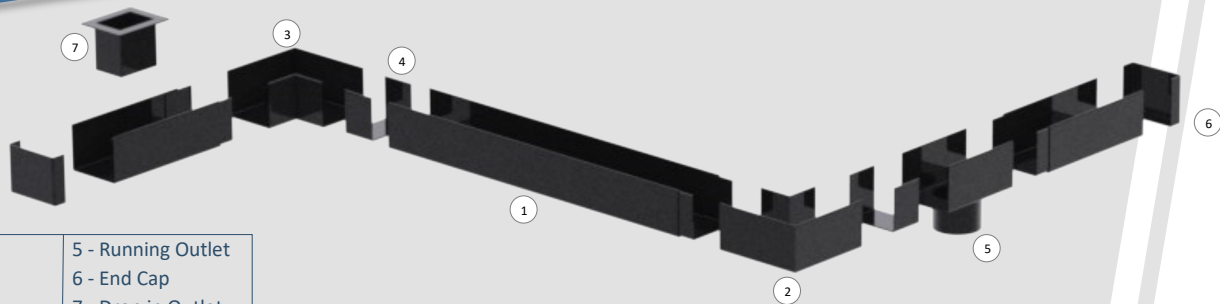




Product Data Sheet : Extruded Box Gutter System



- 1 - Gutter Section
- 2 - External Mitre
- 3 - Internal Mitre
- 4 - Loose Connector
- 5 - Running Outlet
- 6 - End Cap
- 7 - Drop in Outlet

Product Description:

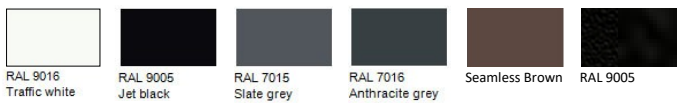
Seamless Aluminum’s range of Box Gutters are designed and manufactured to provide the essential architectural features appropriate to modern designed buildings. The various elements slide together and are sealed with mastic and bolted together. They are fixed directly to fascia board through the back of the gutter.

Our system can be used as a direct replacement for Cast Iron or PVC. It can also be used on both flush and projecting eaves.

As we manufacture all the gutters and accessories in our state of the art manufacturing plant we can accommodate any special requirements you may have in relation to length, colour, special angles or brackets etc.

Physical Properties	
Material	Manufactured from Extruded Aluminium to BS EN 12020-2:2008 and BS EN 755-2:2013 Aluminium alloy 6063 to T4 temper grade.
Finish	Mill Finish or Polyester Powder Coated to most classic RAL colours. Produced to EN12206-1
Sizes Available	125mm x 100mm x 2.75mm 150mm x 100mm x 2.75mm
Life expectancy	40 years or more

Standard RAL Colour Options:



Our polyester powder coated range of RAL colours have a Matt finish and are available as standard colours unless alternative requested.

Durability/Performance:

Aluminium gutter systems have a low maintenance life in excess of 40 years in rural and suburban conditions and in excess of 25 years in industrial and marine conditions.

Fire Rating:

Non Combustible to EN13501-1:2007 + A1:2009
Coefficient for thermal expansion - 0.000023°C
Do not aid combustion
Melting point approximately 660°C

Standards:

All Seamless Aluminium Groups systems are manufactured under the ISO 9001 - 2015 quality management standards.

Compatible with:

63mm, 76mm, 102mm and 150mm* circular downpipe
76 x 76mm, 102 x 102mm square downpipe
102 x 76mm rectangular downpipe
150mm round only works with 150mm box gutter only.

Flow Rate:

All the rates quoted are shown in litres per second. Gutter capacities are based on EN 12056-3:2000, assuming a maximum distance of 50 x gutter depth, from high point to outlet. Longer gutters or gutters with corners exceeding 254mm will have a reduced capacity.

	Gutter Capacity	Ø 63 mm	Ø76 mm	Ø102 mm	Ø150 mm	76x76 mm	102x 102 mm	102 x76 mm
Box 125	4.37	1.87	2.65	4.71	-	3.31	4.42	5.89
Box 150	5.25	1.87	2.65	4.71	7.07	3.31	4.42	5.89

The Capacity of a rainwater system is usually dependent upon the capacity of the gutter outlet or flat roof outlet rather than the rainwater pipe. Please refer to BS EN 12056-3:2000, Section 6, Table 8 for capacities of vertical rainwater pipes.



