

E-LINE KM

CABLE LADDER SYSTEMS



Pre-galvanized
Foldable Cable Ladders



KM



E-Line KM

Cable Ladder and Modules

UKS YD
Horizontal Elbow Modules

KM
Left-hand Reduction

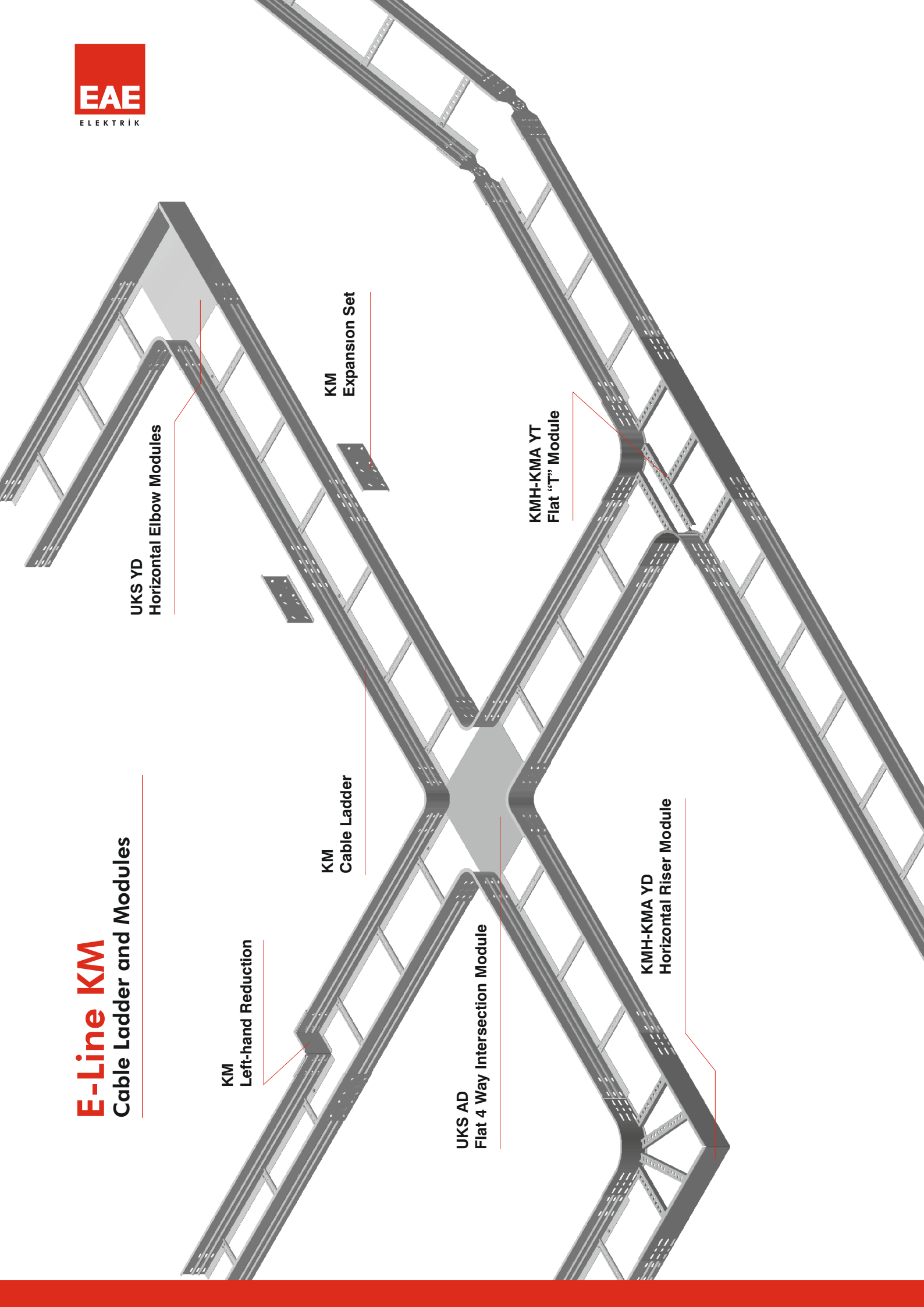
KM
Cable Ladder

KM
Expansion Set

UKS AD
Flat 4 Way Intersection Module

KMH-KMA YT
Flat "T" Module

KMH-KMA YD
Horizontal Riser Module

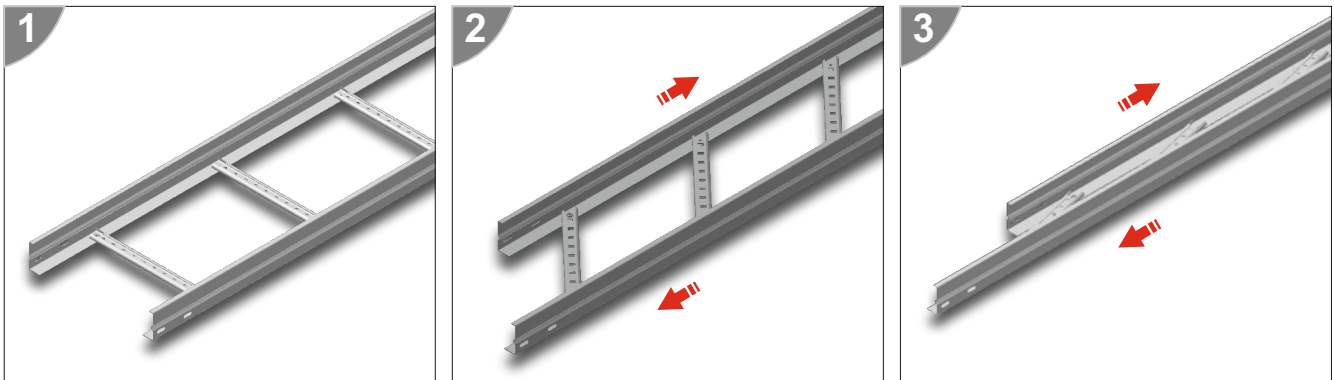




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▶▶ FOLDABLE CABLE LADDERS



Steps to be followed for choosing the correct KM is stated below:

SAMPLE APPLICATION IN CHOOSING KM

SPECIFYING CABLES FOR IN LADDER				
STEP 1	CHOSEN CABLE TYPE	AMOUNT	DIAMETER (Ø mm)	WEIGHT (kg/m.)
	4*1,5	50	13	0,250
	4*6	30	17,5	0,545
	4*25	20	27,5	1,610

SPECIFYING THE TOTAL CUTAWAY OF CABLES IN LADDER				
STEP 2	CHOSEN CABLE TYPE	AMOUNT	DIAMETER (Ø mm)	TOTAL CROSS SECTION AREA (mm ²)
	4*1,5	50	13	$50 \times 13^2 = 8450$
	4*6	30	17,5	$30 \times 17,5^2 = 9188$
	4*25	20	27,5	$20 \times 27,5^2 = 15125$
				= 32763

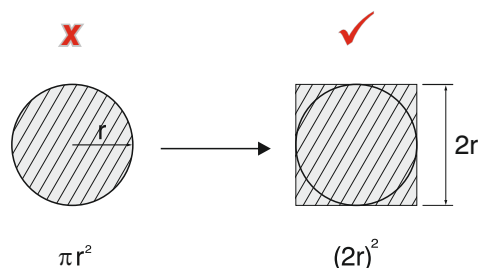
SPECIFYING THE WEIGHT OF CABLES IN LADDER				
STEP 3	CHOSEN CABLE TYPE	AMOUNT	WEIGHT (kg/m.)	TOTAL WEIGHT (kg/m.)
