

obtained from one graph (for a particular range of R) by using the appropriate abscissae. The three graphs, Figs. 8.7, 8.8 and 8.9, have been drawn so that each represents a relationship for the particular range of R shown.

To obtain the maximum moment, the lower C_1 scale is used and for the central moment the $C_1 \times C_2$ scale is used. In each case use of the appropriate d/L ratio will give the value of

$$MC_1/PL \tag{8.11}$$

where M is either the maximum or the central bending moment.

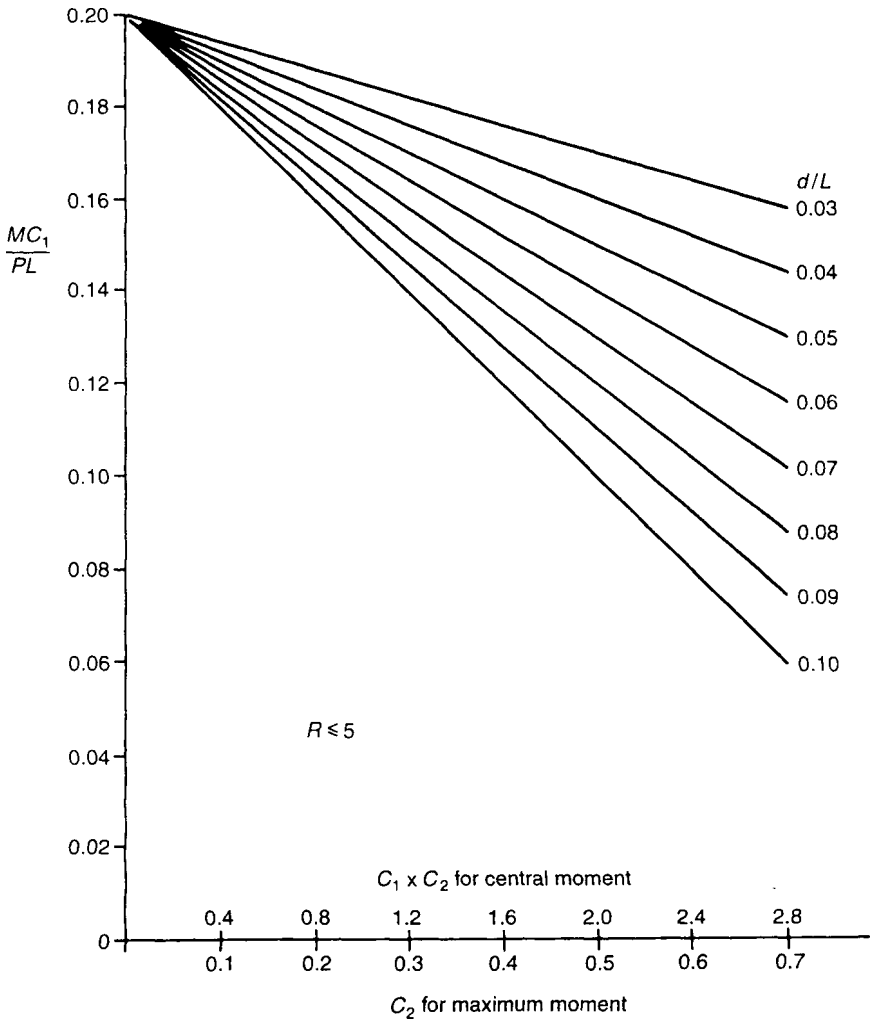


Fig. 8.7 Moments for cubic stress distribution.

The location of the maximum moment is not so important for design purposes but if required an approximate value can be determined from the equation

$$l = P/(2Sf_m t) \tag{8.12}$$

where S is a coefficient which depends on the shape of the vertical stress diagram and can be assumed to be

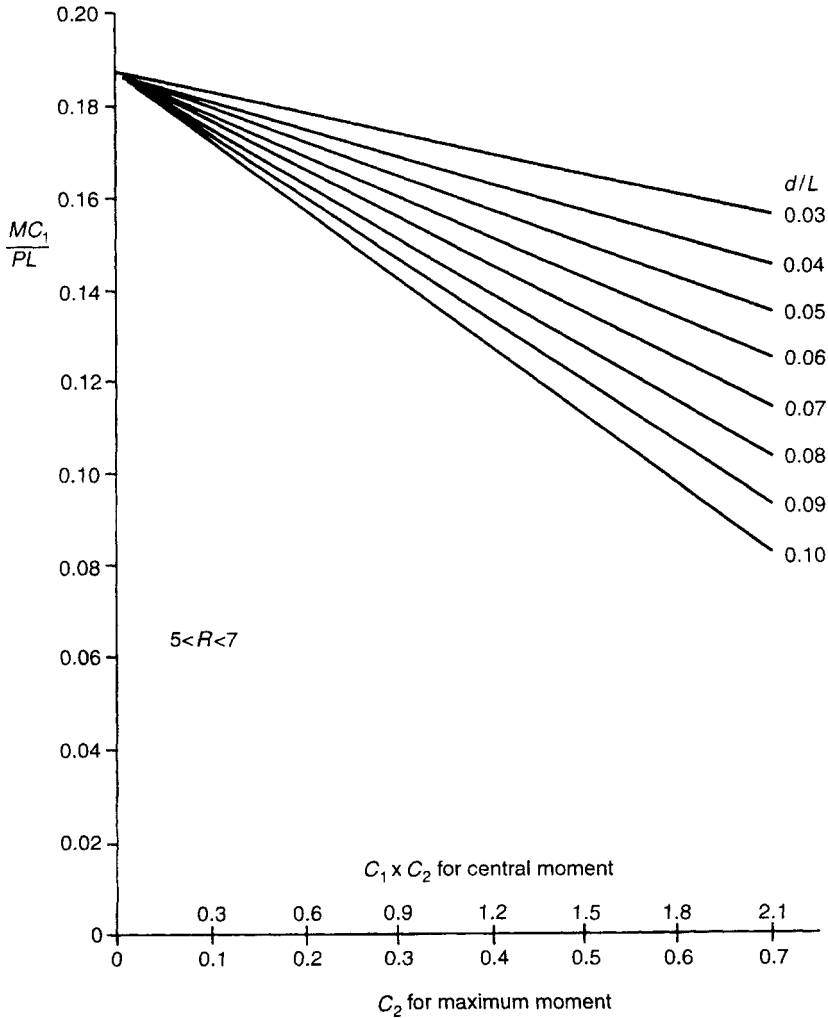


Fig. 8.8 Moments for parabolic stress distribution.