Product Data Sheet : Extruded Box Gutter System

Jointing:

The gutter is jointed using connectors and are bolted together for additional strength. Lengths are butt jointed, then a low modulus sealant, such as Pro cast Clear, is applied and the union is then bolted to both sides creating a joint which will stand up to thermal movement.

Handling & Storage:

Gutters, downpipes and fittings, particularly with polyester powder coat finish should be handled with care and should preferably be stored under cover on racks to prevent scratching. All lengths are supplied in protective polythene wrapping, components suitably packed in boxes. If painted products are to be stored outside, cover with tarpaulin to guard against water ingress into the protective polythene. Mill finish items should be stored undercover to avoid uneven oxidation prior to being fitted.

Maintenance:

In order to maintain proper working order, gutters should be periodically cleaned out and any built-up debris removed. Check all fixings are secure and take any remedial action to rectify if necessary. To maximise the life of the decorative paint finishes, all parts should be washed down at regular intervals and any damage repaired. Please see Cleaning and Maintenance document for detailed instructions.

FIXING METHOD:

Extruded Box Gutter to be direct fixed at a maximum 450mm centres distance. 2 stainless screws (No.5x50mm twin threaded) to be used. Any Accessory brackets to follow same fitting method.

Manufacturer:

Telephone: +44 (0)121 765 4355

Email: Info@seamlessaluminium.co.uk

Website: www.seamlessaluminium.co.uk

Address: Seamless Aluminium International Ltd,
Unit 6b, Solihull Building Trade Centre, Olton Wharf, Olton,
West Midlands B92 7RN.

Compatibility:

Direct Aluminium contact with dissimilar metals or with materials containing lime or cement should be avoided. The polyester coating is an insulation but different metals should be separated by nonmetallic material to prevent electrolytic corrosion. The use of Aluminium in conjunction with copper roofs, cladding or flashings should be avoided. Contact Seamless Aluminium for advice where heavily polluted atmospheres or marine conditions are involved for advice on material choice.

Environmental:

Seamless Aluminium's manufacturing site in Donegal is focused in ensuring all environmental steps are taken when producing any product. Aluminium is a sustainable material, infinitely recyclable and responsibly sourced.

Technical Support:

Technical advice is available from Seamless Aluminium via:

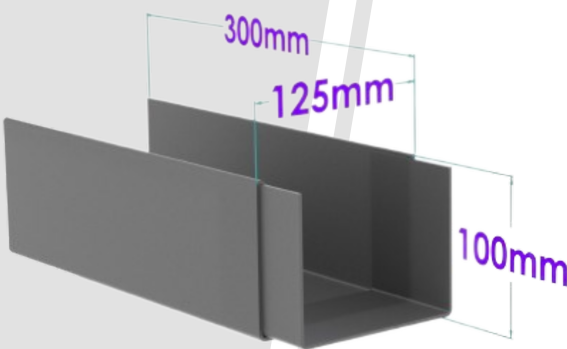
Telephone: +44 (0)121 765 4355

Email: Info@seamlessaluminium.co.uk

Website: www.seamlessaluminium.co.uk

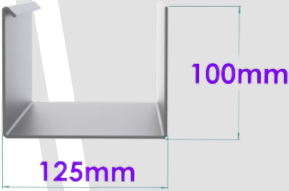
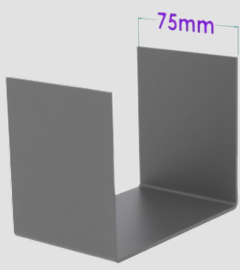
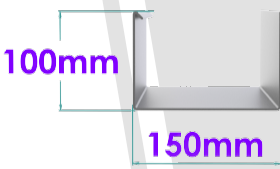
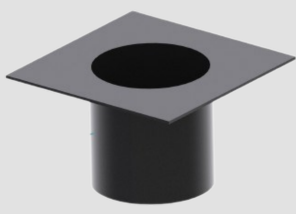
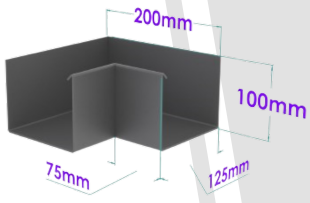
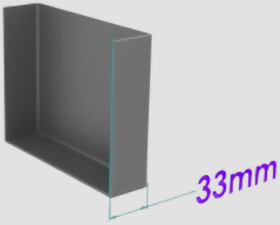
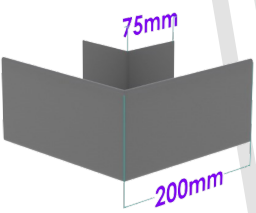
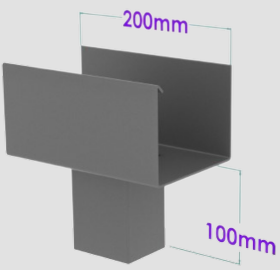
Address: Seamless Aluminium International Ltd,
Unit 6b, Solihull Building Trade Centre, Olton Wharf, Olton,
West Midlands B92 7RN.

