

# 14.

## Rail and Rail Accessories



Installing pipe suspension systems or wall bracket systems quickly and efficiently is easy if one uses Flamco rails and accessories.

Flamco has specifically developed a complete range for this purpose. The various brackets and clamps can be fitted next to each other, on a single rail, for instance. The flat slotted construction makes fitting in a restricted space possible. Sliding rail lock nuts can also glide smoothly to the correct position on the rail.

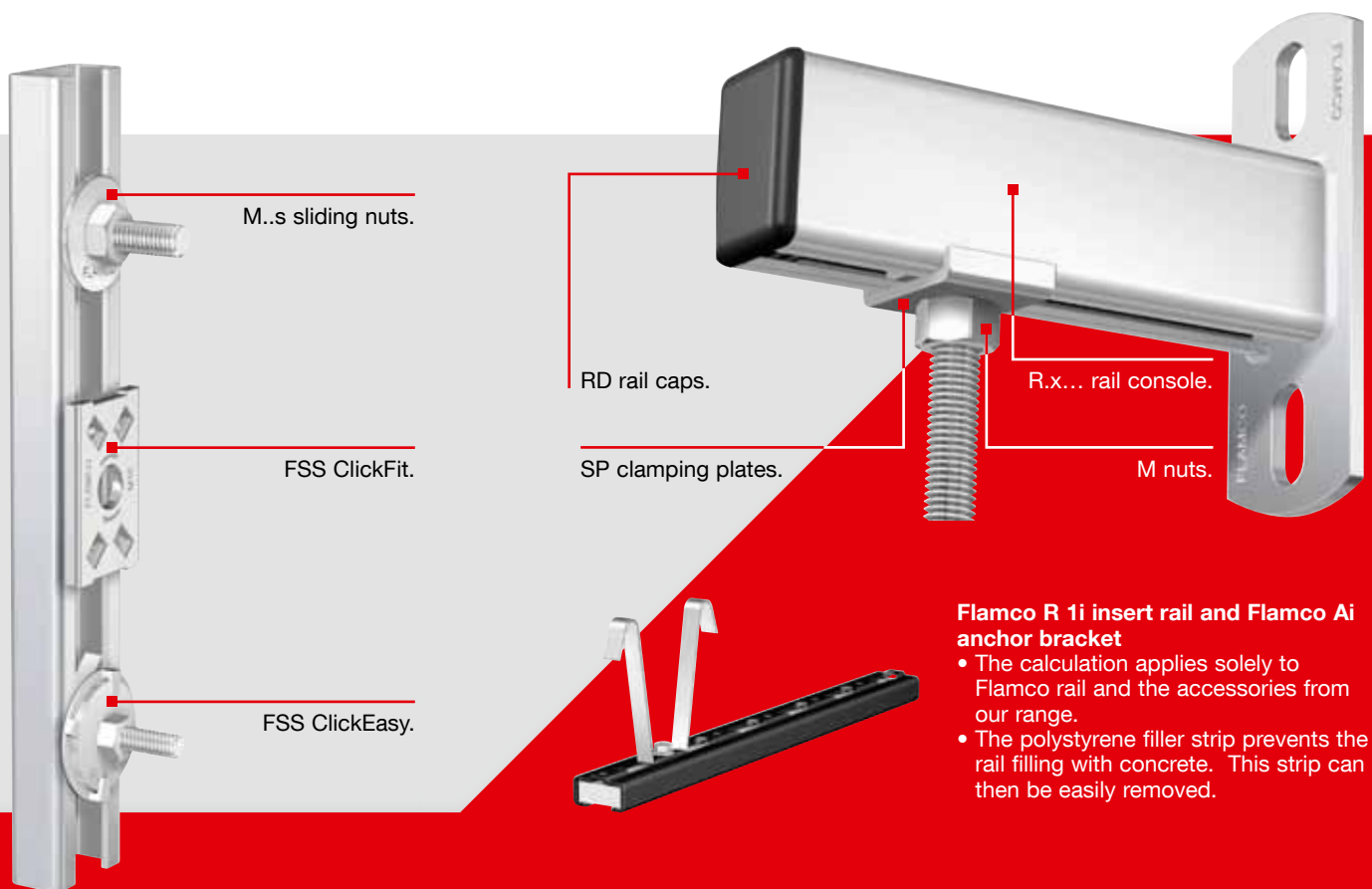
As we use an universal slot profile all rail accessories can be used in each type of Flamco Rail. There is a selection of Flamco Rail profiles to provide the correct load handling capabilities.



# Quick Fitting with Flamco Rail and Rail Accessories

Flamco Rail is second to none for fast and professional installations. Several fixtures and fittings can be mounted next to each other on one rail. Flamco Rail is available in various sizes and load capacities.

The wide range of Flamco Rail and rail accessories available on these pages makes installation quick, easy and, more to the point, adjustable.



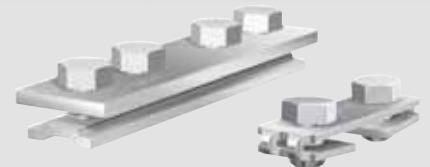
- Flamco R 1i insert rail and Flamco Ai anchor bracket**
- The calculation applies solely to Flamco rail and the accessories from our range.
  - The polystyrene filler strip prevents the rail filling with concrete. This strip can then be easily removed.



- SR 4 noise suppressing strip**
- Noise suppressing lining for the Flamco rail or M 8 threaded rod.



- RD rail end caps**
- Neatly finishes off the ends of all types of Flamco Rail.
  - Quick and easy to push into position.



- RL rail extenders**
- Ideal for connecting two Flamco rails in line.
  - All required bolts are supplied pre-assembled in the packaging.



**The Advantages of Flamco Rail:**

- Short installation height thanks to the flat grooved construction.
- The ergonomic design of the rail ensures that sliding nuts and similar components slide easily into place.
- Flamco fittings and components are common and compatible across the entire range of Flamco rail.

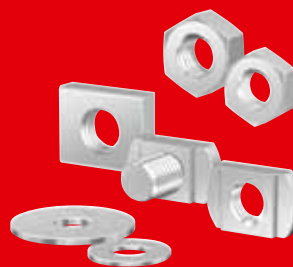
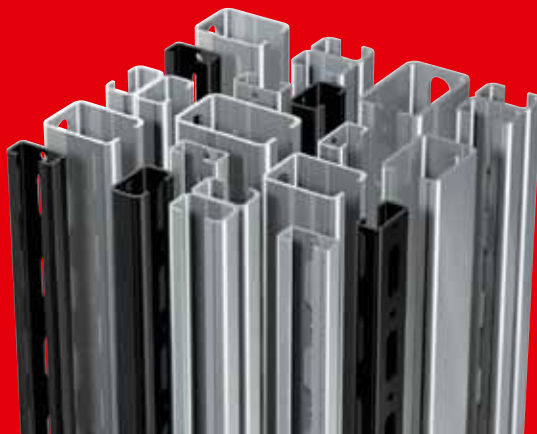
**Selecting the Appropriate Flamco Rail**

Selecting the correct Flamco rail is simple. Identify the number of suspension points, the load to be applied at each point and the bending stress. Then refer to the selection criteria below.

The calculation applies solely to Flamco rail and the accessories from our range.

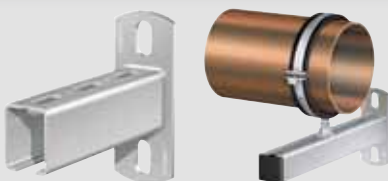
**NOTE**

Make sure there is always an even stress spread across the subsequent suspension points of each pipe. Each suspension point is then loaded equally and evenly.



**Nuts, sliding nuts, washers and hammerhead bolts**

- For the easy mounting of a suspension in Flamco Rail.
- Sliding nuts and hammerhead bolts can be inserted in situ where required. After that, a twist of 90° is all that is required before tightening with a nut.



**R.x... rail consoles**

- For attaching to the wall for support or hanging.
- Stable fastening.
- Can also be used vertically.



**SP clamping plates**

- SP clamping plates are compatible with Flamco Rail types R 2, R 3 and R 4.
- SP.SR clamping plates are compatible with Flamco Rail types R 6, R 7 and R 8.



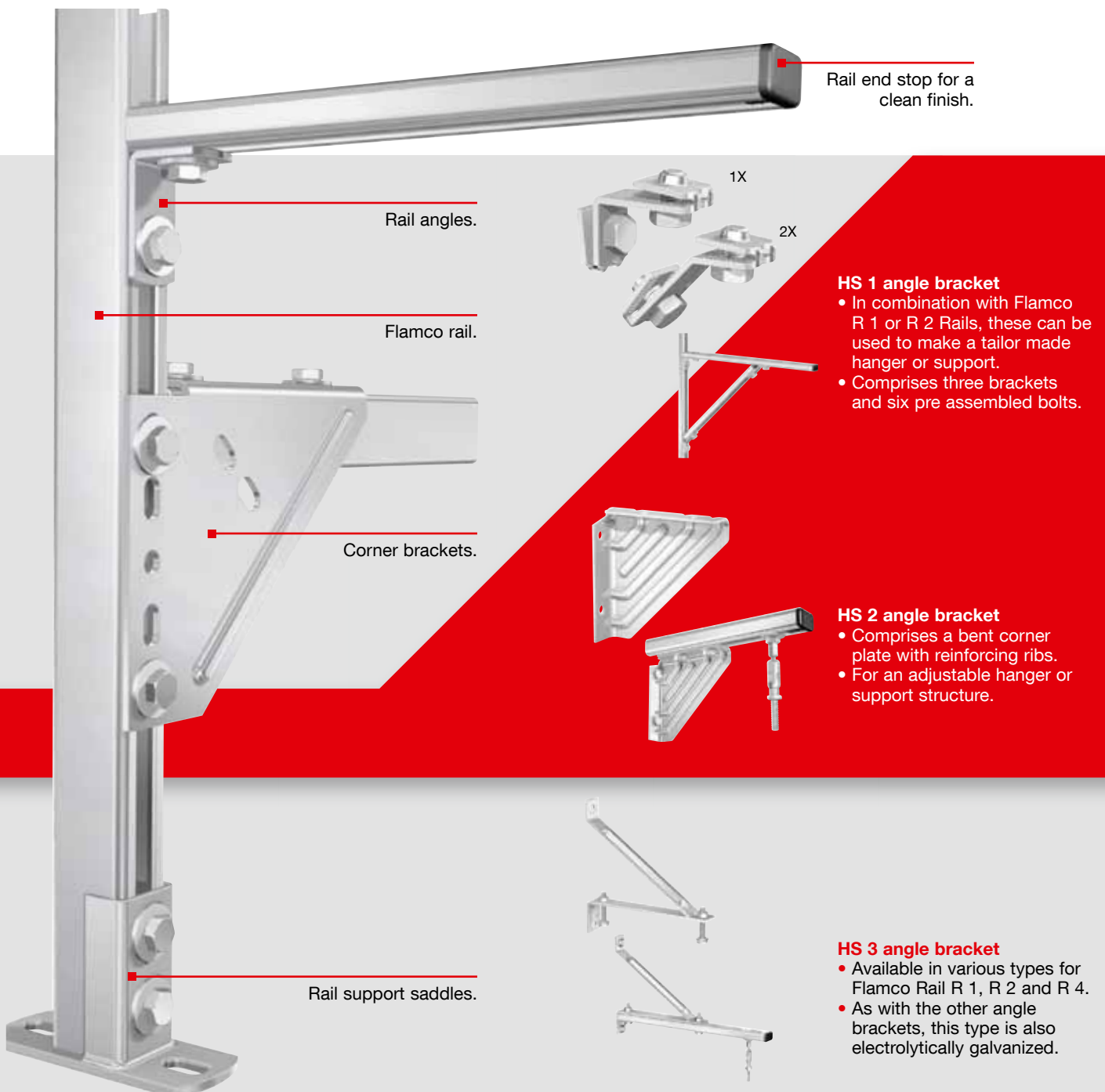
**HBS hammerhead bolt sets**

- Pre assembled sets consisting of a hammerhead bolt, nut and washer.
- A quick and easy way of fitting Flamco clips to a Flamco Rail.

# Even More Options with Flamco Rail Structures

No two installations are the same. This means that we are often asked which specific fixtures and fittings can best and most efficiently be deployed. Against the wall, on the ceiling, in a shaft or free standing. Flexibly or specifically rigid.

In this respect, Flamco rail offers countless possibilities. With Flamco Rail and accessories, you will never be faced with impossible situations.



Rail end stop for a clean finish.

Rail angles.

Flamco rail.

Corner brackets.

Rail support saddles.

1X

2X

### HS 1 angle bracket

- In combination with Flamco R 1 or R 2 Rails, these can be used to make a tailor made hanger or support.
- Comprises three brackets and six pre assembled bolts.

