



Edition

**10**

# COPPER GUTTER SYSTEMS

*made in Germany*



**AMG**  
American Master Gutters, Inc.



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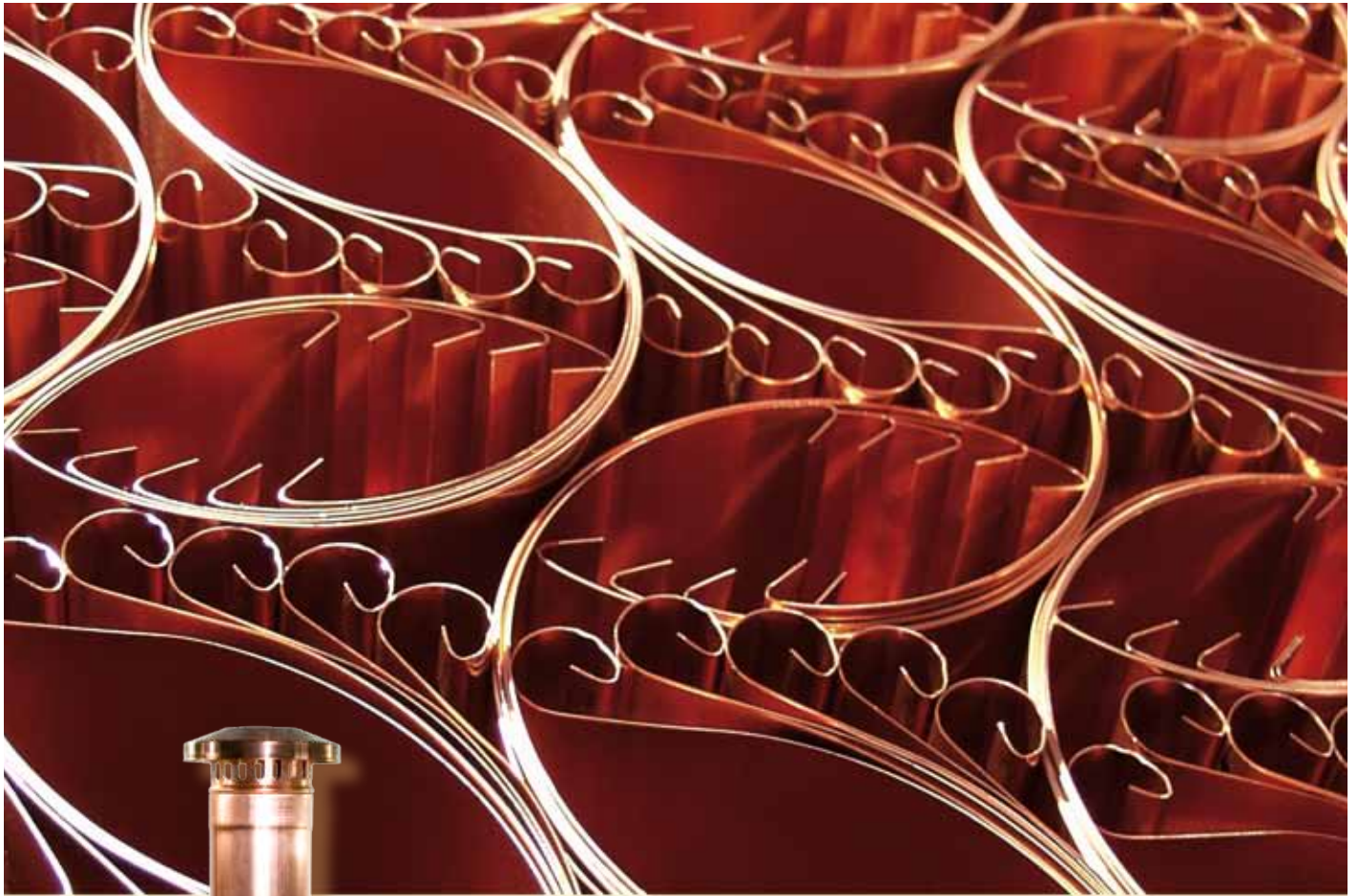
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## *Why copper guttering?*



Copper was mankind's first metal and was used during the Stone Age over 10,000 years ago. Over the course of the millennia, mankind became increasingly proficient at handling this metal, deploying it for the most varied tasks – for example, hammering, heating, forging or mixing it with other metals to create alloys such as lead, silver or pewter.

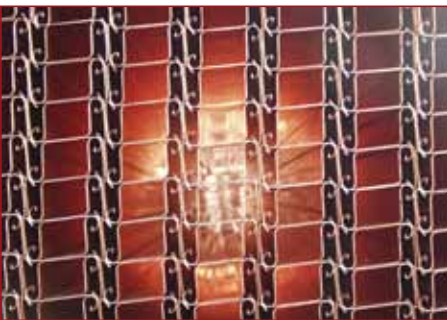
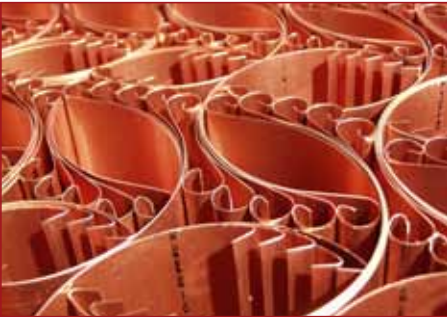
The discovery that copper and tin could easily be mixed provided the name for an era: the Bronze Age. All great cultures and civilizations worked with copper. The Colossus of Rhodes was made from copper and the Ancient Egyptians used copper for their water pipes.

But the name for copper actually came from the Romans, which they called “aes cyprium”, which later became “cuprum”, the origin of today's “copper”.

There are very few materials that maintain their technical function and shape over extremely long periods of time. These include copper, a material that creates its own protective layer and that – with its patina – only reveals its full design qualities during the aging process.



## INTRODUCTION



It is remarkable that around 40% of all copper applications are in construction. And there are countless further copper alloys, of which brass and bronze, in particular are being increasingly deployed in architecture.

Quality, durability and beauty have been the compelling attributes of this material for centuries. Copper has been used as a roof and wall cladding material for buildings since time immemorial. In addition to the functional characteristics, one of the primary reasons for this is undoubtedly its aesthetic qualities.

To this end, its – as a result of weathering – constantly changing patina influences the appearance of a building, whereby the original coppery sheen of the metal gradually develops into a sequence of warm, brown shades before the external surface acquires its characteristic green.

We hope that you will love this catalog. And that you will love this guttering system with the **MADE IN GERMANY** seal of quality. An external roof drainage system that excels in terms of its unique, top-quality material, a guttering system that stands out with regards to function, excellence and exquisite quality.

**Upgrade your roof with AMG copper guttering.  
Give your roof the crowning glory it deserves.**

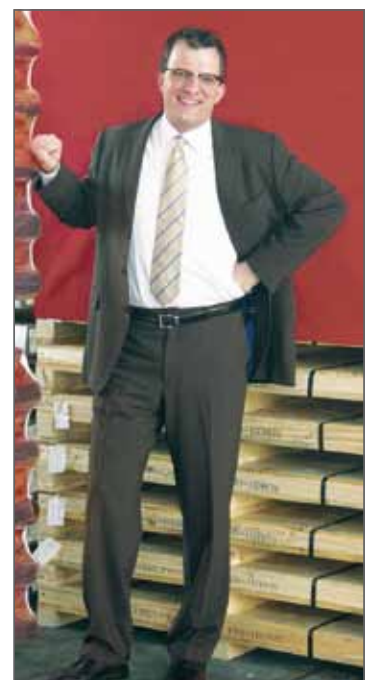


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**GUTTERS**

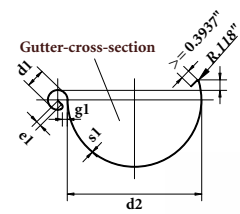
The dimensions of the products, parts and components indicated in this catalog may vary slightly from the actual dimensions due to production variables, without affecting their function. ● round ◐ halfround ■ rectangular

# 1. Gutter, halfround

As a bracket-mounted gutter, this form of guttering is by far the most popular design, as it offers the most favourable prerequisites for water drainage. The rounded guttering always guides the water towards the center, ensuring lower soiling (e.g. leaves) even in the case of minimal flow speeds.

In terms of material efficiency, the semi-round version is also the most favorable form, and this also applies to the resistance against mechanical loads and impacts, such as ice and freezing. The standard lengths are 10 and 18 feet.

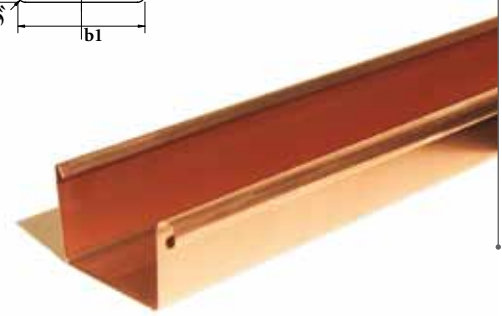
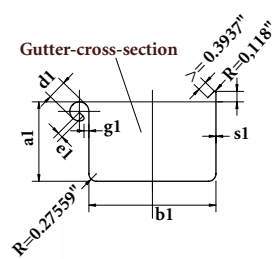
German size	Available dimensions	e1	d1	d2	g1	Gutter cross section
	[oz]	[inch]	[inch]	[inch]	[inch]	[square inch]
200	18	0.20	0.63	3.15	0.20	3.88
250	18	0.28	0.71	4.13	0.20	6.67
280	20	0.28	0.71	5.00	0.24	9.77
333	20	0.35	0.79	6.02	0.24	14.26
400	20	0.35	0.87	7.56	0.24	22.48
500	20	0.35	0.87	9.84	0.24	37.98



# 2. Gutter, rectangular

The rectangular gutter is also used for bracket-mounted systems. Its form is predominantly determined by design considerations. As its flow properties are - due to the flat flow of the water - less favorable than in the case of the semi-round gutter, they should always be installed with a sufficient slope. This type also comes in the standard lengths of 10 and 18 feet.

German size	Available Dimensions	a1	b1	d1	e1	g1	Gutter cross section
	[oz]	[inch]	[inch]	[inch]	[inch]	[inch]	[square inch]
200	18	1.65	2.76	0.63	0.20	0.20	4.50
250	18	2.17	3.35	0.71	0.28	0.20	7.29
333	20	2.95	4.72	0.79	0.35	0.24	13.95
400	20	3.54	5.91	0.87	0.35	0.24	20.93
500	20	4.33	7.87	0.87	0.35	0.24	34.10



**DOWNPOUTS**

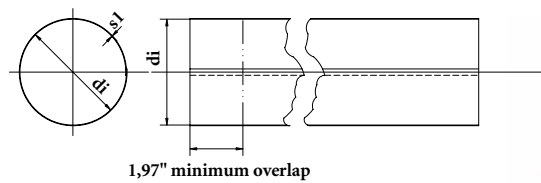
For use with the respective guttering type, we offer both round and square copper downspouts, available in various size ranges. The standard length is 10 feet.

The longitudinal seam comes in various designs: *Soft welded, braised, seamless welded, with seam*

The seamed and welded downspouts have a slightly conical design, so that the individual sections can be inserted into each other to a depth of at least 1.97 inches. The seamless welded downspouts are equipped with a socket end. For this reason, using a simple tool or the downleader coupling allows even the smallest residual pieces to be used.

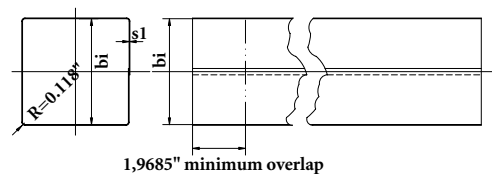
**3. Downspout, round**

German size	Available Dimensions [oz]	di [inch]
60	18	2.25
76	18	3
87	18	3.5
100	18	4
120	20	5
150	20	6

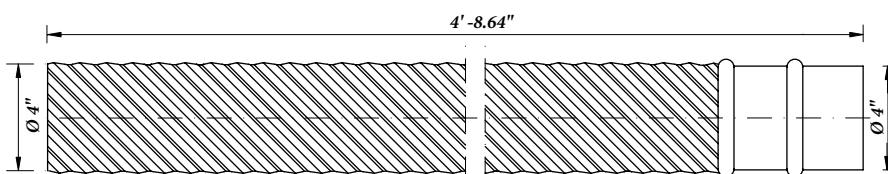


**4. Downspout, rectangular**

German size	Available Dimensions [oz]	di [inch]
60	18	2.25
80	18	3.15
100	18	4
120	20	5



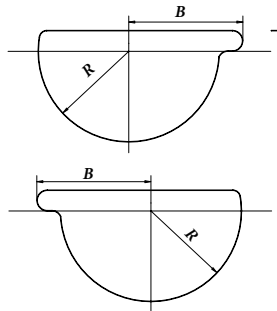
**5. Downspout, twisted**



**ENDCAPS**

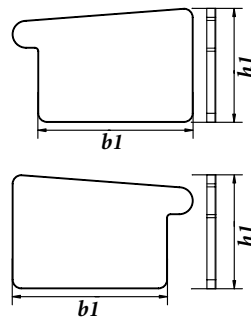
# 6. Endcap, round

German size	For gutter [Ø]	R [inch]	B [inch]
200	3.15	1.57	2.36
250	4.13	2.05	2.82
280	5.00	2.48	3.25
333	6.02	2.99	3.94
400	7.56	3.74	4.70
500	9.84	4.88	5.32



