MINIMUM FORMWORK STRIPPING TIMES—IN SITU CONCRETE

Formed surface	Classification	Hot conditions > 20°C	Average conditions ≤20°C > 12°C	Cold conditions ≤ 12°C ≥ 5°C
Vertical faces	Classes 1, 2, 3 (see Note 2) Classes 4, 5	1 day 9 hours	2 days 12 hours	3 days 18 hours
	A minimum of one day applies to the stripping of vertical faces where frost damage is likely			
Beam and slab soffits	Forms	4 days	6 days	8 days
	Supporting members (shores or backprops)	12 days	18 days	24 days

NOTES:

- 1 The stripping times for beam and slab soffits for members cured in conditions less than 5⁻C shall be increased by half a day for each day on which the daily average temperature was between 2⁻C and 5⁻C, or by a whole day for each day on which the daily average temperature was below 2⁻C.
- 2 Where colour control is specified it is advisable to strip forms early, subject to the limitations given.
- 3 In the absence of site recording, local temperatures are usually available from the Australian Bureau of Meteorology.

5.4.3 Stage III of construction-Formwork stripping and after placement of concrete

5.4.3.1 Construction loads

Loads on the newly poured concrete (e.g. stacked materials and equipment) shall not exceed those nominated in the project documentation and the formwork documentation. See Clause 2.3(b) and Clause 4.7.1(d).

5.4.3.2 Stripping times

Stripping of formwork from in situ concrete shall not be undertaken earlier than as specified in the documentation. In the absence of such specified minimum times, Table 5.4.1 may be used in the case of stripping forms from beam or slab soffits provided that there is compliance with the following conditions:

(a) The ratio of span between supports to the overall depth of the member is less than

$$\frac{280}{\sqrt{(D+100)}}$$

where D is the overall depth of the section in millimetres.

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- (b) The concrete is of normal class as defined in AS 3600, and the mean compressive strength at the designated early age, $f_{\rm cm}$, shall be not less than the appropriate value given in Table 5.4.2. Where these early concrete strengths are not achieved, the times given shall be increased by a factor of 1.5.
- (c) In the case of slabs, the superimposed loads do not exceed 2.0 kN/m².

If these conditions can not be accommodated, additional project documentation shall be obtained.

When standard beam or cylinder tests are used to determine stripping times, test specimens shall be cured under conditions which are not more favourable than the most unfavourable conditions for the portions of the concrete which the test specimens represent.

TABLE 5.4.2
EARLY-AGE MEAN STRENGTHS FOR NORMAL-CLASS CONCRETE

At 3 days	0040	At 7 days		
Grade designation	$f_{\rm cm}$	Grade designation	$f_{\rm en}$	
N20E3	9	N20E7	15	
N25E3	12	N25E7	19	
N32E3	15	N32E7	24	
N40E3	18	N40E7	30	
N50E3	23	N50E7	37	