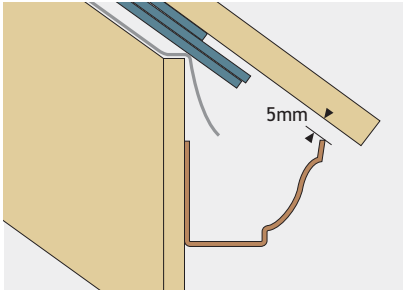


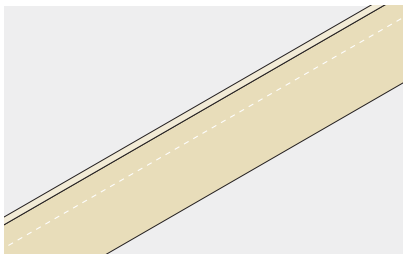
# Installation - AX Moulded Gutters, Direct Fixing

AX Moulded gutters comprise extruded aluminium profiles, jointed with internal union clips. Profiles can be connected to aluminium pipework systems in either round, square or rectangular sections. AX Moulded gutters can be installed by direct fix to the fascia, or by means of support brackets. Assembly and installation must be considered with specific reference to site fixing conditions, but general aspects of preparation are shown below. This guide covers direct fixing. For bracket fixing, see separate installation guide.

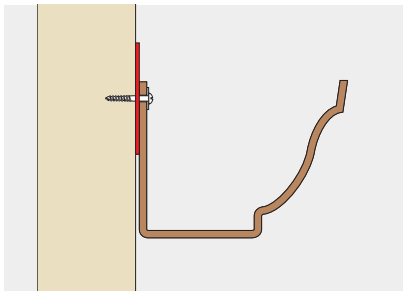
## General fixing instructions



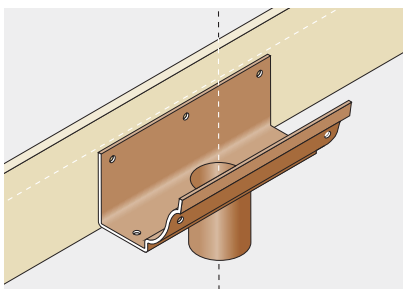
1. Using a straight edge or ruler, shim gutter brackets with 5mm clearance so that the last roof tile or slate will align with the mid point of the gutter.



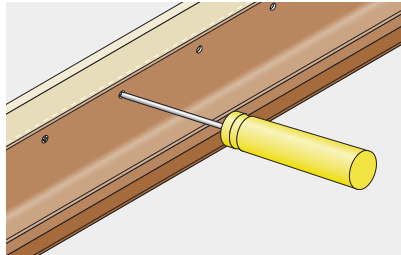
2. Using a string or laser, establish a true line of the gutter.



3. Note any uneven surfaces on the fascia and make adjustments if possible. Where shallow depressions occur, packing pieces can be used under gutter lengths.

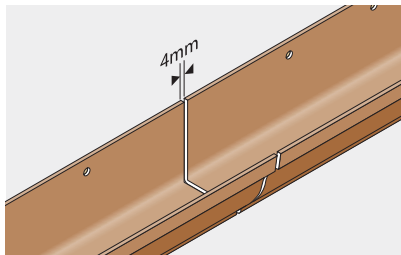


4. Plumb line outlet positions with gullies at ground level

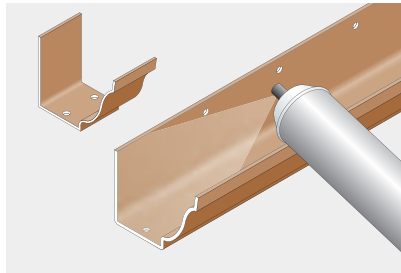


5. Fix all components and gutter lengths direct to the fascia with a single round-head screw through the back edge at 900mm centres. Drill 8mm holes 18mm from the top edge.

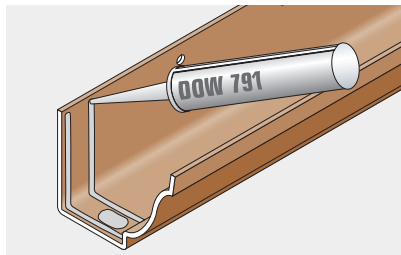
## Method of jointing



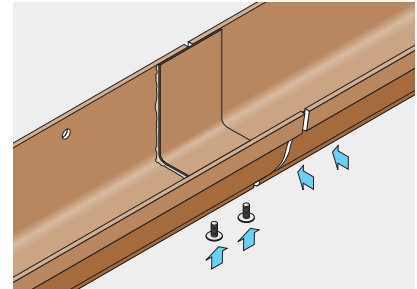
6. When joining gutter lengths, allow for a 4mm expansion gap.