### HS 2 angle bracket

- Comprises a bent corner plate with reinforcing ribs.
- For an adjustable hanger or support structure.

### HS 3 angle bracket

- Available in various types for Flamco Rail R 1, R 2 and R 4.
- As with the other angle brackets, this type is also electrolytically galvanized.

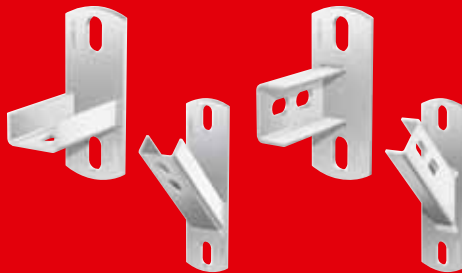


**GWK gas boiler wall console**

- For fitting/supporting wall mounted gas boilers.
- Corner brackets supplied with threaded rod, to make roof or wall fixture.
- Finished with rail end caps.

**PS 31 perpendicular rail clamp**

- For cross connection with Flamco Rail R 1.
- Ideal for making rail structures, e.g. in shafts.



RZ-V RAIL SUPPORT SADDLES

RZ-H RAIL SUPPORT SADDLES

**RZ-V and RZ-H rail support saddles**

- For rail support for mounting to a wall, ceiling or on the ground.
- Flamco rail can be attached with a single bolt.
- The slots make adjustment possible.
- Suitable for Flamco Rail R 0 - R 4.



VH 200

VH 210

VH 165

**VH mounting angles**

- Used for adjustable fixtures/wall mounted or ceiling mounted support structures, or on the ground.



**VP connector plates**

- The Flamco Rail can be attached to the holes with two bolts.
- Used for adjustable fixtures/wall mounted or ceiling mounted support structures, or on the ground.



**KF rail support flanges**

- For attaching all types of Flamco Rail to a wall, ceiling or the ground.
- With pre assembled bolts and washers.
- The slots make adjustment possible.



**RH rail mounting angles**

- For connecting two Flamco Rail R 1 - R 6 rails.
- Ideal for making rail structures, e.g. in shafts.



## Calculation method for Flamco Rail

### Calculation method for Flamco Rail

There are two types of load situations. One whereby the force is outside the fixing points of the Flamco rail (see graph A) and one whereby the force is between the fixing points of the Flamco Rail (see graph B).

In both cases, two values are important:

- force F.
- length L.

Force F is dependent on the pipe diameter and the distance between two suspension points.

With a load between two suspension points whereby several forces are at work, an equivalent load (F1) must be determined.

If the values of F and L are known, the Flamco rail required can be determined from graph A or B.

There are a number of examples shown with various loads.

The following applies to both graphs:

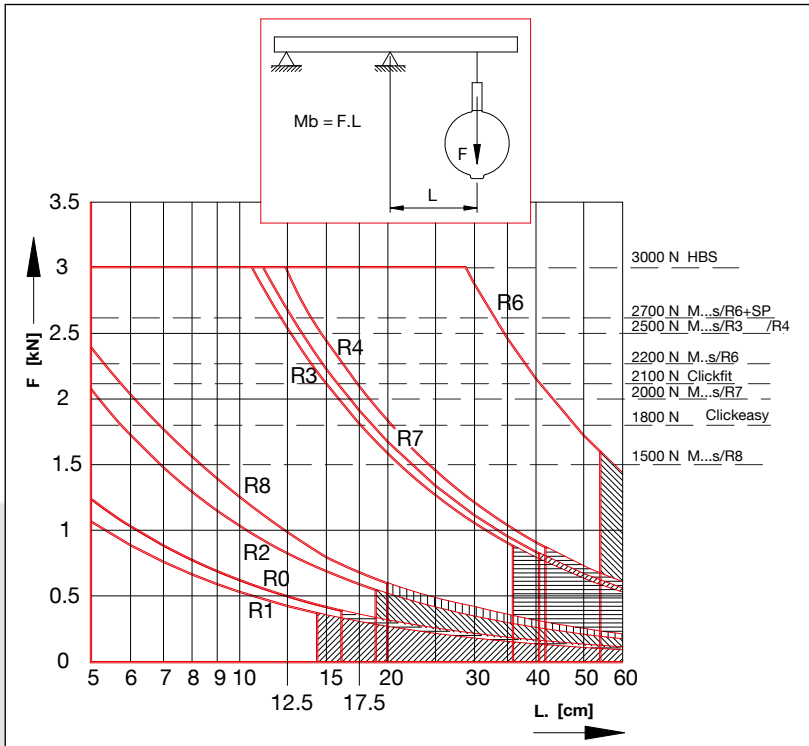
Graphs A and B are based on the usual strength calculations and apply a maximum bending stress of 140 N/mm<sup>2</sup>.

- The shaded areas show where a deflection of

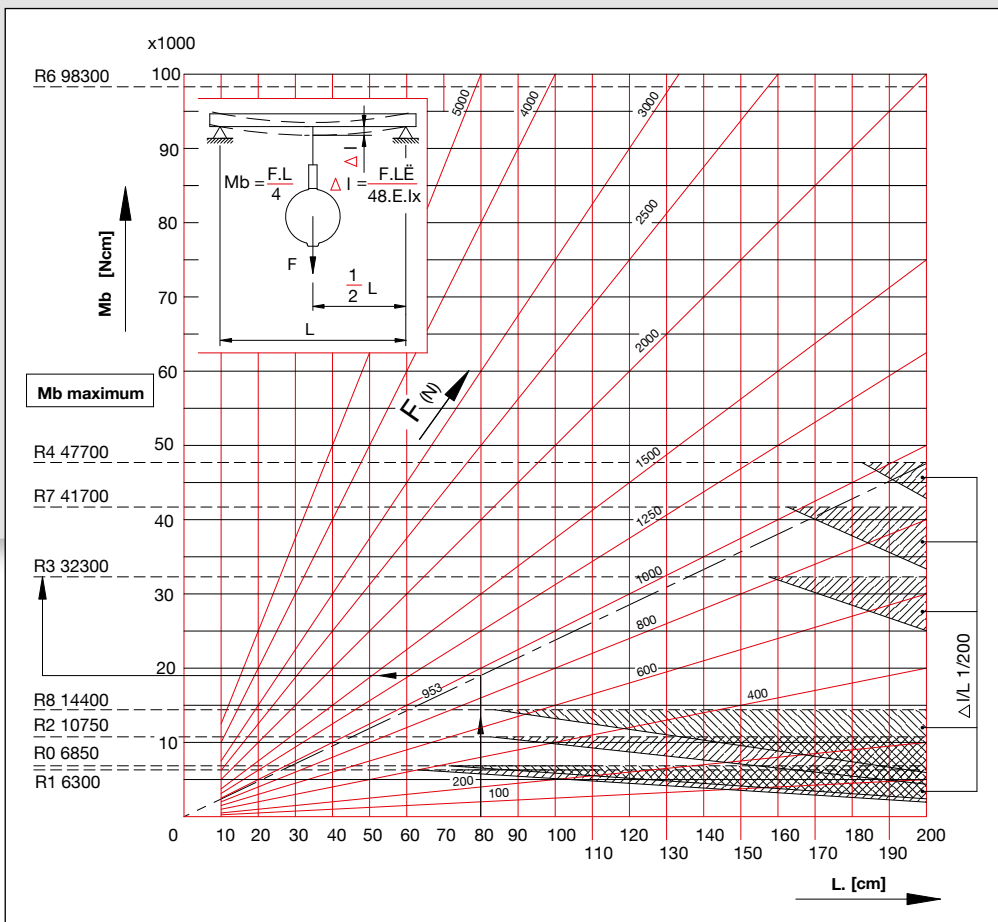
$$\frac{1}{250} \times L \text{ is exceeded.}$$



Graph A

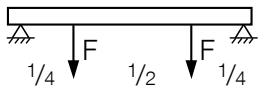
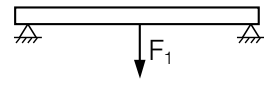
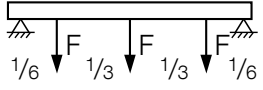
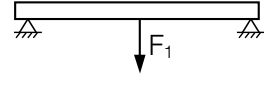
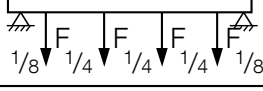
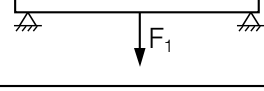


Graph B





**Table 1**

Number of loads and distribution	Equivalent load	Adjustment factor
		$F_1 = 1 \times F$
		$F_1 = 1.68 \times F$
		$F_1 = 2 \times F$

When there are two or more loads between support points, graph B must not be used.

The equivalent load must first be determined with the above correction factor.

The equivalent load  $F_1$  is determined as follows:

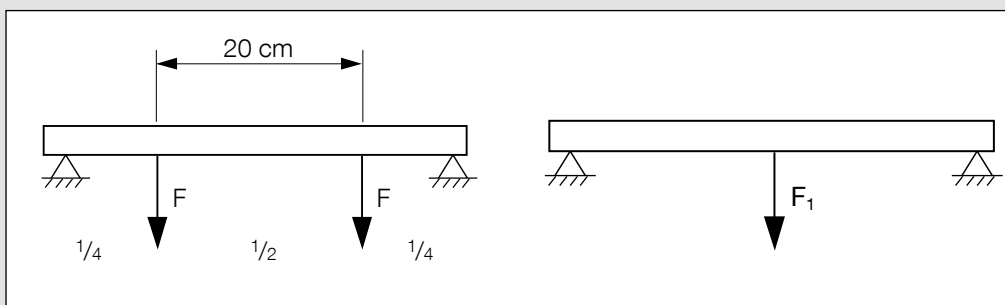
$$F_1 = \text{correction factor} \times F$$

Using the equivalent load  $F_1$  graph B may now be used to select the rail.

The partition may not exceed  $1/4$ ,  $1/6$  or  $1/8$ .

### Calculation example 1

Two pipes of diameter 139.7 mm, filled with water, have to be fixed to a rail and have a centre distance of 20 cm. The distance between the respective rails is 250 cm. What type of Flamco Rail should be used?



### What to do

The weight of the pipe is 27.1 kg/m, which means  $2.5 \times 27.1 = 67.75 \text{ kg} = 677.5 \text{ N}$  per pipe.

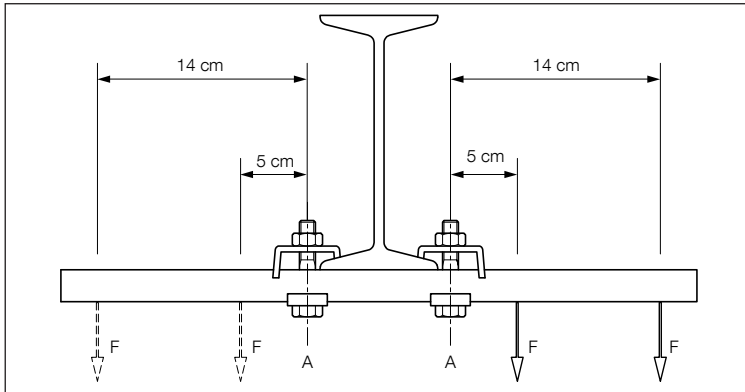
Table 1 shows that the equivalent load ( $F_1 = 1 \times F$ ) =  $1 \times 677.5 = 677.5 \text{ N}$ .

The distance between the rail fixing points ( $L$ ) is max. 40 cm. As graph B shows, the Flamco rail R 2 is most suitable.

**Conclusion:** Flamco rail R 2 meets the requirement.

**Calculation example 2**

Four pipes, dia. 76.1 mm, need to be fixed to a rail underneath a profile. The load is symmetrical in relation to the profile. The distance between the rails is 2 metres.



**What to do**

Pipe weight  $\varnothing$  76.1 mm plus water (gross weight) = 9.2 kg = 92 N/m = 184 N per 2 metres.

The bending moment in relation to A =  $184 \times 5 + 184 \times 14 = 3,496$  Ncm.

The maximum permitted bending moment of Flamco Rail R 1 = 5,350 Ncm.

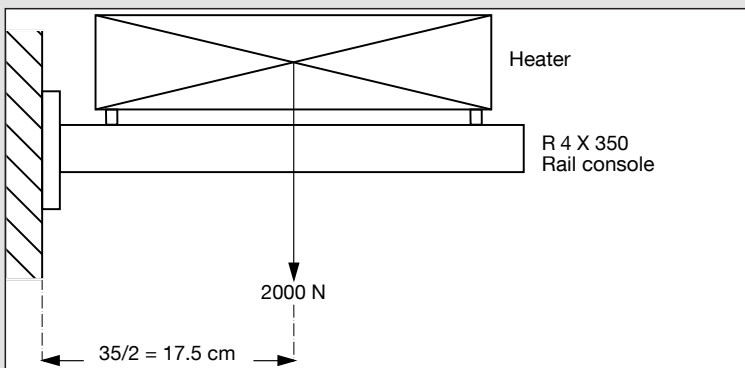
Conclusion: Flamco Rail R 1 meets the requirement.

