One-Piece Ventilated Trough.
- Available in Aluminum, Pre-Galvanized Steel, Hot Dip Galvanized Steel and Stainless Steel 316.
- Fittings are also available to complete this cable tray system.



## Solid Trough

- Fabricated from one sheet to form a continuous One-Piece tray design.
- Available in Aluminum, Pre-Galvanized Steel, Hot Dip Galvanized Steel and Stainless Steel 316.
- Fittings are also available to complete this cable tray system.



Note: 1 pair of splice plates complete with hardware supplied with each straight length.

# Aluminum, Pre-Galvanized, Hot Dip Galvanized, Stainless Steel, Solid and Ventilated Straight Lengths

# One Piece Cable Tray

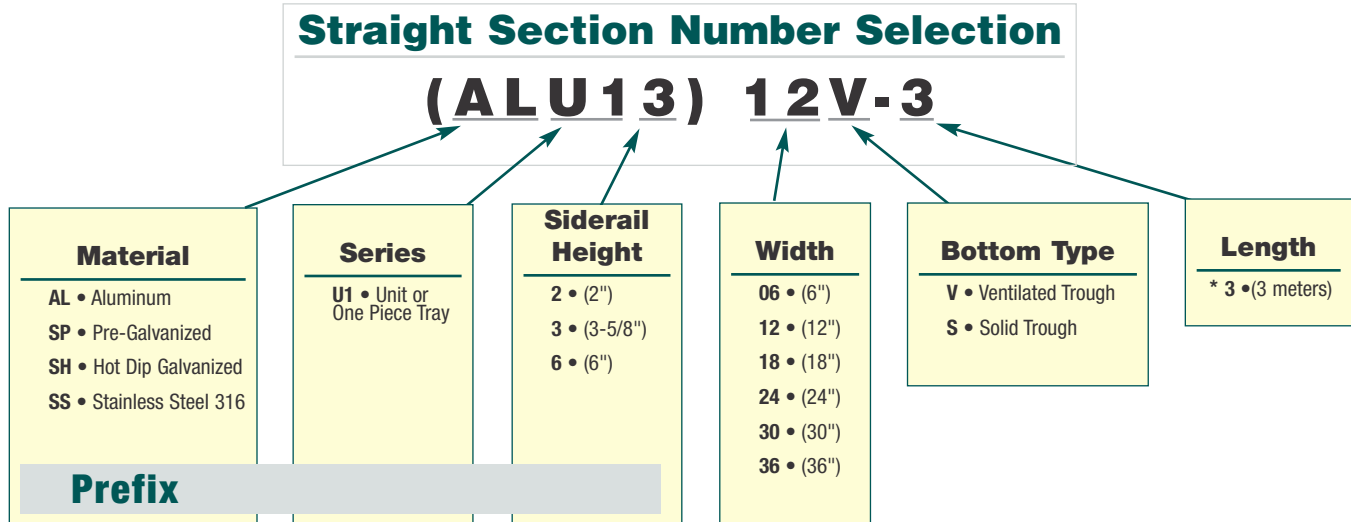
## How to create part numbers

Thomas & Betts has created a numbering system based on the order of selection criteria. For example the first selection issue is the environment which the cable tray will be subjected to. This selection will lead to the best material for your application. For complete details on cable tray selection process, see page 10.

### Methods:

1. Select the material best suited to your environment. Refer to technical section page 10.
2. Determine the series tray using the NEMA Load/Span Designations page 11, and Sizing Cable Tray page 13.
3. Select nominal depth and width of tray based on Cable Loading. See Sizing Cable Tray page 13.
4. Select the bottom type based on cables and spacing requirements.
5. The last number is the length of the cable tray.

