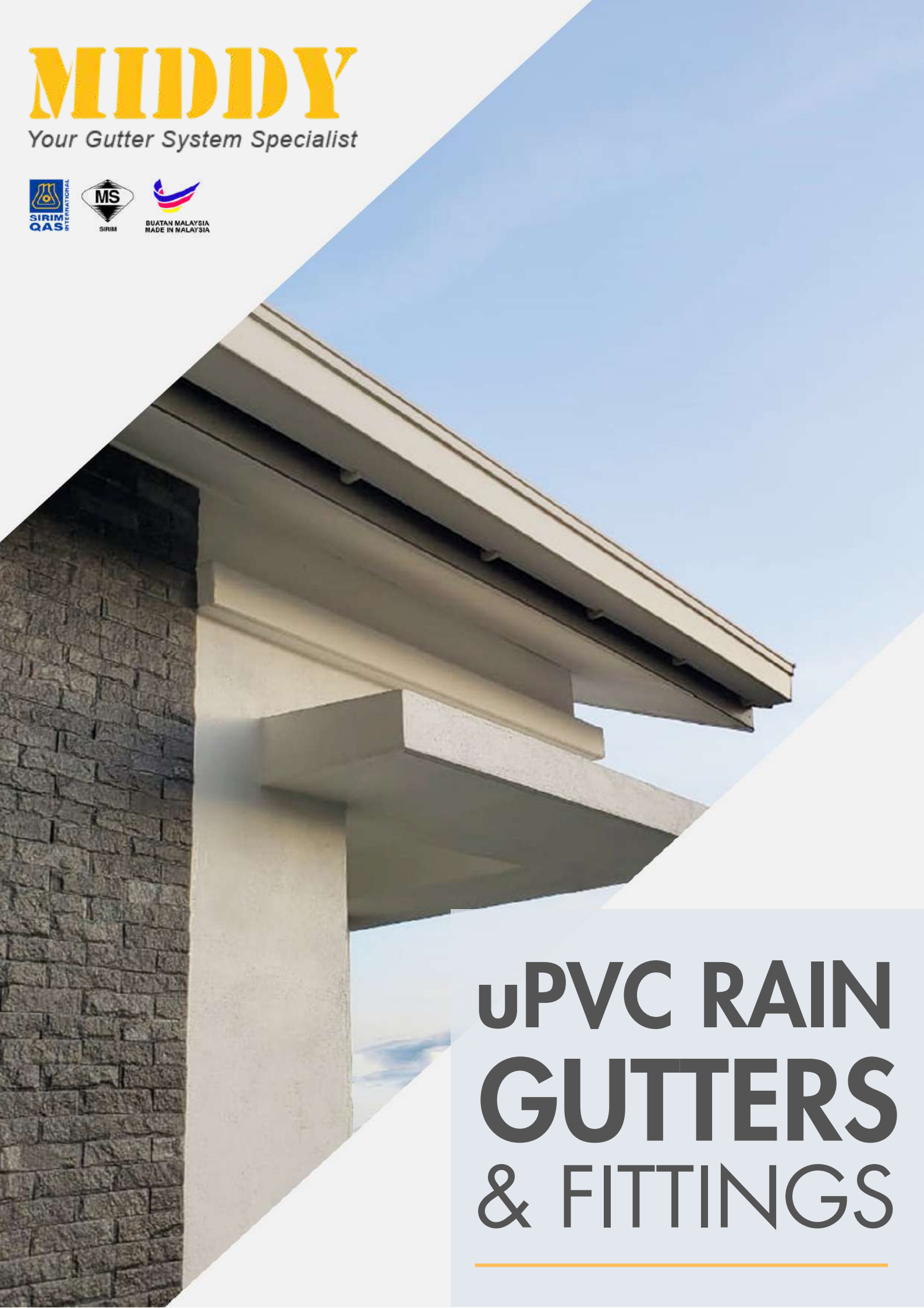


MIDDY

Your Gutter System Specialist



uPVC RAIN GUTTERS & FITTINGS

About Middy

uPVC rain gutter systems

OUR COMPANY

Established in 2011, Middy Industries is a fast-growing manufacturer of gutter system products in Malaysia. We are committed to delivering exceptional products and services to exceed our customers' expectations, both locally and globally.

“ RESPONSIBLE SERVICES
CONSISTENT QUALITY
REASONABLE PRICES
CONTINUOUS IMPROVEMENTS ”

BRAND MISSION

RESEARCH & DEVELOPMENT

To adapt to the rapidly changing environment, our R&D team works unconditionally to research and develop new solutions for product innovation.



QUALITY ASSURANCE

Our production facilities are supervised by experienced professionals, ensuring the highest standards for every product we deliver.



