



Lindab **Roof Drainage System**

Lindab Rainline TM

Technical Information

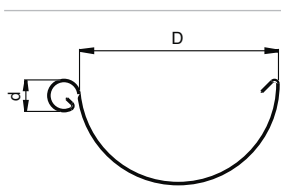
Dimensioning

It is important that the sizes of gutters and pipes used in a rainwater system are selected with consideration of the size of the roof and the position of downpipes in order to ensure that typical rainfall does not cause the system to overflow.

All gutter systems in the UK should be designed to BS EN 12056-3:2000 Gravity drainage systems inside buildings. Roof drainage, layout and calculation (AMD 17041), 2000.

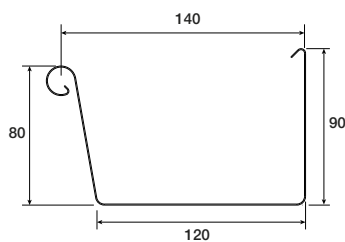
Rainline gutters are available in two shapes and five sizes. Half Round: 100mm, 125mm, 150mm, 190mm and Rectangular 140mm. Downpipes are available in four sizes: 75mm, 87mm, 100mm and 120mm.

Half round gutters (R)

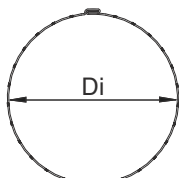


Size (mm)	D (mm)	d (mm)
100	107	17
125	123	17
150	155	17
190	192	22

Rectangular gutters (RTRA)



Downpipes (SROR)



Size (mm)	Di (mm)
75	75
87	87
100	100
120	120

Roof area

BS EN 12056-3:2000 requires that wind driven rain is taken into account when considering the effective catchment area. The standard assumes that rain falls at an angle of 2 units vertical to 1 unit horizontal which means that half the vertical height of any surface must be taken into account in calculations.

For a typical roof surface this means that the effective area is calculated from:

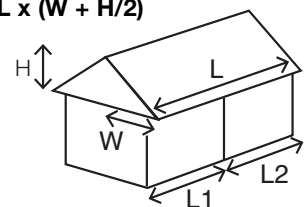
$$\text{Effective area, AE (m}^2\text{)} = L \times (W + H/2)$$

Where:

L= Roof length (m)

W= Eaves to ridge width (m)

H= Eaves to ridge height (m)



Flow capacities

In order to select the appropriate gutter and pipe size combination it is necessary to understand the flow rate required and the flow capacity of the system. The presence of corners in the gutter reduces the capacity, where this is applicable a 15% reduction should be assumed for calculations.

Flow rate is calculated from:

Flow rate (litres/second)

= Effective area x rainfall intensity

Dimensioning

Pipe position

The position of the pipe has a significant effect on the flow capacity of a rainwater system.

A gutter ratio can be used in conjunction with the effective roof area to account for the required adjustment in system flow rate.

For a typical gutter run up to a maximum of 10m the ratio of gutter lengths is calculated from:

