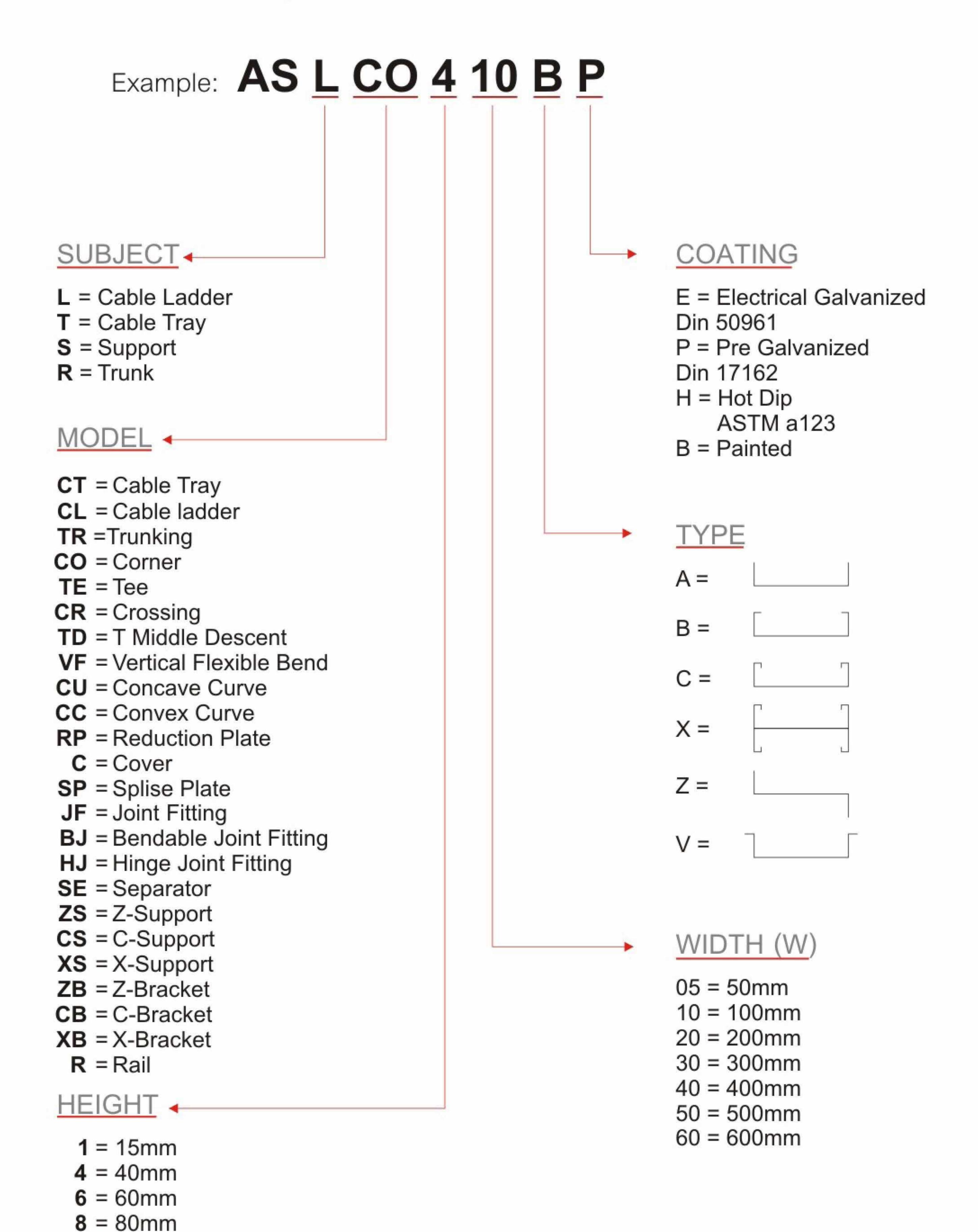


Pars Farabakhsh Energy Co.

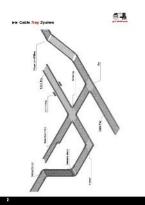
Cable Tray System
Cable Ladder System
Cable Support System
Trunking System

>> Part Numbering





10 = 100 mm

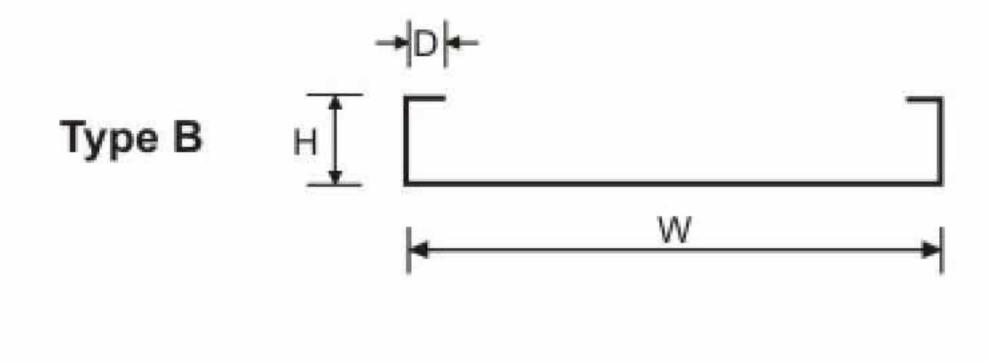


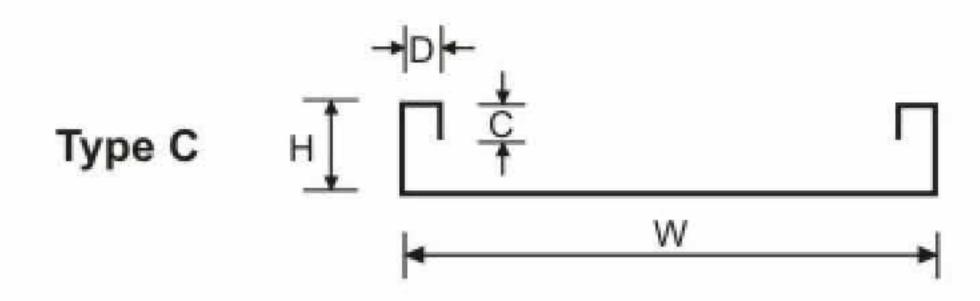


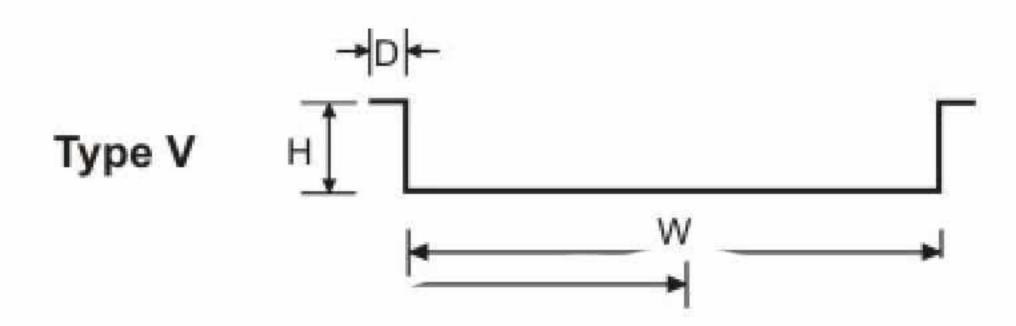


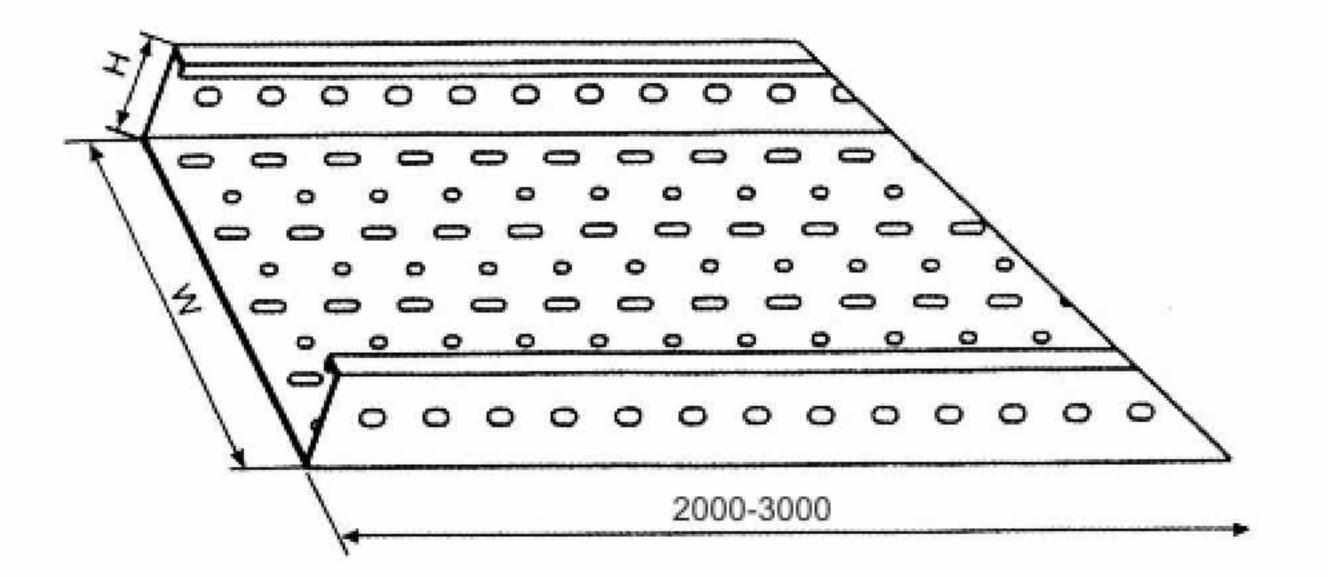
Part No.	н	w	Т	Type B/C	Тур	e C
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)
AS TCT 405	40	50	1	10	10	10
AS TCT 410	40	100	1	10	10	10
AS TCT 610	60	100	1	10	10	10
AS TCT 420	40	200	1.25	10	10	10
AS TCT 620	60	200	1.25	10	10	10
AS TCT 430	40	300	1.25	10	10	10
AS TCT 630	60	300	1.25	10	10	10
AS TCT 440	40	400	1.5	10	10	10
AS TCT 640	60	400	1.5	10	10	10
AS TCT 840	80	400	1.5	10	10	10
AS TCT 450	40	500	1.5	10	10	10
AS TCT 650	60	500	1.5	10	10	10
AS TCT 850	80	500	1.5	10	10	10
AS TCT 460	40	600	2	10	10	10
AS TCT 660	60	600	2	10	10	10
AS TCT 860	80	600	2	10	10	10







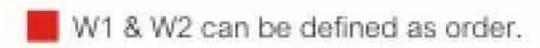


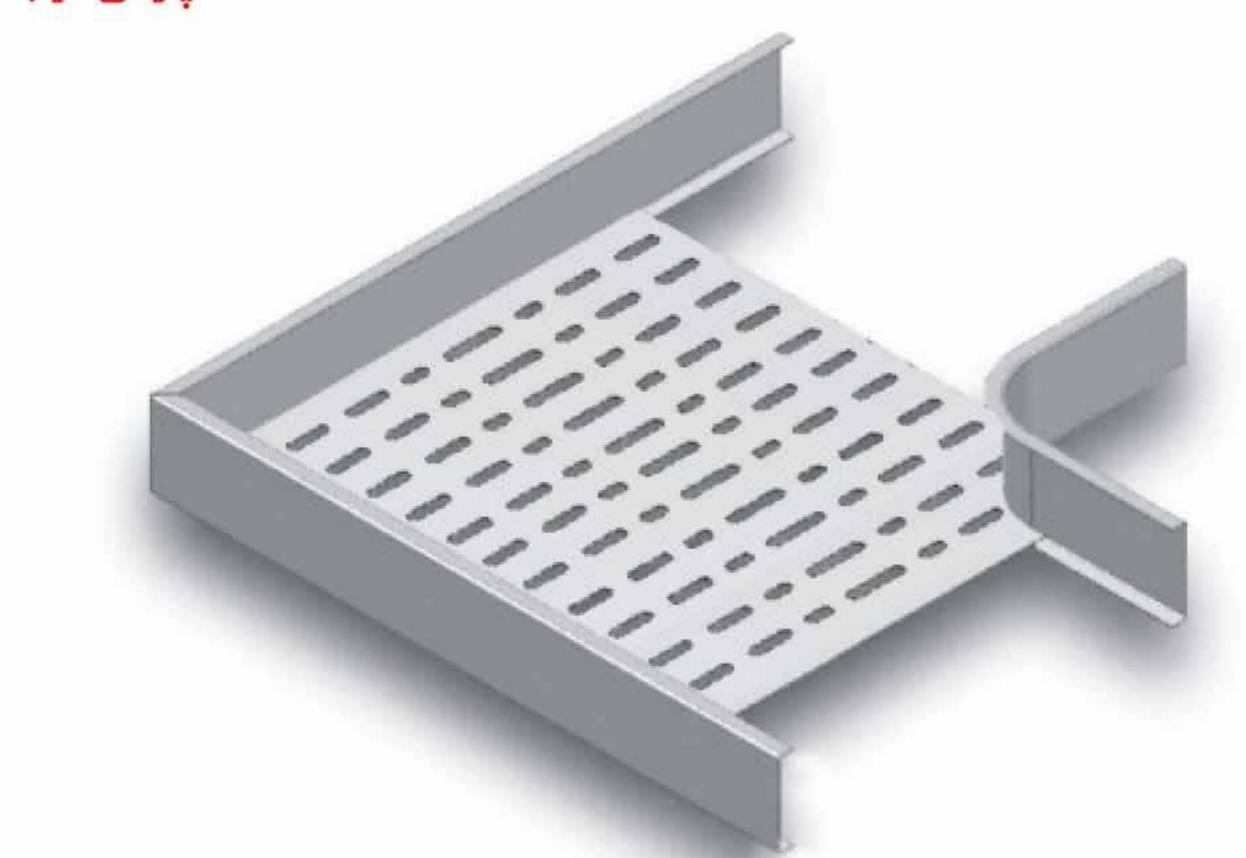


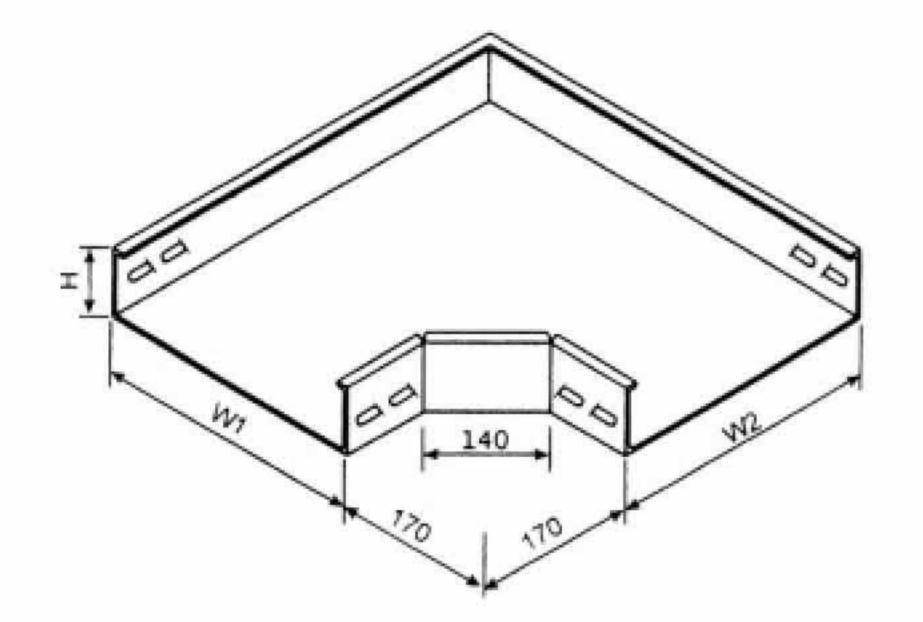
پارس فرابخش انرژی

>> Corner

Part No.	Н	w	Т	Type B	Тур	e C
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)
AS TCO 405	40	50	1	10	10	10
AS TCO 410	40	100	1	10	10	10
AS TCO 610	60	100	1	10	10	10
AS TCO 420	40	200	1.25	10	10	10
AS TCO 620	60	200	1.25	10	10	10
AS TCO 430	40	300	1.25	10	10	10
AS TCO 630	60	300	1.25	10	10	10
AS TCO 440	40	400	1.5	10	10	10
AS TCO 640	60	400	1.5	10	10	10
AS TCO 840	80	400	1.5	10	10	10
AS TCO 450	40	500	1.5	10	10	10
AS TCO 650	60	500	1.5	10	10	10
AS TCO 850	80	500	1.5	10	10	10
AS TCO 460	40	600	2	10	10	10
AS TCO 660	60	600	2	10	10	10
AS TCO 860	80	600	2	10	10	10



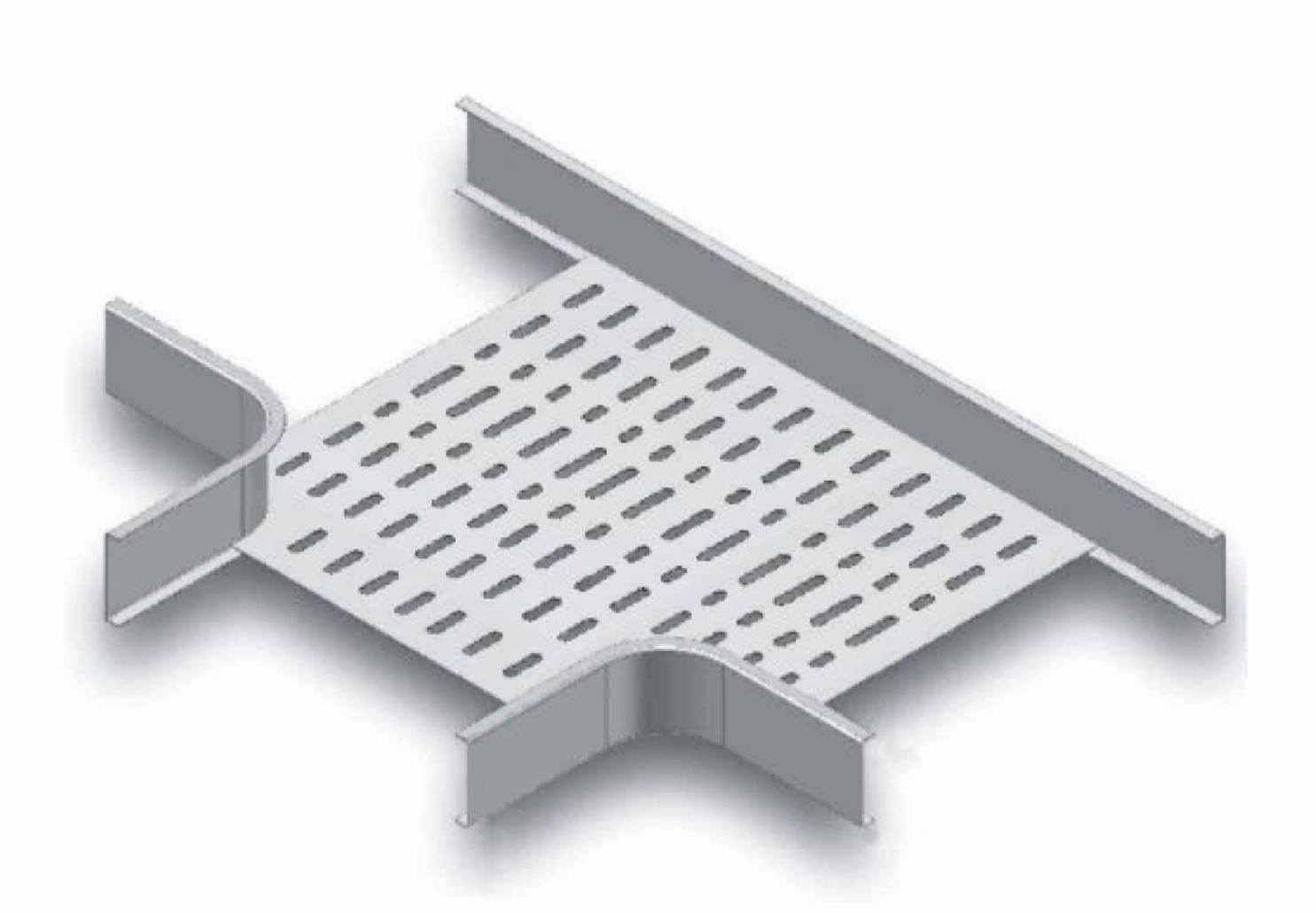


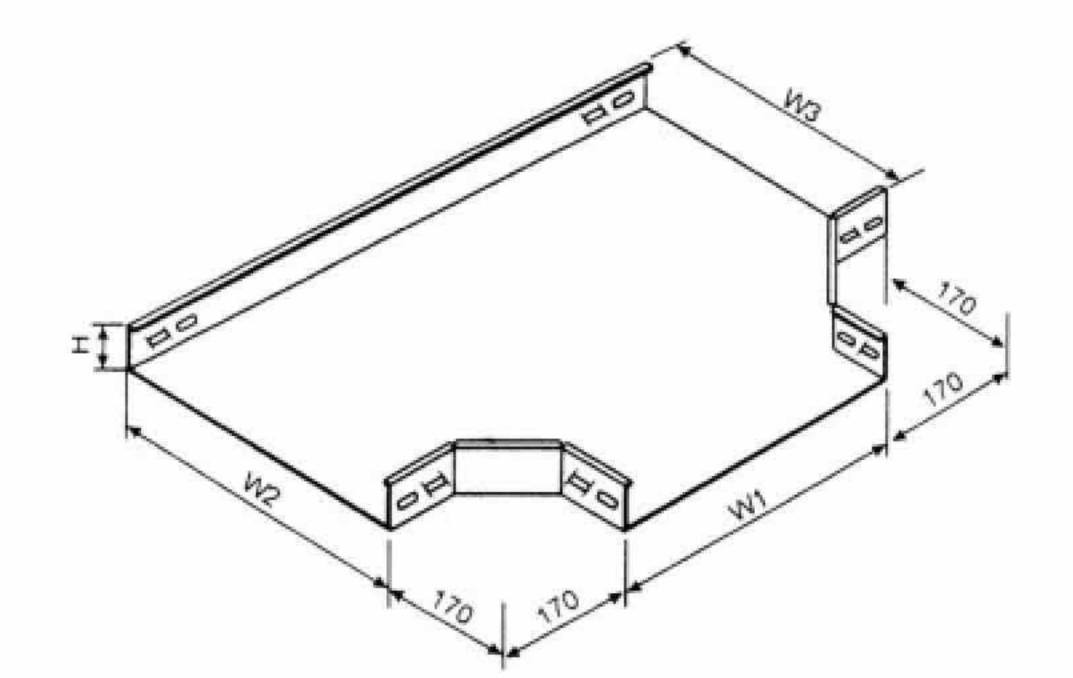


>> Tee

Part No.	н	w	T Type B		Type C	
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)
AS TTE 405	40	50	1	10	10	10
AS TTE 410	40	100	1	10	10	10
AS TTE 610	60	100	1	10	10	10
AS TTE 420	40	200	1.25	10	10	10
AS TTE 620	60	200	1.25	10	10	10
AS TTE 430	40	300	1.25	10	10	10
AS TTE 630	60	300	1.25	10	10	10
AS TTE 440	40	400	1.5	10	10	10
AS TTE 640	60	400	1.5	10	10	10
AS TTE 840	80	400	1.5	10	10	10
AS TTE 450	40	500	1.5	10	10	10
AS TTE 650	60	500	1.5	10	10	10
AS TTE 850	80	500	1.5	10	10	10
AS TTE 460	40	600	2	10	10	10
AS TTE 660	60	600	2	10	10	10
AS TTE 860	80	600	2	10	10	10

W1, W2 & W3 can be defined as order.

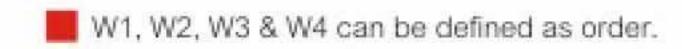


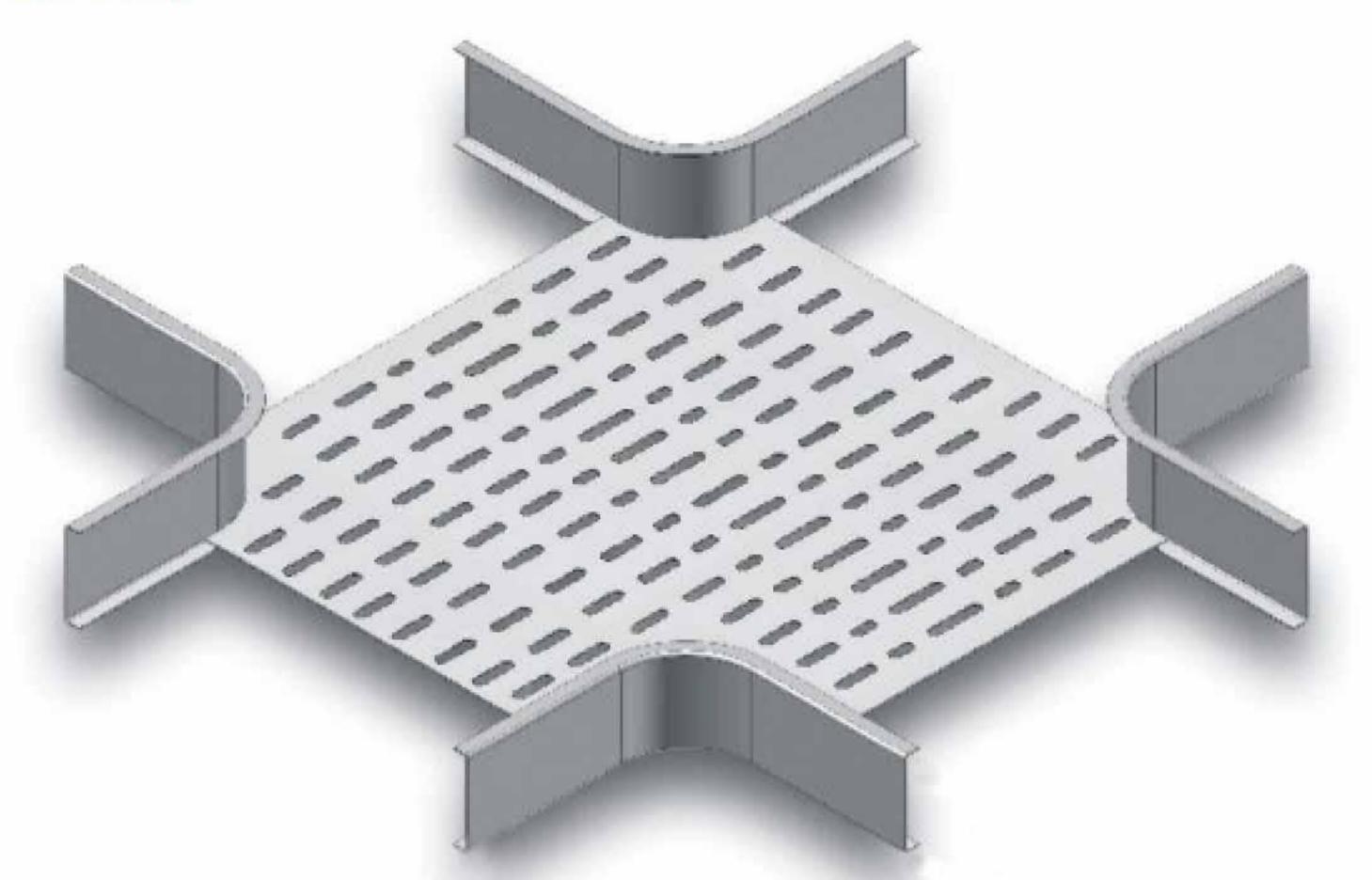


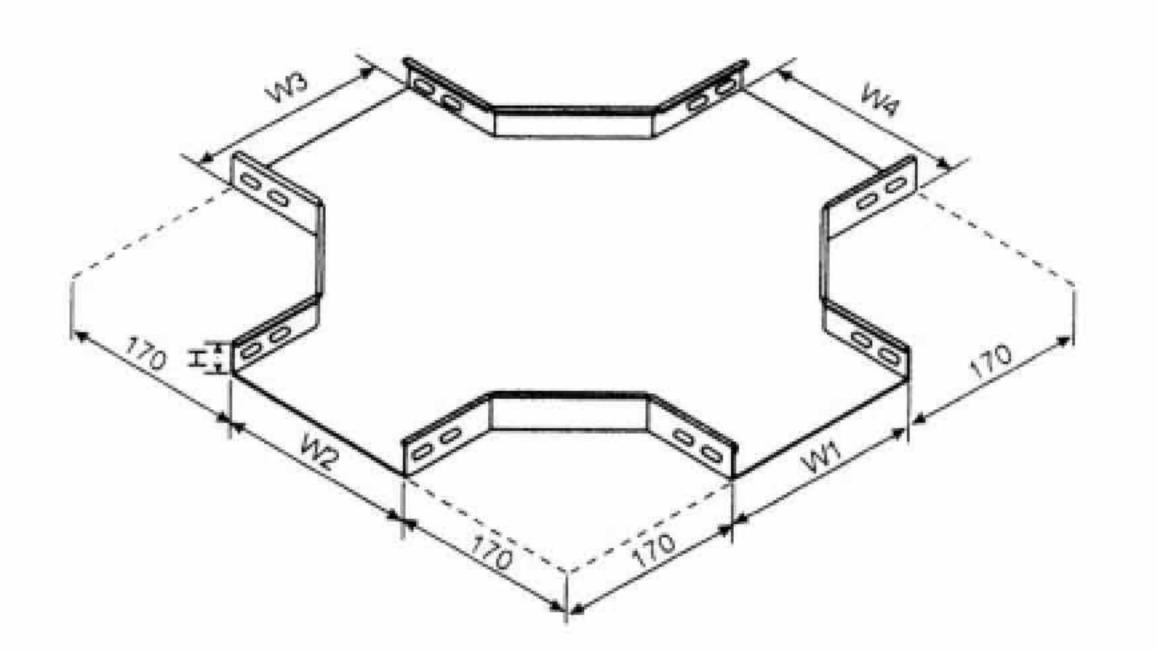


>> Crossing

Part No.	Н	w	Т	T Type B Ty		e C
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)
AS TCR 405	40	50	1	10	10	10
AS TCR 410	40	100	1	10	10	10
AS TCR 610	60	100	1	10	10	10
AS TCR 420	40	200	1.25	10	10	10
AS TCR 620	60	200	1.25	10	10	10
AS TCR 430	40	300	1.25	10	10	10
AS TCR 630	60	300	1.25	10	10	10
AS TCR 440	40	400	1.5	10	10	10
AS TCR 640	60	400	1.5	10	10	10
AS TCR 840	80	400	1.5	10	10	10
AS TCR 450	40	500	1.5	10	10	10
AS TCR 650	60	500	1.5	10	10	10
AS TCR 850	80	500	1.5	10	10	10
AS TCR 460	40	600	2	10	10	10
AS TCR 660	60	600	2	10	10	10
AS TCR 860	80	600	2	10	10	10



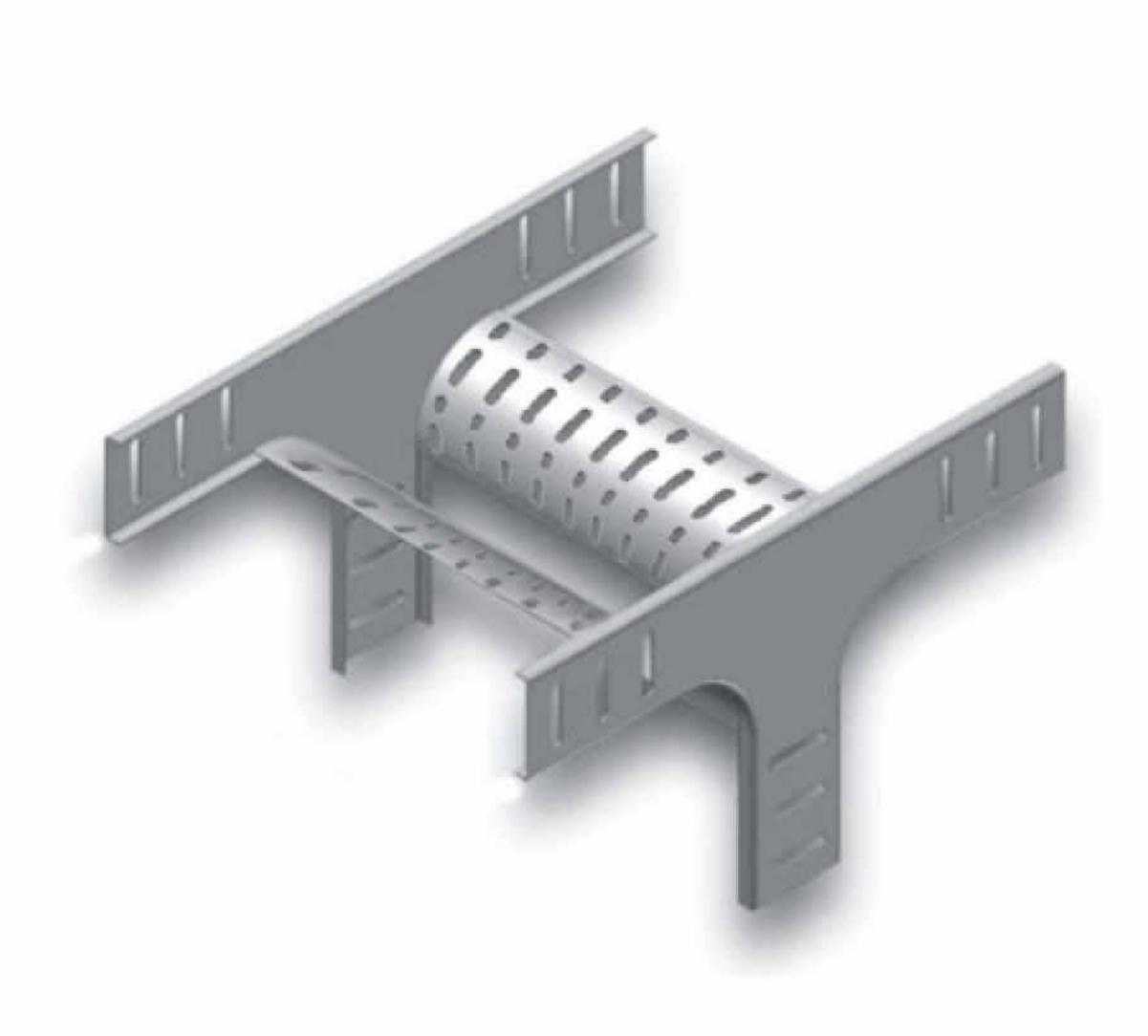


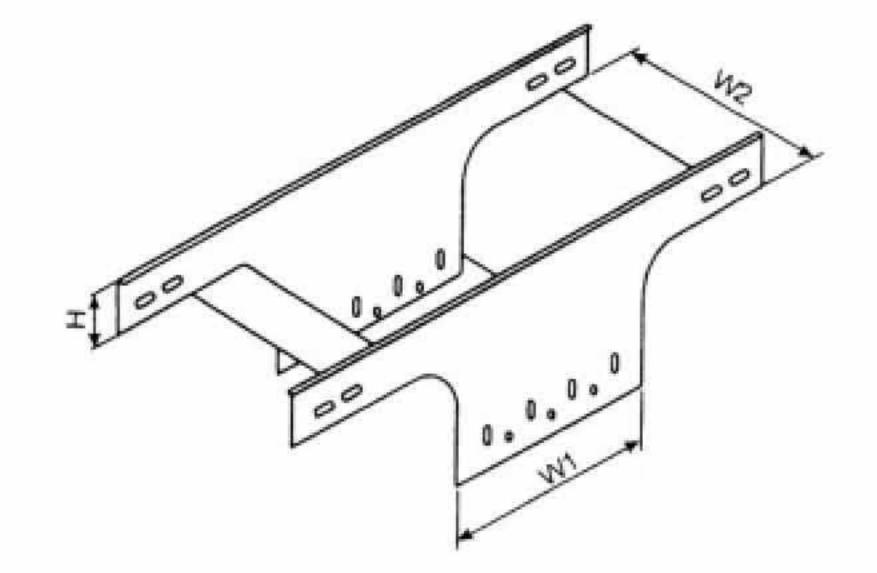


>> T Middle Descent

Part No.	н	w	Т	Туре В	Тур	e C
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)
AS TTD 405	40	50	1	10	10	10
AS TTD 410	40	100	1	10	10	10
AS TTD 610	60	100	1	10	10	10
AS TTD 420	40	200	1.25	10	10	10
AS TTD 620	60	200	1.25	10	10	10
AS TTD 430	40	300	1.25	10	10	10
AS TTD 630	60	300	1.25	10	10	10
AS TTD 440	40	400	1.5	10	10	10
AS TTD 640	60	400	1.5	10	10	10
AS TTD 840	80	400	1.5	10	10	10
AS TTD 450	40	500	1.5	10	10	10
AS TTD 650	60	500	1.5	10	10	10
AS TTD 850	80	500	1.5	10	10	10
AS TTD 460	40	600	2	10	10	10
AS TTD 660	60	600	2	10	10	10
AS TTD 860	80	600	2	10	10	10

W1 & W2 can be defined as order.

