SUMMARY

An analytical study is made of the distributions of total static panel moments to the column and middle strips in flat plate floors with different aspect ratios and compared to those recommended values in the code of practice. A shallow beam concept has been used in the present study. A review has also been made of the different proposals on the effective widths which define the lines of supports provided by the columns (i.e. the widths of the column strips). On basis of the review a narrow range of practical values is thus adopted for the effective widths. The extend of supports for the respective middle strips are thus established. The slab panel’s total static moments are obtained from the results of moment distributions performed on the equivalent structural models of the column and middle strips.

The present study shows that the distributions of total static moment to the floor strips vary with the panel’s aspect ratio instead of following constant percentage values recommended in the codes.