

(The Code clause and table references given below apply to Part 2 and Part 3 unless specifically noted)

Background

AS 1684.2, Clause 9.6.1 states that "continuity of tie-down shall be provided from the roof sheeting (sheeting in this sense also applies to roof tiles) to the foundations". For 'pitched' coupled roofs, where there is net uplift that cannot be resisted by nominal nailing alone, the code requires specific tie-down fixings to be installed. From Tables 9.2 and 9.5, it can be seen that these specific tie-downs are required

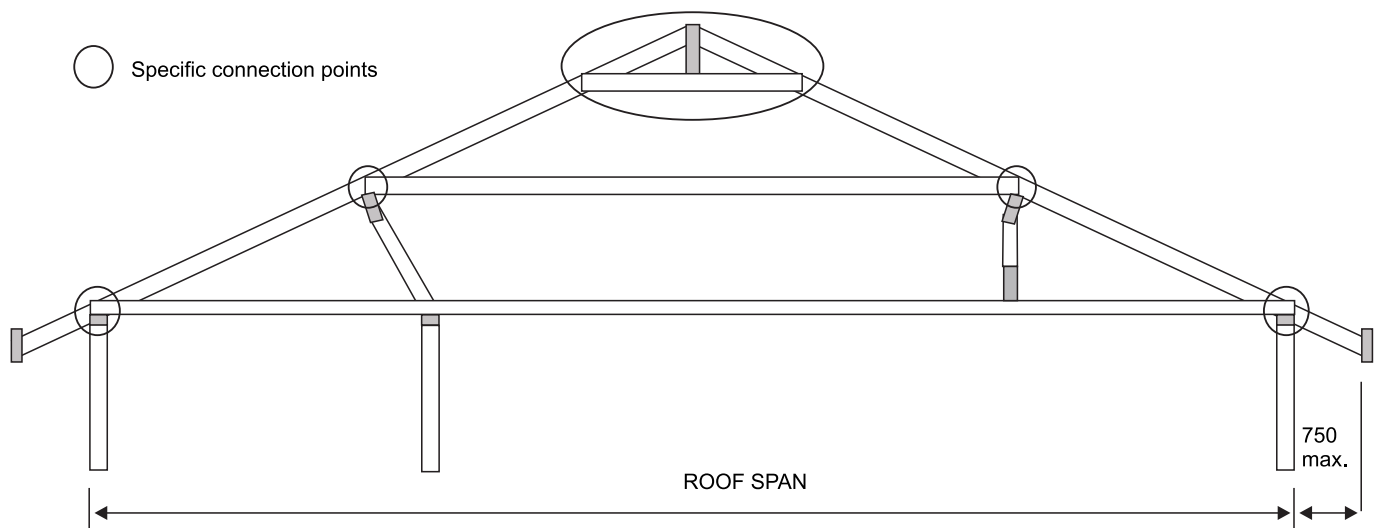
for N1, N2, N3 and N4 sheet roofs and N3 and N4 tile roofs. This guide only covers N1 & N2 sheet roofs and N3 tile roofs.

Simplified details for a limited range of building spans and member and tie-down spacings are provided in this Guide Note and accompanying sheets for the following conditions:-

Roof Span	Maximum Overhang	Roof Type	Rafter Spacing	Wind Classification		
				N1	N2	N3
Up to 9000	750	Sheet	900	Sheet 3.1	Sheet 3.5	NGA
			1200	Sheet 3.2	Sheet 3.6	NGA
		Tile	450			Sheet 3.9
			600			Sheet 3.10
9000 to 12000	750	Sheet	900	Sheet 3.3	Sheet 3.7	NGA
			1200	Sheet 3.4	Sheet 3.8	NGA
		Tile	450			Sheet 3.11
			600			Sheet 3.12

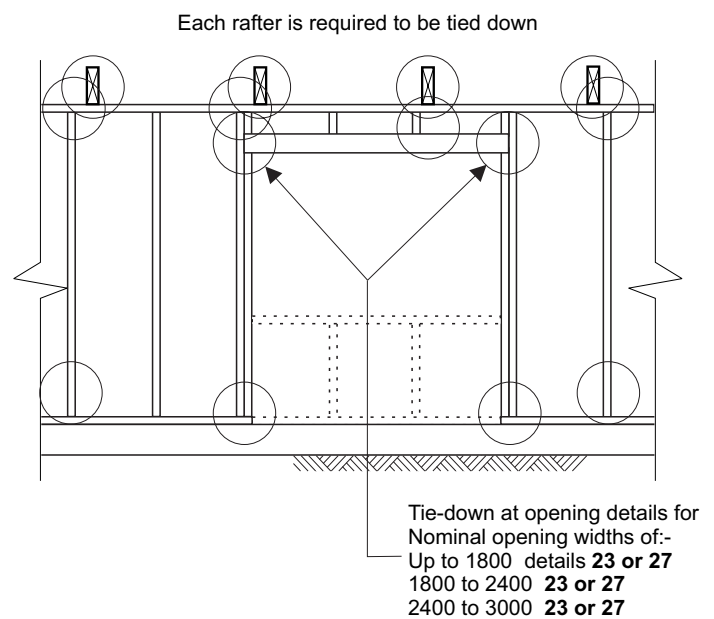
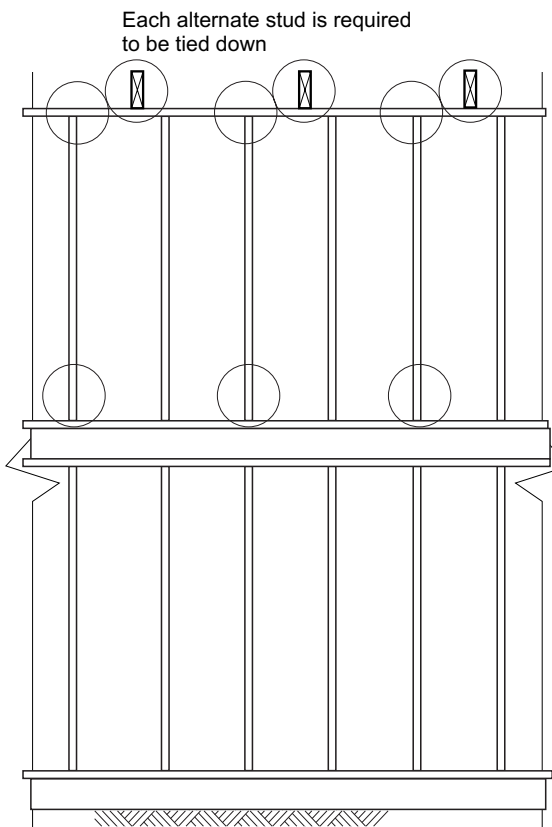
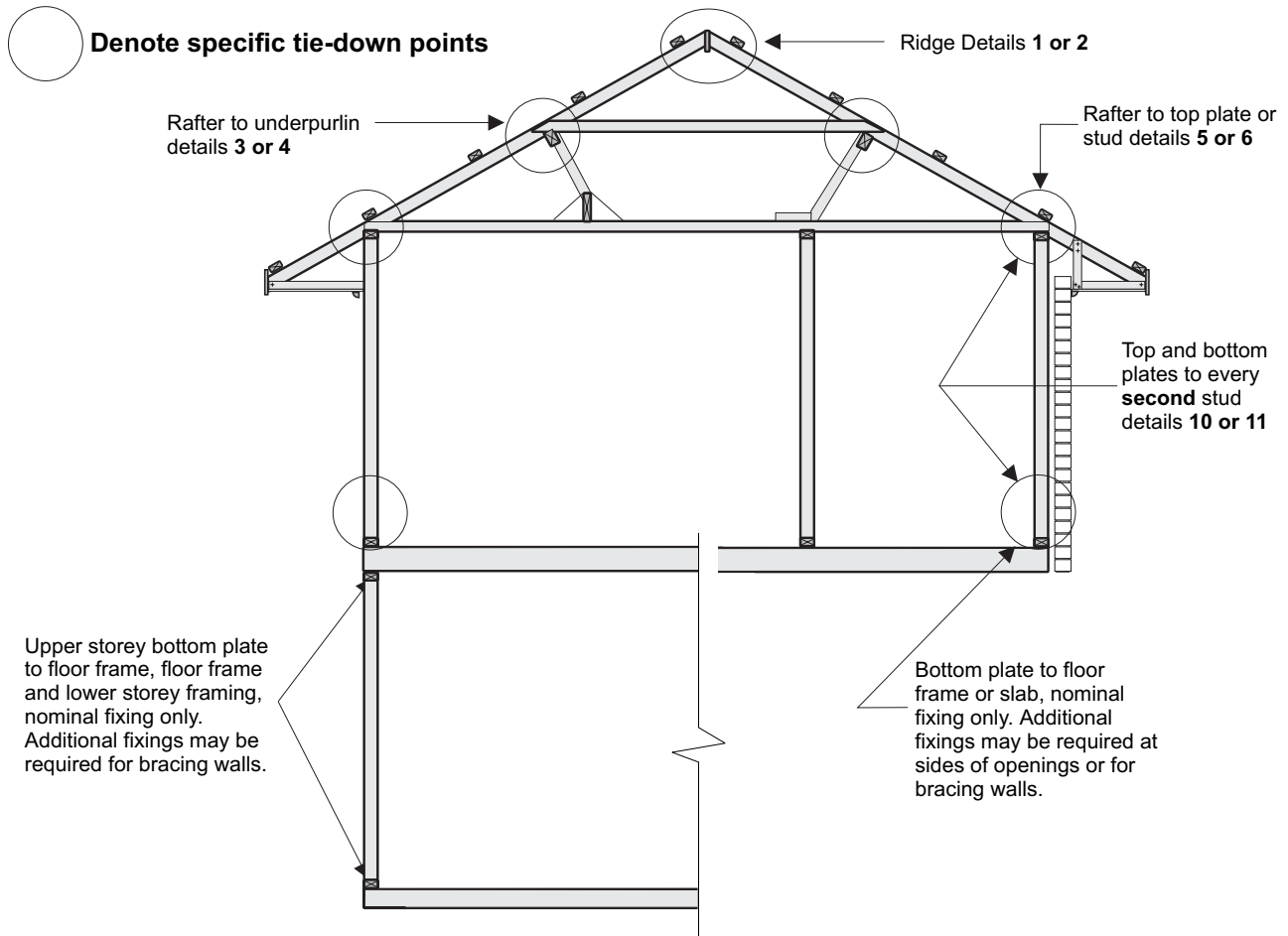
Notes:

1.  = no specific tie-down required
2. NGA = no guide available
3. The details provided are suitable for timber with Joint Strengths J1 to J4 and JD4 and JD5.