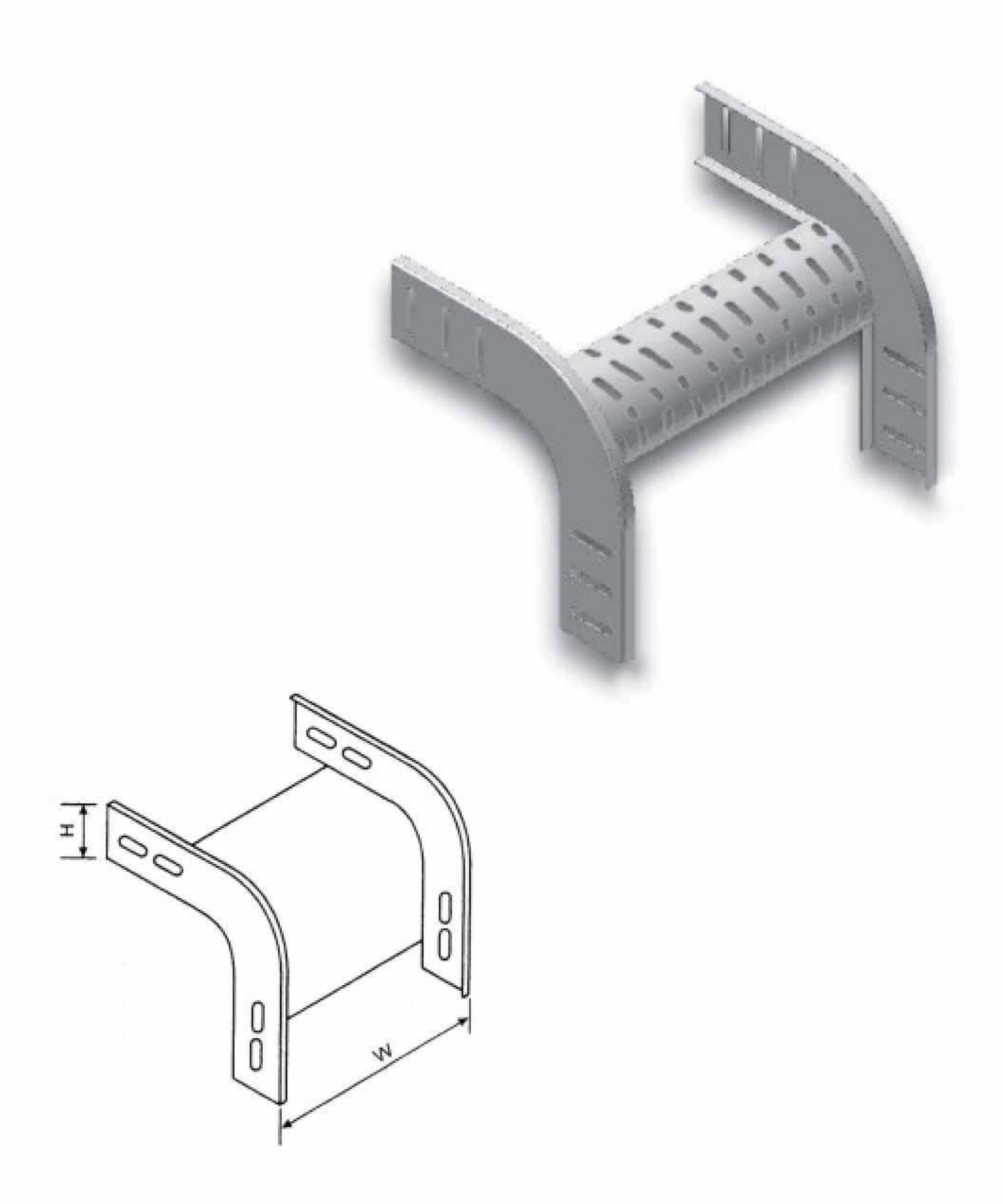






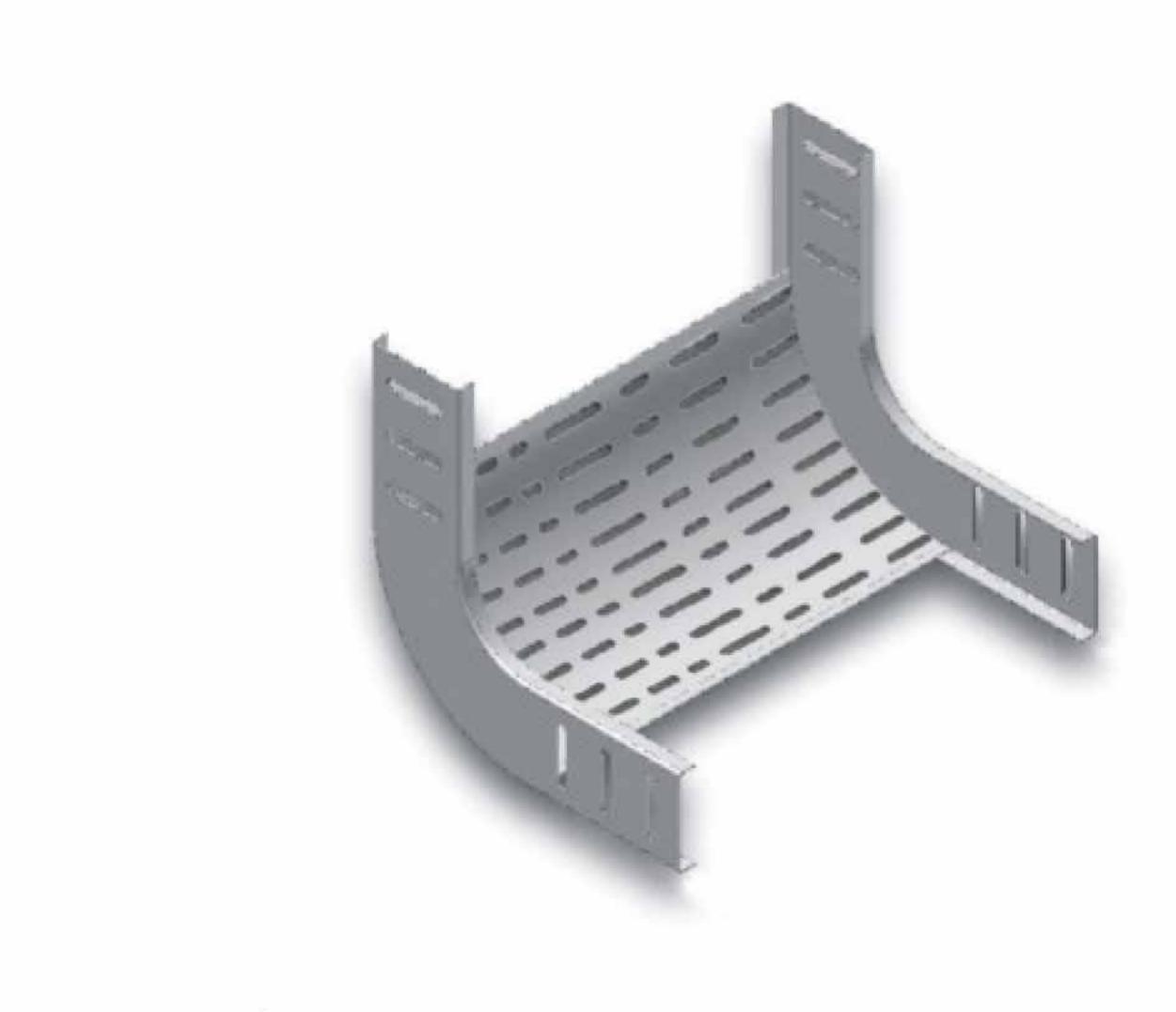
>> Convex Curve

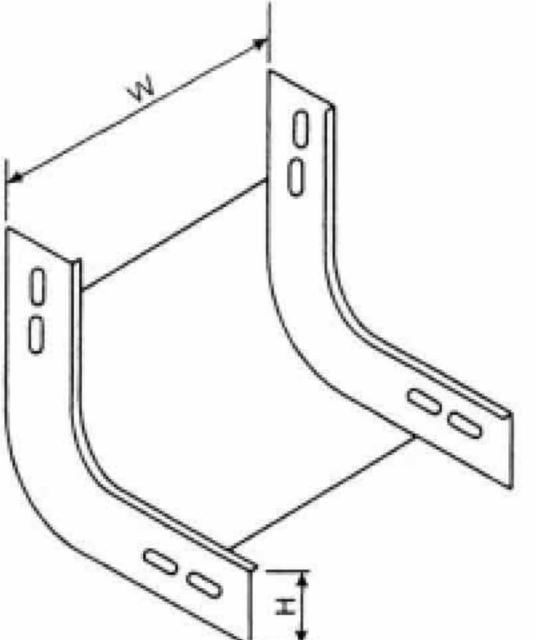
Part No.	Н	w	Т	Type B	Тур	e C
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)
AS TCC 405	40	50	1	10	10	10
AS TCC 410	40	100	1	10	10	10
AS TCC 610	60	100	1	10	10	10
AS TCC 420	40	200	1.25	10	10	10
AS TCC 620	60	200	1.25	10	10	10
AS TCC 430	40	300	1.25	10	10	10
AS TCC 630	60	300	1.25	10	10	10
AS TCC 440	40	400	1.5	10	10	10
AS TCC 640	60	400	1.5	10	10	10
AS TCC 840	80	400	1.5	10	10	10
AS TCC 450	40	500	1.5	10	10	10
AS TCC 650	60	500	1.5	10	10	10
AS TCC 850	80	500	1.5	10	10	10
AS TCC 460	40	600	2	10	10	10
AS TCC 660	60	600	2	10	10	10
AS TCC 860	80	600	2	10	10	10



>> Concave Curve

Part No.	н	w	т	Туре В	Тур	Type C	
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)	
AS TCU 405	40	50	1	10	10	10	
AS TCU 410	40	100	1	10	10	10	
AS TCU 610	60	100	1	10	10	10	
AS TCU 420	40	200	1.25	10	10	10	
AS TCU 620	60	200	1.25	10	10	10	
AS TCU 430	40	300	1.25	10	10	10	
AS TCU 630	60	300	1.25	10	10	10	
AS TCU 440	40	400	1.5	10	10	10	
AS TCU 640	60	400	1.5	10	10	10	
AS TCU 840	80	400	1.5	10	10	10	
AS TCU 450	40	500	1.5	10	10	10	
AS TCU 650	60	500	1.5	10	10	10	
AS TCU 850	80	500	1.5	10	10	10	
AS TCU 460	40	600	2	10	10	10	
AS TCU 660	60	600	2	10	10	10	
AS TCU 860	80	600	2	10	10	10	

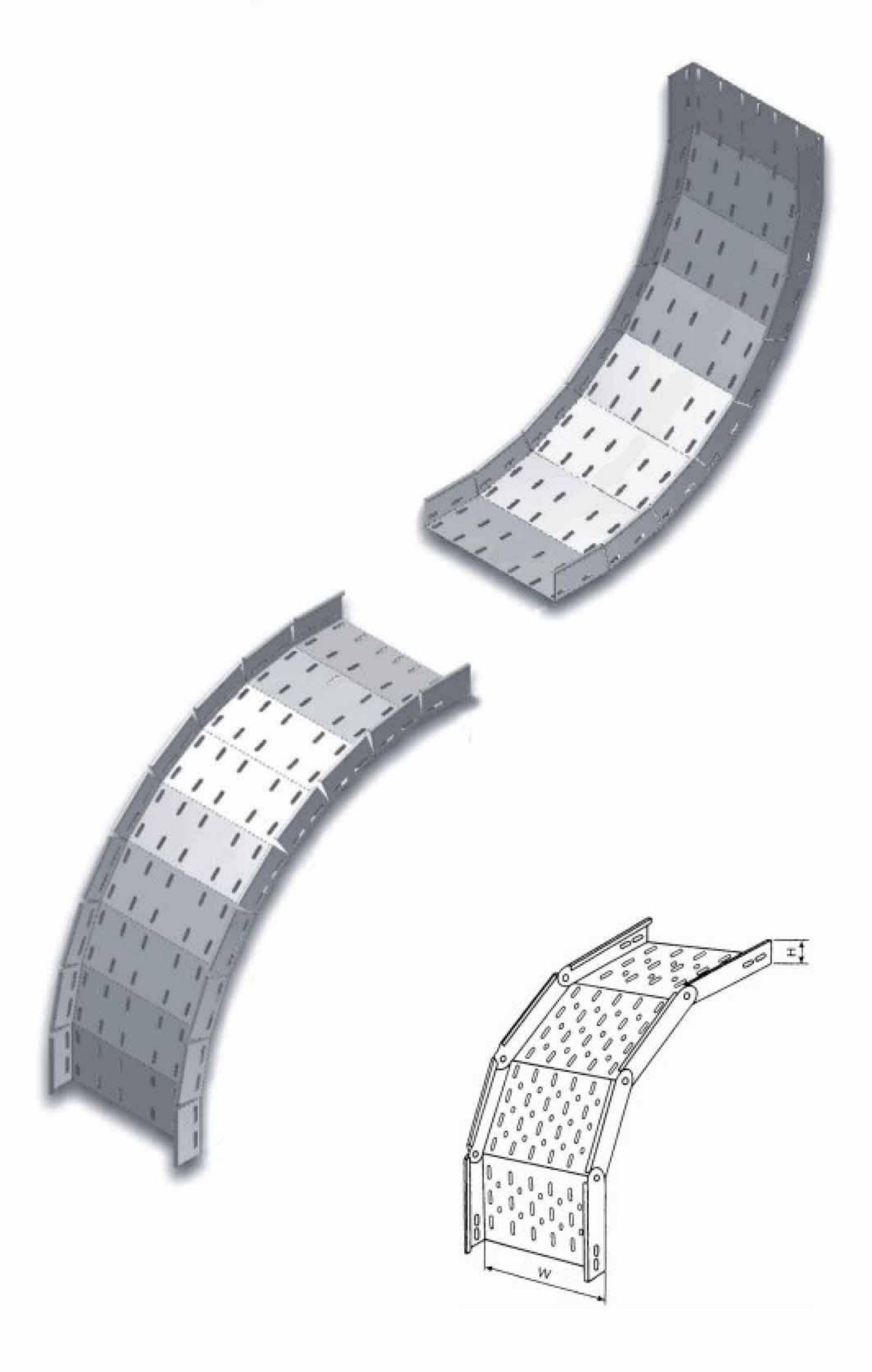




>> Vertical Flexible Bend

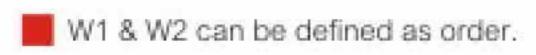
Part No.	Н	w	т	Туре В	Тур	e C
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)
AS TVF 405	40	50	1	10	10	10
AS TVF 410	40	100	1	10	10	10
AS TVF 610	60	100	1	10	10	10
AS TVF 420	40	200	1.25	10	10	10
AS TVF 620	60	200	1.25	10	10	10
AS TVF 430	40	300	1.25	10	10	10
AS TVF 630	60	300	1.25	10	10	10
AS TVF 440	40	400	1.5	10	10	10
AS TVF 640	60	400	1.5	10	10	10
AS TVF 840	80	400	1.5	10	10	10
AS TVF 450	40	500	1.5	10	10	10
AS TVF 650	60	500	1.5	10	10	10
AS TVF 850	80	500	1.5	10	10	10
AS TVF 460	40	600	2	10	10	10
AS TVF 660	60	600	2	10	10	10
AS TVF 860	80	600	2	10	10	10

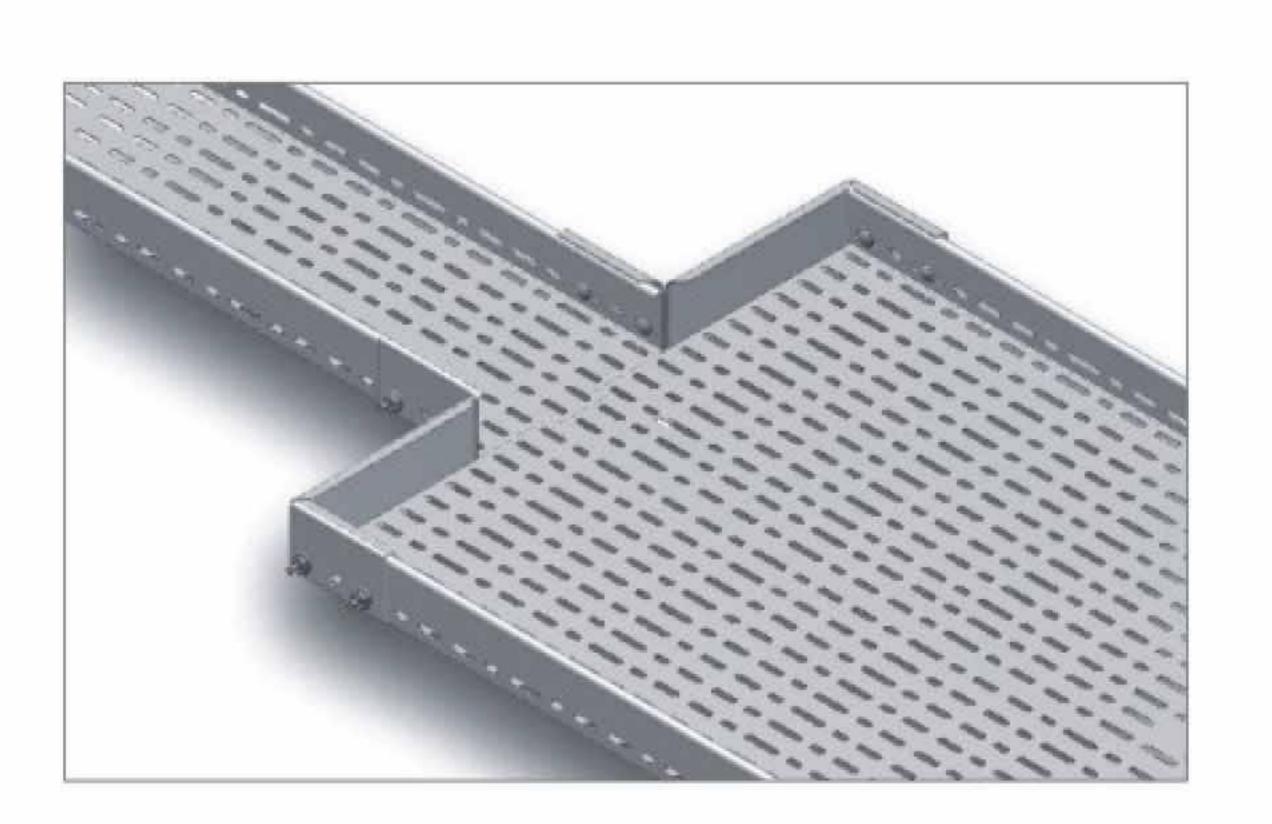


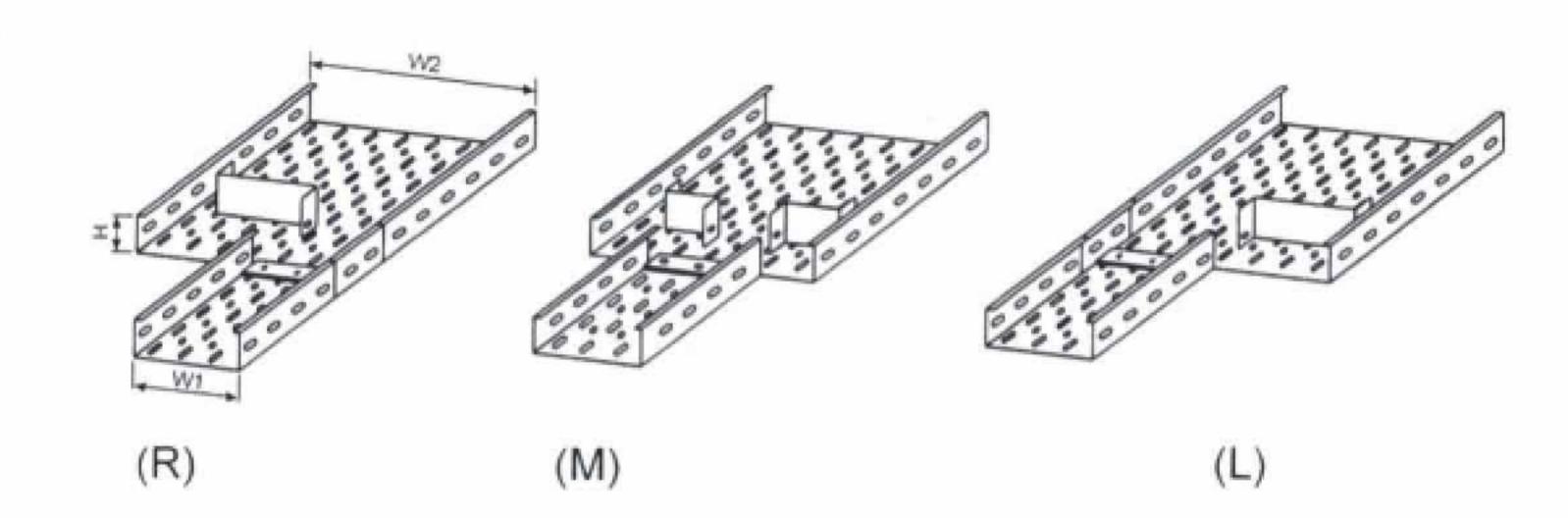


>> Reduction Plate

Part No.	н	w	Т	Type B	Type C	
	(mm)	(mm)	(mm)	nm) D (mm)	D (mm)	C(mm)
AS TRP 405	40	50	1	10	10	10
AS TRP 410	40	100	1	10	10	10
AS TRP 610	60	100	1	10	10	10
AS TRP 420	40	200	1.25	10	10	10
AS TRP 620	60	200	1.25	10	10	10
AS TRP 430	40	300	1.25	10	10	10
AS TRP 630	60	300	1.25	10	10	10
AS TRP 440	40	400	1.5	10	10	10
AS TRP 640	60	400	1.5	10	10	10
AS TRP 840	80	400	1.5	10	10	10
AS TRP 450	40	500	1.5	10	10	10
AS TRP 650	60	500	1.5	10	10	10
AS TRP 850	80	500	1.5	10	10	10
AS TRP 460	40	600	2	10	10	10
AS TRP 660	60	600	2	10	10	10
AS TRP 860	80	600	2	10	10	10



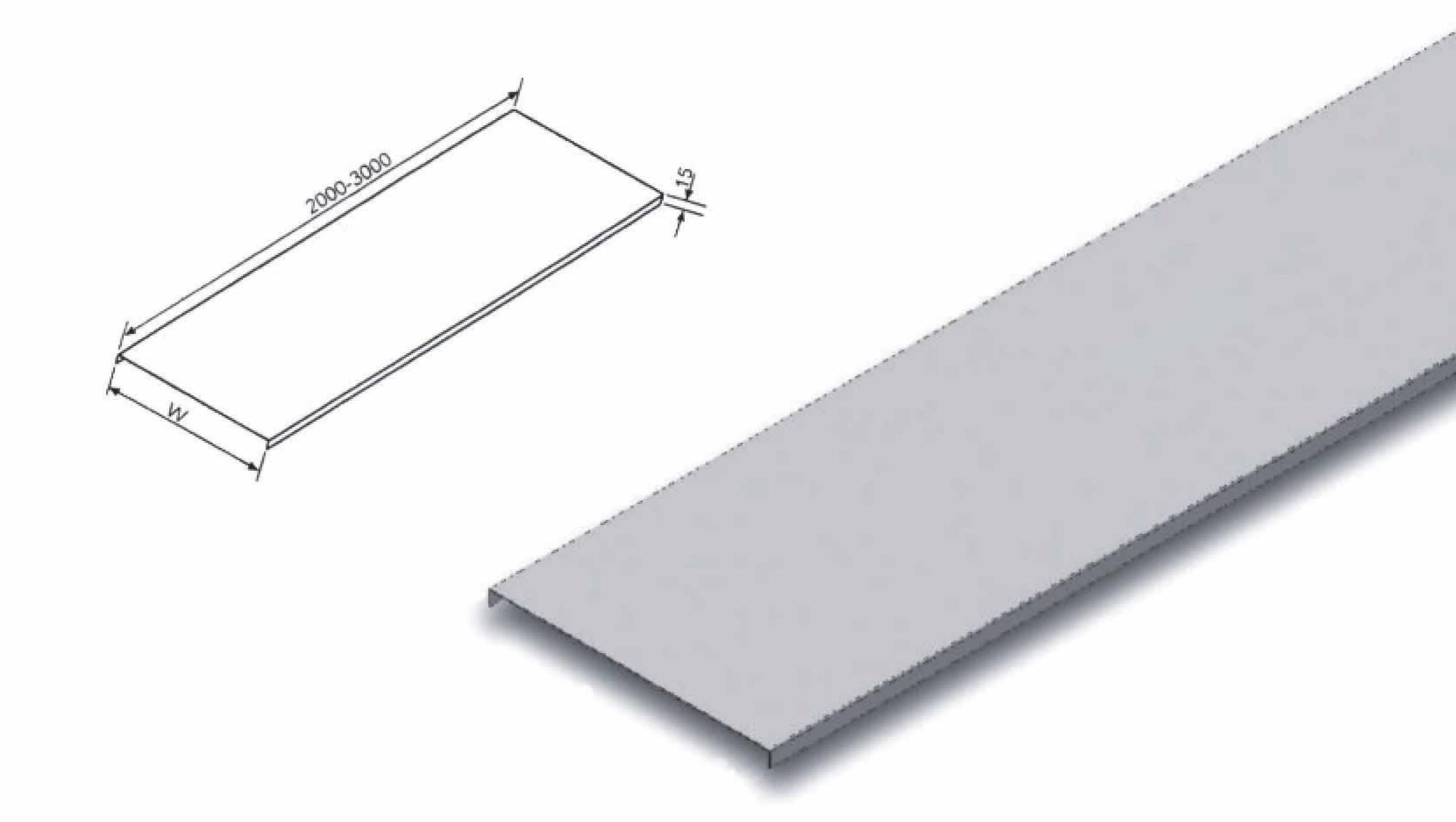






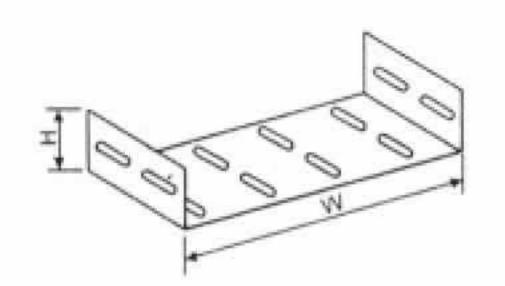
>> Cover

Part No.	H (mm)	W (mm)	T (mm)
AS TC 105	15	50	1
AS TC 110	15	100	1
AS TC 120	15	200	1
AS TC 130	15	300	1
AS TC 140	15	400	1
AS TC 150	15	500	1
AS TC 160	15	600	11