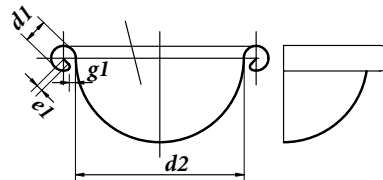
# 7. Endcap, rectangular

German size	For gutter [Ø]	h1 [inch]	b1 [inch]
200	2.76	1.96	2.76
250	3.35	2.56	3.35
333	4.72	3.34	4.72
400	5.91	3.93	5.91
500	7.87	4.72	7.87



# 8. Endcap, round (bullnose)

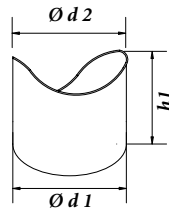
German size	d2 [inch]	d1 [inch]	e1 [inch]	g1 [inch]
200	3.15	0.71	0.24	0.20
250	4.13	0.71	0.28	0.20
280	5.00	0.71	0.28	0.20
333	6.02	0.79	0.35	0.24
400	7.56	0.87	0.35	0.24
500	9.84	0.87	0.35	0.24



**MINI OUTLET DROPS**

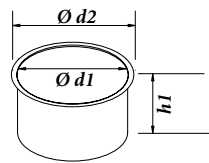
**9. Mini outlet drop for halfround gutters**

German size	d1	d2	h1
	[inch]	[inch]	[inch]
60	2.25	2.66	2.30
76	3.00	3.35	2.93
87	3.5	4.02	2.99
100	4.00	4.45	3.03
120	5.00	5.27	3.50



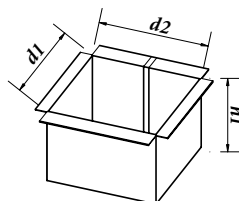
**10. Mini outlet drop for rectangular gutters**

German size	d1	d2	h1
	[inch]	[inch]	[inch]
60	2.25	2.68	1.87
76	3.00	3.28	2.36
87	3.50	3.77	3.11
100	4.00	4.25	2.36



**11. Mini outlet drop, rectangular**

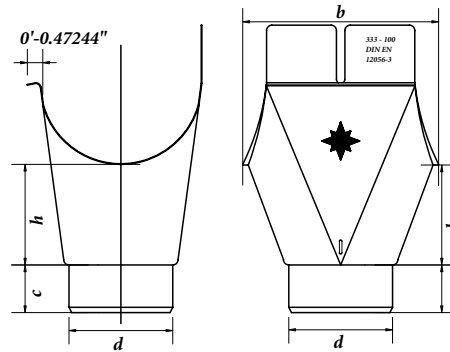
German size	d 1	d 2	h 1
	[inch]	[inch]	[inch]
80	3.15	3.15	2.76
100	4.00	4.00	3.31



**OUTLET DROPS**

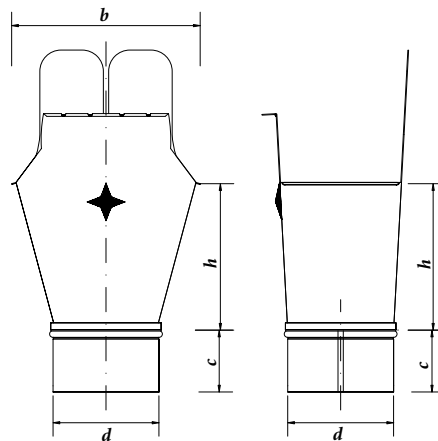
**12. Star outlet drop for halfround gutter to round downspout**

For gutter	pipe	d	b	h	c
Ø [inch]	Ø [inch]	[inch]	[inch]	[inch]	[inch]
3.15	2.25	2.25	5.12	3.03	1.18
4.13	2.25	2.25	5.01	2.36	1.57
4.13	3	3	6.50	2.95	1.38
5.00	3	3	6.30	3.15	1.57
5.00	3.5	3.5	7.24	3.15	1.77
5.00	4	4	7.24	2.95	1.97
6.02	3	3	7.28	3.54	1.57
6.02	3.5	3.5	7.28	3.74	1.77
6.02	4	4	7.48	3.54	1.97
7.56	4	4	8.27	4.13	1.97
7.56	5	5	8.27	4.13	1.97



**13. Star outlet drop for rectangular gutter to round downspout**

For gutter	pipe	d	b	h	c
Ø [inch]	Ø [inch]	[inch]	[inch]	[inch]	[inch]
2.76	2,25	2,25	4.76	4,13	1.67
3.35	3	3	5.75	4.49	1.77
4.72	4	4	7.20	6.02	1.97
5.91	5	5	8.46	8.07	1.97

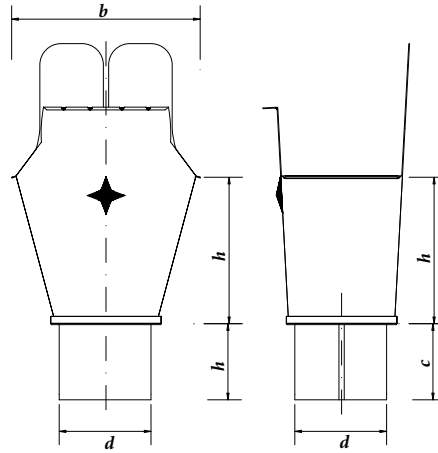


**OUTLET DROPS**

14

14. Star outlet drop for rectangular gutter to rectangular downspout

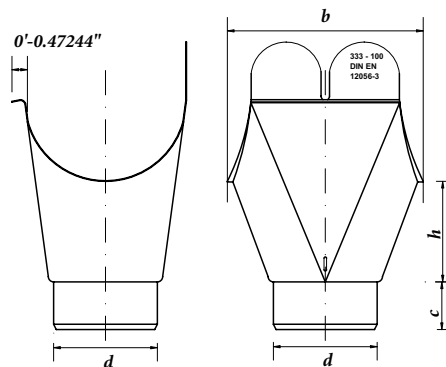
For gutter	pipe	d	b	h	c
Ø [inch]	Ø [inch]	[inch]	[inch]	[inch]	[inch]
2.76	2.25	2.25	4.76	4.13	1.67
3.35	3.15	3.15	5.75	4.49	1.77
4.72	4	4	7.20	6.02	1.97
5.91	5	5	8.46	8.07	1.97



15

15. Plain outlet drop

For gutter	pipe	d	b	h	c
Ø [inch]	Ø [inch]	[inch]	[inch]	[inch]	[inch]
3.15	2.25	2.25	5.12	3.03	1.18
4.13	3	3	6.50	2.95	1.38
5.00	3	3	6.30	3.15	1.57
5.00	3.5	3.5	7.24	3.15	1.77
5.00	4	4	7.24	2.95	1.97
6.02	3	3	7.28	3.54	1.57
6.02	3.5	3.5	7.28	3.74	1.77
6.02	4	4	7.68	3.54	1.77
7.56	4	4	8.27	4.13	1.97
7.56	5	5	8.27	4.13	1.97
9.84	6	6	12.01	5.91	2.36

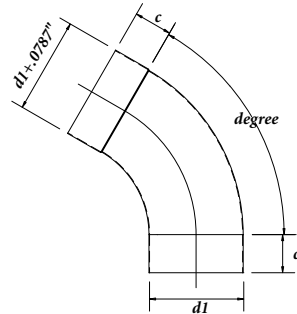


**ELBOWS & OFFSETS**

# 16

16. Elbow, round

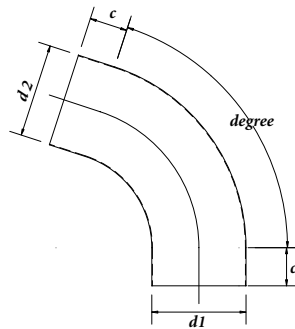
German size	Grad	d1	c
	[degree]	[inch]	[inch]
60	40/72/85	2.25	1.18
76	40/72/85	3.0	1.77
87	40/72/85	3.5	1.77
100	40/72/85	4	1.77
120	40/72/85	5	1.77
150	72	6	1.77



# 17

17. Elbow, rectangular

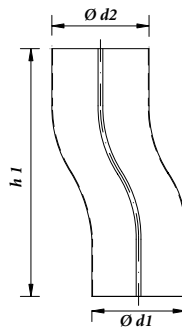
German size	Grad	d1	d2	c
	[degree]	[inch]	[inch]	[inch]
80	72	3.15	3.15	1.18
100	72	4.00	4.00	1.57



# 18

18. Offset

German size	d 1	h 1
	[inch]	[inch]
76	3.00	8.46
87	3.50	9.65
100	4.00	10.24
120	5.00	10.43

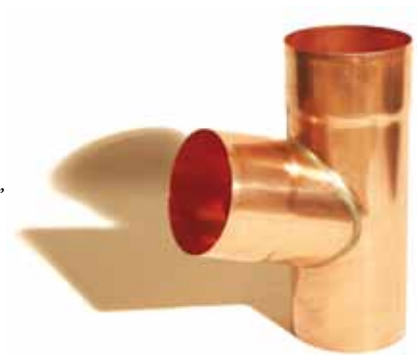
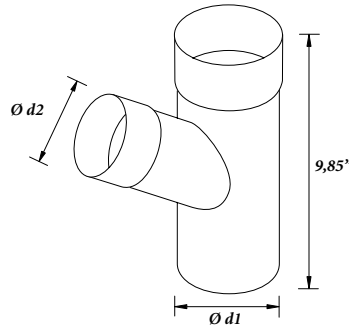


**ELBOWS & OFFSETS**

# 19

**19. Two-way downspout (“Y”)**

German size	Grad	d1/d2	alternative d2	alternative d2
	[degree]	[inch]	[inch]	[inch]
60	60/72/87	2.25	-	-
76	60/72/87	3.0	2.25	-
87	60/72/87	3.5	3.0	2.25
100	60/72/87	4.0	3.5	3.0
120	60/72/87	5.0	4.0	3.5

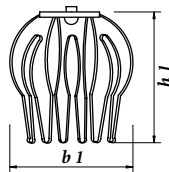


**DRAIN SCREENS**

# 20

**20. Drain screen, copper**

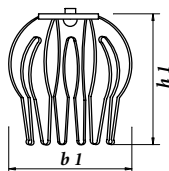
German size	b1	h1
	[inch]	[inch]
60	2.25	3.4
80	3.00	3.5
100	4.00	4.6
120	5.00	4.7
150	6.00	5.7



# 21

**21. Drain screen, stainless steel**

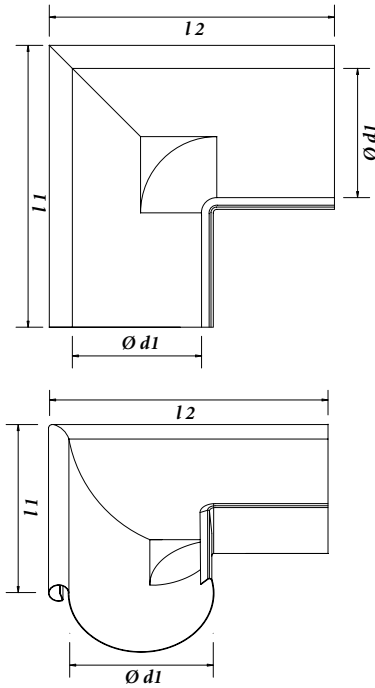
German size	b1	h1
	[inch]	[inch]
60	2.25	3.4
80	3.00	3.5
100	4.00	4.6
120	5.00	4.7
150	6.00	5.7



**MITERS**

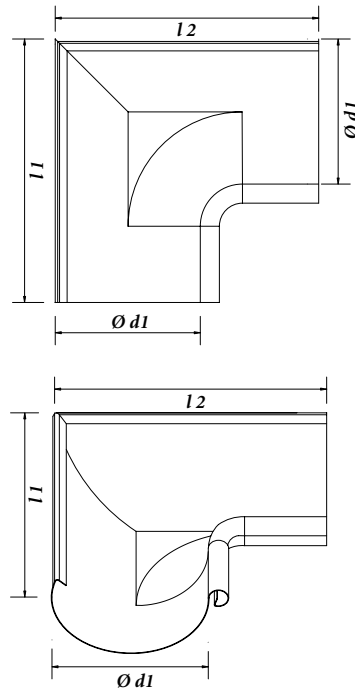
## 22. Mitters, outside halfround

German size	d 1	l1	l2
	[inch]	[inch]	[inch]
200	3.15	9.84	9.84
250	4.13	11.8	11.8
280	5.00	11.8	11.8
333	6.00	11.8	11.8
400	7.56	12.60	12.60
500	9.84	13.39	13.39



## 23. Mitters, inside halfround

German size	d 1	l1	l2
	[inch]	[inch]	[inch]
200	3.15	9.45	9.45
250	4.13	10.63	10.63
280	5.00	11.80	11.80
333	6.00	11.80	11.80
400	7.56	12.60	12.60
500	9.84	13.39	13.39

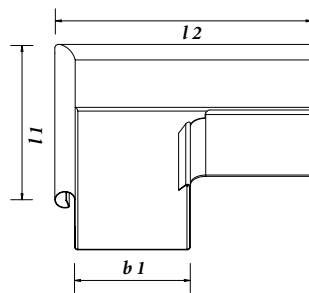
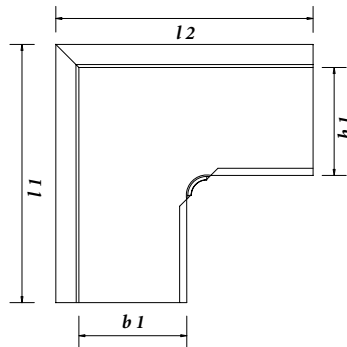