	4*1,5	50	0,250	$50 \times 0,250 = 12,50$
	4*6	30	0,545	$30 \times 0,545 = 16,35$
	4*25	20	1,610	$20 \times 1,610 = 32,20$
				TOTAL WEIGHT = 61,05 kg/m
TOTAL LOAD		1,5m x 61,05 = 91,575 kg/m		

- The total cross section area of the cables stated in the above table is 32763 mm². (Step 2) Therefore the most suitable area taken from the above table is 34800 mm². For this a 100 KM 500 ladder will be provided. 100 KM 500 ladder, with 1.5m hanger spacing Holds 370 kg. of weight. (page 4) There for (370 > 91,575) 100 KM 500 ladder is appropriate for usage.

- Product can be folded one way only.
- Packaging and delivery is considerably easier due to its foldability.

▶▶ HOW TO CHOOSE CORRECT CABLE FOR KM TYPE CABLE LADDER ?

In practical application, cross section area of cables should be calculated according to the example below.



- 1- Please use $(2r)^2$ the formula instead of πr^2 for cross section.
- 2- Find the total cross section bu calculating all the cables.
- 3- Leave 20% reserve for additional cables.
- 4- Choose the correct transportation system from the table below.
- 5- When choosing please choose the figure rounded up from the cutaway sizes.

