



LINCS BUILDING  
CONSULTANCY

## **Guidance Note No. 14**

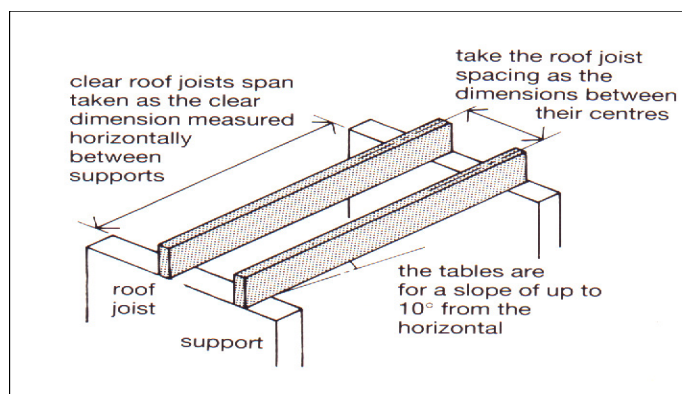
### Flat Roofs

### Timber Sizes and Construction



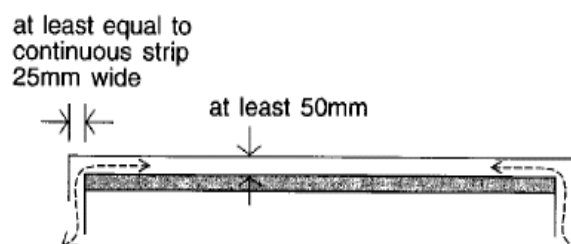
The following tables give details of the allowable spans and spacing for some of the more common timber sizes used in flat roof construction. All figures are based on normal loading conditions found in domestic construction. In any other situation you should refer to TRADA Document "*span tables for solid timber members in floors, ceilings and roofs (excluding trussed rafter roofs) for dwellings*" or ask your LBC Surveyor for advice.

<b>MAXIMUM CLEAR SPAN OF FLAT ROOF JOISTS IN METRES FOR SC3 TIMBER</b>			
<b>Size of roof joist</b>	<b>Spacing between joists</b>		
	<b>400mm</b>	<b>450mm</b>	<b>600mm</b>
47 x 97	1.84	1.81	1.74
47 x 120	2.43	2.39	2.27
47 x 145	3.08	3.02	2.87
47 x 170	3.75	3.67	3.42
47 x 195	4.41	4.31	3.92
47 x 220	5.04	4.85	4.41
75 x 170	4.50	4.38	3.99
75 x 195	5.19	5.01	4.57
75 x 220	5.84	5.63	5.14



### Ventilation details for flat roofs

**\* Important note** – For cold roof construction a 50mm airspace is required for ventilation purposes over the insulation, the minimum depth of joist required is usually taken as 175mm even if a lesser depth would be acceptable from a purely structural point of view



(Note – the following insulation thickness would be suitable, 250mm fibreglass, 120mm cellotex or 140mm styrofoam)



FS58945



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Please note that these guidance notes are for advice only and may not cover all situations. It is your responsibility to ensure that they are appropriate for use in your particular circumstances.