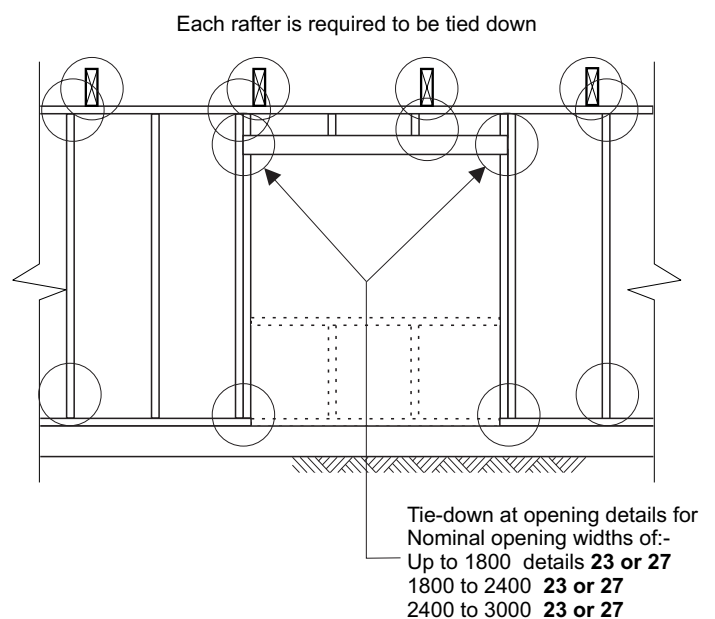
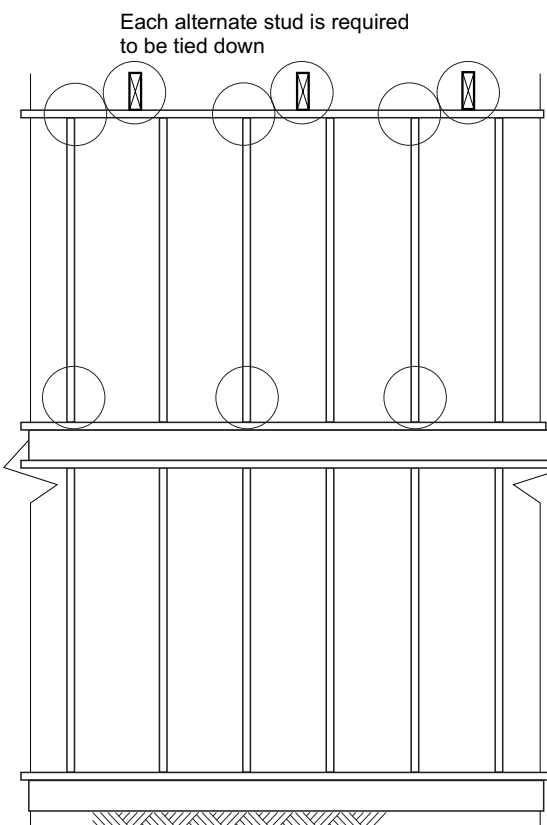
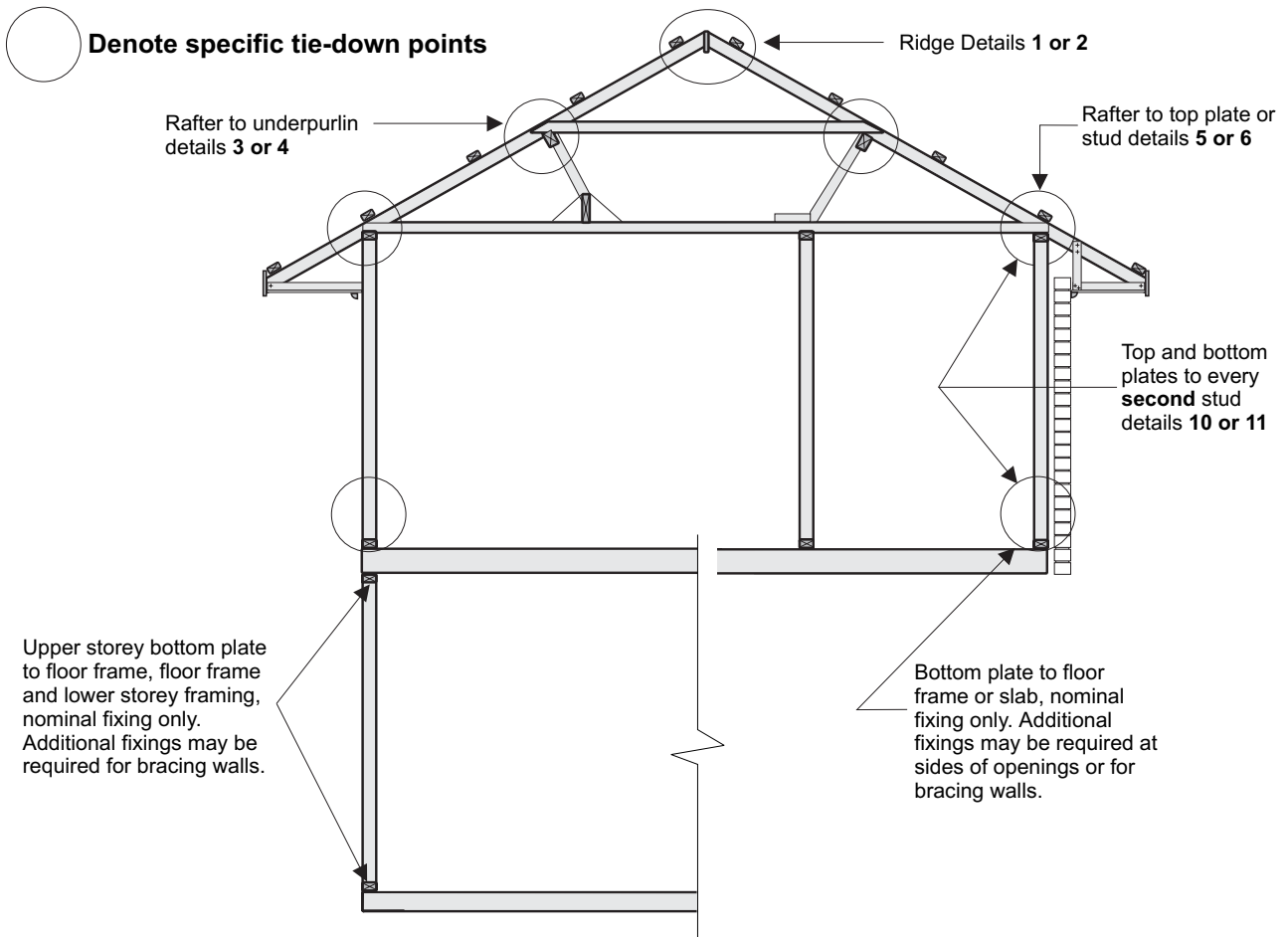
AS 1684 - Part 2 - SIMPLIFIED TIE-DOWN - N1 SHEET ROOF Sheet 3.1

(Roof Span up to 9000 mm, Rafters @ 900 crs, Collar Ties @ 900 crs, O/hang 750 mm max)



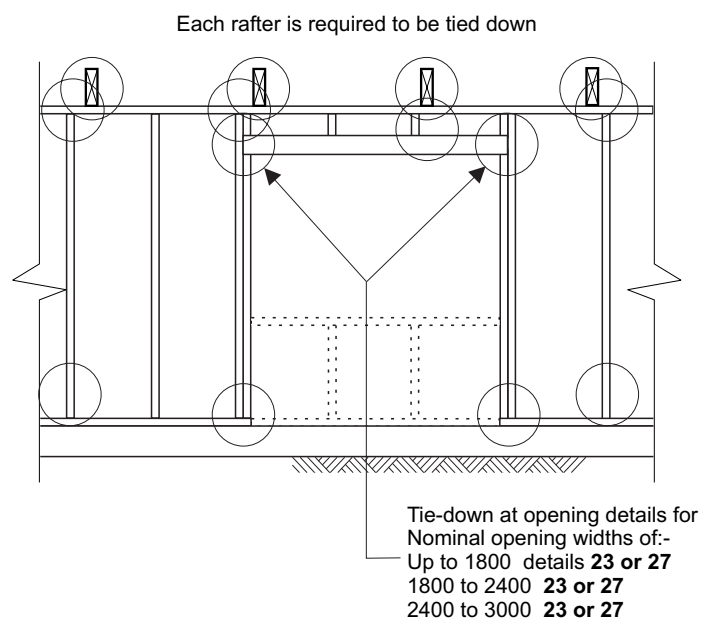
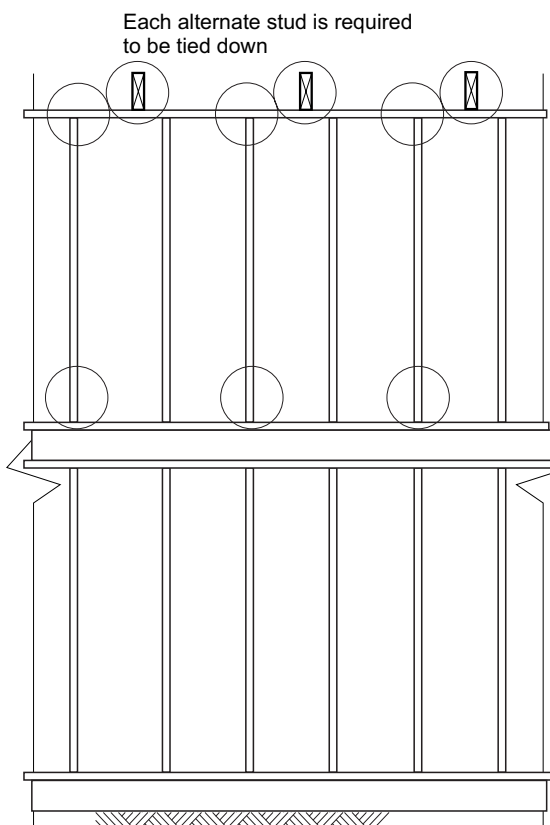
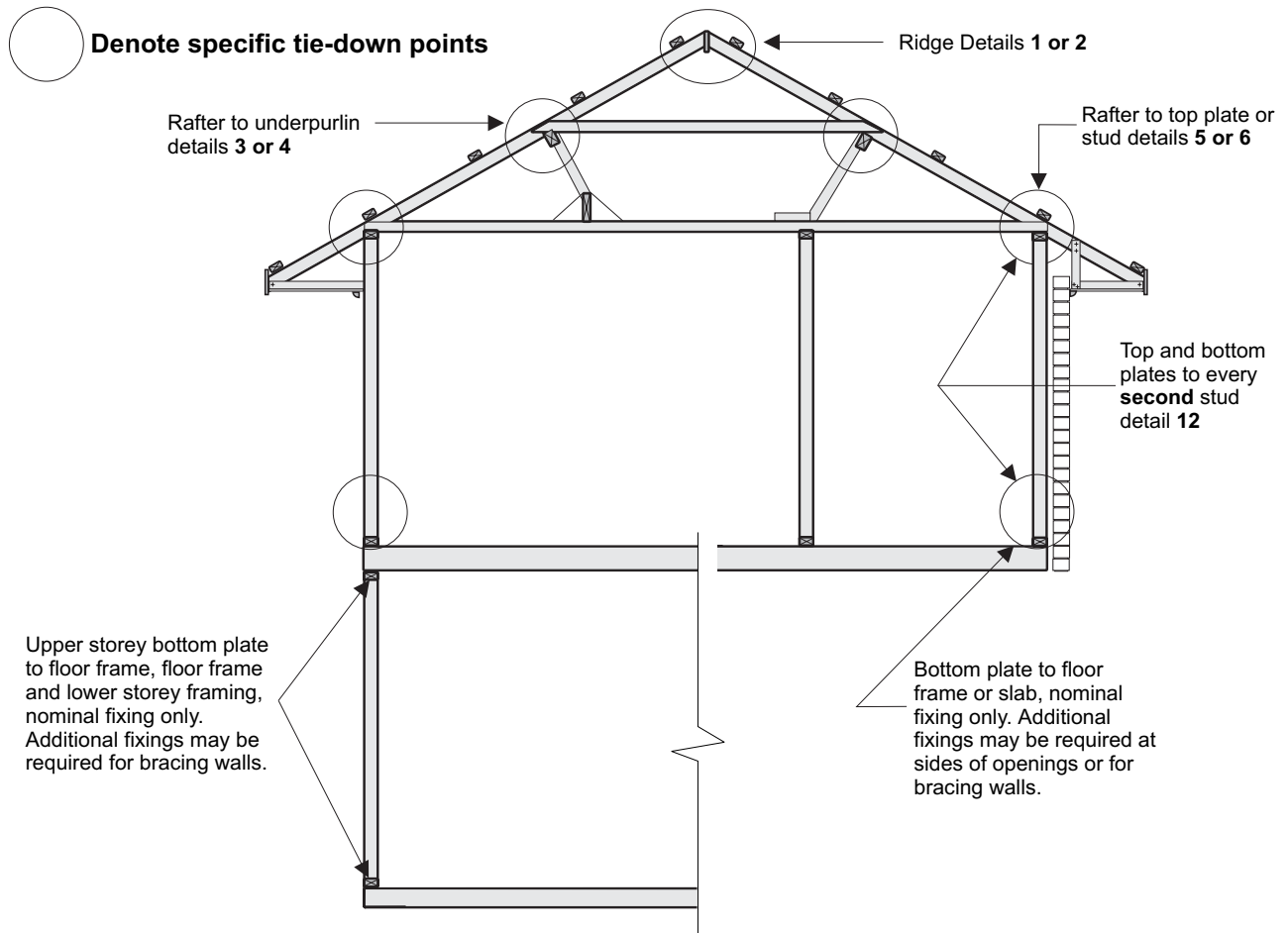
AS 1684 - Part 2 - SIMPLIFIED TIE-DOWN - N1 SHEET ROOF Sheet 3.2

(Roof Span up to 9000 mm, Rafters @ 1200 crs, Collar Ties @ 1200 crs, O/hang 750 mm max)



