



**WILD**

Rain Gutters  
Collection



*upvc* **RAIN  
GUTTERS  
& FITTINGS**





# Tablet of CONTENTS

## — 02

### ABOUT US

- ◆ OUR COMPANY
- ◆ BRAND MISSION

## — 03

### WHAT'S RAIN GUTTER

- ◆ WHY CHOOSE MIDDY
- ◆ ABOUT OUR MIDDY RAIN GUTTER

## — 04

### HONORS & QUALIFICATIONS

- ◆ CERTIFICATE

## — 05

### G100 RAIN GUTTER

- ◆ RAIN GUTTER & FITTINGS

## — 06

### G380 RAIN GUTTER

- ◆ RAIN GUTTER & FITTINGS

## — 07

### RAIN GUTTER GUIDELINE

- ◆ TECHNICAL GUIDELINE
- ◆ PROJECT SPECIFICATIONS
- ◆ SITE ANALYSIS & CALCULATION
- ◆ INSTALLATION STEPS
- ◆ STORAGE INSTRUCTIONS

# About us

## OUR COMPANY

Established in 2001, **MIDDY** is a fast-growing manufacturer of rain gutter system products in Malaysia. We are committed to delivering exceptional products and services to exceed our customers' expectations, both locally and globally.



◆ COTTAGE SITE, DENGKIL

“ Responsible Services, Consistent Quality  
Reasonable Prices, Continuous Improvements. ”

# BRAND MISSION

# WHAT'S RAIN GUTTER

MIDDY Rain Gutter System

- ◆ Leads rainwater from roof to the ground level
- ◆ Prevents water damage to the roof and building



**MIDDY**

YOUR RAIN GUTTER  
SPECIALIST

efficient rain  
gutters can enhance  
your home



◆ PETALING JAYA

## WHY CHOOSE **MIDDY**?

- ◆ Improvement and innovation
- ◆ Focusing in user-friendly design
- ◆ Quality Control - Original uPVC raw material
- ◆ Site visit & professional consultation
- ◆ On-time local deliveries & export services

# ABOUT OUR MIDDY uPVC RAIN GUTTER



ENHANCE  
QUALITY



LONGEVITY  
& DURABILITY



COST-  
EFFECTIVE



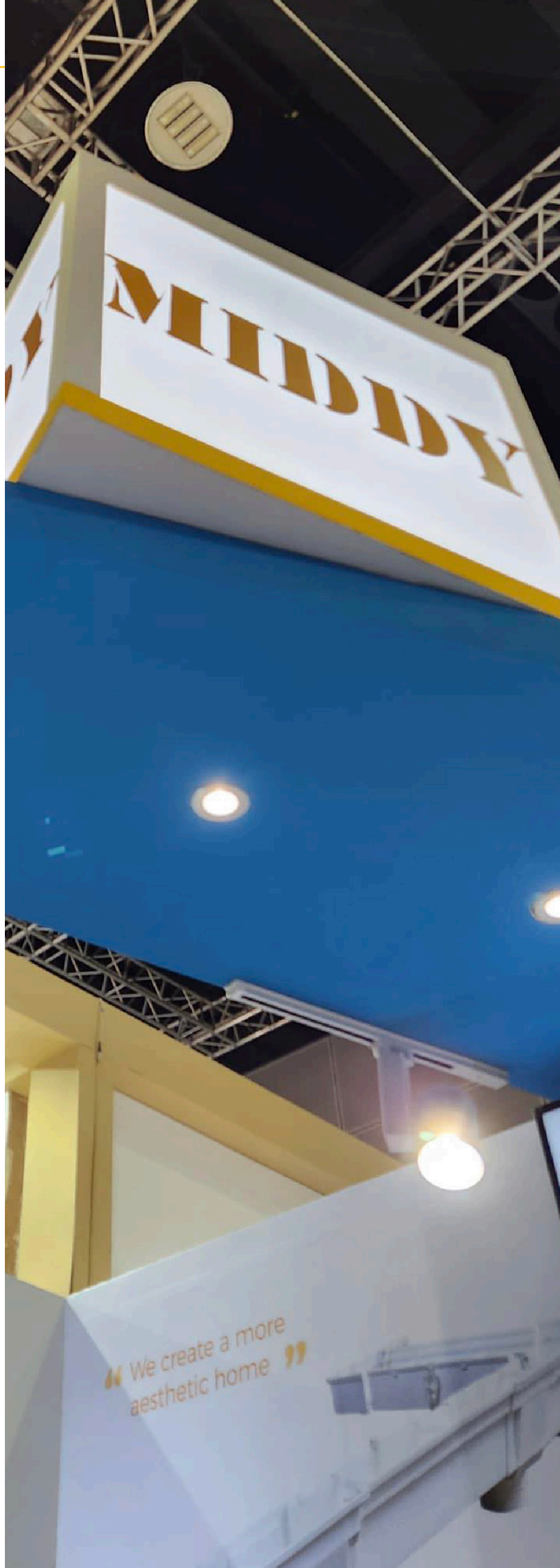
ECO-  
FRIENDLY



WEATHER  
RESISTANCE



RAIN  
HARVEST  
SYSTEM



# HONORS AND QUALIFICATIONS



No Lesen : PC000047  
Licence No :

## LESEN PENSIJILAN BARANGAN Product Certification Licence



SIRIM QAS International Sdn. Bhd. dengan ini menganugerahkan kepada  
SIRIM QAS International Sdn. Bhd. hereby grants to

**MIDDY INDUSTRIES SDN.BHD.**  
NO.3, JALAN KPK 1/7,  
KUNDANG JAYA INDUSTRIAL  
48020 RAWANG  
SELANGOR, MALAYSIA

Lesen untuk menggunakan Tanda Pensijilan di atas barangan  
a licence to use the Certification Mark on

**UNPLASTICIZED POLYVINYL CHLORIDE (PVC-U) EAVES GUTTER**

Please refer to detail in the SCHEDULE

sebagai mematuhi keperluan  
as complying with

**BS EN 607 : 2004**

**Nur Fadhliah binti Muhammad**  
Ketua Pegawai Eksekutif  
Chief Executive Officer  
SIRIM QAS International Sdn. Bhd.



SIRIM QAS International Sdn. Bhd.  
(No. Syarikat: 199601037981(410334-X))  
1, Pendarisan Darul Hesar  
Sekkyen 2, Ptd Surut 7035  
40700 Shah Alam  
Selangor Darul Ehsan  
MALAYSIA  
Tel : 603-5544 6000  
Email : cservic@sirim.my  
<https://www.sirim-qas.com.my>  
<https://www.malaysiancertified.com.my>

Tarikh Mula Pensijilan : 06 January 2012  
Certified Since  
Sah Sehingga : 06 January 2026  
Valid Until

Tarikh Dikeluarkan : 26 November 2024  
Issue Date  
No Siri : 105133  
Serial No

Lesen ini dianugerahkan terbalik kepada syarikat-operasi Pensijilan Barangan SIRIM QAS International Sdn. Bhd.  
This Licence is granted subject to the provisions of the Product Certification Agreement of SIRIM QAS International Sdn. Bhd.



