



330mm Flex-fit Rafter Bracket | K33

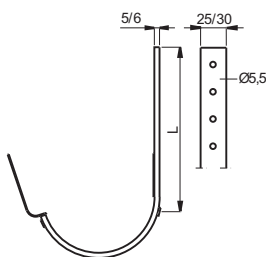
Lindab Rainline rainwater system is made to last using durable lightweight steel with elite Magestic galvanised finish or a choice of UV stable painted colour options.

Designed with both functionality and aesthetics in mind, smart solution products enable quick and easy installation and a stylish result.

PRODUCT FEATURES

- Recommended maximum 800mm interval spacing
- Should be installed to create fall of 10mm per 3.0m run
- Should be bent to require angle using KBO bracket bender
- Uses flexible clips, attached with stainless steel rivets, to hold the gutter in place
- Solid 6mm, steel 30mm wide rafter bar with 4 fixing holes
- Can be supplied bent or twisted for side fixing for additional charge

PRODUCT DIAGRAM



Size mm	L mm
150	334
190	334



PRODUCT SPECIFICATION

Category:	335 GALVANISED STEEL GUTTERS
Reference:	Lindab Rainline Rainwater System
Profile:	R Half Round
Sizes:	150mm / 190mm
Grade:	0.6mm steel
Finishes:	045 SM Silver Metallic/ 044 AM Anthracite Metallic/ 015 BK Black/ 001 WT Antique White/ 087 DG Dark Grey/ 434 BN Brown/ 742 TR Tile Red/ 758 DR Dark Red/ 387 CB Coffee Brown/ 035 AG Anthracite Grey/ MG Unpainted magnesium zinc galvanised

STANDARDS

Gutters, pipes and fittings manufactured to BS EN 612:2005: Eaves gutters with bead stiffened fronts and rainwater pipes with seamed joints made of metal sheet Design to BS EN 12056-3:2000 Gravity drainage systems inside buildings. Roof drainage, layout and calculation (AMD 17041), 2000.

Lindab Magestic material is classified to Eurocode classes A1 and A1FL for fire hazards. Painted steel Rainline is classified to class A2-s1, d0.

WARRANTY

Lindab painted rainwater systems have a 15 year warranty and Lindab Magestic galvanised rainwater systems have a 10 year warranty



Rainline Recommendations

INSTALLATION GENERALLY:

- Install pipework/gutters to ensure the complete discharge of rainwater from the building without leaking.
- Provide access fittings and rodding eyes as necessary in convenient locations to permit adequate cleaning and testing of pipework.
- Avoid contact between dissimilar metals and other materials which would result in electrolytic corrosion.
- Do not bend plastics or galvanised steel pipes. Adequately protect pipework/gutters from damage and distortion during construction.
- Where not specified otherwise use plated, sherardised, galvanised or nonferrous fastenings, suitable for the purpose and background, and compatible with the material being fixed.

FIXING AND JOINTING:

- Fix gutters securely at maximum 600mm centres and at all joints in gutters, with additional brackets near angles and outlets.
- Ensure that roofing underlay is dressed into gutter.
- Ensure that outlets are securely fixed before connecting pipework. To cut the hole for the outlet a hack saw or metal cutting hole saw should be used. Use a hammer on the edges to create a drip edge.
- Fix pipes securely at maximum 1.5m centres plumb and/or true to line. Fix every length of pipe at or close below the coupling.
- Make changes in direction of pipe runs only where shown on drawings unless otherwise approved.
- Fix branches and low gradient sections with uniform and adequate falls to drain efficiently. Provide additional supports as necessary to support junctions and changes in direction.
- Fix externally socketed pipes/fittings with sockets facing upstream.
- Provide a load bearing support for vertical pipes at not less than every storey level. Tighten fixings as the work proceeds so that every storey is self-supporting and undue weight is not imposed on fixings at the base of the pipe.
- Cut ends of pipes to be clean and square with burrs and swarf removed. Ensure that jointing surfaces are clean immediately before assembly.

CUTTING:

- Cut the gutters and pipes with plate shears, hacksaw or chop saw on a firm underlay on the ground.
- Never use an angle grinder. It heats the steel up and thus destroys the galvanised coating. The coating may also be scorched by hot chips or filings.

COATED PIPEWORK/GUTTERS:

- Make sure that the roof drainage components are handled with care during transport, storage and unpacking. If not, the coating may be damaged or the pipes and gutters dented.
- Store pipes and gutters on a plane and stable surface.
- Non coated components must be unpacked and stored in a dry and ventilated place.
- Make good to coatings after cutting and any other damage or recoat.

ACCESS FOR TESTING AND MAINTENANCE:

- Install pipework and gutters with adequate clearance to permit testing, cleaning and maintenance.
- Position access fittings and rodding eyes so that they are not obstructed by other pipework, framing, etc.

TESTING:

- Inform the Contractor Administrator sufficiently in advance to give him a reasonable opportunity to observe tests.
- Check that all sections of installation are free from obstruction and debris before testing.
- Provide clean water, assistance and apparatus for testing as required.
- Carry out tests as specified. After testing, locate and remedy all defects without delay and retest as instructed.
- Keep a record of all tests and provide a copy of each to the Contractor Administrator.
- To complete a gutter test- block all outlets, fill gutters to overflow level and after 5 minutes closely inspect for leakage.

MAINTENANCE:

- Complete maintenance on the system 1-2 times a year.
- Clean the gutter and pipes from leaves and debris. Wash with water and a mild detergent.
- Don't use a high pressure washing appliance.
- At completion, submit printed instructions recommending procedures for maintenance of the rainwater installation including full details of the recommended inspection, cleaning and repair procedures.