RELIABLE TEAM

With years of specialization in gutter systems, our experienced and knowledgeable team is trained to provide customized solutions, expert advice and personalized service.



Middy rain gutter systems are essential for protecting your home. They efficiently drain rain water, thus saving on maintenance costs for years.

Our uPVC rain gutters meet SIRIM certification, ensuring reliability. We are committed to providing excellent service to meet our customers' needs.

Choose Middy as your partner for all your gutter system needs. Experience the difference and let us exceed your expectations in the rain gutter systems industry.



THE ADVANTAGES OF MIDDY GUTTERS



**NO
FLOODING**

ENHANCED
QUALITY



**HOUSE NOT
AFFECTED**

WEATHER
RESISTANCE



**NO
COMPLAINTS**

DESIGN
VERSATILITY



**DURABLE
MATERIALS**

LONGEVITY
& DURABILITY



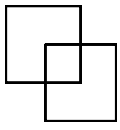
**CAN BE
PAINTED**

ECO -
FRIENDLY



**100%
uPVC**

COST -
EFFECTIVE

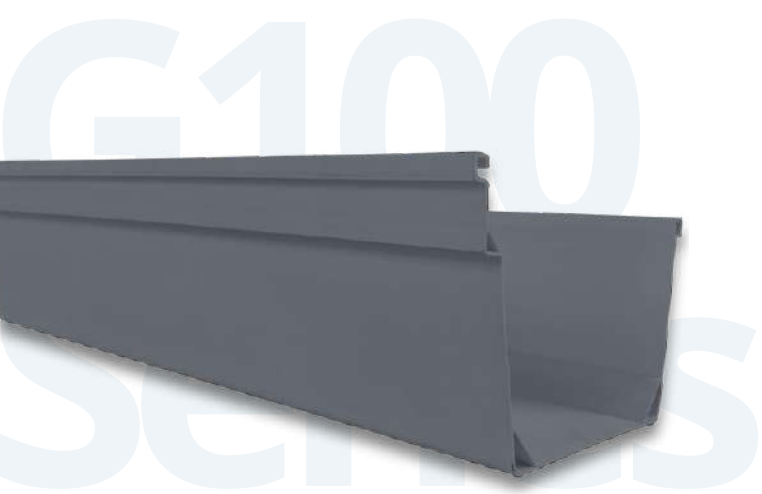


G100
SERIES

a classic box gutter

INDUSTRIAL DESIGN NO. MY01-00372





G100 BOX GUTTER



FITTINGS & ACCESSORIES



GUTTER STRAP

SOCKET

END CAP



INTERNAL BRACKET

EASY FAST BRACKET

ADJUSTABLE BRACKET

BRACKET SERIES

OUTLET SERIES



ORIGINAL OUTLET 4"

FIN OUTLET 3"

FIN OUTLET 4"

FAB OUTLET 3"

CORNER SERIES

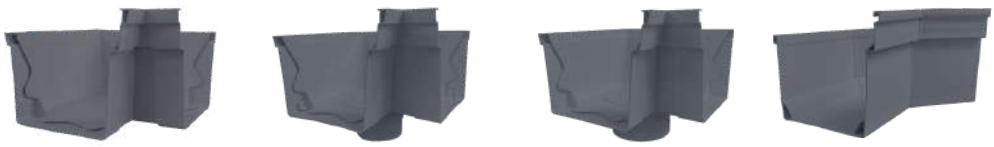


CORNER OUT

CORNER OUT C/W OUTLET 3"

CORNER OUT C/W OUTLET 4"

CORNER OUT 45°



CORNER IN

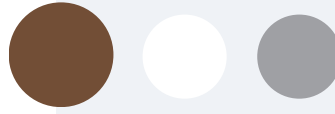
CORNER IN C/W OUTLET 3"

CORNER IN C/W OUTLET 4"

CORNER IN 45°



G100 BOX GUTTER



FITTINGS & ACCESSORIES



GUTTER STRAP



SOCKET



END CAP



INTERNAL BRACKET



EASY FAST BRACKET



ADJUSTABLE BRACKET

BRACKET SERIES

OUTLET SERIES



ORIGINAL OUTLET 4"



FIN OUTLET 3"



FIN OUTLET 4"



FAB OUTLET 3"

CORNER SERIES



CORNER OUT



CORNER OUT C/W OUTLET 3"



CORNER OUT C/W OUTLET 4"



CORNER OUT 45°



CORNER IN



CORNER IN C/W OUTLET 3"



CORNER IN C/W OUTLET 4"