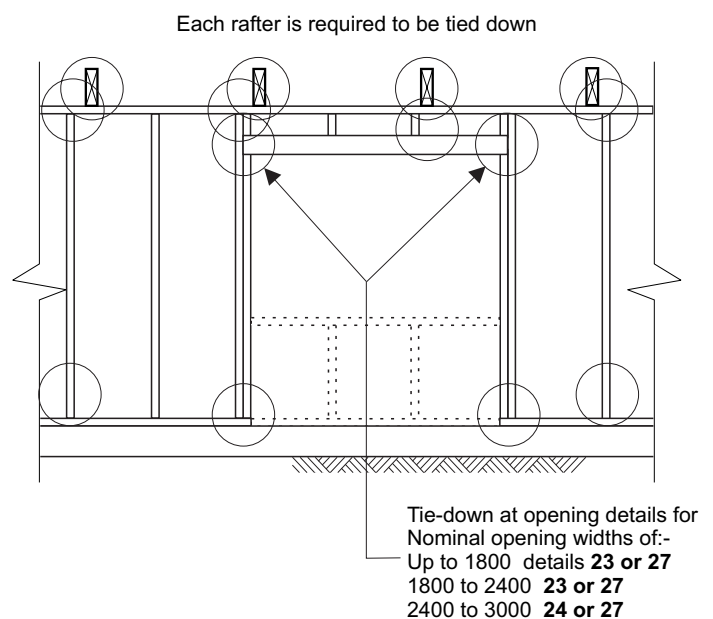
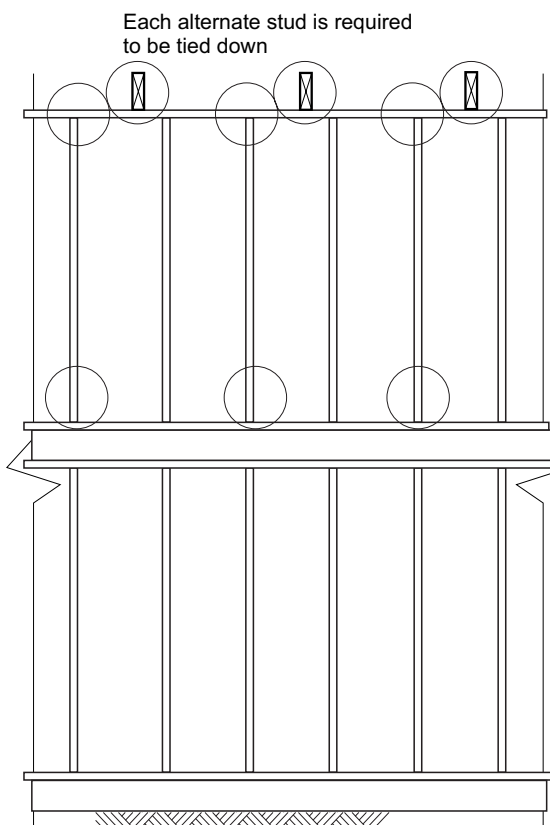
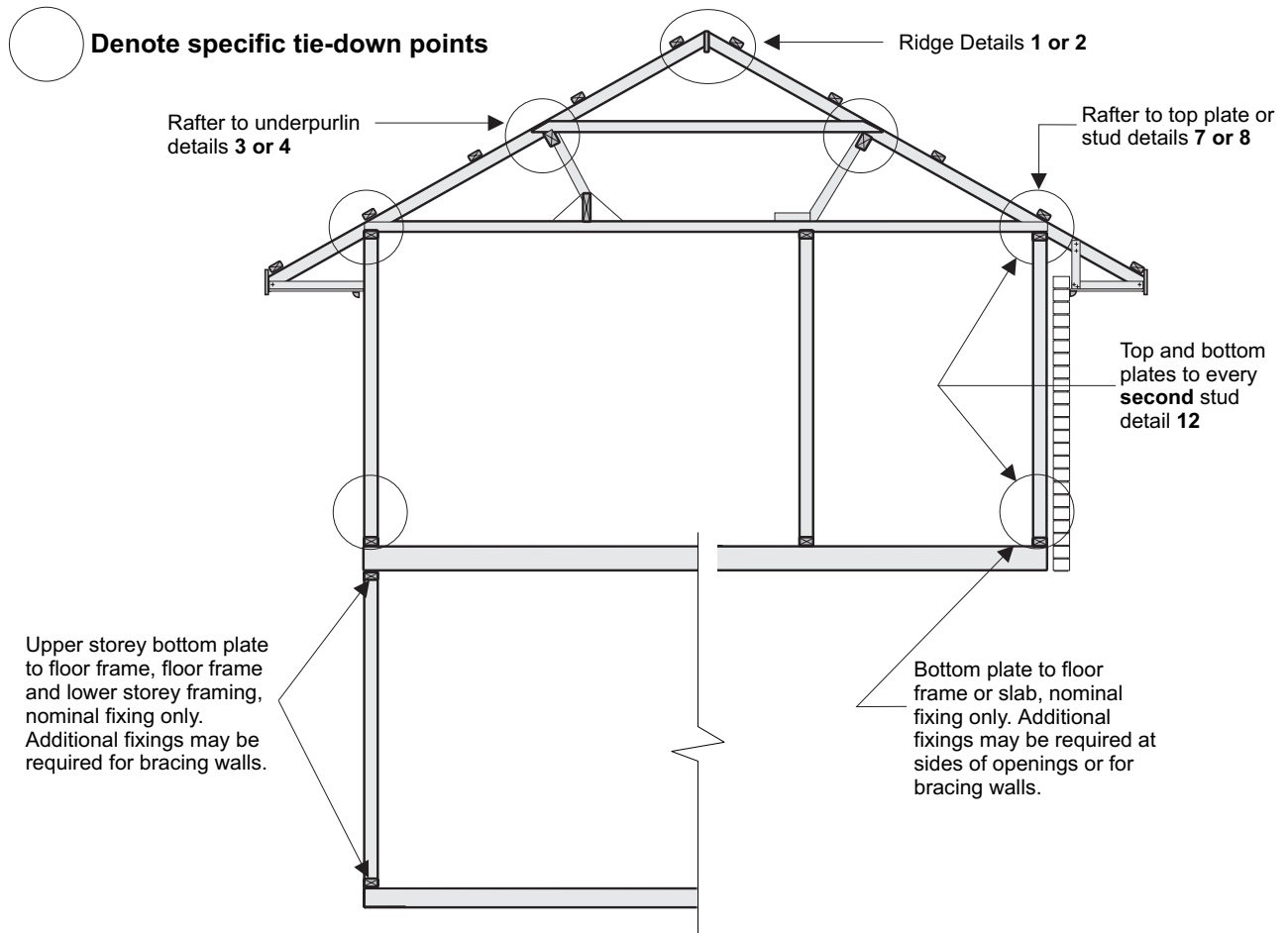
AS 1684 - Part 2 - SIMPLIFIED TIE-DOWN - N1 SHEET ROOF Sheet 3.3

(Roof Span up to 9000 - 12000mm, Rafters @ 900 crs, Collar Ties @ 900 crs, O/hang 750 mm max)



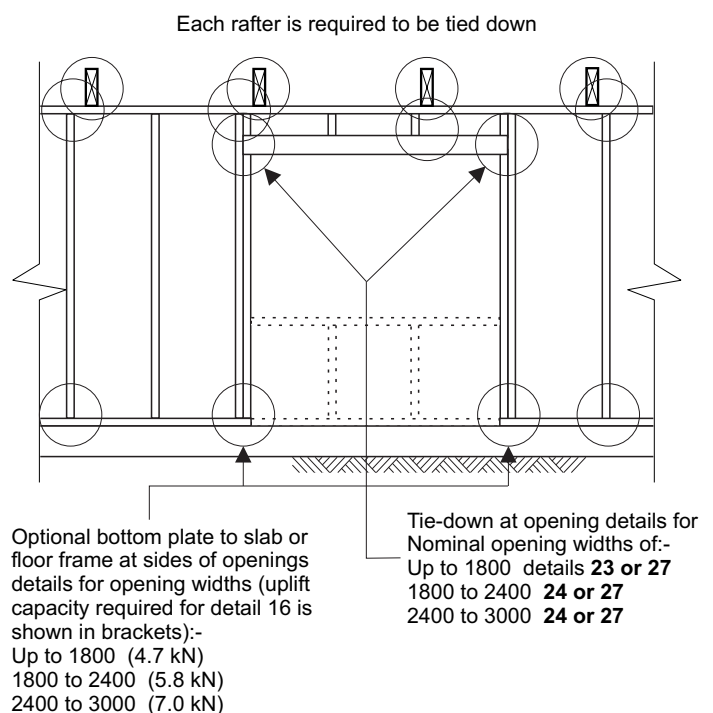
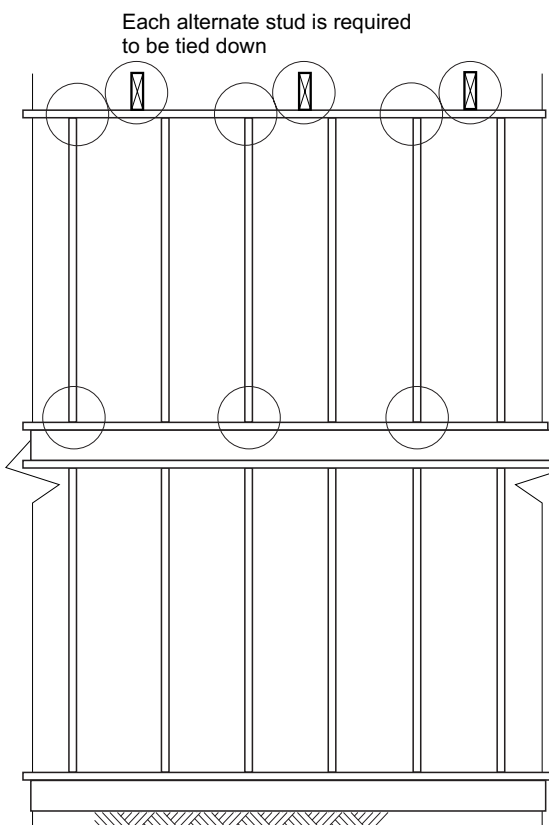
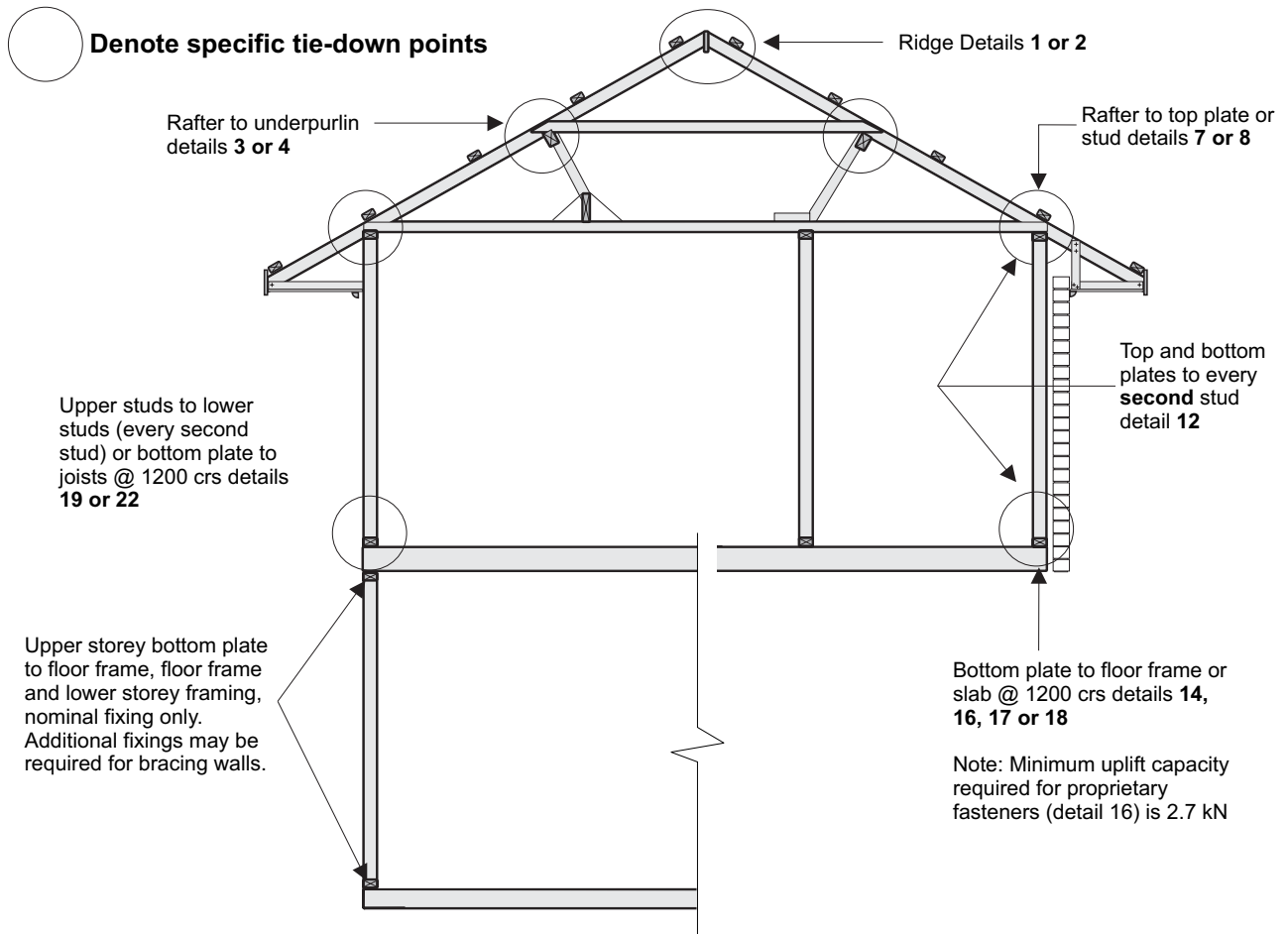
AS 1684 - Part 2 - SIMPLIFIED TIE-DOWN - N1 SHEET ROOF Sheet 3.4

(Roof Span up to 9000 - 12000mm, Rafters @ 1200 crs, Collar Ties @ 1200 crs, O/hang 750 mm max)