**MITERS**

# 24

24. Miters, rectangular outside

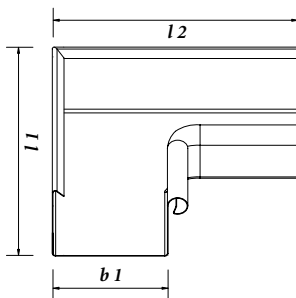
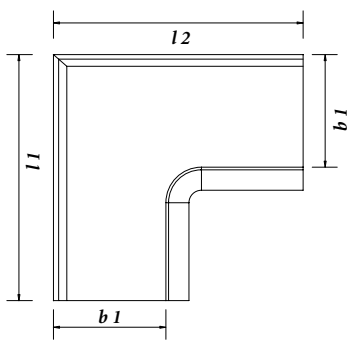
German size	b1	l1	l2
	[inch]	[inch]	[inch]
200	2.76	11.80	11.80
250	3.35	11.80	11.80
333	4.72	11.80	11.80
400	5.91	11.80	11.80
500	7.87	11.80	11.80



# 25

25. Miters, rectangular inside

German size	b1	l1	l2
	[inch]	[inch]	[inch]
200	2.76	11.8	11.8
250	3.35	11.8	11.8
333	4.72	11.8	11.8
400	5.91	11.8	11.8
500	7.87	11.8	11.8

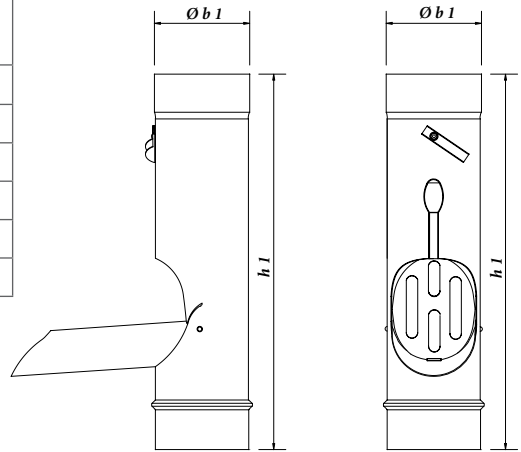


**INLINE CLEANOUTS**

# 26

## 26. Inline cleanout

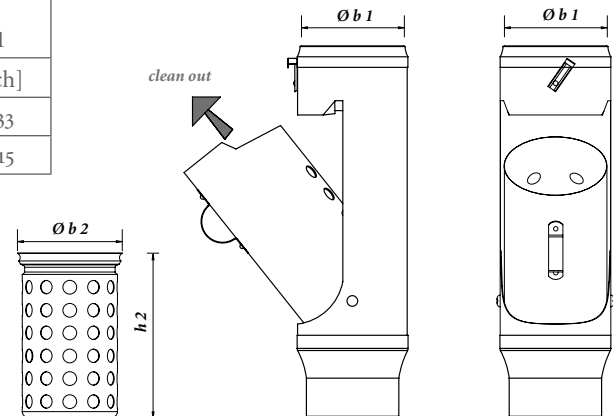
German size	b1	h1
	[inch]	[inch]
60	2.25	15.75
76	3	15.75
87	3.5	15.75
100	4	15.75
120	5	15.75



# 27

## 27. Inline cleanout with removable basket

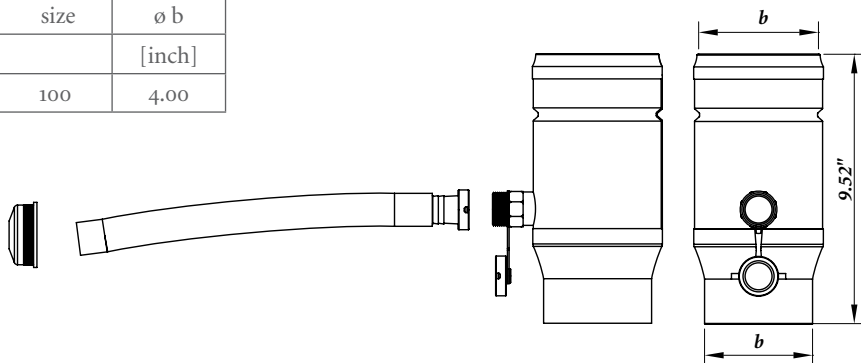
German size	b1	h1
	[inch]	[inch]
76	3.00	17.33
100	4.00	15.15



# 28

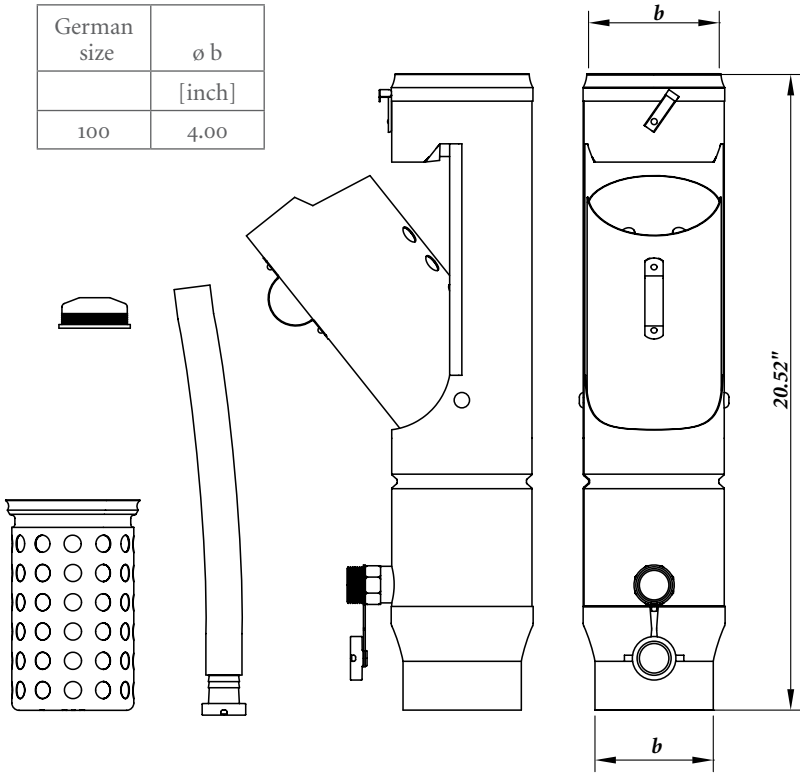
## 28. Inline cleanout with hose connection

German size	ø b
	[inch]
100	4.00

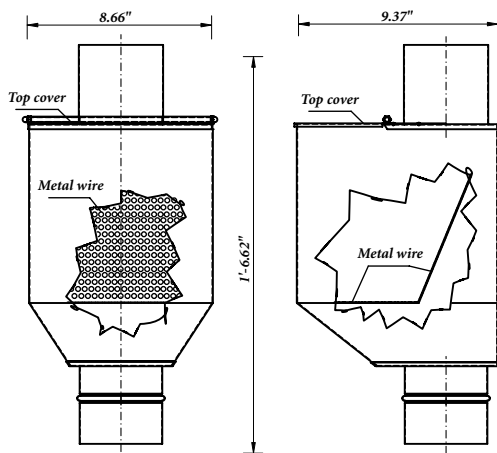


**INLINE CLEANOUTS**

**29. Inline cleanout with removable basket and hose connection**



**30. Special bin with trapped door**

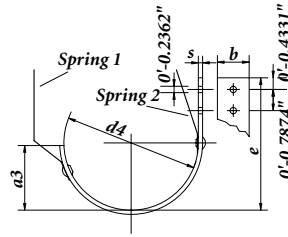


**HANGERS**

# 31

## 31. Fascia hanger, halfround

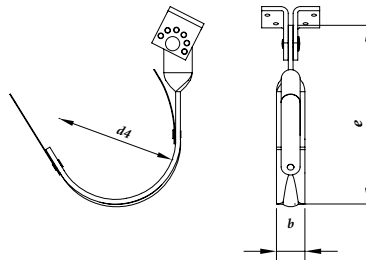
German size	Material thickness b x s	d4	a3	e
	[inch]	[inch]	[inch]	[inch]
280	1.18 x 0.16	5.00	2.40	4.92
333	1.18 x 0.16	6.02	2.91	4.92
400	1.18 x 0.16	7.56	3.66	4.92



# 32

## 32. Fascia hanger, halfround with soldering outfit

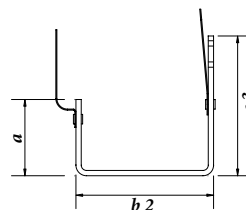
German size	Material thickness b x s	d4	e
	[inch]	[inch]	[inch]
280	1.18 x 0.16	5.00	7.42
333	1.18 x 0.16	6.02	7.83
400	1.18 x 0.16	7.56	9.18



# 33

## 33. Fascia hanger, rectangular

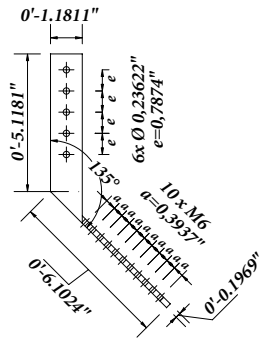
German size	Material thickness b x s	b2	a5	c3
	[inch]	[inch]	[inch]	[inch]
333	1.18 x 0.16	4.72	2.44	4.88
400	1.18 x 0.16	5.91	3.03	5.21



**HANGERS**

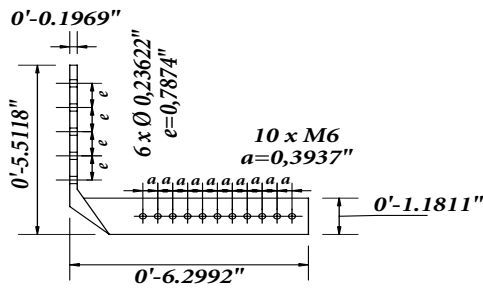
# 34

34. Rafter tail, 135°



# 35

35. Rafter tail, 90°

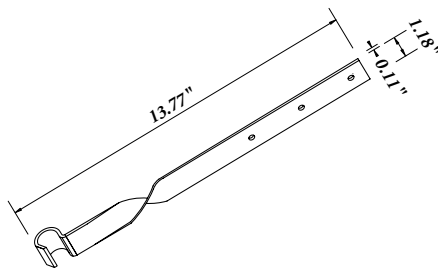


# 36

36. Heavy twisted bead holder



German size	available for halfround gutter [inch]	available for rectangular gutter [inch]
200	3.15	2.76
250	4.13	3.35
280	5.00	-
333	6.02	4.72

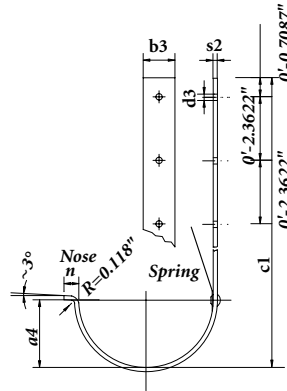


**HANGERS**

37

37. Heavy hanger, halfround with nose & spring

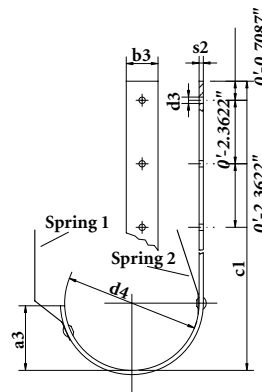
German size	Material thickness (inch)	d4 (inch)	a4 (inch)	c1 (inch)
200	0.98 x 016	3.15	1.46	9.06
250	0.98 x 016	4.13	1.97	11.02
280	1.18 x 0.19	5.00	2.40	11.42
333	1.18 x 0.19	6.02	2.91	11.81
400	1.18 x 0.19	7.56	3.66	13.39
500	1.57 x 0.19	9.84	4.88	14.76



38

38. Heavy hanger, halfround with 2 springs

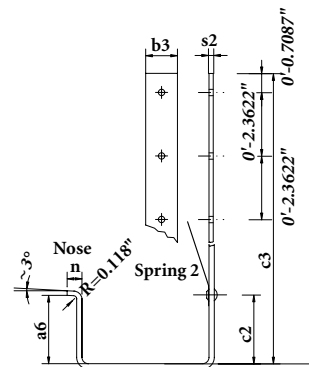
German size	Material thickness (inch)	d4 (inch)	a3 (inch)	c1 (inch)
200	0.98 x 016	3.15	1.46	9.06
250	0.98 x 016	4.13	1.97	11.02
280	1.18 x 0.19	5.00	2.40	11.42
333	1.18 x 0.19	6.02	2.91	11.81
400	1.18 x 0.19	7.56	3.66	13.39
500	1.57 x 0.19	9.84	4.88	14.76



39

39. Heavy hanger, rectangular with nose & spring

German size	Material thickness [inch]	b2 [inch]	a6 [inch]	c3 [inch]
200	0.98 x 016	2.76	1.22	9.06
250	0.98 x 016	3.35	1.73	11.02
333	1.18 x 0.19	4.72	2.44	11.81
400	1.18 x 0.19	5.91	3.03	12.99
500	1.57 x 0.19	7.87	3.82	13.78

