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OUR REF: 26099

DATE: 12/5/2026

Apex Building Products
C/o- Carl Brandon
32-36 Saltwater Circuit,
Narangba QLD 4504
e: CBrandon@apexsteel.com.au

SUBJECT: Apex Apmx Sheet – Rainwater Drainage Capacity

DRAWING NO: 26099-S03-A

We hereby state that the design calculations have been carried out in accordance with the National Code of Construction Series (BCA) and the following Australian Standards:

Act, Regulation or NCC	Section, Regulation, Part, Performance Requirement or other provision
AS/NZS 3500.3-2021	Section 3 – Roof Drainage Systems
AS1562.1:2018	Section 3.3 – Roof Drainage
National Construction Code	NCC 2022 Volumes 2 & 3

We hereby state that the following aspects of the Apex Apmx sheet comply with the codes and standards listed above:

- Rainwater Drainage Capacities for roof pitch of 1 and 2 degrees.
- Maximum Roof Lengths for Drainage for Victorian locations.

Analysis details:

- Analysis based on steady flow and Mannings Formula with roughness coefficient $n = 0.015$.
- Analysis based upon depth of flow of 75% of the height of the top of the anti-capillary feature to the trough.
- Analysis ignores thermal limitations on maximum length, refer to Apex Steel for details.
- Analysis doesn't consider gutter and downpipe requirements, refer to Apex Steel for details.

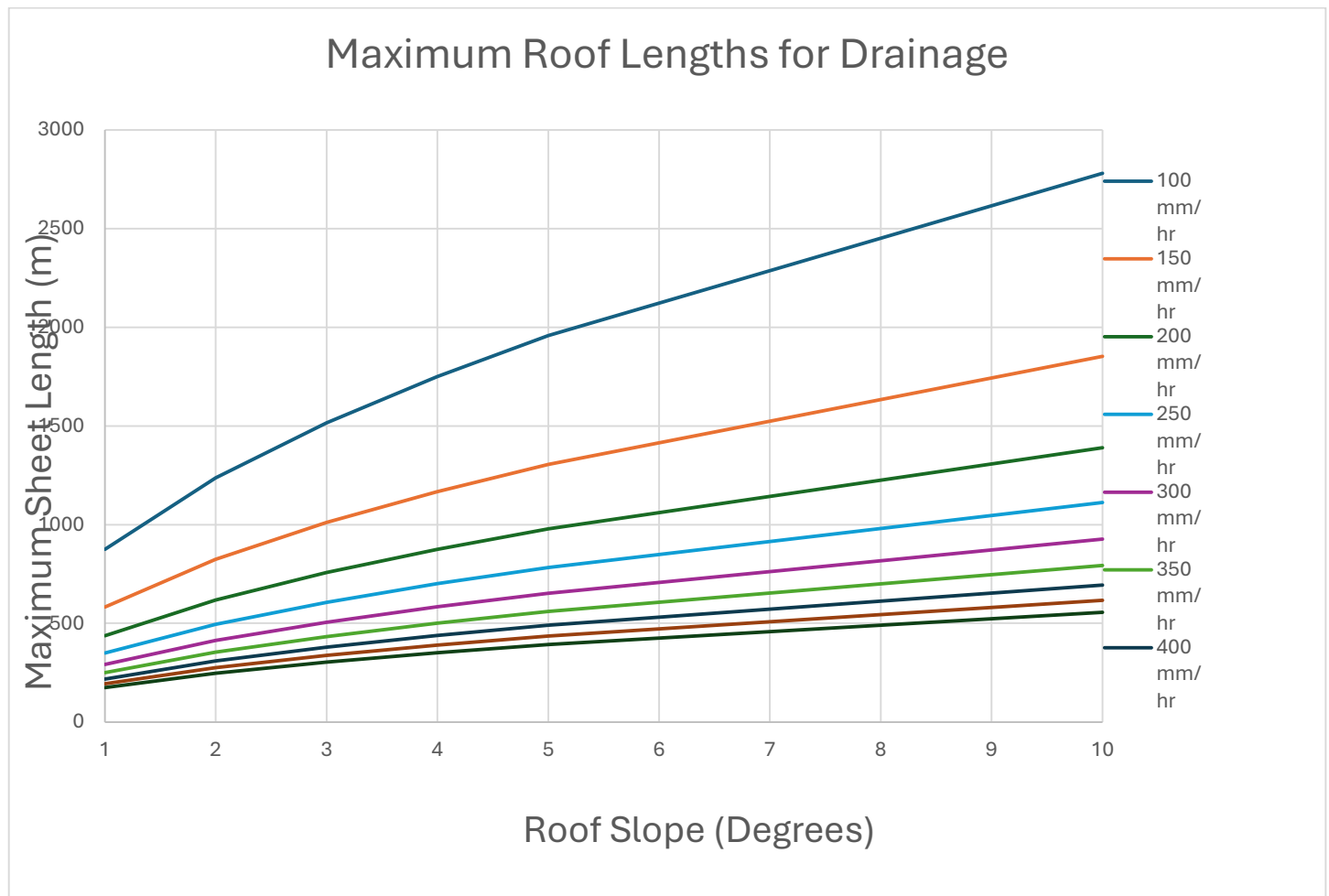
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Signature:

Apmax- Maximum Roof Lengths for Drainage

Maximum Roof Lengths for Drainage - Roof Volume

Roof Slope (Degrees)	Rainfall Capacity (mm/hr)								
	100	150	200	250	300	350	400	450	500
1	875	583	437	350	292	250	219	194	175
2	1237	825	619	495	412	353	309	275	247
3	1516	1010	758	606	505	433	379	337	303
4	1751	1167	875	700	584	500	438	389	350
5	1958	1306	979	783	653	560	490	435	392
10	2780	1853	1390	1112	927	794	695	618	556

Apmax – Maximum Roof Lengths for Drainage



RAINFALL REGION (VICTORIA)	ARI (ONE IN 100 YEARS) (mm/hr)	ROOF PITCH (DEGREES)	MAXIMUM RIDGE TO GUTTER LENGTH OF ROOF (m)
BALLARAT	188	1	472
BENALLA	194	1	455
GEELONG	144	1	618
HORSHAM	173	1	516
LAKES ENTRANCE	198	1	443
MELBOURNE	187	1	475
HASTINGS, MELBOURNE	145	1	612
MILDURA	218	1	385
STAWELL	186	1	478

Apmax – Maximum Ridge to Gutter Length of Roof – 1 Degree – Victorian Locations

RAINFALL REGION (VICTORIA)	ARI (ONE IN 100 YEARS) (mm/hr)	ROOF PITCH (DEGREES)	MAXIMUM RIDGE TO GUTTER LENGTH OF ROOF (m)
BALLARAT	188	2	668
BENALLA	194	2	643
GEELONG	144	2	874
HORSHAM	173	2	730
LAKES ENTRANCE	198	2	627
MELBOURNE	187	2	672
HASTINGS, MELBOURNE	145	2	866
MILDURA	218	2	544
STAWELL	186	2	676

Apmax – Maximum Ridge to Gutter Length of Roof – 2 Degrees – Victorian Locations



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