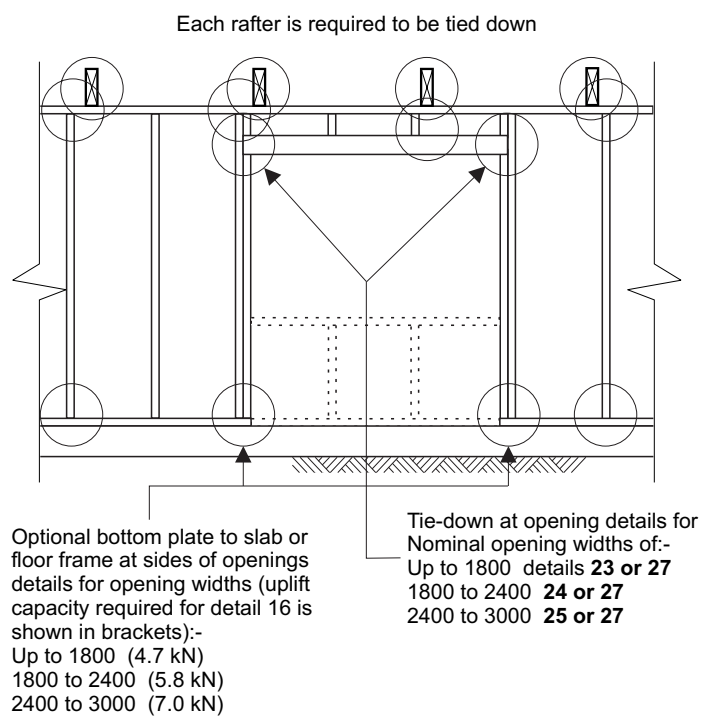
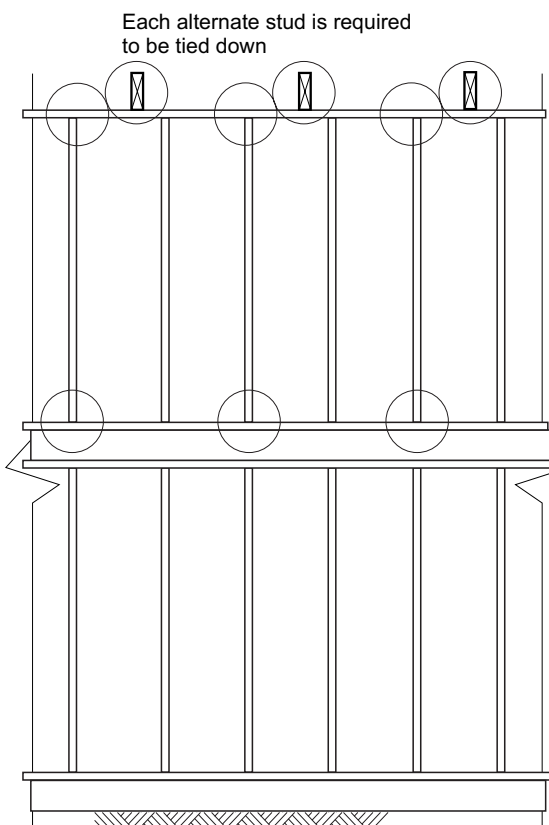
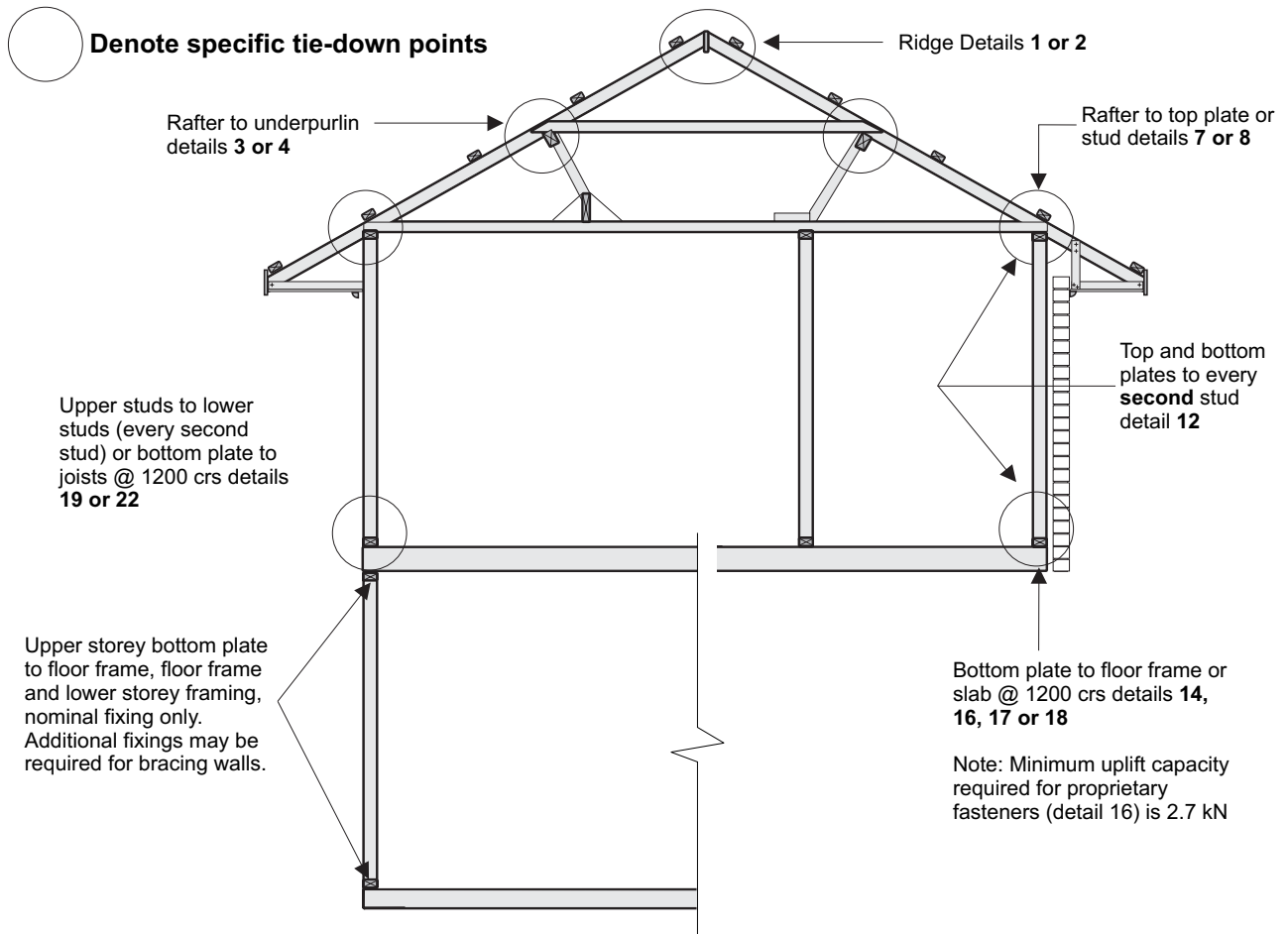
AS 1684 - Part 2 - SIMPLIFIED TIE-DOWN - N2 SHEET ROOF Sheet 3.5

(Roof Span up to 9000 mm, Rafters @ 900 crs, Collar Ties @ 900 crs, O/hang 750 mm max)



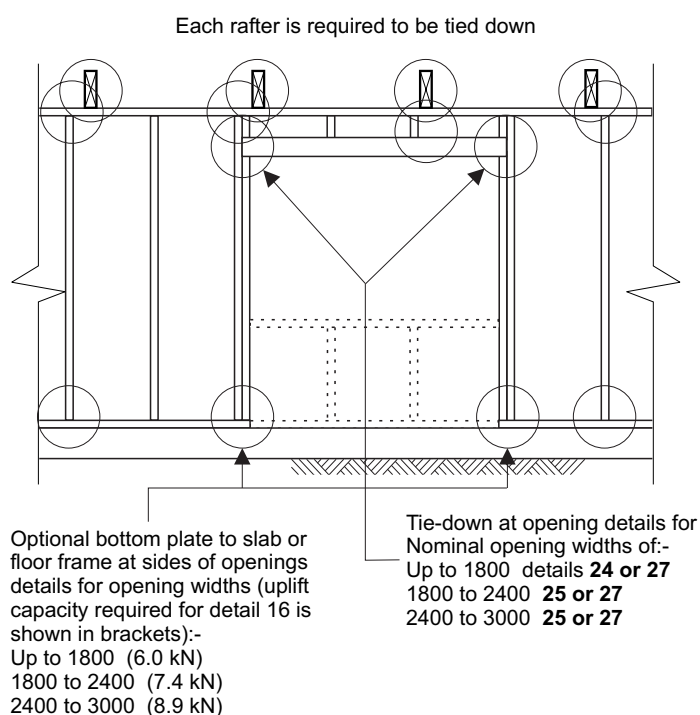
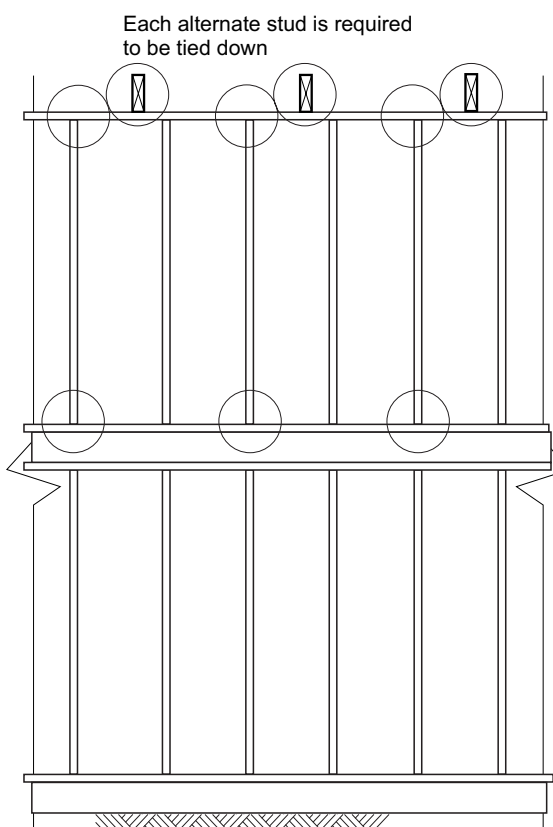
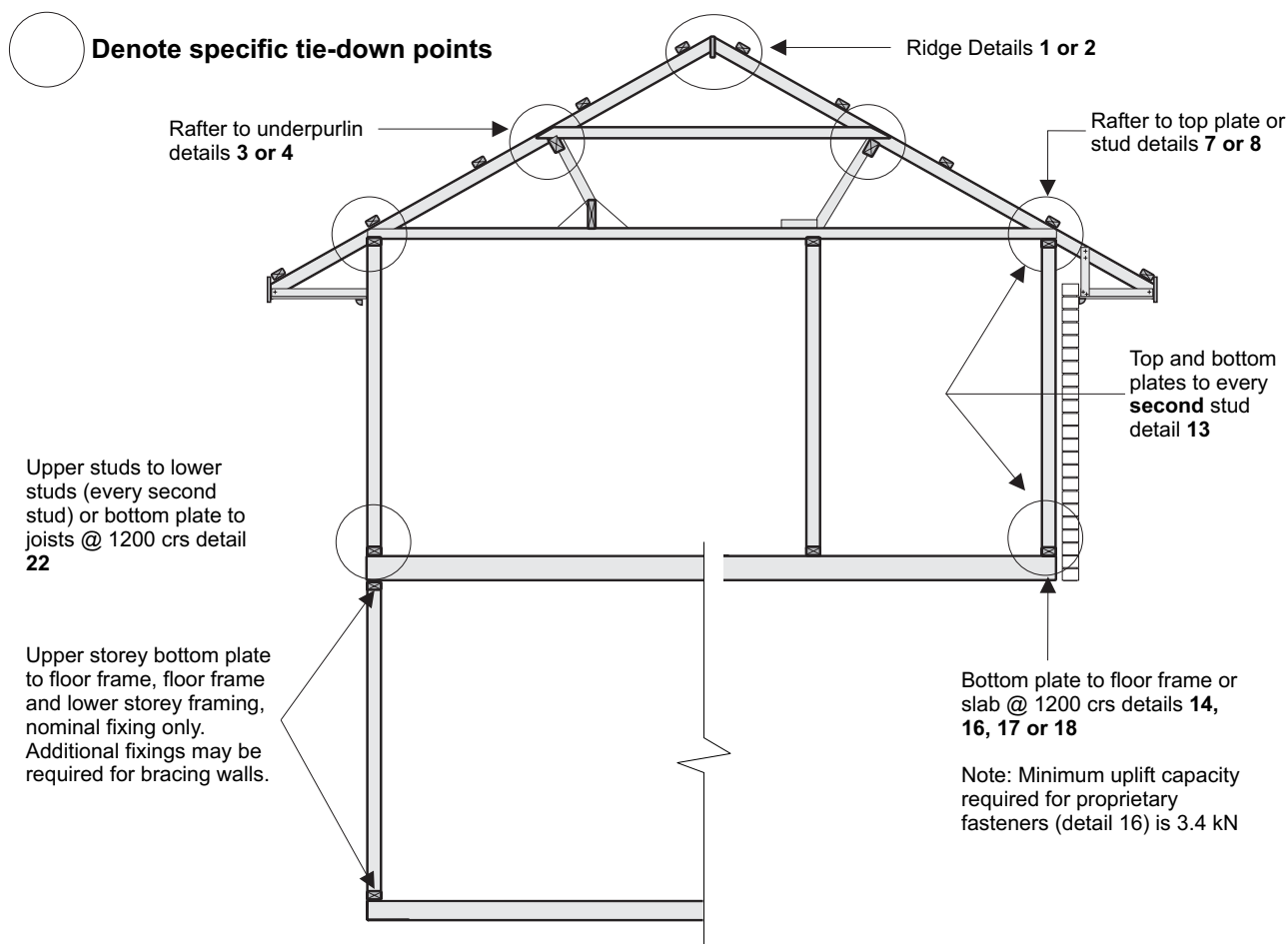
AS 1684 - Part 2 - SIMPLIFIED TIE-DOWN - N2 SHEET ROOF Sheet 3.6

(Roof Span up to 9000 mm, Rafters @ 1200 crs, Collar Ties @ 1200 crs, O/hang 750 mm max)



