

Fernandes & Associates

Consulting Engineers - Mechanical & Structural

Date: March 11, 2022 Certificate no. FAC-839 Rev. B

CERTIFICATE OF COMPLIANCE

Description of product certified: Apex Quad 115 High Front Gutters

Aspects of product certified: Continuous front slot overflow capacity and maximum ridge to gutter

lengths

Drawing number: FA-APEX-839 Rev. B

Front slot opening area: 1568mm² per lineal meter of gutter

Basis of certification

The following documents were referred to in making this certification:

- 1. NCC2019 Volume 2
- 2. NCC2019 Volume 3
- 3. AS/NZS 3500.3:2021

Certification

I certify that the continuous overflow capacity and the maximum ridge to gutter lengths stated in drawing FA-APEX-839 Rev. B, have been obtained using methods and principles which comply with the requirements of NCC2019 (Volumes 2 and 3) and AS/NZS 3500.3:2021.

Conditions of certification

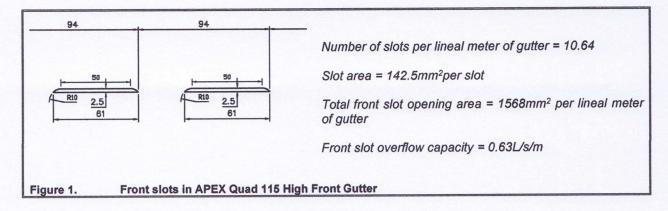
Overflow capacities and maximum ridge to gutter lengths are valid for the following conditions:

- 1. Gutters have to be installed in accordance with NCC2019 requirements
- 2. Gutter slope = 1:500 (or steeper)
- 3. Minimum vertical distance from top of fascia to bottom of gutter slot = 25mm
- 4. Gutter slots are clean and free from dirt and other obstructions.

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1% AEP (100 Years ARI)	Front slot overflow capacity (L/s/m)	Maximum ridge to gutter length (m)
130	0.63	17.0
135		16.5
140		16.0
145		15.5
150		15.0
155		14.5
160		14.0
165		13.5
170		13.0
175		12.5
180		12.5
185		12.0
190		11.5
195		11.5
200		11.0
205		11.0
210		10.5
215		10.5
220		10.0
225		10.0
230		9.5
235		9.5
240		9.0
250		9.0

Table 2. Maximum ridge to gutter lengths vs AEP

Notes:

- 1. Overflow capacities and maximum ridge to gutter lengths are valid for the following conditions:
 - a. Gutter slope = 1:500 (or steeper)
 - b. Minimum vertical distance from top of fascia to bottom of front slot = 25mm
 - c. Gutters are regularly maintained and slot openings are free from dirt and other obstructions that prevent the water from flowing through.
- 2. Overflow capacities and maximum ridge to gutter lengths have been calculated in accordance with the requirements of NCC 2019 (volumes 2 and 3) and AS3500.3-2021.



Rainfall location (Victoria)	1% AEP* (100 years ARI) (mm/h)	Maximum ridge to gutter length (m)
Apollo Bay	135	16.5
Avalon	148	15.0
Bachus Marsh	149	15.0
Bairnsdale	197	11.0
Ballarat	192	11.5
Benalla	194	11.5
Bendigo	214	10.5
Bright	189	11.5
Camperdown	143	15.5
Cape Otway	135	16.5
Casterton	157	14.0
Castlemain	198	11.0
Colac	127	17.0
Craigieburn	186	12.0
Dadenong	181	12.5
Echuca	186	12.0
Edenhope	160	14.0
Foster	152	15.0
Frankston	165	13.5
Geelong	143	15.5
Hamilton	164	13.5
Hastings	145	15.5
Heathcote	208	10.5
Hopetoun	207	10.5
Horsham	173	12.5
Johanna	129	17.0
Kerang	205	11.0
Kinglake	187	12.0
Kyneton	201	11.0
Lakes Entrance	199	11.0
Leongatha	143	15.5
Macarthur	168	13.0
Mallacoota	237	9.0
Mansfield	174	12.5
Maryborough	180	12.5
Melbourne City	187	11.5
Meredith	167	13.5
Mildura	219	10.0
Morwell	172	13.0
Mount Macedon	177	12.5
Nelson	145	15.5
Nhill	180	12.5
Oakleigh	182	12.5
Omeo	160	14.0
Orbost	198	11.0
Ouyen	202	
Phillip Island	135	16.5 12.5
Port Fairy	180	12.5
Portland	161	16.0
Portsea	140	13.0
Sunbury	171	12.0
Stawell	187	12.0
Sunshine	186	10.0
Swan Hill	218	12.5
Wangaratta	179 169	13.0
Warnambool	172	13.0
Warrandyte		10.5
Wedderburn	212	12.5

#AEP – Annual Exceedance Probability
Front slot opening area = 1568 mm² per lineal meter of gutter

Table 3. Maximum ridge to gutter lengths (front slot overflow capacity=0.63 L/s/m)

APPROVED BY: Milton Fernandes - FIEAust CPEng NER APEC Engineer IntPE(Aus) RPEQ4112 PE0000457(BLA-Vic)