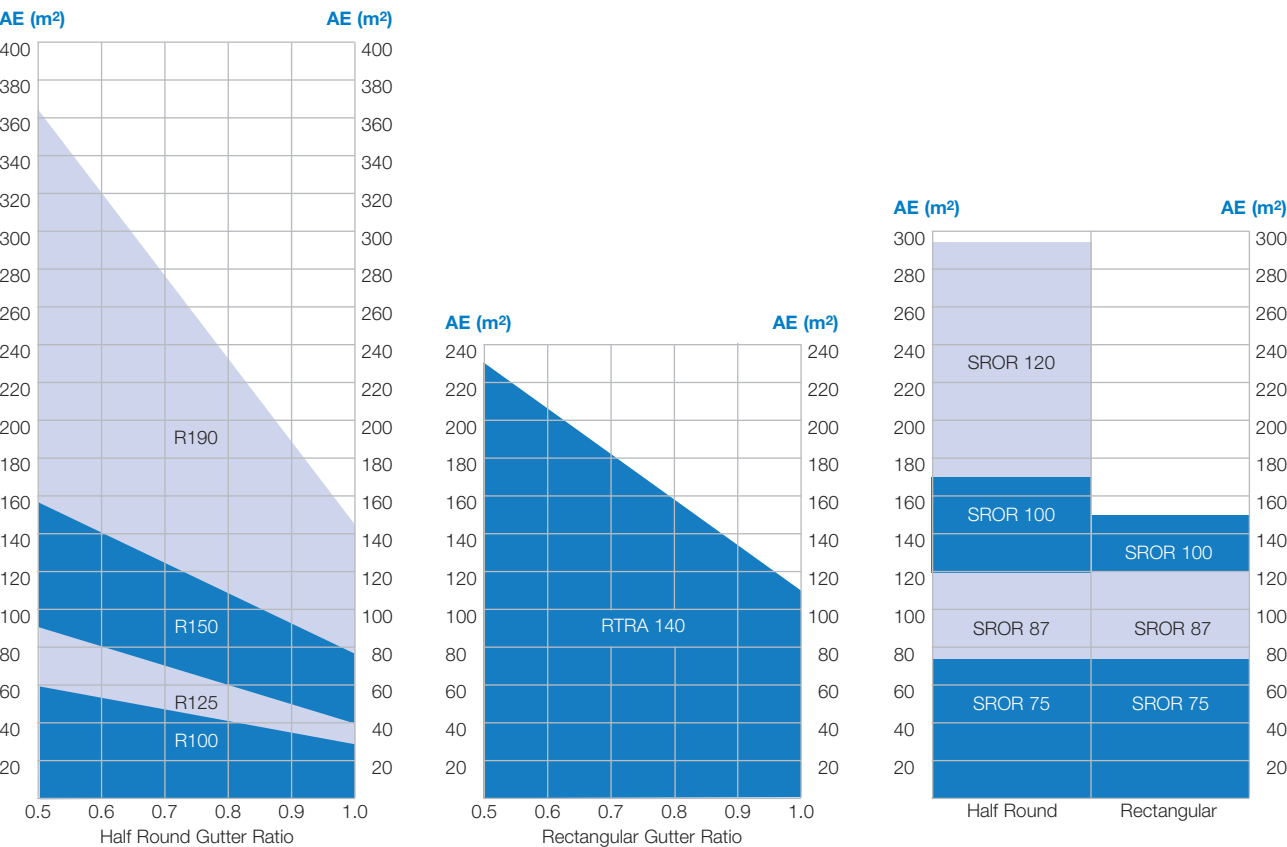
Gutter Ratio = $L1 / (L1 + L2)$

Where: $L1 \geq L2$

Selecting gutter size

There is no standard rate of rainfall in the UK so for accurate calculations refer to an approved weather authority to get a site-specific rainfall level. Our technical department can assist with calculations for your project locations.

The charts below allow effective area and gutter ratio to be used to choose the correct gutter and pipe size. A 1 year storm calculation is measured at up to 0.022 litres per second per square metre and up to 0.036 litres per second per square metre for a 5 year storm calculation as recommended by British Standards. For gutter runs longer than 10m contact us for further advice.



Technical Facts

Rainline*

Colour chart

Number	Name	Nearest NCS	Nearest RAL
001	Antique white	S 1002-G50Y	9002
015	Black	S 9000-N	9011
015	Black matte	S 9000-N	9011
035	Anthracite grey	S 7502-B	7016
035M	Anthracite grey matte	S 7502-B	7016
044	Anthracite metallic	-	9007
045	Silver metallic	-	9006
087	Dark grey	S 7005-B20G	7043
387	Coffee brown	S 8502-Y	8019
434	Brown	S 7010-Y70R	8017
742	Tile red	S 4040-Y80R	8004
758	Dark red	S 5040-Y80R	3009

All colour coated roof drainage products from Lindab are coated with a zinc layer of 275 g/m².

Other material

MG	Magestic zinc-magnesium	-	-
CU	Copper	-	-

* All colours are not available in all dimensions and combinations.

Technical Facts

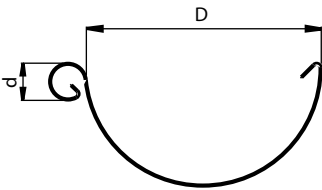
Gutter & fittings

R Gutter

Dim	D mm	d mm	Area* mm ²	Area** mm ²
100	107	17	4500	4100
125	123	17	5900	5500
150	155	17	9400	8900
190	192	22	17300	16200