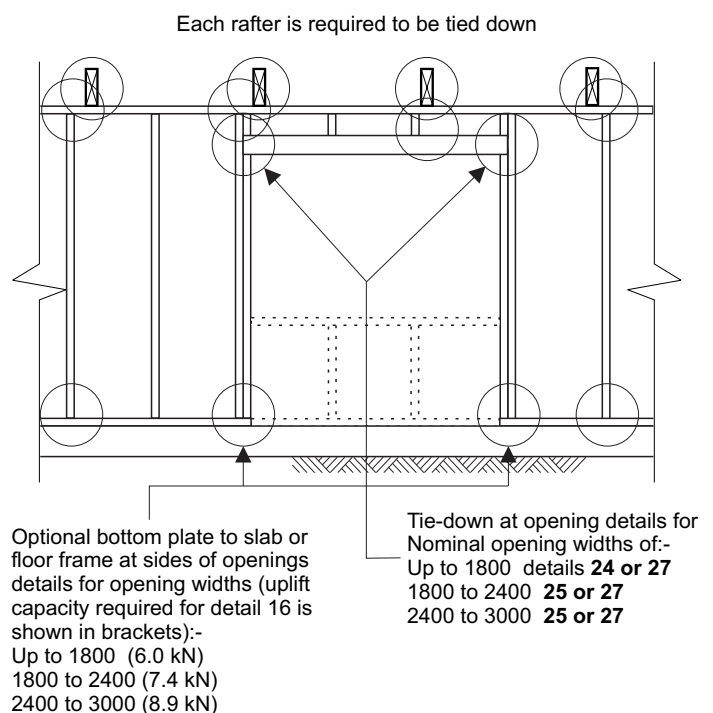
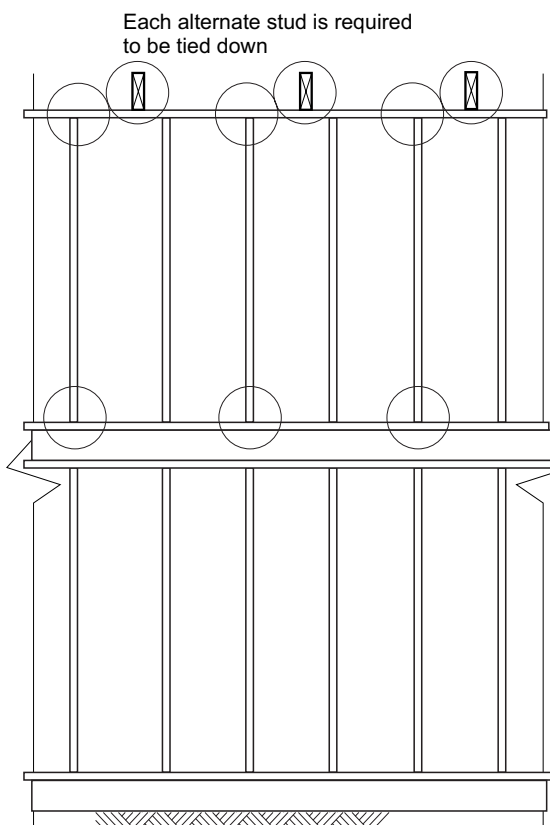
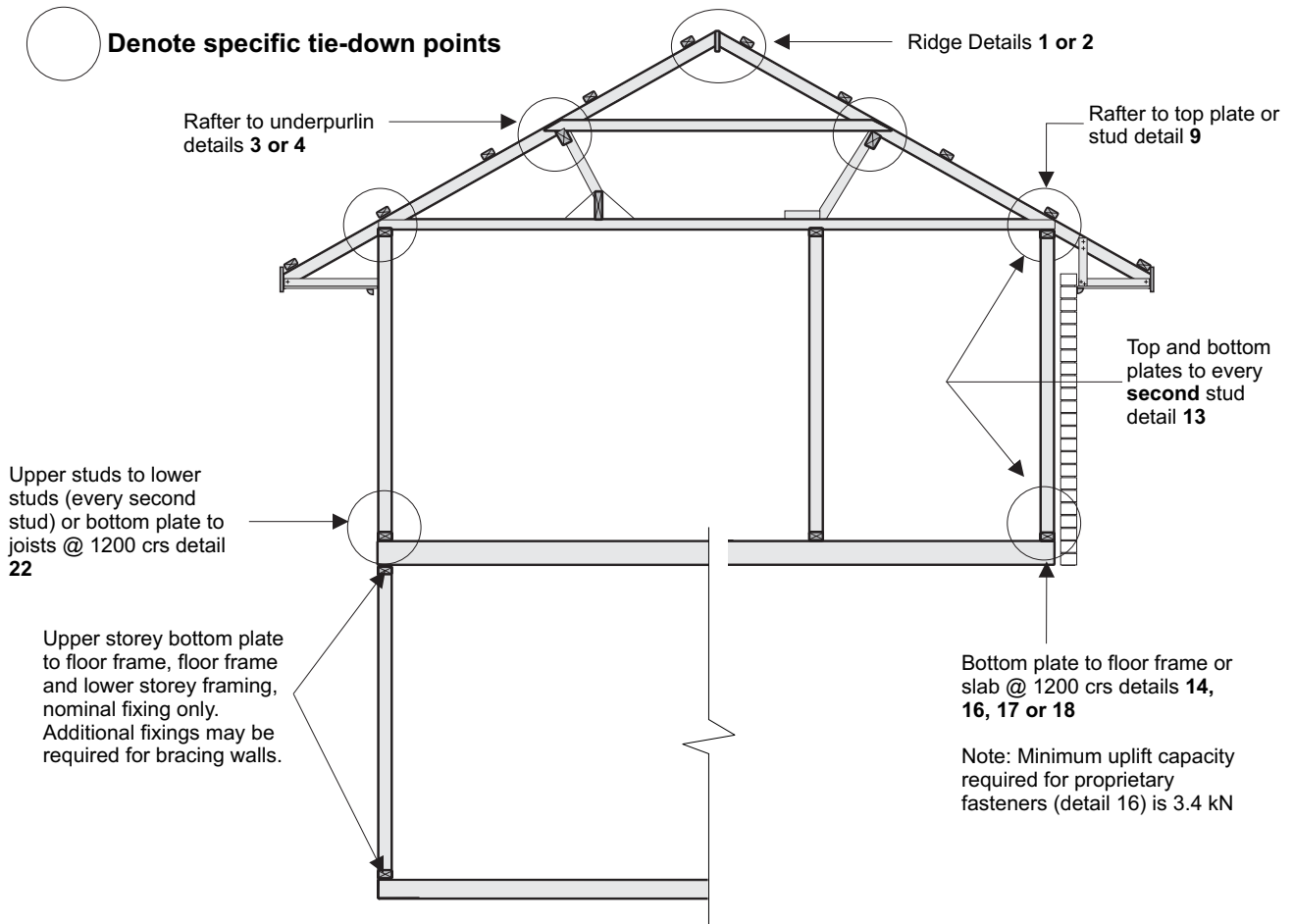
AS 1684 - Part 2 - SIMPLIFIED TIE-DOWN - N2 SHEET ROOF Sheet 3.7

(Roof Span up to 9000 - 12000 mm, Rafters @ 900 crs, Collar Ties @ 900 crs, O/hang 750 mm max)



AS 1684 - Part 2 - SIMPLIFIED TIE-DOWN - N2 SHEET ROOF Sheet 3.8

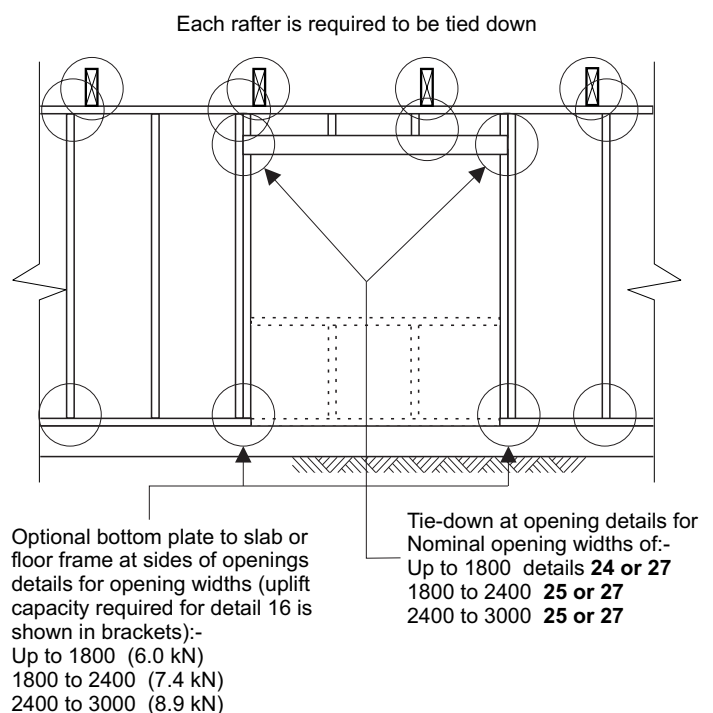
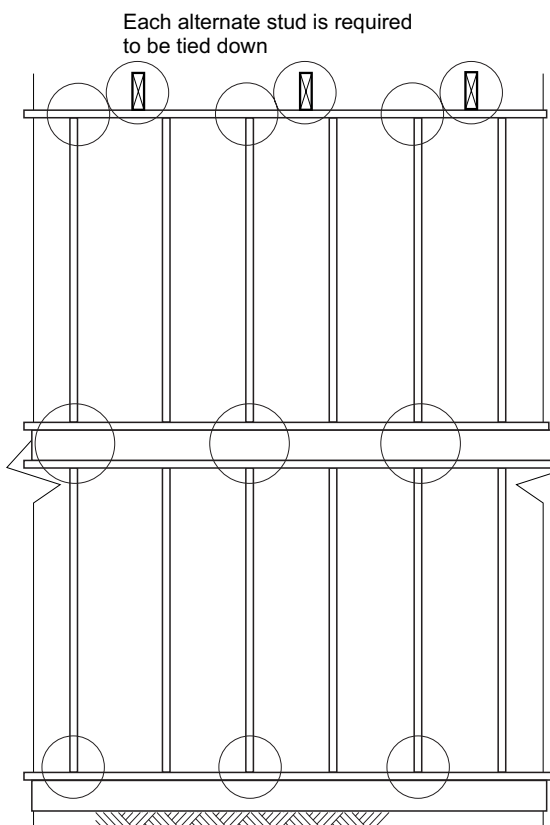
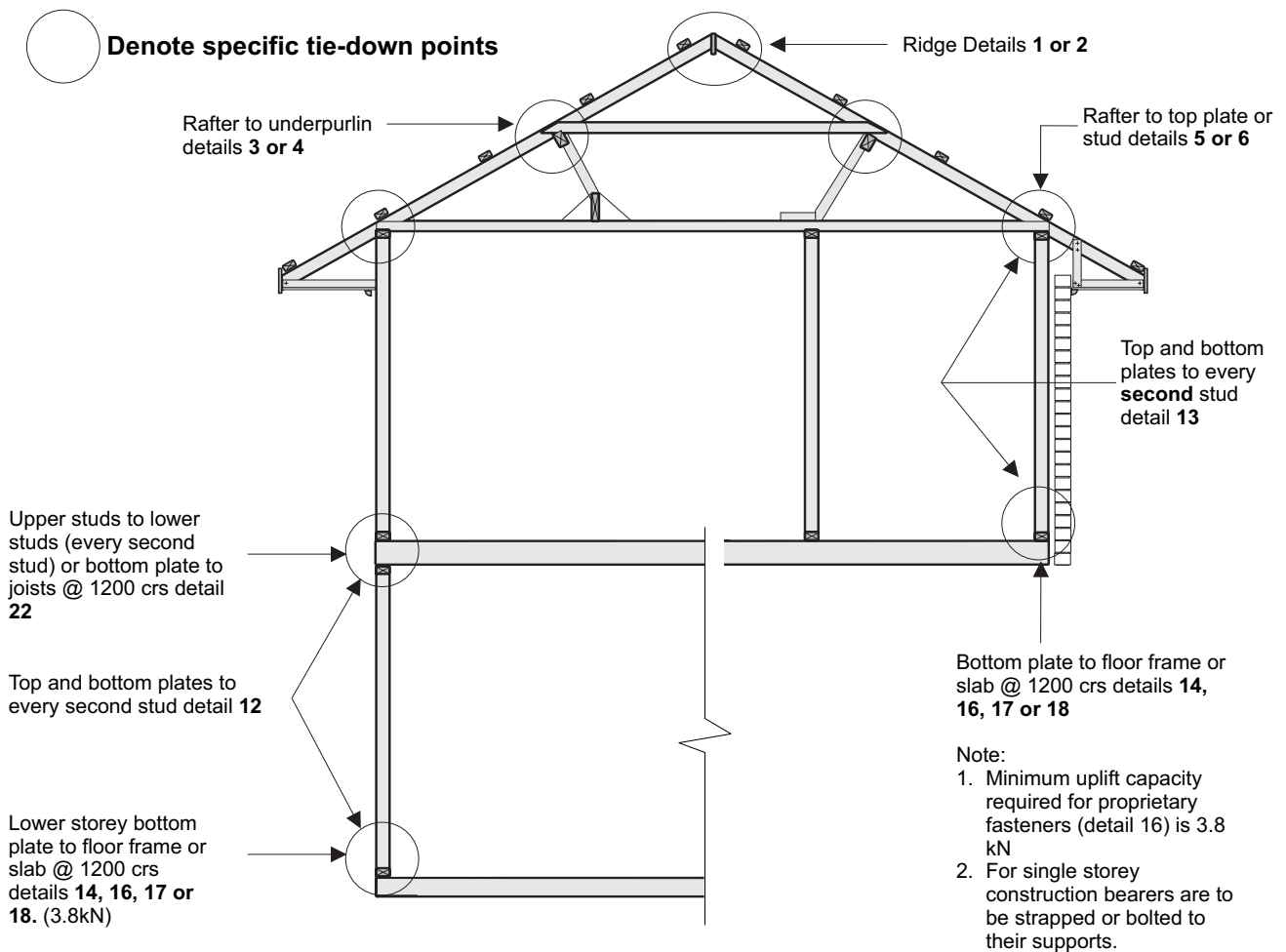
(Roof Span up to 9000 - 12000 mm, Rafters @ 1200 crs, Collar Ties @ 1200 crs, O/hang 750 mm max)