**Calculation example 3**

An air heater of 200 kg (= 2,000 N) needs to be fixed on two rail consoles.

Will rail console R 4 x 350 meet the requirement?

Load information, Flamco rail R 4: Maximum point load (max. working load) = 2,500 N  
 Maximum bending stress = 36,550 Ncm.



**What to do**

Working load =  $\frac{2,000 \text{ N}}{4} = 500 \text{ N} < 2,500 \text{ N}$ : OK.

Bending stress =  $\frac{2,000 \text{ N}}{2} \times 17.5 \text{ cm} = 17,500 \text{ Ncm} < 36,550 \text{ Ncm}$ : OK.

**Conclusion:** Rail console R 4 x 350 meets the requirement.



## FLAMCO RAIL


Flamco rail is exceptionally versatile when it comes to one or more suspensions or wall fixings. These can be achieved quickly and skilfully whilst several suspensions can be mounted alongside each other on one rail. Flamco rails are available in several types with differing strength characteristics.

Rail accessories, such as sliding nuts and hammer head bolts make mounting easy, and can be adjusted after installation.

A comprehensive system giving excellent results - fast!

### R Flamco Rail

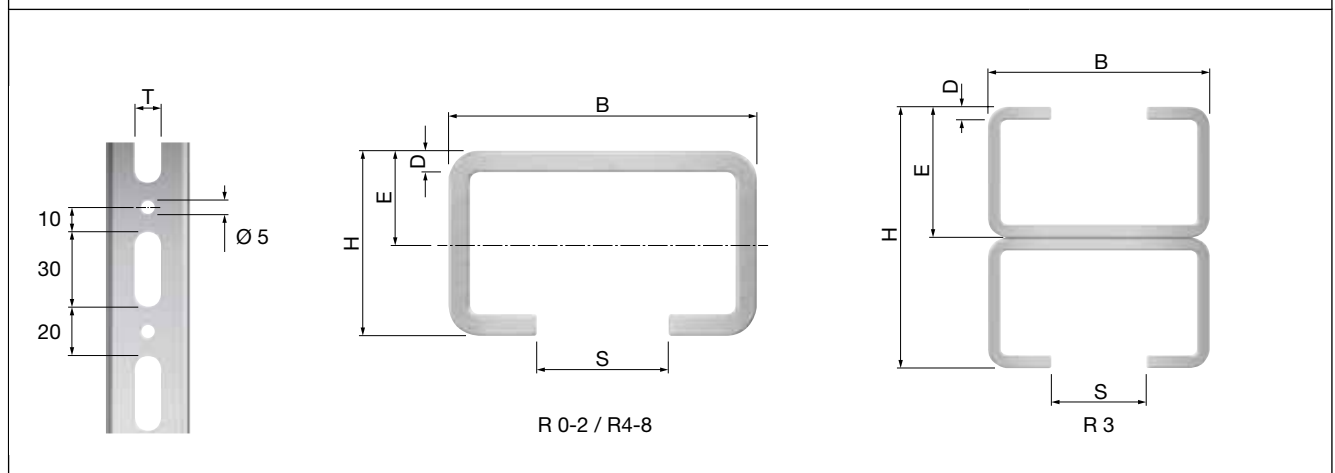
- Material: St 02 Z 275 NA. as per DIN 17162 TL. 1.
- Easy and quick mounting.
- With slotted holes for adjustable mounting.
- Safety load (V) = 3.

Type	Stock Length [m]	Ø [cm²]	Point load		Mb recom- mended [Ncm] **	Ix [cm⁴]	Wx [cm³]	Mass [kg/m]		Order code (priced per metre)
			Max. wor- kingload [N]	Rupture load [N]						
R 0 Sendzimir zinc plated	2	0.86	2000	6000	6850	0.338	0.428	0.66	520 m	50020
R 1 Sendzimir zinc plated *	2	1.09	2000	6000	6300	0.315	0.394	0.85	520 m	50010
R 1 Sendzimir zinc plated *	2	1.09	2000	6000	6300	0.315	0.394	0.85	780 m	50310
R 2 Sendzimir zinc plated *	2	1.45	2500	7500	10750	0.705	0.672	1.27	440 m	50011
R 2 Sendzimir zinc plated *	3	1.45	2500	7500	10750	0.705	0.672	1.27	660 m	50311
R 4 Sendzimir zinc plated	2	2.92	2500	7500	47700	6.914	2.981	2.35	352 m	50013
R 4 Sendzimir zinc plated	3	2.92	2500	7500	47700	6.914	2.981	2.35	480 m	50313
R 6 Sendzimir zinc plated	2	4.57	3000	9000	98300	1.8548	6.144	3.6	208 m	50017
R 7 Sendzimir zinc plated *	2	2.46	2000	6000	41700	5.381	2.606	1.98	456 m	50029
R 7 Sendzimir zinc plated *	3	2.46	2000	6000	41700	5.381	2.606	1.98	684 m	50019

\* Available in every desired length up to 6 metres.

\*\* Maximum point load.

### Dimensions R Flamco Rail



Type	Dimensions					
	H [mm]	B [mm]	D [mm]	E [mm]	S [mm]	T [mm]
R 0 Sendzimir zinc plated	18	28	1.25	9	14	8.5
R 1 Sendzimir zinc plated	15	30.5	2	8	14.5	10.5
R 2 Sendzimir zinc plated	20	34	2.4	10.5	14.5	10.5
R 3 Sendzimir zinc plated	40	34	2.4	-	14.5	10.5
R 4 Sendzimir zinc plated	46	35	2.5	23	14.5	13.5
R 6 Sendzimir zinc plated	60	40	3	30	14.5	13.5
R 7 Sendzimir zinc plated	41	41	2	21	14.5	13.5

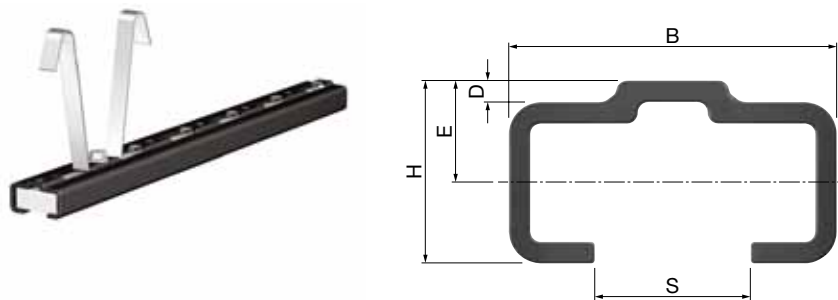
**INSERT RAIL**


Flamco R 1i insert rail is identical to Flamco R 1 rail with the exception of the anchor brackets so that it can be cast into the soffit or wall to give a flush finish.

**R1i Flamco Insert Rail**

R1i insert rail for cast in-situ applications.

- Black finish.
- Polystyrene filling strip, which ensures that the Flamco rail is not filled with concrete during pouring. The filling strip can be easily removed after pouring.

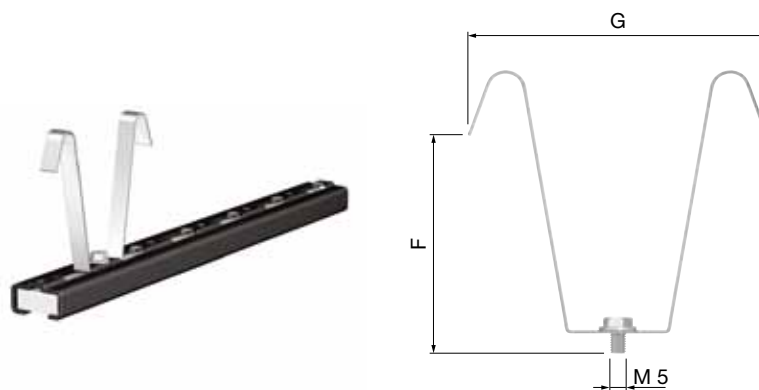



Type	Dimensions							Order Code
	D [mm]	B [mm]	H [mm]	E [mm]	S [mm]	L. [m]		
R1i	2	30	17	7	14.5	2	2m	50003

**A1i Anchor Bracket**

For mounting Flamco R 1i insert rail in concrete constructions.

- Bolt: electrolytically zinc plated.
- Washer: electrolytically zinc plated.
- Mounted in the Flamco rail prior to installation.
- M 5 bolt and washer are supplied with the anchor.



Type	Suitable for rail	Dimensions			Order Code
		F [mm]	G [mm]		
A1i	R1i	75	85	1	50101



## RAIL CONSOLES

For suspension or support directly against a wall.

### R .x... Rail Console

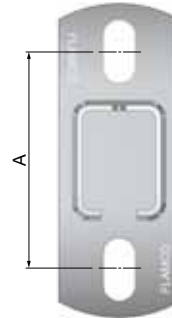
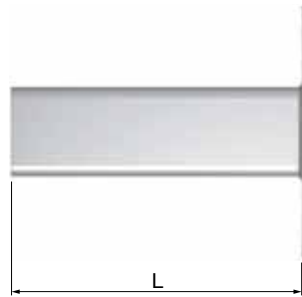
- Electrolytically zinc plated.
- Stable fastening.
- Rail brackets with different sizes can be supplied on request.



R 1 x 150 - R 1 x 600



R 1 x 700



Type	Flamco Rail	Dimensions				Max. load at end point L [N]		Order Code
		A [mm]	L [mm]	Base plate [mm]	Slotted hole [mm]			
<b>R 1 x 150</b>	R 1	80	150	115 x 20	11 x 22	400	1	71665
<b>R 1 x 200</b>	R 1	80	200	115 x 20	11 x 22	300	1	71670
<b>R 1 x 300</b>	R 1	80	300	115 x 20	11 x 22	200	1	71666
<b>R 1 x 400</b>	R 1	80	400	115 x 20	11 x 22	150	1	71667
<b>R 2 x 200</b>	R 2	80	200	115 x 40	11 x 22	500	1	71675
<b>R 4 x 150</b>	R 4	90	150	130 x 50	13 x 26	3000	1	71680
<b>R 4 x 250</b>	R 4	90	250	130 x 50	13 x 26	1800	1	71682
<b>R 4 x 350</b>	R 4	90	350	130 x 50	13 x 26	1250	1	71684
<b>R 6 x 480</b>	R 6	134	480	200 x 100	13 x 26	2000	1	71690
<b>R 6 x 750</b>	R 6	134	750	200 x 100	13 x 26	1250	1	71692
<b>R 7 x 200</b>	R 7	90	200	130 x 50	13 x 26	2000	1	71694
<b>R 7 x 300</b>	R 7	90	300	130 x 50	13 x 26	1250	1	71695
<b>R 7 x 400</b>	R 7	90	400	130 x 50	13 x 26	1000	1	71696
<b>R 7 x 500</b>	R 7	90	500	130 x 50	13 x 26	750	1	71697
<b>R 7 x 600</b>	R 7	90	600	130 x 50	13 x 26	500	1	71698
<b>R 7 x 700*</b>	R 7	440	700	490 x 44	13 x 30	400	1	71699

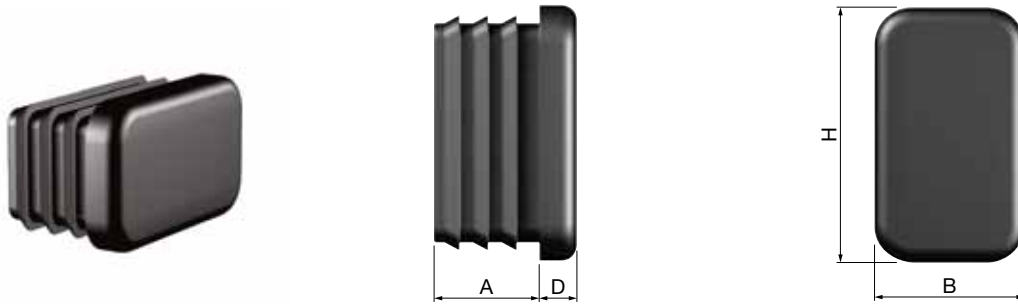
\* With shore.

**RAIL END CAPS**

For a neat finish to Flamco rail R 1 - R 8 and rail consoles. (For a neat finish to Flamco rail R 3, we advise two RD 2 rail end caps.)

**RD Rail End Cap**

- Black plastic.
- Easy to fit and self-securing.