CORNER IN 45°



G100 BOX GUTTER



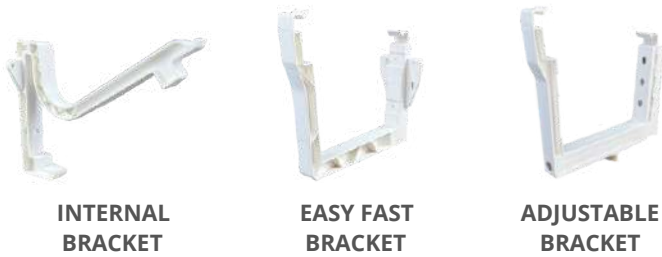
FITTINGS & ACCESSORIES



GUTTER STRAP

SOCKET

END CAP



INTERNAL BRACKET

EASY FAST BRACKET

ADJUSTABLE BRACKET

BRACKET SERIES

OUTLET SERIES



ORIGINAL OUTLET 4"

FIN OUTLET 3"

FIN OUTLET 4"

FAB OUTLET 3"

CORNER SERIES



CORNER OUT

CORNER OUT C/W OUTLET 3"

CORNER OUT C/W OUTLET 4"

CORNER OUT 45°

CORNER IN

CORNER IN C/W OUTLET 3"

CORNER IN C/W OUTLET 4"

CORNER IN 45°

G100 Series

uPVC rain gutter systems

BRACKET SERIES

The G100 uPVC Rain Gutter system provides three options for bracket installation, each with its own advantages.



INTERNAL BRACKET

- ▶ A hidden and modern solution for installation, providing an elegant appearance.



EASY FAST BRACKET

- ▶ The design of side wings gives an easier solution for faster and effortless installation.



ADJUSTABLE BRACKET

- ▶ Perfect for uneven fascia board. It is the best solution for a strong and stable structure.

PROJECT SPECIFICATIONS

Detailed guideline for project specifications.

Notice :

For better maintenance against thermal expansion and contraction.

≥Every 5.8 meters of uPVC Rain Gutters should be installed with one piece of Original Outlet.

≥It is recommended to install Gutter Straps and Internal Brackets at 0.6 meters (2 feet) intervals along the uPVC Rain Gutters to support and strengthen the uPVC Rain Gutters.



ORIGINAL OUTLET

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



GUTTER STRAP

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

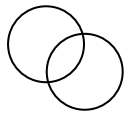


INTERNAL BRACKET

- ▶ Better support for uPVC Rain Gutters while facing thermal expansion and contraction.

G100 SERIES
with Hidden
Internal Bracket





G380
SERIES

a modern wave gutter



INDUSTRIAL DESIGN NO. MY7-00919-0103



G380 WAVE GUTTER



FITTINGS & ACCESSORIES



GUTTER STRAP



SOCKET



END CAP



BRACKET



ADJUSTABLE
BRACKET

BRACKET SERIES

OUTLET SERIES



ORIGINAL
OUTLET 3"



ORIGINAL
OUTLET 4"



FIN
OUTLET 3"



FIN
OUTLET 4"

CORNER SERIES



CORNER OUT



CORNER OUT C/W
OUTLET 3"



CORNER OUT C/W
OUTLET 4"



CORNER OUT 45°



CORNER IN



CORNER IN C/W
OUTLET 3"



CORNER IN C/W
OUTLET 4"

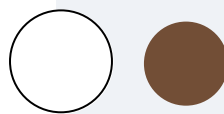


CORNER IN 45°

G380



G380 WAVE GUTTER



FITTINGS & ACCESSORIES



GUTTER STRAP



SOCKET



END CAP



BRACKET



ADJUSTABLE
BRACKET

BRACKET SERIES

OUTLET SERIES



ORIGINAL
OUTLET 3"



ORIGINAL
OUTLET 4"



FIN
OUTLET 3"



FIN
OUTLET 4"

CORNER SERIES



CORNER OUT



CORNER OUT C/W
OUTLET 3"



CORNER OUT C/W
OUTLET 4"



CORNER OUT 45°



CORNER IN



CORNER IN C/W
OUTLET 3"