AS 1684 - Part 2 - SIMPLIFIED TIE-DOWN - N3 TILE ROOF

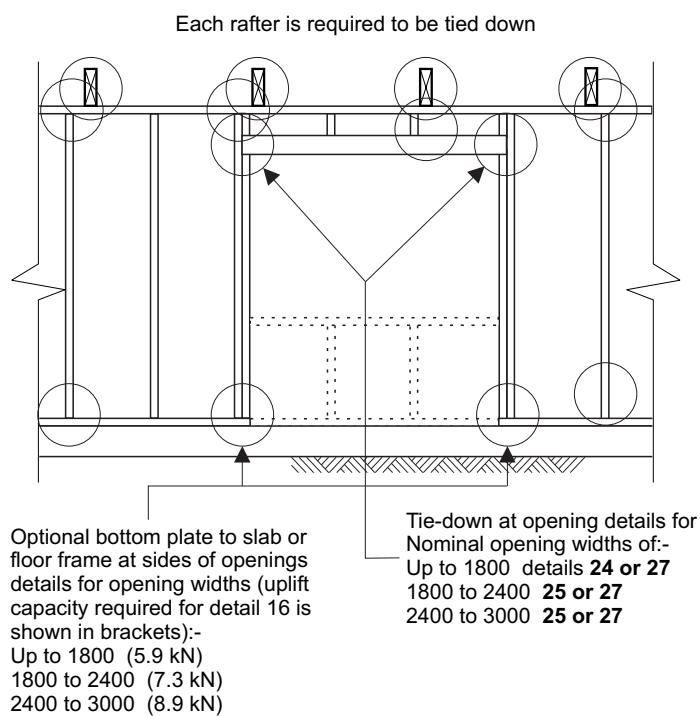
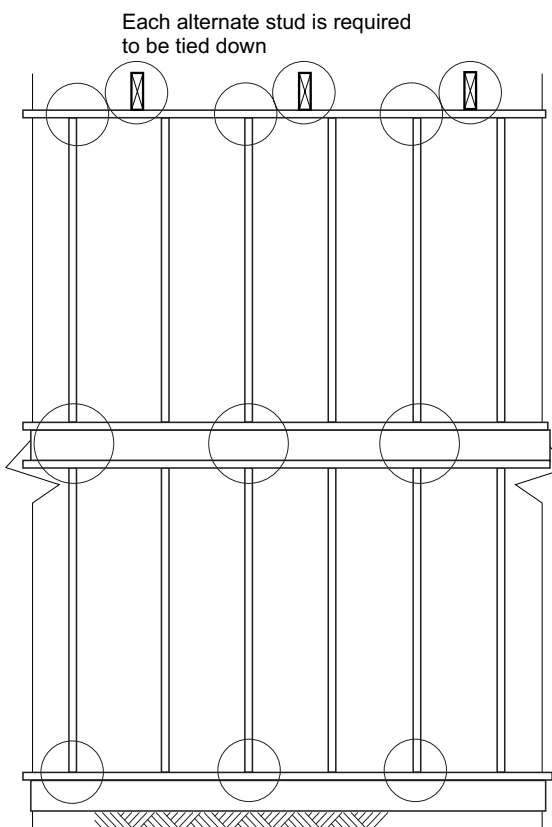
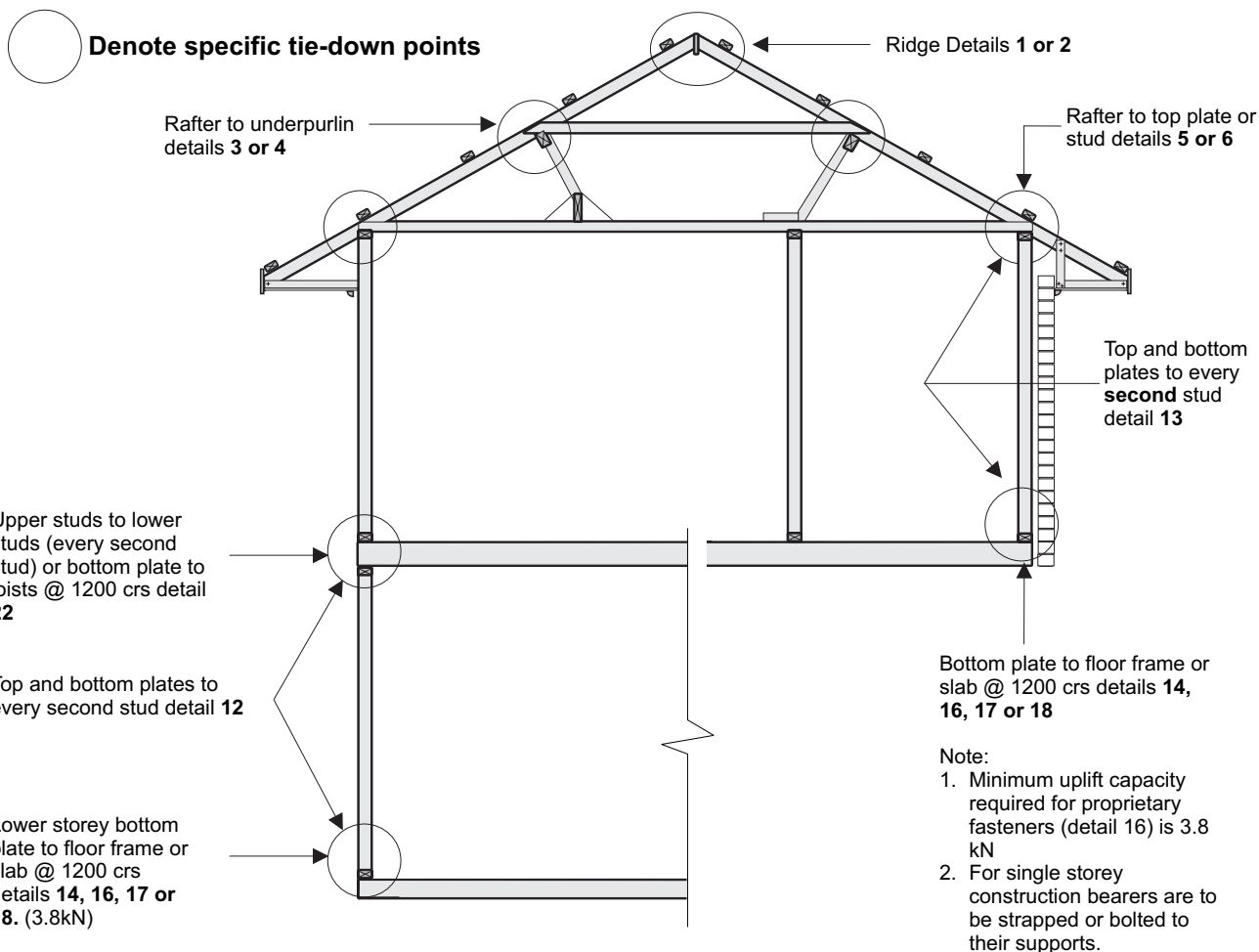
Sheet 3.9

(Roof Span up to 9000 mm, Rafters @ 450 crs, Collar Ties @ 900 crs, O/hang 750 mm max)



AS 1684 - Part 2 - SIMPLIFIED TIE-DOWN - N3 TILE ROOF Sheet 3.10

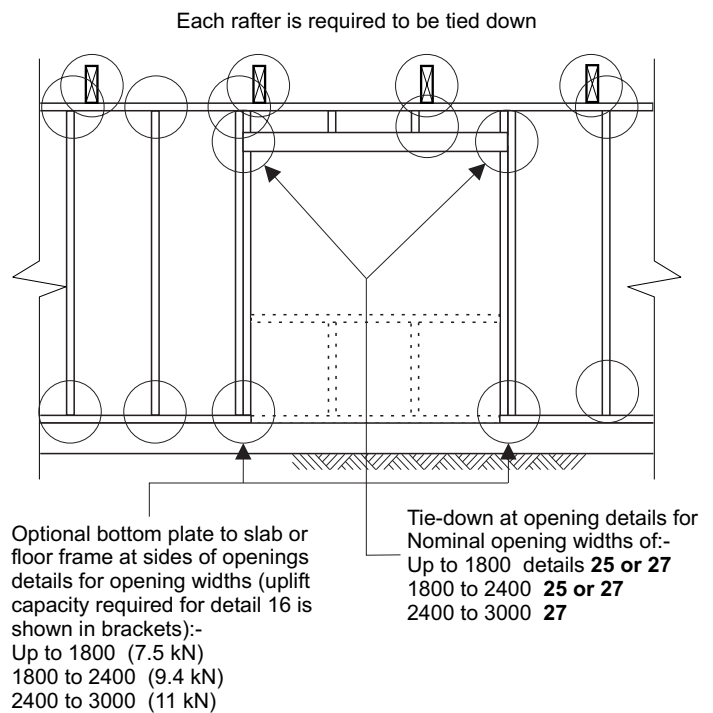
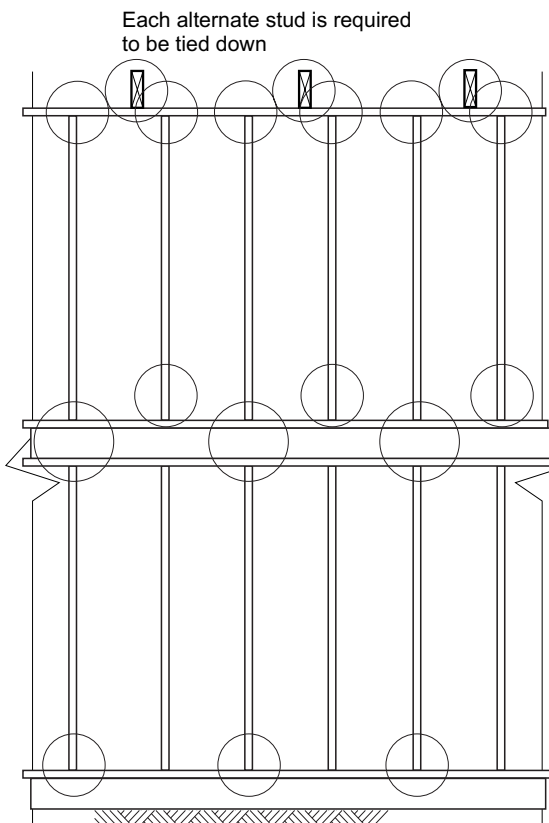
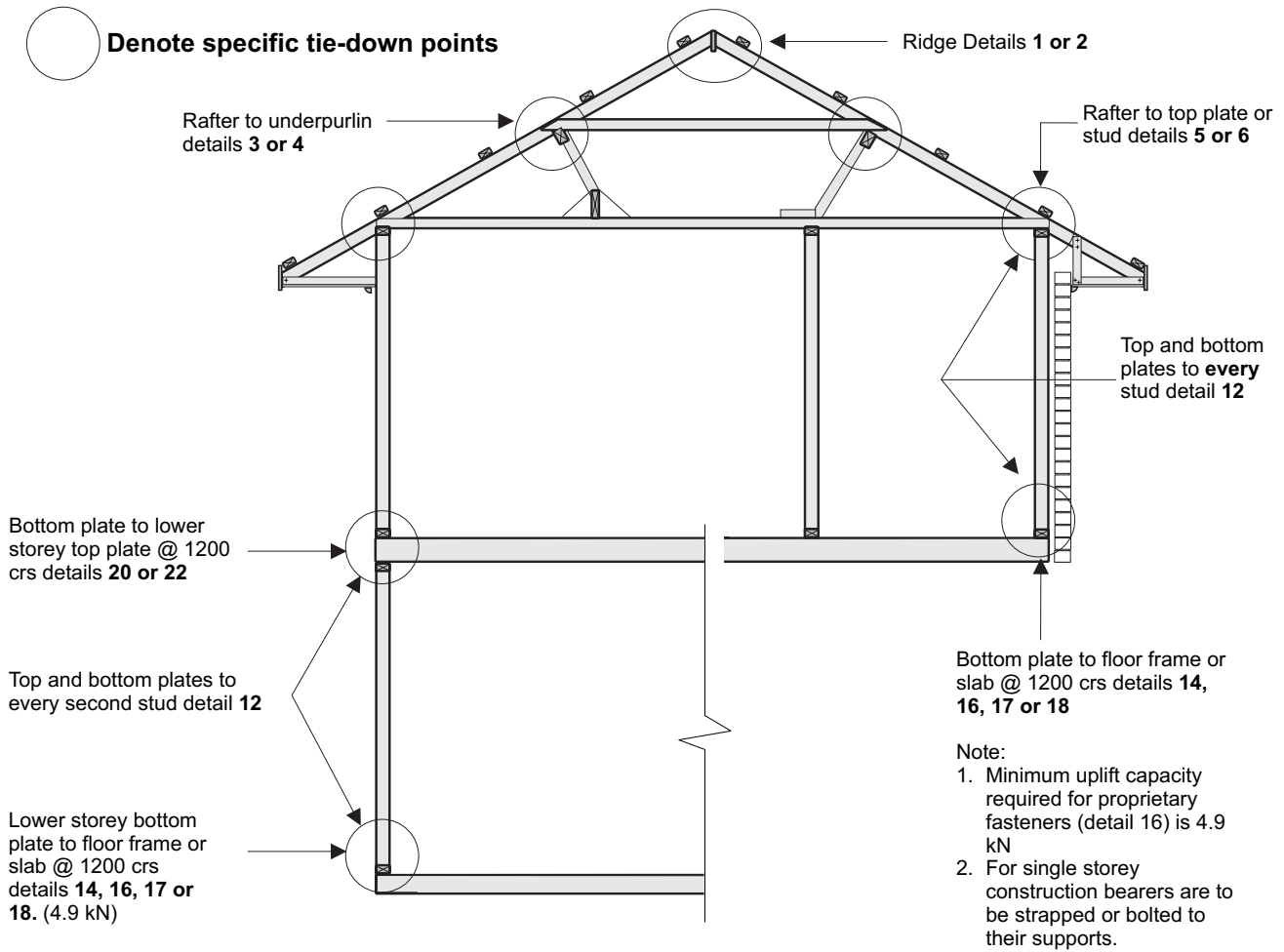
(Roof Span up to 9000 mm, Rafters @ 600 crs, Collar Ties @ 1200 crs, O/hang 750 mm max)