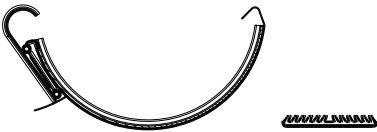
* Sectional area

** Water carrying area (6 mm lower front edge, 190 gutter 11 mm)



RSK Gutter joint

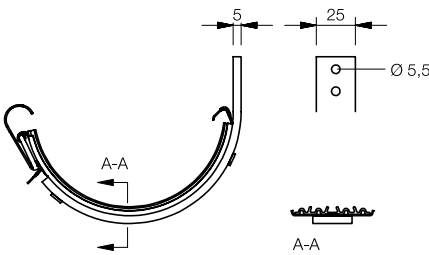
Dim
100
125
150



RSKR Gutter joint

Dim
125
150

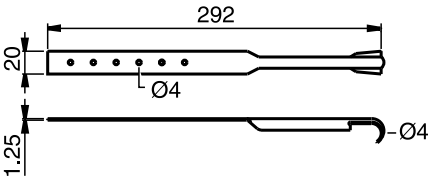
To SS-EN 1462 Class A-H



Technical Facts

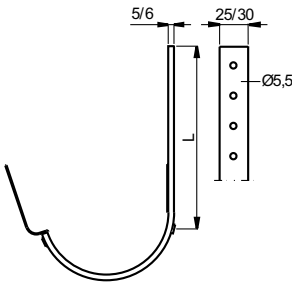
Gutter & fittings

STAG Stay strap



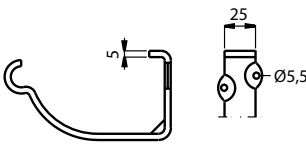
K33/K24/K18/K07 Bracket

Dim	L mm			
	K33	K24	K18	K07
100			180	70
125			180	70
150			180	70
190	334	244		74



KFK Fascia Bracket

Dim
100
125
150
190

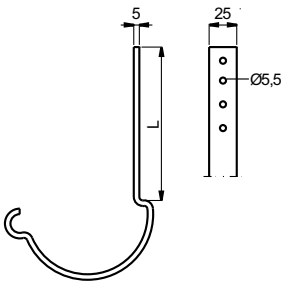


Technical Facts

Gutter & fittings

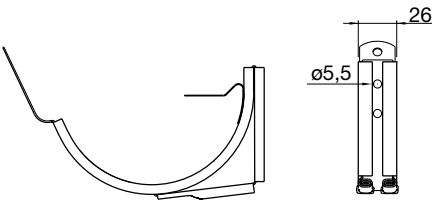
KFL35/KFL/KFM Bracket

Dim	L mm		
	KFL35	KFL	KFM
100		196	
125	336	196	146
150	336	196	146



SKK Bracket

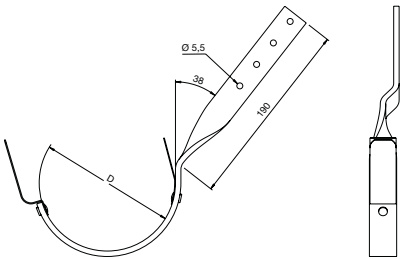
Dim
100
125
150



KRT Bracket

Dim
125
150

To SS-EN 1462 Class A-H



Technical Facts

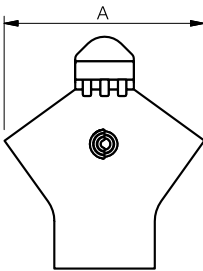
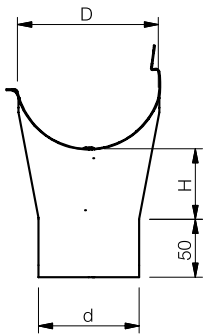
Gutter & fittings

KBO Bracket bender



OMV Gutter outlet

Dim D/d	A mm	H mm
100/75	156	56
100/87	156	48
125/75	174	67
125/87	174	59
125/100	174	50
150/87	212	82
150/100	212	73
150/120	212	60



All gutter outlets in Copper (CU) will be delivered as gutter outlet OK.

