

Box Gutter Design Guidelines

RSC TECHNICAL BULLETIN



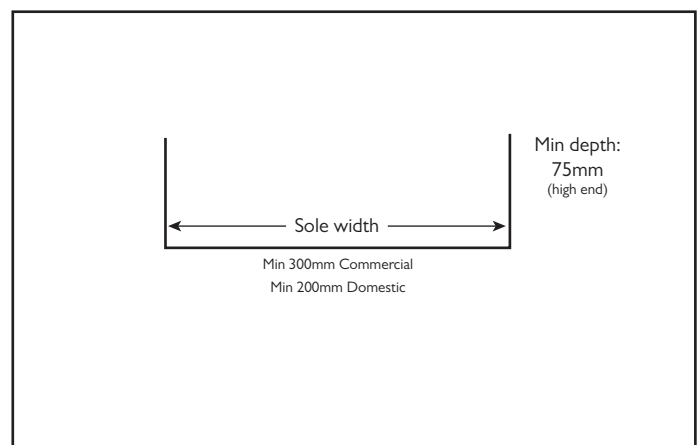
The Victorian Building Authority (VBA) provides advice to assist plumbers, roofers and builders when specifying box gutters, and designing structures that will house a box gutter. Considering the below factors when designing your box gutters will help to ensure your work is compliant.

CONSIDERATIONS	REQUIREMENTS
GRADIENTS	<ul style="list-style-type: none"> Not flatter than 1:200 for sole widths equal to or less than 600mm wide Deviations from the gradients must be smooth and prevent permanent ponding
SUPPORT SYSTEM	<ul style="list-style-type: none"> Made from material compatible with box gutter material (ask us if you need help with this) UV resistant if positioned in direct sunlight Secured to building structure No other services attached to box gutter support structure Give consideration to potential environmental corrosion and take preventative steps to guard against it Secure to prevent longitudinal movement, unless designed to allow for thermal effect Must be able to support the entire weight of gutter and sumps when full of water, plus trafficable load at any point in gutter and sumps
OUTLETS	<ul style="list-style-type: none"> Must discharge to rainhead or sump
OVERFLOW	<ul style="list-style-type: none"> Must include independent overflow discharging into atmosphere
LAYOUT	<ul style="list-style-type: none"> Min width 300mm (commercial), 200mm (domestic) Min depth 75mm high end Sole width which is not reduced towards the outlet without a proportional increase in depth Discharge at downstream end without change in direction (ie - not to the side) Box gutter must be straight (no change in direction) Must be sealed to rainheads and sumps

Box Gutters installations must meet the following Australian Standards and Plumbing regulations requirements:

- AS/NZS 3500.3 Plumbing and drainage Part 3: Stormwater Drainage
- AS/NZS 3500. Plumbing and drainage Part 5: House Installations
- SA HB 39 installation code for metal roof and wall cladding
- SAA/SNZ HBI 14 guidelines for the design of eaves and box gutters

Source: Victorian Building Authority Fact Sheet - Box Gutter Design as of 31/3/2021



Offering experience and advice

Roofing & Sheetmetal Centre has extensive experience with roof plumbing products and can provide guidance on design, compliance and installation.

