Ovation®

gutter system

GUTTERS WITH CUTTING-EDGE DESIGN

BUILDING
SANITARY
ENVIRONMENT

Nicoll
BUILDING - SANITARY - ENVIRONMENT

OVATION® LG 28 AND LG 38

Gutter systems which change the way you think about gutters.

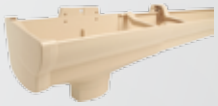
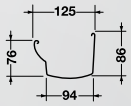
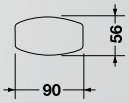
The **Ovation**® gutter system is designed to be discreet and elegant. It is technically innovative with excellent hydraulic capacity and easy to fit.

ADVANTAGES

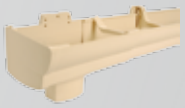
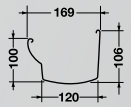
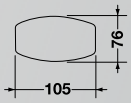
- 2 versions with cutting-edge design (LG28 and LG38).
- Good looks and innovation.
- Excellent hydraulic capacity.
- Precise, time-saving and easy to fit.
- Hardwearing.
- Available in a range of 8 different colours.
- Outstanding new technical qualities!

TECHNICAL FEATURES

Ovation® LG 28

	Gutter profile	Downpipe
Used for	Detached, semi-detached houses, Small blocks of flats	
Characteristic	Cutting-edge design	
Shape		
Assembly	Solvent welding	
Measurements		
Hydraulics		
Budget	€ €	
Material	Polyvinyl chloride	
Profile	Moulded	Elliptical : 90 x 56
Section	75.4 cm²	39.7 cm²
Flat roof area served by an outlet	90 x 56 (Section: 39.7 cm²) = 92 m² Ø 80 = 92 m²	
Colours	White Sand Brown Red Black Green Dark grey Copper	

Ovation® LG 38

	Gutter profile	Downpipe
Used for	Houses, Small blocks of flats, Villas, Industrial buildings	
Characteristic	Cutting-edge design	
Shape		
Assembly	Solvent welding	
Measurements		
Hydraulics		
Budget	€ € €	
Material	Polyvinyl chloride	
Profile	Moulded	Elliptical: 105 x 76
Section	138.34 cm²	66.3 cm²
Flat roof area served by an outlet	105 x 76 (Section: 66.3 cm²) = 141 m² Ø 100 = 141 m²	
Colours	White Sand Brown Red Black Green	

EUROPEAN STANDARDS

THE **NICOLL** EXTRA

Hail test:

- To prove the high mechanical resistance of its guttering systems, Nicoll has worked in close collaboration with the CSTB building engineering centre (France).
  The ranges of tests designed to reproduce once-in-a-decade hailstorm conditions proved the high resistance of the Nicoll systems which have been certified by the CSTB.

EUROPEAN STANDARD NF – EN 607, for gutter profiles and fittings.

1. Shock testing at 0°C for one hour to test resistance in cold conditions (hail, pressure of a ladder).

2. Warm and cold cycle testing, 100°C for 30' then cooled to ambient temperature.

No distortion or surface alteration detected in the **Ovation® 28 and 38** gutter.

3. Resistance to ageing: gutter exposed for 1600 hours to ultraviolet radiation and rain/evaporation cycles.

After testing, the **Ovation® 28 and 38** gutters showed no discolouration and their shock resistance was unchanged.

4. Seal: five 15' cycles with hot water at 50°C followed by 10' with cold water at 15°C.

No leaking detected in the **Ovation® 28 and 38** gutter.

5. Resistance to corrosion from pollution and acids.

EUROPEAN STANDARD NF – EN 1462, for gutter hooks (PVC or metal).

1. UV resistance for PVC the same as for gutter standard NF-EN 607.

2. Corrosion resistance:
- Class A for use in a harsh atmosphere,
- Class B for use in milder atmospheric conditions.

The **Nicoll Ovation® 28 and 38** facing and concealed brackets are in class A.

3. Load resistance:
- Class H for heavy-duty brackets, test load 750N,
- Class L for light brackets, test load 500N,
- Class O with an opening width of less than 80mm (e.g. LG16).

The **Nicoll Ovation® 28 and 38** concealed brackets are in class H.

TECHNICAL ASSISTANCE

SITE TECHNICAL STUDIES AND CUSTOM PARTS

Nicoll has a team of experts to handle your site studies and for special orders of customized parts or limited series. This means you will be supported by all the force and response of the Nicoll industrial system to steer you through even the most difficult sites.