Table 1

KM CABLE TRAYS MAX.HAUL CAPACITY			
CABLE TYPE	CABLE OUTER DIAMETER (Ø mm)	NET WEIGHT (kg)	NOMINAL CROSS SECTION (mm ²)
4*1,5	13	0,250	169
4*2,5	14,5	0,330	210
4*4	16,5	0,435	272
4*6	17,5	0,545	306
4*10	19,5	0,745	380
4*16	21,5	1,030	462
4*25	27,5	1,610	756
4*35	30	2,080	900
4*50	33	2,690	1089

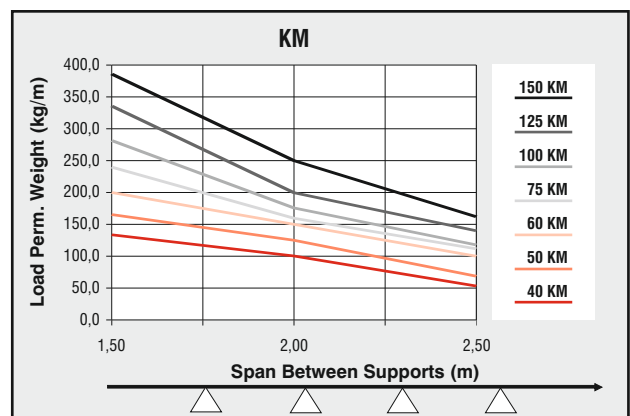
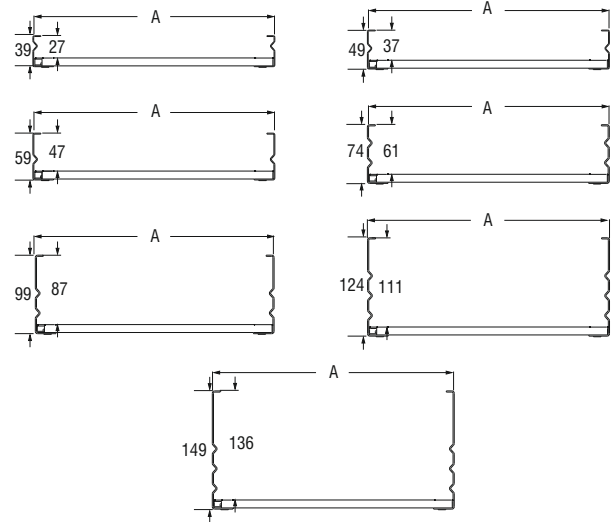
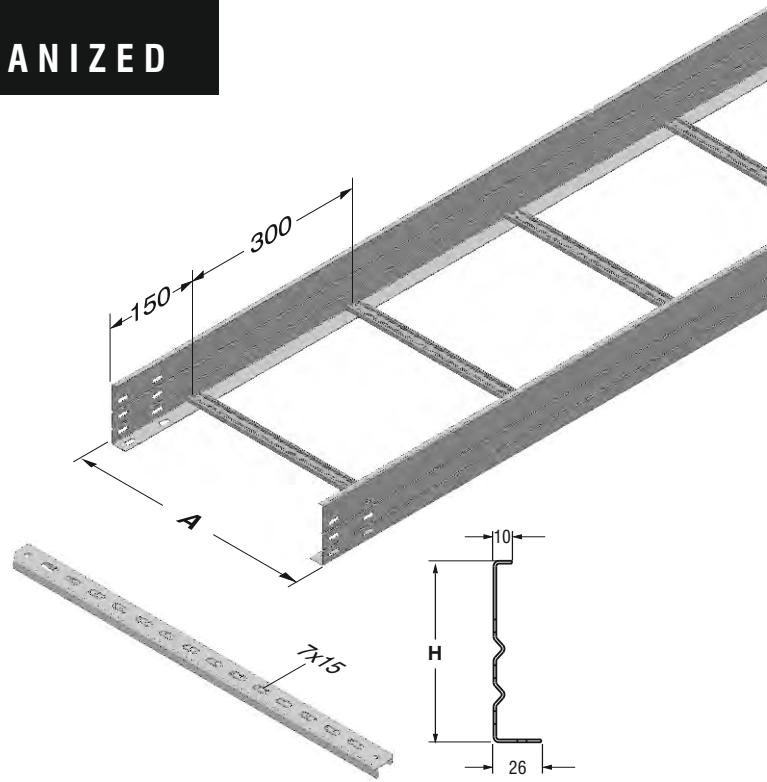
Table 2