OK Gutter outlet

Dim D/d	A mm	H mm
150/75	194	55
190/100	180	62
190/120	206	62

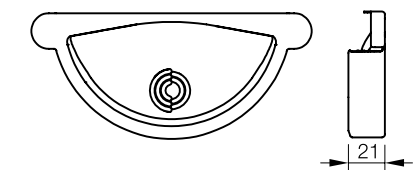


Technical Facts

Gutter & fittings

RG Stop end

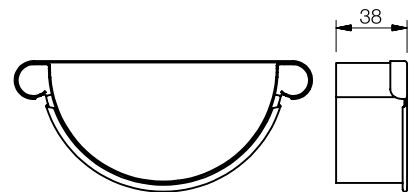
Dim
100
125
150



RGU Stop end

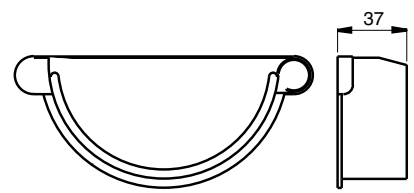
Dim
100

100mm stop end in in Copper (CU) will be delivered as RGU



RGV/RGH Stop end

Dim
190

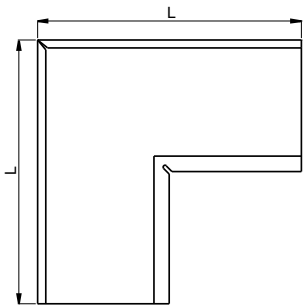


Technical Facts

Gutter & fittings

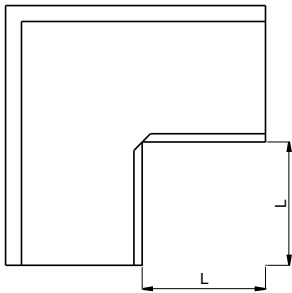
RVI Gutter angle, inner

Dim	L mm
100	400
125	300
150	300
190	500



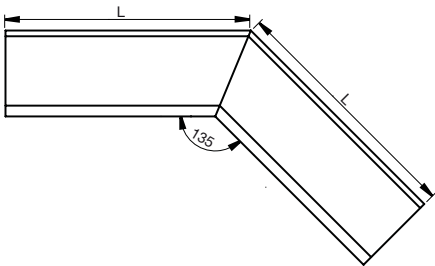
RVY Gutter angle, outer

Dim	L mm
100	295
125	160
150	130
190	285



RVI135 Gutter angle 135°, inner

Dim	L mm
100	300
125	300
150	300

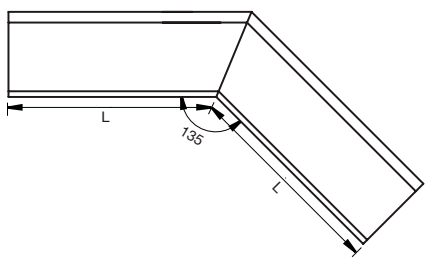


Technical Facts

Gutter & fittings

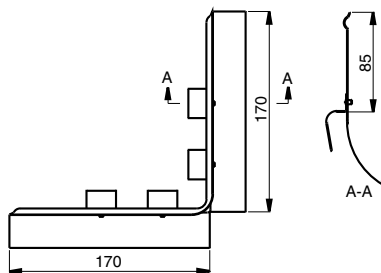
RVY135 Gutter angle 135°, outer

Dim	L mm
100	250
125	240
150	230



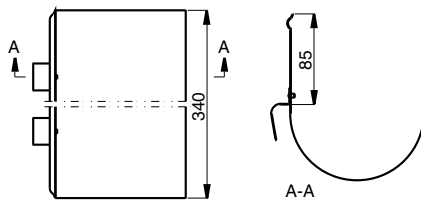
OSK Overflow protection

All dimensions



OSKR Overflow protection, straight

Dim
125
150

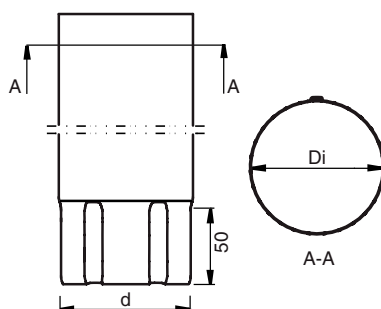


Technical Facts

Downpipe & fittings

SROR Down pipe

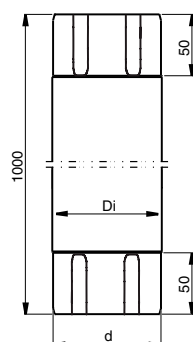
Dim	Area
Di/d	mm ²
75	4400
87	5900
100	7800
120	11300



MST Intermediate pipe

Dim
75
87
100
120

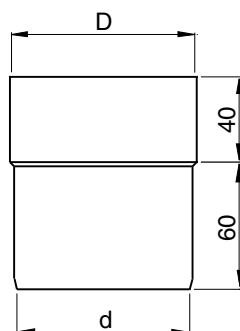
Cut into suitable pieces



SRORM Pipe connector

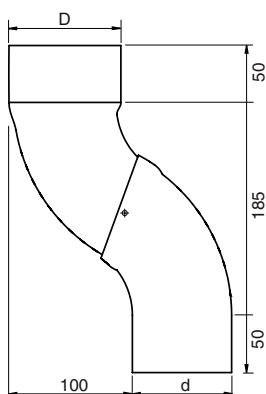
Dim
D/d
75
87
100

SRORM fits both inside and outside the downpipe.