Technical Assistance Department
Service Assistance Technique
e-mail: tech-com.nicoll@aliaxis.com

Narrow 90° Y-branch

The Nicoll customized parts department can make all types of Y-branches for downpipes with any angle or drainage diameter.

Special stopends

For façades with particular angles, Nicoll can manufacture special stopends for a better aesthetic.

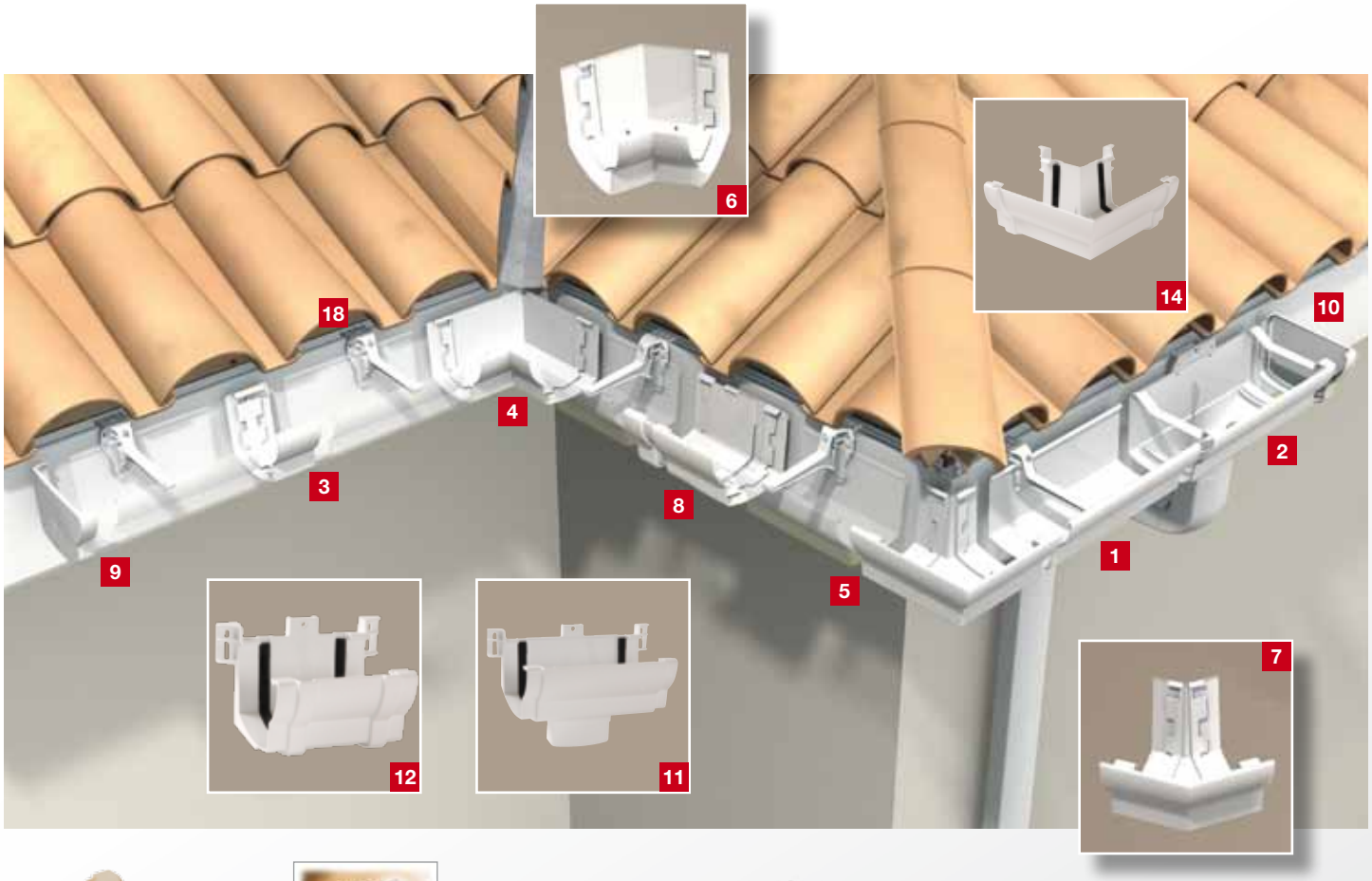
Angle outlet

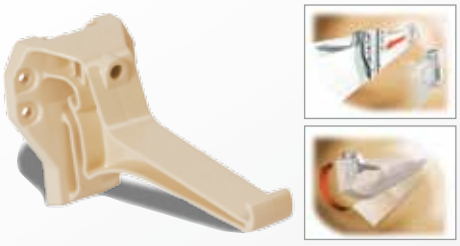
For draining rainwater on a corner, Nicoll can make angle outlets specially for your needs.