		USABLE NET CROSS SECTION AREA(mm ²)						
		(H) TRAY HEIGHT (mm)						
		40(27)	50(37)	60(47)	75(61)	100(87)	125(111)	150(136)
(A) TRAY WIDTH (mm)	100	2160	2960	3760	4880	6960	-----	-----
	200	4320	5920	7520	9760	13920	17760	21760
	300	6480	8880	11280	14640	20880	26640	32640
	400	8640	11840	15040	19520	27840	35520	43520
	500	10800	14800	18800	24400	34800	44400	54400
	600	12960	17760	22560	29280	41760	53280	65280

►► FOLDABLE CABLE LADDER

Pre-galvanized (TS EN 10346 - TS EN 10143)

Description	H (mm)	A (mm)	Cable Area (cm ²)	Weight (kg./m.)	Order Code
040 KM 100	40	100	27	1,481	3025383
040 KM 200	40	200	55	1,651	3025384
040 KM 300	40	300	83	1,817	3025385
040 KM 400	40	400	111	1,987	3025386
040 KM 500	40	500	139	2,154	3025387
040 KM 600	40	600	167	2,324	3025388
050 KM 100	50	100	37	1,669	3025389
050 KM 200	50	200	75	1,839	3025390
050 KM 300	50	300	113	2,005	3025391
050 KM 400	50	400	151	2,175	3025392
050 KM 500	50	500	189	2,342	3025393
050 KM 600	50	600	227	2,512	3025394
060 KM 100	60	100	47	1,857	3025395
060 KM 200	60	200	95	2,027	3025396
060 KM 300	60	300	143	2,194	3025397
060 KM 400	60	400	191	2,364	3025398
060 KM 500	60	500	239	2,531	3025399
060 KM 600	60	600	287	2,701	3025400
075 KM 100	75	100	62	2,613	3025401
075 KM 200	75	200	125	2,783	3025402
075 KM 300	75	300	188	2,950	3025403
075 KM 400	75	400	250	3,120	3025404
075 KM 500	75	500	313	3,287	3025405
075 KM 600	75	600	376	3,457	3025406
100 KM 100	100	100	86	3,223	3025407
100 KM 200	100	200	174	3,393	3025408
100 KM 300	100	300	262	3,560	3025409
100 KM 400	100	400	349	3,730	3025410
100 KM 500	100	500	437	3,897	3025411
100 KM 600	100	600	525	4,067	3025412
125 KM 200	125	200	204	4,007	3025413
125 KM 300	125	300	307	4,174	3025414
125 KM 400	125	400	409	4,344	3025415
125 KM 500	125	500	512	4,511	3025416
125 KM 600	125	600	615	4,681	3025417
150 KM 200	150	200	273	4,592	3025418
150 KM 300	150	300	411	4,759	3025419
150 KM 400	150	400	548	4,929	3025420
150 KM 500	150	500	686	5,095	3025421
150 KM 600	150	600	824	5,265	3025422



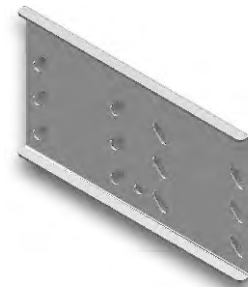
■ There may be +/- differences in carriage values depending on steel plate tolerance and steel plate hardness value. Please immediately contact your customer representative for detailed information.

- **KM folding ladder is compatible with UKS size.**
- Standard Length 3000 mm. It can be lengthened to 6000 mm. if needed.
- **Please indicate order code in your orders.**
- Please contact us for special dimensions.
- Material weights may vary by ± 10%