SOKN One piece bend

Dim
D/d
75
87
100

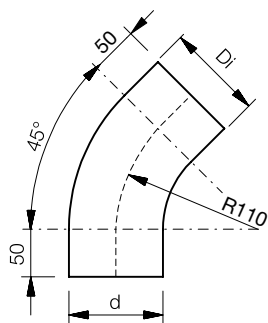


Technical Facts

Downpipe & fittings

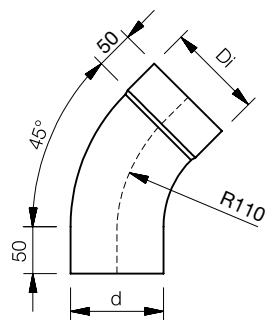
BK45 Bends 45°

Dim
Di/d
75
87
100



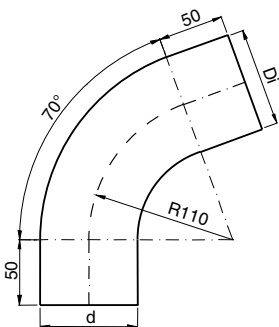
BM45 Bends 45°

Dim
Di/d
75
87
100



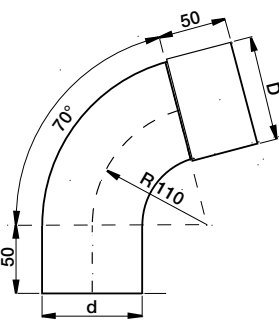
BK70 Bends 70°

Dim
Di/d
75
87
100
120



BM70 Bends 70°

Dim
D/d
120

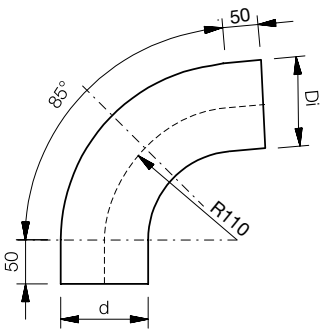


Technical Facts

Downpipe & fittings

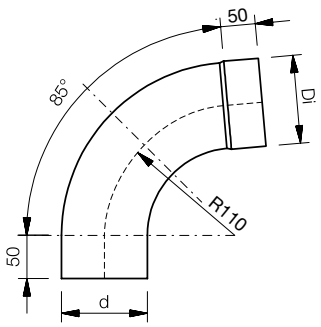
BK85 Bends 85°

Dim
Di/d
75
87
100



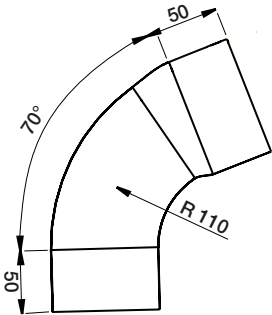
BM85 Bends 85°

Dim
Di/d
75
87
100



BKM70 Bends, conical 70°

Dim
Di/d
75
87
100



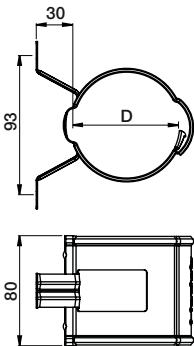
Technical Facts

Downpipe & fittings

SSVU Pipe holder

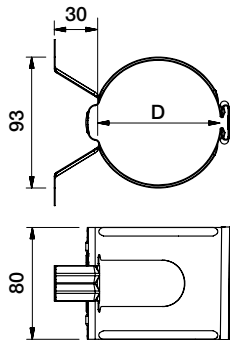
Dim
D
75
87
100
120

For Magestic (MG) and copper (CU) SVHA design will be supplied



SVHA Pipe holder

Dim
D
75
87
100
120



SSC Screw kit

Distance from wall (mm)	Plug	Screw	Distances*
25	1	1	1
55	1	1	2
85	1	1	3
115	1	1	4