### Example:



\* Standard straight length is 10 feet nominal = actually 3m.  
 1m = 3.2808ft    3m = 9.842ft

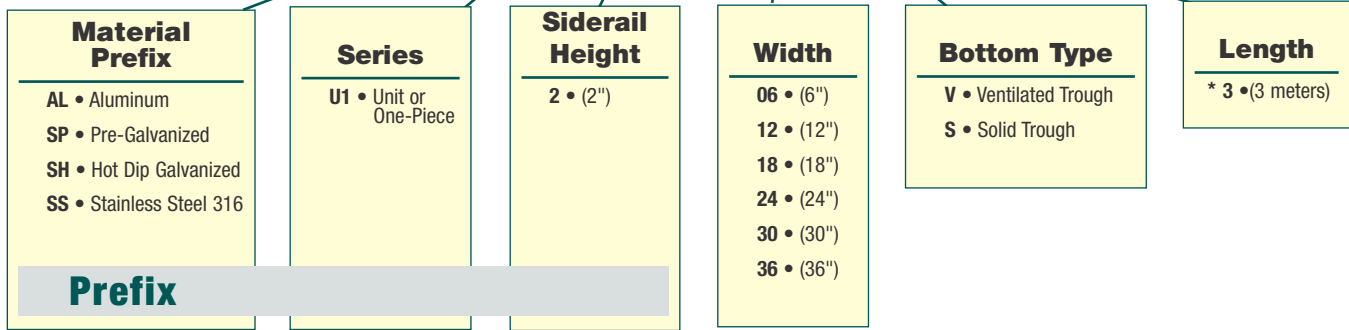
# One Piece Cable Tray

2" Straight Section  
AL, SP, SH, SS

Solid and Vented Straight Lengths

## Straight Section Number Selection

**(ALU12) 12V-3**



\* Standard straight length is 10 feet nominal = actually 3m.  
1m = 3.2808 ft      3m = 9.842 ft

## Technical Specifications

All calculations and data are based on 36" wide cable trays with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

### DEFLECTION FACTOR

For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.

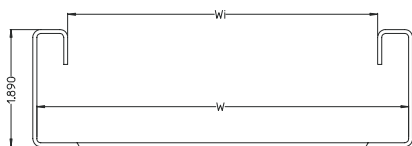
For Fittings consult pages 167 to 181.

SERIES		SUPPORT SPAN (Feet)							
		6	8	10	12	14	16	18	20
<b>ALU12</b>	Load (lb/ft)	69	39	25	-	-	-	-	-
	Deflection (in.)	0.382	0.730	1.000	-	-	-	-	-
	Deflection Factor	0.006	0.019	0.040	-	-	-	-	-
<b>SPU12</b>	Load (lb/ft)	69	39	25	-	-	-	-	-
	Deflection (in.)	0.382	0.730	1.000	-	-	-	-	-
	Deflection Factor	0.006	0.019	0.040	-	-	-	-	-
<b>SHU12</b>	Load (lb/ft)	69	39	25	-	-	-	-	-
	Deflection (in.)	0.382	0.730	1.000	-	-	-	-	-
	Deflection Factor	0.006	0.019	0.040	-	-	-	-	-
<b>SSU12</b>	Load (lb/ft)	69	39	25	-	-	-	-	-
	Deflection (in.)	0.382	0.730	1.000	-	-	-	-	-
	Deflection Factor	0.006	0.019	0.040	-	-	-	-	-

# 2" Straight Section AL, SP, SH, SS

Solid and Vented Straight Lengths

# One Piece Cable Tray



One Piece  
Straights

All U12 Series (Dimensions)	
W (in.)	WI (in.)
6	5.0
9	8.0
12	11.0
18	17.0
24	23.0
30	29.0
36	35.0

## Technical Specifications

### LOAD RATINGS

1.5 Safety factor. All tray sections will support an additional 200 lb concentrated load on any portion of tray above and beyond published load class.