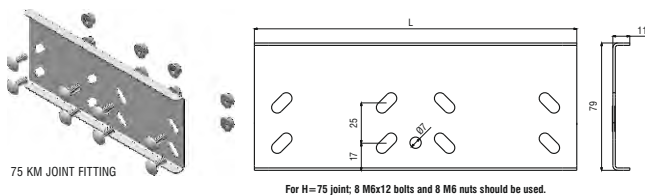
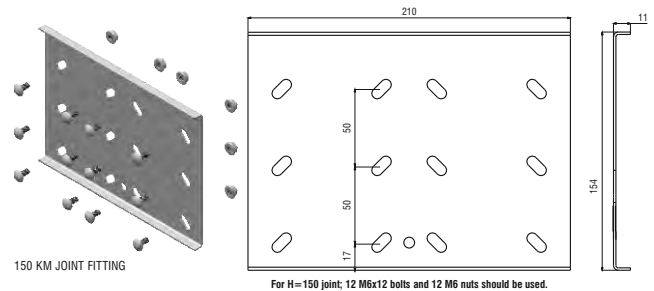
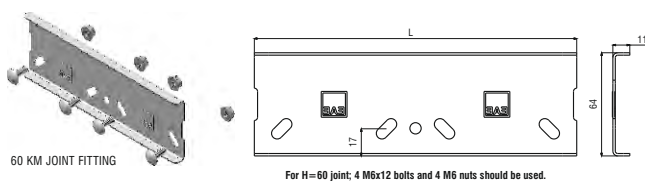
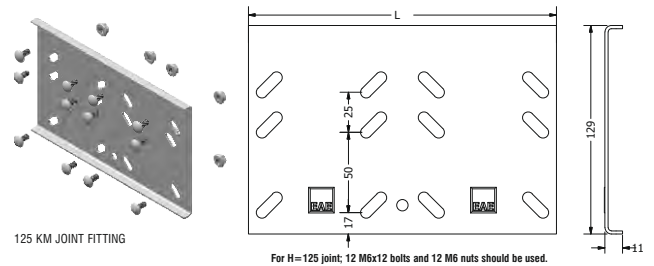
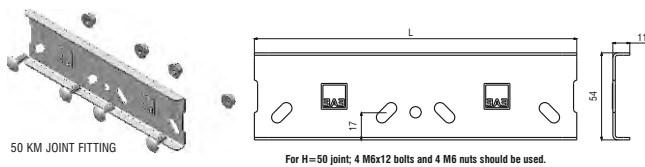
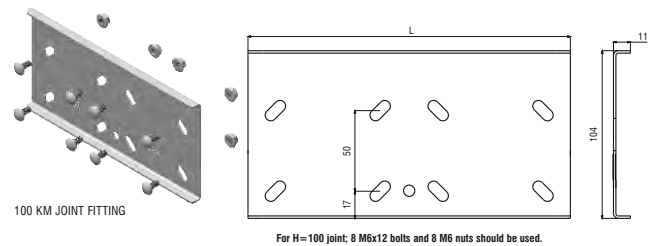
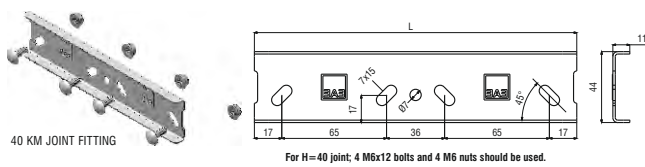
►► KM JOINT FITTING

Pre-galvanized (TS EN 10346 - TS EN 10143)

Description	H (mm)	L (mm)	T (mm)	Weight (kg./pc)	Order Code
40 KM JOINT FITTING	40	200	1,2	0,118	3114709
50 KM JOINT FITTING	50	200	1,2	0,136	3114710
60 KM JOINT FITTING	60	200	1,2	0,158	3114711
75 KM JOINT FITTING	75	210	1,2	0,180	3114712
100 KM JOINT FITTING	100	210	1,2	0,224	3114713
125 KM JOINT FITTING	125	192	1,2	0,270	3114714
150 KM JOINT FITTING	150	210	1,2	0,316	3114715



Joint Fitting Outward



- Please contact us for special size.
- Please indicate order code in your orders.