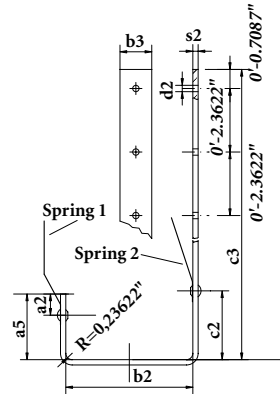


HANGERS

# 40

## 40. Heavy hanger, rectangular with 2 springs

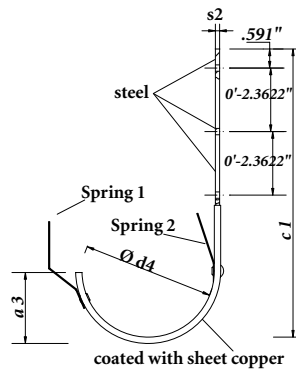
German size	Material thickness	b2	a6	c3
	[inch]	[inch]	[inch]	[inch]
200	0.98 x 0.16	2.76	1.22	9.06
250	0.98 x 0.16	3.35	1.73	11.02
333	1.18 x 0.19	4.72	2.44	11.81
400	1.18 x 0.19	5.91	3.03	12.99
500	1.57 x 0.19	7.87	3.82	13.78



# 41

## 41. Heavy hanger, copper coated, halfround with 2 springs

German size	Material thickness	d4	a3	c1
	(inch)	(inch)	(inch)	(inch)
280	0.98 x 0.23	5.00	2.52	11.42
333	0.98 x 0.23	6.02	3.03	11.81
400	1.98 x 0.31	7.56	3.78	13.39

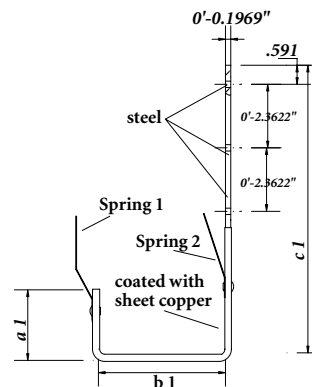


**Note:** For more information regarding the material please see the technical information on page 30

# 42

## 42. Heavy hanger, copper coated, rectangular with 2 springs

German size	Material thickness	b1	a1	c1
	(inch)	(inch)	(inch)	(inch)
333	0.98 x 0.23	4.72	2.44	11.81
400	0.98 x 0.31	5.91	3.03	12.99



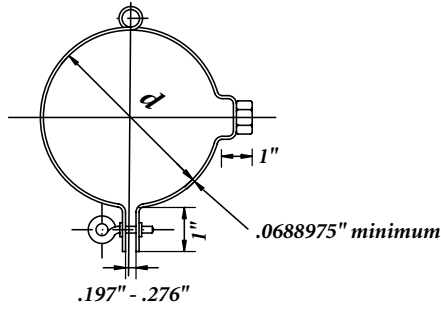
**Note:** For more information regarding the material please see the technical information on page 30

**BRACKETS & BOLTSCREWS**

# 43

**43. Bracket, halfround with screw M10**

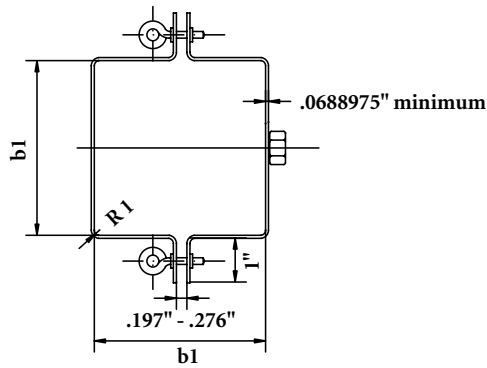
German size	d
	[inch]
60	2.25
76	3
87	3.5
100	4
120	5
150	6



# 44

**44. Bracket, rectangular with screw M10**

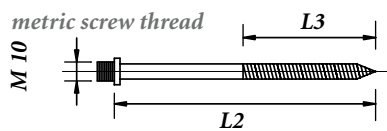
German size	b1
	[inch]
60	2.25
80	3.15
100	4
120	5



# 45

**45. Boltscrew M10**

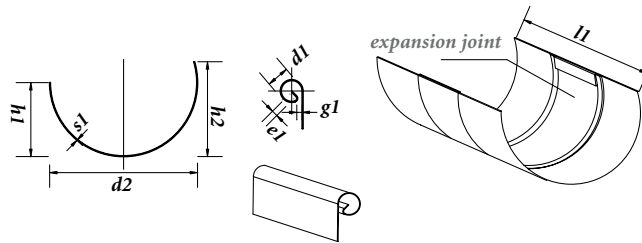
German size	L 2	L 3
	[inch]	[inch]
80	3.15	2.95
100	3.94	2.95
140	5.51	2.95
180	7.09	2.95



**EXPANSION JOINTS**

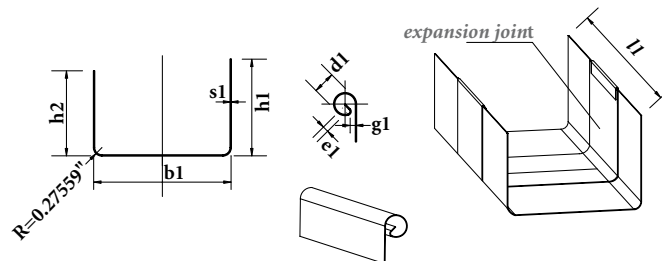
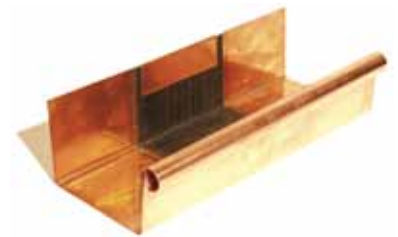
# 46. Expansion joints, halfround

German size	d 2	h 1	h 2	l 1	d1	e1	g1	s 1
	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[oz]
200	3.15	1.57	1.89	11.81	0.63	0.20	0.20	18
250	4.13	2.09	2.48	11.81	0.71	0.28	0.20	18
280	5.00	2.52	2.91	11.81	0.71	0.28	0.20	18
333	6.02	3.03	3.43	11.81	0.79	0.35	0.24	18
400	7.56	3.78	3.91	11.81	0.87	0.35	0.24	20
500	9.84	4.92	5.20	11.81	0.87	0.35	0.24	20



# 47. Expansion joints, rectangular

German size	b 1	h 1	h 2	l 1	d1	e1	g1	s 1
	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[oz]
200	2.76	1.89	1.57	11.81	0.63	0.20	0.20	18
250	3.35	2.48	2.09	11.81	0.71	0.28	0.20	18
333	4.72	3.27	2.87	11.81	0.79	0.35	0.24	18
400	5.91	3.86	3.46	11.81	0.87	0.35	0.24	20
500	7.87	5.04	4.25	11.81	0.87	0.35	0.24	20

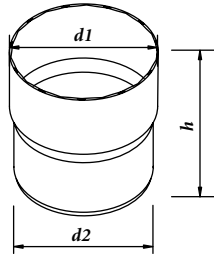


**COUPLINGS**

48

48. Downleader coupling

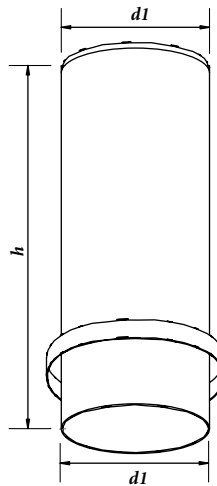
German size	d1	d2	h
	Ø [inch]	Ø [inch]	[inch]
60	2.25	2.21	4.33
76	3.00	2.85	4.33
87	3.50	3.31	4.33
100	4.00	3.62	4.33
120	5.00	4.53	4.33



49

49. Sliding piece with cap

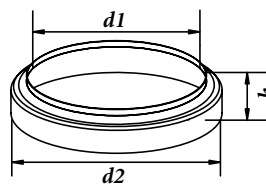
German size	d1	h
	Ø [inch]	Ø [inch]
76	3.00	9.65
87	3.50	9.65
100	4.00	9.65
120	5.00	9.65



50

50. Cap for boot

German size	pipe	h	d1	d2
	[Ø]	[inch]	[inch]	[inch]
60	2.25	1.10	2.25	4.63
76	3	1.10	3	4.63
87	3.5	1.10	3.5	4.63
100	4	0.90	4	4.63
120	5	1.02	5	5.83



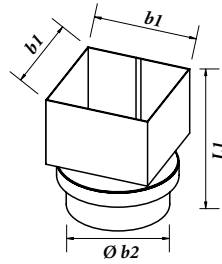
**COUPLINGS**

51

51. Transition piece, rectangular/round

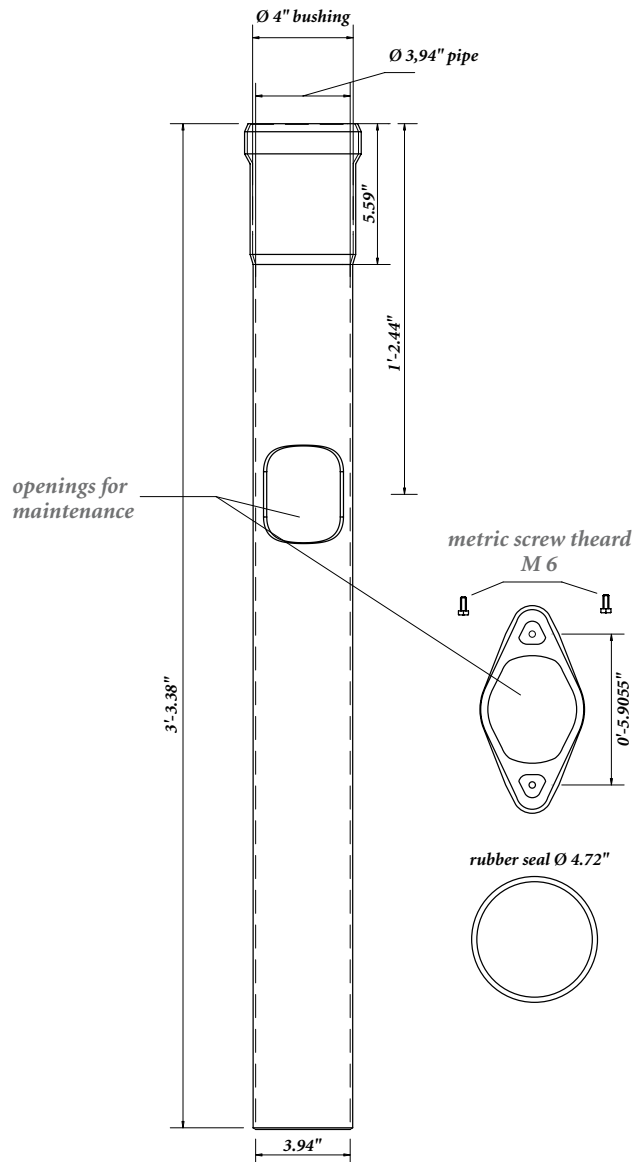


German size	b 1	b 2	l 1
	[inch]	[inch]	[inch]
80	3.26	3.11	5.12
100	4.10	3.84	5.12



52

52. Heavy boot with door

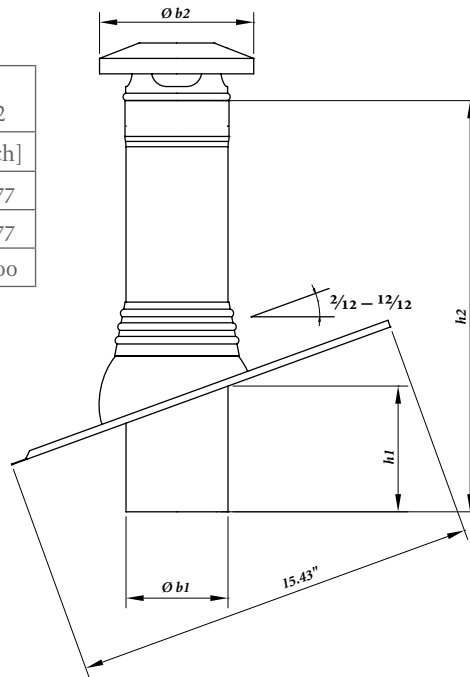


**VENTILATION PIPES**

53

**53. Ventilation pipe with copper sheet, flexible**

German size	b1	h1	b2	h2
	[degree]	[inch]	[inch]	[inch]
76	3.00	4.87	5.91	17.77
100	4.00	4.82	5.91	17.77
120	5.00	3.48	6.54	18.00



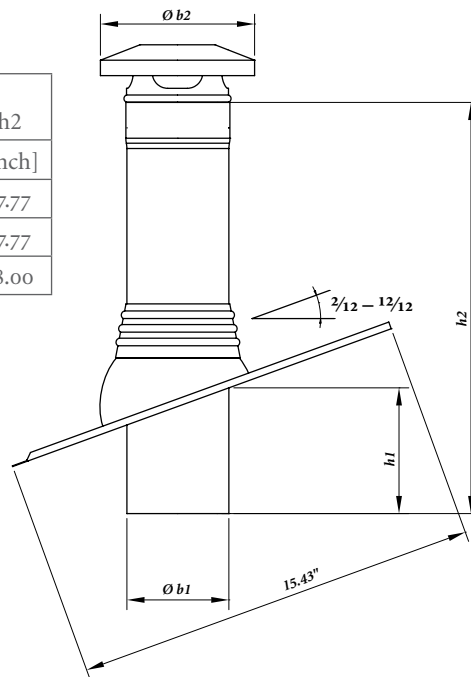
Applicable for roof pitches

from  $2/12$  -  $12/12$

54

**54. Ventilation pipe with lead sheet, flexible**

German size	b1	h1	b2	h2
	[degree]	[inch]	[inch]	[inch]
76	3.00	4.87	5.91	17.77
100	4.00	4.82	5.91	17.77
120	5.00	3.48	6.54	18.00