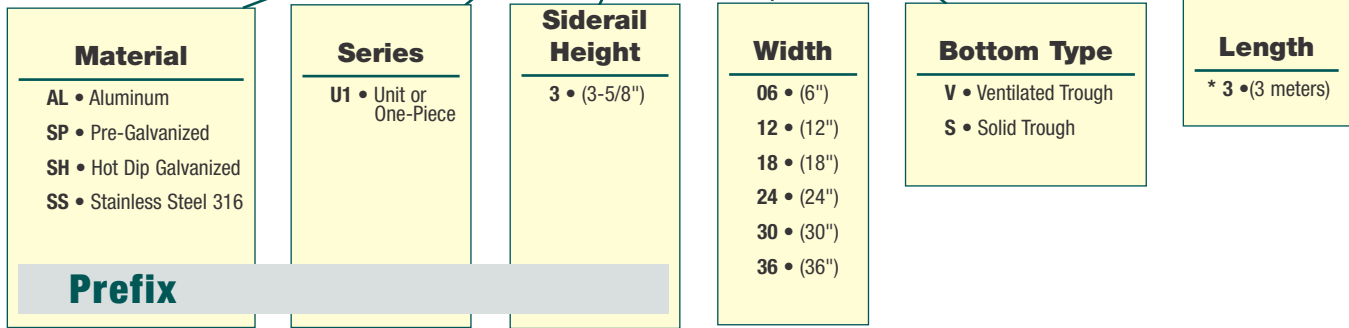
SERIES	DIMENSIONS	CLASSIFICATIONS	
		NEMA	CSA
<b>ALU12</b>	See Above	-	<b>A</b>
<b>SPU12</b> <b>SHU12</b>	See Above	-	<b>A</b>
<b>SSU12</b>	See Above	-	<b>A</b>

# One Piece Cable Tray

3-5/8" Straight Section  
AL, SP, SH, SS  
Solid and Vented Straight Lengths

## Straight Section Number Selection

**(ALU13) 12V-3**



\* Standard straight length is 10 feet nominal = actually 3m.  
1m = 3.2808 ft      3m = 9.842 ft

## Technical Specifications

All calculations and data are based on 36" wide cable trays with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

### DEFLECTION FACTOR

For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.

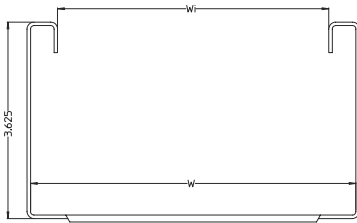
For Fittings consult pages 167 to 181.

SERIES		SUPPORT SPAN (Feet)							
		6	8	10	12	14	16	18	20
<b>ALU13</b>	Load (lb/ft)	180	101	65	-	-	-	-	-
	Deflection (in.)	0.382	0.430	0.540	-	-	-	-	-
	Deflection Factor	0.002	0.004	0.008	-	-	-	-	-
<b>SPU13</b>	Load (lb/ft)	180	101	65	-	-	-	-	-
	Deflection (in.)	0.125	0.250	0.320	-	-	-	-	-
<b>SHU13</b>	Deflection Factor	0.001	0.002	0.005	-	-	-	-	-
<b>SSU13</b>	Load (lb/ft)	180	101	65	-	-	-	-	-
	Deflection (in.)	0.125	0.250	0.320	-	-	-	-	-
	Deflection Factor	0.001	0.002	0.005	-	-	-	-	-

# 3-5/8" Straight Section AL, SP, SH, SS

Solid and Vented Straight Lengths

# One Piece Cable Tray



One Piece  
Straights

All U13 Series (Dimensions)	
W (in.)	W1 (in.)
6	5.0
9	8.0
12	11.0
18	17.0
24	23.0
30	29.0
36	35.0

## Technical Specifications

### LOAD RATINGS

1.5 Safety factor. All tray sections will support an additional 200 lb concentrated load on any portion of tray above and beyond published load class.