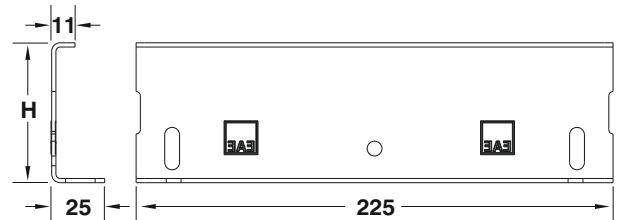
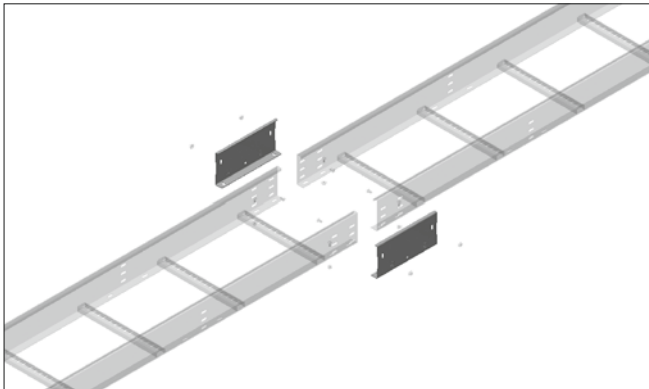
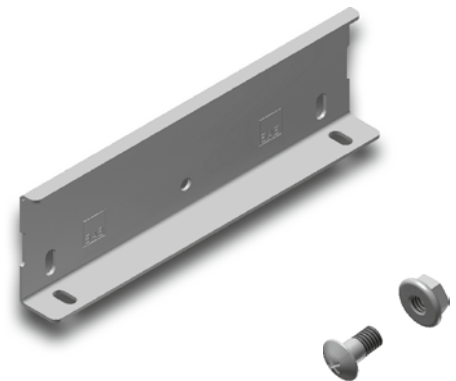
- Recommended spacing for outward clamps is 2 metres
- Material weights may vary by $\pm 10\%$



►► **KM EXPANSION SET**

Pre-galvanized (TS EN 10346 - TS EN 10143)

Description	H (mm)	T (mm)	Weight (kg./set.)	Order Code
40 KM EXPANSION SET	40	2	0,516	3006610
50 KM EXPANSION SET	50	2	0,634	3048424
60 KM EXPANSION SET	60	2	0,656	3006611
75 KM EXPANSION SET	75	2	0,822	3125846
100 KM EXPANSION SET	100	2	0,998	3125847
125 KM EXPANSION SET	125	2	1,185	3125848
150 KM EXPANSION SET	150	2	1,372	3125849

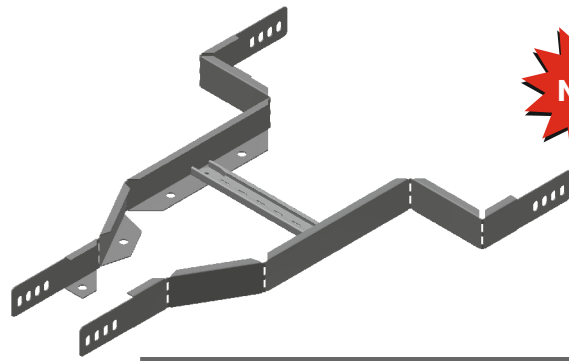


- Dilatation set allows for expansion upto 35mm.
- 40-50-60-75-100 Dilatation sets uses, 2 lots of dilatation joints, 8 pieces of special bolts and nuts.
125-150 Dilatation sets uses, 2 lots of dilatation joints, 12 pieces of special bolts and nuts.

►► KM REDUCTION MODULE

Pre-galvanized (TS EN 10346 - TS EN 10143)