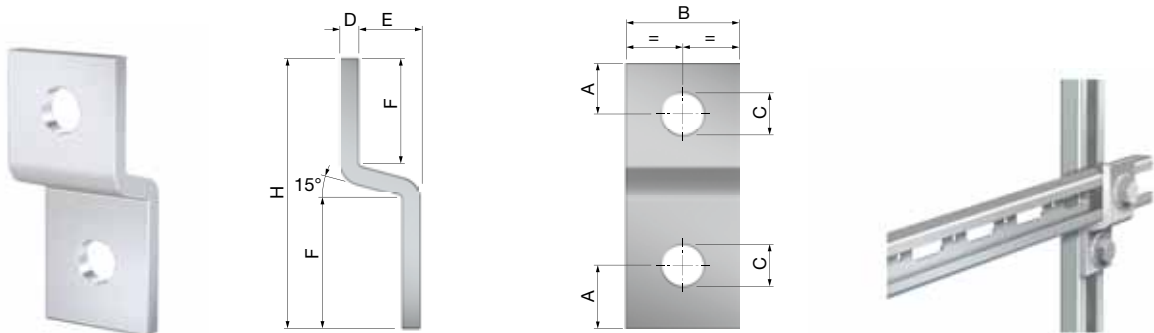
Type	Suitable for rail	Dimensions				📦	Order Code
		A [mm]	B [mm]	D [mm]	H [mm]		
RD 1	R 1	12	15	5	30	100	50501
RD 2	R 2/3	12	20	5	35	100	50502
RD 4	R 4	14	35	5	46	100	50504
RD 6	R 6	14	41	5	60	100	50506
RD 7	R 7	14	40	5	40	100	50507
RD 8	R 8	14	30	5	40	100	50508

**RAIL CLAMP SQUARES**

**PS 31 Rail Clamp (square)**

For cross connection with Flamco rail R 1, for example in shafts.

- Electrolytically zinc plated.



Type	Suitable for rail	Dimensions							📦	Order Code
		A [mm]	B [mm]	Ø C [mm]	D [mm]	E [mm]	F [mm]	H [mm]		
PS 31	R 1	15	30	11	5	16	31	70	50	71650



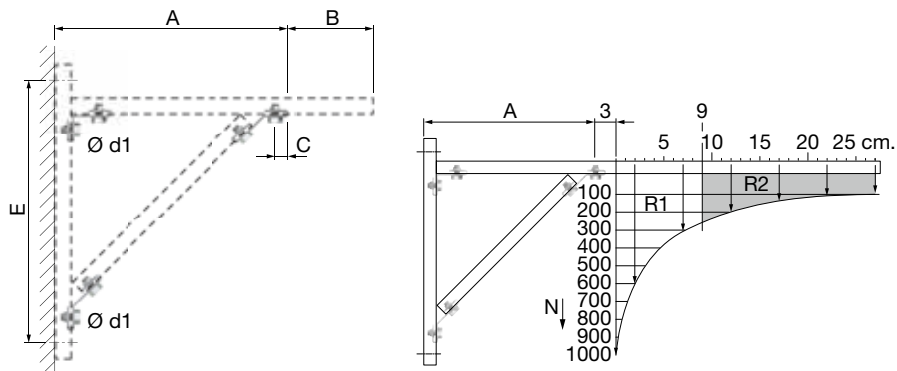


## ANGLE SUPPORT

### HS 1 Angle Support Set

For making a customised (adjustable) suspension or support in combination with Flamco rail R 0, R 1 or R 2.

- Electrolytically zinc plated.
- Consists of one 90° corner bracket, two 135° corner brackets and six M 10 x 15 bolts.
- The rail can be ordered separately.

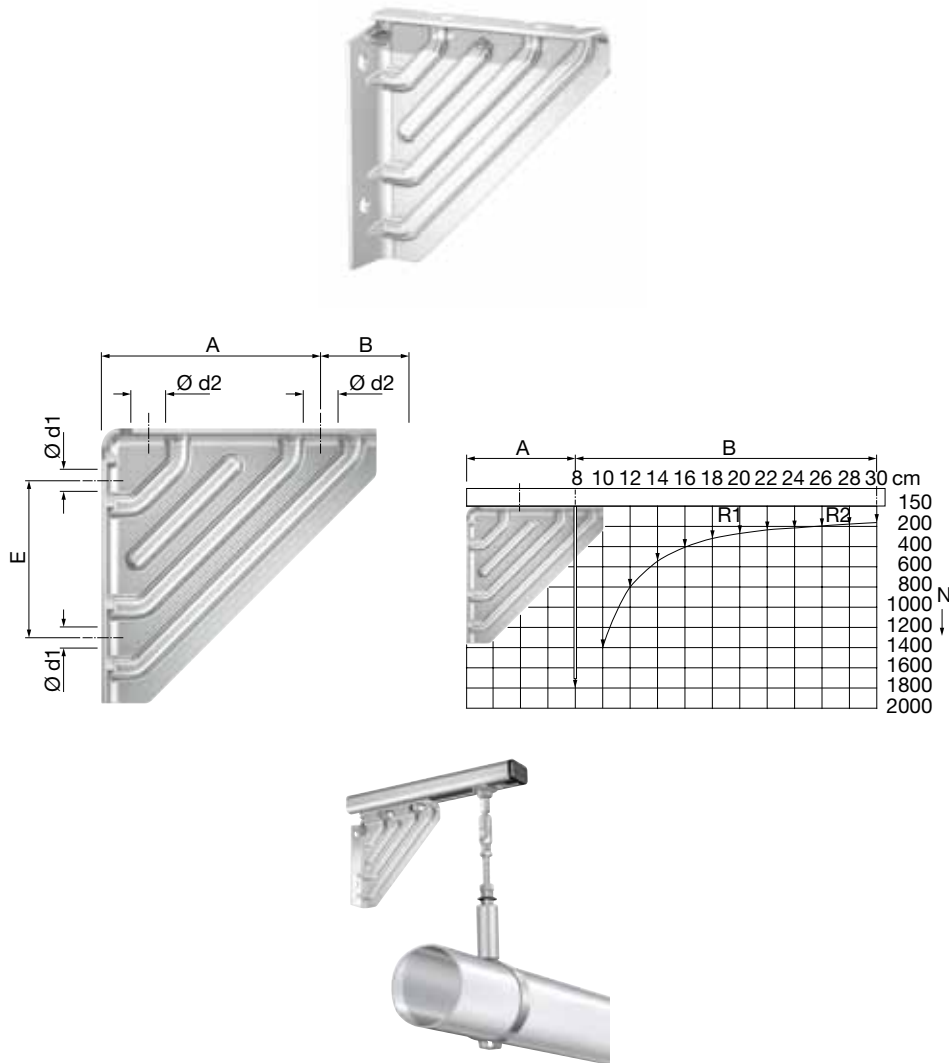



Type	Suitable for rail	Dimensions					Max. working load			Order Code
		A [mm]	B max. [mm]	E [mm]	Ø d1 [mm]	C [mm]	A [N]	A+B [N]		
HS 1	R 1	140 - 530	90	A+60	10	30	1000	260	25	71600
HS 1	R 2	155 - 780	270	A+60	10	30	1000	100	25	71600

**HS 2 Angle Support**

For making a customised (adjustable) suspension or support in combination with Flamco rail R 0, R 1 or R 2, or with D 6 or D 8 threaded rod.

- Electrolytically zinc plated.
- Material thickness: 2 mm.
- Consists of an angled corner plate with reinforcing ribs and mounting holes.



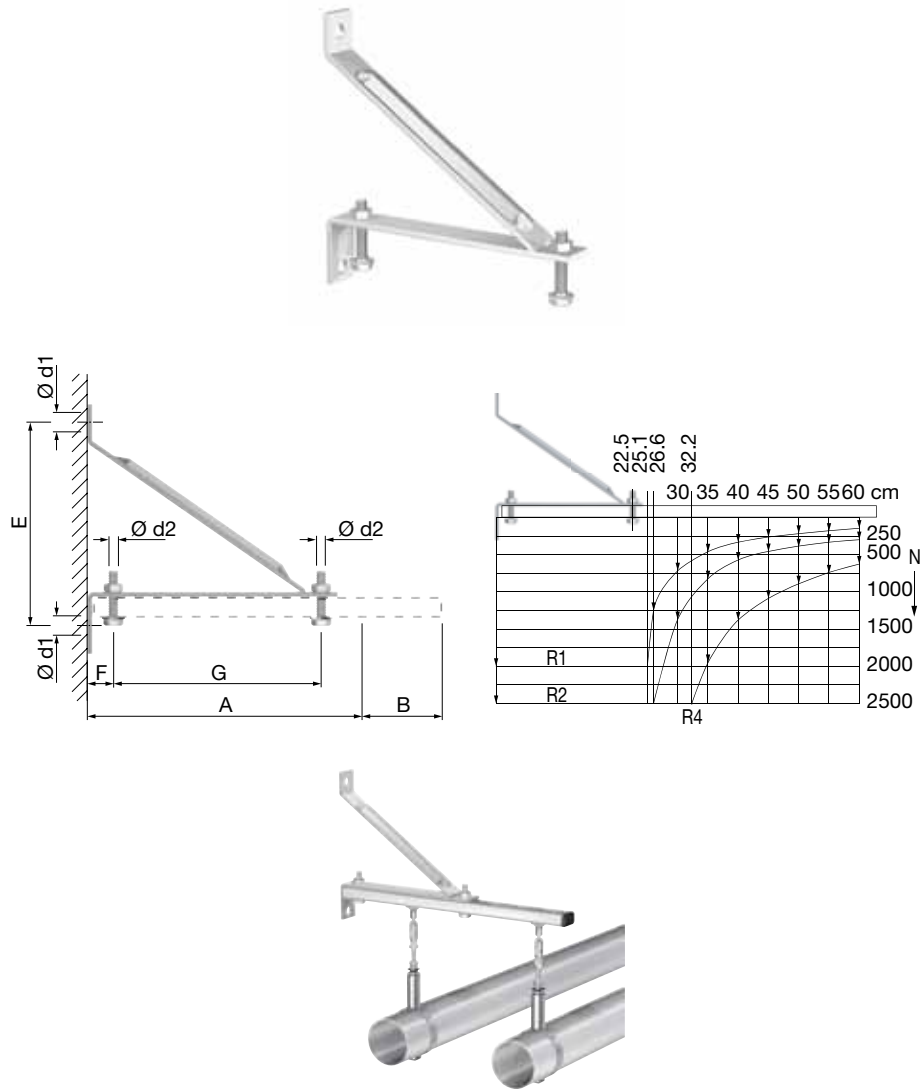
Type	Suitable for threaded rod or rail	Dimensions					Max. working load			Order Code
		A [mm]	B max. [mm]	E [mm]	Ø d1 [mm]	Ø d2 [mm]	A [N]	A+B [N]		
HS 2	D 6, D 8, R 0 - 2	80	220	56	6	9	1800	156	25	71602



## HS 3 Angle Support

For making a customised (adjustable) suspension or support in combination with Flamco rail R 0, R 1 R 2 or R 4.

- Electrolytically zinc plated.
- Angle support HS 3 can be supplied in two versions:
  - HS 3/R 1 - R 2, including angle support, two M 10 x 35 bolts and two washers.
  - HS 3/R 4, including angle support, two M 10 x 80 bolts, two washers and two clamping plates.