Customized angles

In addition to the Nicoll range, you can order any type of angle you require from the Nicoll customized parts department.

OVATION® LG 28 AND LG 38
Gutter profile





Brackets

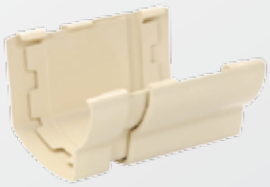
The Ovation® system has completely concealed brackets to enhance its discretion. They are reinforced at the back to prevent them coming unclipped and enhance their mechanical resistance.
The gutter is easier to fit because it is simply engaged on the nose and then tipped to clip it on the heel.

Outlets

The new outlet with anti-splash ribs allows the LG 28 to service flat roofs of up to 65m² and the LG 38 to service flat roofs of up to 100m².

Co-extrusion

The inside surface is partly made of recycled PVC. The outside surface is perfect because it is made of new PVC with a concentration of pigments developed to resist ultra-violet rays.



Expansion piece

This part enhances the system's performance, particularly on 4-slope roofs typical in some regions.

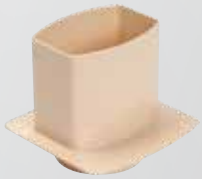
Marking

All the profile and coupling parts are marked so they are easy to identify for making extensions.

OVATION® LG 28 AND LG 38
Downpipe

Downpipe clip

This has a discreet rear fastening to keep the design smooth.
It is clipped together by hand and unclipped with a screwdriver. Patented design.



Rainwater shoe

The universal shoe is a versatile complementary part which fits to the following diameters: 90, 100, 110, and 125 on LG 38 and 75, 80, 90 and 100 on LG 28.

Reinforced bottom downpipe

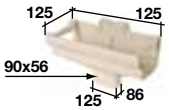
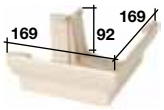
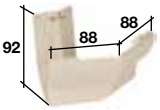
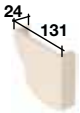
An indispensable part to protect drainpipes on houses and blocks of flats (supplied with a non-glued outlet).

THE NICOLL EXTRA

- Nicoll gutters comply with European standards NF – EN 607 (gutter profiles and fittings) and NF – EN 1462 (gutter brackets).

OVATION® LG 28
Gutter profile

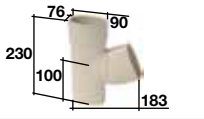
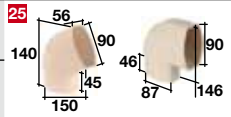
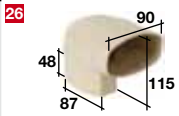
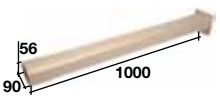
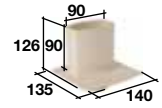
Ovation® LG 28 gutter system