No Lesen : PC000047  
Licence No :

## SCHEDULE

MIDDY INDUSTRIES SDN.BHD.



Trade Mark :MIDDY  
Model :G100  
Type :GREY, BROWN, WHITE, GREEN, BLUE  
Size :OPENING WIDTH: 170mm; LENGTH : 2.9m, 4m, 5.8m and 6m

Trade Mark :MIDDY  
Model :G380  
Type :GREY, BROWN, WHITE, GREEN, BLUE  
Size :OPENING WIDTH: 205mm; LENGTH : 2.9m, 4m, 5.8m and 6m

End of page

SIRIM QAS International Sdn. Bhd.  
(No. Syarikat: 199601037981(410334-X))  
1, Pendarisan Darul Hesar  
Sekkyen 2, Ptd Surut 7035  
40700 Shah Alam  
Selangor Darul Ehsan  
MALAYSIA  
Tel : 603-5544 6000  
Email : cservic@sirim.my  
<https://www.sirim-qas.com.my>  
<https://www.malaysiancertified.com.my>

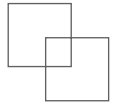
Tarikh Mula Pensijilan : 06 January 2012  
Certified Since  
Sah Sehingga : 06 January 2026  
Valid Until

Tarikh Dikeluarkan : 26 November 2024  
Issue Date  
No Siri : 105133  
Serial No

Lesen ini dianugerahkan terbalik kepada syarikat-operasi Pensijilan Barangan SIRIM QAS International Sdn. Bhd.  
This Licence is granted subject to the provisions of the Product Certification Agreement of SIRIM QAS International Sdn. Bhd.

You may contact us for the further assistance.

# HONORS



# a classic box gutter

G100 SERIES

Classic Box UPVC gutter combines classic aesthetics with large capacity, customer-friendly price, durability, strong construction and corrosion resistance. It is a reliable and durable choice for building drainage systems.

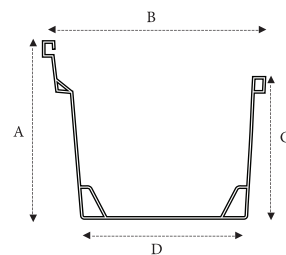


INDUSTRIAL DESIGN NO.MY01-00372

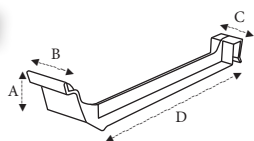


**G100 RAIN GUTTER**

DIMENSIONS (mm)				LENGTH (m)
A	B	C	D	
150	190	120	140	4 / 5.8

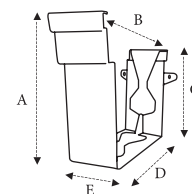


ACCESSORIES ▼



**GUTTER STRAP**

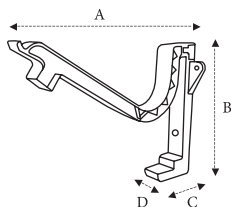
DIMENSIONS (mm)			
A	B	C	D
41	30	20	190



**SOCKET**

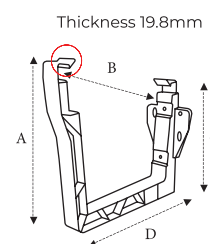
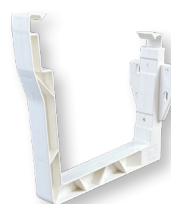
DIMENSIONS (mm)				
A	B	C	D	E
158	190	125	146	59

BRACKET SERIES ▼



**INTERNAL BRACKET**

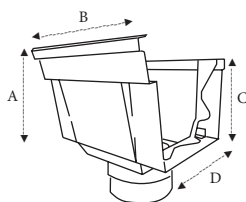
DIMENSIONS (mm)			
A	B	C	D
204	147	50	20



**EASY FAST BRACKET**

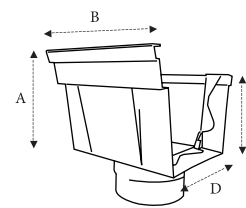
DIMENSIONS (mm)			
A	B	C	D
175	195	150	180

OUTLET SERIES ▼



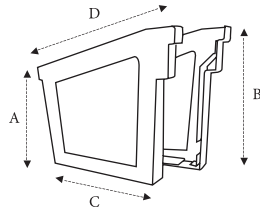
**OUTLET FIN 3" AND 4"**

DIMENSIONS (mm)				OUTLET SIZE	
A	B	C	D	3"	4"
155	220	125	145	80/ 82	100/ 110



**OUTLET FIN V2 3" AND 4"**

DIMENSIONS (mm)				OUTLET SIZE	
A	B	C	D	3"	4"
160	185	125	145	80/ 82	100/ 110



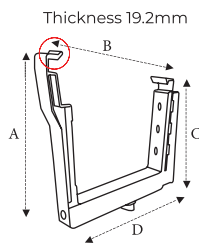
**END CAP (RIGHT & LEFT)**

DIMENSIONS (mm)				
A	B	C	D	
125	155	145	195	

What is **GUTTER STRAP** ?



Prevention, Protection, Maintenance  
To prevent & protect the shape of gutters from deformation and maintain the qualities of uPVC Rain Gutters.



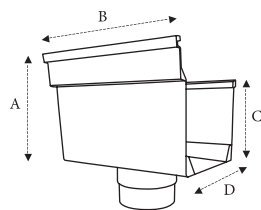
**ADJUSTABLE BRACKET**

DIMENSIONS (mm)				
A	B	C	D	
185	205	153	176	

What is **ORIGINAL OUTLET** ?

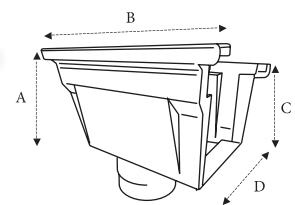


Original Outlet is recommended as it allows spacing for uPVC Rain Gutter to move along during thermal expansion. No silicone, solvent cement or screw needed simplifies the installation process.



