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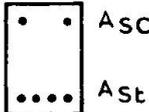
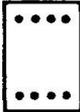
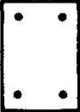
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The 1963 edition of the American Building Code Requirements for Reinforced Concrete (ACI 318-63) states that the additional long-term deflexion is a multiple of the instantaneous deflexion as shown in the following table :

REINFORCEMENT	SECTION	RATIO OF ADDITIONAL LONG-TERM DEFLEXION TO INSTANTANEOUS DEFLEXION
$A_{sc} = 0$	 <p>(1)</p>	2.0
$A_{sc} = 0.5 A_{st}$	 <p>(2)</p>	1.2
$A_{sc} = A_{st}$	  <p>(3) (4)</p>	0.8

The results given in the Cement and Concrete Association Technical Report TRA.442 - "A series of long-term tests to investigate the deflexion of a representative precast concrete floor component" showed that the provision of compression steel in a lightly reinforced member did not reduce the long-term deflexions by the amounts predicted by the ACI Code. This investigation indicated that it was incorrect to assume that the long-term behaviour of the lightly reinforced section (4) would be the same as the heavily reinforced section (3) although the ratio of compression to tension steel areas is the same in both cases. The tests showed that section (4) behaved in a similar manner to section (2), and that the amount of restraint to long-term deformation was dependent on the arrangement of reinforcement in the compression zone, which need not be related to the area of tension steel determined by a collapse method of design as suggested by the American Code.