Description	White	Sand	Brown	Red	Black	Green	Dark grey	Copper	
GUTTER PROFILE									
1 Length 4 m.	LG28B	LG28S	LG28M	LG28R	LG28N	LG28V	LG28A	LG28C	
Length 2 m.	LG282B	LG282S	LG282M	LG282R	LG282N	LG282V	LG282A	LG282C	
SOLVENT WELD FITTINGS									
2 Central outlet 90 x 56	NAD289B	NAD289S	NAD289M	NAD289R	NAD289N	NAD289V	NAD289A	NAD289C	
Central outlet Ø 80	NAD28B	NAD28S	NAD28M	NAD28R	NAD28N	NAD28V	NAD28A	NAD28C	
3 Union part	JNC28B	JNC28S	JNC28M	JNC28R	JNC28N	JNC28V	JNC28A	JNC28C	
4 90° internal angle	AIC28B	AIC28S	AIC28M	AIC28R	AIC28N	AIC28V	AIC28A	AIC28C	
5 90° external angle	AEC28B	AEC28S	AEC28M	AEC28R	AEC28N	AEC28V	AEC28A	AEC28C	
6 135° internal angle*	AIC285B	AIC285S	AIC285M	AIC285R	AIC285N	AIC285V	AIC285A	AIC285C	
7 135° external angle*	AEC285B	AEC285S	AEC285M	AEC285R	AEC285N	AEC285V	AEC285A	AEC285C	
8 Expansion piece	JND28B	JND28S	JND28M	JND28R	JND28N	JND28V	JND28A	JND28C	
9 Left gutter stopend	FG28B	FG28S	FG28M	FG28R	FG28N	FG28V	FG28A	FG28C	
Right gutter stopend	FD28B	FD28S	FD28M	FD28R	FD28N	FD28V	FD28A	FD28C	
10 Left stopend outlet	FGC28B	FGC28S	FGC28M	FGC28R	FGC28N	FGC28V	FGC28A	FGC28C	
Right stopend outlet	FDC28B	FDC28S	FDC28M	FDC28R	FDC28N	FDC28V	FDC28A	FDC28C	
RUBBER GASKET FITTINGS									
11 Central outlet 90 x 56	NAJ289B	NAJ289S	NAJ289M	NAJ289A	NAJ289B	NAJ289V	NAJ289A	NAJ289C	
12 Pipe Connector	JNJ28B	JNJ28S	JNJ28M	JNJ28A	JNJ28B	JNJ28V	JNJ28A	JNJ28C	
13 90° internal anglet	AIJ28B	AIJ28S	AIJ28M	AIJ28A	AIJ28B	AIJ28V	AIJ28A	AIJ28C	
14 90° external angle	AEJ28B	AEJ28S	AEJ28M	AEJ28A	AEJ28B	AEJ28V	AEJ28A	AEJ28C	
15 135° internal angle	AIJ285B	AIJ285S	AIJ285M	AIJ285A	AIJ285B	AIJ285V	AIJ285A	AIJ285C	
16 135° external angle	AEJ285B	AEJ285S	AEJ285M	AEJ285A	AEJ285B	AEJ285V	AEJ285A	AEJ285C	
17 Left gutter stopend	FGGJ28B	FGGJ28S	FGGJ28M	FGGJ28R	FGGJ28N	FGGJ28V	FGGJ28A	FGGJ28C	
Right gutter stopend	FGDJ28B	FGDJ28S	FGDJ28M	FGDJ28R	FGDJ28N	FGDJ28V	FGDJ28A	FGDJ28C	
GUTTER BRACKETS									
18 Concealed fascia brackets	BHGB28B	BHGB28S	BHGB28M	BHGB28R	BHGB28N	BHGB28V	BHGB28A	BHGB28C	

* 135° angles are profiled solutions.

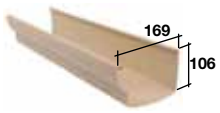
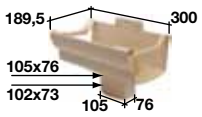
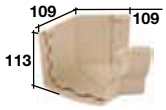
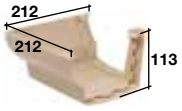
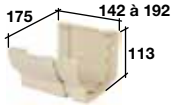
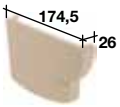
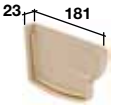
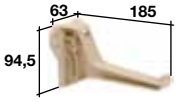
OVATION® LG 28 Downpipe