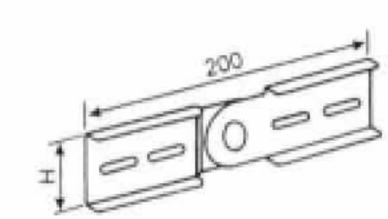
>> Accessories





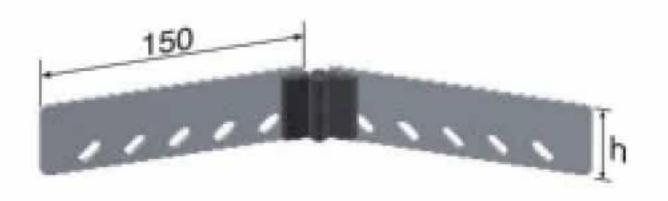
Splice Plate

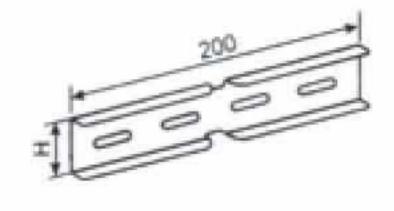




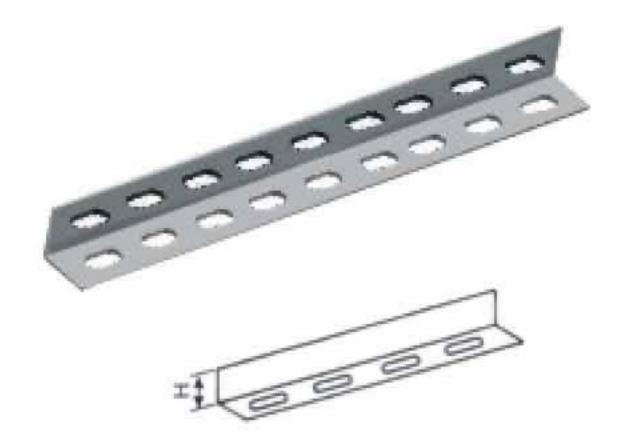








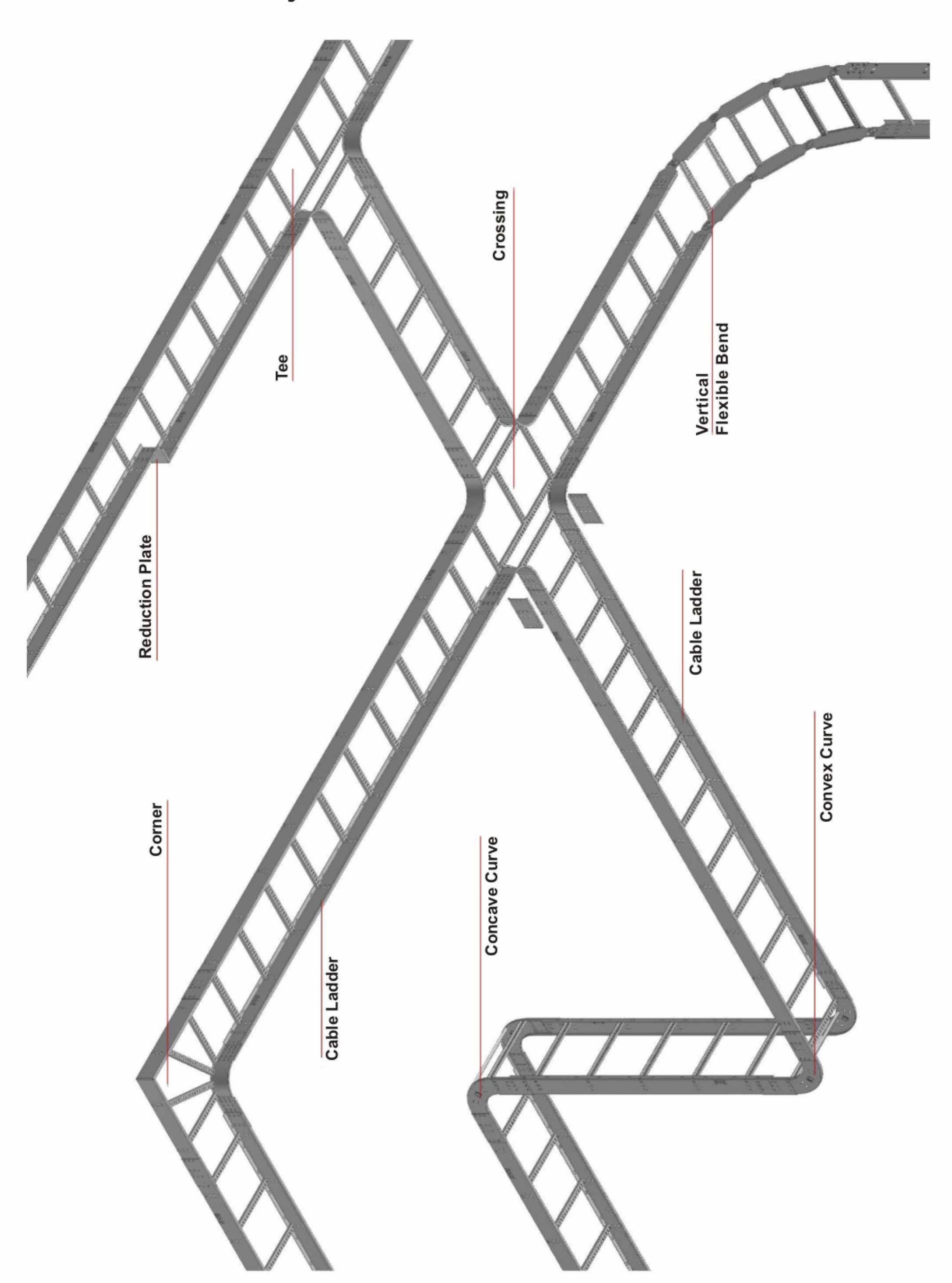
Bendable Joint Fitting



Separator



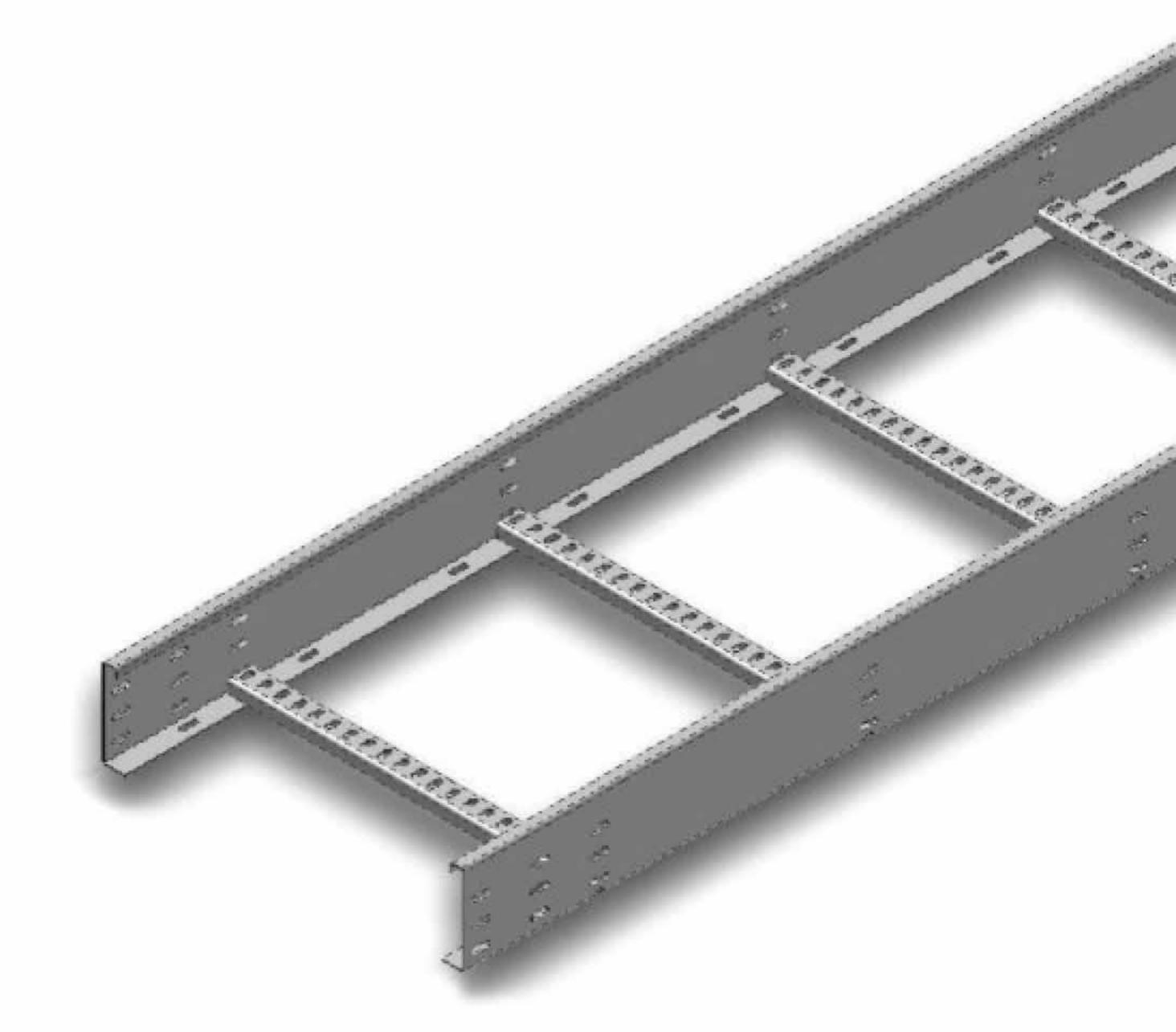
>> Cable Ladder System

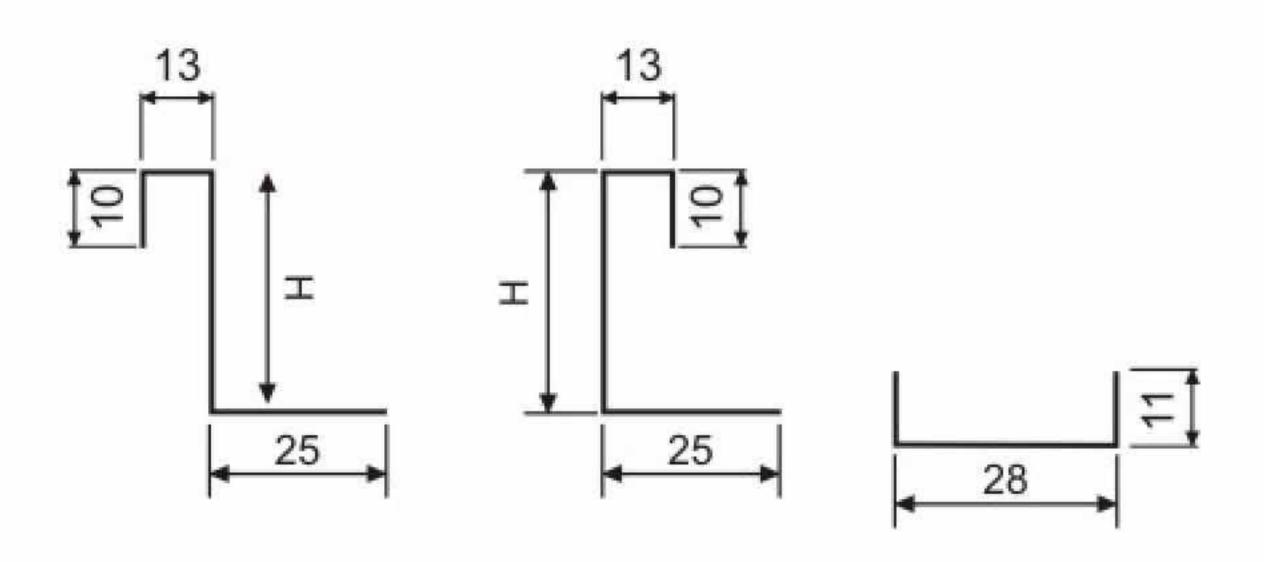


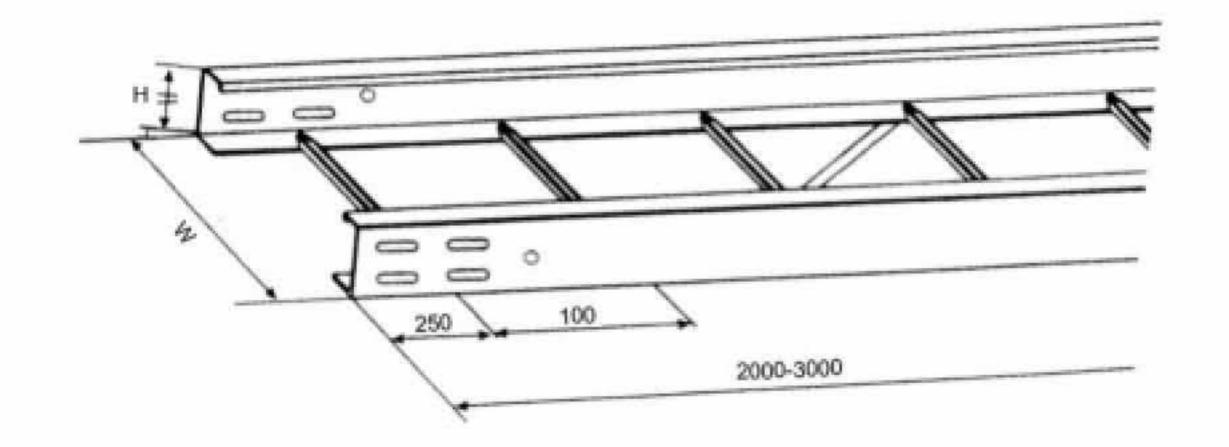


>> Ladder

Part No.	Н	w	Т	Type B	Тур	Type C	
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)	
AS LCL 405	40	50	1	10	10	10	
AS LCL 410	40	100	1	10	10	10	
AS LCL 610	60	100	1	10	10	10	
AS LCL 420	40	200	1.25	10	10	10	
AS LCL 620	60	200	1.25	10	10	10	
AS LCL 430	40	300	1.25	10	10	10	
AS LCL 630	60	300	1.25	10	10	10	
AS LCL 440	40	400	1.5	10	10	10	
AS LCL 640	60	400	1.5	10	10	10	
AS LCL 840	80	400	1.5	10	10	10	
AS LCL 450	40	500	1.5	10	10	10	
AS LCL 650	60	500	1.5	10	10	10	
AS LCL 850	80	500	1.5	10	10	10	
AS LCL 460	40	600	2	10	10	10	
AS LCL 660	60	600	2	10	10	10	
AS LCL 860	80	600	2	10	10	10	





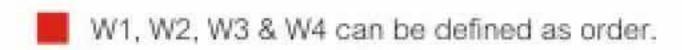


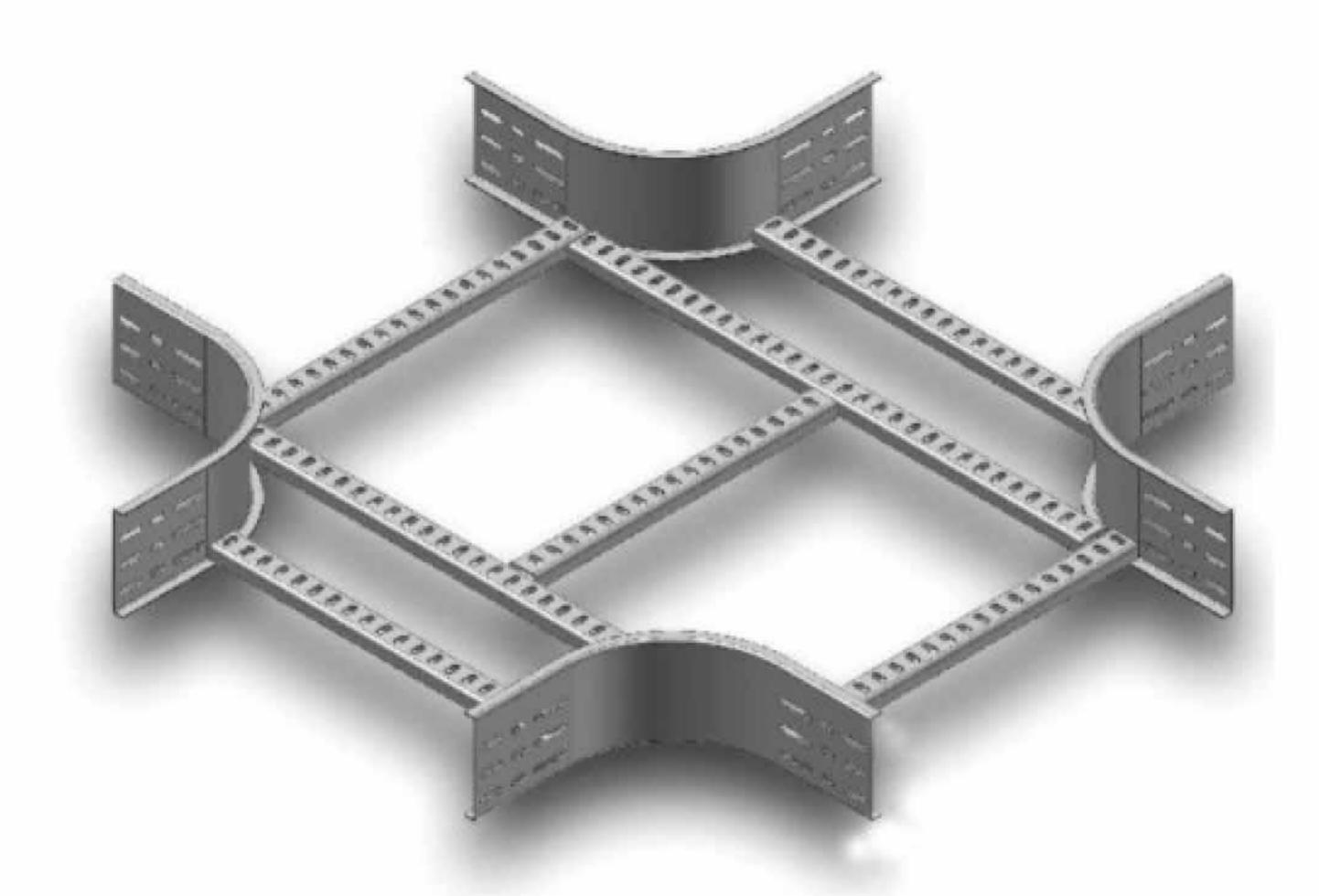


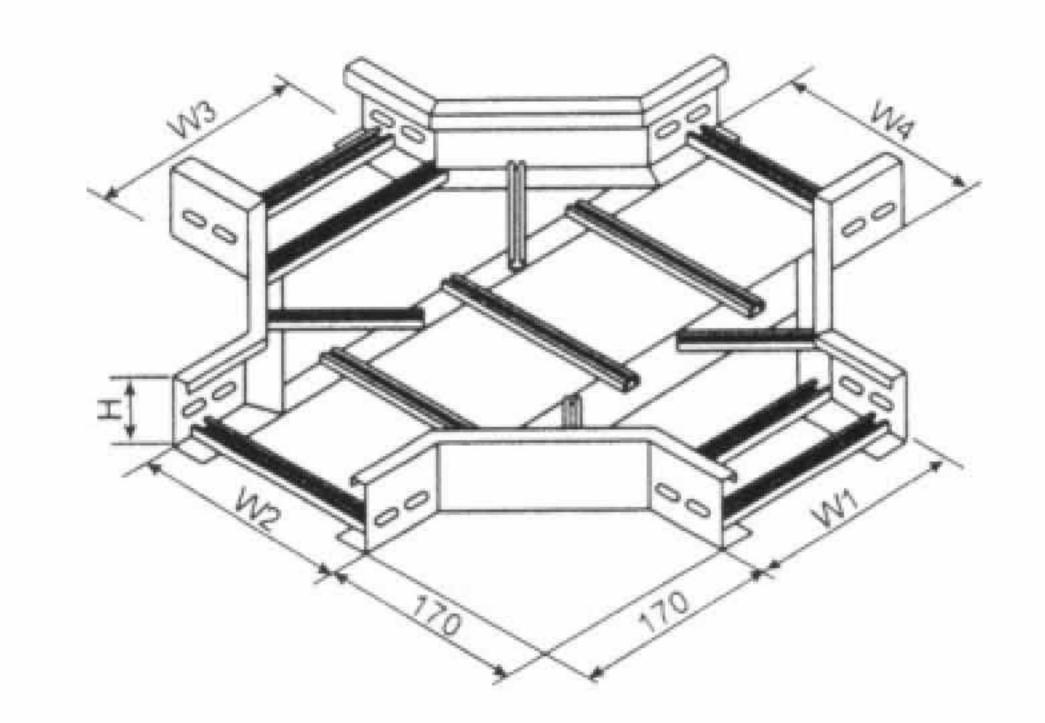


>> Crossing

Part No.	н	w	Т	Туре В	Тур	e C
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)
AS LCR 405	40	50	1	10	10	10
AS LCR 410	40	100	1	10	10	10
AS LCR 610	60	100	1	10	10	10
AS LCR 420	40	200	1.25	10	10	10
AS LCR 620	60	200	1.25	10	10	10
AS LCR 430	40	300	1.25	10	10	10
AS LCR 630	60	300	1.25	10	10	10
AS LCR 440	40	400	1.5	10	10	10
AS LCR 640	60	400	1.5	10	10	10
AS LCR 840	80	400	1.5	10	10	10
AS LCR 450	40	500	1.5	10	10	10
AS LCR 650	60	500	1.5	10	10	10
AS LCR 850	80	500	1.5	10	10	10
AS LCR 460	40	600	2	10	10	10
AS LCR 660	60	600	2	10	10	10
AS LCR 860	80	600	2	10	10	10



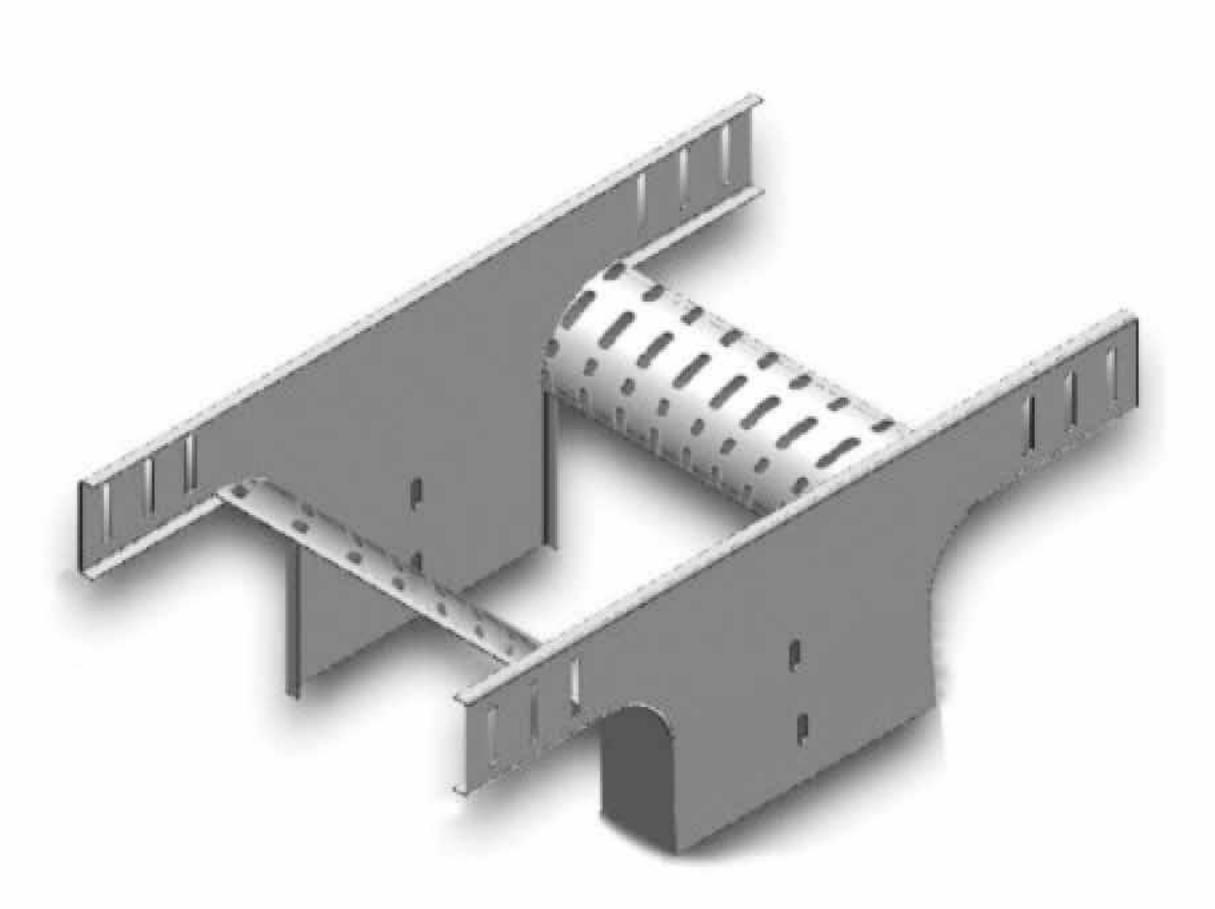


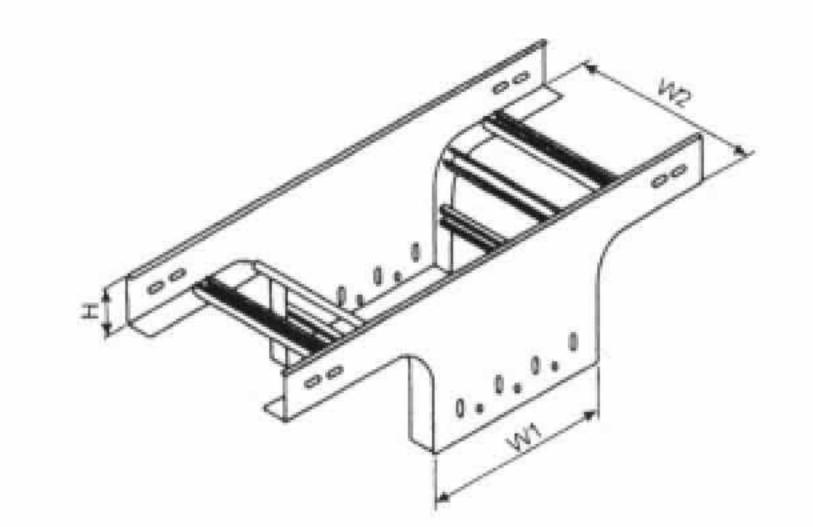


>> T Middle Descent

Part No.	Н	W	Т	Туре В	Тур	e C
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)
AS LTD 405	40	50	1	10	10	10
AS LTD 410	40	100	1	10	10	10
AS LTD 610	60	100	1	10	10	10
AS LTD 420	40	200	1.25	10	10	10
AS LTD 620	60	200	1.25	10	10	10
AS LTD 430	40	300	1.25	10	10	10
AS LTD 630	60	300	1.25	10	10	10
AS LTD 440	40	400	1.5	10	10	10
AS LTD 640	60	400	1.5	10	10	10
AS LTD 840	80	400	1.5	10	10	10
AS LTD 450	40	500	1.5	10	10	10
AS LTD 650	60	500	1.5	10	10	10
AS LTD 850	80	500	1.5	10	10	10
AS LTD 460	40	600	2	10	10	10
AS LTD 660	60	600	2	10	10	10
AS LTD 860	80	600	2	10	10	10

W1 & W2 can be defined as order.

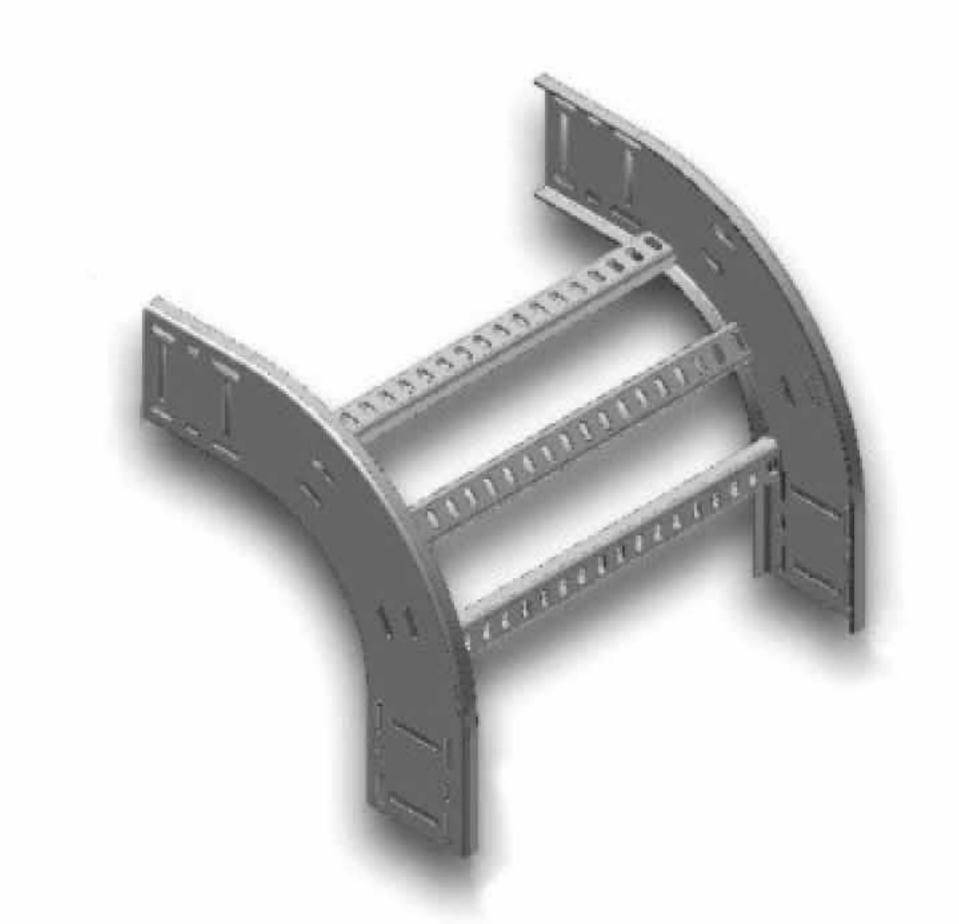


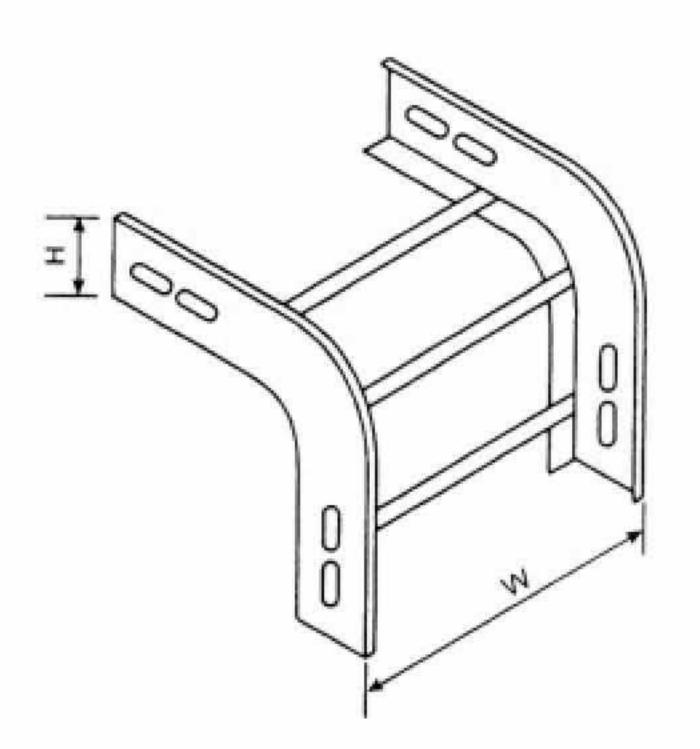




Convex Curve

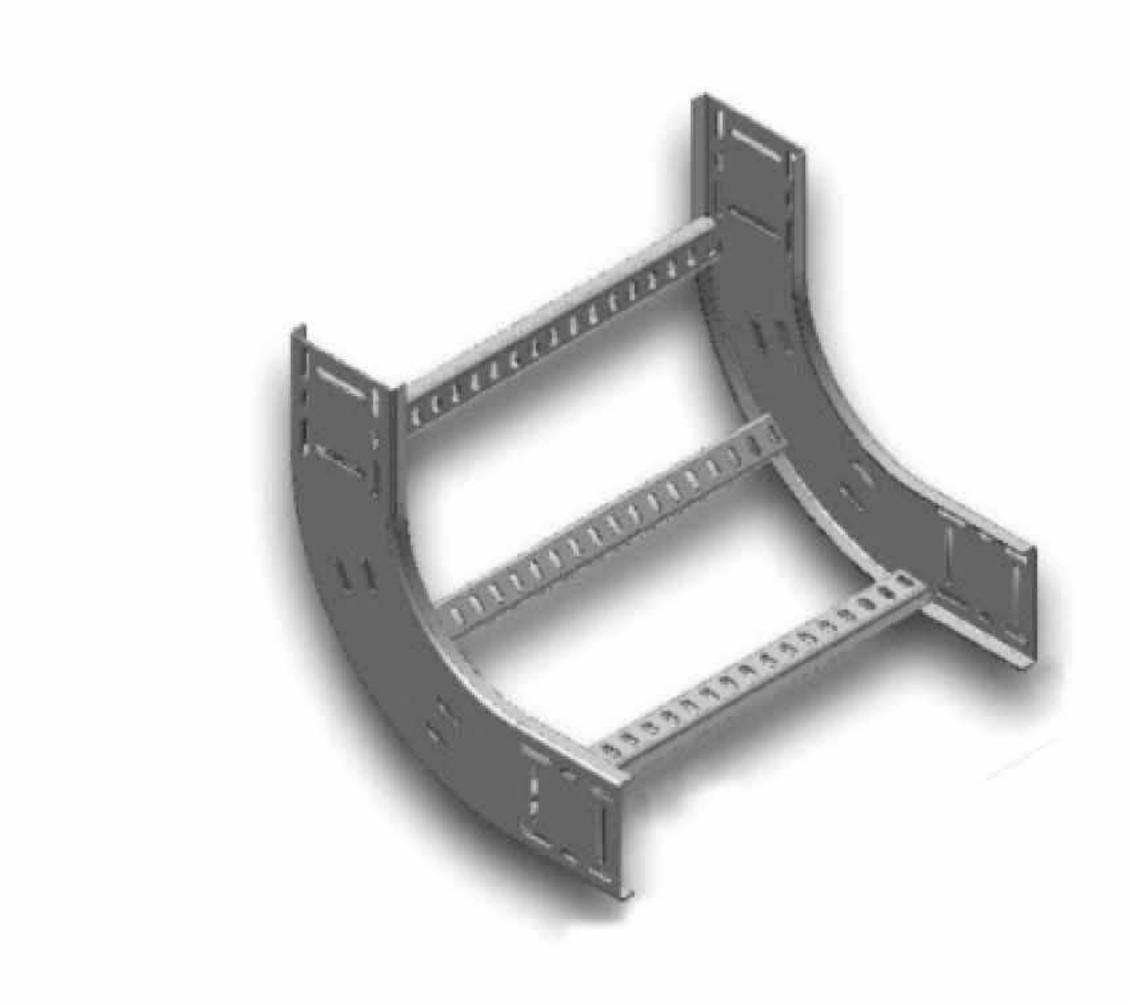
Part No.	н	w	Т	Type B	Тур	e C
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)
AS LCC 405	40	50	1	10	10	10
AS LCC 410	40	100	1	10	10	10
AS LCC 610	60	100	1	10	10	10
AS LCC 420	40	200	1.25	10	10	10
AS LCC 620	60	200	1.25	10	10	10
AS LCC 430	40	300	1.25	10	10	10
AS LCC 630	60	300	1.25	10	10	10
AS LCC 440	40	400	1.5	10	10	10
AS LCC 640	60	400	1.5	10	10	10
AS LCC 840	80	400	1.5	10	10	10
AS LCC 450	40	500	1.5	10	10	10
AS LCC 650	60	500	1.5	10	10	10
AS LCC 850	80	500	1.5	10	10	10
AS LCC 460	40	600	2	10	10	10
AS LCC 660	60	600	2	10	10	10
AS LCC 860	80	600	2	10	10	10

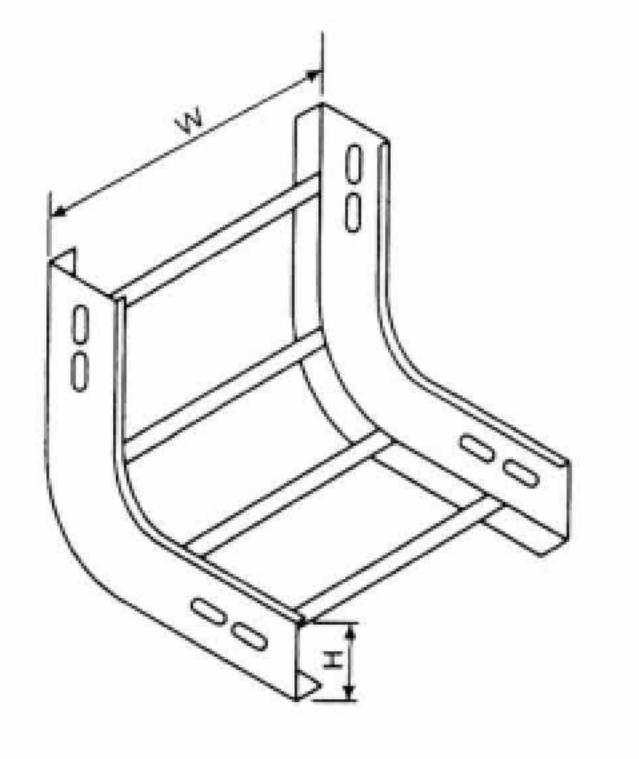




Concave Curve

Part No.	н	w	Т	Туре В	Тур	e C
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)
AS LCU 405	40	50	1	10	10	10
AS LCU 410	40	100	1	10	10	10
AS LCU 610	60	100	1	10	10	10
AS LCU 420	40	200	1.25	10	10	10
AS LCU 620	60	200	1.25	10	10	10
AS LCU 430	40	300	1.25	10	10	10
AS LCU 630	60	300	1.25	10	10	10
AS LCU 440	40	400	1.5	10	10	10
AS LCU 640	60	400	1.5	10	10	10
AS LCU 840	80	400	1.5	10	10	10
AS LCU 450	40	500	1.5	10	10	10
AS LCU 650	60	500	1.5	10	10	10
AS LCU 850	80	500	1.5	10	10	10
AS LCU 460	40	600	2	10	10	10
AS LCU 660	60	600	2	10	10	10
AS LCU 860	80	600	2	10	10	10