*Distances in light grey HD polythene

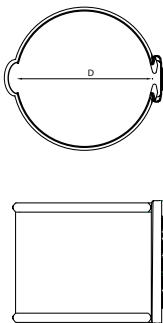


Technical Facts

Downpipe & fittings

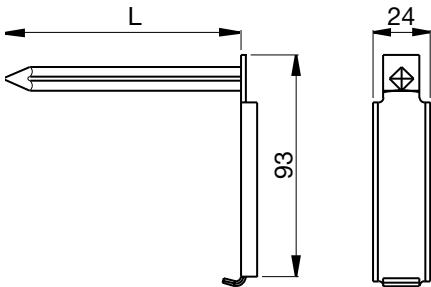
SV Pipe holder for spike

Dim	
D	
	75
	87
	100
	120



SST Spike for pipe holder

L	
mm	
	125
	175
	250
	300

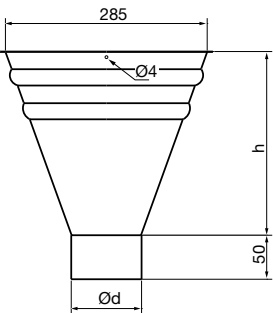


Technical Facts

Downpipe & fittings

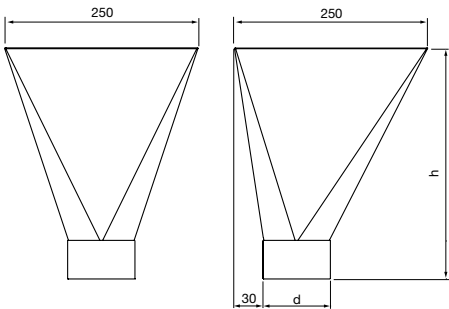
VATK Hopper

Dim	h
87	270
100	253
120	227



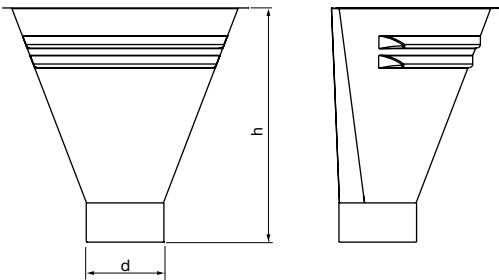
VATKL Square hopper

Dim	h
75	305
87	230
100	200



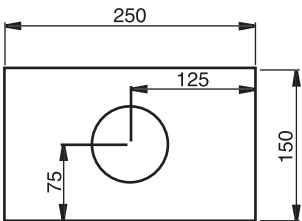
VATKS Halfround hopper

Dim	h
87	270
100	253



VATKR Regular hopper

Dim
75
87
100
120

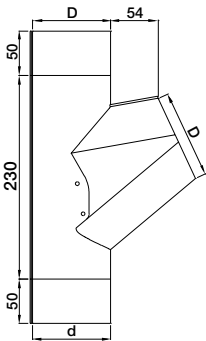


Technical Facts

Downpipe & fittings

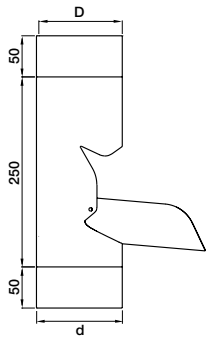
GROR Adjustable branch

Dim
75
87
100
120



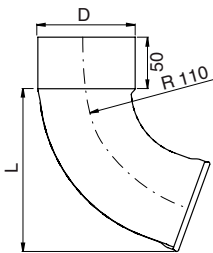
FUTK Adjustable shoe

Dim
75
87
100



UTK Shoe

Dim	L mm
75	151
87	157
100	113
120	173



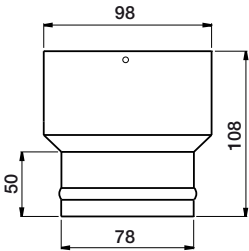
Technical Facts

Downpipe & fittings

Connector for 80 mm hose.

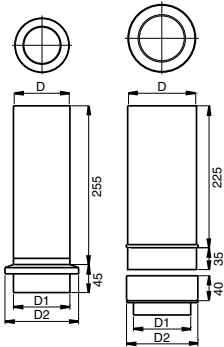
Dim

87



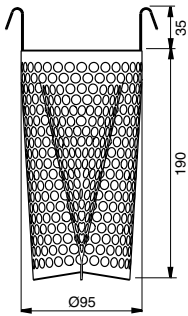
BUTK Drain shoe

Dim	D1 mm	D2 mm
75	81	115
87	93	115
100	93	115
120	93	125



DVSIL Leaf filter

Stainless steel.



PRT Sliding pipe

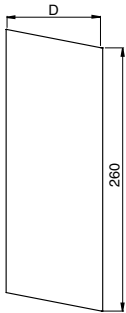
Dim

75

87

100

The sliding pipe fits outside the downpipe.

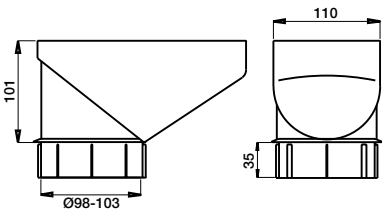


Technical Facts

Downpipe & fittings

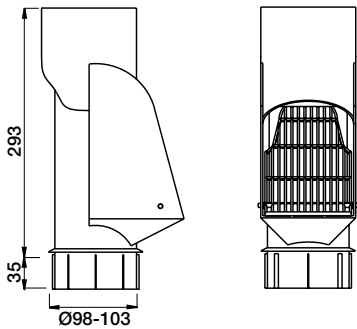
RT Drain trap (HD polythene)

Leaf filter in HD polythene for downpipes.
The lower section fits standard ground pipes/ junction pipes.



