

PITCH/RAFTER REQUIREMENTS



Rafter length

With heavy rainfall, a considerable volume of water can accumulate at the bottom of a roof. The longer the roof run (rafter length), the more water accumulates.

AS 2050 states long rafter lengths may require sarking to prevent inundation of water into the roof. These lengths may vary according to the tile type, the pitch of the roof and the exposure.

CSR Roofing advises against the use of minimum pitch for long rafter lengths without sarking/underlay. As a general

guide for contoured tiles, rafter length should not exceed 4.5m at a minimum pitch of 15 degrees. For every 0.5m increase in rafter length above 4.5 metres, the pitch should increase by 1 degree until the acceptable pitch of 22.5 degrees is reached for long rafters.

The table below indicates the rafter length dimensions at which sarking should be installed over the whole roof. Advice should be sought from your local CSR Roofing office with regard to regional sarking (underlay) installation requirements.

MAXIMUM RAFTER LENGTHS

MAXIMUM RAFTER LENGTH	ROOF PITCH
4500	15°
5000	16°
5500	17°
6000	18°
6500	19°
7000	20°
7500	21°
8000	22°

This table is to be used a guideline only. Varying conditions and tile designs can effect these ratios, eg site conditions, exposure and Government requirements. If unsure, check with your local CSR Roofing office.

Rafter (Truss) Spacings

The wider the rafter spacing, the greater the stresses upon them, and the batten specified.

Battens made of timber should be sound, and in sufficient length and size to meet regional fixing requirements. Batten sizes and types vary by region, however must be fixed in accordance with the AS 1684 or AS 1720.1 and NZS 3604 in New Zealand.

Rafter Length Considerations

CSR Roofing roofing tiles are designed to be dimensionally consistent, allowing some tolerance to assist the roof tiler during set out. However, it is advisable to consider the rafter length at the design stage, to avoid the need to cut a short tile course.