Ovation® TD 95 - 90 x 56 downpipe system

Description	White	Sand	Brown	Red	Black	Green	Dark grey	Copper	
DOWNPIPE PROFILE									
19 Length 4 m.	TD95B	TD95S	TD95M	TD95R	TD95N	TD95V	TD95A	TD95C	
Length 3 m.	TD953B	TD953S	TD953M	TD953R	TD953N	TD953V	TD953A	TD953C	
Length 2 m.	TD952B	TD952S	TD952M	TD952R	TD952N	TD952V	TD952A	TD952C	
DOWNPIPE FITTINGS									
20 67°30 male-female branch	BN16GTB	BN16GTS	BN16GTM	BN16GTR	BN16GTN	BN16GTV	BN16GTA		
21 15° male-female bend	CN1GTB	CN1GTS	CN1GTM	CN1GTR	CN1GTN	CN1GTV	CN1GTA	CN1GTC	
22 45° male-female bend	CN4GTB	CN4GTS	CN4GTM	CN4GTR	CN4GTN	CN4GTV	CN4GTA	CN4GTC	
23 67°30 male-female bend	CN6GTB	CN6GTS	CN6GTM	CN6GTR	CN6GTN	CN6GTV	CN6GTA	CN6GTC	
24 87°30 male-female bend	CN8GTB	CN8GTS	CN8GTM	CN8GTR	CN8GTN	CN8GTV	CN8GTA	CN8GTC	
	CN06GTB	CN06GTS	CN06GTM	CN06GTR	CN06GTN	CN06GTV	CN06GTA		
25 67°30 direction change bend	CN9GTB	CN9GTS	CN9GTM	CN9GTR	CN9GTN	CN9GTV	CN9GTA	CN9GTC	
90° direction change bend									
26 90° male-female bend for gable turns	CNP9GTB	CNP9GTS	CNP9GTM	CNP9GTR	CNP9GTN	CNP9GTV	CNP9GTA	CNP9GTC	
27 Single socket pipe connector	ZNGTB	ZNGTS	ZNGTM	ZNGTR	ZNGTN	ZNGTV	ZNGTA	ZNGTC	
28 Downpipe collector	JAM95B	JAM95S	JAM95M	JAM95R	JAM95N	JAM95V	JAM95A	JAM95C	
29 Single socket Ø80/Ovation® TD95 coupling	ZR95B	ZR95S	ZR95M	ZR95R	ZR95N	ZR95V	ZR95A	ZR95C	
REINFORCED BOTTOM DOWNPIPES									
30 Traditional straight - 1m	DDF10NB	DDF10NS	DDF10NM	DDF10NR	DDF10NN	DDF10NV	DDF10NA	DDF10NC	
PIPE BRACKETS									
31 Flange	CONGTB	CONGTS	CONGTM	CONGTR	CONGTN	CONGTV	CONGTA	CONGTC	
RAINWATER SHOES									
32 Universal rainwater shoe Ø 75 - 80 - 90 - 100	PCU95B	PCU95S	PCU95M	PCU95R	PCU95N	PCU95V	PCU95A	PCU95C	

OVATION® LG 38
Gutter profile

Ovation® LG 38 gutter system

Description	White	Sand	Brown	Red	Black	Green	
GUTTER PROFILE							
1 Length 4 m.	LG38B	LG38S	LG38M	LG38R	LG38N	LG38V	
Length 2 m.	LG382B	LG382S	LG382M	LG382R	LG382N	LG382V	
SOLVENT WELD FITTINGS							
2 Central outlet 105 x 76	NAD381B	NAD381S	NAD381M	NAD381R	NAD381N	NAD381V	
Central outlet Ø 100	NAD38B	NAD38S	NAD38M	NAD38R	NAD38N	NAD38V	
3 Coupling	JNC38B	JNC38S	JNC38M	JNC38R	JNC38N	JNC38V	
4 90° internal angle	AIC38B	AIC38S	AIC38M	AIC38R	AIC38N	AIC38V	
5 90° external angle	AEC38B	AEC38S	AEC38M	AEC38R	AEC38N	AEC38V	
6 135° internal angle*	AIC385B	AIC385S	AIC385M	AIC385R	AIC385N	AIC385V	
7 135° external angle*	AEC385B	AEC385S	AEC385M	AEC385R	AEC385N	AEC385V	
8 Expansion piece	JND38B	JND38S	JND38M	JND38R	JND38N	JND38V	
9 Left gutter stopend	FG38B	FG38S	FG38M	FG38R	FG38N	FG38V	
Right gutter stopend	FD38B	FD38S	FD38M	FD38R	FD38N	FD38V	
10 Left stopend outlet	FGC38B	FGC38S	FGC38M	FGC38R	FGC38N	FGC38V	
Right stopend outlet	FDC38B	FDC38S	FDC38M	FDC38R	FDC38N	FDC38V	
GUTTER BRACKETS							
18 Concealed Fascia bracket	BHGB38B	BHGB38S	BHGB38M	BHGB38R	BHGB38N	BHGB38V	
ACCESSORIES							
15 Cutting gauge for gutter and downpipe profiles	GAB38						
Ovation® bracket for layered tiles	CGO						

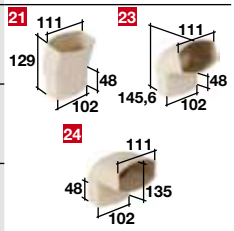
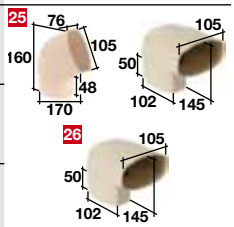
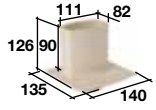
THE NICOLL EXTRA

- Practical and versatile, **the cutting gauge** is the perfect guide for successfully cutting gutter and downpipe profiles.

* 135° angles are profiled solutions.