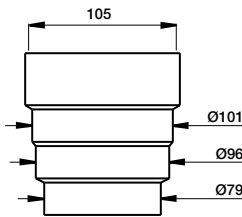
SLS Self cleaning leaf trap

Self cleaning leaf filter in HD polythene for downpipes.
The lower section fits standard ground pipes.



MRT Drain connector

Connector for HD polythene filters.
For connection to ground pipes with dimensions other than standard.



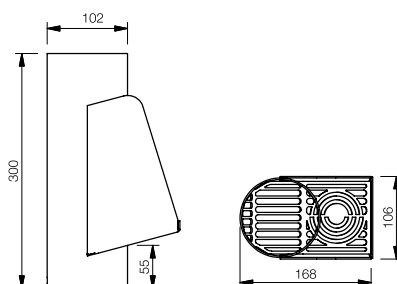
Technical Facts

Reinforced downpipe

VANDAL SLS 300

300 mm reinforced self-cleaning leaf filter.

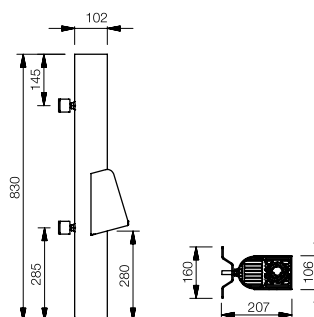
	Steel	Stainless
Outer dim. (Ø mm)	101.6	101.6
Thickness	2.0	1.5
Weight (kg)	2.1	1.8



VANDAL SLS 850

830 mm reinforced downpipe with self-cleaning leaf filter for buildings with plinth.

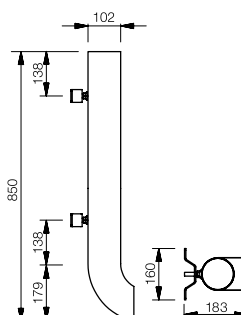
	Steel	Stainless
Outer dim. (Ø mm)	101.6	101.6
Thickness	2.0	1.5
Weight (kg)	5.3	4.1



VANDAL UTK 850

850 mm reinforced downpipe with shoe.

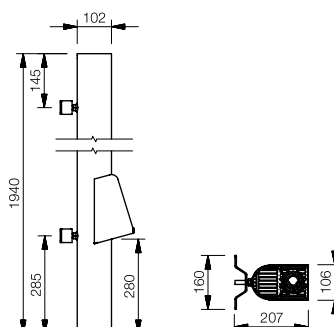
	Steel	Stainless
Outer dim. (Ø mm)	101.6	101.6
Thickness	2.0	1.5
Weight (kg)	5.3	4.0



VANDAL SLS 2000

2m reinforced downpipe with self-cleaning leaf filter at the bottom.

	Steel	Stainless
Outer dim. (Ø mm)	101.6	101.6
Thickness	2.0	1.5
Weight (kg)	10.9	8.5



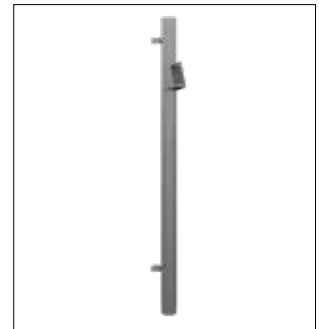
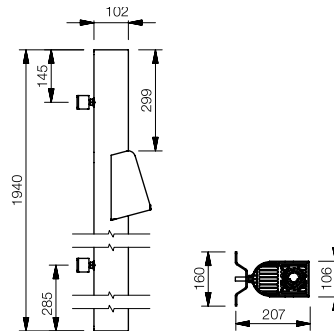
Technical Facts

Reinforced downpipe

VANDAL SLST 2000

2m reinforced downpipe with self-cleaning leaf filter on top. Excellent for use in nursery and junior school environments.

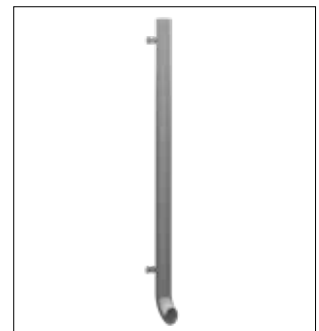
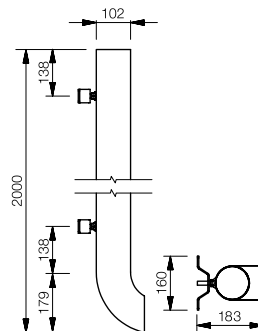
	Steel	Stainless
Outer dim. (Ø mm)	101.6	101.6
Thickness	2.0	1.5
Weight (kg)	10.9	8.5



VANDAL UTK 2000

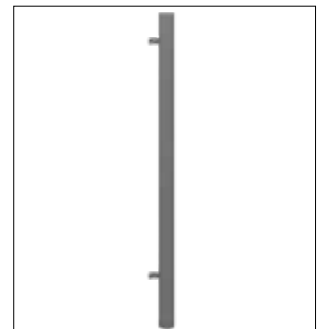
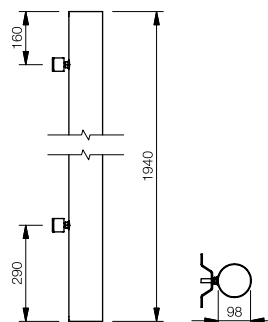
2m reinforced downpipe with shoe.