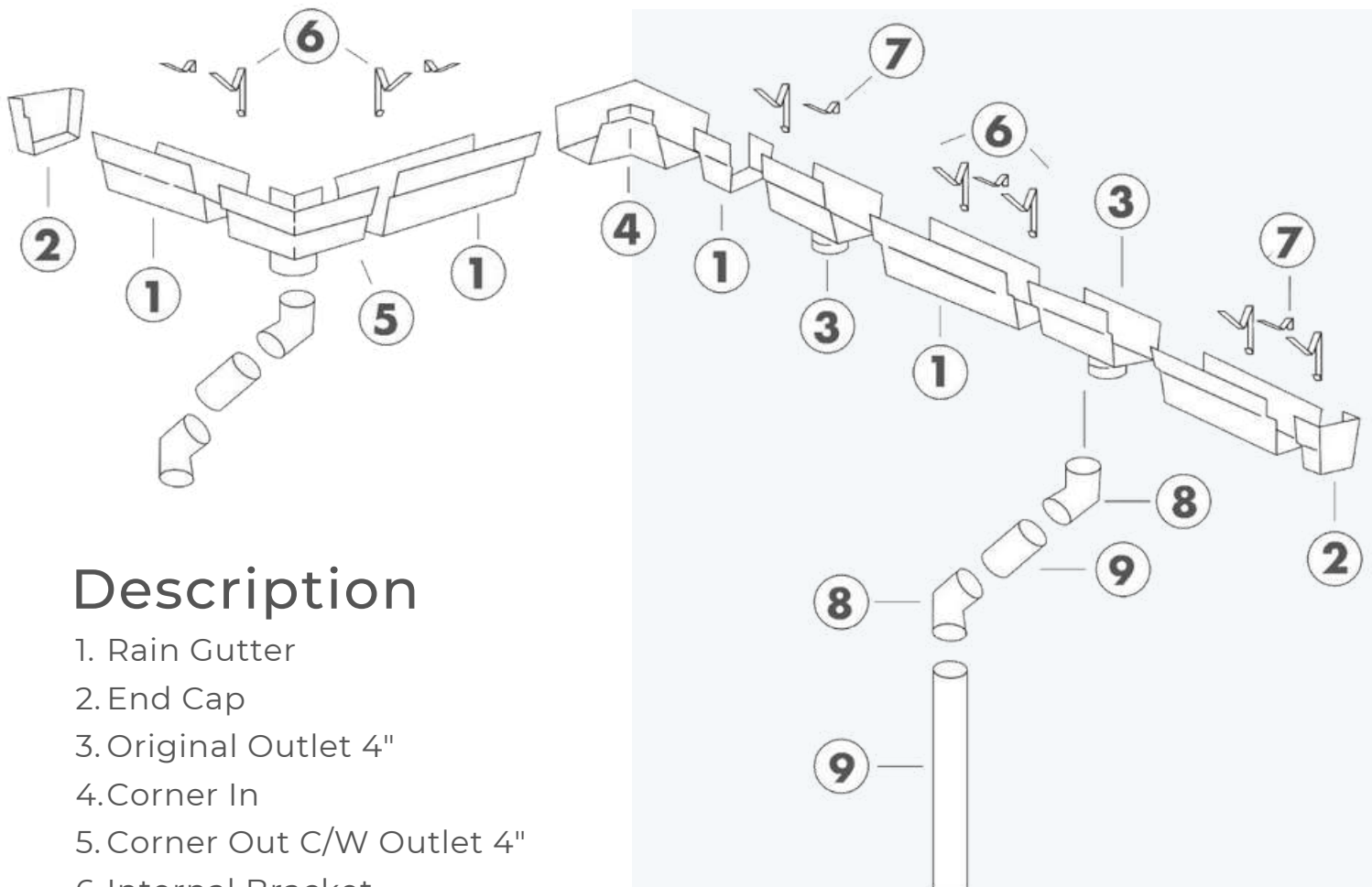


CORNER IN C/W
OUTLET 4"



CORNER IN 45°

TECHNICAL GUIDELINE



Description

1. Rain Gutter
2. End Cap
3. Original Outlet 4"
4. Corner In
5. Corner Out C/W Outlet 4"
6. Internal Bracket
7. Gutter Strap
8. Bend 45°
9. Downpipe

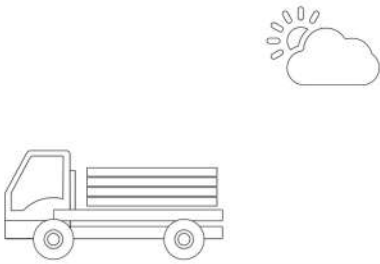
NOTICE:

- > 2.9 meter Middy G100 Rain Gutter System : DIY - friendly installation.
- > 5.8 meter Middy G100 Rain Gutter System : Specialist installation recommended.

STORAGE INSTRUCTIONS

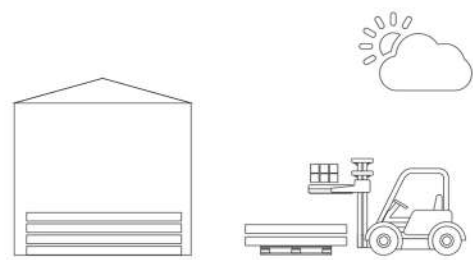
A proper storage is important to guarantee the quality of the uPVC Rain Gutters, and ensure a seamless service to our customers.