AS 1684 - Part 2 - SIMPLIFIED TIE-DOWN - N3 TILE ROOF

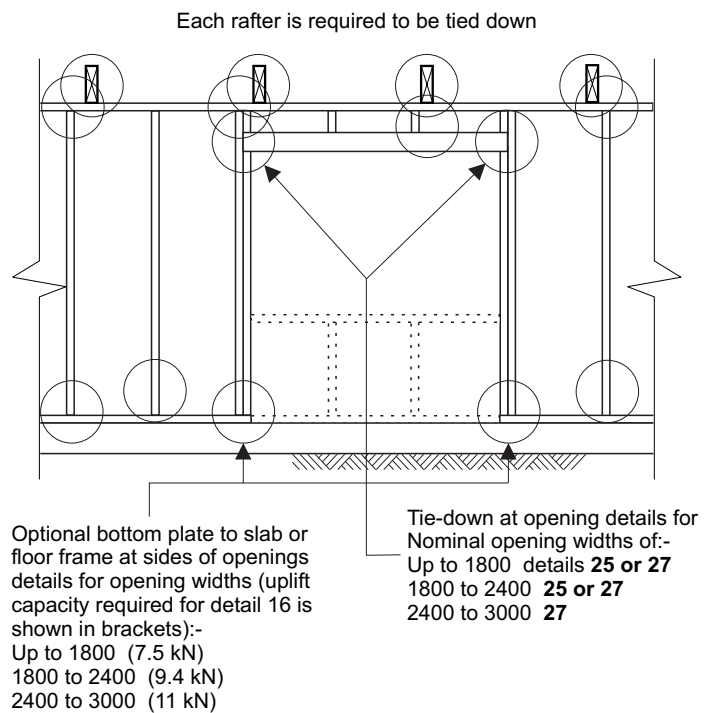
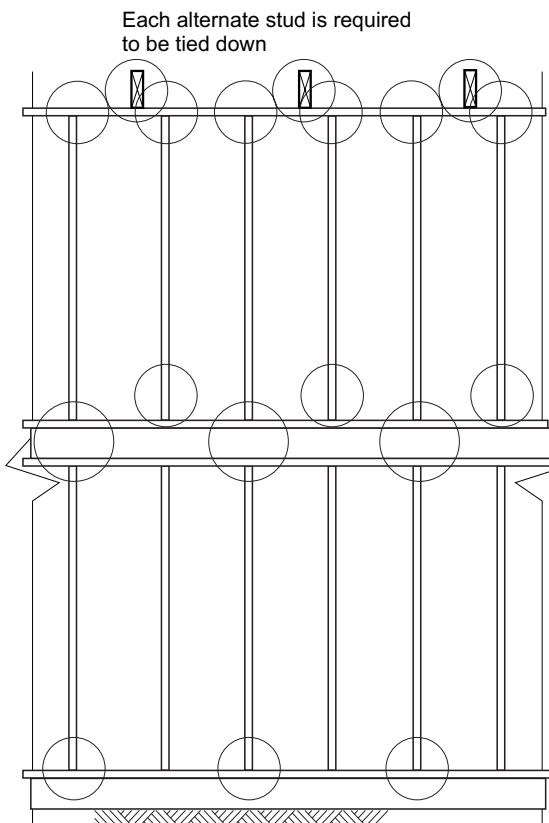
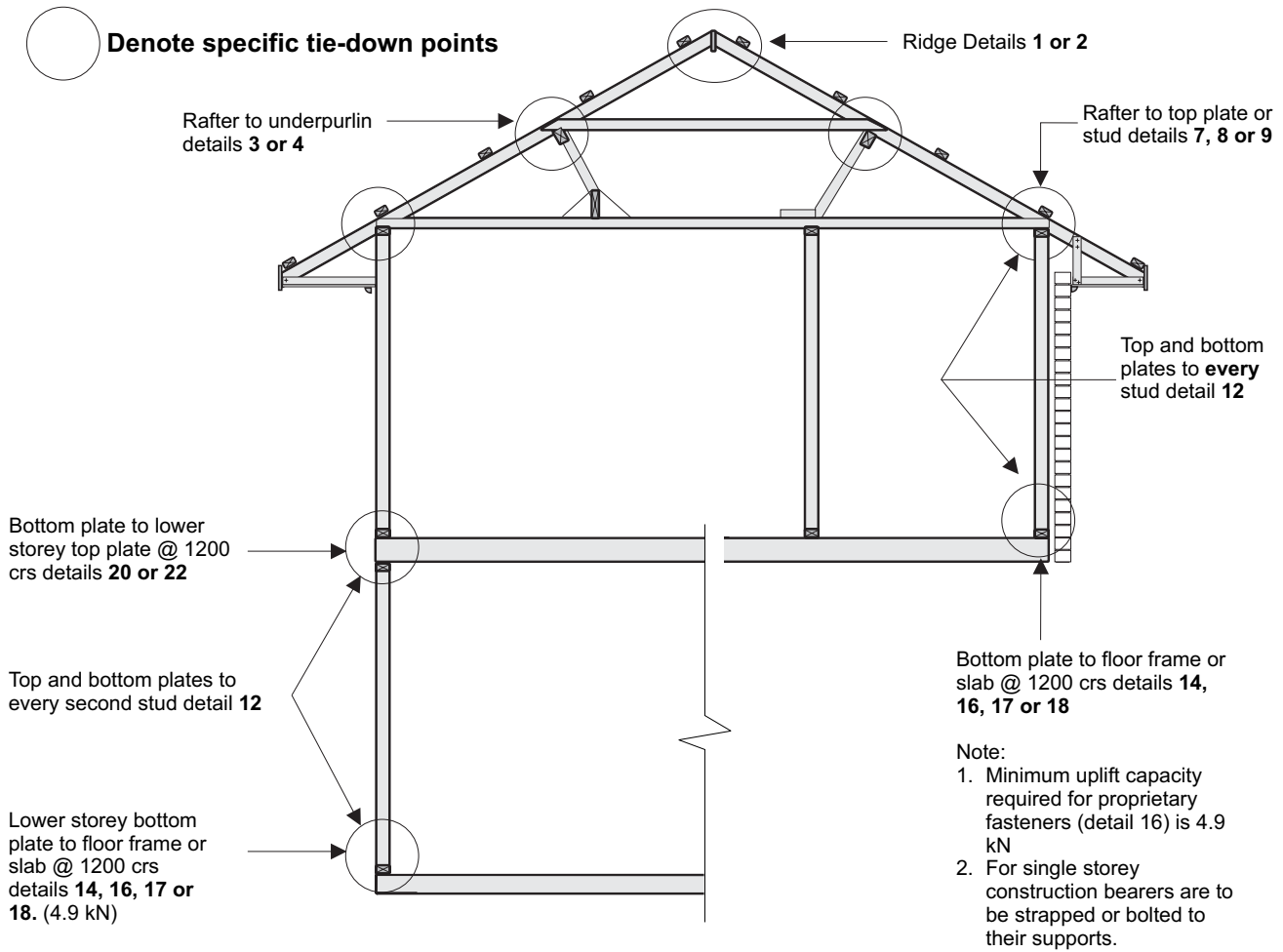
Sheet 3.11

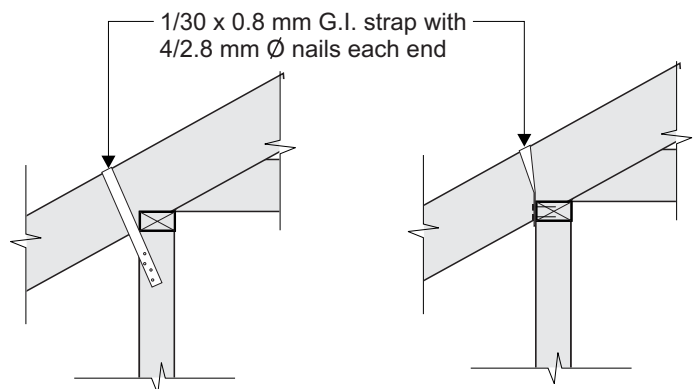
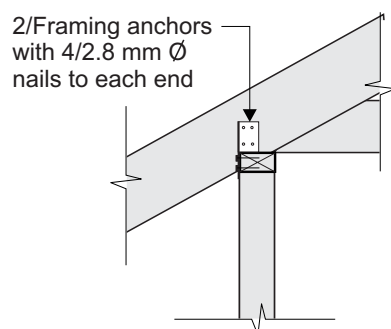
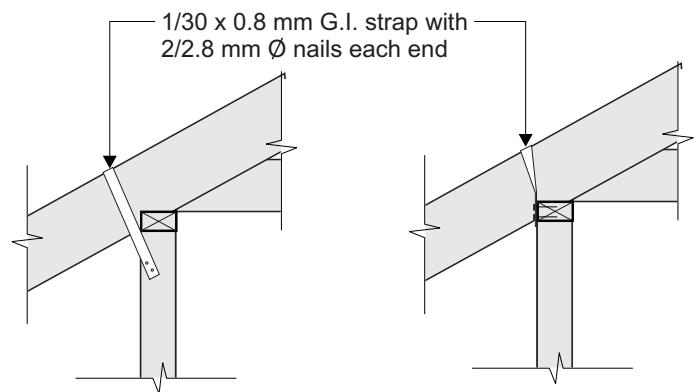
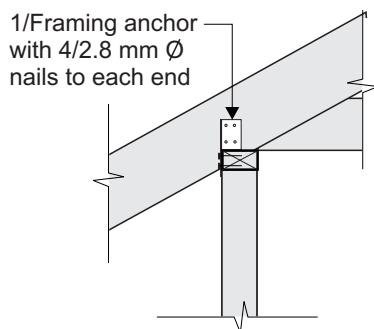
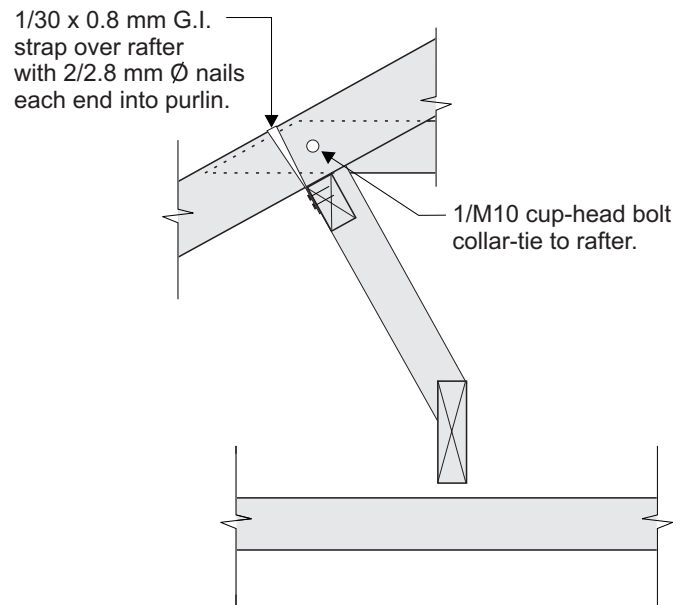
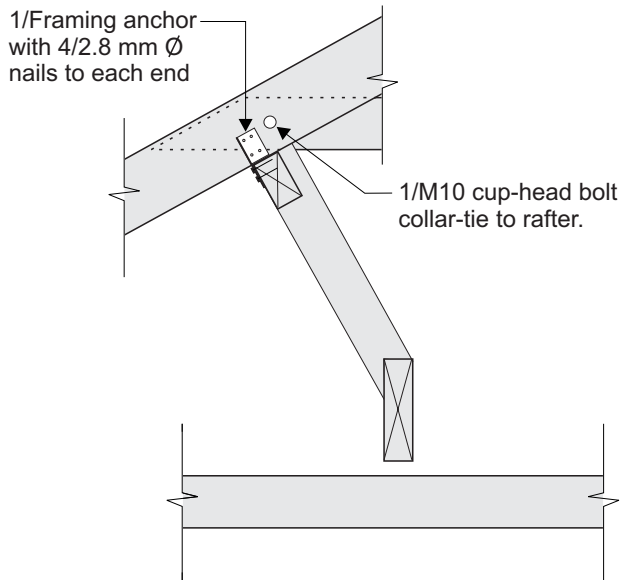
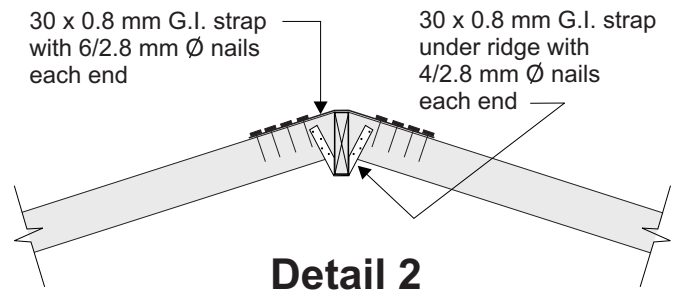
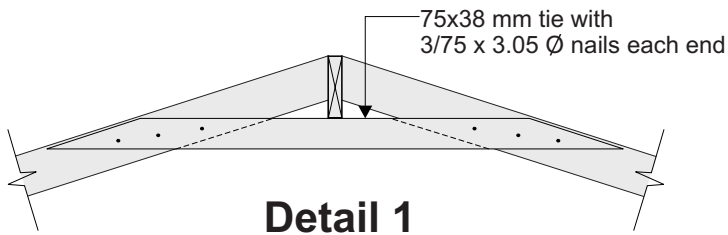
(Roof Span up to 9000 - 12000 mm, Rafters @ 450 crs, Collar Ties @ 900 crs, O/hang 750 mm max)