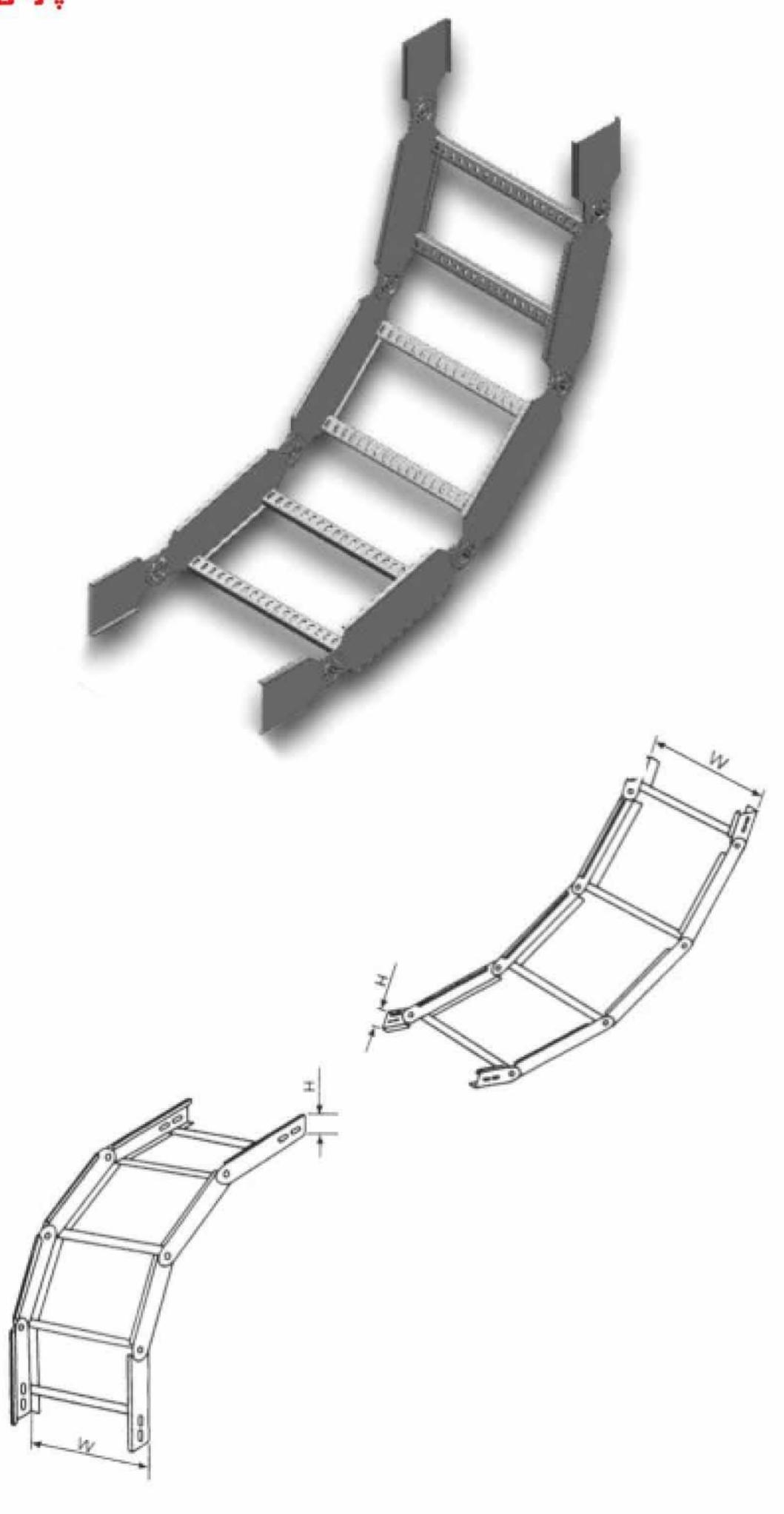




پارس فرابخش انرژی

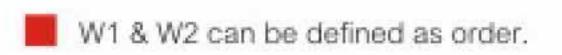
>> Vertical Flexible Bend

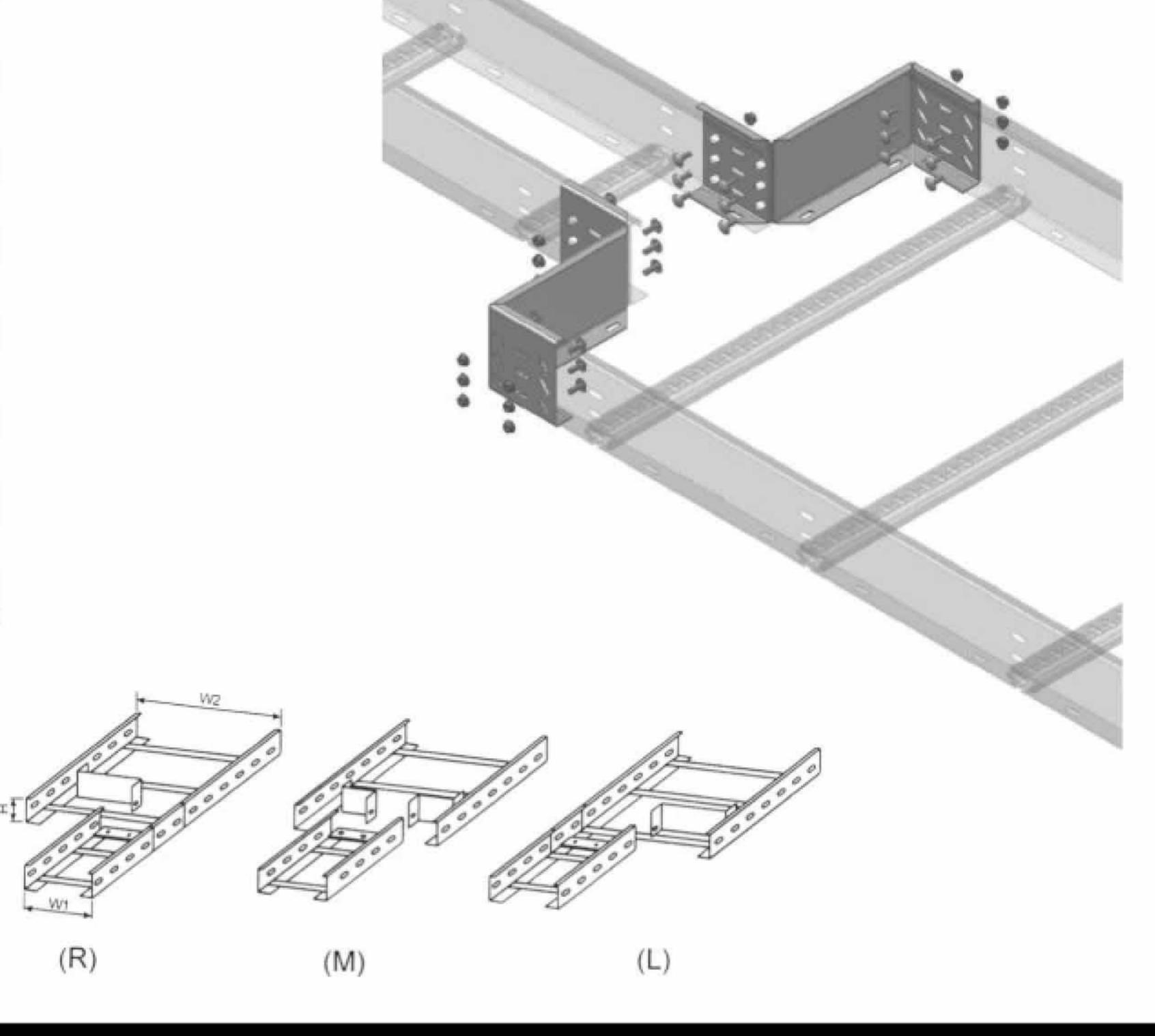
Part No.	н	w	Т	Type B	Тур	e C
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)
AS LVF 405	40	50	1	10	10	10
AS LVF 410	40	100	1	10	10	10
AS LVF 610	60	100	1	10	10	10
AS LVF 420	40	200	1.25	10	10	10
AS LVF 620	60	200	1.25	10	10	10
AS LVF 430	40	300	1.25	10	10	10
AS LVF 630	60	300	1.25	10	10	10
AS LVF 440	40	400	1.5	10	10	10
AS LVF 640	60	400	1.5	10	10	10
AS LVF 840	80	400	1.5	10	10	10
AS LVF 450	40	500	1.5	10	10	10
AS LVF 650	60	500	1.5	10	10	10
AS LVF 850	80	500	1.5	10	10	10
AS LVF 460	40	600	2	10	10	10
AS LVF 660	60	600	2	10	10	10
AS LVF 860	80	600	2	10	10	10



>> Reduction Plate

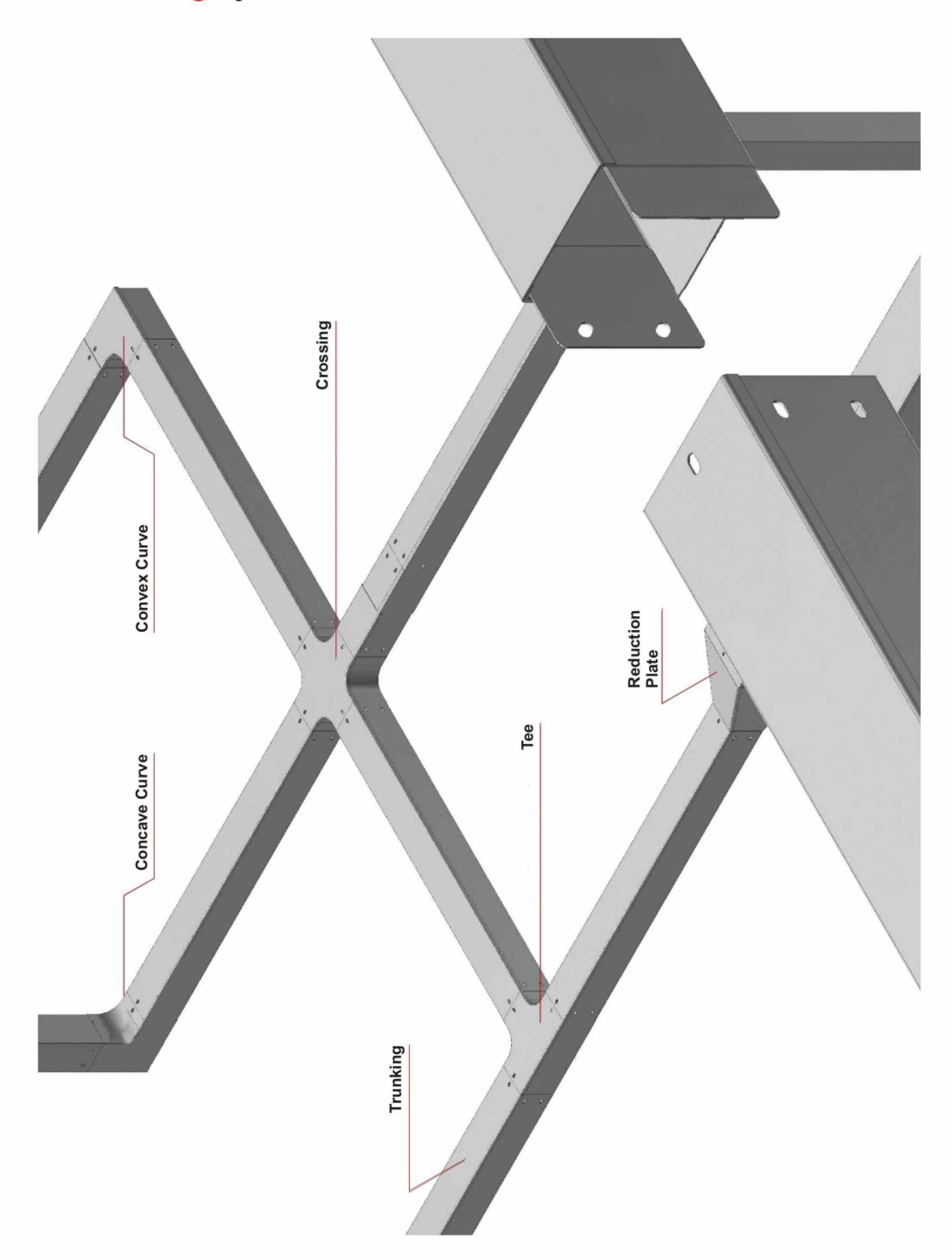
Part No.	Н	W	т	Type B	Тур	e C
	(mm)	(mm)	(mm)	D (mm)	D (mm)	C(mm)
AS LRP 405	40	50	1	10	10	10
AS LRP 410	40	100	1	10	10	10
AS LRP 610	60	100	1	10	10	10
AS LRP 420	40	200	1.25	10	10	10
AS LRP 620	60	200	1.25	10	10	10
AS LRP 430	40	300	1.25	10	10	10
AS LRP 630	60	300	1.25	10	10	10
AS LRP 440	40	400	1.5	10	10	10
AS LRP 640	60	400	1.5	10	10	10
AS LRP 840	80	400	1.5	10	10	10
AS LRP 450	40	500	1.5	10	10	10
AS LRP 650	60	500	1.5	10	10	10
AS LRP 850	80	500	1.5	10	10	10
AS LRP 460	40	600	2	10	10	10
AS LRP 660	60	600	2	10	10	10
AS LRP 860	80	600	2	10	10	10





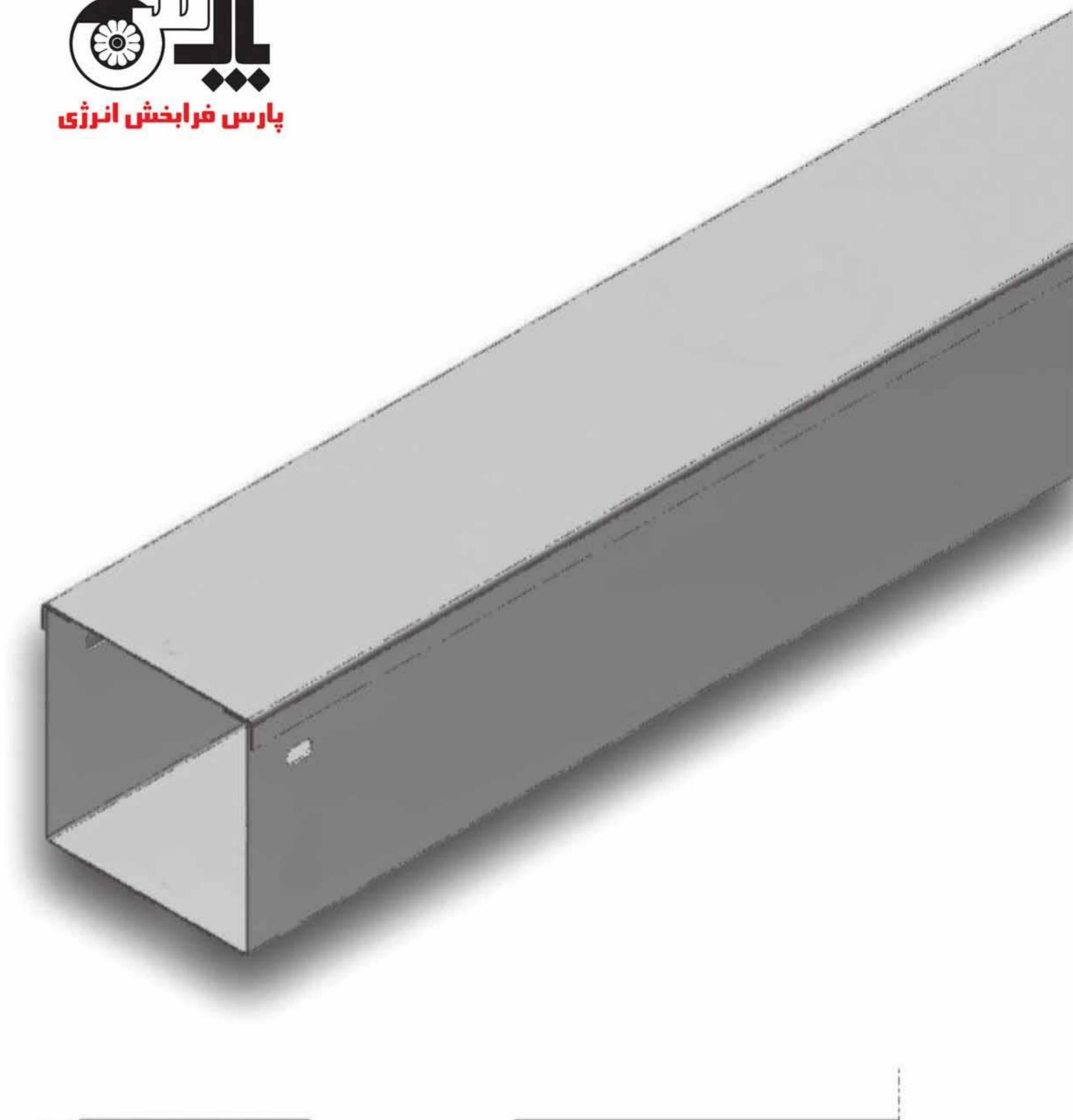


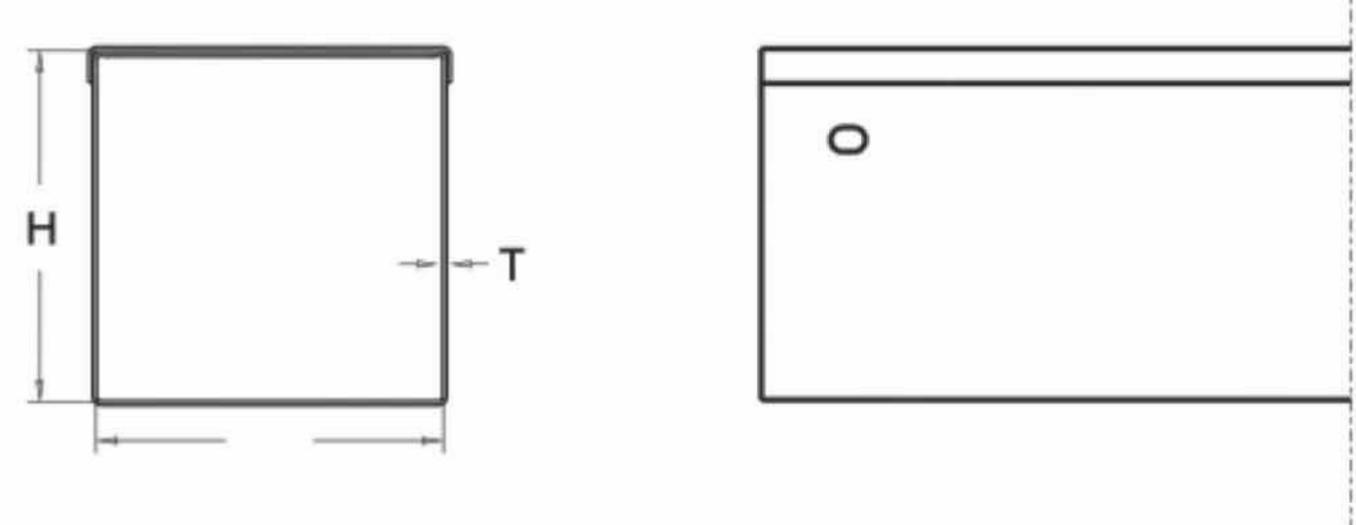




>> Tray

Part No.	H (mm)	W (mm)	T (mm)
AS RTR 405	40	50	1
AS RTR 410	40	100	1
AS RTR 610	60	100	1
AS RTR 420	40	200	1.25
AS RTR 620	60	200	1.25
AS RTR 430	40	300	1.25
AS RTR 630	60	300	1.25
AS RTR 440	40	400	1.5
AS RTR 640	60	400	1.5
AS RTR 840	80	400	1.5
AS RTR 450	40	500	1.5
AS RTR 650	60	500	1.5
AS RTR 850	80	500	1.5
AS RTR 460	40	600	2
AS RTR 660	60	600	2
AS RTR 860	80	600	2



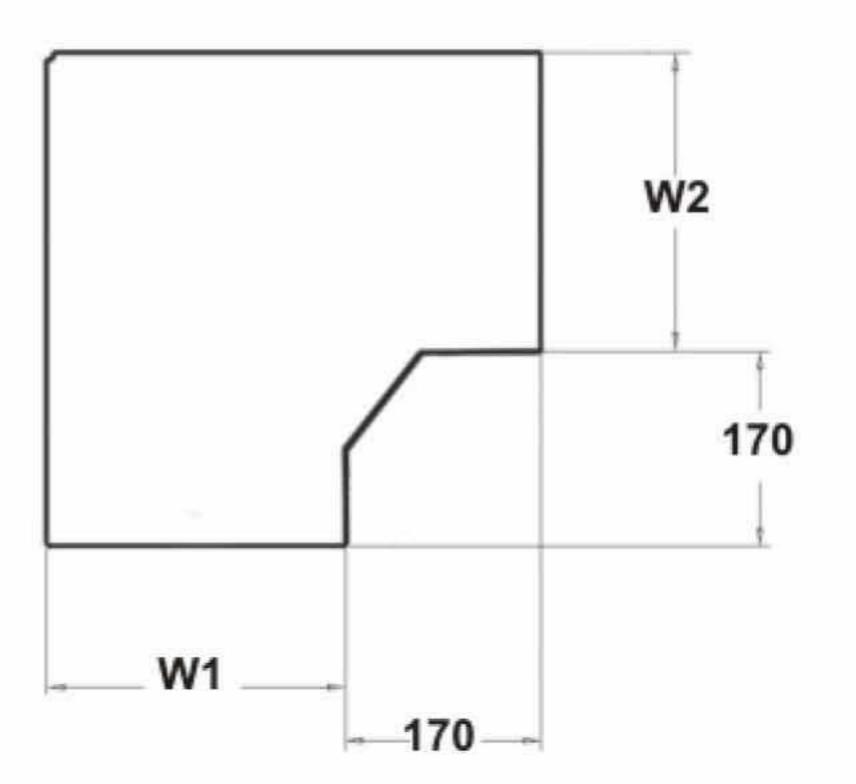


Corner

Part No.	H (mm)	W (mm)	T (mm)
AS RCO 405	40	50	1
AS RCO 410	40	100	1
AS RCO 610	60	100	1
AS RCO 420	40	200	1.25
AS RCO 620	60	200	1.25
AS RCO 430	40	300	1.25
AS RCO 630	60	300	1.25
AS RCO 440	40	400	1.5
AS RCO 640	60	400	1.5
AS RCO 840	80	400	1.5
AS RCO 450	40	500	1.5
AS RCO 650	60	500	1.5
AS RCO 850	80	500	1.5
AS RCO 460	40	600	2
AS RCO 660	60	600	2
AS RCO 860	80	600	2

W1 & W2 can be defined as order.



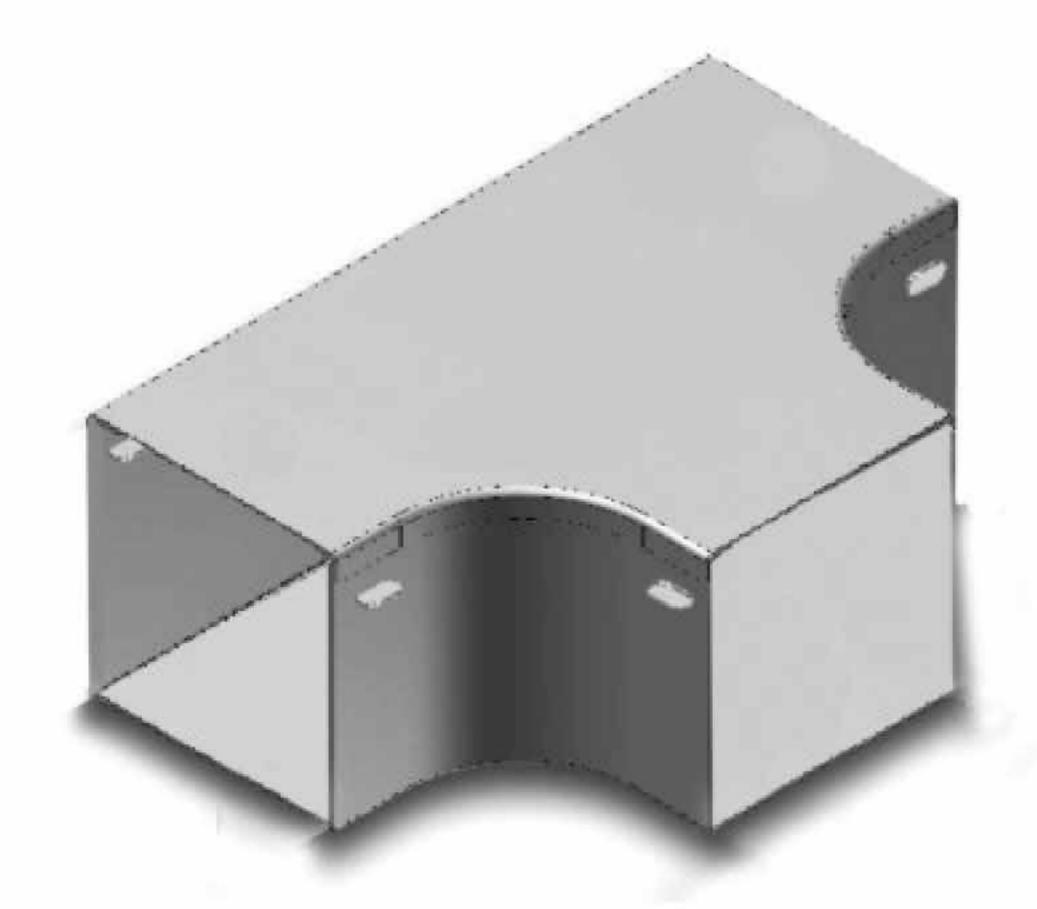


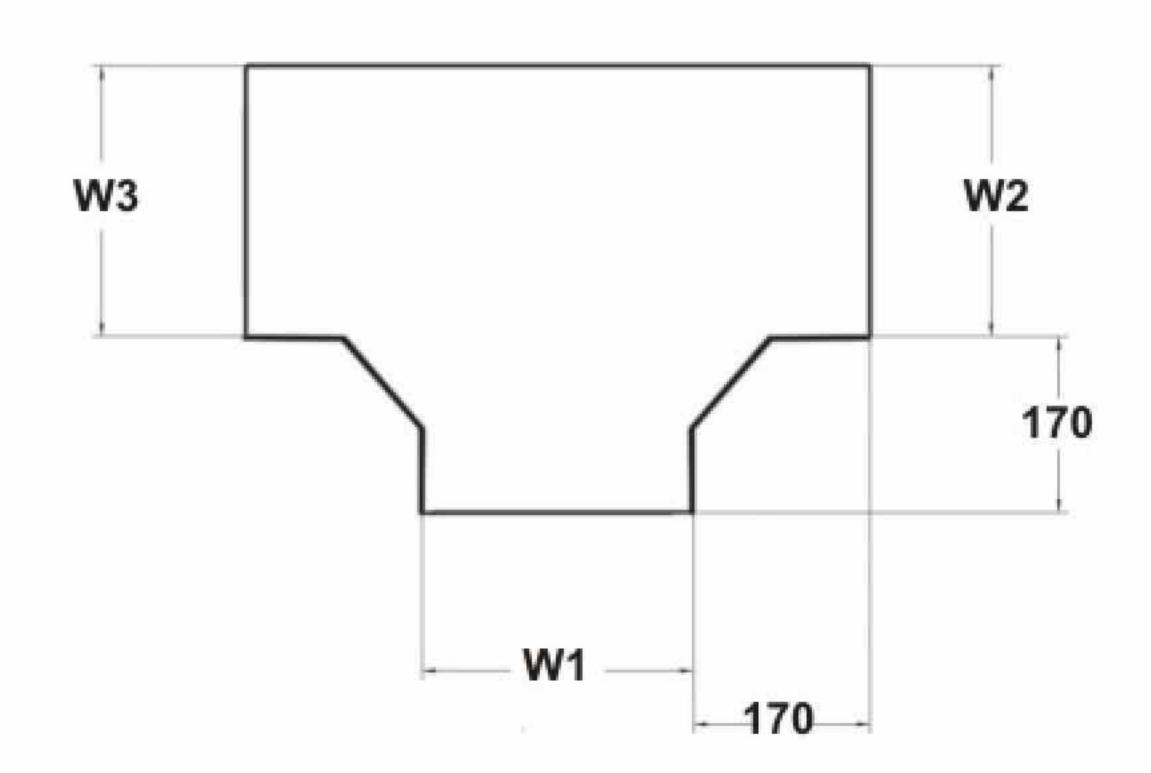


>> Tee

Part No.	H (mm)	W (mm)	T (mm)
AS RTE 405	40	50	1
AS RTE 410	40	100	1
AS RTE 610	60	100	1
AS RTE 420	40	200	1.25
AS RTE 620	60	200	1.25
AS RTE 430	40	300	1.25
AS RTE 630	60	300	1.25
AS RTE 440	40	400	1.5
AS RTE 640	60	400	1.5
AS RTE 840	80	400	1.5
AS RTE 450	40	500	1.5
AS RTE 650	60	500	1.5
AS RTE 850	80	500	1.5
AS RTE 460	40	600	2
AS RTE 660	60	600	2
AS RTE 860	80	600	2

W1, W2 & W3 can be defined as order.