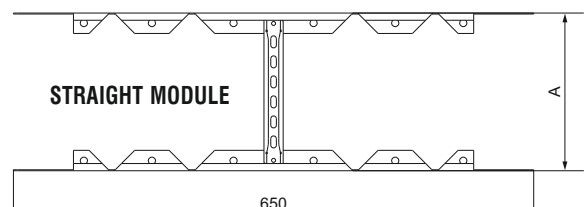
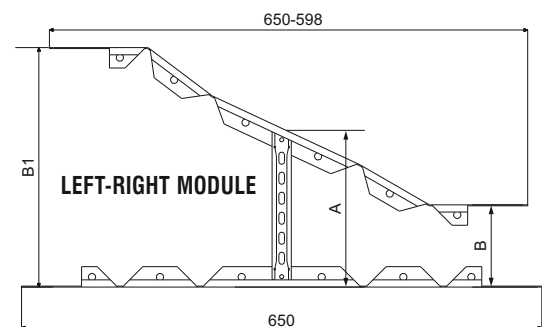
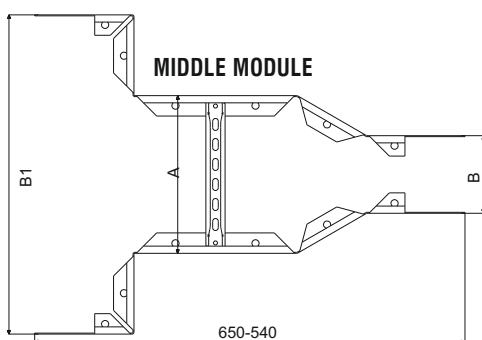
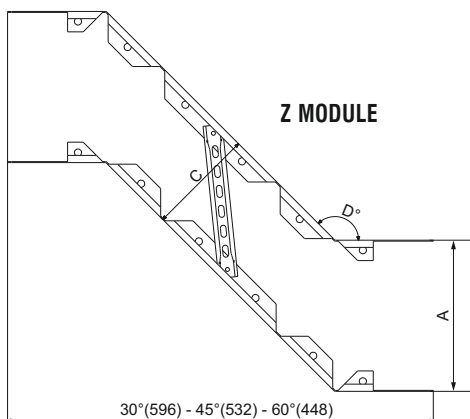
Description	A (mm)	Weight (kg/pc)	Order Code
040 KM 200 REDUCTION MODULE	200	0,975	3136537
040 KM 300 REDUCTION MODULE	300	1,003	3136538
040 KM 400 REDUCTION MODULE	400	1,035	3136539
040 KM 500 REDUCTION MODULE	500	1,064	3136540
040 KM 600 REDUCTION MODULE	600	1,092	3136541
050 KM 200 REDUCTION MODULE	200	1,073	3136542
050 KM 300 REDUCTION MODULE	300	1,104	3136543
050 KM 400 REDUCTION MODULE	400	1,139	3136544
050 KM 500 REDUCTION MODULE	500	1,170	3136545
050 KM 600 REDUCTION MODULE	600	1,201	3136546
060 KM 200 REDUCTION MODULE	200	1,180	3136547
060 KM 300 REDUCTION MODULE	300	1,214	3136548
060 KM 400 REDUCTION MODULE	400	1,254	3136549
060 KM 500 REDUCTION MODULE	500	1,287	3136550
060 KM 600 REDUCTION MODULE	600	1,321	3136551
075 KM 200 REDUCTION MODULE	200	1,305	3136552
075 KM 300 REDUCTION MODULE	300	1,342	3136553
075 KM 400 REDUCTION MODULE	400	1,386	3136554
075 KM 500 REDUCTION MODULE	500	1,423	3136555
075 KM 600 REDUCTION MODULE	600	1,461	3136556
100 KM 200 REDUCTION MODULE	200	1,727	3136557
100 KM 300 REDUCTION MODULE	300	1,777	3136558
100 KM 400 REDUCTION MODULE	400	1,835	3136559
100 KM 500 REDUCTION MODULE	500	1,884	3136560
100 KM 600 REDUCTION MODULE	600	1,934	3136561



MIDDLE REDUCTION MODULE									
A		A		A		A		A	
200		300		400		500		600	
B	B1	B	B1	B	B1	B	B1	B	B1
100	400	200	500	300	600	400	700	500	800
100	350	200	450	300	550	400	650	500	750
100	300	200	400	300	500	400	600	500	700
100	250	200	350	300	450	400	550	500	650
100	200	200	300	300	400	400	500	500	600