**OUTLET FAB**

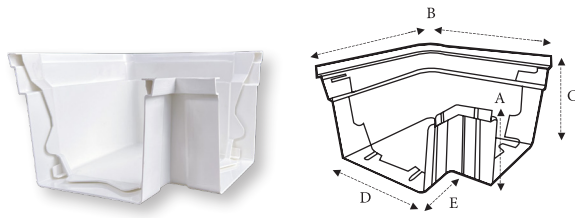
DIMENSIONS (mm)				OUTLET SIZE	
A	B	C	D	3"	4"
155	207	120	140	80/ 82 100/ 110	



**ORIGINAL OUTLET 4"**

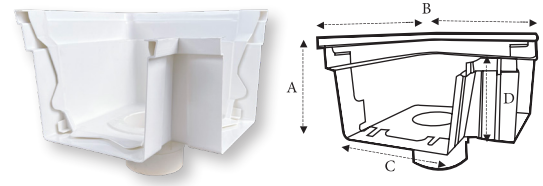
DIMENSIONS (mm)				OUTLET SIZE	
A	B	C	D	3"	4"
160	280	127	155	80/ 82 100/ 110	

**CORNER SERIES** ▼



**CORNER OUT**

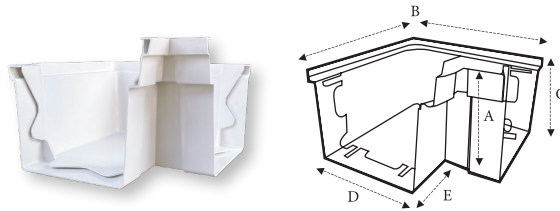
DIMENSIONS (mm)				
A	B	C	D	E
126	240	156	146	61



**CORNER OUT C/W OUTLET 3" AND 4"**

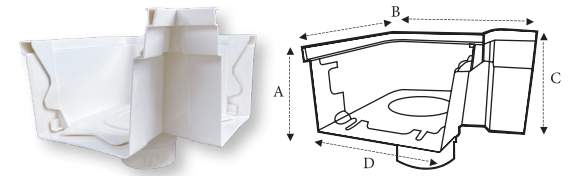
DIMENSIONS (mm)				OUTLET SIZE	
A	B	C	D	3"	4"
157	240	146	126	80/ 82	100/ 110

**CORNER SERIES** ▼



**CORNER IN**

DIMENSIONS (mm)				
A	B	C	D	E
157	235	126	146	78



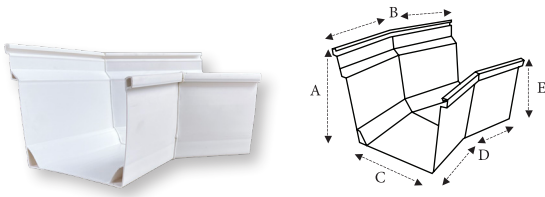
**CORNER IN C/W OUTLET 3" AND 4"**

DIMENSIONS (mm)				OUTLET SIZE	
A	B	C	D	3"	4"
126	235	157	146	80/ 82	100/ 110

“ **MIDDY** Rain Gutter  
*Protect* your home ”



← MASJID AL-MUJAHIDEEN,  
PETALING JAYA



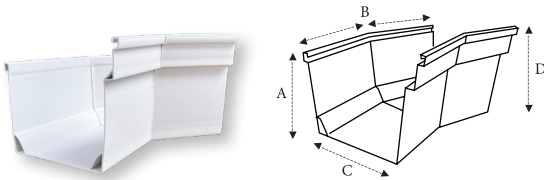
### CORNER OUT 45°

DIMENSIONS (mm)				
A	B	C	D	E
155	440	145	320	120



#### What is **CORNER OUT** ?

Corner Out enables changes in direction at outward turns in gutter system.



### CORNER IN 45°

DIMENSIONS (mm)			
A	B	C	D
120	440	145	155



#### What is **CORNER IN** ?

Corner In is designed to connect uPVC Rain Gutter at angle turning inward.



*White*  
**Trendy Design** ▶  
◆ MASJID AL-MUJAHIDEEN, PETALING JAYA

G100



a classic box

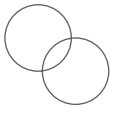
◀ *Grey*  
**Classic Design**  
◆ COTTAGE SITE, DENGKIL



rain gutter

*Brown*  
**Elegant Design** ▶  
◆ RESIDENTIAL AREA, PETALING JAYA





# a modern wave gutter

G380 SERIES

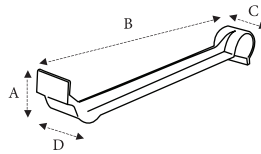
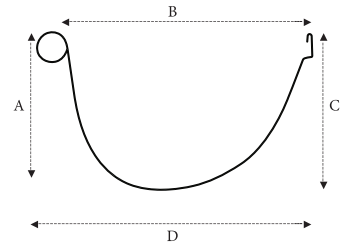
The innovation of minimalist gutter design matches different architectural preferences with efficient water flow, the ability to remove debris and low maintenance with long-lasting performance.