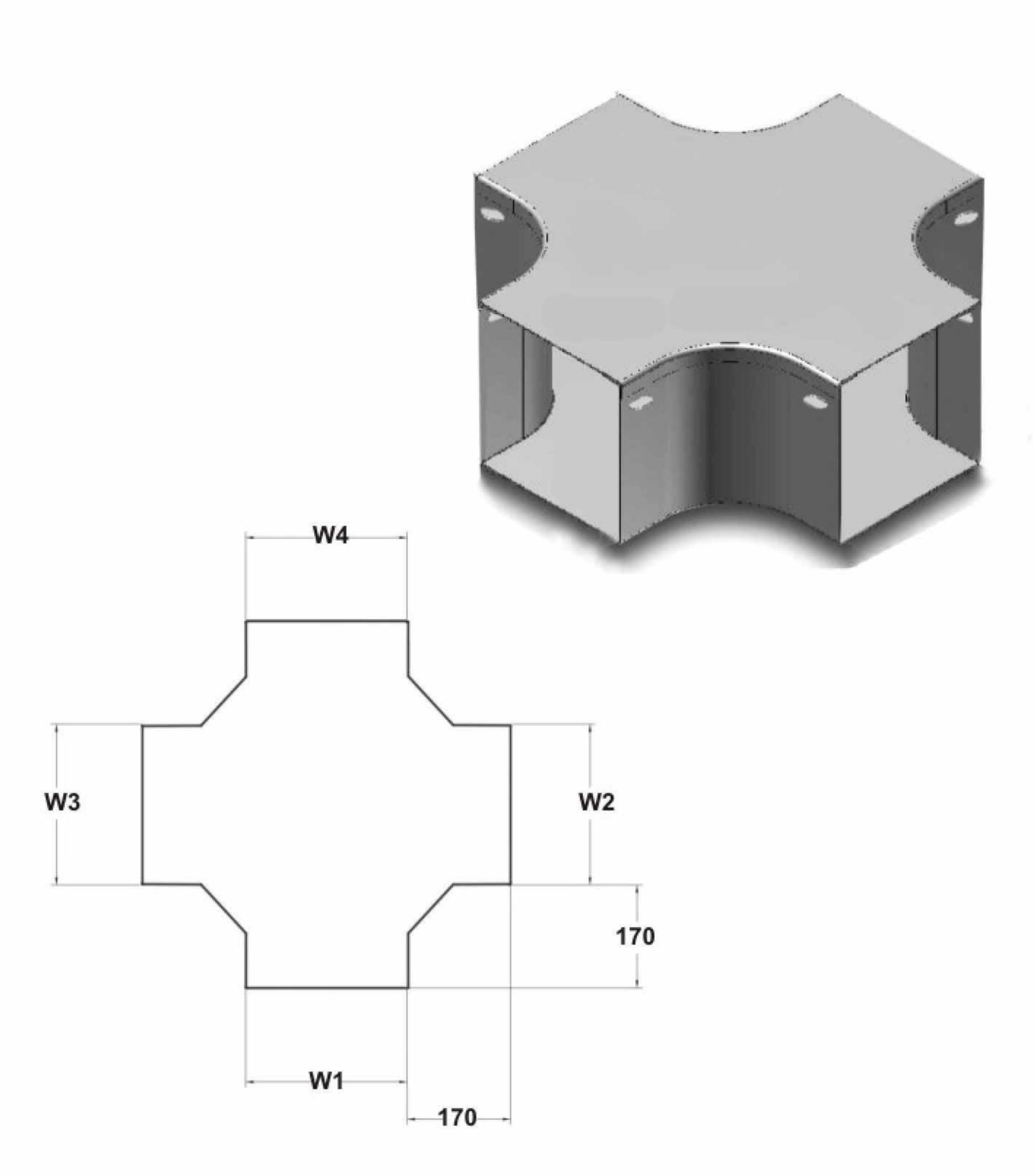




>> Crossing

Part No.	H (mm)	W (mm)	T (mm)
AS RCR 405	40	50	1
AS RCR 410	40	100	1
AS RCR 610	60	100	1
AS RCR 420	40	200	1.25
AS RCR 620	60	200	1.25
AS RCR 430	40	300	1.25
AS RCR 630	60	300	1.25
AS RCR 440	40	400	1.5
AS RCR 640	60	400	1.5
AS RCR 840	80	400	1.5
AS RCR 450	40	500	1.5
AS RCR 650	60	500	1.5
AS RCR 850	80	500	1.5
AS RCR 460	40	600	2
AS RCR 660	60	600	2
AS RCR 860	80	600	2

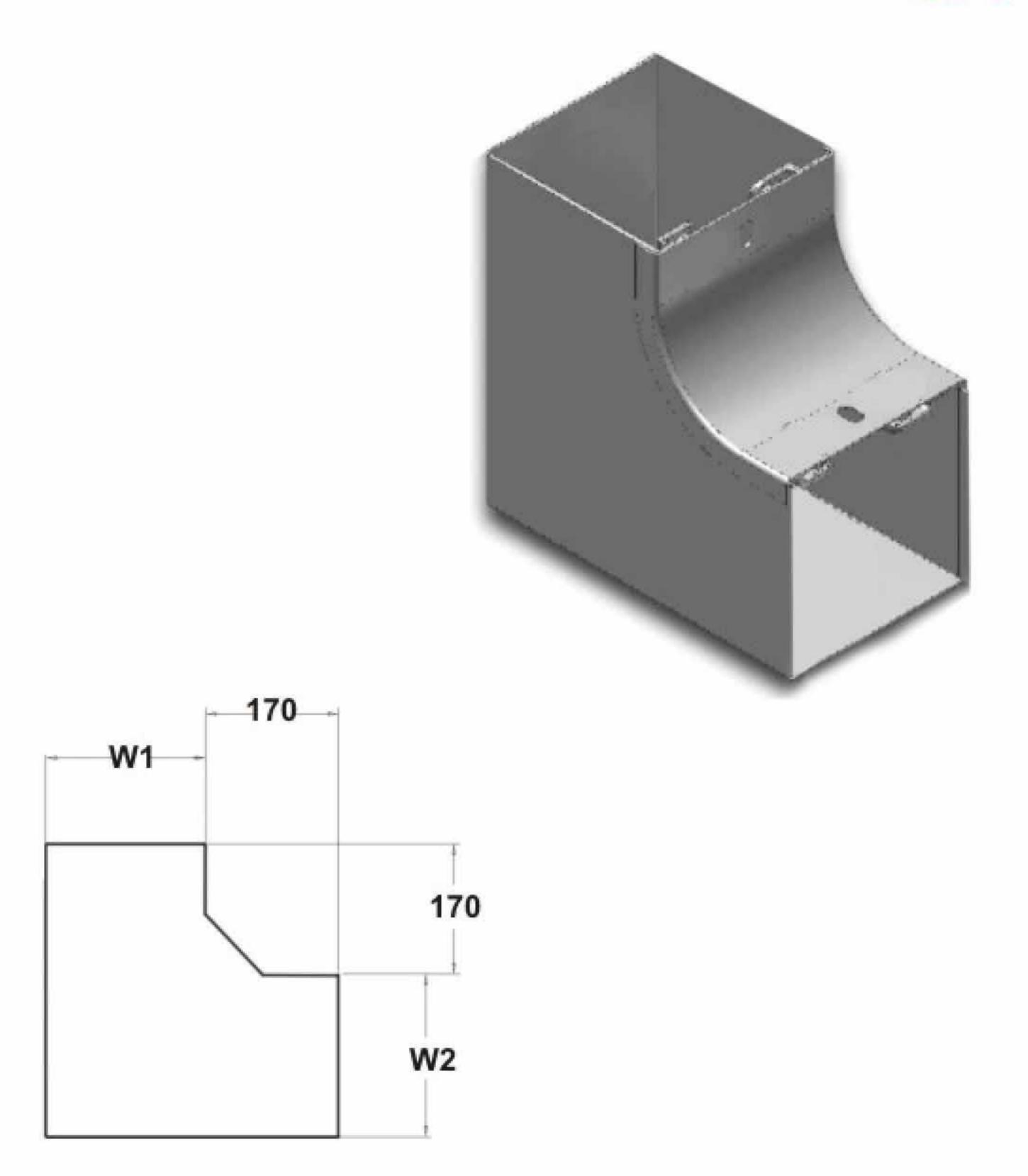
W1, W2, W3 & W4 can be defined as order.



پارس فرابخش انرژی

>> Convex Curve

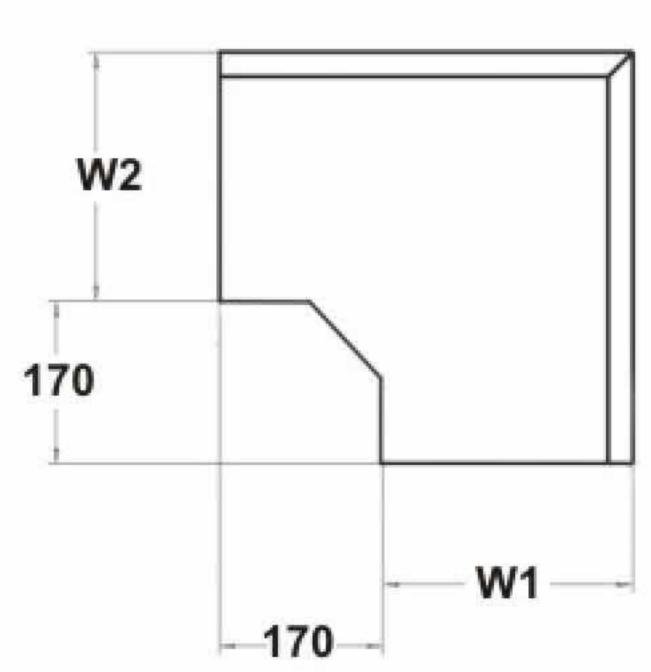
Part No.	H (mm)	W (mm)	T (mm)
AS RCC 405	40	50	1
AS RCC 410	40	100	1
AS RCC 610	60	100	1
AS RCC 420	40	200	1.25
AS RCC 620	60	200	1.25
AS RCC 430	40	300	1.25
AS RCC 630	60	300	1.25
AS RCC 440	40	400	1.5
AS RCC 640	60	400	1.5
AS RCC 840	80	400	1.5
AS RCC 450	40	500	1.5
AS RCC 650	60	500	1.5
AS RCC 850	80	500	1.5
AS RCC 460	40	600	2
AS RCC 660	60	600	2
AS RCC 860	80	600	2



>> Concave Curve

Part No.	H (mm)	W (mm)	T (mm)
AS RCU 405	40	50	1
AS RCU 410	40	100	1
AS RCU 610	60	100	1
AS RCU 420	40	200	1.25
AS RCU 620	60	200	1.25
AS RCU 430	40	300	1.25
AS RCU 630	60	300	1.25
AS RCU 440	40	400	1.5
AS RCU 640	60	400	1.5
AS RCU 840	80	400	1.5
AS RCU 450	40	500	1.5
AS RCU 650	60	500	1.5
AS RCU 850	80	500	1.5
AS RCU 460	40	600	2
AS RCU 660	60	600	2
AS RCU 860	80	600	2







Ceiling Mounting

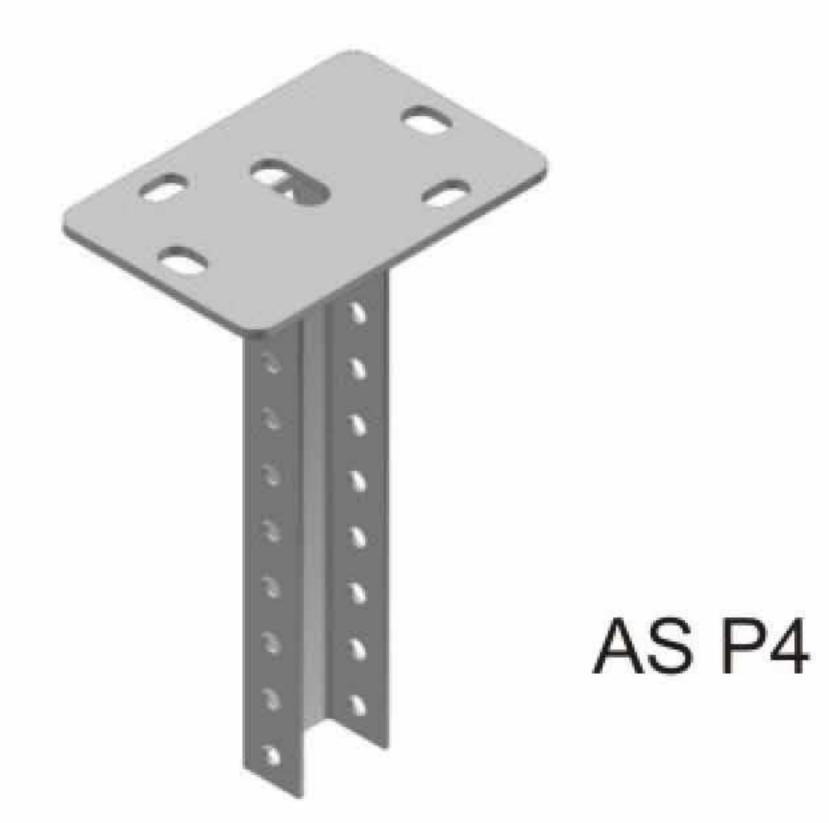
Part No.	L (mm)	T (mm)
AS P1 12	120	2
AS P1 24	240	2
AS P1 48	480	2
AS P1 100	1000	2
AS P2 12	120	2
AS P2 24	240	2
AS P2 48	480	2
AS P2 100	1000	2
AS P4 12	120	2
AS P4 24	240	2
AS P4 48	480	2
AS P4 100	1000	2
AS P4 200	2000	2

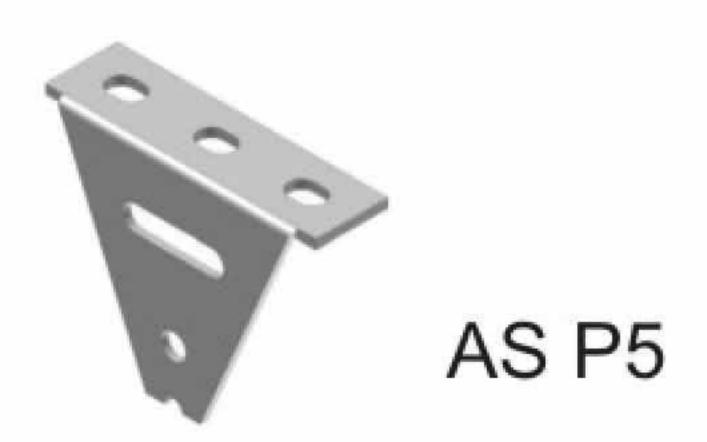


AS P1



AS P2







AS P3

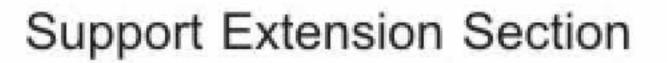




AS P8

Support Extension Section

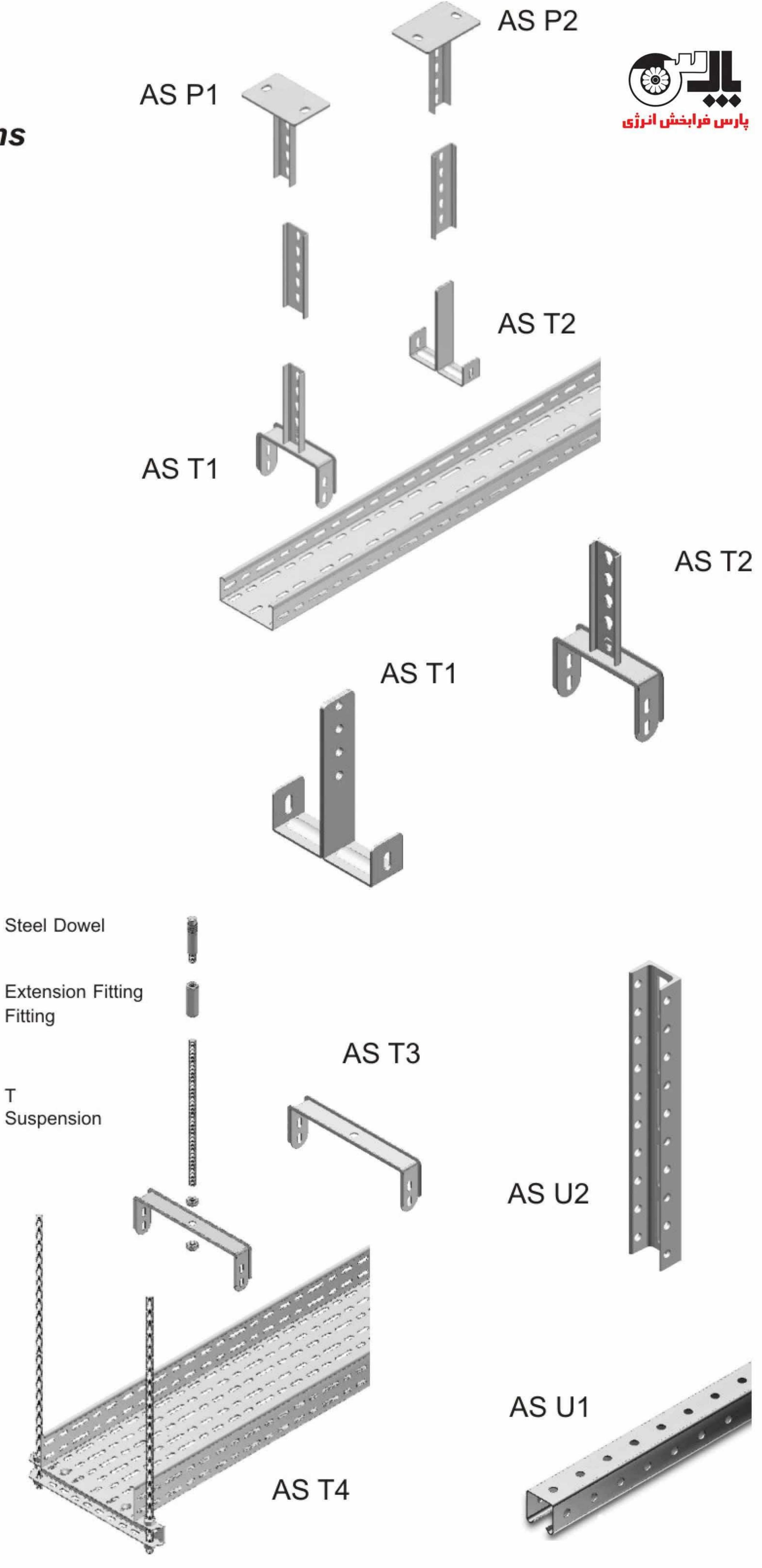
Part No.	L (mm)	T (mm)
AS U 112	120	2
AS U 124	240	2
AS U 148	480	2
AS U 1100	1000	2
AS U 212	120	2
AS U 224	240	2
AS U 248	480	2
AS U 2100	1000	2
AS U 2200	2000	2



Part No.	A (mm)	T (mm)
AS T 105	50	1.5
AS T 110	100	1.5
AS T 115	150	1.5
AS T 120	200	1.5
AS T 205	50	1.5
AS T 210	100	1.5
AS T 215	150	1.5
AS T 220	200	1.5

"T" System Tray Supports

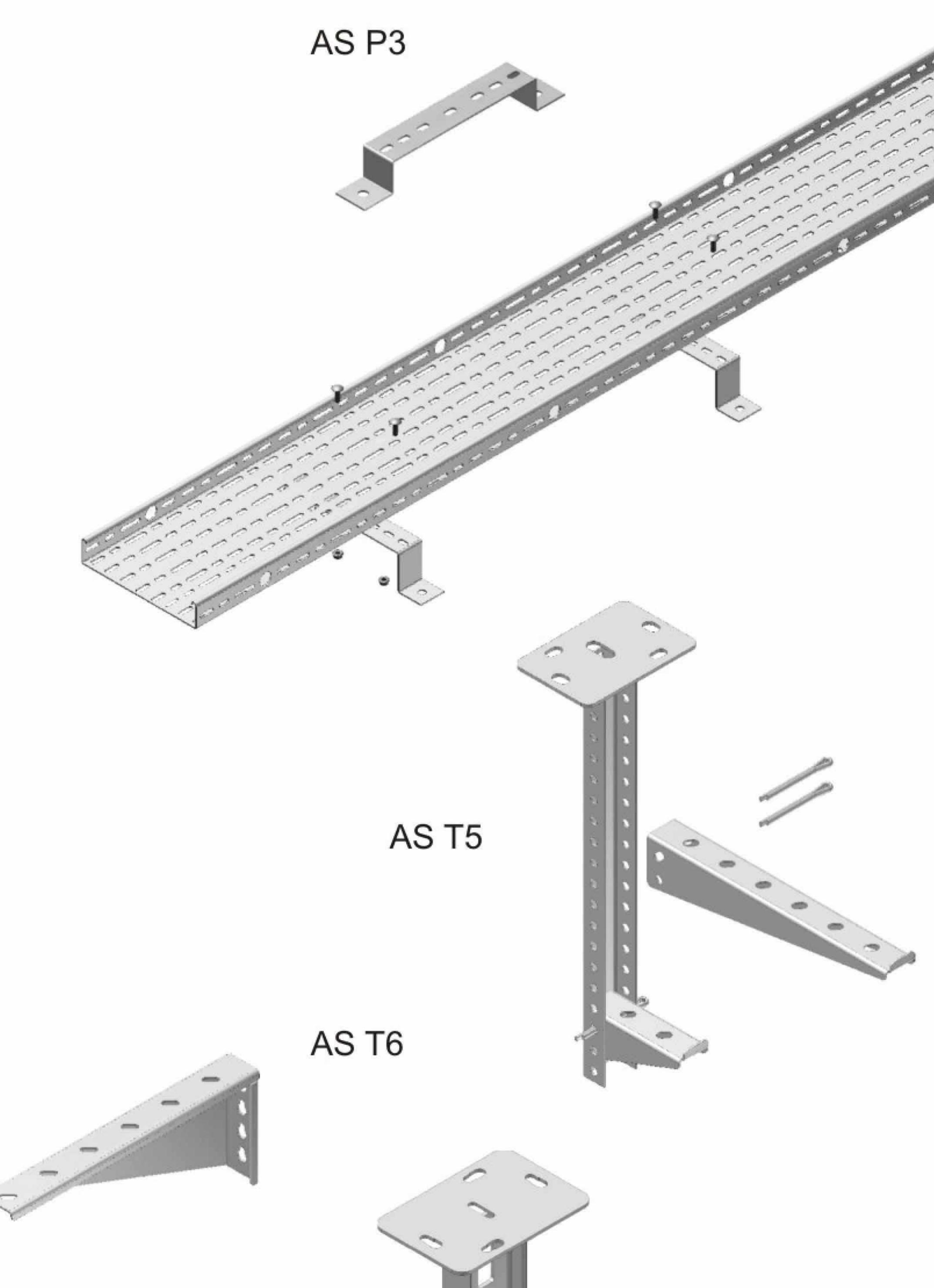
			_		
Pai	rt	No.	(A mm)	T (mm)
AS	Т	305		50	1.5
AS	Т	310		100	1.5
AS	Т	315		150	1.5
AS	Т	320		200	1.5
AS	Τ	325	10	250	1.5
AS	Т	300		300	1.5
AS	T	412		125	1.5
AS	T	417		175	1.5
AS	T	422	9	225	1.5
AS	Т	427	1	275	1.5
AS	T	432		325	1.5
AS	Т	437		375	1.5
AS	T	447		475	1.5
AS	Т	457	3	575	1.5
AS	Т	467		675	1.5

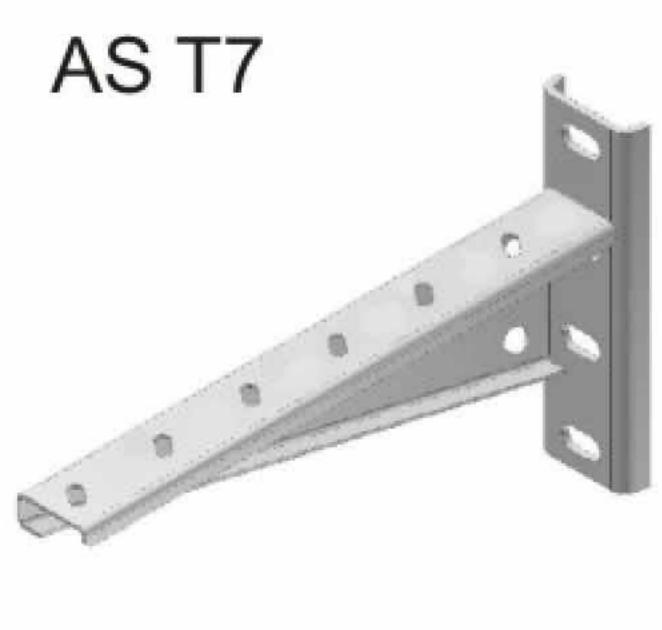


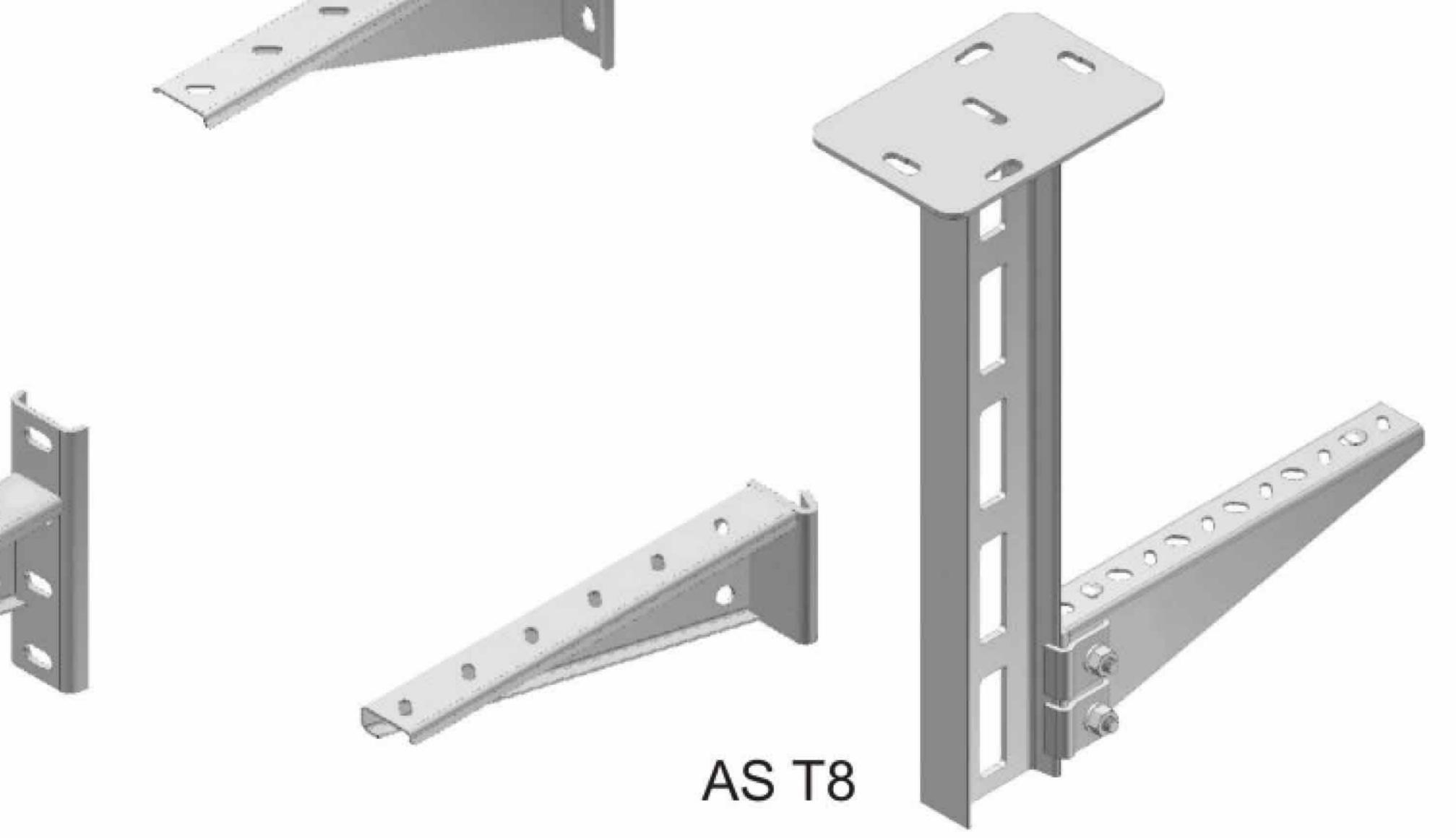


Support Extension Section

Support Extension Section			
Part No.		L (mm)	T (mm)
AS T	505	50	1.5
AS T	510	100	1.5
AS T	515	150	1.5
AS T	520	200	1.5
AS T	525	250	1.5
AS T	530	300	1.5
AS T	540	400	1.5
AS T	550	500	1.5
AS T	560	600	1.5
AS T	605	50	1.5
AS T	610	100	1.5
AS T	615	150	1.5
AS T	620	200	1.5
AS T	625	250	1.5
AS T	630	300	1.5
AS T	640	400	1.5
AS T	650	500	1.5
AS T	710	100	2
AS T	720	200	2
AS T	725	250	2
AS T	730	300	2
AS T	740	400	2
AS T	750	500	2
AS T	760	600	2
AS T	810	100	1.5
AS T	815	150	1.5
AS T	820	200	1.5
AS T	825	250	1.5
AS T	830	300	1.5
AS T	840	400	1.5
AS T	850	500	1.5
AS T	860	600	1.5







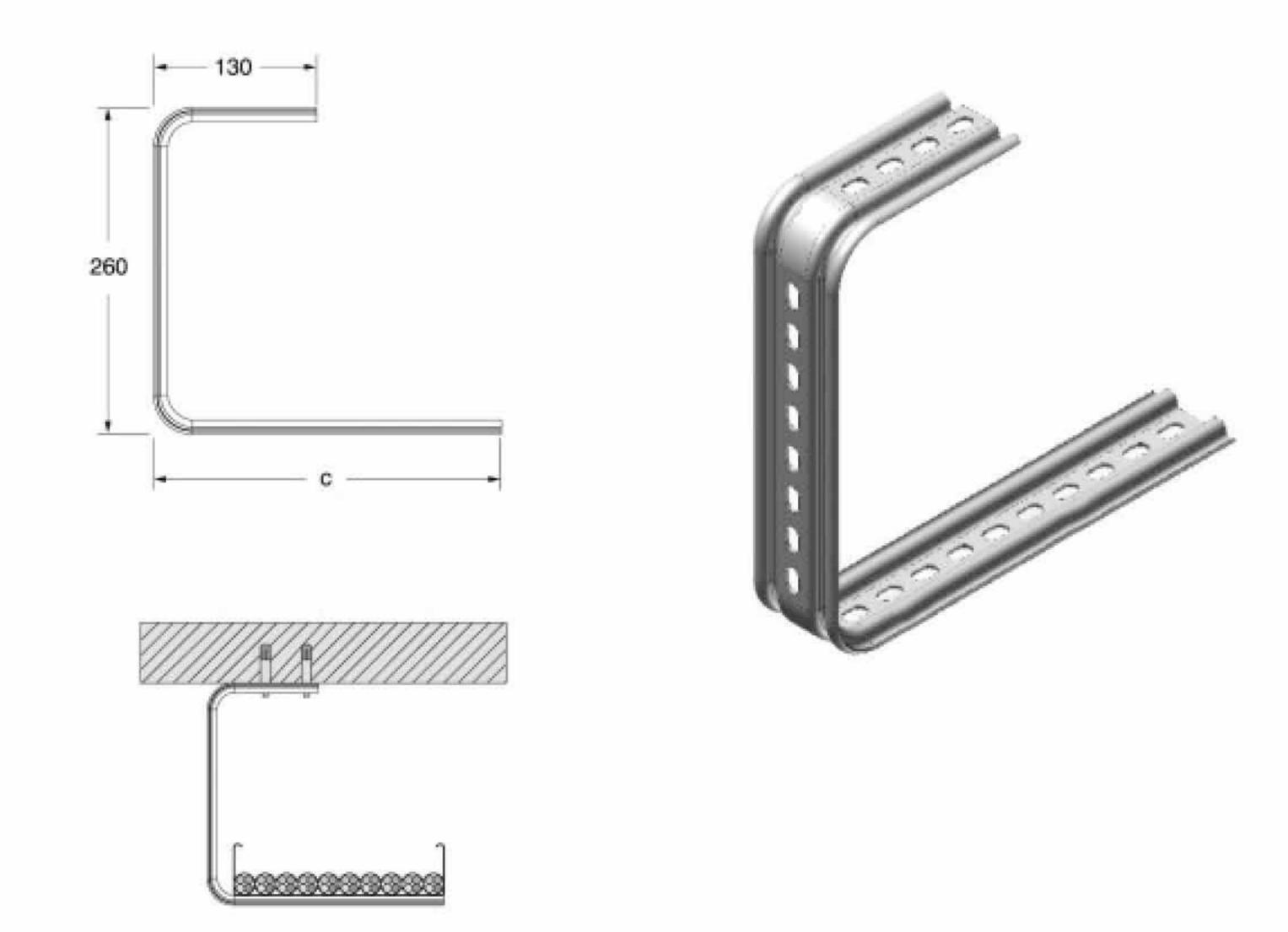




AS K1

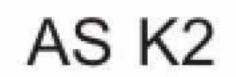
Universal Support Fittings

Part No.	a (mm)	b (mm)	c (mm)
AS K 108	130	260	80
AS K 113	130	260	130
AS K 118	130	260	180
AS K 123	130	260	230
AS K 128	130	260	280
AS K 133	130	260	330



Universal Support Fittings

Part No.	a (mm)	c (mm)
AS K 208	130	80
AS K 213	130	130
AS K 218	130	180
AS K 223	130	230
AS K 228	130	280
AS K 233	130	330

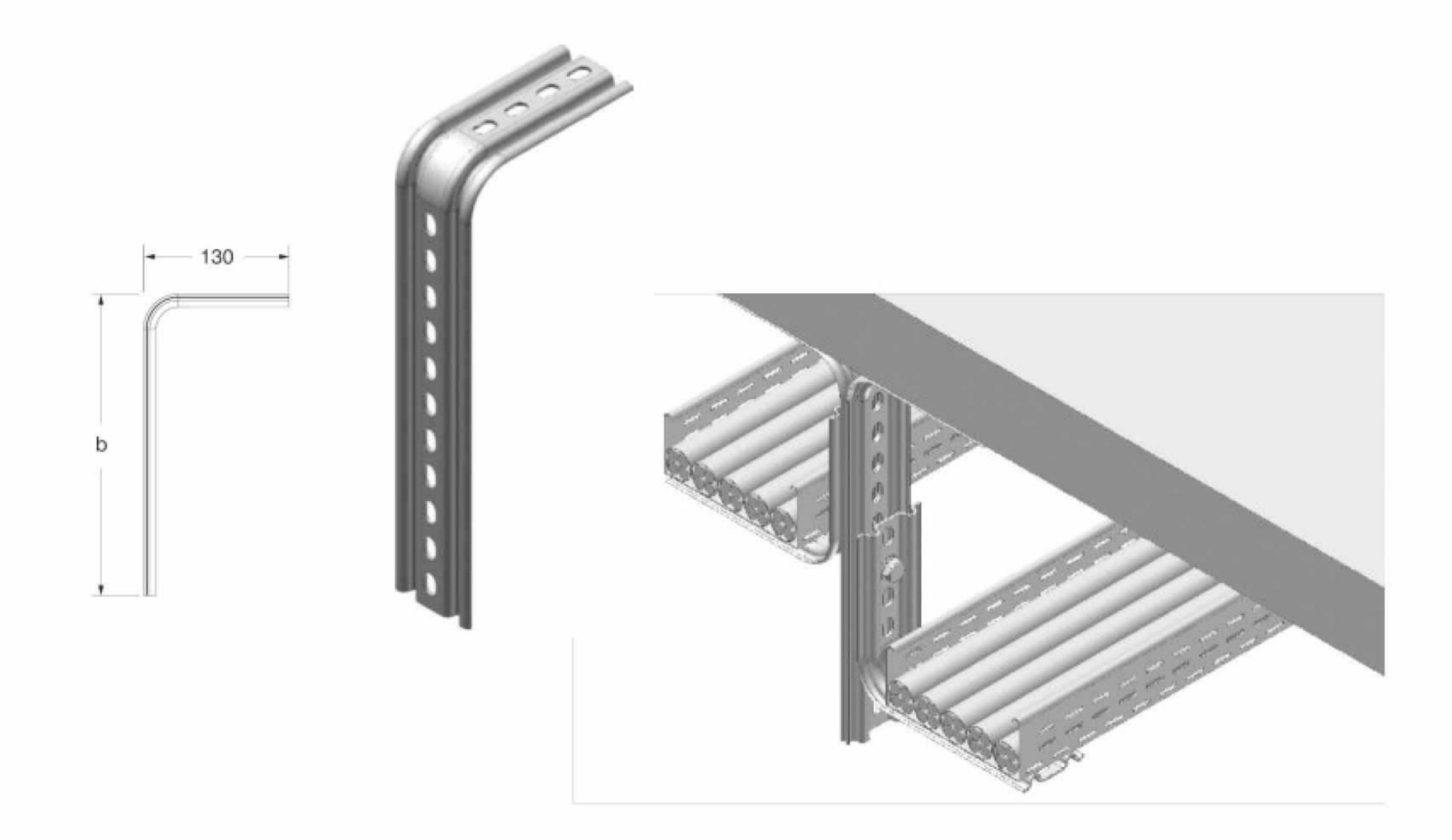




AS K3

Universal Support Fittings

Part No.		a (mm)	b (mm)
AS K	108	130	360
AS K	113	130	360
AS K	118	130	360
AS K	123	130	360
AS K	128	130	360
AS K	133	130	360