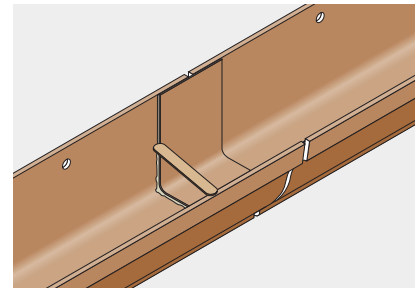
7. De-grease and clean each union and gutter length/fitting to a distance of 50mm - 100mm from the end.



8. Apply two 6mm beads of Dow Corning 791 low-modulus Type A silicone sealant either side of, and around the fixing holes. Silicone sealant must be applied only to completely dry surfaces.

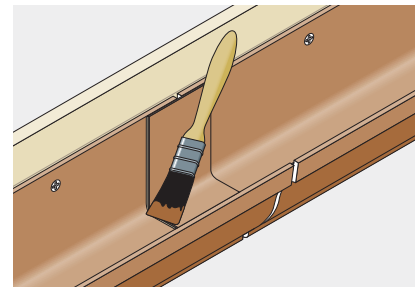


9. Secure the union to the gutter using the M6 x 20mm aluminium nuts, bolts and washers supplied. Pass bolt from outside in, and use washer and nut to secure finger-tight.



10. Tool-off displaced silicone sealant to the inside of the gutter joint. Tighten fixing bolts. Cone-off bolts and any other potential leakage points with sealant. Allow to cure for 24 hours.

## Finishing

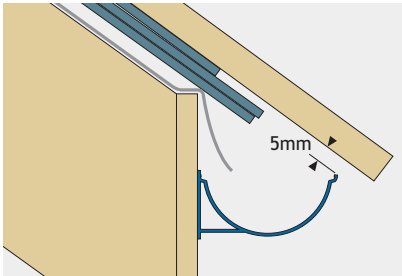


11. Use touch-up paint on all exposed nuts, bolts and washers.

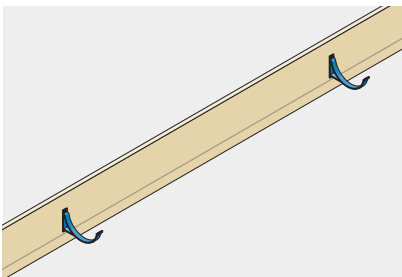
# Installation - AX Half Round and Moulded Gutters, Bracket Fixing

AX Half Round, Deep Run and Moulded gutters comprise extruded aluminium profiles, jointed with internal union clips. A range of brackets is available to accommodate all types of eaves condition. AX profiles can be connected to aluminium pipework systems in either round, square or rectangular sections secured by standard or offset brackets. The installation procedure is the same for AX Half Round, AX Deep Run and AX Moulded gutters.

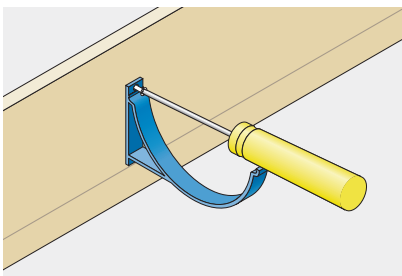
## General fixing instructions



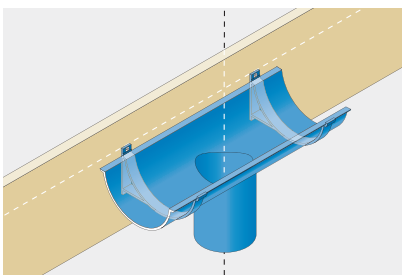
- Using a straight edge or ruler, shim gutter brackets with 5mm clearance so that the last roof tile or slate will align with the mid point of the gutter.