OVATION® LG 38 Downpipe

Ovation® TD 107 - 105 x 76 downpipe system

Description	White	Sand	Brown	Red	Black	Green	
DOWNPIPE PROFILE 105 X 76							
19 Length 4 m.	TD107B	TD107S	TD107M	TD107R	TD107N	TD107V	
Length 3 m.	TD1073B	TD1073S	TD1073M	TD1073R	TD1073N	TD1073V	
Length 2 m.	TD1072B	TD1072S	TD1072M	TD1072R	TD1072N	TD1072V	
DOWNPIPE FITTINGS							
20 67°30 male-female branch	BM16GTB	BM16GTS	BM16GTM	BM16GTR	BM16GTN	BM16GTV	
21 15° male-female bend	CM1GTB	CM1GTS	CM1GTM	CM1GTR	CM1GTN	CM1GTV	
23 67°30 male-female bend	CM6GTB	CM6GTS	CM6GTM	CM6GTR	CM6GTN	CM6GTV	
24 87°30 male-female bend	CM8GTB	CM8GTS	CM8GTM	CM8GTR	CM8GTN	CM8GTV	
25 67°30 direction change bend	CM06GTB	CM06GTS	CM06GTM	CM06GTR	CM06GTN	CM06GTV	
90° direction change bend	CM9GTB	CM9GTS	CM9GTM	CM9GTR	CM9GTN	CM9GTV	
26 90° male-female bend for gable turns	CMP9GTB	CMP9GTS	CMP9GTM	CMP9GTR	CMP9GTN	CMP9GTV	
27 Single socket pipe connector	ZMGTB	ZMGTS	ZMGTM	ZMGTR	ZMGTN	ZMGTV	
28 Downpipe collector	JAM107B	JAM107S	JAM107M	JAM107R	JAM107N	JAM107V	
29 Single socket Ø80/Ovation® TD95 coupling	ZT107B	ZT107S	ZT107M	ZT107R	ZT107N	ZT107V	
REINFORCED BOTTOM DOWNPIPES							
30 Traditional straight - 1m	DDF10MB	DDF10MS	DDF10MM	DDF10MR	DDF10MN	DDF10MV	
PIPE CLIPS							
31 Flange	COMGTB	COMGTS	COMGTM	COMGTR	COMGTN	COMGTV	
RAINWATER SHOES							
32 Universal shoe Ø 90 - 100 - 110 - 125	PCU107B	PCU107S	PCU107M	PCU107R	PCU107N	PCU107V	

GENERAL RULES

Installing a gutter system.

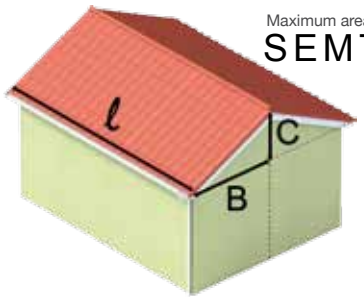
REGULATIONS

The rules for dimensions of rainwater installations are those given in the code of practice DTU 60-11.

Nicoll gutters and brackets comply with European standards NF EN 607 and NF EN 1462.

Standards reference documents
DTU 60.11
European standard NF EN 607 No 5 + 15/79-279.

CALCULATION OF ROOF AREA TO GUTTER



Maximum area in m²

$$SEMT = (B + \frac{C}{2}) \times \ell$$

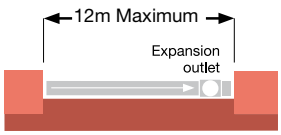
MAXIMUM ROOF AREA

Flat roof served by an outlet

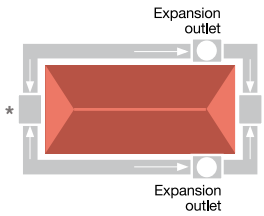
	Downpipe		END OUTLET				CENTRAL OUTLET			
			No pitch		Pitch 0.3% (3mm/m)		No pitch		Pitch 0.3% (3mm/m)	
			Output (m^3/h)	SEMT (m^2)	Output (m^3/h)	SEMT (m^2)	Output (m^3/h)	SEMT (m^2)	Output (m^3/h)	SEMT (m^2)
Ovation® gutter	LG28	TD95	5,5	73	7,5	100	18	240	23	307
	LG38	TD107	11	147	16	213	31	413	37	493

EXPANSION ALLOWANCE

Expansion coef.: 0.7mm x metre x 10° C temperature difference



If the installation is like fig. B "line blocked at both ends or at the free end" and does not exceed 12m, an expansion outlet will be required.