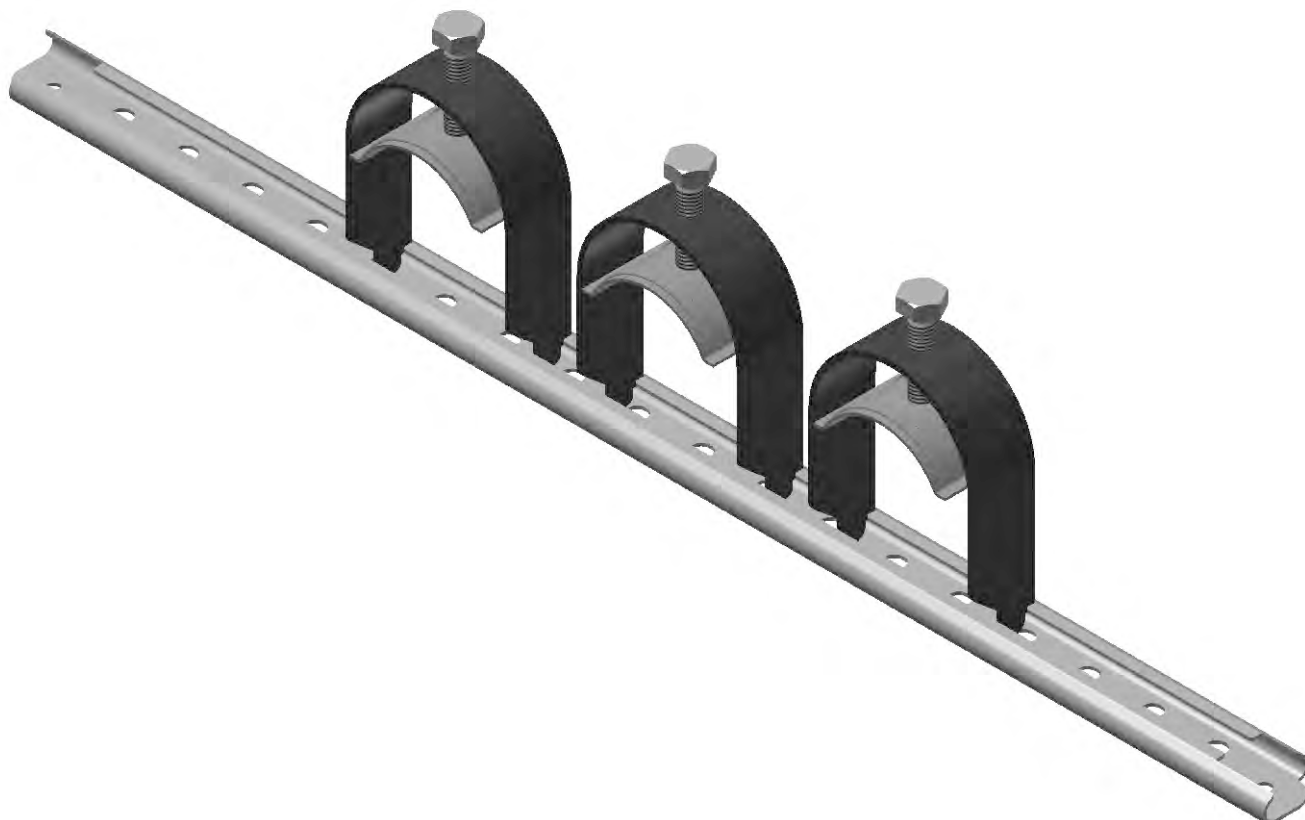
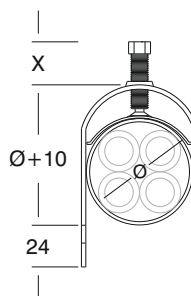
LEFT - RIGHT REDUCTION MODULE									
A		A		A		A		A	
200		300		400		500		600	
B	B1	B	B1	B	B1	B	B1	B	B1
100	300	200	400	300	500	400	600	500	700
100	250	200	350	300	450	400	550	500	650
100	200	200	300	300	400	400	500	500	600

Z REDUCTION MODULE									
A		A		A		A		A	
200		300		400		500		600	
D°	C	D°	C	D°	C	D°	C	D°	C
30	167	30	254	30	341	30	427	30	514
45	133	45	205	45	235	45	346	45	417
60	92	60	142	60	192	60	242	60	293



▶▶ BRA CABLE CLAMP

Description	Ø mm	X mm	Weight (kg/pc)	Order Code
KM 1-12 CABLE CLAMP	12	20	0,041	1008041
KM 1-16 CABLE CLAMP	16	20	0,046	1008042
KM 1-20 CABLE CLAMP	20	20	0,061	1008043
KM 1-24 CABLE CLAMP	24	20	0,065	1008044
KM 1-28 CABLE CLAMP	28	20	0,070	1008045
KM 1-32 CABLE CLAMP	32	20	0,075	1008046
KM 1-36 CABLE CLAMP	36	20	0,081	1008047
KM 1-40 CABLE CLAMP	40	30	0,087	1008048
KM 1-44 CABLE CLAMP	44	30	0,094	1008049
KM 1-48 CABLE CLAMP	48	30	0,099	1008050
KM 1-52 CABLE CLAMP	52	30	0,104	1008051
KM 1-56 CABLE CLAMP	56	30	0,109	1008052
KM 1-60 CABLE CLAMP	60	30	0,114	1008053
KM 1-64 CABLE CLAMP	64	30	0,120	1008054
KM 1-70 CABLE CLAMP	70	30	0,126	1008055
KM 1-76 CABLE CLAMP	76	30	0,132	1008056
KM 1-82 CABLE CLAMP	82	30	0,138	1008057
KM 1-88 CABLE CLAMP	88	30	0,145	1008058
KM 1-94 CABLE CLAMP	94	30	0,151	1008059
KM 1-100 CABLE CLAMP	100	30	0,159	1008060



- Please indicate order code in your orders.
- Please contact us for special size.
- Material weights may vary by ± 10%