Seamless Aluminium Group pursues a policy of constant product development and information contained within this datasheet is therefore subject to change without notice. The customer is responsible for ensuring that each product is fit for its intended purpose and that the conditions for use are suitable. All quoted data is nominal and subject to production tolerances.





Box Gutter Parts and Accessories:

	<u>125mm Gutter Section</u>		<u>Internal Connector</u>
	<u>150mm Gutter Section</u>		<u>Drop in Outlet</u>
	<u>Internal Mitre</u>		<u>End cap</u>
	<u>External Mitre</u>		<u>Running Outlet</u>



Cleaning & Maintenance

Introduction:

These recommendations cover procedures for cleaning and maintenance of powder coated Aluminium rainwater, eaves, coping systems. Powder Coatings are organic coatings which need to be cleaned and maintained regularly to ensure that the decorative and protective properties of the coating are retained. Powder Coated Aluminium materials, gutter and rainwater pipe systems are not a FIT and FORGET product and regular cleaning and maintenance (depending on environment) will be required to ensure product/ system lifespan and correct functionality.

Method:

Gutters should be regularly cleaned out of debris, leaves and grit to maintain the designed flow rate and to prevent ponding or debris build up which will in turn block gutters and downpipes. Check all joints are watertight, fixings are secure and take any remedial action to rectify if necessary. Usual maintenance of powder coated applied products can be done with an appropriate cleaning product, followed by clear water rinsing and wiping using a soft cloth. All surfaces should be cleaned using a soft cloth or sponge, using nothing harsher than natural bristle brushes. There is no need to overclean or apply excessive pressure or rubbing. We recommend frequent mild cleaning rather than infrequent heavy cleaning. If the project is subject to any hazardous unusual environmental factors, or is close to salt water, an estuary or marine environments then Seamless Aluminium Ltd must be consulted on an individual project basis. If the coating is very heavily soiled (i.e. due to lack of maintenance), then the recommendation is to consult a specialized cleaning company.

Recording:

Failure to follow cleaning and maintenance guidelines will render all Warranties null and void therefore a written record must be kept in respect of all inspections, maintenance, cleaning and repair work detailing the following Information Name and details of inspection , cleaning body, date of works (cleaning, maintenance and or repair), detail of works undertaken and Inspection report findings.

Cleaning Products:

Before cleaning the cleaning agent’s datasheet must be consulted. Usual maintenance can be done using water with mild detergent (pH 5 to 8) rinsing down afterwards with fresh water If the atmospheric pollution has resulted in heavy soiling of the coating, some stains or marks may require stronger domestic products such as products based of alcohol, petroleum spirits, white spirit, or bleach (diluted to 5%). In this case, it is necessary to rinse the coating immediately after the cleaning product has been used. In no circumstance should any abrasive cleaner or polish, or any cleaner containing ketones or esters be used.

Frequency:

The frequency of cleaning depends in part on the geographical and environmental location of the building, the elements it is exposed to and the standard of appearance that is required . Also the requirements to remove deposits, which could, during prolonged contact with either the powder film or the metal substrate, (if exposed) cause damage. As a general rule the coated surface should be cleared at least once a year in a normal environment. However in areas where pollutants are more prevalent, coastal areas or industrial areas a more frequent cleaning programme must be carried out. The Industry standards for the cleaning of Powder Coated Aluminium products dependant on their located environments are as follows:

Environment	Frequency of Cleaning
Normal Urban industrial. Moderate SO ₂ levels in coastal area with low salinity	12 months
Severe Industrial areas and coastal areas with moderate salinity and SO ₂ levels >30 mg/m ³	6 months
Hazardous Industrial areas with humid and aggressive atmospheres, with SO ₂ .> 30mg/m ³ Coastal and offshore areas less than one km from coast with high UV, high humidity and salt > 12 mg per litre rain water)	3 months