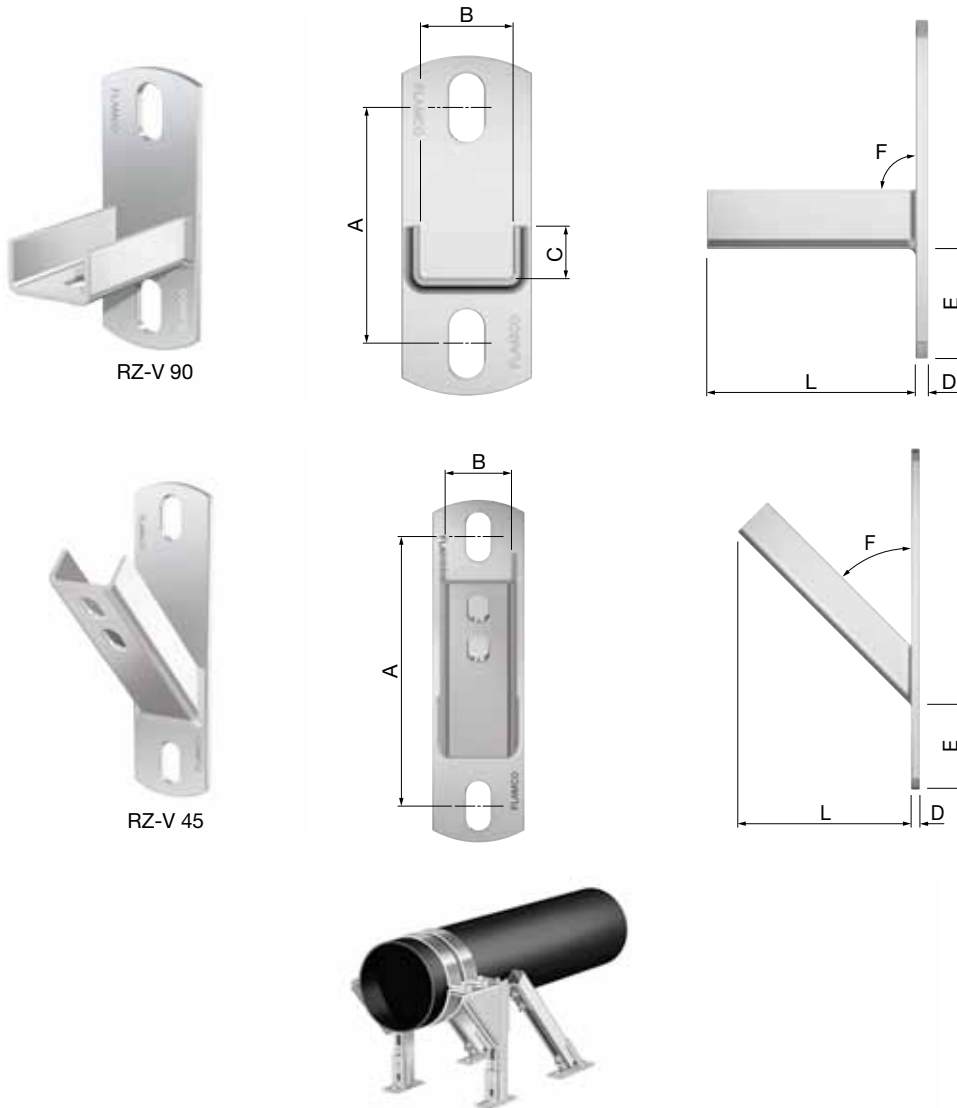
Type	Suitable for rail	Dimensions							Max. working load			Order Code
		A [mm]	B (max.) [mm]	E [mm]	F [mm]	G [mm]	Ø d1 [mm]	Ø d2 [mm]	A [N]	A+B [N]		
HS 3	R 1 - 2	260	340	210	25	200	13	11	2500	194 - 260	20	71603
HS 3	R 4	260	340	210	25	200	13	11	2500	625	20	71604

**RAIL SUPPORT SADDLES**

**RZ-V Rail Support Saddles**

For mounting Flamco rails R 0, R 1, R 2, R 3 and R 4 on the wall, ceiling or floor.

- Electrolytically zinc plated.
- One bolt rail fastening because of hole pattern.
- Adjustable through slotted holes.



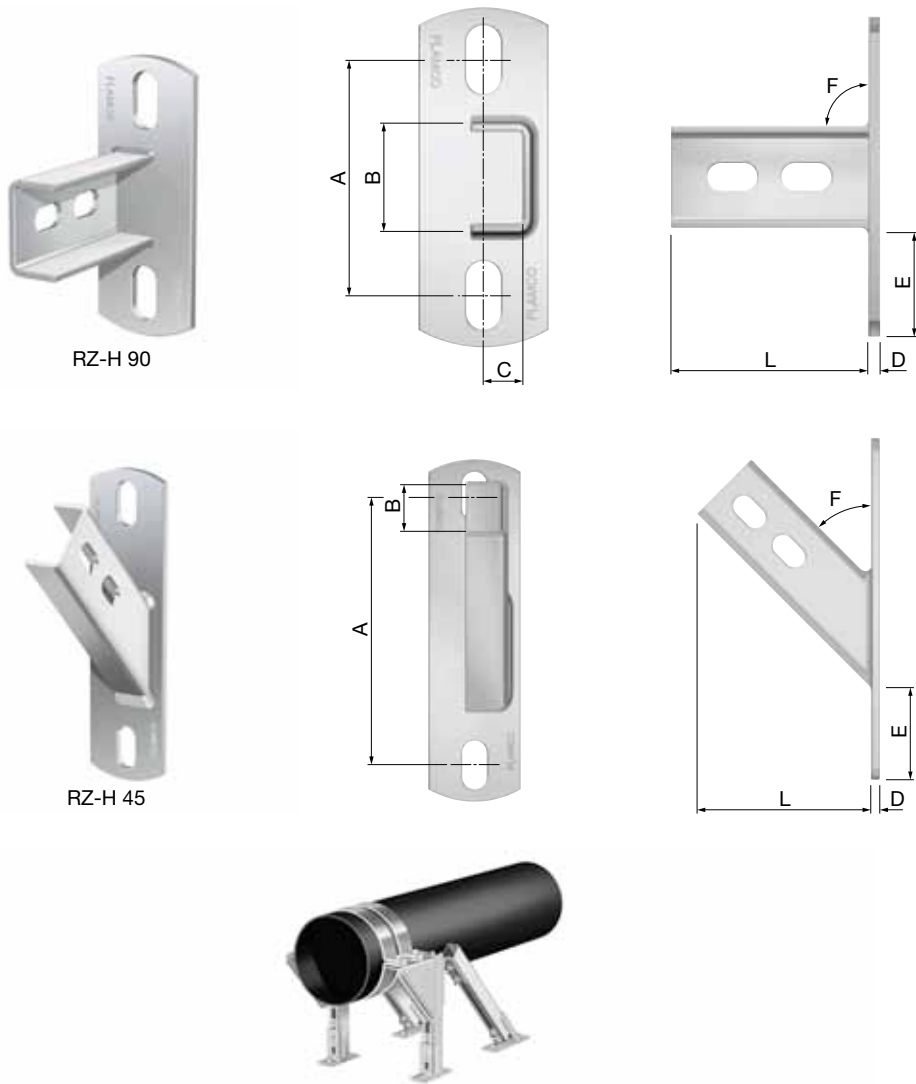
Type	Suitable for rail	Dimensions								Slotted hole		Order Code	
		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	L [mm]	Base Plate [mm]	Saddle [mm]			
<b>RZ-V 90</b>	R 0 - 4	90	35.5	20	5	45	90°	80	130 x 50	13 x 26	11 x 20	10	71631
<b>RZ-V 45</b>	R 0 - 4	145	35.5	20	5	45	45°	94	185 x 50	13 x 26	11 x 20	10	71636



## RZ-H Rail Support Saddles

For mounting Flamco rails R 0, R 1, R 2, R 3 and R 4 on the wall, ceiling or floor.

- Electrolytically zinc plated.
- One bolt rail fastening because of hole pattern.
- Adjustable through slotted holes.



Type	Suitable for rail	Dimensions								Slotted hole			Order Code
		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	L [mm]	Base Plate [mm]	Saddle [mm]			
<b>RZ-H 90</b>	R 0 - 4	90	35.5	15	5	45	90°	80	130 x 50	13 x 26	11 x 20	10	71630
<b>RZ-H 45</b>	R 0 - 4	145	35.5	15	5	45	45°	94	185 x 50	13 x 26	11 x 20	10	71635

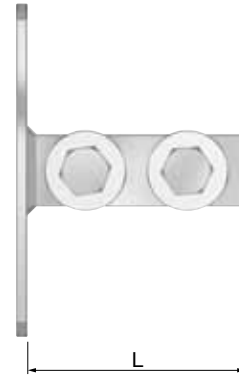
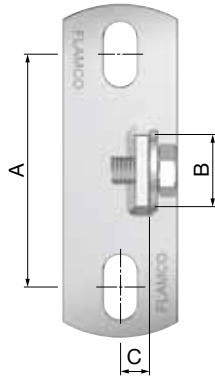
**RAIL SUPPORT FLANGES**

**KF Rail Support Flanges**

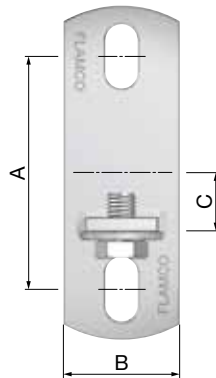
- Slot 11 x 22 mm.
- Screw M 10.




KF-H



KF-V



Type	Suitable for rail	Dimensions						Bolts		Order Code
		A [mm]	B [mm]	C [mm]	L [mm]	Base Plate [mm]	Slotted Hole [mm]			
<b>KF-H</b>	R 0 - 8	80	25	10	75	115 x 40	11 x 22	M 10	10	71640
<b>KF-V</b>	R 0 - 8	80	25	20	75	115 x 40	11 x 22	M 10	10	71641



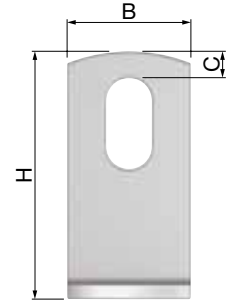
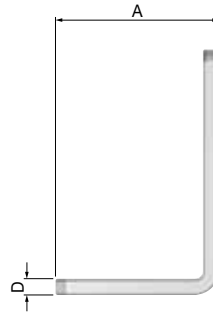


## MOUNTING ANGLES

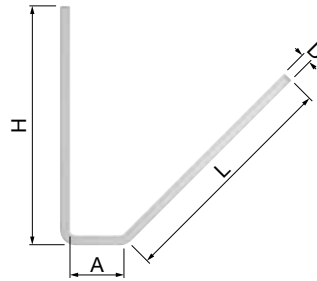
### RH Rail Angle



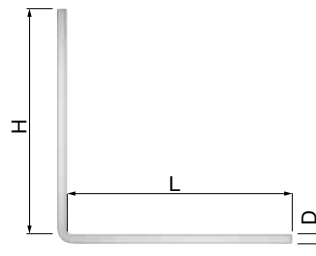
RH 90 -1



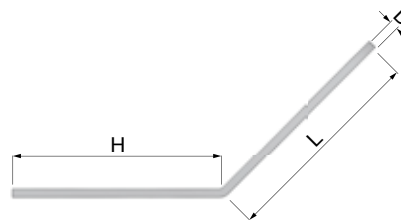
RH 45-1



RH 90 -2



RH 45 -2



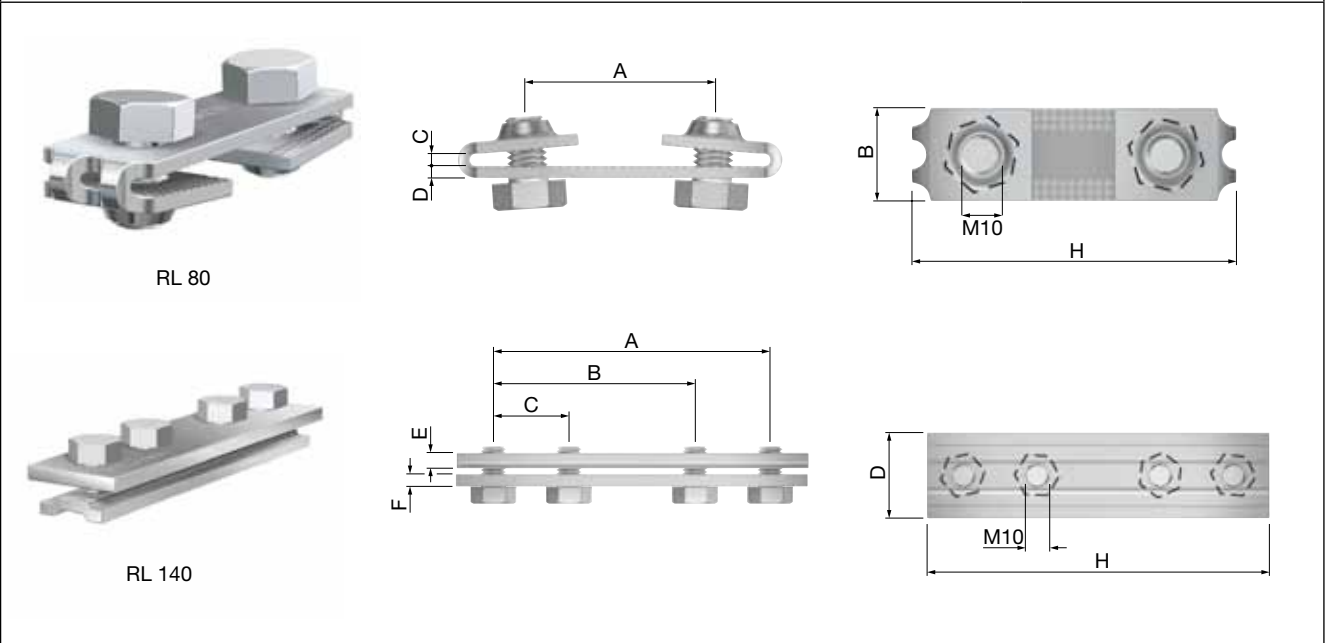
Type	Suitable for rail	Dimensions						Slotted hole [mm]		Order Code
		A [mm]	B [mm]	C [mm]	D [mm]	H [mm]	L [mm]			
<b>RH 90 - 1</b>	R 0 - 8	40	30	6.5	4	60	-	11 x 22	50	71606
<b>RH 45 - 2</b>	R 0 - 8	25	35	-	5	110	110	11 x 40	25	71620
<b>RH 90 - 2</b>	R 0 - 8	-	35	-	5	110	110	11 x 40	25	71621
<b>RH 135 - 2</b>	R 0 - 8	-	35	-	5	115	115	11 x 40	25	71622

**RAIL EXTENSIONS**

**RL Rail Extender**

For the in-line connection of two Flamco rails.