INDUSTRIAL DESIGN NO.MY01-00919-0103

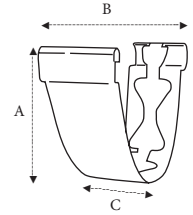
**G380 RAIN GUTTER**

DIMENSIONS (mm)				LENGTH (m)
A	B	C	D	
120	205	120	180	4 / 5.8



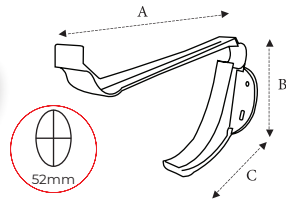
**GUTTER STRAP**

DIMENSIONS (mm)			
A	B	C	D
36	210	20	29



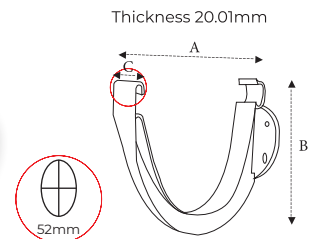
**SOCKET**

DIMENSIONS (mm)		
A	B	C
125	215	60



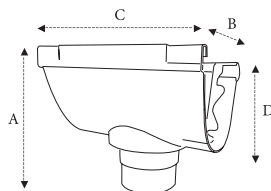
**INTERNAL BRACKET**

DIMENSIONS (mm)		
A	B	C
220	135	105



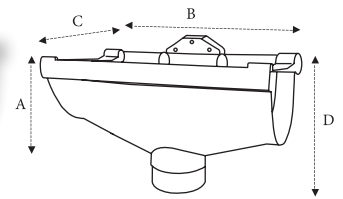
**BRACKET**

DIMENSIONS (mm)		
A	B	C
223	145	20



**OUTLET FIN 3" AND 4"**

DIMENSIONS (mm)				OUTLET SIZE	
A	B	C	D	3"	4"
190	210	210	125	80/ 82	100/ 110



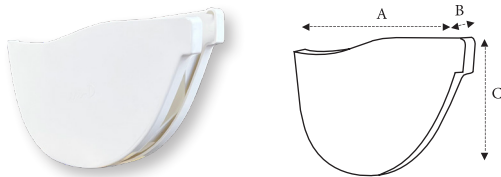
**ORIGINAL OUTLET 3" AND 4"**

DIMENSIONS (mm)				OUTLET SIZE	
A	B	C	D	3"	4"
125	298	215	210	80/ 82	100/ 110

ACCESSORIES ▼

BRACKET SERIES ▼

OUTLET SERIES ▼



**END CAP (RIGHT & LEFT)**

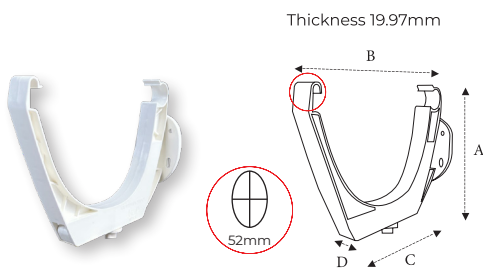
DIMENSIONS (mm)		
A	B	C
190	12	115

What is **GUTTER STRAP** ?



Prolong, Preserve and Support

To support and preserve the shape of gutters and prolong the life of the gutter system.



**ADJUSTABLE BRACKET**

DIMENSIONS (mm)			
A	B	C	D
150	225	118	20

What is **BRACKET** ?



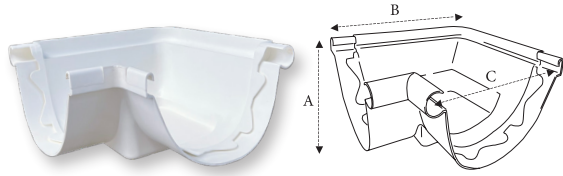
Bracket is essential to provide support for the gutter system. Choosing the correct type of bracket is important for different situations.

What is **ORIGINAL OUTLET** ?



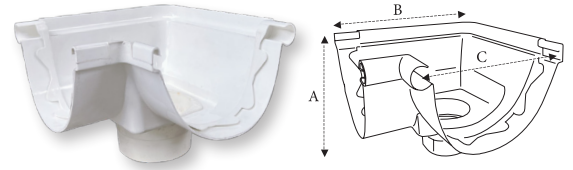
Original Outlet allows flexibility for the gutter's movement during thermal expansion. Original Outlet, with no silicone, solvent cement or screw required, reduces the risk of damage.

**CORNER SERIES ▼**



**CORNER OUT**

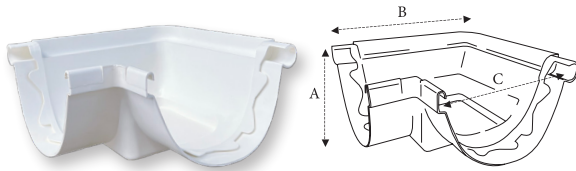
DIMENSIONS (mm)		
A	B	C
125	253	210



**CORNER OUT C/W 3" AND 4"**

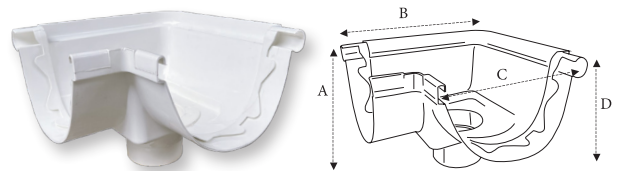
DIMENSIONS (mm)			OUTLET SIZE	
A	B	C	3"	4"
185	253	210	80/82	100/110

**CORNER SERIES ▼**



**CORNER IN**

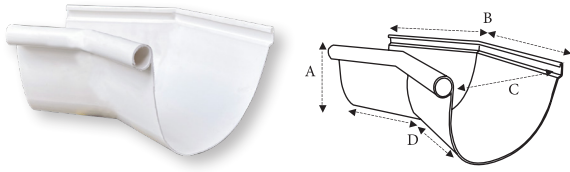
DIMENSIONS (mm)		
A	B	C
130	265	210



**CORNER IN C/W OUTLET 3" AND 4"**

DIMENSIONS (mm)			OUTLET SIZE	
A	B	C	3"	4"
185	265	210	80/82	100/110





**CORNER OUT 45°**

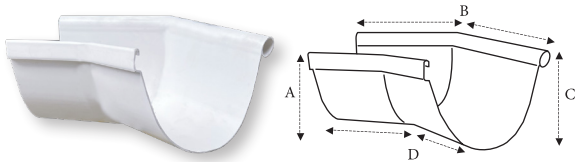
DIMENSIONS  
(mm)

A	B	C	D
120	345	155	210



What is **CORNER OUT** ?

Corner Out is used to gutters to turn outward away from building.



**CORNER IN 45°**

DIMENSIONS  
(mm)

A	B	C	D
120	350	120	208



What is **CORNER IN** ?

Corner In is designed to smoothly transition the gutters around the inward-facing corner.



# G380

*White*  
**Trendy Design** ▶  
◆ SMK DATO'S SAGO



a modern wave  
rain gutter

*Brown*  
**Elegant Design** ▶  
◆ JKR, KUALA SELANGOR



# TECHNICAL GUIDELINE

## Description G100 & G380

1. End Cap (Right)
2. Gutter
3. Internal Bracket
4. Original Outlet
5. Gutter Straps
6. Adjustable Bracket
7. Outlet Fin
8. External Bracket
9. Corner Out with Outlet
10. Corner In
11. Socket
12. Corner 45°