HORIZONTAL PLACEMENT



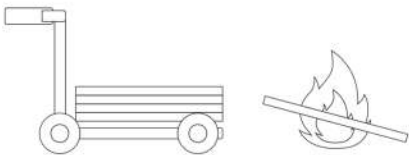
- ▶ Load the Rain Gutters horizontally during transportation to distribute the weight evenly and prevent damage.

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



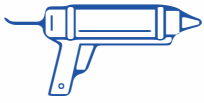
- ▶ For best results, please handle the uPVC Rain Gutters according to the instructions in this brochure. Make sure all health and safety procedure guidelines are followed.

Gutter Guideline

uPVC rain gutter systems

INSTALLATION GUIDE

Tools & 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



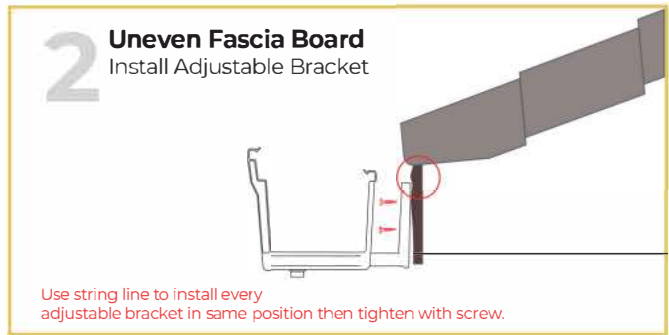
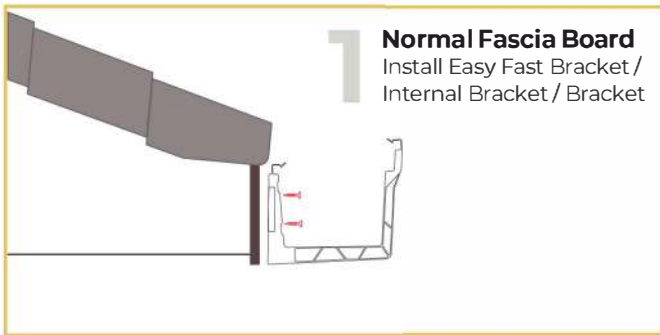
Set Square



Solvent Cement

SITE ANALYSIS & CALCULATION

Proper instruction to install uPVC Rain Gutter system



CALCULATION

To calculate the number of UPVC Rain Gutter & Fittings required.

CORNER count the number of corner needed with the correct degree.

RAIN GUTTER measure the entire length of the roof, dividing by 5.8 meters to determine the number of uPVC Rain Gutter needed.

OUTLET count the number of outlet needed.

SOCKET socket is only required as a connector in a certain situation.

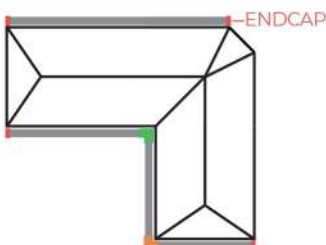
GUTTER STRAPS divide total length of uPVC Rain Gutters by 0.6 meters to determine the number of gutter strap needed.

BRACKET divide total length of uPVC Rain Gutters by 0.6 meters to determine the number of bracket needed.

END CAP count the end of Rain Gutters where end cap is required to be placed. If the entire roof is surrounded by Rain Gutters, no end cap is required.

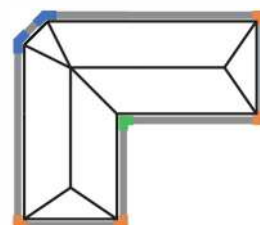
END CAP

End Cap is required to close off the end of Rain Gutters.



CORNER

Corner connects the Rain Gutters at any angle changes.

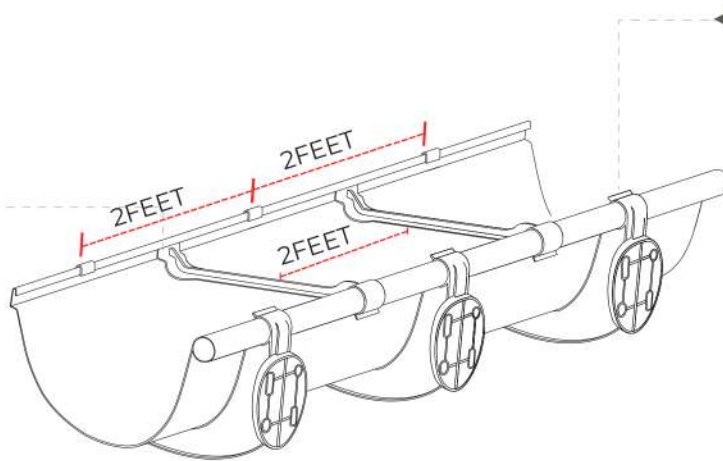


90°
Corner Out
90°
Corner In
45°
Corner Out

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 (2 feet).