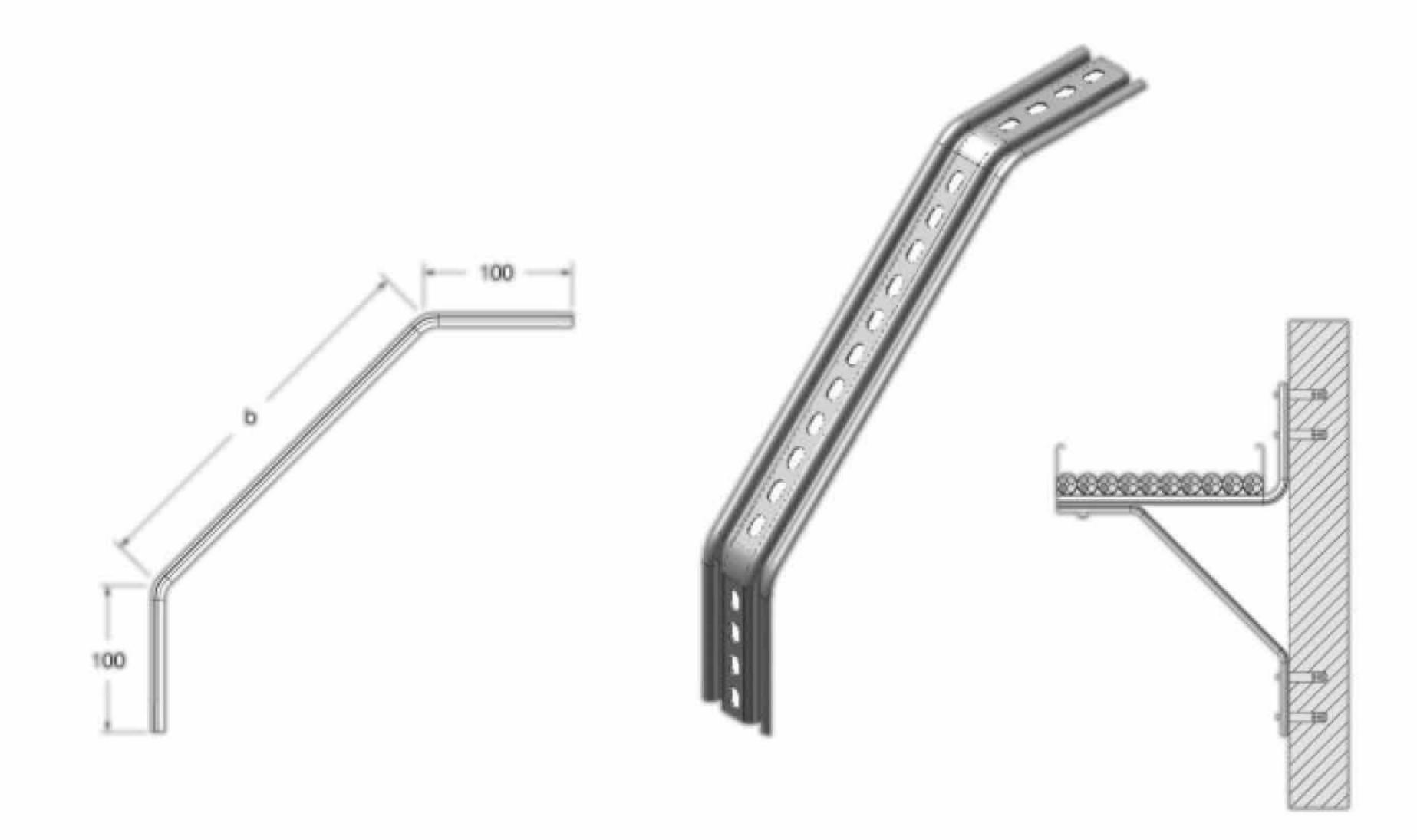


>> Convex Curve

Universal Suspension Fitting

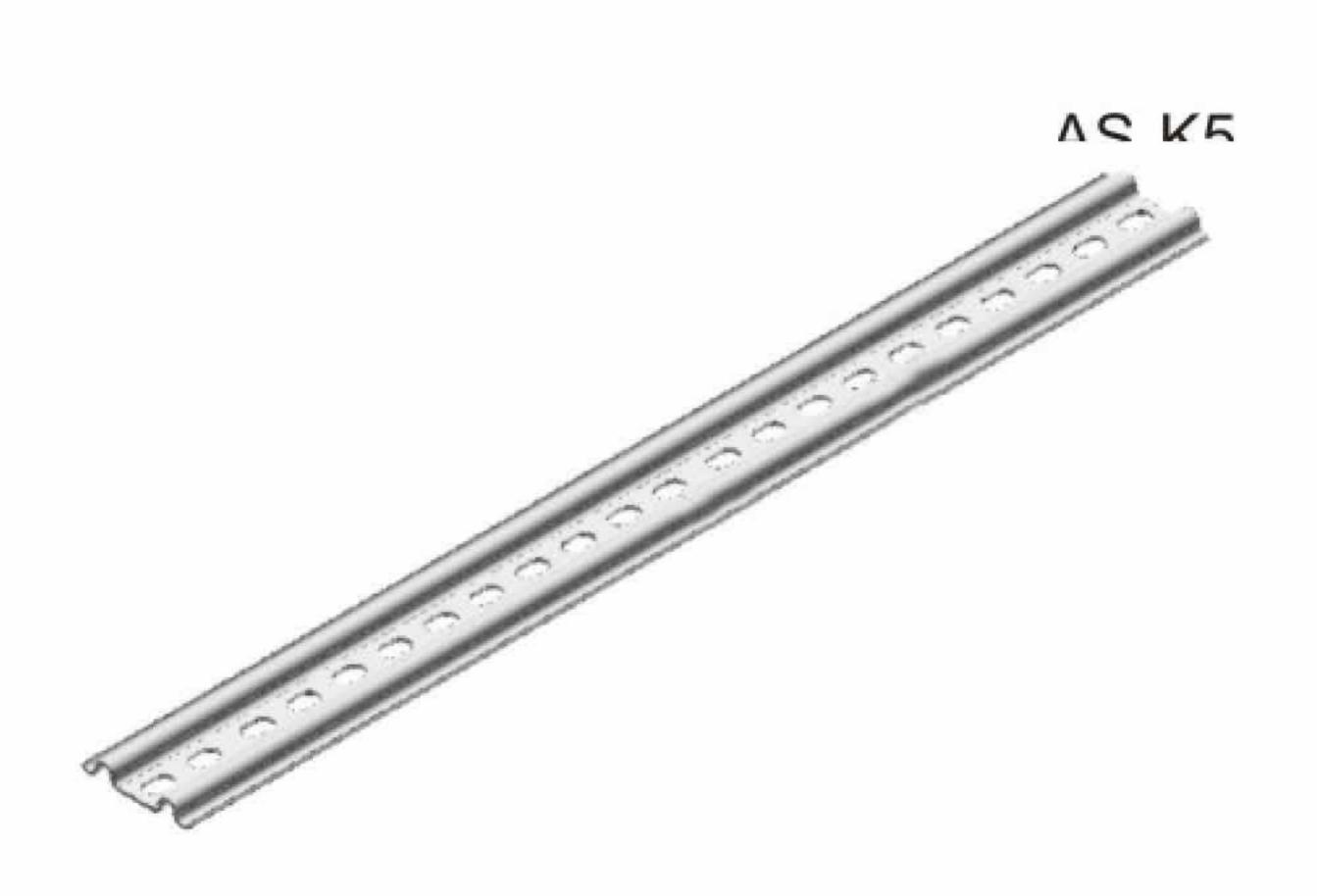
Part No.	a (mm)	b (mm)
AS K 411	130	260
AS K 412	130	260
AS K 413	130	260
AS K 414	130	260
AS K 415	130	260

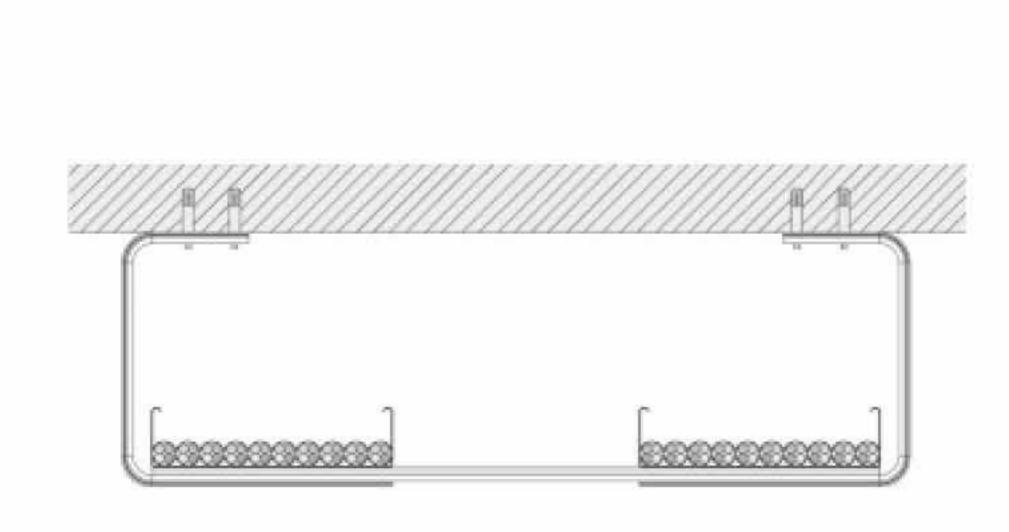
AS K4

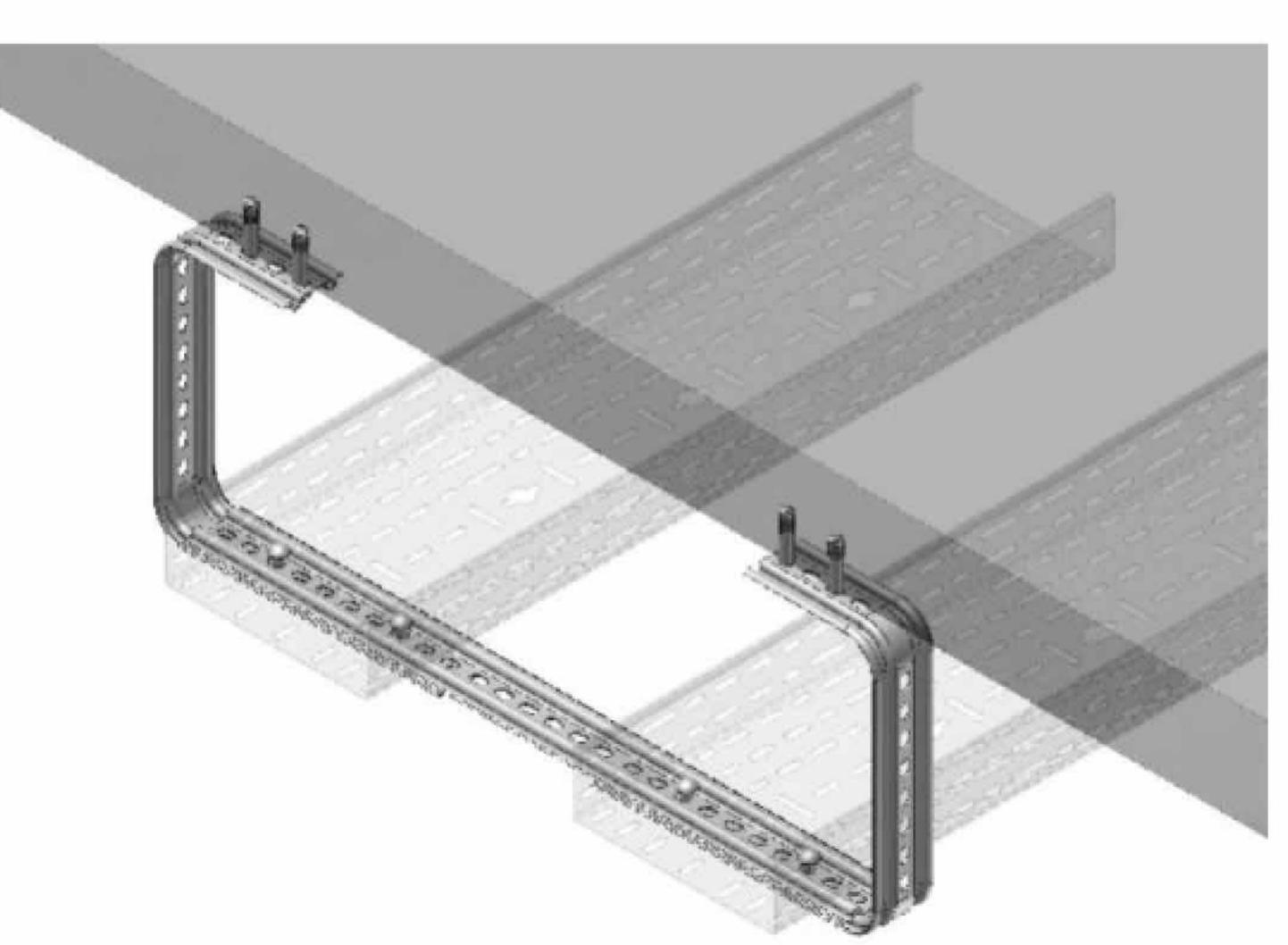


Universal Suspension Fitting

Part No.	a (mm)
AS K 513	300
AS K 514	400
AS K 515	500
AS K 516	600
AS K 518	800
AS K 519	900





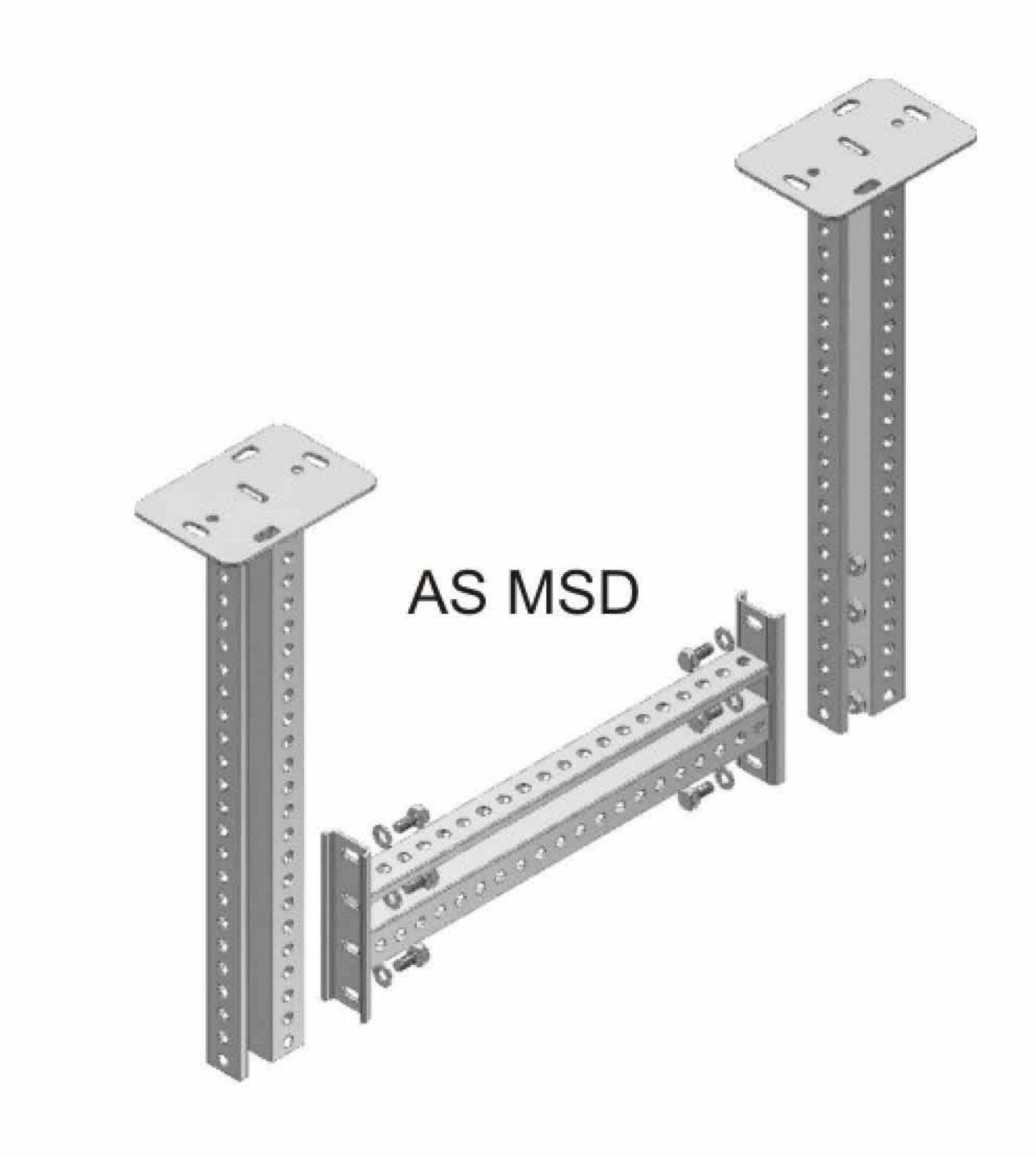


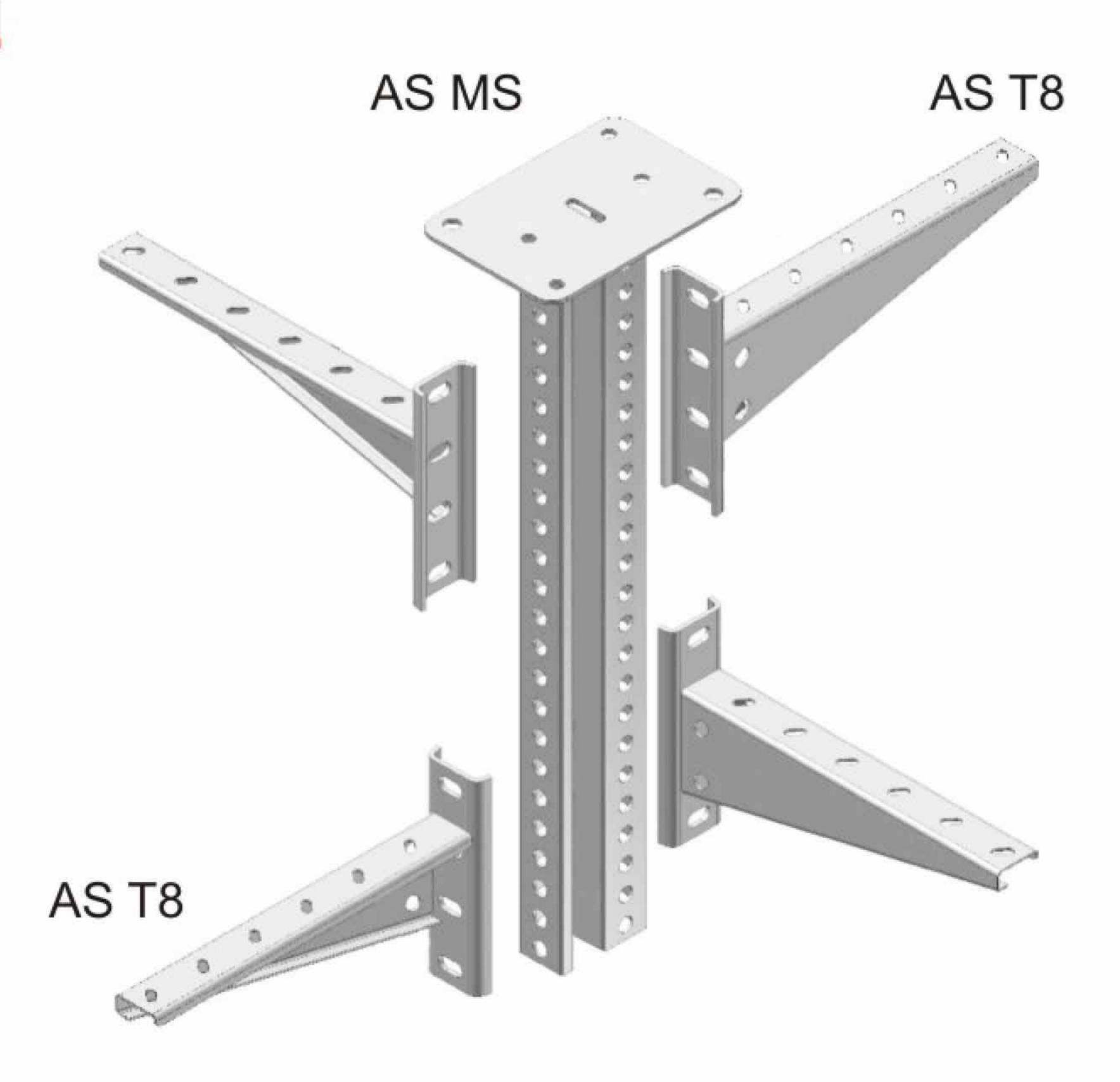




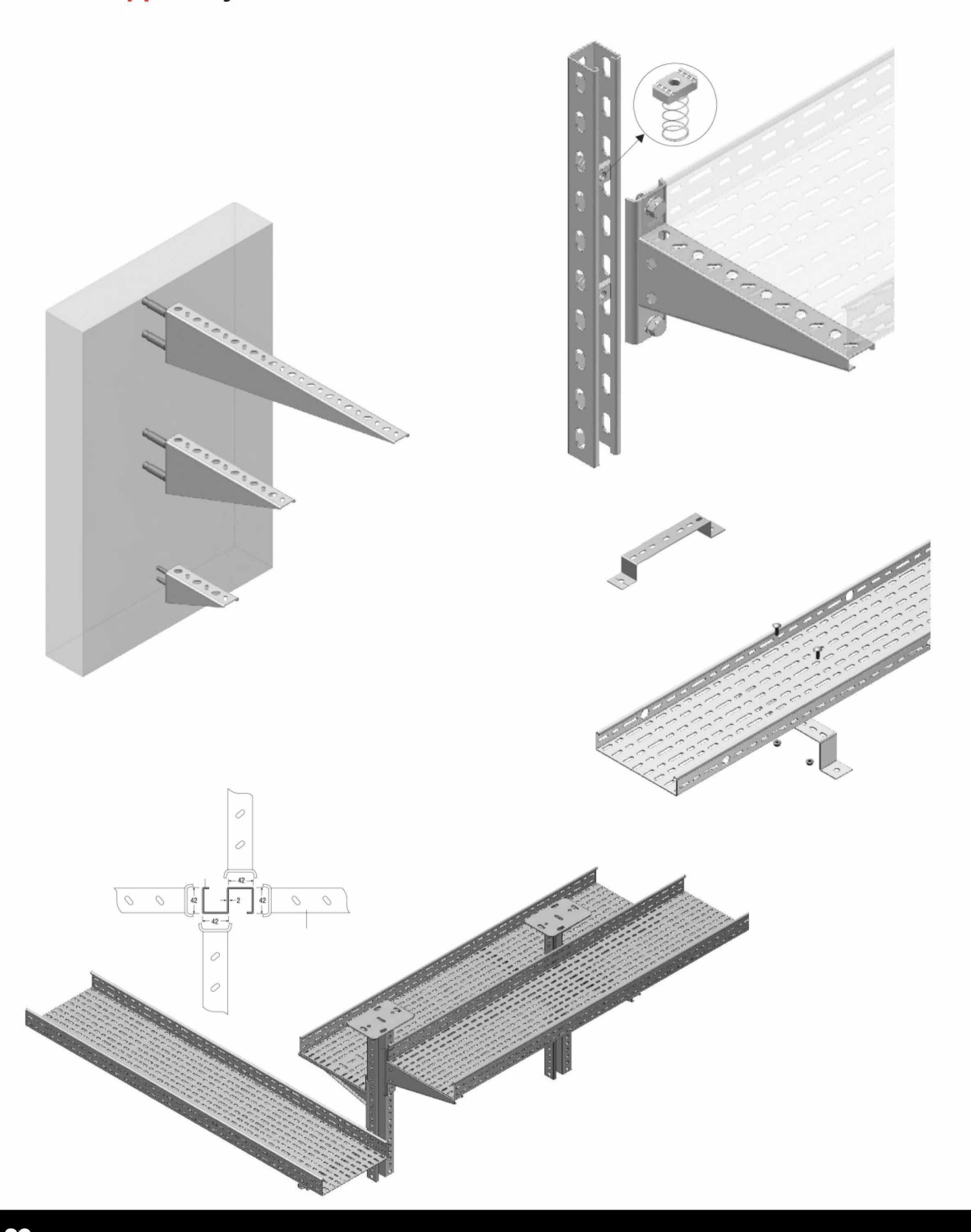
Universal Supports

Universal Supports			
Part No.	L (mm)	T (mm)	
AS MS 300	300	2	
AS MS 400	400	2	
AS MS 500	500	2	
AS MS 600	600	2	
AS MS 700	700	2	
AS MS 800	800	2	
AS MS 900	900	2	
AS MS 1000	1000	2	
AS MS 1100	1100	2	
AS MS 1200	1200	2	
AS MS 1300	1300	2	
AS MS 1400	1400	2	
AS MS 1500	1500	2	
AS MS 1600	1600	2	
AS MS 1700	1700	2	
AS MS 1800	1800	2	
AS MS 1900	1900	2	
AS MS 2000	2000	2	
AS MS 300	300	2	
AS MS 400	400	2	
AS MS 500	500	2	
AS MS 600	600	2	
AS MS 700	700	2	
AS MS 800	800	2	
AS MS 900	900	2	
AS MS 1000	1000	2	



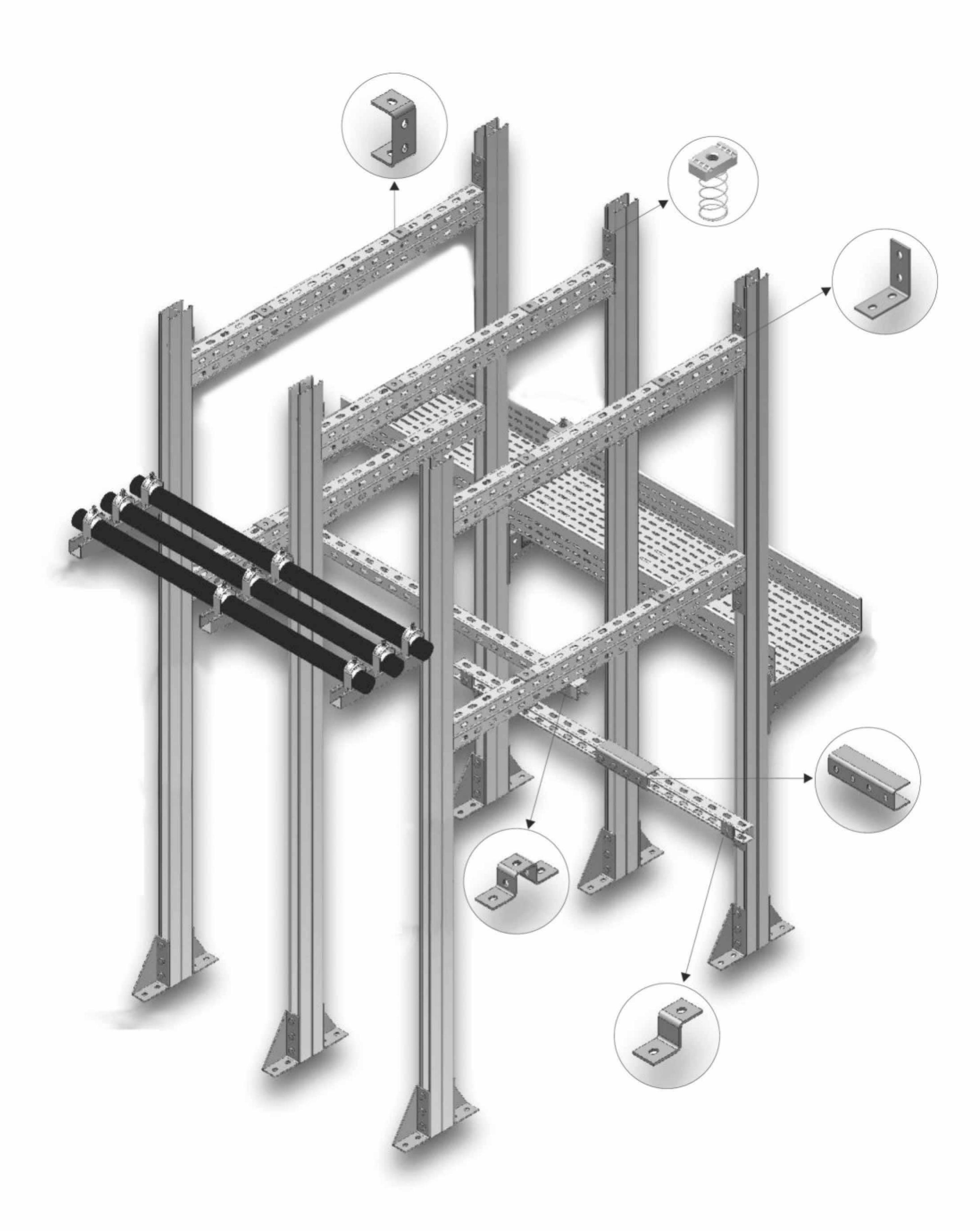






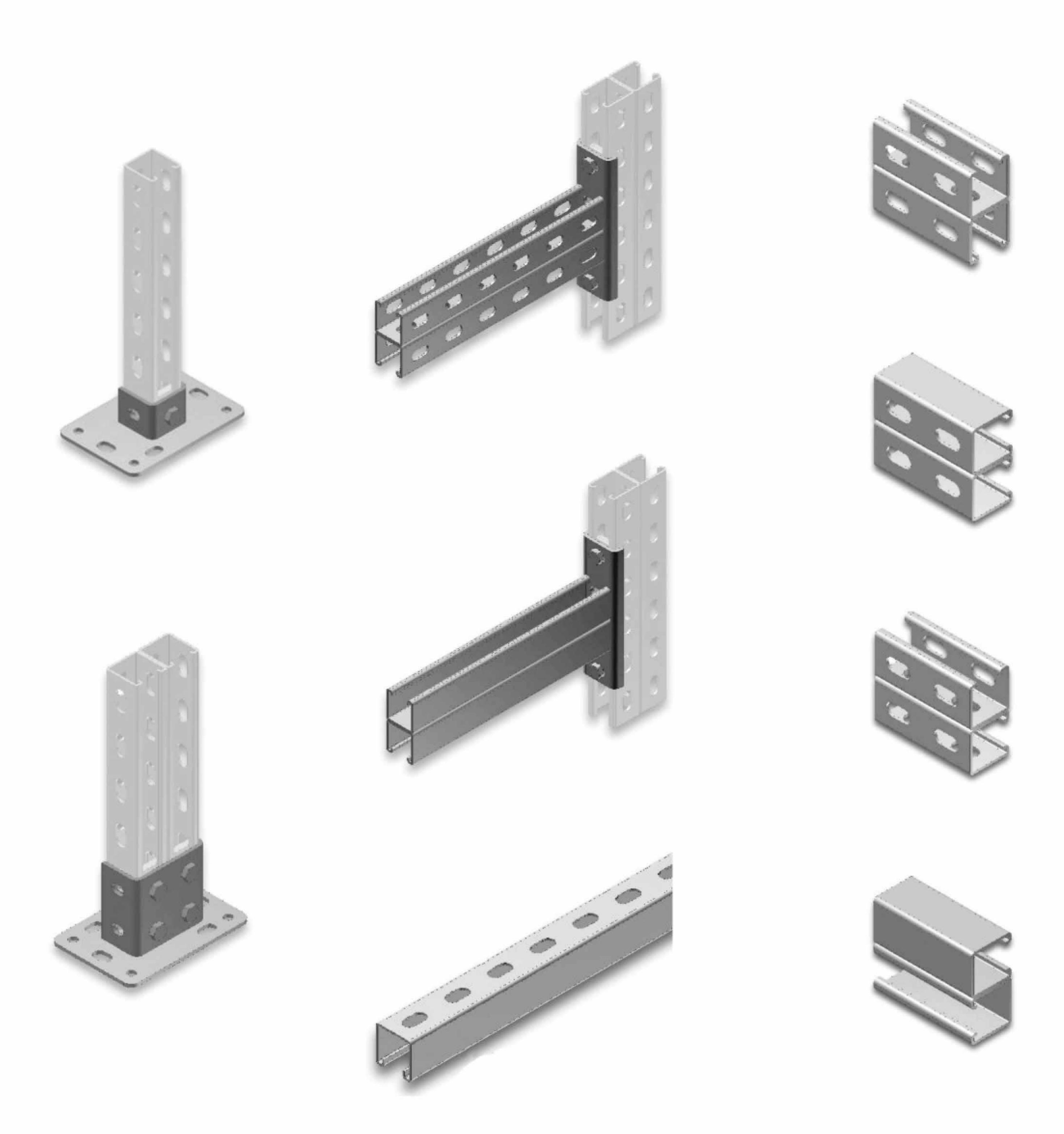


>> Sample Mounting Applications











NYY Cable Diameter and Weight Values

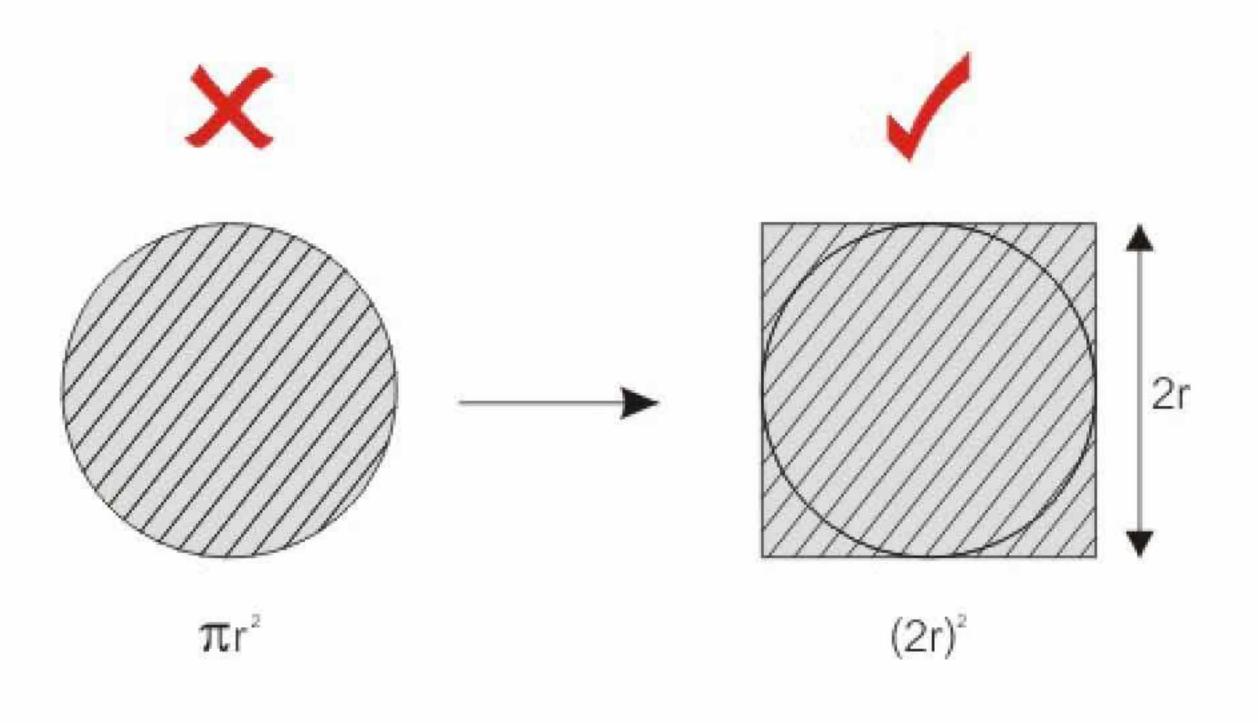
Diameter and Weigh		
Normal Cross-Section (mm²)	Cable Outer Diameter (mm)	Net Weight (kg/m)
1x4	9.0	0.125
1x6	9.5	0.150
1x10	10.5	0.200
1x16	11.5	0.265
1x25s	13.5	0.385
1x35s	14.5	0.490
1x50s	15	0.610
1x70s	16.7	0.820
1x95s	18.5	1.090
1x120s	20.0	1.340
1x150s	22.0	1.610
1x185s	24.1	2.000
1x240s	27.5	2.630
2x1.5	12.0	0.195
2x2.5	13.0	0.250
2x4	14.5	0.320
2x6	15.5	0.385
2x10	17.0	0.510
2x16	19.0	0.675
2x25s	23.5	1.040
2x35s	25.5	1.320
2x50s	28.0	1.680
2x70s	31.5	2.225
2x95s	36.0	3.000
2x120s	39.0	3.660
2x150s	42.5	4.440
2x185s	47.5	5.510
2x240s	54.0	7.210
3x1.5	12.5	0.220
3x2.5	13.5	0.285
3x4	15.0	0.370
3x6	16.0	0.455
3x10	18.0	0.615
3x16	20.0	0.835
3x25s	24.5	1.290
3x35s	27.5	1.680
3x50s	30.0	2.130
3x70s	33.5	2.880
3x95s	38.5	3.890
3x120s	41.5	4.730
3x150s	46.0	5.810

Normal Cross-Section (mm²)	Cable Outer Diameter (mm)	Net Weight (kg/m)
3x185s	51.5	7.250
3x240s	58.0	9.430
3x16/10	21.0	0.955
3x25s/16	26.0	1.460
3x35s/16	28.5	1.830
3x50/25s	31.5	2.410
3x70/35s	35.5	3.270
3x95/50s	40.5	4.380
3x120/70s	44.5	5.490
3x150/70s	48.0	6.470
3x185/95s	54.0	8.190
3x240/120s	61.5	10.680
4x1.5	13.0	0.250
4x2.5	14.5	0.330
4x4	16.5	0.435
4x6	17.5	0.545
4x10	19.5	0.745
4x16	21.5	1.030
4x25s	27.5	1.610
4x35s	30.0	2.080
4x50s	33.0	2.690
5x1.5	14.0	0.290
7x1.5	15.0	0.345
10x1.5	18.0	0.465
12x1.5	18.5	0.515
14x1.5	19.0	0.570
19x1.5	21.0	0.705
21x1.5	22.0	0.770
24x1.5	24.0	0.870
30x1.5	25.5	1.040
40x1.5	28.0	1.300
5x2.5	15.5	0.385
7x2.5	16.5	0.460
10x2.5	20.0	0.635
12x2.5	21.0	0.710
14x2.5	21.5	0.805
19x2.5	24.0	0.990
21x2.5	25.5	1.110
24x2.5	28.0	1.260
30x2.5	29.5	1.490
40x2.5	33.0	1.910



Section of Cable Support Systems

The following way can be followed up as being practical in selevtion of trays or ladders depending on cables to be used.