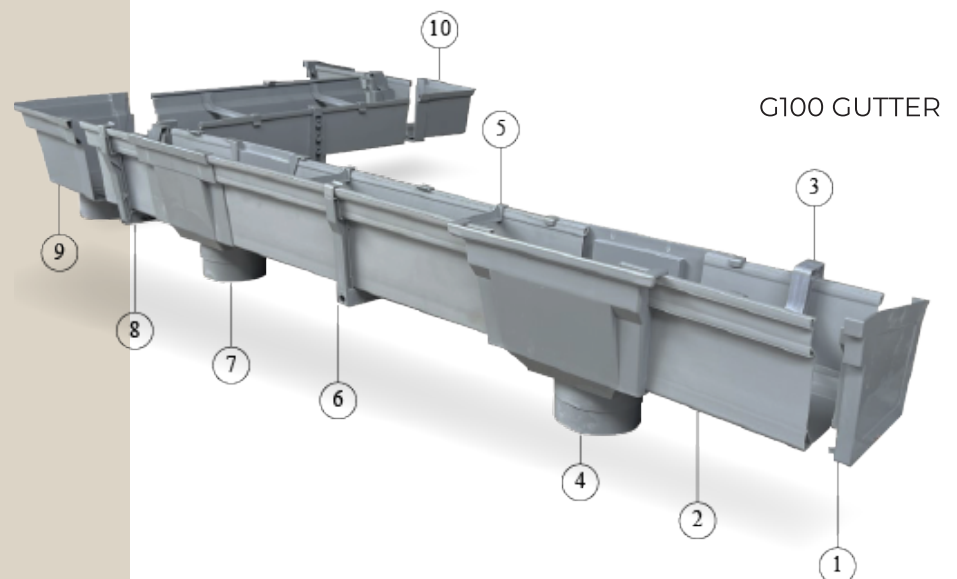
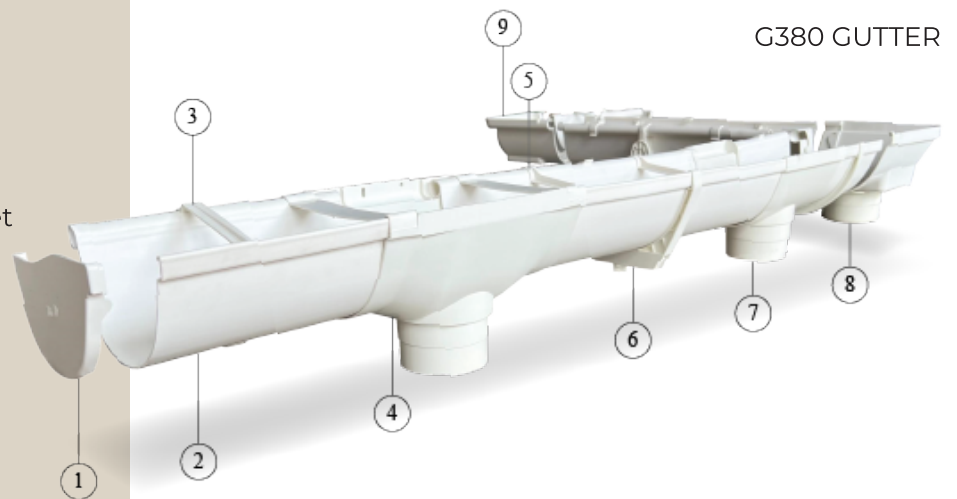
### NOTICE :

**2.9 meter MIDDY Rain Gutter System :**

DIY - Friendly installation.

**5.8 meter MIDDY Rain Gutter System :**

Specialist installation recommended.



# PROJECT SPECIFICATIONS

For better maintenance against thermal expansion and contraction,

- ◆ Install brackets along an even fascia board.
- ◆ Every 5.8 meters of uPVC Rain Gutter should be installed with one piece of Original Outlet
- ◆ Both Gutter Straps & Brackets must be installed at 0.6 meters (2feet) intervals.



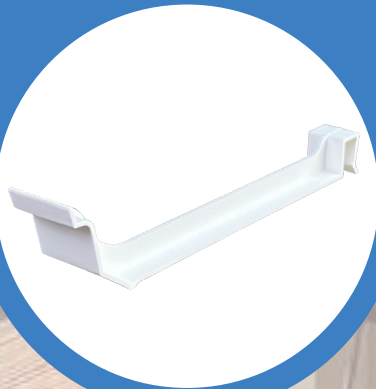
## ORIGINAL OUTLET

- ◆ Proper equipment for installation against thermal expansion and contraction.
- ◆ Easy for installation, no silicone, solvent cement or screw required.



## GUTTER STRAP

- ◆ The first manufacturer invented Gutter Strap.
- ◆ To protect the shape of uPVC Rain Gutter from deformation.
- ◆ To strengthen the qualities of uPVC Rain Gutter



## INTERNAL BRACKET

- ◆ A hidden and modern solution
- ◆ To protect the shape of uPVC Rain Gutter from deformation.



G100 SERIES  
WITH HIDDEN --->  
INTERNAL BRACKET

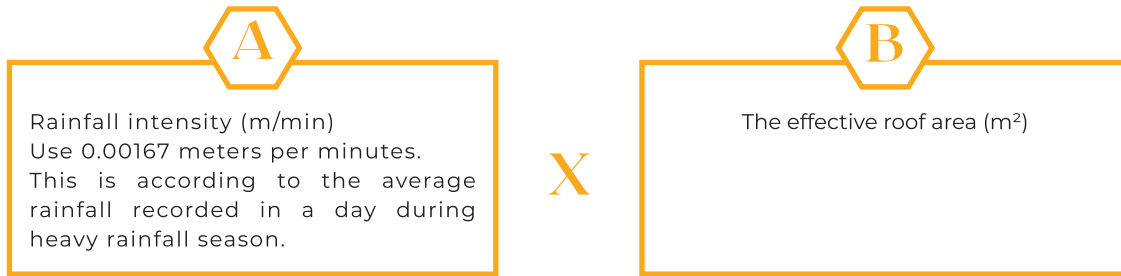
**ESSENTIAL GUIDE**

A gutter system is required to drain the heavy rain which lasts at least two minutes. Intense rainfall can occur in Malaysia. The gutter installer must determine if the gutter system can effectively collect rainwater from the roof size.

The calculation below shows how to determine the volume of rainwater running off a roof.

**THE CALCULATION**

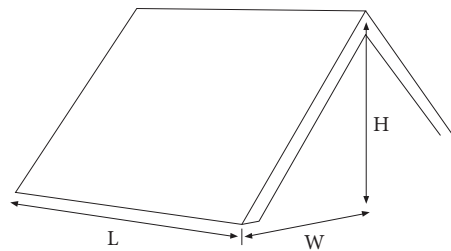
To calculate the volume of rainwater runoff from a roof, multiply the rainfall intensity by the roof area.



Volume of rainwater runoff a roof = **A x B**

**THE EFFECTIVE ROOF AREA**

The Effective Roof Area (ERA) can be determined by using the following calculations:



W = eaves under the ridge  
H = vertical height from eaves to ridge  
L = length of roof section

**1**

**(Width + Height / 2) x Length = Area (W + H/2) x L = A (m<sup>2</sup>)**

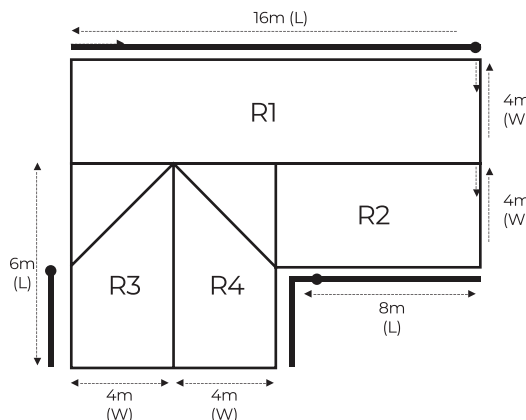
- R1 = (4m + 2.3m/2) x 16m = 82.4m<sup>2</sup>
- R2 = (4m + 2.3m/2) x 8m = 41.2m<sup>2</sup>
- R3 = (4m + 2.3m/2) x 6m = 30.9m<sup>2</sup>
- R4 = (4m + 2.3m/2) x 6m = 30.9m<sup>2</sup>