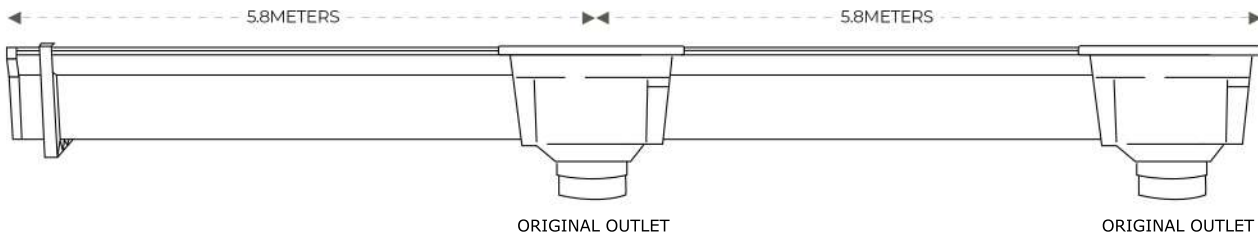


BRACKET

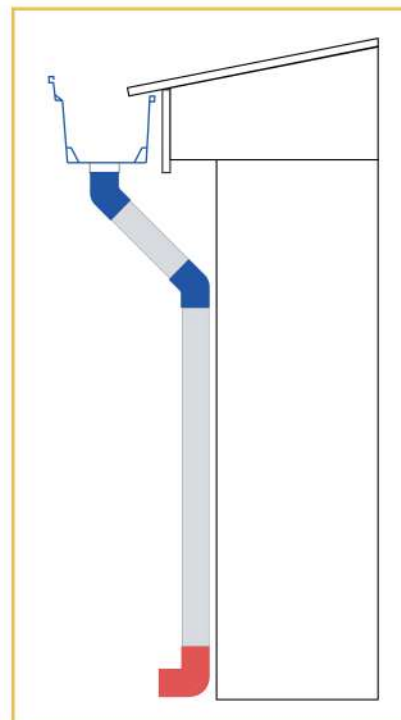
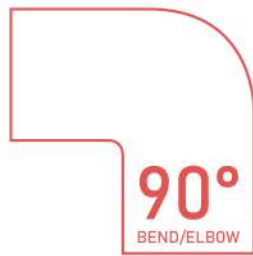
Brackets are required to support the Rain Gutters. It is recommended to install at intervals of 0.6 meters (2 feet).

OUTLET

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



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.

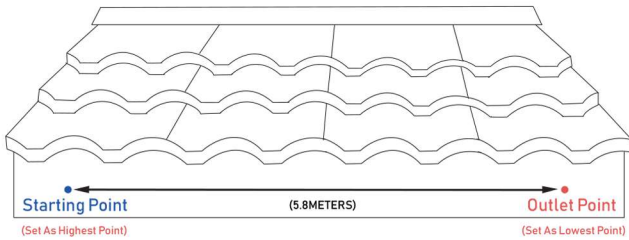
PIPE CLIP pipe clip could secure and guide the downpipe to the wall.

Gutter Guideline

uPVC rain gutter systems

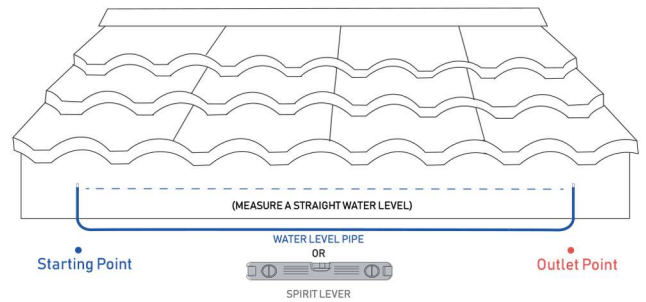
INSTALLATION STEPS

1
step



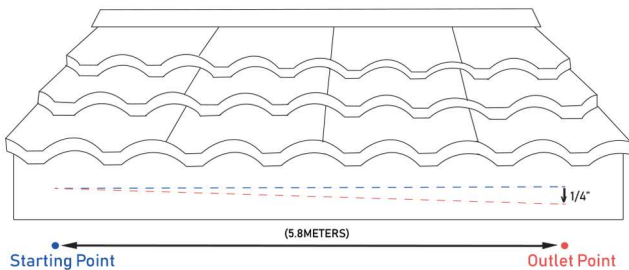
- Determine the location of starting point and the outlet point.