Applicable for roof pitches

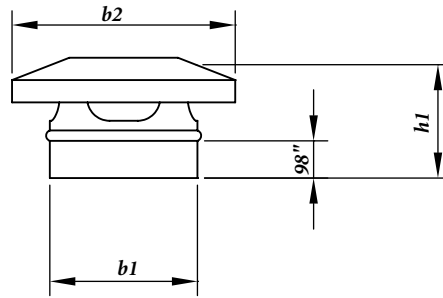
from  $2/12$  -  $12/12$

**VENTILATION PIPES**

55

55. Cap for ventilation pipe

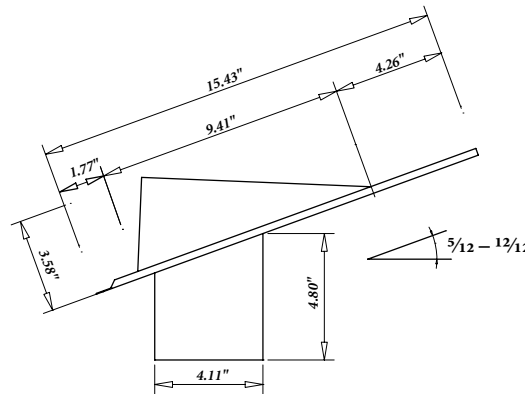
German size	b1	h1	b2
	[inch]	[inch]	[inch]
76	2.96	3.00	5.91
100	3.91	3.00	5.91
120	4.70	3.22	6.54



56

56. Ventilation pipe "Atlantic"

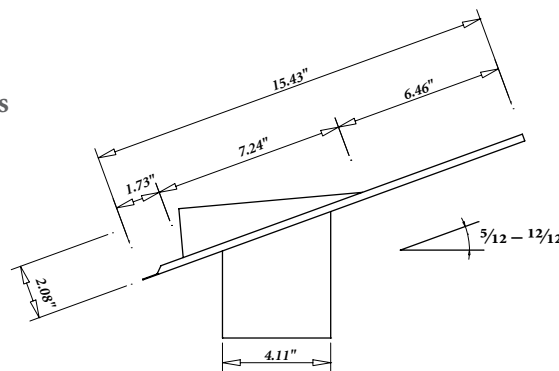
Applicable for roof pitches from  $\frac{5}{12}$  -  $\frac{12}{12}$



57

57. Ventilation pipe "Rocky Mountain"

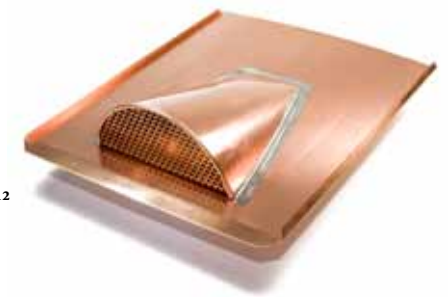
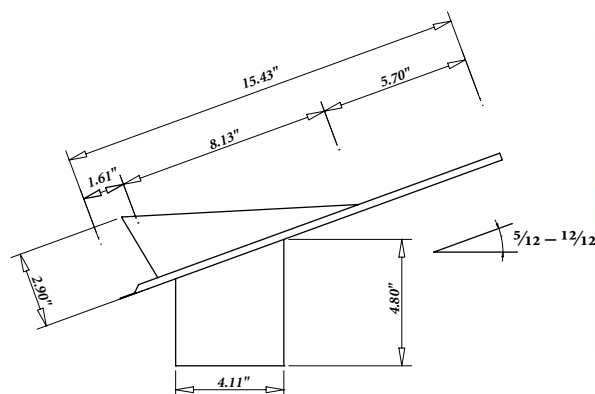
Applicable for roof pitches from  $\frac{5}{12}$  -  $\frac{12}{12}$



58

58. Ventilation pipe "Pacific"

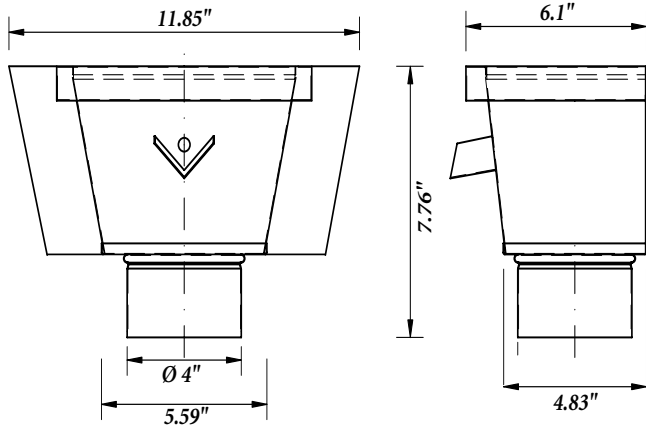
Applicable for roof pitches from  $\frac{5}{12}$  -  $\frac{12}{12}$