**2**

**Length x Width x Pitch Factor = Area (refer to table) = Area**

- L x W x Pitch = A (m<sup>2</sup>)
- R1 = 16m x 4m x 1.288 = 82.4m<sup>2</sup>
- R2 = 8m x 4m x 1.288 = 41.2m<sup>2</sup>
- R3 = 6m x 4m x 1.288 = 30.9m<sup>2</sup>
- R4 = 6m x 4m x 1.288 = 30.9m<sup>2</sup>

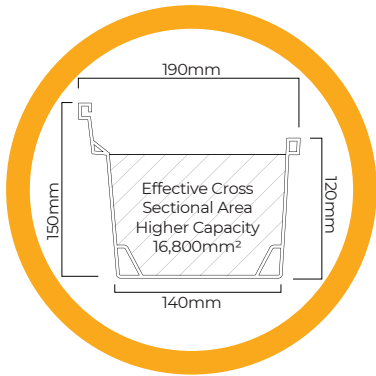
**Assume H=2.3m, Roof Pitch = 30° :**



Roof Pitch	Pitch Factor
4.8°	1.003
9.5°	1.014
15°	1.134
17.5°	1.158
20°	1.182
22.5°	1.207
25°	1.233

Roof Pitch	Pitch Factor
27°	1.260
30°	1.288
32.5°	1.319
35°	1.350
37.5°	1.384
40°	1.419
42.5°	1.459

Assuming the figure stated for R1, The volume of rainwater runoff = **A x B**  
 $R1 = 0.00167m \times 82.4m^2 = 0.1376m^3 / min$



**a Classic  
box gutter**

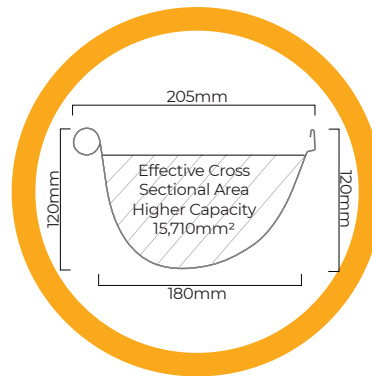
**Gutter Profile G100**

Assuming that slope =  $\frac{1}{4}$  "  
 (According to Manning equation)  
 G100 Gutter flow rate =  $0.636m^3 / min$

**a Modern  
wave gutter**

**Gutter Profile G380**

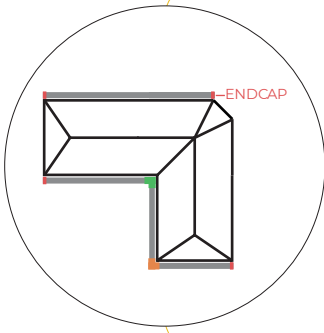
Assuming that slope =  $\frac{1}{4}$  "  
 (According to Manning equation)  
 G380 Gutter flow rate =  $0.449mm^3 / min$



**ROOF AREA  
COVERAGE GUIDE**

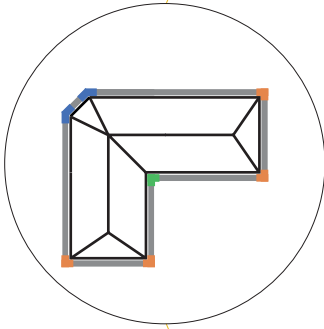


You may choose any of our gutters (which matches the above requirement) as your choice of gutter.



## END CAP (L& R)

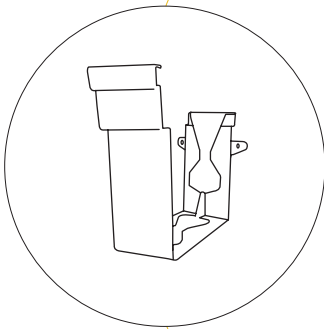
End Cap is required to be placed at the end of Rain Gutters.  
If the entire roof is surrounded by Rain Gutters, no end cap is required.



## CORNER

Determine the angle of corner and choose the corner correctly with specific degree.

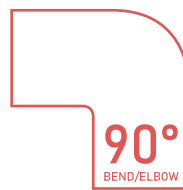
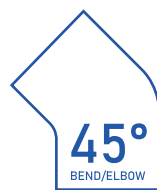
90° Corner Out    90° Corner In    45° Corner Out



## SOCKET

Socket is only required as a connector under a certain situation.

## DOWNPIPE & FITTINGS



### DRAIN-DOWNSPIPE

measure the entire height of the house, dividing by 5.8 meters to determine the number of pipe needed.

### DOWNSPIPE SOCKET

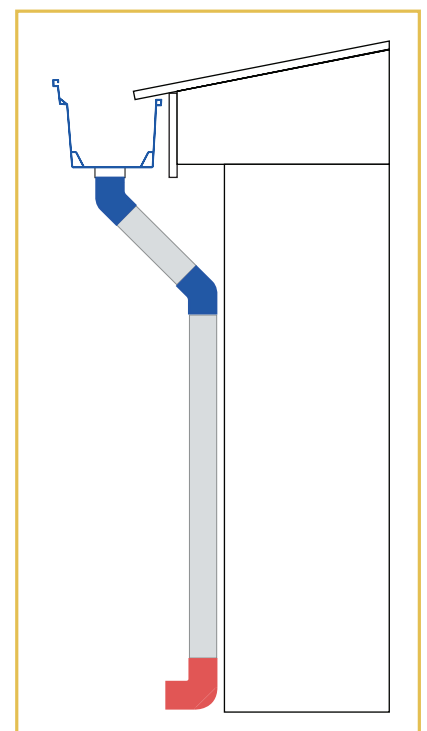
the end of each pipe requires a socket as connector.

### ELBOW / BEND

generally each outlet requires two 45° elbows to connect outlet to downpipe, and also one 90° elbow at the bottom of the downpipe to the drain.

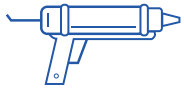
### PIPE CLIP

pipe clip could secure and guide the downpipe to the wall



## INSTALLATION GUIDE

Tool & Equipment for uPVC Rain Gutter system installation.