2
step



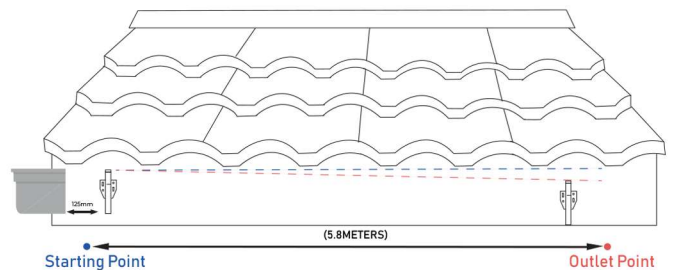
- Use spirit level or level pipe to make sure the water level on fascia board is straight, mark the starting point and outlet point.

3
step



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

4
step

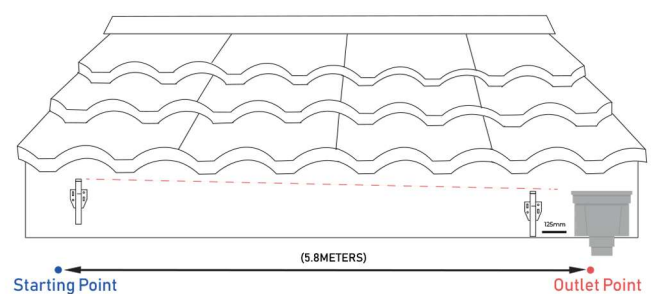


- Install the first bracket near the highest point (starting point), assure the distance between End Cap / Corner and Bracket is $\leq 125\text{mm}$.

5
step

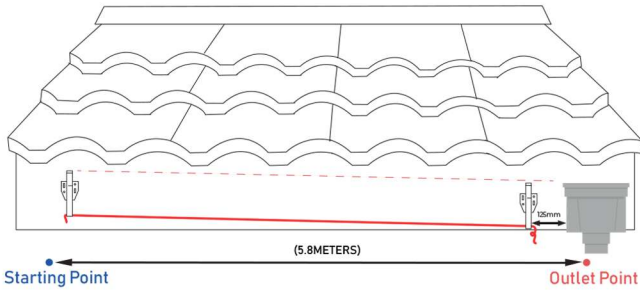
- Install the second bracket near the lowest point (outlet point), assure the distance between Outlet and Bracket is $\leq 125\text{mm}$.

* 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.



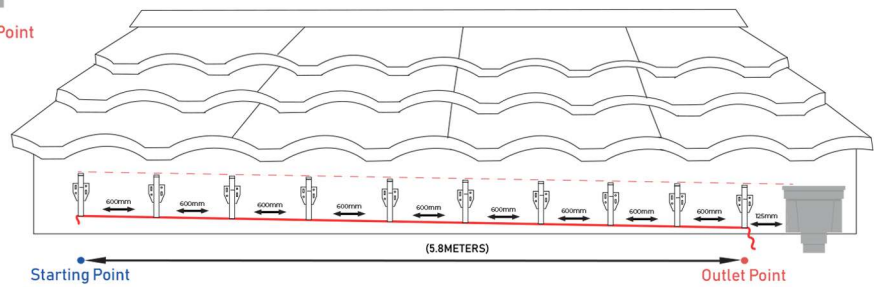
INSTALLATION STEPS

6
step

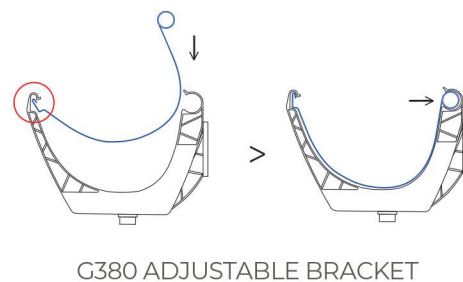
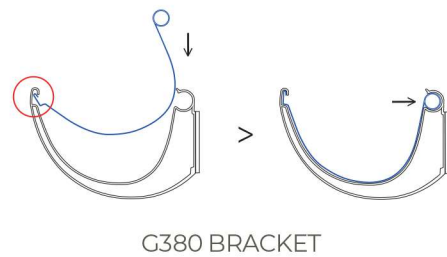
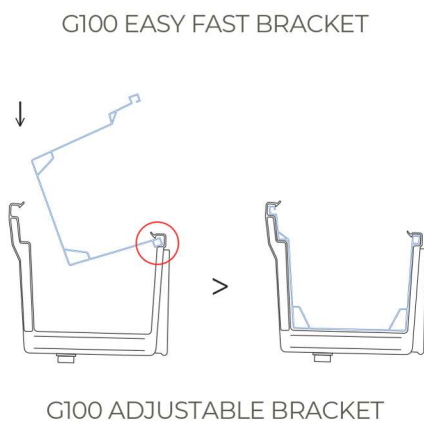
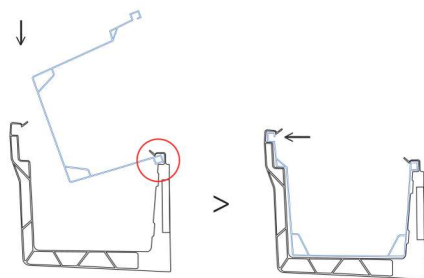
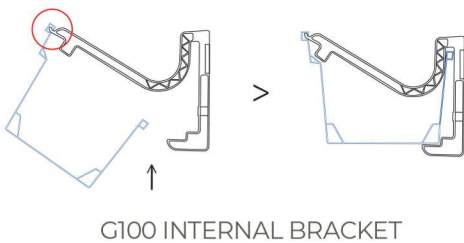