**LEADERBOXES**

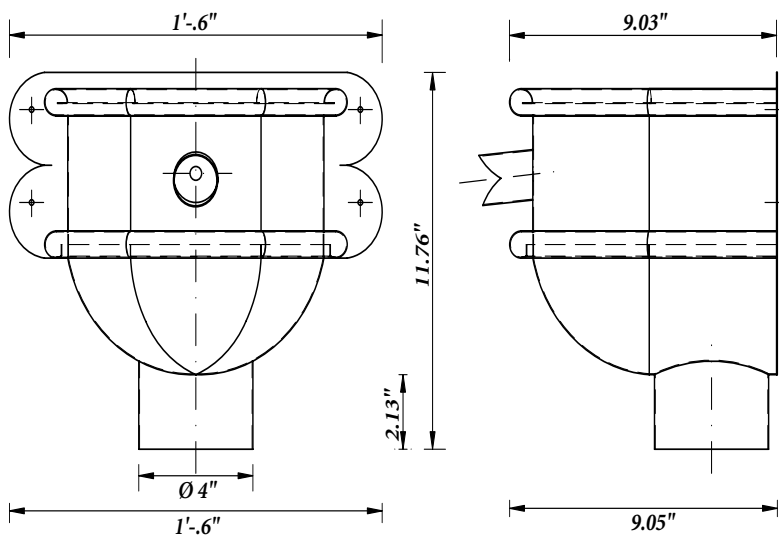
# 59

## 59. Cologne



# 60

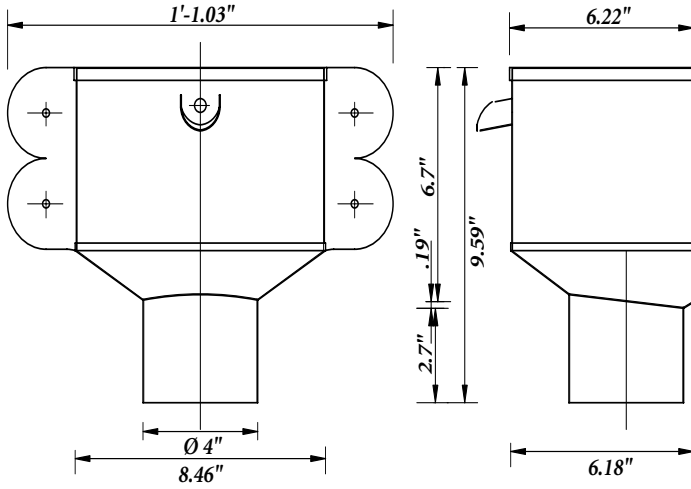
## 60. Duesseldorf



**LEADERBOXES**

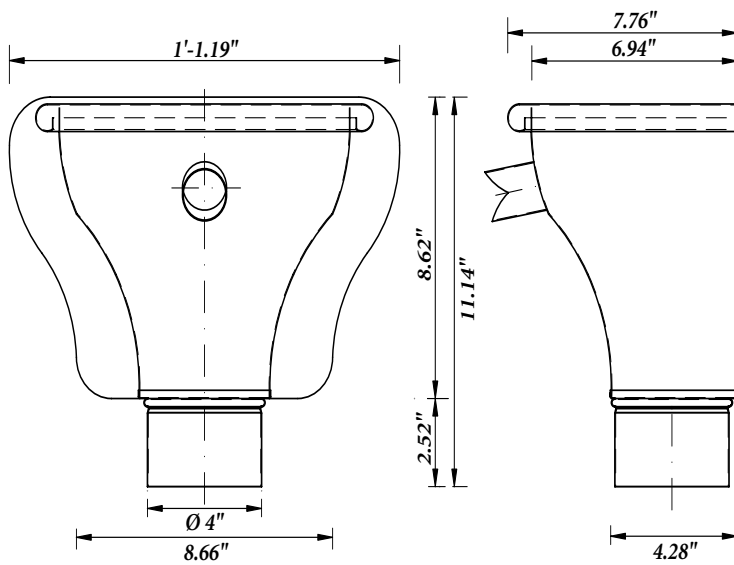
# 61

61. Hamburg



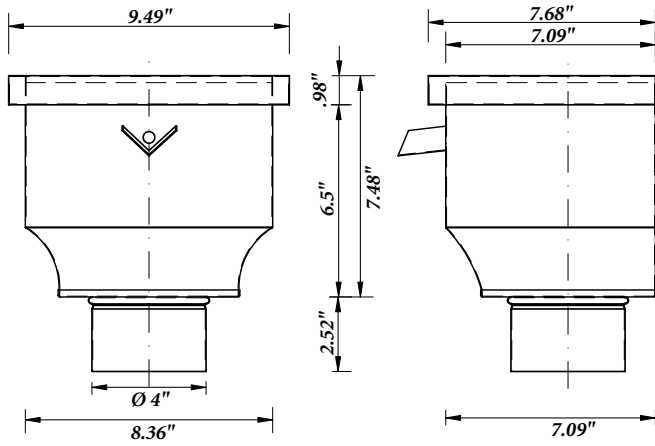
# 62

62. Berlin

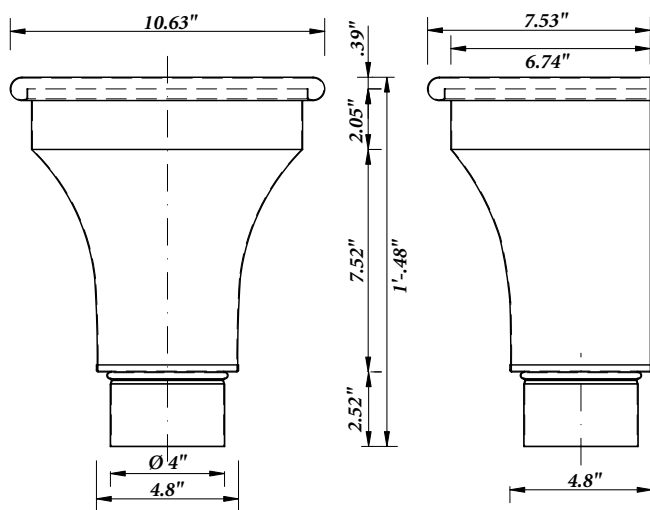


**LEADERBOXES**

63. Frankfurt

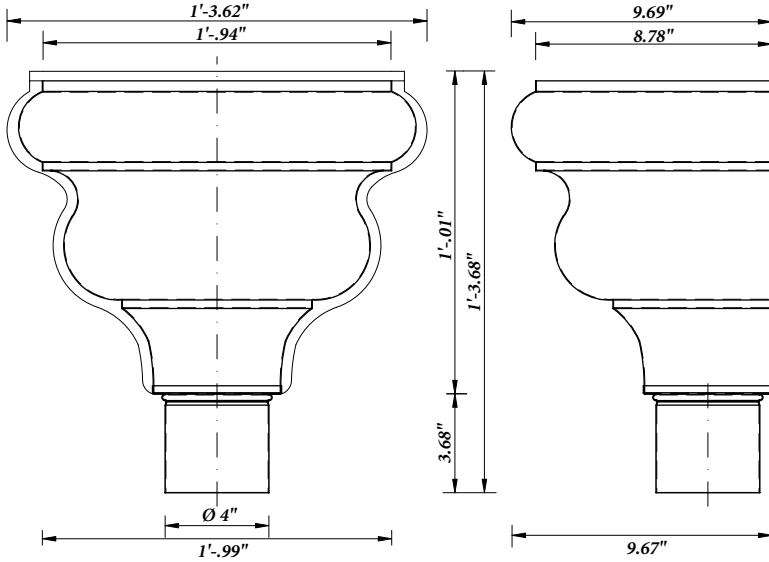


64. Paris



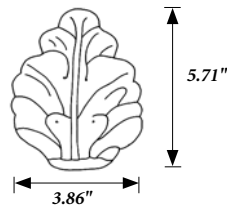
**LEADERBOXES**

65. Masterpiece

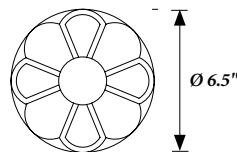


**ORNAMENTS**

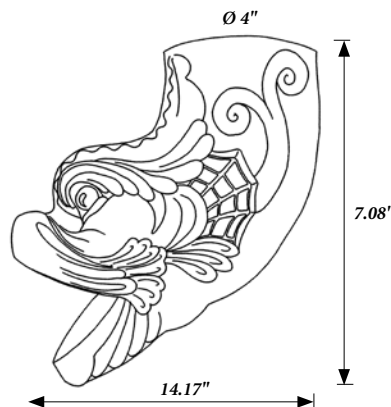
66. Ornamental leaf



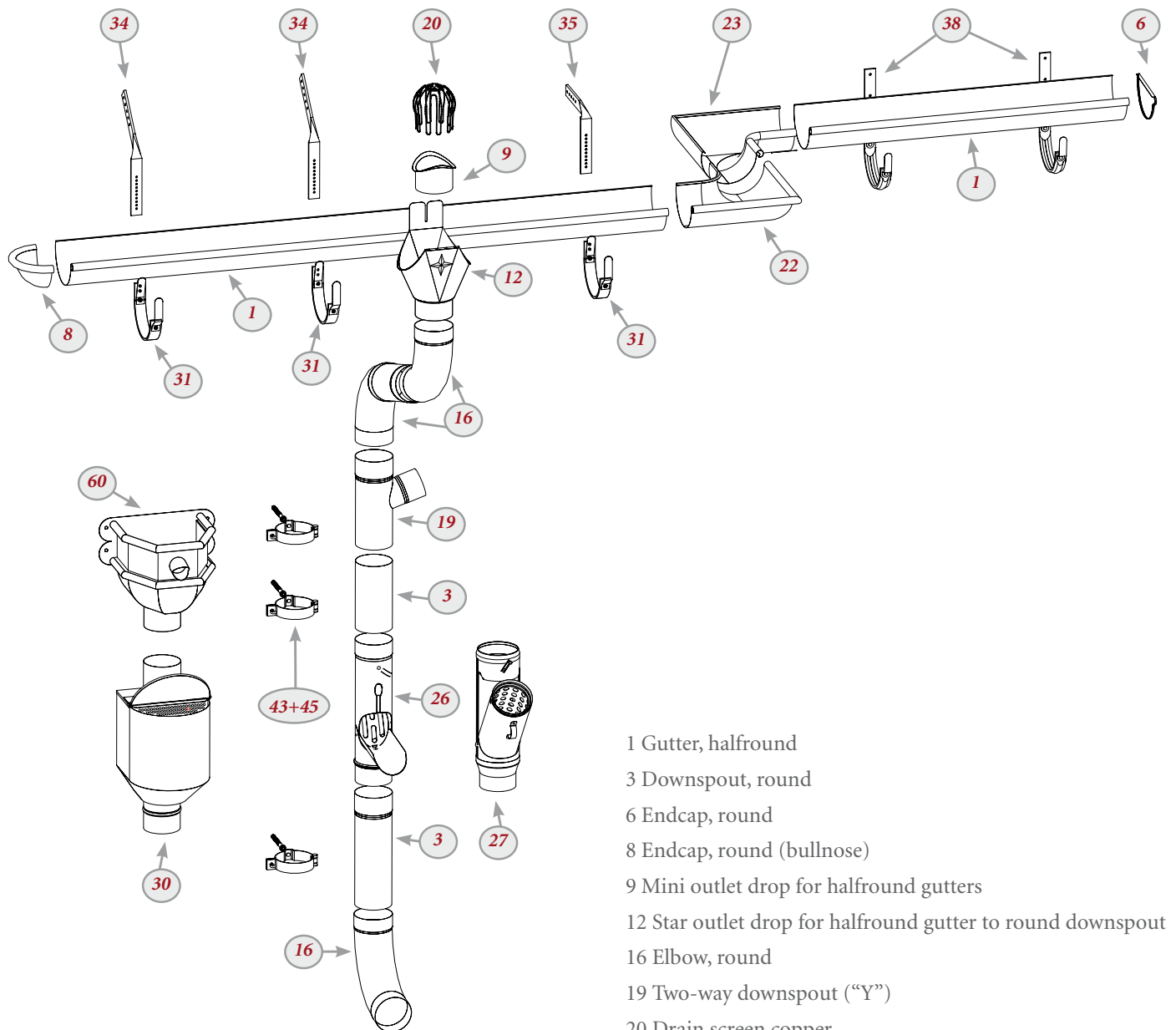
67. Ornamental flower



68. Ornamental fishhead

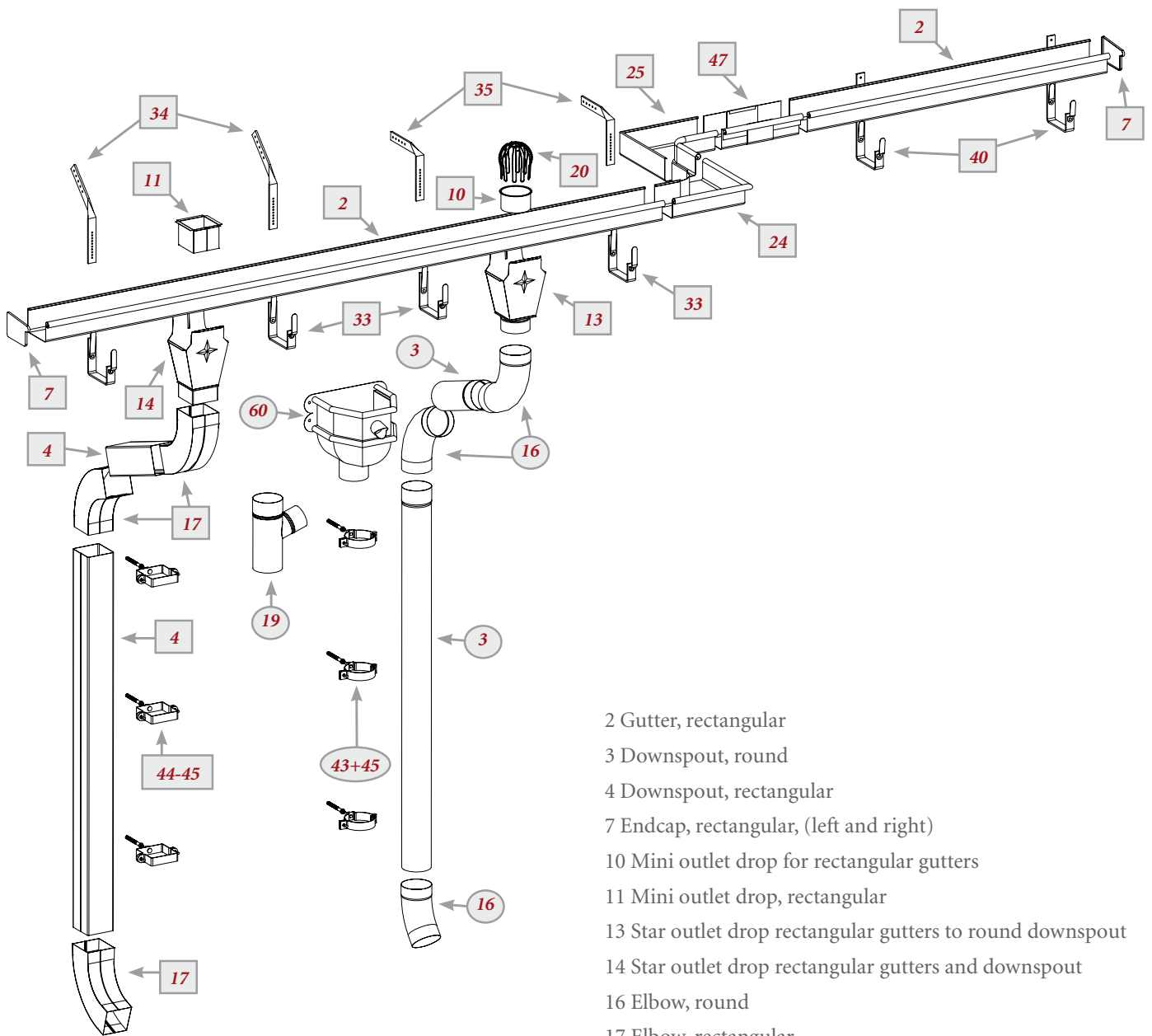


**SPEC DRAWINGS OF COPPER GUTTER SYSTEMS, HALFROUND**



- 1 Gutter, halfround
- 3 Downspout, round
- 6 Endcap, round
- 8 Endcap, round (bullnose)
- 9 Mini outlet drop for halfround gutters
- 12 Star outlet drop for halfround gutter to round downspout
- 16 Elbow, round
- 19 Two-way downspout (“Y”)
- 20 Drain screen copper
- 22 Miters, outside halfround
- 23 Miters, inside halfround
- 26 Inline cleanout
- 27 Inline cleanout with removable basket
- 30 Special bin with draped door
- 31 Fascia hanger, halfround
- 34 Rafter tail, 135°
- 35 Rafter tail, 90°
- 38 Heavy hanger, halfround with 2 springs
- 43 Bracket, halfround with screw M10
- 45 Boltscrew, M10
- 60 Leaderbox, Duesseldorf

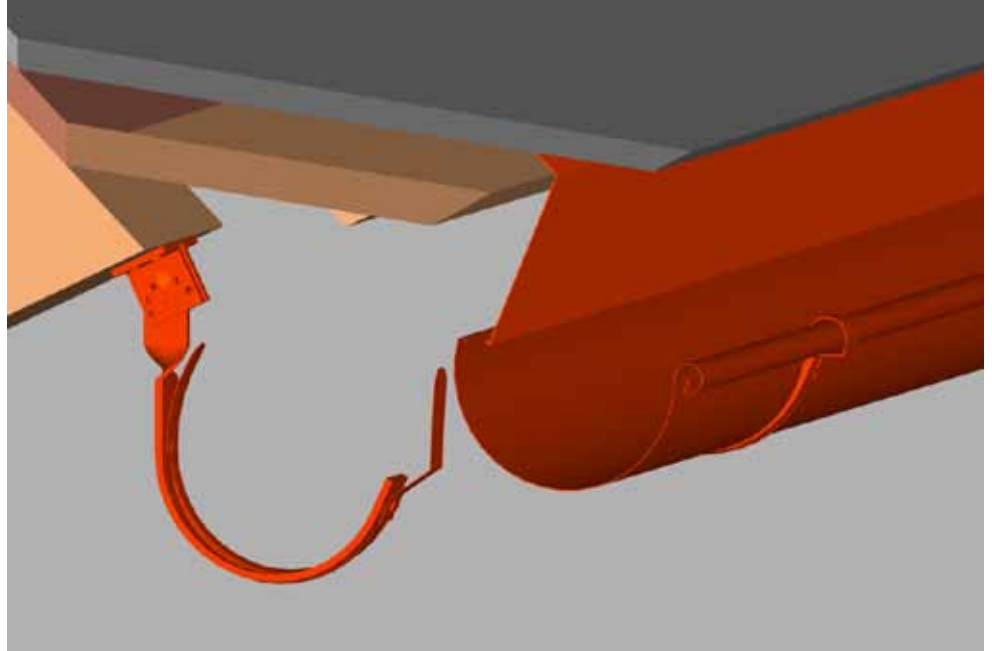
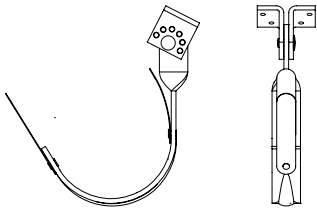
**SPEC DRAWINGS OF COPPER GUTTER SYSTEMS, RECTANGULAR**



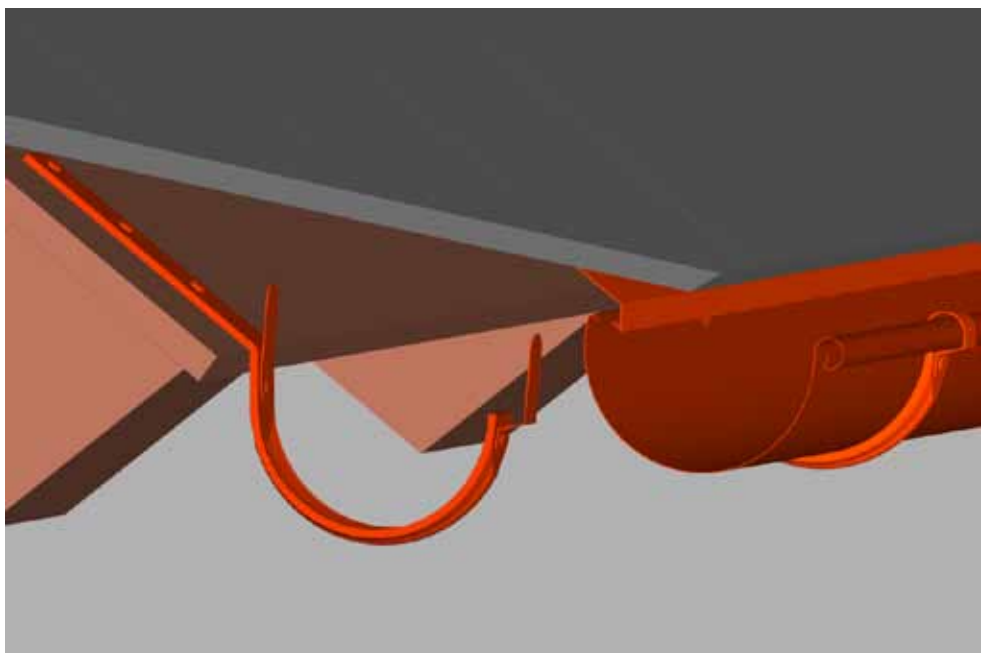
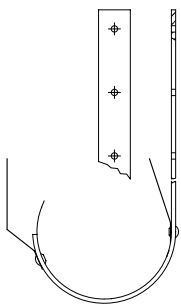
- 2 Gutter, rectangular
- 3 Downspout, round
- 4 Downspout, rectangular
- 7 Endcap, rectangular, (left and right)
- 10 Mini outlet drop for rectangular gutters
- 11 Mini outlet drop, rectangular
- 13 Star outlet drop rectangular gutters to round downspout
- 14 Star outlet drop rectangular gutters and downspout
- 16 Elbow, round
- 17 Elbow, rectangular
- 19 Tow-way downspout
- 20 Drain screen, copper
- 24 Miters outside, rectangular
- 25 Miters inside, rectangular
- 33 Fascia hanger, rectangular
- 34 Rafter tail, 135°
- 35 Rafter tail, 90°
- 40 Heavy hanger, rectangular with 2 springs
- 43 Bracket, halfround with screw M10
- 44 Bracket, rectangular with screw M10
- 45 Boltscrew, M10
- 47 Expansion joint, rectangular
- 60 Leaderbox, Duesseldorf