Silicone



Rubber Hammer



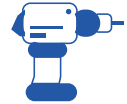
Tape Measure



Ladder



Safety Clothing



Impact Drill



Grinder



Screw



Pipe Level



Spirit Level



String Line



Set Square



Solvent Cement

## SITE ANALYSIS & CALCULATION

Proper instruction to install uPVC Rain Gutter system

01



**Normal Fascia Board**  
Install Easy Fast Bracket/ Internal Bracket / Bracket





Normal Fascia Board

Ueven Fascia Board

**Ueven Fascia Board**  
Install Adjustable Bracket

02



Use string line to install every adjustable bracket in same position then tighten with screw.

Ueven Fascia Board



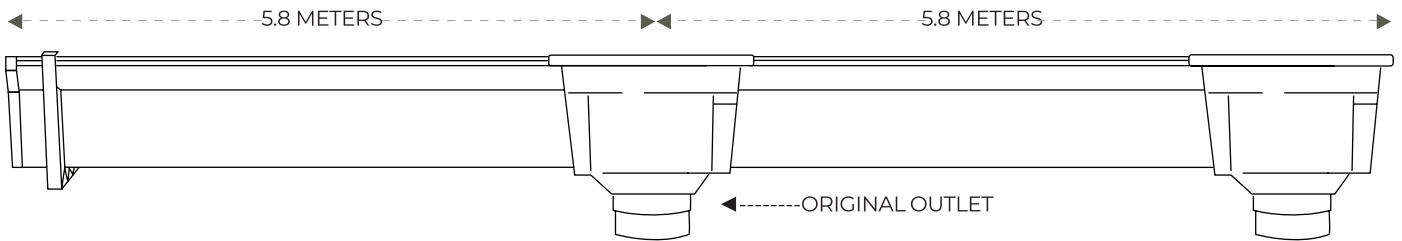


### RAIN GUTTER

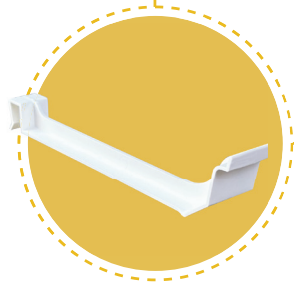
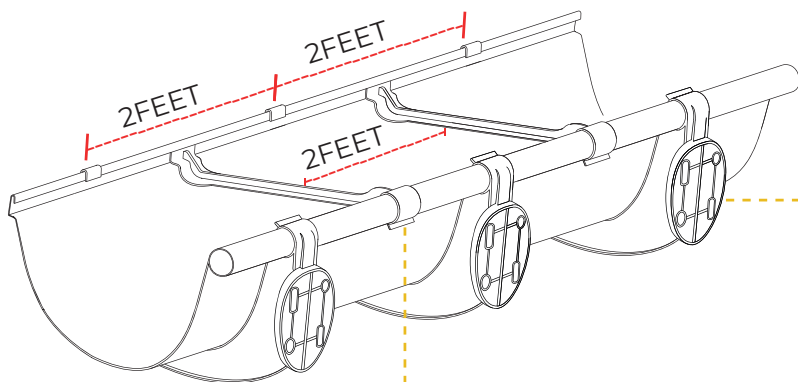
The number of **Rain Gutter** needed is determined by measuring the entire length of the roof, then dividing by 5.8 meters (our standard size).

### OUTLET

**Outlet** is required to drain water into the downpipe. One piece of outlet is needed per 5.8 meters of uPVC Rain Gutter.



## BRACKET & GUTTER STRAP



#### GUTTER STRAP

To maintain the shape and strengthen the uPVC Rain Gutter, Gutter Straps are recommended to install every 0.6 meters (2feet).

#### BRACKET

Brackets are required to support the Rain Gutters. It is recommended to install at intervals of 0.6 meters (2feet).

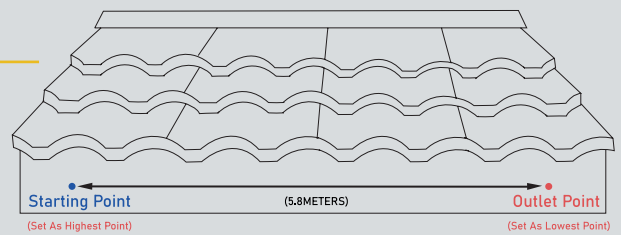


## STEP 1



### STARTING POINT TO OUTLET

Determine the location of starting point and the outlet point.

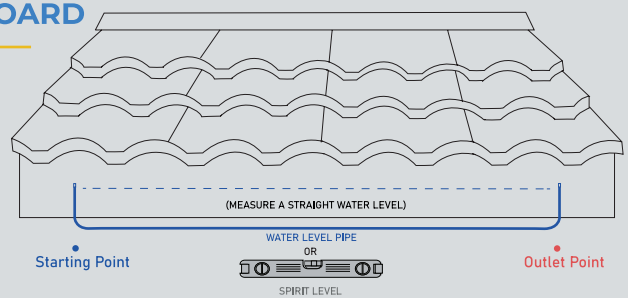


## STEP 2



### WATER LEVEL ALONG FASCIA BOARD

Use spirit level or level pipe to make sure the water level along fascia board is straight, mark the starting point and outlet point.

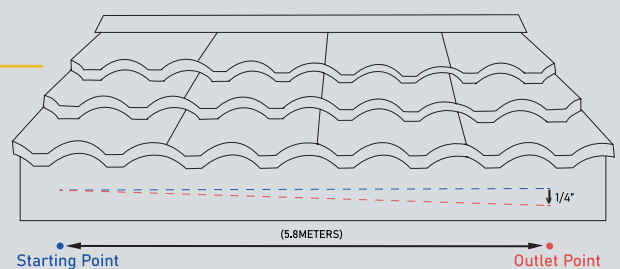


## STEP 3



### SPEED OF WATERFLOW

To increase the speed of waterflow, mark the lowest point with a 0.64cm (1/4 inch) downward slope from the outlet point as highest point.



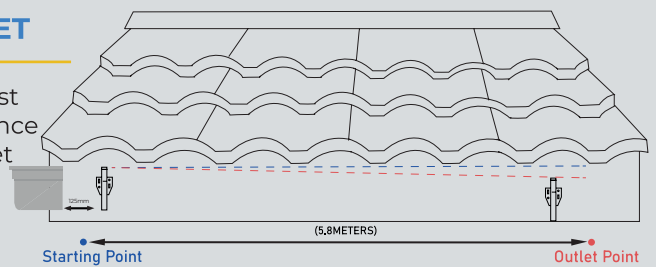


#### STEP 4



#### END CAP / CORNER & BRACKET

Install the first bracket near the highest point (starting point), assure the distance between End Cap / Corner and Bracket is  $\leq 125\text{mm}$ .