If the installation runs rounds a roof with 4 slopes, as in fig. D, expansion outlets and expansion pieces will be required.*

THE NICOLL EXTRA

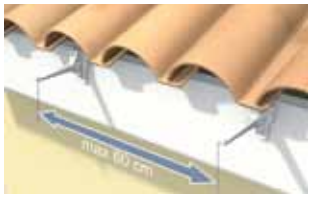
- Ovation® expansion outlets and pieces are designed for effective expansion control. A graduation system is used to align the profile with the ambient temperature mark. This way of controlling the profile's expansion enables the Ovation® gutter system to withstand great temperature variations.

OVATION® LG 28/38

1- FITTING THE GUTTER PROFILE

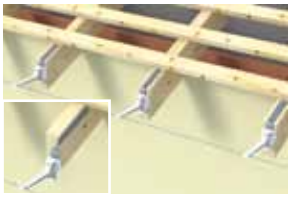
The OVATION® LG28/LG38 gutter system is entirely compatible with the BELRIV® eaves system.

a. Fitting systems



Fitting to the fascia

- Fit the facing brackets to the fascia at regular intervals of no more than 0.60m.



Fitting to rafters

- Fit the brackets to a flat or twisted bracket so the gutter can be placed on the top or the side of the rafter. Space them at regular intervals of no more than 0.60m.

Fitting to layered tiles

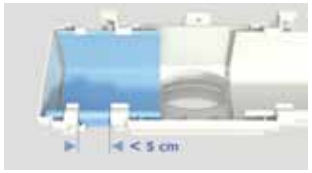
- Stretch a twine and drill 2 holes in the tiles to fit the metal accessory. This galvanised part can be used instead of a tile bracket.

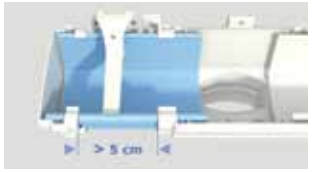
Fitting to tiles

- Fit the brackets to a galvanised bracket at the top of the curve so that the drainage channel stays free. Space them at regular intervals of no more than 0.60m.

.

b. Fitting the outlet





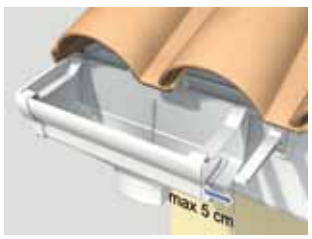
1 Fitting an expansion or rubber gasket outlet

- Establish the position of the outlets vertically to the inspection boxes.
- Fit the outlet onto the facing to make a fixed point for the gutter to move smoothly.
- For a seal joint outlet, if the stopend of the piece of gutter is more than 5cm, a fascia bracket will need to be used.

2 Fitting a glued outlet

- Lay a line of glue round the groove inside the gutter stopend.
- Assemble immediately in a straight line.
- Wait a few minutes before handling.

c. Fitting the gutter brackets



- Establish the position of the outlet and fit the end hooks at at least 50mm from the fittings to allow the gutter to expand freely.

- This type of gutter requires a flat surface or low pitch.
- Stretch a twine between the end hooks to ensure proper alignment. Screw in the hooks (2 screws per hook)
  or fit them with a Belriv® plate (ref. ASC) at regular intervals of no more than 0.60m.

OVATION® LG 28/38

1 - FITTING THE GUTTER PROFILE (continued)

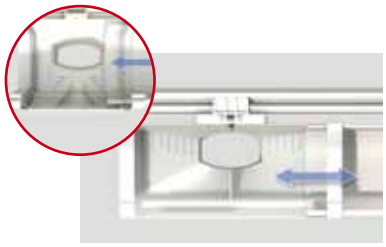
d. Fitting the gutter

1 Cutting the profile

- Cut the profile using the OVATION® cutting gauge and a handsaw, then smooth the edges with fine emery paper.

2 Fitting the gutter

- Place the gutter on the nose of the brackets first, tip it and carefully clip the profile into the back of the bracket.



3 Adjusting the profile in the expansion or rubber gasket outlet

- Slot the gutter profile into the expansion outlet, aligning the end against the ambient temperature mark.

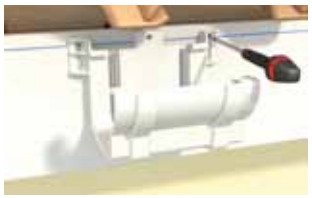
4 Fitting a solvent weld or rubber gasket stopend solvent weld system:

- Apply a regular line of glue in the stopend, union part or angle grooves:
- Spread glue over the smooth inside surface of the fitting.
- Assemble immediately with a straight movement. Wait a few minutes before handling.