**INSTALLATION EXAMPLES**

**1. Example: Fascia hanger soldering outfit**

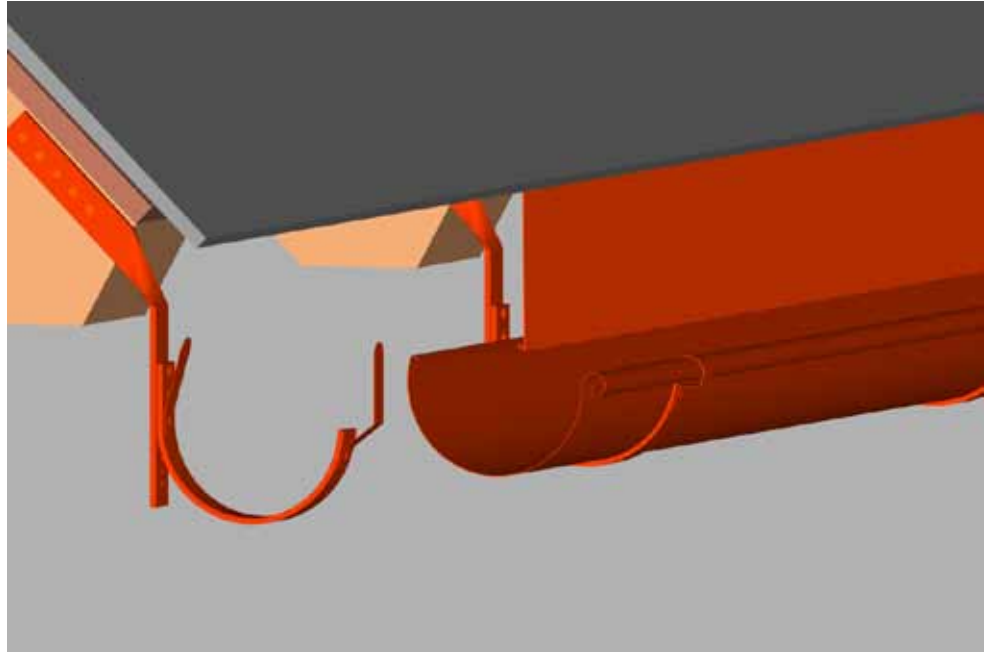
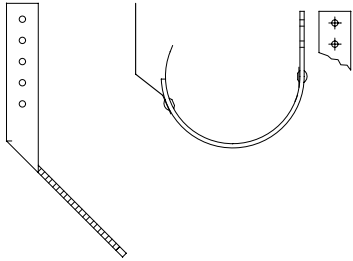


**2. Example: Heavy Hanger with two springs**

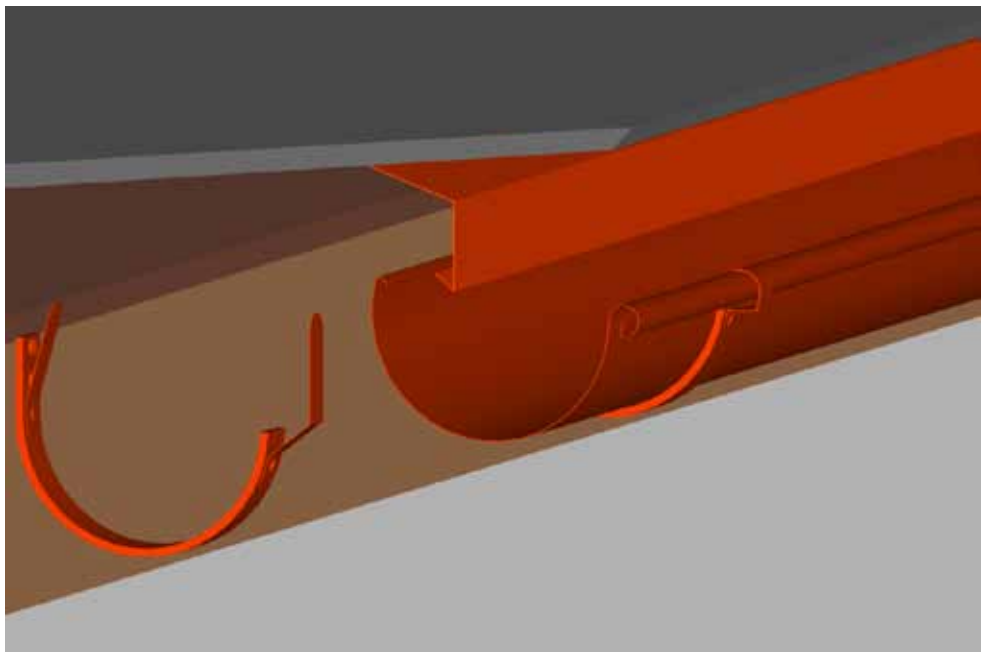
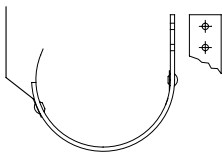


**INSTALLATION EXAMPLES**

**3. Example: Fascia hanger with rafter tail**

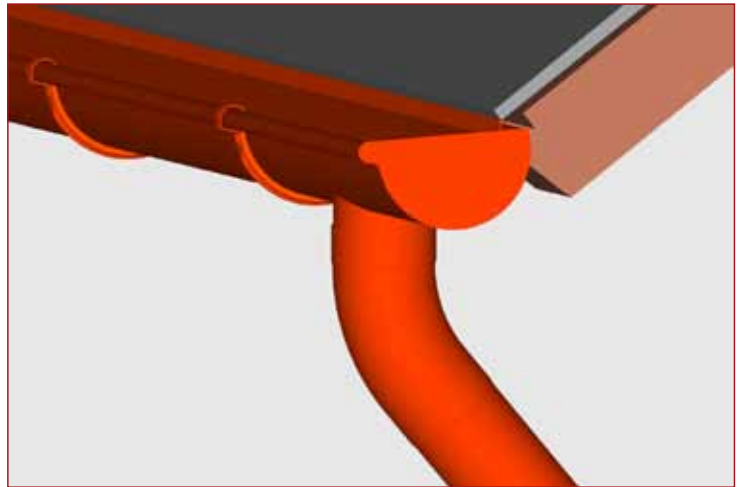
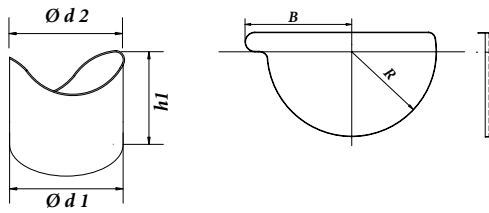


**4. Example: Fascia hanger**

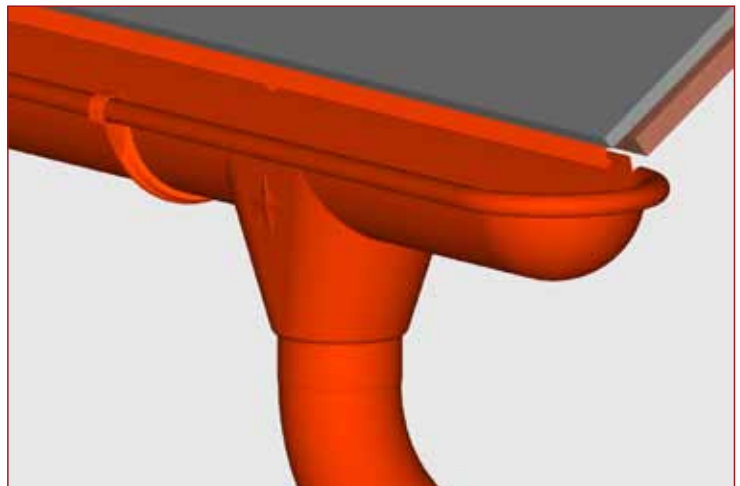
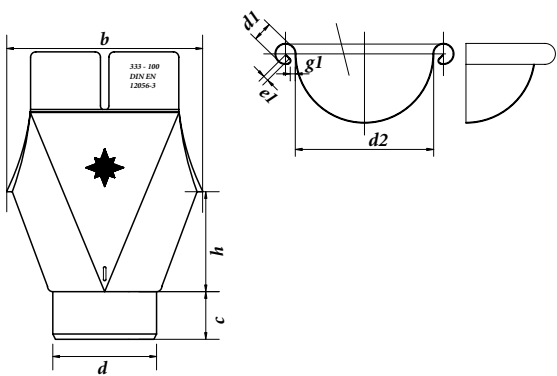


**INSTALLATION EXAMPLES**

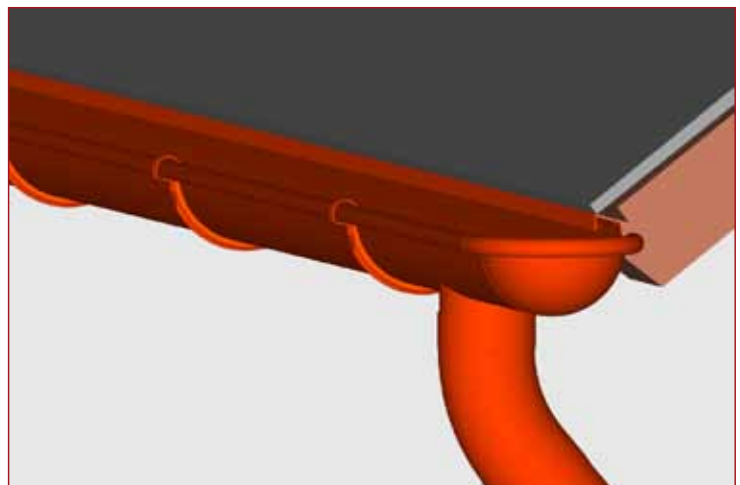
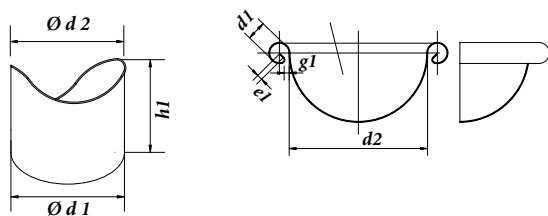
5. Example: Flat endcap & mini outlet drop



5. Example: Round endcap & star outlet drop

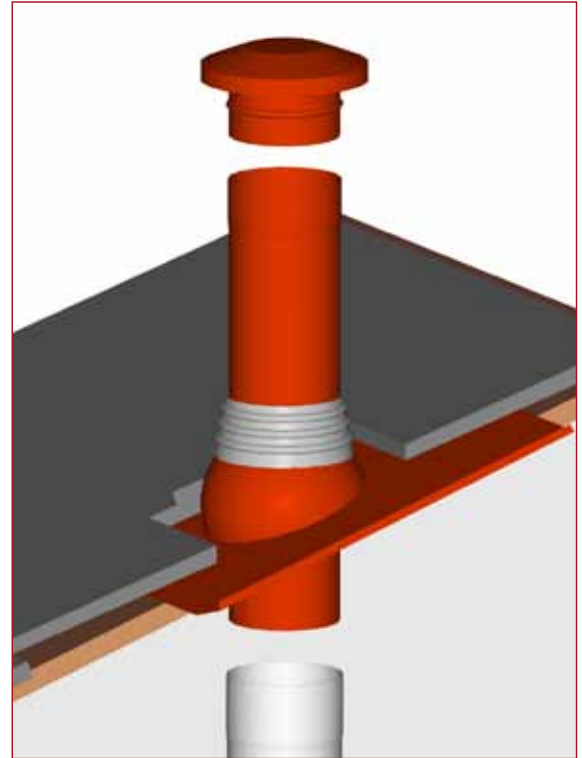
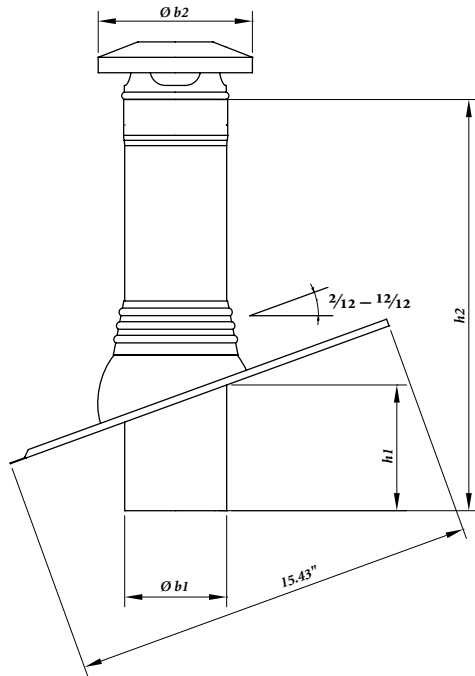