- ▶ Install brackets at 0.6 meters intervals following the string line to ensure a perfect slope.

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



HOW TO INSERT RAIN GUTTER INTO THE BRACKET



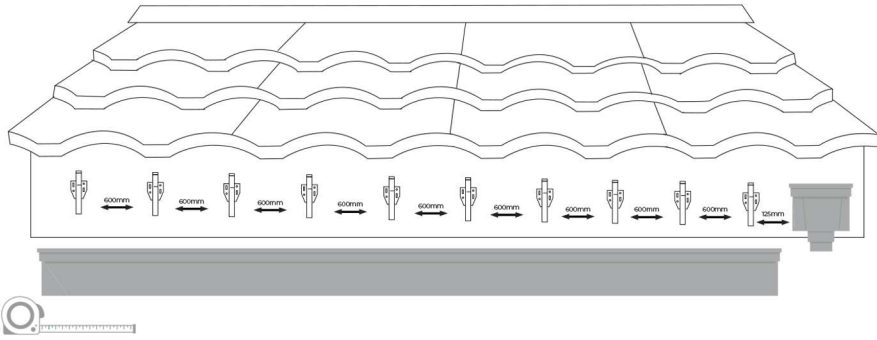
GUTTER G100

GUTTER G380

Gutter Guideline

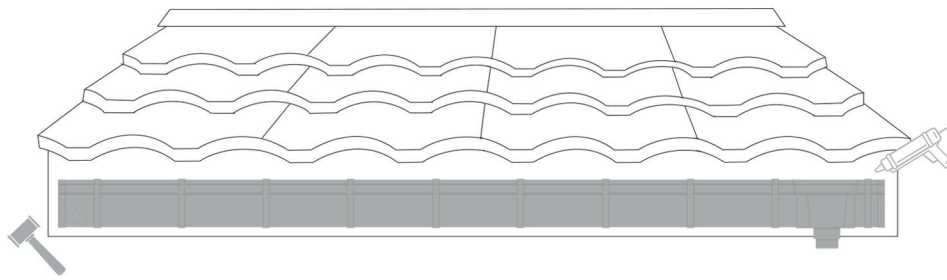
uPVC rain gutter systems

INSTALLATION STEPS



7
step

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

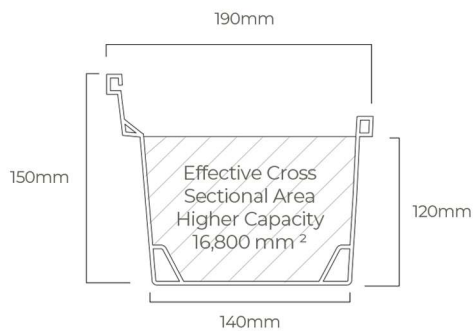


8
step

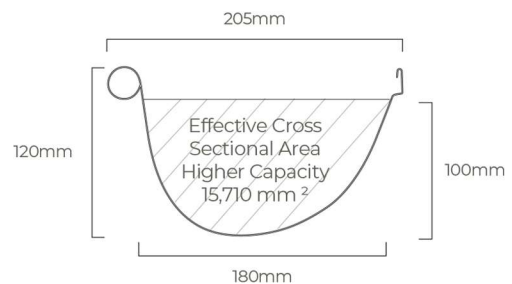
- Make sure there are no gaps between each joint. Rubber hammer can be used to make sure that each joint is completely adjoined. Solvent cement and silicone are required for each type of Joint : Socket, Outlet Fin, Corner and End Cap

* Original Outlet does not require solvent cement and silicone for installation.

PRODUCT DETAILS



Gutter Profile G100



Gutter Profile G380

GUTTER G100

GUTTER G380



www.middy.com.my

Fast • Reliable • Durable
uPVC rain gutter systems

MIDDY
Your Gutter System Specialist

MIDDY INDUSTRIES SDN BHD

(947045-K)
