$$Q = C_d A\sqrt{2gh}$$

where—

A = Area (m^2)

C_d = Discharge coefficient = 0.61

g = Gravity = 9.81 m/s^2

h = Effective head (m)

Q = Flow rate (m^3/s)

- For front face weir, end stop weir, inverted nozzle, front bead or controlled gap:

$$Q = 0.67 C_d b\sqrt{2g}\, h^{1.5}$$

where—

b = Width (m)

C_d = Discharge coefficient = 0.63

g = Gravity = 9.81 m/s^2

h = Effective head (m)

Q = Flow rate (m^3/s)

7.4.2 Materials

[2019: 3.5.3.2]

Gutters, downpipes and *flashings* must—

(a) be manufactured in accordance with AS/NZS 2179.1 for metal components; and

(b) be manufactured in accordance with AS 1273 for UPVC components; and

(c) be compatible with all upstream roofing materials in accordance with 7.2.2(2); and

(d) not contain any lead if used on a roof forming part of a *drinking water* catchment area.

7.4.3 Selection of guttering

[2019: 3.5.3.3]

The size of guttering must—

(a) for eaves gutters, be in accordance with Table 7.4.3a, Table 7.4.3b and Table 7.4.3c; and

(b) be suitable to remove rainwater falling at the appropriate 5 minute duration rainfall intensity listed in Table 7.4.3d as follows—

(i) for eaves gutters — 5% *annual exceedance probability*; and

(ii) for eaves gutter overflow measures — 1% *annual exceedance probability*.

Table 7.4.3a: Size of gutter required to drain roof catchment area into one (1) downpipe for various rainfall intensities and roof catchment areas (A, B, C, D, E and F defined in Table 7.4.3b)

Design rainfall intensity (mm/h) (as per Table 7.4.3d)	Roof catchment area per downpipe — 30 m^2	Roof catchment area per downpipe — 40 m^2	Roof catchment area per downpipe — 50 m^2	Roof catchment area per downpipe — 60 m^2	Roof catchment area per downpipe — 70 m^2
90 mm/h	A or C	A or C	A or C	A or C	A or C