SERIES	DIMENSIONS	CLASSIFICATIONS	
		NEMA	CSA
<b>ALU13</b>	See Above	<b>8C</b>	<b>C1</b>
<b>SPU13</b> <b>SHU13</b>	See Above	<b>8C</b>	<b>C1</b>
<b>SSU13</b>	See Above	<b>8C</b>	<b>C1</b>

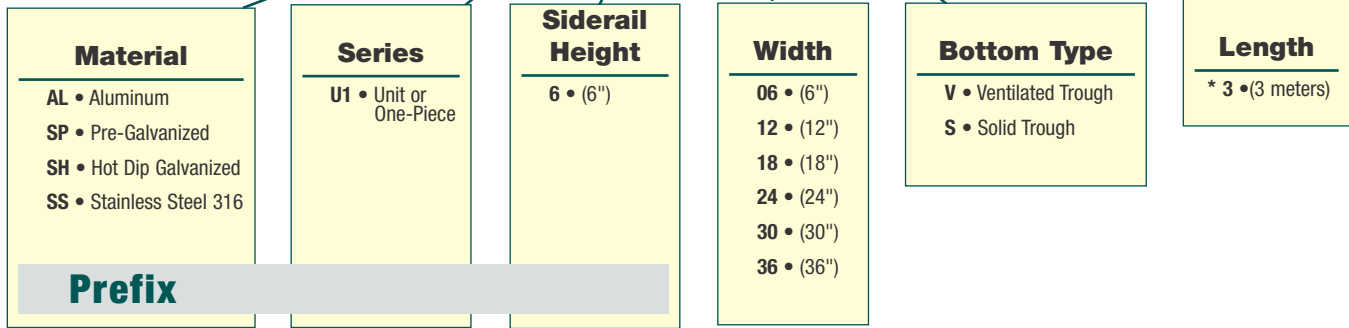
# One Piece Cable Tray

6" Straight Section  
AL, SP, SH, SS

Solid and Vented Straight Lengths

## Straight Section Number Selection

**(ALU16) 12V-3**



\* Standard straight length is 10 feet nominal = actually 3m.  
1m = 3.2808 ft      3m = 9.842 ft

## Technical Specifications

All calculations and data are based on 36" wide cable trays with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

### DEFLECTION FACTOR

For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.

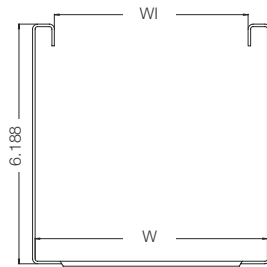
For Fittings consult pages 167 to 181.

SERIES		SUPPORT SPAN (Feet)							
		6	8	10	12	14	16	18	20
<b>ALU16</b>	Load (lb/ft)	180	101	65	-	-	-	-	-
	Deflection (in.)	0.082	0.128	0.160	-	-	-	-	-
	Deflection Factor	0.000	0.001	0.002	-	-	-	-	-
<b>SPU16</b>	Load (lb/ft)	180	101	65	-	-	-	-	-
	Deflection (in.)	0.125	0.250	0.320	-	-	-	-	-
<b>SHU16</b>	Deflection Factor	0.001	0.002	0.005	-	-	-	-	-
<b>SSU16</b>	Load (lb/ft)	180	101	65	-	-	-	-	-
	Deflection (in.)	0.125	0.250	0.320	-	-	-	-	-
	Deflection Factor	0.001	0.002	0.005	-	-	-	-	-

# 6" Straight Section AL, SP, SH, SS

Solid and Vented Straight Lengths

# One Piece Cable Tray



One Piece  
Straights

All U16 Series (Dimensions)	
W (in.)	WI (in.)
6	5.0
9	8.0
12	11.0
18	17.0
24	23.0
30	29.0
36	35.0

## Technical Specifications

### LOAD RATINGS

1.5 Safety factor. All tray sections will support an additional 200 lb concentrated load on any portion of tray above and beyond published load class.

SERIES	DIMENSIONS	CLASSIFICATIONS	
		NEMA	CSA
<b>ALU16</b>	See Above	<b>8C</b>	<b>C1</b>
<b>SPU16</b> <b>SHU16</b>	See Above	<b>8C</b>	<b>C1</b>
<b>SSU16</b>	See Above	<b>8C</b>	<b>C1</b>