Rubber gasket system:

- Stopends, unions parts and angles are clipped from back to front into the gutter profile.

e. Fitting the LG 28 rubber gasket system



- Mark the measurements of the gutter profile to go between the outlet and the coupling and fit the outlet to the facing.
- Engage the gutter in the back of the fascia brackets and clip to the front of the brackets.

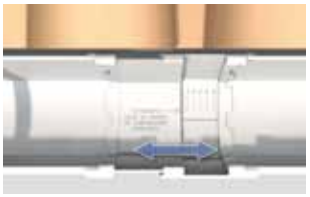
f. Fitting a solvent weld angle

- Apply a regular line of glue in the angle grooves.
- Apply glue to the smooth inside surface of the coupling.
- Assemble immediately with a straight movement.

- Make a visual check to see that the coupling is properly glued to the profile.
- Wait a few minutes before handling.

g. Fitting an expansion piece

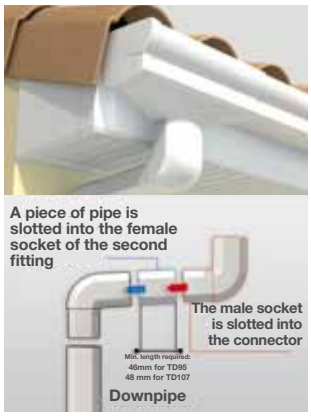
- Apply a regular line of glue in the coupling grooves. Spread glue over the smooth inside surface. Assemble immediately with a straight movement.
- If there are more than 2m between 2 angles, it is best to fit an expansion piece.
- Slide the expansion piece until it is aligned with the ambient temperature mark.



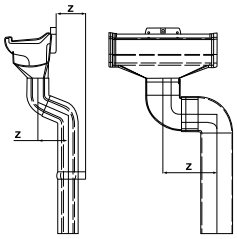
NB: solvent weld fittings should never be used with rubber gasket fittings.

2 - FITTING THE DOWNPIPE

a. Preparing the S coupling



- Prepare the top S by joining 2 bends with a piece of pipe at least 46mm long
  for OVATION® LG28 and 48mm for OVATION® LG38.
- Do not glue the first bend to the outlet so they will come apart easily but do glue the bend sockets to the downpipe.



Minimum offset for OVATION® system bends.

Description	Z Dimension LG 28	LG 38
15° bend	16 mm	19 mm
45° bend	54 mm	-
67°30 bend	83 mm	100 mm
87°30 bend	112 mm	130 mm
90° lateral bend	150 mm	165 mm

b. Fitting the downpipe pipe clips

- Mark the position of the first pipe clip.
- This must be under the S coupling.
- Use a plumb line and square to mark the vertical alignment on the wall.
- Do a “dummy” assembly of the pipes to mark the position of the clamps. To prevent the parts from sliding down, fix a clamp under each coupling.
- Fasten the pipe clips to the wall with brackets or dowel pins.
- To hold the downpipe, put pipe clips at approx. 2m intervals.
- The pipe is fastened by clipping the pipes clips. These can only be unclipped with a screwdriver.
- Use a coupling to join 2 downpipes. The male socket must be glued but the female socket allowed to expand freely when the pipe is placed against the mark.

c. Changing the direction of the downpipe

- To change the direction of a downpipe or restore the right alignment for rainwater drainage, use a lateral direction change bend.

d. Fitting the downpipes

- Cut the downpipe using a handsaw and the OVATION® cutting gauge. Smooth the edges with fine emery paper.
- Put the pipes in place and close the pipe clips.
- If there are 2 sections of roof to service, use a downpipe outlet or a branch.

e. Fitting a reinforced downpipe

- Slot the reinforced downpipe into the downpipe with the end of the pipe facing the mark etched on the shoe.
- Remember to put a clamp under the reinforced downpipe coupling.

f. Connecting to a catch basin or around storm drainage

- The universal outlet is connected at one end to the OVATION® downpipe, facing the mark, and at the other to a round pipe or rainwater catch basin.

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BUILDING - SANITARY - ENVIRONMENT

NICOLL is ISO 9001v2008 and ISO14001v2004 certified

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SAS (business corporation) with a capital of €7,683,431 - 060 200 128 RCS Angers

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