5. Example: Round endcap & mini outlet drop



**INSTALLATION EXAMPLES**

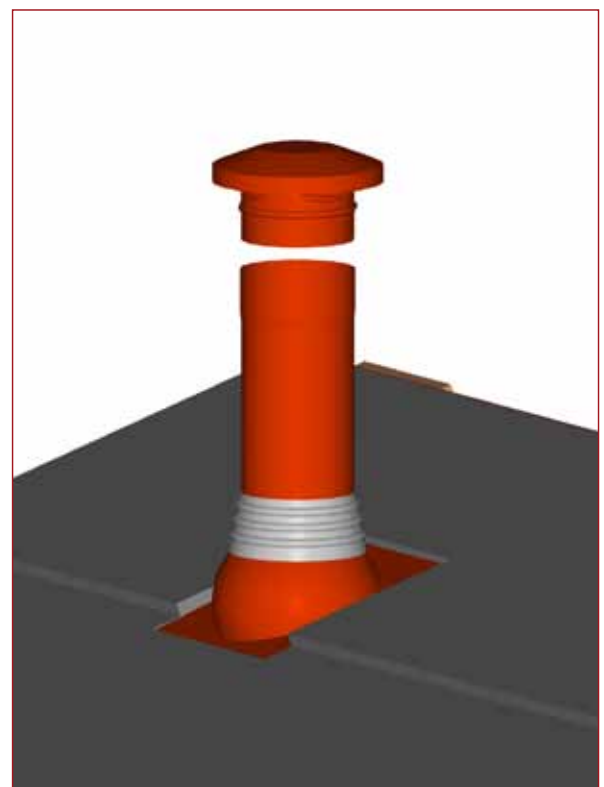
6. Example: Ventpipe



*Your advantage:*

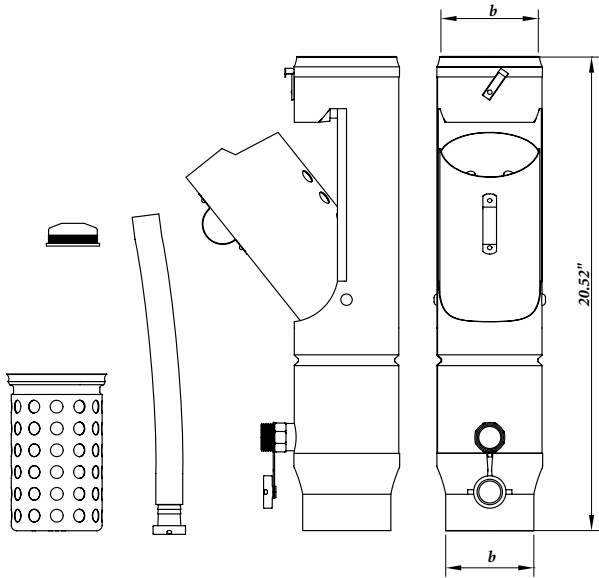
AMG ventpipes cover roof pitches

from  $2/12 - 12/12$  all in one.

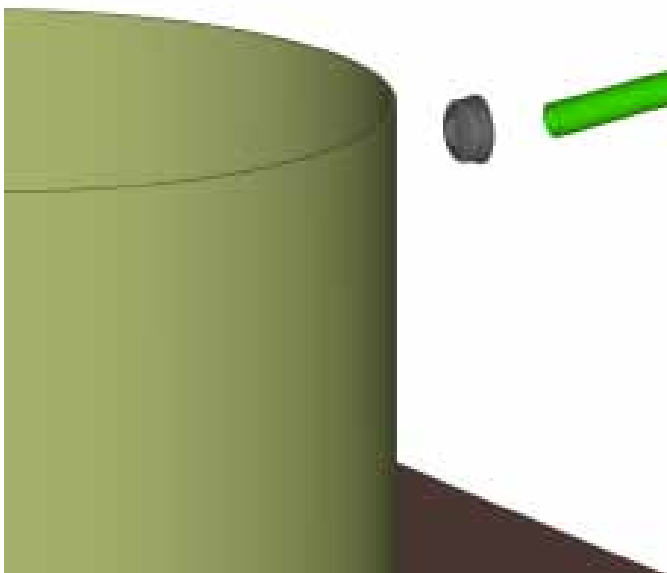


**INSTALLATION EXAMPLES**

7. Example: Inline Cleanout

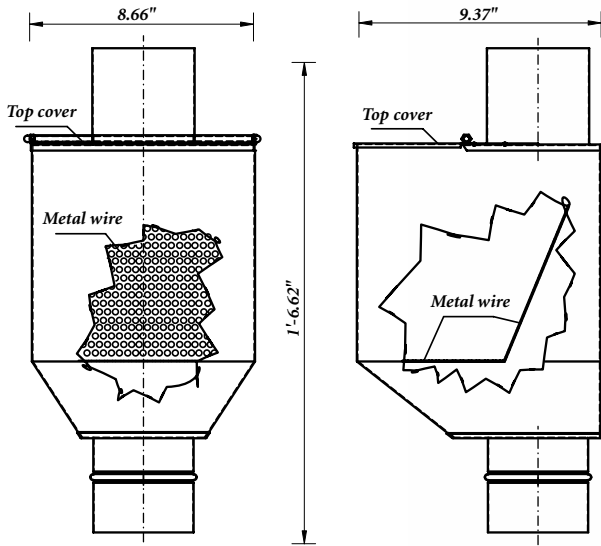


*Your advantage:*  
Channel and save your rainwater!



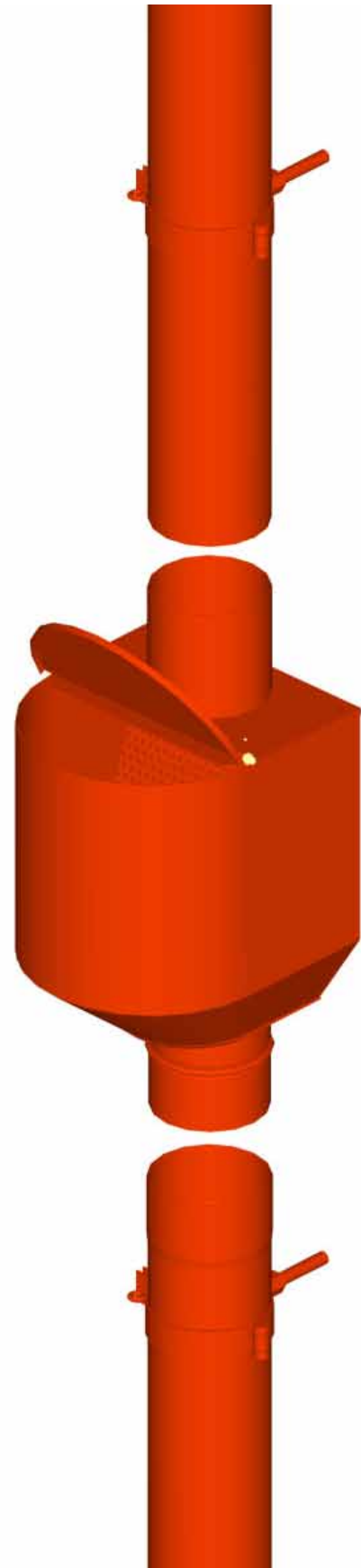
**INSTALLATION EXAMPLES**

**8. Example: AMG special bin**



***Your advantage:***

This special bin collects leaves for a clean downspout!



*EXAMPLES OF COMPLETED INSTALLATIONS*

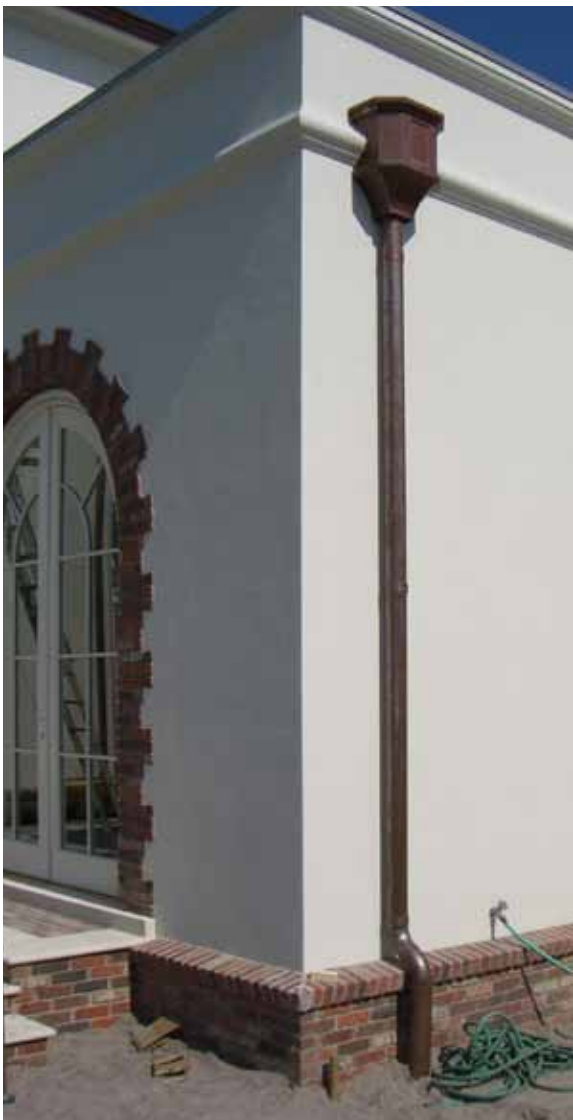


**EXAMPLES OF COMPLETED INSTALLATIONS**

To this end, its – as a result of weathering – constantly changing patina influences the appearance of a building, whereby the original copper sheen of the metal gradually develops into a sequence of warm, brown shades before the external surface acquires its characteristic green.



*EXAMPLES OF COMPLETED INSTALLATIONS*



**EXAMPLES OF COMPLETED INSTALLATIONS**



*EXAMPLES OF COMPLETED INSTALLATIONS*



**EXAMPLES OF COMPLETED INSTALLATIONS**



## THE COPPER COATED HANGERS

### • The copper coated hangers

The copper coated hanger support is a proven component that has been used for private and public buildings in Germany for decades. Contact corrosion between the galvanized hook iron and the copper cladding is impossible as a result of a double seam and the welt-like seal of the copper mantle.

Furthermore, the extremely familiar standard potential is not given in practice, as the high-avidity zinc forms an inorganic coating with oxygen and carbon dioxide after only a short period.

In the galvanizing plant, the formation of these coatings is promoted by chromating the zinc surface directly following galvanization.



## TECHNICAL INFORMATION

### • Material Designation

EN mark	DIN Werkst.-Nr. / Bez.	BS	ASTM	AFNOR	UNI	JIS
Cu-DHP	2.0090 / SF - Cu	C 106	CDA 122			

### • Chemical analysis

Cu	Fe	NI	Pb	Al	P	Zn	Mn	Cd	Te
min 99.9	-		-	-	0.015 - 0.040	-	-	-	-

### • Physical Properties

Density:	8.9 g/cm <sup>3</sup>
Coefficient of Thermal Expansion:	17.7 10 <sup>-6</sup> /K
Electrical Conductivity:	45-52 m/Ohm*mm <sup>2</sup>
Thermal Conductivity:	344.0 W/mk
Modulus of Elasticity:	132 KN/m <sup>2</sup>
Soft annealing temp.:	350-500 °C
Stress relieving temp.:	150-200 °C

### • Mechanical Properties ( EN 1652 )

Temper CW 024 A	thickness	Tensile Strength	Yield Strength	Elongation %	
				A <sub>50</sub>	A <sub>(&gt;2.5 mm)</sub>
R / H	mm	N / mm <sup>2</sup>	R <sub>p0.2</sub> N / mm <sup>2</sup>		
R 200 / H 040	> 5	200 - 250	100 max		42
R 220 / H 040	0.2 - 5	220 - 260	140 max	33	42
R 240 / H 090	0.2 - 15	240 - 300	180 min	8	15
R 290 / H 090	0.2 - 15	290 - 360	250 min	4	6
R 360 / H 110	0.2 - 2	360 min	320 min	2	

### • Fabrication Properties

Corrosion Resistance:	Not resistant to oxidizing acids, hydrous ammonia, halogenated gases, seawater, hydrogen sulfide
Capacity of being cold worked:	Excellent
Soldering/brazing:	Excellent
Resistance welding:	Excellent
Gas shield arc welding:	Fair

**SAFETY INFORMATION FOR AMG GUTTER-SYSTEMS**

- Always store AMG product safely and in accordance with best practice. Keep them away from children.
- Never use rainwater for drinking water. It might contain bacteria, dirt or may be contaminated.
- Check your local building code and regulations before you design your roof drain system, or before you get started.
- Always make sure you work from a safe and secure platform or ladders.
- Always check the area underneath your working space and secure this area to make sure nobody gets hurt if you drop something.
- If you don't feel you can complete this work safely, call a local contractor.
- Always wear approved safety goggles and gloves; beware of sharp edges.
- Always use approved fasteners.
- Never install or work on loose, damaged or under dimensioned roof material or roof structures.
- When you install the rain gutters, check the slope, and make sure the collected water can run off without causing damage.
- Never mix AMG products with other gutter systems.
- Never modify – unless recommended by AMG.
- Beware of cut edges – might be extremely sharp.
- Dispose of leftovers and off-cut safely and in accordance with best practices.
- Never leave any parts or tools unsecured on your roof, they might fall down causing serious damage or hurt somebody.
- Never do installation work alone, always work in a team.
- Check for power lines.
- Never install on icy or slippery roofs or in windy weather conditions.



**GUTTERS • DOWNSPOUTS • ACCESSORIES • ORNAMENTS • TOOLS**

*Your vendor:*



*Copper gutters made in Germany*