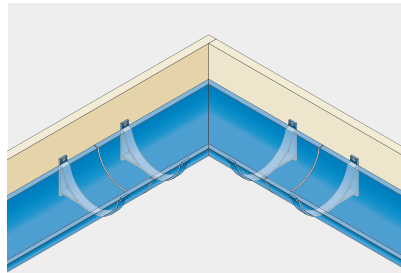
- Use a string or laser to establish a true line and level of the gutter. Prepare to use packing pieces under brackets where there are depressions.



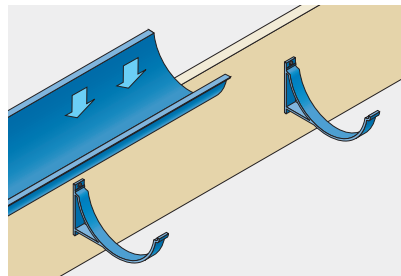
- Generally position fascia brackets at 900mm centres in accordance with BS EN 12056-3:2000. Fix brackets with two No 12 x 38mm round-head screws.



- Plumb line outlet positions with gullies at ground level.

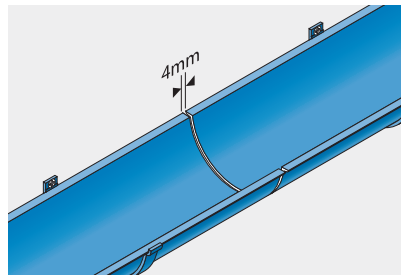


- Offer angle pieces and outlets to the fascia. Lower gutter sections onto the brackets leaving a 4mm expansion gap between gutter sections and allow sufficient clearance for the gutter joint.

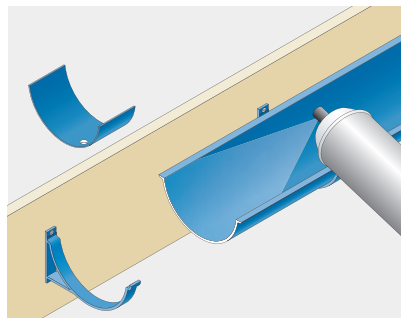


- Clip gutter sections into brackets.

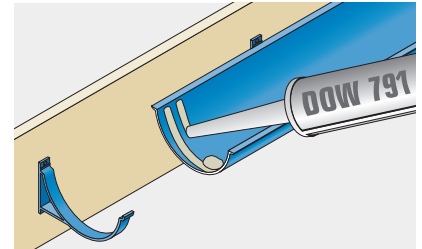
## Method of jointing



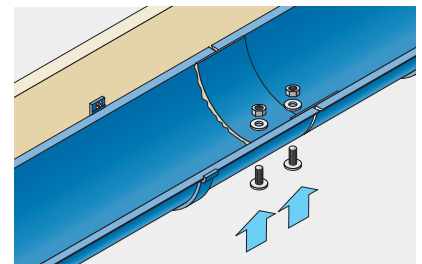
- When joining gutter lengths, allow for a 4mm expansion gap.



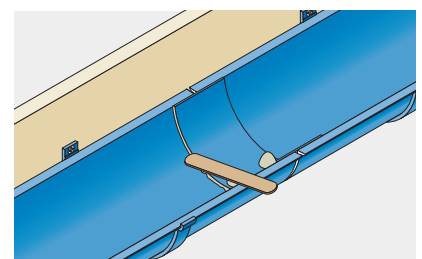
- De-grease and clean each union and gutter length/fitting to a distance of 50 - 100mm from the end.



- Apply two 6mm beads of Dow Corning 791 low-modulus Type A silicone sealant to the ends of gutter profiles and fixing hole. Silicone sealant must be applied only to completely dry surfaces.

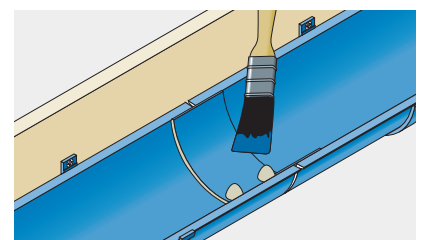


- Secure the union to the gutter using the M6 x 12mm aluminium nuts, bolts and washers supplied. Pass bolt from outside in, and use washer and nut to secure finger-tight.



- Tool-off displaced silicone sealant to the inside of the gutter joint. Tighten fixing bolts. Cone-off bolts and any other potential leakage points with sealant. Allow to cure for 24 hours.

## Finishing



- Use touch-up paint on all exposed nuts, bolts and washers.