- Electrolytically zinc plated.
- Including pre-assembled M 10 bolts.



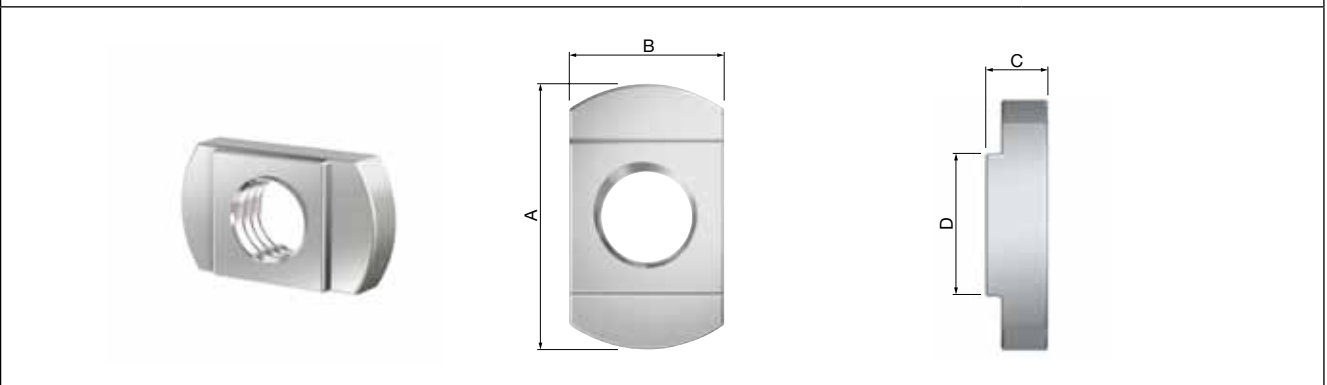
Type	Suitable for rail	Dimensions							Order Code	
		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]		
RL 80	R 0 - R 8	45	24	3	3	-	-	80	50	71605
RL 140	R 0 - R 8	110	80	30	35	6.2	5	140	50	71608

**SLIDING NUTS**

**M..s Sliding Nuts**

For easy mounting of a suspension in Flamco rail.

- Electrolytically zinc plated.



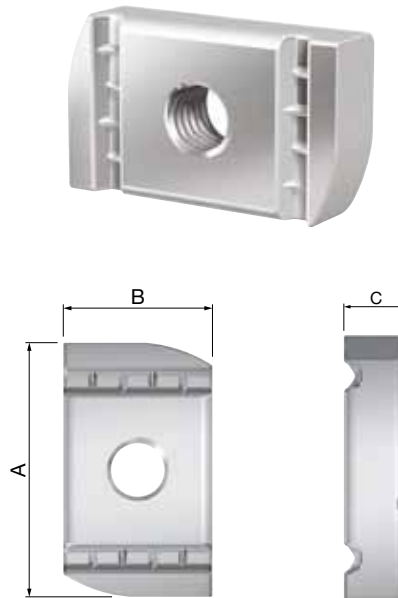
Type	Suitable for rail	Connection	Dimensions				Order Code	
			A [mm]	B [mm]	C [mm]	D [mm]		
M 6s	R 0 - 8	M 6	23	15	5	14	1000	80301
M 8s	R 0 - 8	M 8	23	15	5	14	1000	80302
M 10s	R 0 - 8	M 10	23	15	5	14	1000	80303
M 12s	R 0 - 8	M 12	25	22	6	14	250	80304



## M..SR Sliding Nuts

Extra strong version (Strut) for the easy mounting of a suspension in Flamco rail.

- Electrolytically zinc plated.



Type	Suitable for rail	Connection	Dimensions				Order Code
			A [mm]	B [mm]	C [mm]		
M 6 SR	R 6 - 8	M 6	34.5	20	6	100	80311
M 8 SR	R 6 - 8	M 8	34.5	20	8	100	80312
M 10 SR	R 6 - 8	M 10	34.5	20	9	100	80313
M 12 SR	R 6 - 8	M 12	34.5	20	10	100	80314
M 16 SR	R 6 - 8	M 16	34.5	20	12	100	80315

## NUTS

For easy mounting of a suspension in Flamco rail.

- Electrolytically zinc plated.

### M Nuts

Type	Spanner size (SW)	Connection	Height of nut [mm]		Order Code
M 6	10	M 6	5	1000	70201
M 8	13	M 8	6.5	1000	70202
M 10	17	M 10	8	1000	70203
M 12	19	M 12	10	500	70204
M 16	24	M 16	13	250	70205
M 20	30	M 20	16	100	70206



### M..h Nuts

Type	Spanner size (SW)	Connection	Height of nut [mm]		Order Code
M 6h	10	M 6	2.5	1000	70101
M 8h	13	M 8	3	1000	70102
M 10h	17	M 10	4	1000	70103

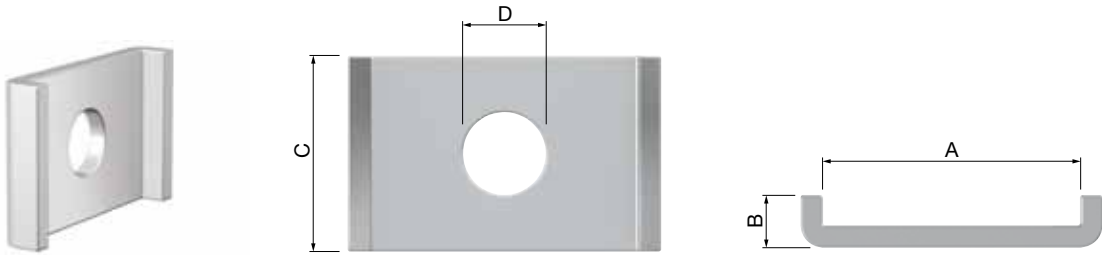


**CLAMPING PLATES**

For easy mounting of a suspension in Flamco rail.

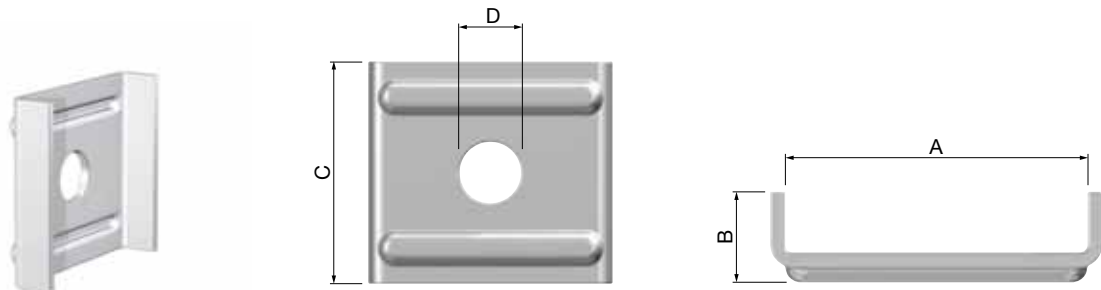
- Electrolytically zinc plated.

**SP Clamping Plates**



Type	Suitable for rail	Connection	Dimensions				📦	Order Code
			A [mm]	B [mm]	C [mm]	D [mm]		
SP 6	R 2 - 4	M 6	34	7	25	6.5	100	80606
SP 8	R 2 - 4	M 8	34	7	25	8.5	100	80608
SP 10	R 2 - 4	M 10	34	7	25	8.5	100	80610
SP 12	R 2 - 4	M 12	34	7	25	12.5	100	80612

**SP.SR Clamping Plates**



Type	Suitable for rail	Connection	Dimensions				📦	Order Code
			A [mm]	B [mm]	C [mm]	D [mm]		
SP 6 SR	R 6 - 8	M 6	40	12	40	6.5	50	80630
SP 8 SR	R 6 - 8	M 8	40	12	40	8.5	10	80632
SP 10 SR	R 6 - 8	M 10	40	12	40	11.5	50	80634
SP 12 SR	R 6 - 8	M 12	40	12	40	12.5	50	80636



## WASHERS

For easy mounting of a suspension in Flamco rail.

- Electrolytically zinc plated.

<b>S Washers</b>					
Type	Connection	Dimensions			Order Code
		Ø [mm]	D. [mm]		
<b>S 6</b>	M 6	14	0.8	250	70801
<b>S 8</b>	M 8	18	1.5	250	70802
<b>S 10</b>	M 10	22	1.5	250	70803
<b>S 12</b>	M 12	28	2.0	1000	70804
<b>S 16</b>	M 16	33	2.0	250	70805
<b>S 20</b>	M 20	40	2.5	250	70806



<b>S..s Washers</b>					
Type	Connection	Dimensions			Order Code
		Ø [mm]	D. [mm]		
<b>S 6s</b>	M 6	25	2.0	1000	70811
<b>S 8s</b>	M 8	28	2.0	1000	70812
<b>S 10s</b>	M 10	28	2.0	1000	70813



<b>S..SR Washers</b>					
Type	Connection	Dimensions			Order Code
		Ø [mm]	D. [mm]		
<b>S 6 SR</b>	M 6	40	3.0	100	70831
<b>S 8 SR</b>	M 8	40	3.5	100	70832
<b>S 10 SR</b>	M 10	40	3.5	100	70833
<b>S 12 SR</b>	M 12	40	5.0	100	70834
<b>S 16 SR</b>	M 16	40	6.5	25	70835

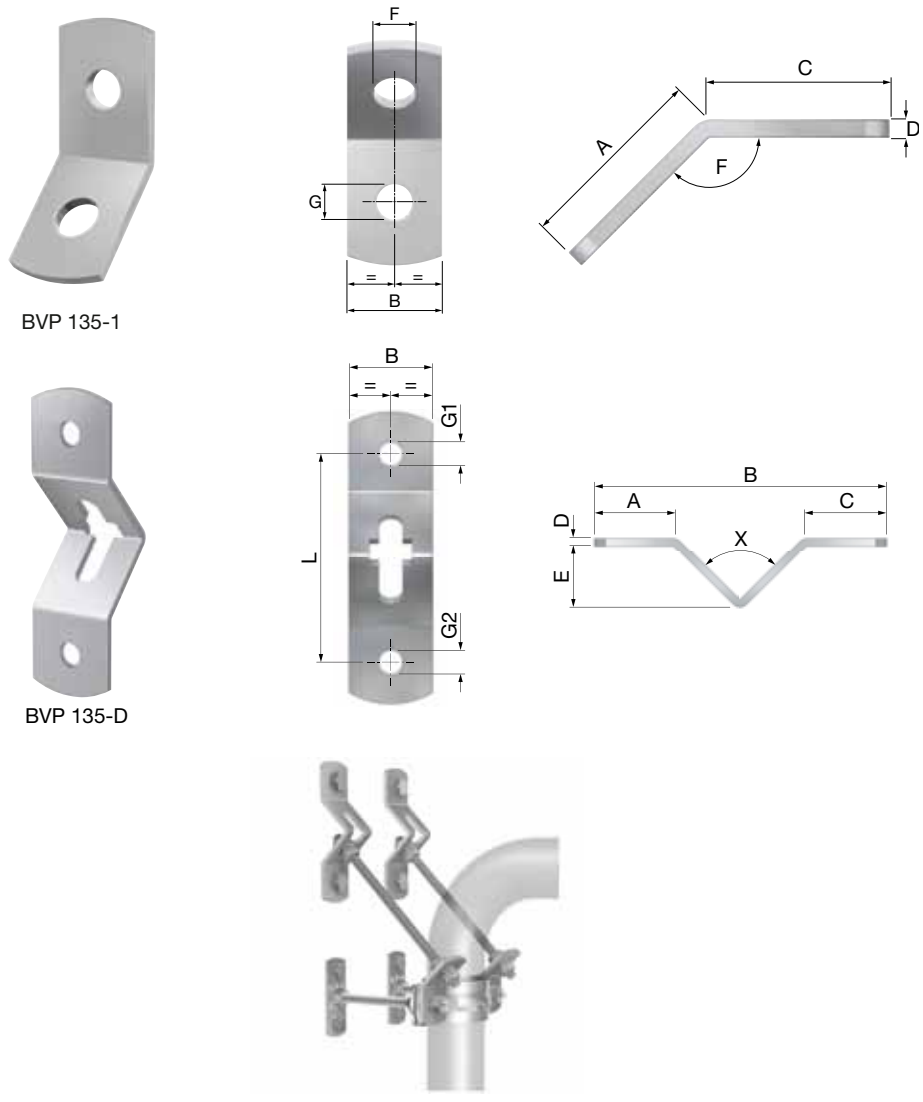


**FIXED POINT CONSTRUCTIONS**

**BVP Fixed Point Construction**

Specially suited for fixed point constructions in combination with BSP fixed point clips, D 10 stud and GP backplates.