- 1- For calculation of cross sectional area of the cable use (2r) formula instead of πr^2 .
- 2- Find out total cross-section by calculating all cables.
- 3- Leave 20% reservation allowance from viewpoint of forming ground to supplements.
- 4- Select appropriate cable support system from the following table.
- 5- Select nearest large value to your total cross-section while making your selection.

Cable Trays

		Tray Height (mm)											
		15	25	40	50	60	75	100	125	150			
	50	750	1250	2000	2500	3000	-						
	100	1500	2500	4000	5000	6000	7500						
(mm)	150	2250	3750	6000	7500	9000	11250	15000	18750				
	200	3000	5000	8000	10000	12000	15000	20000	25000	30000			
Width	250	3750	6250	10000	12500	15000	18750	25000	31250	37500			
>	300	4500	7500	12000	15000	18000	22500	30000	37500	45000			
Tray	400	6000	10000	16000	20000	24000	30000	40000	50000	60000			
	500	7500	125000	20000	25000	30000	375000	50000	62500	75000			
	600	9000	150000	24000	30000	36000	45000	60000	75000	90000			

Cable Ladder

		Ladder Height (mm)										
		60	75	100	125	150						
	100	4500	6000									
<u>E</u>	150	6750	9000	12750	16500	0 —						
(mm)	200	9000	12000	17000	22000	27000						
	250	11250	15000	21250	275000	33750						
Š	300	13500	18000	25500	33000	40500						
Tray Width	400	18000	24000	34000	44000	54000						
	500	22500	30000	42500	55000	675000						
	600	27000	36000	51000	66000	81000						



Maximum Loading Capacities of Cable Trays (Support Distance 1.5m)

		Value		A-	1 40 ►	<u> </u>		A-		A-		A—	100
Α	Normal Cross-Section (mm²)	Cable Outer Diameter (mm)	Net Weight (kg/m)	Quantity	Total Weight	Quantity	Total Weight	Quantity	Total Weight	Quantity	Total Weight	Quantity	Total Weight
	4x1.5	13.0	0.250	8	2.000	12	3.000	12	3.000	-	-	_	_
	4x2.5	14.5	0.330	8	2.640	8	2.640	10	3.300	-	=	<u>u</u>	2
	4x4	16.5	0.435	6	2.610	6	2.610	9	3.915	-	-	_	
50	4x6	17.5	0.545	5	2.725	6	3.270	7	3.815	-	=	-	<u>-</u>
50	4x10	19.5	0.745	3	2.235	3	2.235	5	3.725	_	-	-	_
	4x16	21.5	1.030	3	3.090	4	4.120	4	4.120		₩		<u>.</u> .
	4x25s	27.5	1.610	1	1.610	2	3.220	2	3.220	1 -	-	-	-
	4x35s	30.5	2.080	1	2.080	1	2.080	2	4.160	7	*:-	=	-
	4x50s	33.0	2.690	1	2.690	1	2.690	1	2.690	-	-	-	
	4x1.5	13.0	0.250	21	5.250	28	7.000	33	8.250	42	10.500	=	
	4x2.5	14.5	0.330	15	4.950	19	6.270	24	7.920	30	9.900	-	-
	4x4	16.5	0.435	12	5.220	18	7.830	19	8.265	25	10.875	-	, #
100	4x6	17.5	0.545	10	5.450	9	8.175	15	8.175	20	10.900	-	_
100	4x10	19.5	0.745	9	6.705	8	6.705	14	10.430	18	13.410	-	
	4x16	21.5	1.030	2	7.210	5	8.240	11	11.330	12	12.360	_	_
	4x25s	27.5	1.610	3	4.830	6	8.050	6	9.660	6	9.660	-	7
	4x35s 4x50s	30.5	2.080	2	6.240 5.380	3	6.240 8.070	5 3	10.400 8.070	6 5	12.480 13.450		
	Av.A.E	42.0	0.050	20	0.000	40	40.500	40	40.000	60	1E 7E0	0.4	04.000
	4x1.5 4x2.5	13.0 14.5	0.250	32 23	8.000 7.590	42 31	10.500	48 39	12.000 12.870	63 48	15.750 15.840	84	21.000
	4x2.5	16.5	0.330	16	6.960	24	10.230	27	11.745	40	17.400	67	22.110
	4x4 4x6	17.5	0.435	15	8.175	22	11.990	24	13.080	32	17.440	48 48	20.880
150	4x10	19.5	0.745	14	10.430	15	11.175	21	15.645	28	20.860	36	26.820
	4x16	21.5	1.030	10	10.300	12	12.360	17	17.510	19	19.570	30	30.900
	4x25s	27.5	1.610	5	8.050	5	8.050	9	14.490	9	14.490	18	28.980
	4x35s	30.5	2.080	4	10.400	6	12.480	8	16.640	8	16.640	14	29.120
	4x50s	33.0	2.690	4	10.760	4	10.760	6	16.140	8	21.520	11	29.590
	4x1.5	13.0	0.250	44	11.000	58	14.500	65	16.250	87	21.750	116	29.000
	4x2.5	14.5	0.330	25	8.250	38	12.540	50	16.500	65	21.450	91	30.030
	4x4	16.5	0.435	23	10.005	33	14.355	33	14.355	55	23.925	66	28.710
	4x6	17.5	0.545	21	11.445	27	14.715	32	17.440	42	22.890	63	34.335
200	4x10	19.5	0.745	19	14.155	22	16.390	29	21.605	40	29.800	60	44.700
	4x16	21.5	1.030	13	13.390	17	17.510	22	22.660	26	26.780	43	44.290
	4x25s	27.5	1.610	7	11.270	10	16.100	13	20.930	13	20.930	26	41.860
	4x35s	30.5	2.080	6	12.480	8	16.640	11	22.880	12	24.960	18	37.440
	4x50s	33.0	2.690	5	13.450	6	16.140	9	24.210	11	29.590	17	45.730
	4x1.5	13.0	0.250	53	13.250	74	18.500	83	20.750	111	27.750	148	37.000
	4x2.5	14.5	0.330	40	13.200	51	16.830	68	22.440	83	27.390	117	38.610
	4x4	16.5	0.435	29	12.615	44	19.140	47	20.445	73	31.755	87	37.845
250	4x6	17.5	0.545	27	14.715	41	22.345	41	22.345	56	30.520	81	44.145
250	4x10	19.5	0.745	23	17.135	27	20.115	35	26.075	42	31.290	67	49.915
	4x16	21.5	1.030	16	16.480	20	20.600	27	27.810	33	33.990	55	56.650
	4x25s	27.5	1.610	9	14.490	13	20.930	17	27.370	17	27.370	34	54.740
	4x35s	30.5	2.080	8	16.640	10	20.800	15	31.200	15	31.200	23	47.840
	4x50s	33.0	2.690	7	18.830	7	18.830	11	29.590	14	37.660	21	56.490



Maximum Loading Capacities of Cable Trays (Support Distance 1.5m)

A			Value		<u> </u>	1 40 ►	A-	<u></u> 50	A-		<u></u> ——A−		A−	100
300 482.5 14.5 0.330 48 15.840 59 19.470 78 25.740 100 33.000 140 46.200 4x4 16.5 0.445 36 15.660 53 23.055 58 25.230 87 37.845 94 40.980 4x6 17.5 0.545 32 17.440 47 25.615 66 35.970 99 53.955 4x10 19.5 0.745 29 21.805 32 23.840 44 32.780 62 46.190 91 67.795 4x16 21.5 1.030 20 20.800 26 26.780 38 39.140 39 40.170 65 66.950 4x25s 27.5 1.610 10 16.100 14 22.540 20 32.200 24 38.640 36 57.960 4x35s 30.5 2.080 9 18.720 12 24.980 18 37.440 18 37.440 29 80.320 4x50s 33.0 2.690 8 21.520 8 21.520 13 34.970 17 45.730 26 89.940 4x1.5 13.0 0.250 89 22.250 118 29.500 130 32.500 150 37.800 210 52.500 4x46 17.5 0.330 68 22.440 80 26.400 107 35.310 133 43.890 186 61.380 4x4 16.5 0.435 47 20.445 71 30.885 71 30.885 118 51.330 141 61.335 4x10 19.5 0.745 40 29.800 46 34.270 59 43.955 82 61.990 112 83.400 4x25s 27.5 1.610 14 22.540 19 30.590 28 45.320 52 61.990 12 71.940 4x25s 27.5 1.610 14 22.540 19 30.590 28 45.320 32 51.520 56 90.160 4x35s 30.5 2.080 13 27.040 17 35.390 28 45.320 32 51.520 56 90.160 4x25s 32.75 1.610 14 22.540 19 30.590 28 45.320 32 51.520 56 90.160 4x25s 33.0 2.690 11 29.590 11 29.590 18 48.400 25 52.000 38 79.040 4x25 14.5 0.330 80 26.400 99 32.670 156 37.900 38.790 39.700 4x25s 27.5 1.610 14 22.540 19 30.590 28 45.320 32 51.520 56 90.160 4x25s 30.0 5.000 13 27.040 17 35.390 26 54.000 25 52.000 38 79.040 4x25s 27.5 1.610 14 22.540 19 30.590 28 45.320 32 51.520 56 90.160 4x25s 30.0 5.000 11 29.590 11 29.590 18 48.400 23 61.870 35 94.150 5000 4x1.5 13.0 0.250 113 28.250 113 28.250 163 40.750 25 56.250 300 75.000 4x25s 27.5 1.610 18 28.980 26 41.860 32 51.520 53 85.330 70 112.700 4x25s 27.5 1.610 18 28.980 26 41.860 32 51.520 58 70.990 166 16.200 4x25 52.000 38 79.040 4x50s 33.0 2.680 14 37.660 14 37.660 22 58.180 29 76.900 26 69.990 26 69.900 4x25 27.5 1.610 21 33.380 178 44.500 196 49.000 270 67.500 360 90.000 4x25 27.5 1.610 21 33.380 176 44.500 196 49.000 270 67.500 360 90.000 4x25 27.5 1.610 21 33.3810 31 49.910 42 67.620 53 85.330 85 135.200 4x36 30.5 2.080 19 39.520 25 50.000 37 76.900 53 87.900 55 65	Α	Cross-Section	Diameter	The second secon	Quantity		Quantity		Quantity		Quantity		Quantity	
4x4 18.5 0.435 36 15.660 53 23.055 58 25.230 87 37.845 94 40.890 4x6 17.5 0.545 32 17.440 47 25.615 47 25.615 66 35.970 99 33.856 4x10 19.5 0.745 29 21.060 32 23.840 44 32.780 62 46.190 91 67.795 4x16 21.5 1.030 20 20.600 26 26.780 38 39.140 39 40.170 66 66.950 4x25 2.7.5 1.610 10 18.100 14 22.540 20 32.200 24 38.640 36 67.980 4x50s 33.0 2.690 8 21.520 8 21.520 13 34.970 17 45.730 26 69.940 4x05 14.5 0.330 8 22.250 118 29.500 130 32.500		4x1.5	13.0	0.250	65	16.250	86	21.500	97	24.250	132	33.000	176	44.000
300 4x6 17.5 0.545 32 17.440 47 25.615 47 25.615 66 35.970 99 53.955 410 19.5 0.745 29 21.605 32 23.840 44 32.780 62 46.190 91 67.795 62 44.16 21.5 1.030 20 20.600 26 26.780 38 39.140 39 40.170 65 66.950 42.25 27.5 1.610 10 16.100 14 22.540 20 32.200 24 38.640 36 67.960 48.355 30.5 2.080 9 18.720 12 24.980 18 37.440 18 37.440 29 60.320 48.505 33.0 2.690 8 21.520 8 21.520 13 34.970 17 45.730 26 69.940 48.505 33.0 2.690 8 21.520 8 21.520 13 34.970 17 45.730 26 69.940 48.505 33.0 2.690 8 21.520 118 29.500 130 32.500 150 37.500 210 52.500 48.42.5 14.5 0.330 68 22.440 80 26.400 107 35.310 133 43.890 186 61.380 48.4 16.5 0.435 47 20.445 71 30.885 71 30.885 118 51.330 141 61.335 48.1 48.1 48.1 48.1 48.1 48.1 48.1 48.1		4x2.5	14.5	0.330	48	15.840	59	19.470	78	25.740	100	33.000	140	46.200
4x10 19.5 0.745 29 21.605 32 23.840 44 32.780 62 46.190 91 67.795 4x16 21.5 1.030 20 20.600 26 26.780 38 39.140 39 40.170 65 66.950 4x25s 27.5 1.610 10 16.100 14 22.540 20 32.200 24 38.640 36 57.960 4x35s 30.5 2.080 9 18.720 12 24.960 18 37.440 18 37.440 29 60.320 4x50s 33.0 2.690 8 21.520 8 21.520 13 34.970 17 45.730 26 69.940 4x45 14.5 13.0 0.250 89 22.250 118 29.500 130 32.500 150 37.500 210 52.500 4x2.5 14.5 0.330 68 22.440 80 26.400 107 35.310 133 43.890 186 61.380 4x4 16.5 0.435 47 20.445 71 30.885 71 30.885 118 51.330 141 61.335 4x16 21.5 1.030 26 26.780 35 36.050 44 45.320 54 56.620 90 92.700 4x25s 27.5 1.610 14 22.540 19 30.590 28 45.320 32 51.520 56 90.160 4x50s 33.0 2.690 11 29.590 11 29.590 18 48.420 23 61.870 35 94.150 4x4 16.5 0.435 57 24.795 91 18 29.590 18 48.420 23 61.870 35 94.150 4x25 14.5 0.330 80 26.400 177 35.360 25 52.000 38 79.040 4x50s 33.0 0.650 113 27.040 17 35.360 26 54.000 25 52.000 38 79.040 4x50s 33.0 0.650 113 29.590 11 29.590 18 48.420 23 61.870 35 94.150 4x4 16.5 0.435 57 24.795 87 37.845 93 40.455 118 51.330 177 76.995 4x4 16.5 0.435 57 24.795 87 37.845 93 40.455 118 51.330 177 76.995 4x4 16.5 0.435 57 24.795 87 37.845 93 40.455 118 51.330 177 76.995 4x4 16.5 0.435 57 24.795 87 37.845 93 40.455 118 51.330 177 76.995 4x6 17.5 0.545 55 29.975 55 29.975 74 40.330 112 61.040 168 91.660 4x10 19.5 0.745 49 36.505 49 36.505 44 36.205 25 56.250 300 75.000 4x25s 27.5 1.610 18 28.980 26 41.860 32 51.520 56 85.330 70 112.700 4x25s 35.5 2.056 16 38.050 44 45.320 54 55.620 68 70.040 113 116.390 4x25s 35.5 2.056 16 38.050 49 36.505 49 36.505 44 36.050 25 56.250 300 75.000 4x25s 37.5 55 29.975 55 29.975 74 40.330 112 61.040 168 91.660 4x35s 35.5 2.050 16 32.800 20 41.600 14 29.120 32 66.550 48 99.840 4x35s 35.5 2.050 16 32.800 20 44.600 14 29.120 32 66.550 48 99.840 4x35s 35.5 2.050 16 33.280 20 41.600 14 29.120 32 66.550 48 99.840 4x46 17.5 0.435 72 31.320 105 46.675 108 46.980 178 77.430 213 92.665 444 16.5 0.435 72 31.320 105 46.675 108 46.980 178 77.430 213 92.665 444 45.5 0.330 41 42.23		4x4	16.5	0.435	36	15.660	53	23.055	58	25.230	87	37.845	94	40.890
4x16 21.5 1.030 20 20.800 28 26.780 38 39.140 39 40.170 65 66.950 4x25s 27.5 1.610 10 16.100 14 22.540 20 32.200 24 38.640 36 57.960 4x35s 30.5 2.080 9 18.720 12 24.960 18 37.440 18 37.440 29 60.320 4x50s 33.0 2.690 8 21.520 8 21.520 13 34.970 17 45.730 26 69.940 4x1.5 13.0 0.250 89 22.250 118 29.500 130 32.500 150 37.500 210 52.500 4x2.5 14.5 0.330 68 22.440 80 26.400 107 35.310 133 43.890 186 61.380 4x0 17.5 0.545 41 22.345 65 35.425 65 36.2	200	4x6	17.5	0.545	32	17.440	47	25.615	47	25.615	66	35.970	99	53.955
4x25s 27.5 1.610 10 16.100 14 22.540 20 32.200 24 38.640 36 57.960 4x35s 30.5 2.080 9 18.720 12 24.960 18 37.440 18 37.440 29 60.320 4x50s 33.0 2.690 8 21.520 8 21.520 13 34.970 17 45.730 26 69.940 4x1.5 13.0 0.250 89 22.250 118 29.500 130 32.500 150 37.500 210 52.500 4x2.5 14.5 0.330 68 22.440 80 26.400 107 35.310 133 43.890 186 61.330 4x44 16.5 0.435 47 20.445 71 30.885 71 30.885 118 51.330 141 61.335 4x6 17.5 0.545 41 22.345 65 35.425 65 35.425 88 47.960 132 71.940 4x10 19.5 0.745 40 29.800 46 34.270 59 43.955 82 61.090 112 83.440 4x35s 30.5 2.080 13 27.040 17 35.360 26 54.080 25 52.000 38 79.040 4x50s 33.0 2.690 11 29.590 11 35.360 26 54.080 25 52.000 38 79.040 4x50s 33.0 2.690 11 29.590 11 29.590 11 35.600 68 4x35s 30.5 2.080 13 27.440 17 35.360 26 54.080 25 52.000 38 79.040 4x50s 33.0 2.690 11 29.590 11 29.590 11 39.500 68 55.420 32 66.870 35 94.150 4x410 19.5 0.745 49 36.500 44 45.320 54 55.620 90 92.700 4x50s 33.0 2.690 13 27.040 17 35.360 26 54.080 25 52.000 38 79.040 4x50s 33.0 2.690 11 29.590 11 29.590 11 39.500 68 54.080 25 52.000 38 79.040 4x50s 33.0 2.690 11 29.590 11 39.500 68 54.080 25 52.000 38 79.040 4x50s 33.0 2.690 11 29.590 11 39.500 68 54.080 25 52.000 38 79.040 4x10 19.5 0.745 49 36.500 44 45.320 54 55.620 68 70.040 113 16.390 4x25 27.5 1.610 14 22.540 19 30.590 48 48.420 23 61.870 35 94.150 4x10 19.5 0.745 49 36.500 44 45.320 54 55.620 68 70.040 113 16.390 4x25 27.5 1.610 18 28.980 26 41.860 32 51.520 53 85.330 70 112.700 4x10 19.5 0.745 49 36.500 44 45.320 54 55.620 68 70.040 113 16.390 4x25s 27.5 1.610 18 28.980 26 41.860 32 51.520 30 66.990 284 93.720 4x4 15.5 0.330 98 32.340 116 38.280 155 51.150 20 66.560 48 99.840 4x50s 33.0 2.690 14 37.660 14 37.660 22 59.180 29 78.010 44 118.360 4x25 14.5 0.330 98 32.340 116 38.280 155 51.150 20 66.560 48 99.840 4x50s 33.0 2.690 14 37.660 14 37.660 22 59.180 29 78.010 44 118.360 4x25 14.5 0.330 98 32.340 116 38.280 155 51.150 203 66.990 284 93.720 4x6 17.5 0.545 65 58.425 65 53.425 65 53.425 65 53.405 98 53.410 134 73.030 201 109.545 4255 27.5 1.	300	4x10	19.5	0.745	29	21.605	32	23.840	44	32.780	62	46.190	91	67.795
4x35s 30.5 2.080 9 18.720 12 24.960 18 37.440 18 37.440 29 60.320 4x50s 33.0 2.690 8 21.520 8 21.520 13 34.970 17 45.730 26 69.940 4x1.5 13.0 0.250 89 22.250 118 29.500 130 32.500 150 37.500 210 52.500 4x.2.5 14.5 0.330 68 22.440 80 26.400 107 35.310 133 43.890 186 61.380 4x4 16.5 0.435 47 20.445 71 30.885 71 30.885 118 51.330 141 61.335 4x6 17.5 0.545 41 22.345 65 35.425 65 35.425 88 47.960 132 71.940 4x10 19.5 0.745 40 29.800 46 34.270 59 43.955 82 61.090 112 83.440 4x16 21.5 10.30 26 26.780 35 36.050 44 45.320 54 55.620 90 92.700 4x35s 30.5 2.080 13 27.040 17 35.360 26 54.080 25 52.000 38 79.040 4x50s 33.0 2.690 111 29.590 111 29.590 18 48.420 23 61.870 35 94.150 4x1.5 13.0 0.250 113 28.250 113 28.250 163 40.750 225 56.250 300 75.000 4x2.5 14.5 0.330 80 26.400 99 32.670 115 37.950 168 55.440 235 77.550 4x6 17.5 0.645 55 29.975 55 29.975 74 40.330 112 61.040 168 91.660 4x16 21.5 10.33 35 36.050 44 32.780 102 75.990 156 116.220 4x16 21.5 10.33 35 36.050 44 32.780 102 75.990 156 116.220 4x6 21.5 10.33 35 36.050 49 36.505 44 32.780 102 75.990 156 116.220 4x16 21.5 10.33 35 36.050 49 36.505 44 32.780 102 75.990 156 116.220 4x16 21.5 10.33 35 36.050 44 45.320 54 55.620 30 75.000 4x10 19.5 0.745 49 36.505 49 36.505 44 32.780 102 75.990 156 116.220 4x16 21.5 10.33 35 36.050 49 36.505 44 32.780 102 75.990 156 116.220 4x6 21.5 10.33 35 36.050 44 45.320 54 55.620 68 70.040 113 116.390 4x25s 27.5 1.610 18 28.980 26 41.860 32 51.520 53 85.330 70 112.700 4x35s 30.5 2.080 16 33.280 20 41.600 14 29.120 32 66.560 48 99.840 4x50s 33.0 2.690 14 37.660 14 37.660 22 59.180 29 78.010 44 118.360 4x25 14.5 10.30 0.250 134 33.500 178 44.500 196 49.000 270 67.500 360 90.000 4x10 19.5 0.745 58 43.210 58 43.210 88 65.560 126 93.870 158 117.710 4x6 27.5 14.610 21.5 33.810 33.500 178 44.500 196 49.000 270 67.500 360 90.000 4x6 17.5 0.645 65 35.425 65 35.425 98 53.410 134 73.030 201 109.545 4x6 17.5 0.545 65 35.425 65 35.425 98 53.410 134 73.030 201 109.545 4x6 17.5 0.545 65 35.425 65 35.425 98 53.410 134 73.030 201 109.545 4x6 17.5		4x16	21.5	1.030	20	20.600	26	26.780	38	39.140	39	40.170	65	66.950
4x1.5		4x25s	27.5	1.610	10	16.100	14	22.540	20	32.200	24	38.640	36	57.960
4x1.5		4x35s	30.5	2.080	9	18.720	12	24.960	18	37.440	18	37.440	29	60.320
4x2.5		4x50s	33.0	2.690	8	21.520	8	21.520	13	34.970	17	45.730	26	69.940
400 4x4		4x1.5	13.0	0.250	89	22.250	118	29.500	130	32.500	150	37.500	210	52.500
4x6 17.5 0.545 41 22.345 65 35.425 65 35.425 88 47.960 132 71.940 4x10 19.5 0.745 40 29.800 46 34.270 59 43.955 82 61.090 112 83.440 4x16 21.5 1.030 26 26.780 35 36.050 44 45.320 54 55.620 90 92.700 4x25s 27.5 1.610 14 22.540 19 30.590 28 45.320 32 51.520 56 90.160 4x35s 30.5 2.080 13 27.040 17 35.360 26 54.080 25 52.000 38 79.040 4x50s 33.0 2.690 11 29.590 11 29.590 18 48.420 23 61.870 35 94.150 4x1.5 13.0 0.250 113 28.250 113 28.250 163 40.750 225 56.250 300 75.000 4x2 5 14.5 0.330 80 26.400 99 32.670 115 37.950 168 55.440 235 77.550 4x4 16.5 0.435 57 24.795 87 37.845 93 40.455 118 51.330 177 76.995 4x6 17.5 0.545 55 29.975 55 29.975 74 40.330 112 61.040 168 91.560 4x10 19.5 0.745 49 36.505 49 36.505 44 32.780 102 75.990 156 116.220 4x10 19.5 0.745 49 36.505 49 36.505 44 32.780 102 75.990 156 116.220 4x25s 27.5 1.610 18 29.890 26 41.860 32 51.520 53 85.330 70 112.700 4x35s 30.5 2.080 16 33.280 20 41.600 14 29.120 32 66.560 48 99.840 4x50s 33.0 2.690 14 37.660 14 37.660 22 59.180 29 78.010 44 118.360		4x2.5	14.5	0.330	68	22.440	80	26.400	107	35.310	133	43.890	186	61.380
4x10	400	4x4	16.5	0.435	47	20.445	71	30.885	71	30.885	118	51.330	141	61.335
4x16 21.5 1.030 26 26.780 35 36.050 44 45.320 54 55.620 90 92.700 4x25s 27.5 1.610 14 22.540 19 30.590 28 45.320 32 51.520 56 90.160 4x35s 30.5 2.080 13 27.040 17 35.360 26 54.080 25 52.000 38 79.040 4x50s 33.0 2.690 11 29.590 11 29.590 18 48.420 23 61.870 35 94.150 4x4.5 13.0 0.250 113 28.250 113 28.250 163 40.750 225 56.250 300 75.000 4x2.5 14.5 0.330 80 26.400 99 32.670 115 37.950 168 55.440 235 77.550 4x4 16.5 0.435 55 29.975 55 29.975 74		4x6	17.5	0.545	41	22.345	65	35.425	65	35.425	88	47.960	132	71.940
4x25s 27.5 1.610 14 22.540 19 30.590 28 45.320 32 51.520 56 90.160 4x35s 30.5 2.080 13 27.040 17 35.360 26 54.080 25 52.000 38 79.040 4x50s 33.0 2.690 11 29.590 11 29.590 18 48.420 23 61.870 35 94.150 4x1.5 13.0 0.250 113 28.250 113 28.250 163 40.750 225 56.250 300 75.000 4x2.5 14.5 0.330 80 26.400 99 32.670 115 37.950 168 55.440 235 77.550 4x4 16.5 0.435 57 24.795 87 37.845 93 40.455 118 51.330 177 76.995 4x6 17.5 0.545 55 29.975 55 29.975 74 <th< td=""><td>4x10</td><td>19.5</td><td>0.745</td><td>40</td><td>29.800</td><td>46</td><td>34.270</td><td>59</td><td>43.955</td><td>82</td><td>61.090</td><td>112</td><td>83.440</td></th<>		4x10	19.5	0.745	40	29.800	46	34.270	59	43.955	82	61.090	112	83.440
4x35s 30.5 2.080 13 27.040 17 35.360 26 54.080 25 52.000 38 79.040 4x50s 33.0 2.690 11 29.590 11 29.590 18 48.420 23 61.870 35 94.150 4x1.5 13.0 0.250 113 28.250 163 40.750 225 56.250 300 75.000 4x2.5 14.5 0.330 80 26.400 99 32.670 115 37.950 168 55.440 235 77.550 4x4 16.5 0.435 57 24.795 87 37.845 93 40.455 118 51.330 177 76.995 4x6 17.5 0.545 55 29.975 55 29.975 74 40.330 112 61.040 168 91.560 4x10 19.5 0.745 49 36.505 49 36.505 44 32.780 102 <t< td=""><td>4x16</td><td>21.5</td><td>1.030</td><td>26</td><td>26.780</td><td>35</td><td>36.050</td><td>44</td><td>45.320</td><td>54</td><td>55.620</td><td>90</td><td>92.700</td></t<>		4x16	21.5	1.030	26	26.780	35	36.050	44	45.320	54	55.620	90	92.700
4x50s 33.0 2.690 11 29.590 11 29.590 18 48.420 23 61.870 35 94.150 4x1.5 13.0 0.250 113 28.250 113 28.250 163 40.750 225 56.250 300 75.000 4x2.5 14.5 0.330 80 26.400 99 32.670 115 37.950 168 55.440 235 77.550 4x4 16.5 0.435 57 24.795 87 37.845 93 40.455 118 51.330 177 76.995 4x6 17.5 0.545 55 29.975 55 29.975 74 40.330 112 61.040 168 91.560 4x10 19.5 0.745 49 36.505 49 36.505 44 32.780 102 75.990 156 116.220 4x16 21.5 1.030 35 36.050 44 45.320 54		4x25s	27.5	1.610	14	22.540	19	30.590	28	45.320	32	51.520	56	90.160
4x1.5 13.0 0.250 113 28.250 113 28.250 163 40.750 225 56.250 300 75.000 4x2.5 14.5 0.330 80 26.400 99 32.670 115 37.950 168 55.440 235 77.550 4x4 16.5 0.435 57 24.795 87 37.845 93 40.455 118 51.330 177 76.995 4x6 17.5 0.545 55 29.975 55 29.975 74 40.330 112 61.040 168 91.560 4x10 19.5 0.745 49 36.505 49 36.505 44 32.780 102 75.990 156 116.220 4x16 21.5 1.030 35 36.050 44 45.320 54 55.620 68 70.040 113 116.390 4x25s 27.5 1.610 18 28.980 26 41.860 32		4x35s	30.5	2.080	13	27.040	17	35.360	26	54.080	25	52.000	38	79.040
4x2.5 14.5 0.330 80 26.400 99 32.670 115 37.950 168 55.440 235 77.550 4x4 16.5 0.435 57 24.795 87 37.845 93 40.455 118 51.330 177 76.995 4x6 17.5 0.545 55 29.975 55 29.975 74 40.330 112 61.040 168 91.560 4x10 19.5 0.745 49 36.505 49 36.505 44 32.780 102 75.990 156 116.220 4x16 21.5 1.030 35 36.050 44 45.320 54 55.620 68 70.040 113 116.390 4x25s 27.5 1.610 18 28.980 26 41.860 32 51.520 53 85.330 70 112.700 4x35s 30.5 2.080 16 33.280 20 41.600 14 <t< td=""><td></td><td>4x50s</td><td>33.0</td><td>2.690</td><td>11</td><td>29.590</td><td>11</td><td>29.590</td><td>18</td><td>48.420</td><td>23</td><td>61.870</td><td>35</td><td>94.150</td></t<>		4x50s	33.0	2.690	11	29.590	11	29.590	18	48.420	23	61.870	35	94.150
500 4x4 16.5 0.435 57 24.795 87 37.845 93 40.455 118 51.330 177 76.995 4x6 17.5 0.545 55 29.975 55 29.975 74 40.330 112 61.040 168 91.560 4x10 19.5 0.745 49 36.505 49 36.505 44 32.780 102 75.990 156 116.220 4x16 21.5 1.030 35 36.050 44 45.320 54 55.620 68 70.040 113 116.390 4x25s 27.5 1.610 18 28.980 26 41.860 32 51.520 53 85.330 70 112.700 4x35s 30.5 2.080 16 33.280 20 41.600 14 29.120 32 66.560 48 99.840 4x50s 33.0 2.690 14 37.660 17 37.660		4x1.5	13.0	0.250	113	28.250	113	28.250	163	40.750	225	56.250	300	75.000
500 4x6 17.5 0.545 55 29.975 55 29.975 74 40.330 112 61.040 168 91.560 4x10 19.5 0.745 49 36.505 49 36.505 44 32.780 102 75.990 156 116.220 4x16 21.5 1.030 35 36.050 44 45.320 54 55.620 68 70.040 113 116.390 4x25s 27.5 1.610 18 28.980 26 41.860 32 51.520 53 85.330 70 112.700 4x35s 30.5 2.080 16 33.280 20 41.600 14 29.120 32 66.560 48 99.840 4x50s 33.0 2.690 14 37.660 14 37.660 22 59.180 29 78.010 44 118.360 4x1.5 13.0 0.250 134 33.500 178 44.500 <		4x2.5	14.5	0.330	80	26.400	99	32.670	115	37.950	168	55.440	235	77.550
500 4x10 19.5 0.745 49 36.505 49 36.505 44 32.780 102 75.990 156 116.220 4x16 21.5 1.030 35 36.050 44 45.320 54 55.620 68 70.040 113 116.390 4x25s 27.5 1.610 18 28.980 26 41.860 32 51.520 53 85.330 70 112.700 4x35s 30.5 2.080 16 33.280 20 41.600 14 29.120 32 66.560 48 99.840 4x50s 33.0 2.690 14 37.660 14 37.660 22 59.180 29 78.010 44 118.360 4x1.5 13.0 0.250 134 33.500 178 44.500 196 49.000 270 67.500 360 90.000 4x2.5 14.5 0.330 98 32.340 116 38.280		4x4	16.5	0.435	57	24.795	87	37.845	93	40.455	118	51.330	177	76.995
4x16 21.5 1.030 35 36.050 44 45.320 54 55.620 68 70.040 113 116.390 4x25s 27.5 1.610 18 28.980 26 41.860 32 51.520 53 85.330 70 112.700 4x35s 30.5 2.080 16 33.280 20 41.600 14 29.120 32 66.560 48 99.840 4x50s 33.0 2.690 14 37.660 14 37.660 22 59.180 29 78.010 44 118.360 4x1.5 13.0 0.250 134 33.500 178 44.500 196 49.000 270 67.500 360 90.000 4x2.5 14.5 0.330 98 32.340 116 38.280 155 51.150 203 66.990 284 93.720 4x4 16.5 0.435 72 31.320 105 45.675 108		4x6	17.5	0.545	55	29.975	55	29.975	74	40.330	112	61.040	168	91.560
4x25s 27.5 1.610 18 28.980 26 41.860 32 51.520 53 85.330 70 112.700 4x35s 30.5 2.080 16 33.280 20 41.600 14 29.120 32 66.560 48 99.840 4x50s 33.0 2.690 14 37.660 14 37.660 22 59.180 29 78.010 44 118.360 4x1.5 13.0 0.250 134 33.500 178 44.500 196 49.000 270 67.500 360 90.000 4x2.5 14.5 0.330 98 32.340 116 38.280 155 51.150 203 66.990 284 93.720 4x4 16.5 0.435 72 31.320 105 45.675 108 46.980 178 77.430 213 92.655 4x6 17.5 0.545 65 35.425 65 35.425 98	500	4x10	19.5	0.745	49	36.505	49	36.505	44	32.780	102	75.990	156	116.220
4x35s 30.5 2.080 16 33.280 20 41.600 14 29.120 32 66.560 48 99.840 4x50s 33.0 2.690 14 37.660 14 37.660 22 59.180 29 78.010 44 118.360 4x1.5 13.0 0.250 134 33.500 178 44.500 196 49.000 270 67.500 360 90.000 4x2.5 14.5 0.330 98 32.340 116 38.280 155 51.150 203 66.990 284 93.720 4x4 16.5 0.435 72 31.320 105 45.675 108 46.980 178 77.430 213 92.655 4x6 17.5 0.545 65 35.425 65 35.425 98 53.410 134 73.030 201 109.545 4x10 19.5 0.745 58 43.210 58 43.210 88		4x16	21.5	1.030	35	36.050	44	45.320	54	55.620	68	70.040	113	116.390
4x50s 33.0 2.690 14 37.660 14 37.660 22 59.180 29 78.010 44 118.360 4x1.5 13.0 0.250 134 33.500 178 44.500 196 49.000 270 67.500 360 90.000 4x2.5 14.5 0.330 98 32.340 116 38.280 155 51.150 203 66.990 284 93.720 4x4 16.5 0.435 72 31.320 105 45.675 108 46.980 178 77.430 213 92.655 4x6 17.5 0.545 65 35.425 65 35.425 98 53.410 134 73.030 201 109.545 4x10 19.5 0.745 58 43.210 58 43.210 88 65.560 126 93.870 158 117.710 4x16 21.5 1.030 41 42.230 53 54.590 65		4x25s	27.5	1.610	18	28.980	26	41.860	32	51.520	53	85.330	70	112.700
4x1.5 13.0 0.250 134 33.500 178 44.500 196 49.000 270 67.500 360 90.000 4x2.5 14.5 0.330 98 32.340 116 38.280 155 51.150 203 66.990 284 93.720 4x4 16.5 0.435 72 31.320 105 45.675 108 46.980 178 77.430 213 92.655 4x6 17.5 0.545 65 35.425 65 35.425 98 53.410 134 73.030 201 109.545 4x10 19.5 0.745 58 43.210 58 43.210 88 65.560 126 93.870 158 117.710 4x16 21.5 1.030 41 42.230 53 54.590 65 66.950 81 83.430 135 139.050 4x25s 27.5 1.610 21 33.810 31 49.910 42		4x35s	30.5	2.080	16	33.280	20	41.600	14	29.120	32	66.560	48	99.840
4x2.5 14.5 0.330 98 32.340 116 38.280 155 51.150 203 66.990 284 93.720 4x4 16.5 0.435 72 31.320 105 45.675 108 46.980 178 77.430 213 92.655 4x6 17.5 0.545 65 35.425 65 35.425 98 53.410 134 73.030 201 109.545 4x10 19.5 0.745 58 43.210 58 43.210 88 65.560 126 93.870 158 117.710 4x16 21.5 1.030 41 42.230 53 54.590 65 66.950 81 83.430 135 139.050 4x25s 27.5 1.610 21 33.810 31 49.910 42 67.620 53 85.330 85 135.240 4x35s 30.5 2.080 19 39.520 25 52.000 37		4x50s	33.0	2.690	14	37.660	14	37.660	22	59.180	29	78.010	44	118.360
4x4 16.5 0.435 72 31.320 105 45.675 108 46.980 178 77.430 213 92.655 4x6 17.5 0.545 65 35.425 65 35.425 98 53.410 134 73.030 201 109.545 4x10 19.5 0.745 58 43.210 58 43.210 88 65.560 126 93.870 158 117.710 4x16 21.5 1.030 41 42.230 53 54.590 65 66.950 81 83.430 135 139.050 4x25s 27.5 1.610 21 33.810 31 49.910 42 67.620 53 85.330 85 135.240 4x35s 30.5 2.080 19 39.520 25 52.000 37 76.960 38 79.040 57 118.560		4x1.5	13.0	0.250	134	33.500	178	44.500	196	49.000	270	67.500	360	90.000
4x6 17.5 0.545 65 35.425 65 35.425 98 53.410 134 73.030 201 109.545 4x10 19.5 0.745 58 43.210 58 43.210 88 65.560 126 93.870 158 117.710 4x16 21.5 1.030 41 42.230 53 54.590 65 66.950 81 83.430 135 139.050 4x25s 27.5 1.610 21 33.810 31 49.910 42 67.620 53 85.330 85 135.240 4x35s 30.5 2.080 19 39.520 25 52.000 37 76.960 38 79.040 57 118.560		4x2.5	14.5	0.330	98	32.340	116	38.280	155	51.150	203	66.990	284	93.720
4x10 19.5 0.745 58 43.210 58 43.210 88 65.560 126 93.870 158 117.710 4x16 21.5 1.030 41 42.230 53 54.590 65 66.950 81 83.430 135 139.050 4x25s 27.5 1.610 21 33.810 31 49.910 42 67.620 53 85.330 85 135.240 4x35s 30.5 2.080 19 39.520 25 52.000 37 76.960 38 79.040 57 118.560		4x4	16.5	0.435	72	31.320	105	45.675	108	46.980	178	77.430	213	92.655
4x16 21.5 1.030 41 42.230 53 54.590 65 66.950 81 83.430 135 139.050 4x25s 27.5 1.610 21 33.810 31 49.910 42 67.620 53 85.330 85 135.240 4x35s 30.5 2.080 19 39.520 25 52.000 37 76.960 38 79.040 57 118.560		4x6	17.5	0.545	65	35.425	65	35.425	98	53.410	134	73.030	201	109.545
4x25s 27.5 1.610 21 33.810 31 49.910 42 67.620 53 85.330 85 135.240 4x35s 30.5 2.080 19 39.520 25 52.000 37 76.960 38 79.040 57 118.560	600	4x10	19.5	0.745	58	43.210	58	43.210	88	65.560	126	93.870	158	117.710
4x35s 30.5 2.080 19 39.520 25 52.000 37 76.960 38 79.040 57 118.560		4x16	21.5	1.030	41	42.230	53	54.590	65	66.950	81	83.430	135	139.050
		4x25s	27.5	1.610	21	33.810	31	49.910	42	67.620	53	85.330	85	135.240
4x50s 33.0 2.690 17 45.730 17 45.730 27 72.630 36 96.840 54 145.260		4x35s	30.5	2.080	19	39.520	25	52.000	37	76.960	38	79.040	57	118.560
		4x50s	33.0	2.690	17	45.730	17	45.730	27	72.630	36	96.840	54	145.260