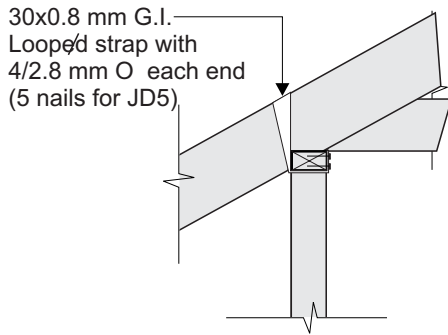


AS 1684 - Part 2 - SIMPLIFIED TIE-DOWN - N3 TILE ROOF Sheet 3.12

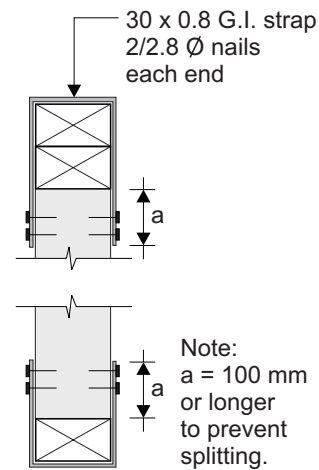
(Roof Span up to 9000 - 12000 mm, Rafters @ 600 crs, Collar Ties @ 1200 crs, O/hang 750 mm max)



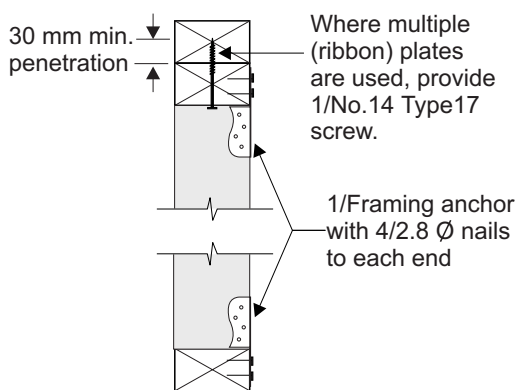




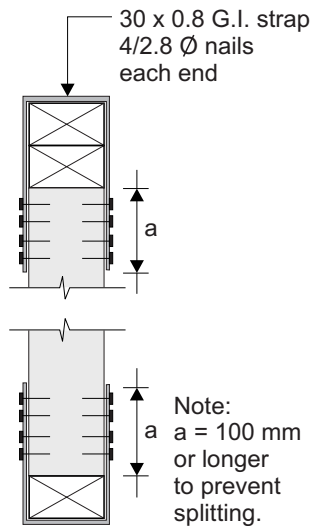
Detail 9



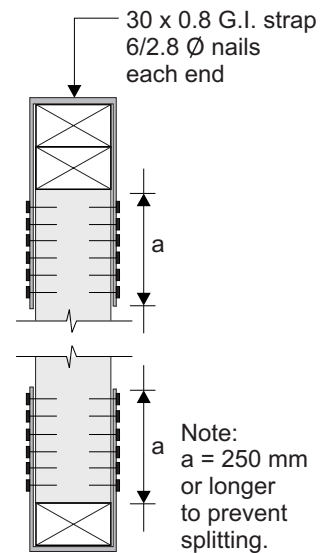
Detail 10



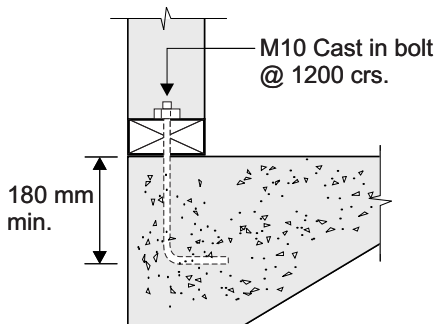
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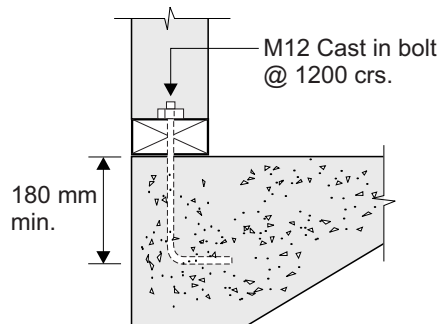
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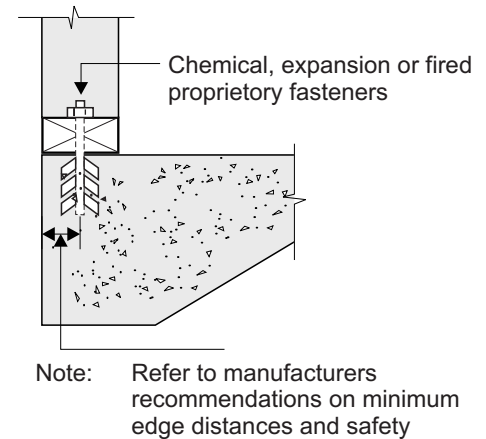
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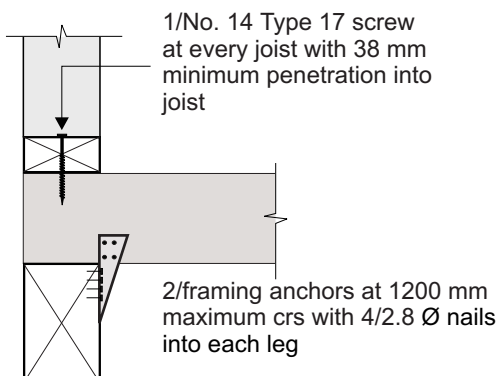
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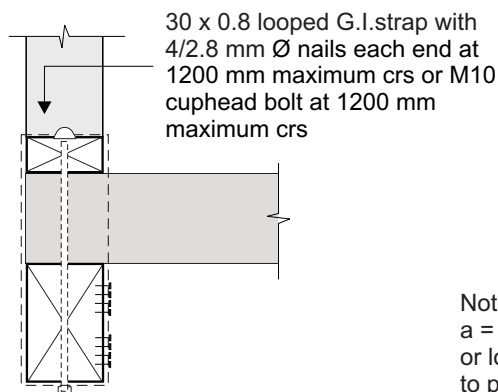
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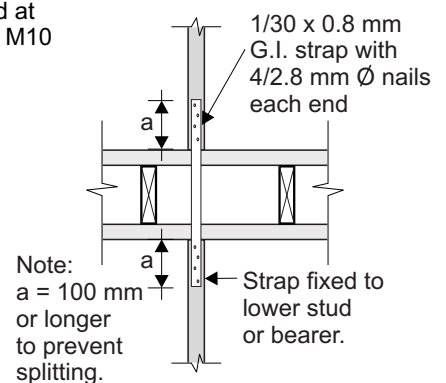
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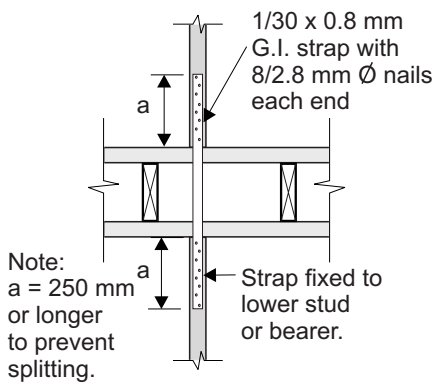
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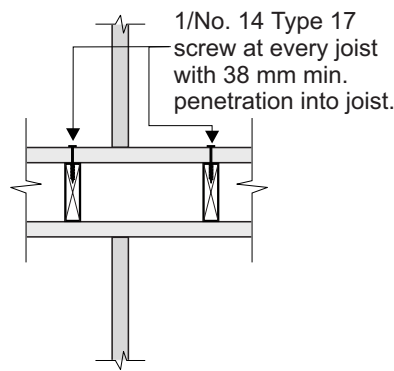
Detail 18



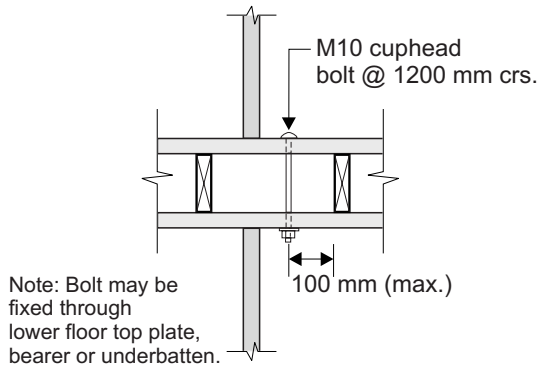
Detail 19



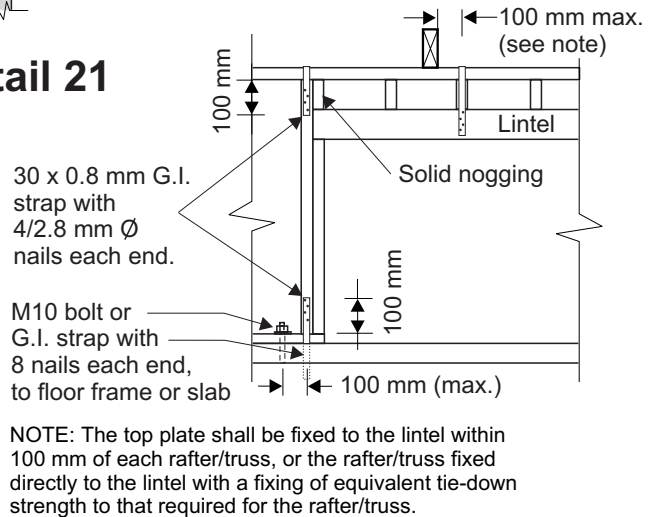
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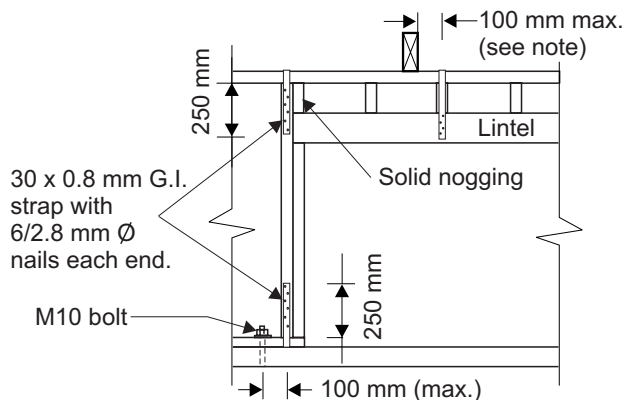
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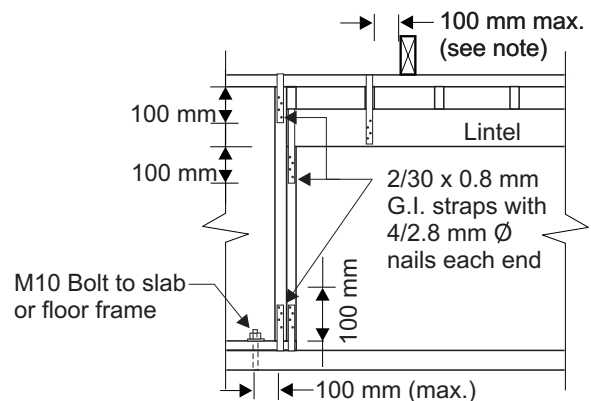
Detail 22



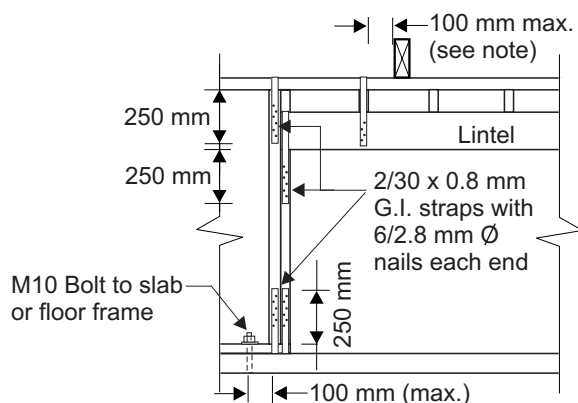
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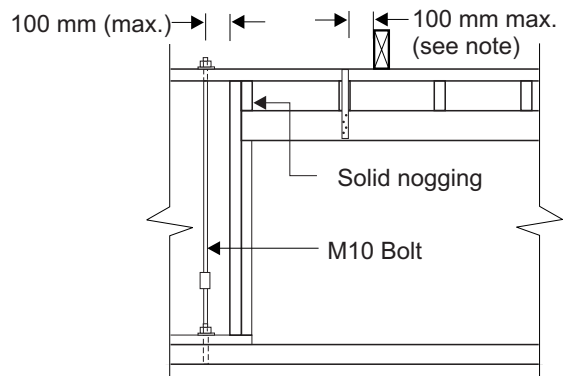
Detail 24



Detail 25



Detail 26



Detail 27



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