- Electrolytically zinc plated.



Type	Dimensions										Order Code
	A [mm]	B [mm]	C [mm]	X [mm]	G 1 [mm]	G 2 [mm]	D [mm]	L [mm]	Slotted hole [mm]		
<b>BVP 135-1</b>	40	30 x 4	-	135°	Ø 11	Ø 13	-	-	-	50	71623
<b>BVP 135-D</b>	39	40 x 4	34	90°	Ø 11	Ø 13	140	100	11	25	71624

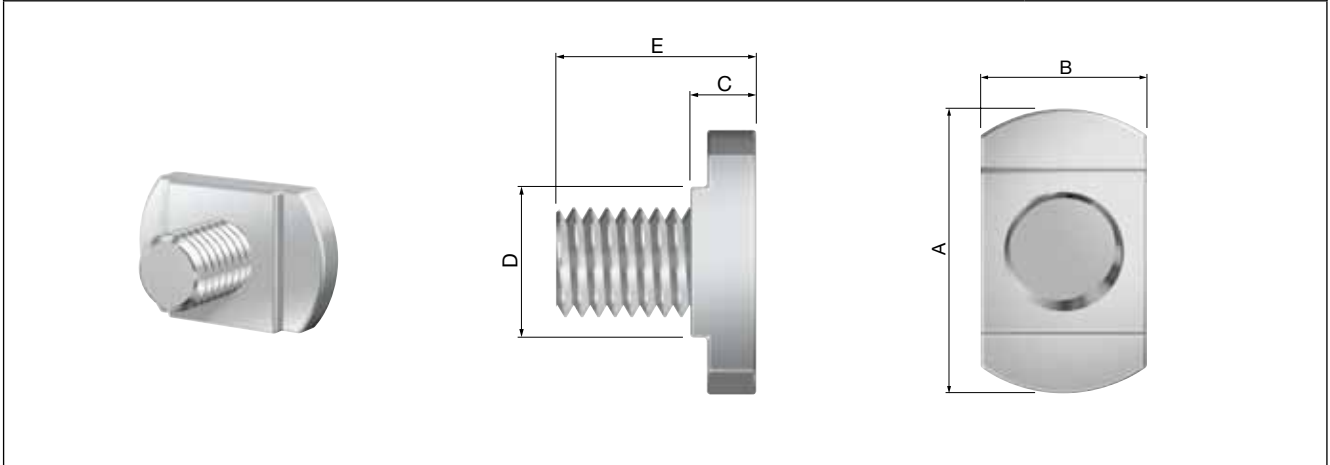




## HAMMER HEAD BOLTS

- Electrolytically zinc plated.

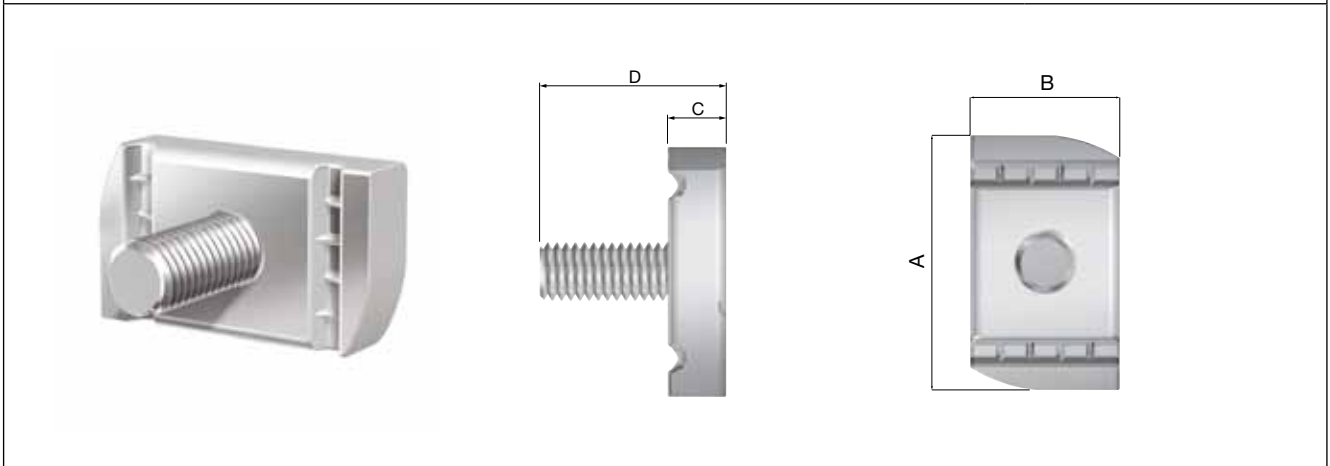
### HB Hammer Head Bolts



Type	Suitable for rail	Connection	Dimensions						Order Code
			A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
HB 6	R 0 - 8	M 6	24	14	5	14	14	500	70401
HB 8	R 0 - 8	M 8	24	14	5	14	15	500	70402
HB 10	R 0 - 8	M 10	24	14	5	14	17	500	70403
HB 12	R 0 - 8	M 12	24	14	6	14	20	500	70404

### HB..SR Hammer Head Bolts

- Extra strong version (Strut).

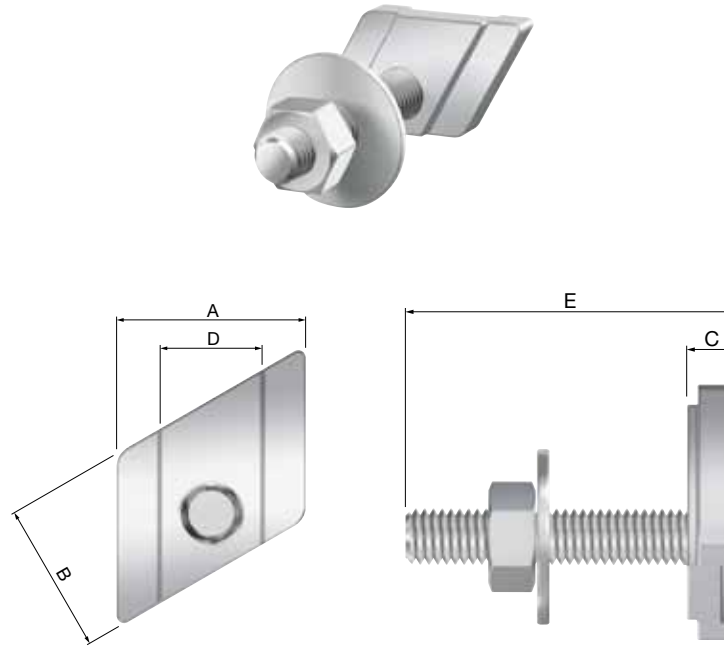


Type	Suitable for rail	Connection	Dimensions					Order Code
			A [mm]	B [mm]	C [mm]	D [mm]		
HB 6 SR	R 6 - 8	M 6	34.5	20	6	20	100	70411
HB 8 SR	R 6 - 8	M 8	34.5	20	8	24	100	70412
HB 12 SR	R 6 - 8	M 12	34.5	20	10	30	100	70414

**HBS Hammer Head Bolt Sets**

The hammer head bolt set makes simple and fast mounting possible of Flamco pipe mounting material to all types of Flamco rail.

- Supplied complete with nut and washer.
- Safety load (V) = 3.



Type	Connection	Max. working load [N]	Dimensions					📦	Order Code
			A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
HBS 8 x 25	M 8	3000	25	20	6.5	13.5	20	10	70450
HBS 8 x 30	M 8	3000	25	20	6.5	13.5	25	10	70451
HBS 8 x 40	M 8	3000	25	20	6.5	13.5	35	10	70452
HBS 8 x 50	M 8	3000	25	20	6.5	13.5	45	10	70453
HBS 8 x 60	M 8	3000	25	20	6.5	13.5	55	10	70454
HBS 8 x 70	M 8	3000	25	20	6.5	13.5	65	10	70455
HBS 8 x 80	M 8	3000	25	20	6.5	13.5	75	10	70456
HBS 8 x 90	M 8	3000	25	20	6.5	13.5	85	10	70457
HBS 8 x 100	M 8	3000	25	20	6.5	13.5	95	10	70458
HBS 8 x 120	M 8	3000	25	20	6.5	13.5	115	10	70459
HBS 8 x 150	M 8	3000	25	20	6.5	13.5	145	10	70460
HBS 8 x 200	M 8	3000	25	20	6.5	13.5	195	10	70461
HBS 10 x 25	M 10	3000	25	20	6.5	13.5	20	10	70462
HBS 10 x 40	M 10	3000	25	20	6.5	13.5	35	10	70463
HBS 10 x 60	M 10	3000	25	20	6.5	13.5	55	10	70464
HBS 10 x 80	M 10	3000	25	20	6.5	13.5	75	10	70465
HBS 10 x 100	M 10	3000	25	20	6.5	13.5	95	10	70466

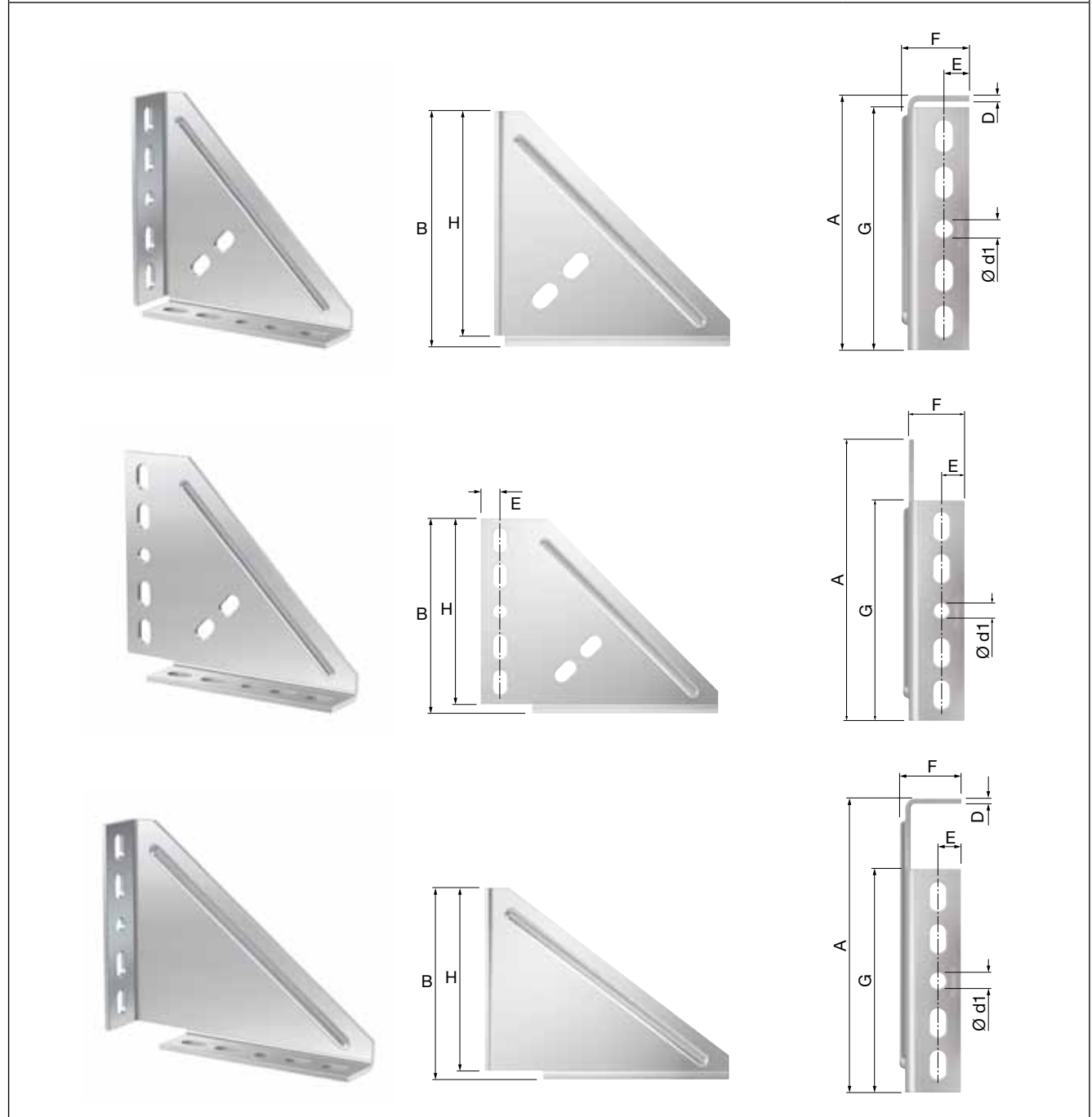


## MOUNTING PLATES AND CORNERS

### VH Corner Brackets

For making an adjustable suspension or support construction on the wall, ceiling or floor.