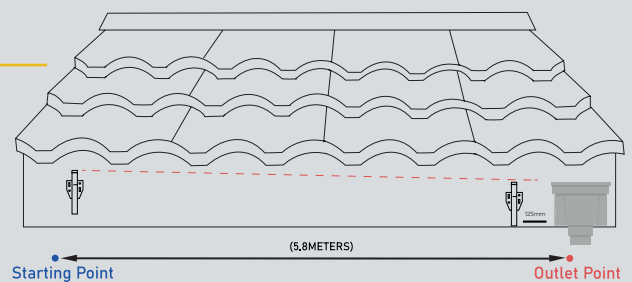


#### STEP 5



#### OUTLET & BRACKET

Install the second bracket near the lowest point (outlet point), assure the distance between Outlet and Bracket is  $\leq 125\text{mm}$ .



\* the distance between Bracket and Outlet / End Cap / Corner / Socket must be  $\leq 125\text{mm}$  to give a better support for the uPVC Rain Gutters.

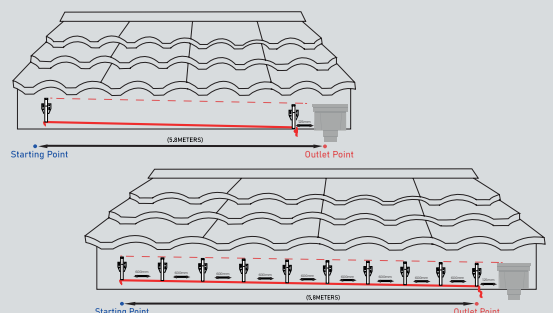
#### STEP 6



#### BRACKETS SPACING

Tighten the string line from the first bracket (near starting point) to the second bracket (near outlet point).

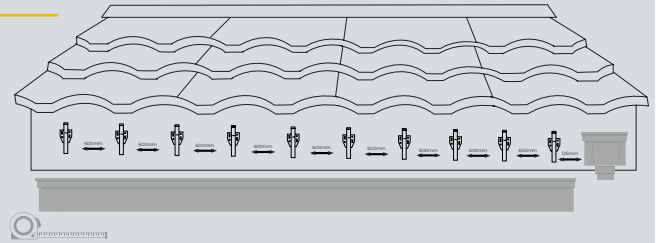
Install brackets at 0.6 meters intervals following the string line to ensure a perfect slope.



**STEP 7**

**GUTTER INSTALLATION WITH FITTINGS**

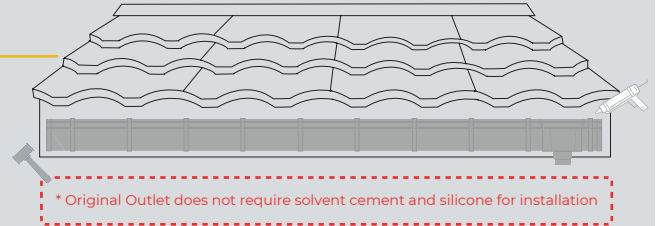
Measure the length of roof, cut the gutters with a grinder or saw. Removes the burrs and leave a smoother edge, then begin the gutter installation with fittings.



**STEP 8**

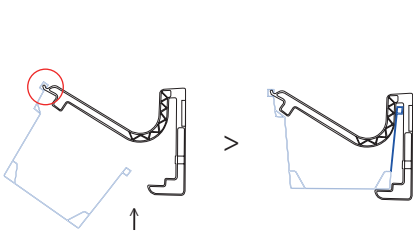
**FINAL CHECKING**

Make sure there is no gap between each joint. Rubber hammer can be used to make sure that each joint is completely adjoined. Solvent cement and silicon are required for each type of joint : Socket, Outlet Fin, Corner and End Cap

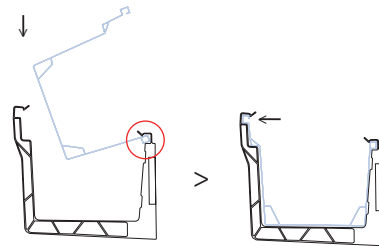


**HOW TO** *Insert* **RAIN GUTTER INTO THE BRACKET**

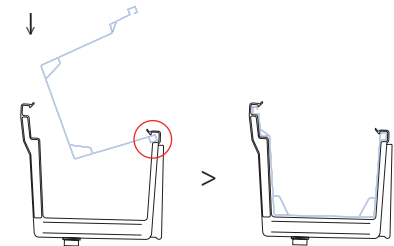
**GUTTER G100**



**G100 INTERNAL BRACKET**

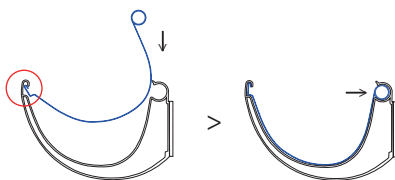


**G100 EASY FAST BRACKET**

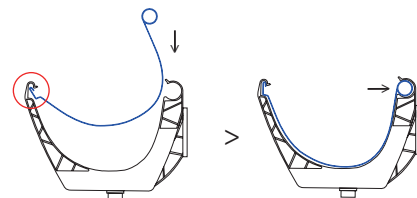


**G100 ADJUSTABLE BRACKET**

**GUTTER G380**



**G380 BRACKET**



**G380 ADJUSTABLE BRACKET**

## STORAGE INSTRUCTIONS

A proper storage is important to guarantee the quality of the uPVC Rain Gutters, and ensure a seamless service to our customers.



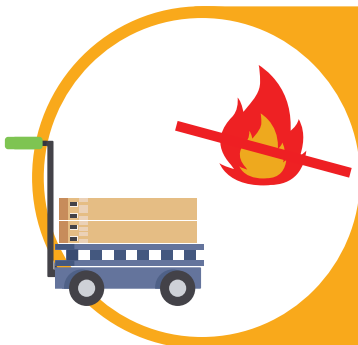
### HORIZONTAL PLACEMENT

Load the Rain Gutters horizontally during transportation to distribute the weight evenly and prevent damage.



### SHADED STORAGE

To maintain the durability, the uPVC Rain Gutters should be placed on a reasonably flat surface. Store them in a shaded area or cover them with heat-resistant plastic.



### AVOID DIRECT HEAT

Avoid storing uPVC Rain Gutters near heat sources or exposing them to direct sunlight as this could damage the uPVC Rain Gutters.



### QUALITY ASSURANCE

For best results, please handle the uPVC Rain Gutters according to the instructions in this brochure. Make sure all health and safety procedure guidelines are followed.





uPVC Rain Gutter Systems

**Fast • Reliable • Durable**

# MIDDY

**MIDDY INDUSTRIES SDN BHD** (549717-T)

35-2 Jalan Pusat BCH 1/1A,  
Bandar Country Homes,  
48000 Rawang Selangor  
[www.middy.com.my](http://www.middy.com.my)

