

Box Gutters & Commercial Rainwater Systems

Fabricated box gutters, sumps and overflow for commercial roofs

Commercial roofs drain through box gutters rather than eaves gutters: a formed channel inside the roof line, sized by the rainfall it has to carry and protected by an overflow so that a blockage does not put the roof under water.

System items

Item	Function
Box gutter	Formed channel, usually in the roof, sized to the flow
Sump	Local deepening at the outlet to take the discharge
Rainwater head / outlet	Connects the gutter to the downpipe
Overflow	Secondary path — required so a blockage cannot flood the roof
Downpipes	Vertical discharge; size follows the flow

Specified data

Material	Sheet steel, 0.9 – 2.0 mm typical for fabricated box gutter; coating to suit the roof
Sizing	From the roof area, rainfall intensity and the number of outlets — this is a hydraulic calculation, not a catalogue pick
Joints	Fully sealed laps and ends; where the gutter is inside the building, the joint detail matters as much as the size
Overflow	Set at a level that keeps water out of the building if the primary outlet blocks

Standards referenced

EN 12056-3 (gravity drainage systems inside buildings — roof drainage, layout and calculation) · AS/NZS 3500.3 (plumbing and drainage — stormwater drainage) · local plumbing codes govern the sizing where they apply · coated steel to EN 10346 / ASTM A653

Need a quote? Send the roof area, rainfall intensity, outlet positions and the gutter run lengths.

zt-rfm.com · ztrollformmachine.com · +86 131 6656 7923 · steven@zt-rfm.com