	Steel	Stainless
Outer dim. (Ø mm)	101.6	101.6
Thickness	2.0	1.5
Weight (kg)	11.8	8.0



VANDAL STD 2000

	Steel	Stainless
Outer dim. (Ø mm)	101.6	101.6
Thickness	2.0	1.5
Weight (kg)	10.5	8.2



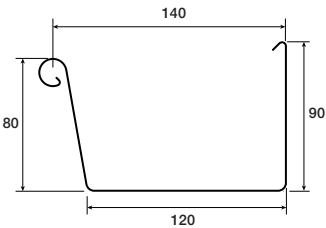
Technical Facts

Rectangular gutter with accessories

RTRA Gutter

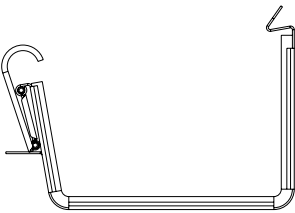
Dim	Area* mm ²
140	10 000

* Water carrying area.



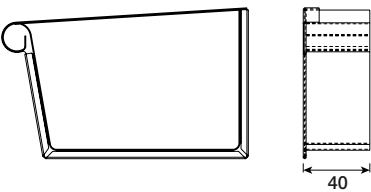
RTSK Gutter joint

Dim
140



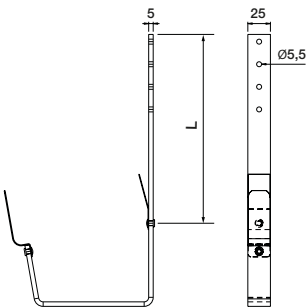
RTGV/RTGH Stop end

Dim
140



RTK07/RTK21 Bracket

Dim	L mm	
	RTK07	RTK21
140	70	210

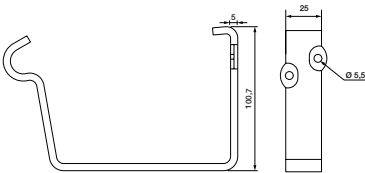


Technical Facts

Rectangular gutter with accessories

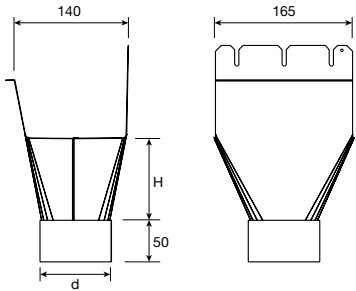
RTKFK Bracket

Dim	
140	



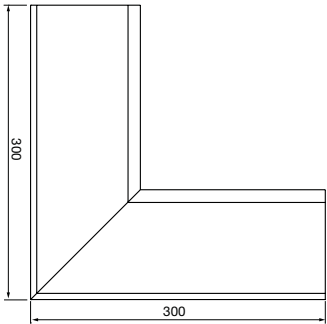
RTOK Gutter outlet

Dim	H
D/d	mm
140/75	105
140/87	95
140/100	85



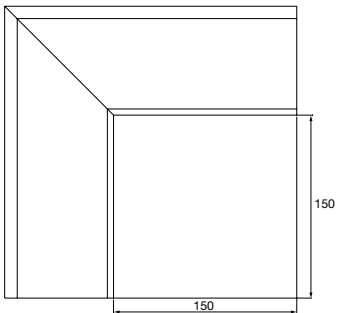
RTVI Gutter angle, inner

Dim	
140	



RTVY Gutter angle, outer

Dim	
140	



Technical Facts

Accessories

STIFT Touch up paint

Touch up paint to fix the small scratch or to cover up cut ends, with application brush.



BF Touch up paint

Touch up paint supplied in 250 ml tin





Most of us spend the majority of our time indoors. Indoor climate is crucial to how we feel, how productive we are and if we stay healthy.

We at Lindab have therefore made it our most important objective to contribute to an indoor climate that improves people's lives. We do this by developing energy-efficient ventilation solutions and durable building products. We also aim to contribute to a better climate for our planet by working in a way that is sustainable for both people and the environment.

[Lindab | For a better climate](#)

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