Correction factors for cables with single conduit in outdoor.

Form of cable laying down		In case of distance existing between cable as much as cable diameter-distance from wall ≥ 2cm						
Number of collocate cable system	ed	1	2	3				
Embedded in the ea	arth	0.92	0.89	0.88	d			
Bad ventilation in cable tray	Number of supports				1			
	1	0.92	0.89	0.88				
	2	0.87	0.84	0.83				
	3	0.84	0.82	0.81	d —			
	6	0.82	0.80	0.79				
Good ventilation in cable tray	Number of supports				1			
	1	1.00	0.97	0.96				
	2	0.97	0.94	0.93				
	3	0.96	0.93	0.92				
	6	0.94	0.91	0.90	2 cm d			
In case of laying down cable to wall one on fop of other					2 cm d d			
		1	2	3	194			
		0.94	0.91	0.89	10-			

					7
Form of cable laying	g down	Distan	ce betwee	en cables=	=2d. Distance from wall ≥2cm.
Number of collocate cable system	ed	1	2	3	≥2 cm
Embedded in the ea	arth	0.95	0.90	0.88	d — 1 2d 2d 2d
Bad ventilation in cable tray	Number of supports				20 cm
	1 2 3 6	0.95 0.90 0.88 0.86	0.90 0.85 0.83 0.81	0.88 0.83 0.81 0.79	20 cm 2d 2d
Good ventilation in cable tray	Number of supports				20 cm
	1 2 3 6	1.00 1.00 1.00 1.00	0.98 0.95 0.94 0.93	0.96 0.93 0.92 0.90	→ O O O O O O O O O O O O O O O O O O O
In case of laying down cable to wall one on fop of other		1	2	3	
		0.89	0.86	0.84	1000 † 1000
From of laying down not requiring reduct				20 cm 4d 2d	



Correction factors for cables with multi- conduits and direct current cables with single conduit in outdoor.

Form of cable layin	g down	Dis	tance b	etweer	n cable	s = cal	ole diameter
Number cables		1	2	3	6	9	
Cable embedded in	earth	0.95	0.90	0.88	0.85	0.84	≥2cm d d
Cable tray has not been well ventilated	Number of supports						(a) (a) ↓ (b) d) ← ≥ 20 cm
well ventilated	1 2 3 6	0.90	0.90 0.85 0.83 0.81	0.83 0.81	0.81 0.79	0.78	A A A A A A A A A
Cable tray has not been	Number of supports						
well ventilated	1 2 3 6	1.00	0.98 0.85 0.94 0.93	0.93 0.92	0.90	0.89	→ d → ≥ 20 cm A A A A ≥2cm →
In case of laying do to wall one on fop o		1	2	3	6	9	
Arranged in rows in shelves or mounted to wall		1.00	0.93	0.90	0.87	0.86	<pre> A ↑ A A A A A A A A A A A A A A A A A A</pre>
Laying down from not requiring application of reduction factor		Cables in any number mounted one on top of other				her	A ↓ d d ↑ A ↑ A ↑ A ↑ A ↑

laying down Form	laying down Form of cables		tance b	etwee	n cable	s = cal	ole diameter
Number of cables		1	2	3	6	9	
Cable embedded in	n earth	0.95	0.84	0.80	0.75	0.73	
Cable tray has been badly	Number of supports						
ventilated	1 2 3 6	0.95 0.95		0.76 0.74	0.71 0.70	The state of the s	<u>AAAAAA</u> AAAAAA
Air circulation between cables	Number of						
	1 2 3 6	0.95 0.95	0.84 0.80 0.78 0.76	0.76 0.74	0.71 0.70	0.69 0.68	<u>AAAAAA</u> <u>AAAAAA</u> AAAAAA
Number of cables Mounting form to shelves or directly to wall laying down form		0.95	2	3 0.72	0.68	0.66	
Laying down from rapplication of reduce	do	ibles in wn side	e by sid		laid	$\begin{array}{c c} & & & & \\ & & & & \\ & & & & \\ & & & &$	



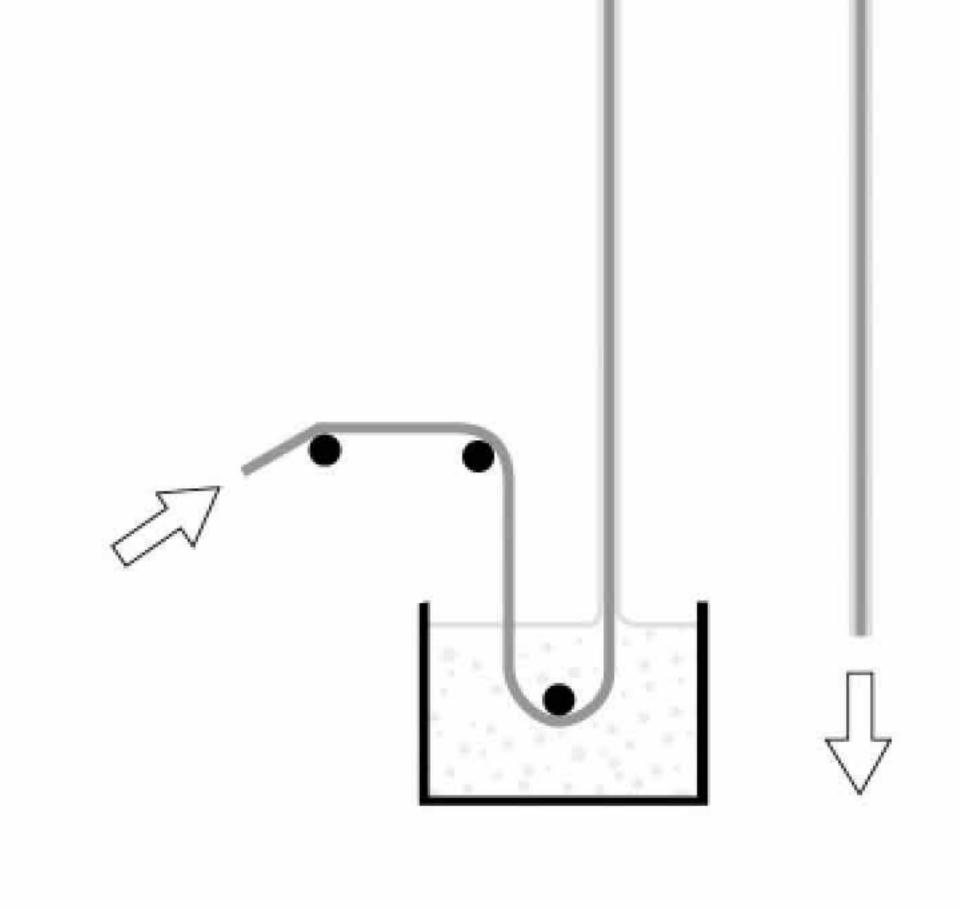
Zinc Ellectro plating (Electrolytic Plating)

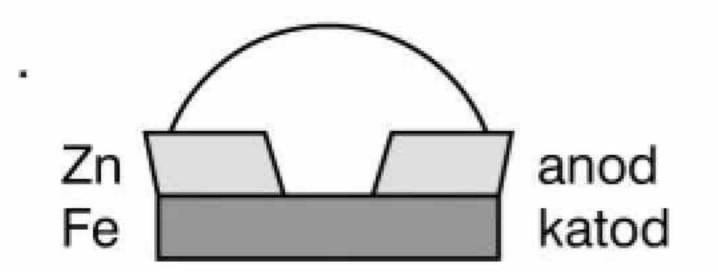
Electroytic zinc plating process is realized by galvanic coating process will be effected by applying electrolysis technique to iron material in plating baths which has been filled by solutions containing zinc. Plating thickness by this method will reach up to 7-10 μ m.

Pre-galvanizing

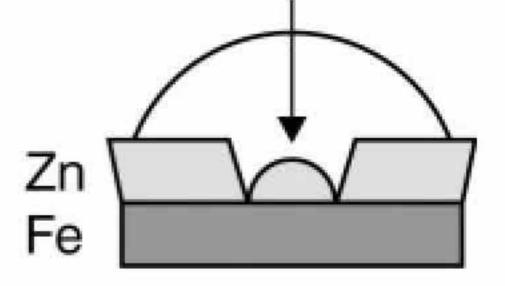
Sheet metal manufacteres plate sheet rolls in continuous hot dip galvanizing baths. Plating thickness by this process will reach Min 15 μ /m.

Material plated by pre-galvanizing method will be protected against corrosion on cut surfaces due to cathodic effect between zinc and iron elements. (It be valid and effective up to 2mm thickness



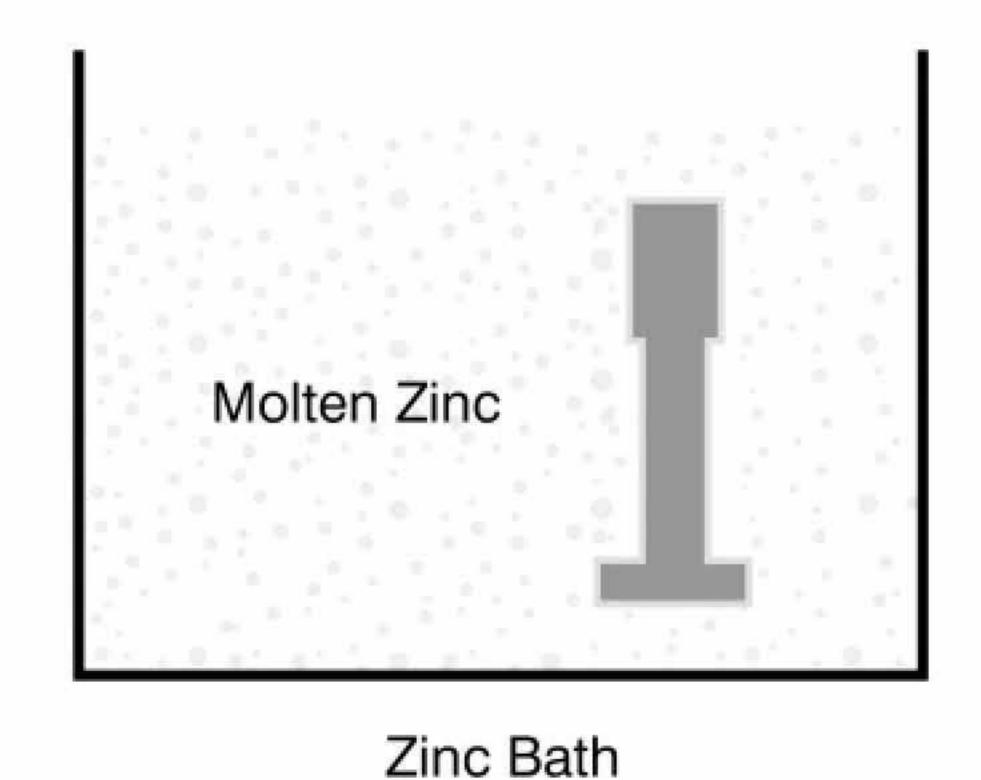


Zinc salts will prevent corrosion till no zinc will remain at all.



Hot Dip Galvanizing

This method is the process of plating plain steel materials by dipping into zinc melt after fabrication. Plating thickness by this process will reach Min $45 \,\mu$ /m.



Corrosion of zinc plated and unprotected steel in atmosphere.

Atmosphere Types	Wear out of zinc coating (\mu/year)	Wear out of unprotected steel (μ /year)
Open field	1.0 - 3.4	6 - 60
Sea side	2.4 - 15.0	20 - 170
City	1.0 - 6.0	30 - 70
Industry	3.8 - 19.0	30 - 160
Tropical climate	1.0 - 9.7	1 - 70

پارس فرابخش انرژی

>> Technical Specifications and Tables

▶ Paint

Epoxy Paint;

- Resistance against chemicals substance is very high.
- Resistance against corrosion is excellent
- Surface hardness is high.
- It is not suitable for exterior application since, it has no UV resistance and durability, it becomes chalky.
- Yellowing in colour may occur by time.
- Dull paints in different brightness and properties can be easily formulated.

Epoxy/ Polyester Paint;

- Resistance against exterior effects is limited.
- Yellowing in colour may occur by time.
- If there is no excessive corrosive medium or chemical effect, it is suitable to be applied inside interior locations.
- It is difficult to obtain fully dull paint.
- Mechanical properties are suitable for daily application such as impact, flexibility and scratching.

Polyester Paint;

- UV resistance is very well, it provides excellent resistance and durability under exterior conditions.
- It will not become yellowish and will not change colour.
- Mechanical properties are very well (such as impact, flexibility etc.)

►► Protection of Galvanized Sheet Metal during the Period of Stockpiling

By the virtue of its composition, the galvanized sheet metal is known to be particularly sensitive against the effects of materials of acidic character, polluted air, water and relative humidity present above a certain rate. The service life of galvanized sheet metal is shorter in the industrial areas where the air is densely polluted. The most important element of atmospheric air pollution is sulfur dioxide.

$$C + H + S + O_2 \longrightarrow CO_2 + H_2O + SO_2$$

 $SO_2 + \frac{1}{2}O_2 \longrightarrow SO_3$
 $SO_2 + H_2O \longrightarrow H_2SO_3$
 $SO_3 + H_2O \longrightarrow H_2SO_4$



The sulfurous and sulfuric acid forming in various rates enters into reaction with zinc and causes corrosion in the layer of galvanization.

Decreasing the rate of atmospheric pollution or reducing it to zero will not be possible on individual basis. To prevent the likely corrosion of galvanized layer due to air pollution in stockpiling will be possible only by stockpiling the galvanized sheet metal in well protected warehouses.

A matter causing greatest complaint regarding galvanized sheet metal is the white coloured spots called as white rust, which develop on the surface of sheet metal during the course of stockpiling. Its development, however, can be minimized, even completely eliminated, by taking proper measures.

The white rust is the result of chemical reaction between zinc and the carbon dioxide, oxygen and water or moisture in the air.

$$C + O_2$$
 \longrightarrow CO_2
 $Zn + \frac{1}{2}O_2$ \longrightarrow ZnO
 $4Zn + 3H_2O + CO_2$ \longrightarrow $ZnCO_3.3Zn(OH)_2$

The white rust phenomenon occurs during the stockpiling of galvanized sheet metal as a result of combined action of above-stated parameters and mostly in the case of stock-piled sheet metal. As the air with a high rate of moisture will be trapped between the pieces of stocked sheet metal, any differences in temperature will cause the trapped air to reach the dew point, leading to formation of droplets of water on the surfaces of sheet metal pieces. As a result, the oxygen dissolved in water will react with Zn to produce zinc hydroxide while the carbon dioxide present in the air will react with zinc to produce zinc carbonate. The combined result of these two reactions will lead to the development of zinc carbonate zinc hydroxide, called white rust.

In order to protect the stacked sheet metal against the effects of white rust for a certain period of time, although not for long, the pieces of sheet metal are subjected to a process named passivation. During this process, a protective film is produced on the surface of galvanized sheet metal through a chemical reaction.

That protective film will protect the galvanized sheet metal against the formation of white rust for a certain period of time. In order to ensure said protection, however, the following conditions must be strictly observed.

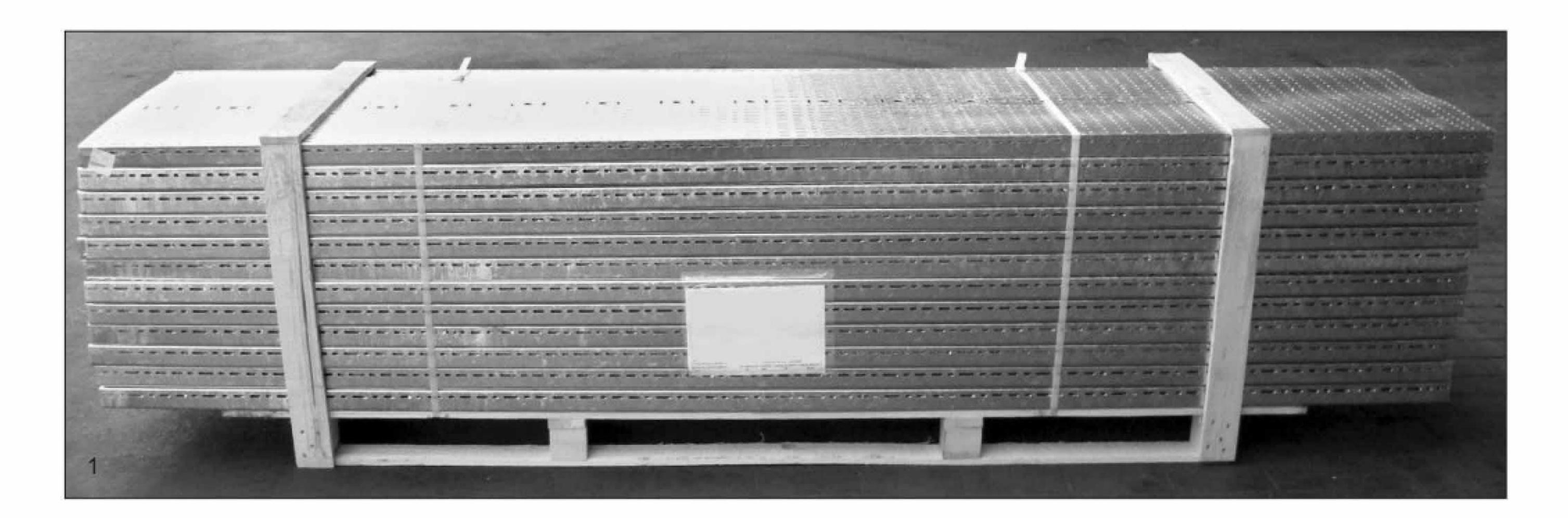
- Stacked sheet metal must never be allowed to come in contact with water.
- There must be sufficient space provided for continuous circulation of air in the place where they are stacked.
- There must be sufficient space provided for proper circulation of air between the stacks of sheet metal (min 300mm between the two stacks).
- The temperature differences in the places of stockpiling must be small (between 5-10°C).
- The relative humidity in the places of stockpiling must not exceed 70%.
- The sheet metal must not be stockpiled in places where there is air pollution.
- Where the stacked sheet metal is to be stockpiled for long periods of time, each piece of sheet metal must be examined periodically, and any droplets of water likely to be formed on the surfaces of sheet metal must be wiped off and the surfaces must be dried.
- The stacks must be placed, without fail, on wooden palettes or props as to prevent the sheet metal to come in contact with the floor.

When the above conditions are fulfilled, it will be possible to ensure proper circulation of air in the place of stockpiling, thereby ensuring the formation of white rust at a reduced level.

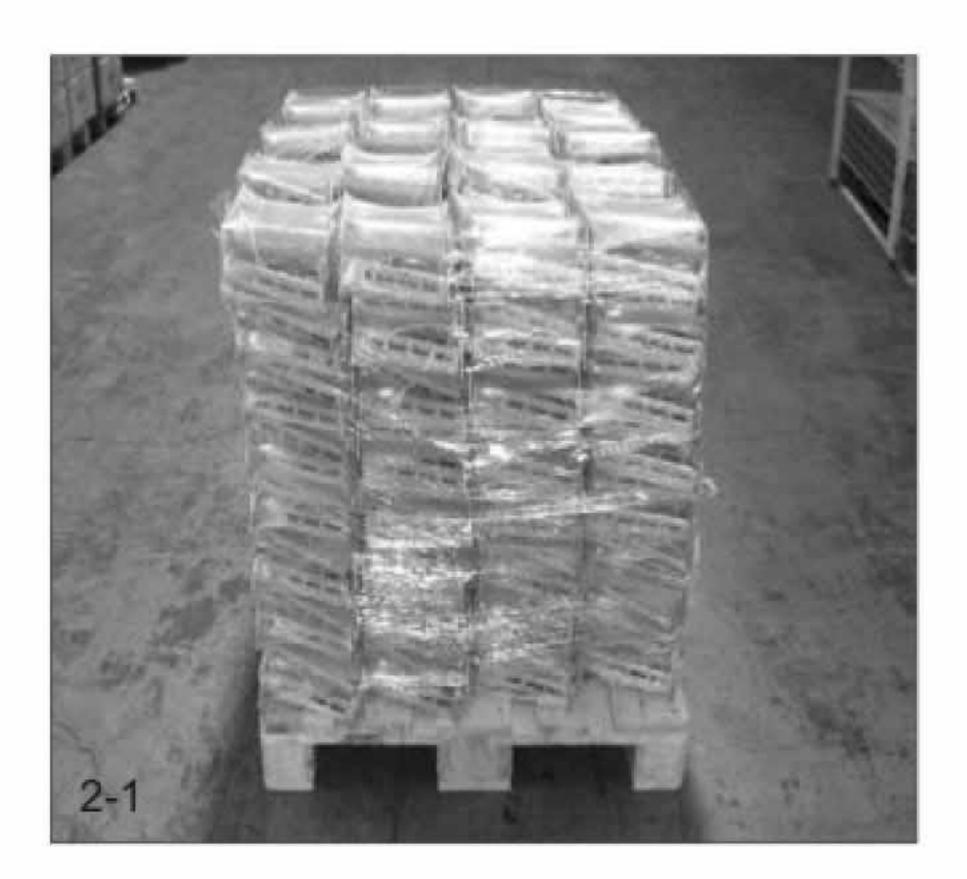


▶ Packaging

1- Cable Trays&Ladders and Modules are packed with wooden palettes in order to ensure safe transportation to site. After being piled suitably onto wooden palettes, products are encircled onto these palettes with PVC strip tapes to hinder sliding from the palette. Wooden laths nailed on the sides and onto the palette ensure protection against forces that may possibly come from above and sides.



2- Support and suspension equipments used in the installation of cable trays firstly, are covered by shrink nylon via heat treatment. Packages do not contain more than totally 25kg product to facilitate the carriage. Product amounts within the package are arranged in 10 units or tenfold unit to facilitate counting. Labels containing the code, description, small technical drawing of the product and specifying the content and amount within the package are adhered onto the packages for easy product identification. Small product packages then are stacked onto wooden palette and wrapped against scattering and supported sideways via PVC strip tapes.







3 - Accessories such as joint components, screws, nuts, dowels etc, are packed within cardboard parcels. In order to hinder screws, nuts, washers, dowels to rust, they firstly are put into nylon bags. All parcels are prepared not exceeding 25kg and are identified by labels indicating product information. Small product packages then are stacked onto wooden palette and wrapped against scattering and supported sideways via PVC strip tapes.

All palettes are identified with labels indicating product information contained within. Palette labels also contain customer information and palette total weight.

Package type above is for large scale projects. It may differ for small deliveries and warehouses.