- Electrolytically zinc plated.
- The hole pattern is such that the rail can be fixed with two bolts.

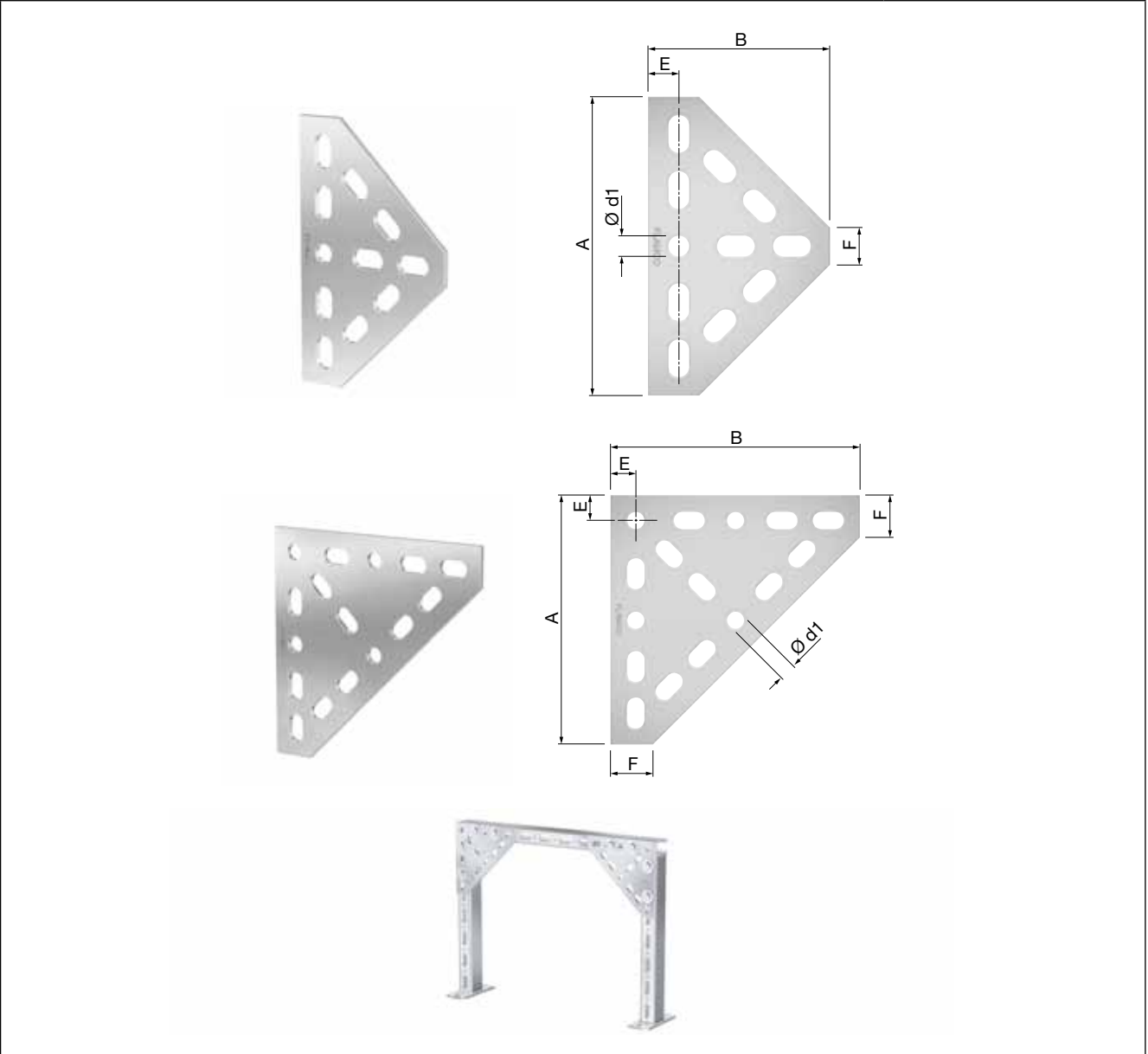



Type	Dimensions								Slotted hole [mm]		Order Code
	A [mm]	B [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	Ø d1 [mm]			
VH 165 x 165 x 4	165	165	4	16.5	40	157.5	157.5	11	11 x 20	10	71612
VH 200 x 165 x 4	200	165	4	16.5	40	157.5	157.5	11	11 x 20	10	71613
VH 210 x 165 x 4	210	165	4	16.5	40	160.5	157.5	11	11 x 20	10	71614

**VP Corner Plates**

For making an adjustable suspension or support construction on the wall, ceiling or floor.

- Electrolytically zinc plated.
- The hole pattern is such that the rail can be fixed with two bolts (M 10).



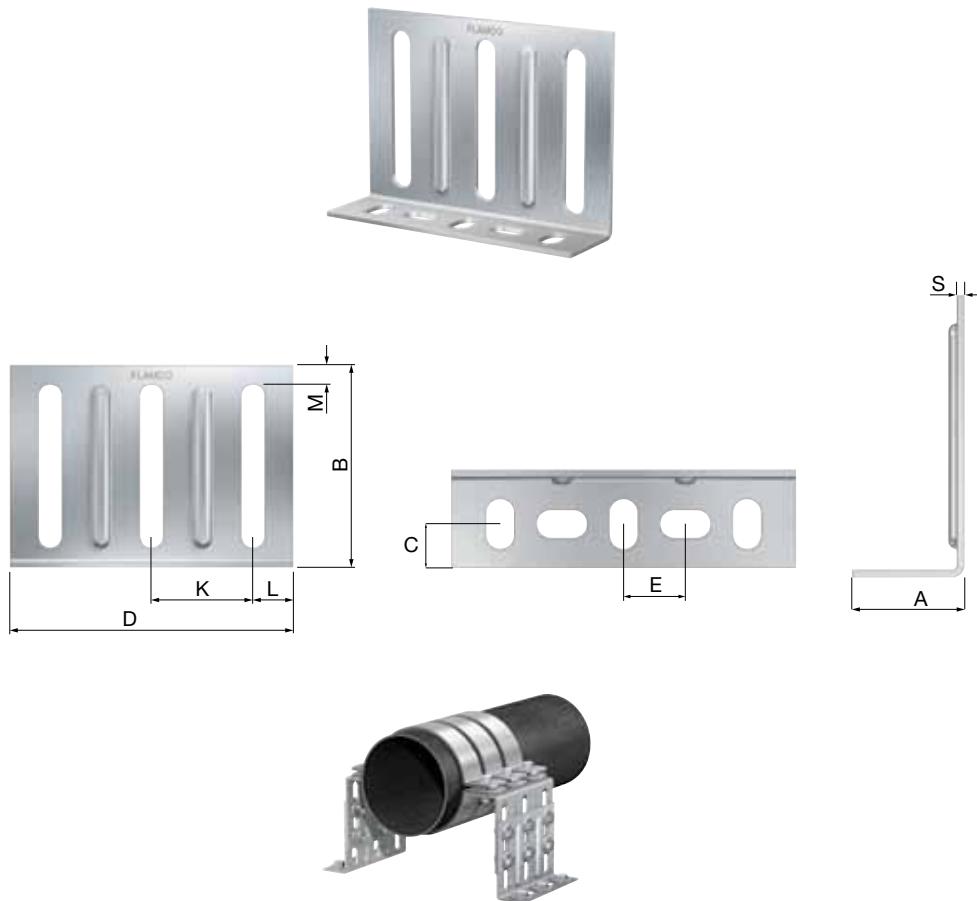
Type	Dimensions					Material thickness [mm]	Slotted hole [mm]		Order Code
	A [mm]	B [mm]	E [mm]	F [mm]	Ø d1 [mm]				
<b>VP 160 x 100 x 4</b>	160	100	16.5	20	11	4	11 x 22	25	71610
<b>VP 160 x 160 x 4</b>	160	160	4	16.5	27.5	4	11 x 22	25	71611



## VG Angle Plate

For making a fixed point construction, adjustable suspension or support construction.

- Electrolytically zinc plated.
- Supplied with slotted holes.
- Sleeves suitable for M 10.
- Specially suited for fixed point constructions in combination with BSP fixed point clips.



Type	Dimensions										Order Code
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	K [mm]	L [mm]	M [mm]	S [mm]		
VG 140 x 100 x 3	40	100	18.5	140	25	50	11	10	3	10	71616

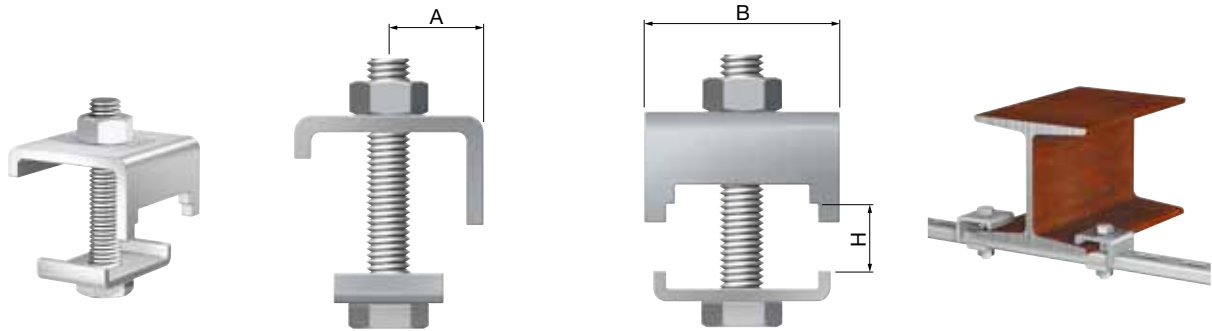
**RAIL GIRDER CLIPS**

**RB Rail Girder Clips**

For mounting Flamco rail to steel profiles without drilling or welding.  
Can be used in combination with Flamco rails R 1 - 8.

- Electrolytically zinc plated.
- Load depends on Flamco rail.
- Supplied complete with upper plate and lower plate, nut and bolt.

N.B.: Two RB clips per fixing.

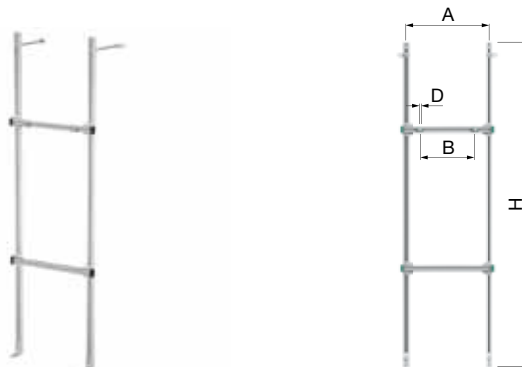


Type	Suitable for rail	Bolt	Max. clamping height H [mm]	Dimensions			Order Code
				A [mm]	B [mm]		
<b>RB 1</b>	R 1	M 8 x 55	15	20	44	50	80601
<b>RB 2</b>	R 2	M 8 x 55	15	20	44	50	80602
<b>RB 3 / 4</b>	R 3 / 4	M 10 x 80	15	20	44	50	80604
<b>RB 6</b>	R 6	M 10 x 100	15	20	50	50	80603
<b>RB 7 / 8</b>	R 7 / 8	M 10 x 80	15	20	50	10	80605

**GAS WALL CONSOLES**

**GWK Console**

- Parts zinc plated, uprights galvanized.
- HS brackets for making various structures with Flamco rail.
- HS brackets are zinc plated.



Type	Connection D	Dimensions				Order Code
		A [mm]	B [mm]	H [mm]		
<b>GWK 490</b>	M 8	490	460	1700	1	71750
<b>GWK 650</b>	M 8	650	620	1700	1	71751
<b>GWK 900</b>	M 8	900	870	1700	1	71752
<b>Cross beam 490</b>	-	490	-	-	1	71753
<b>Cross beam 650</b>	-	650	-	-	1	71754
<b>Cross beam 900</b>	-	900	-	-	1	71755
<b>135° corner brackets</b>	-	-	-	-	1	71756