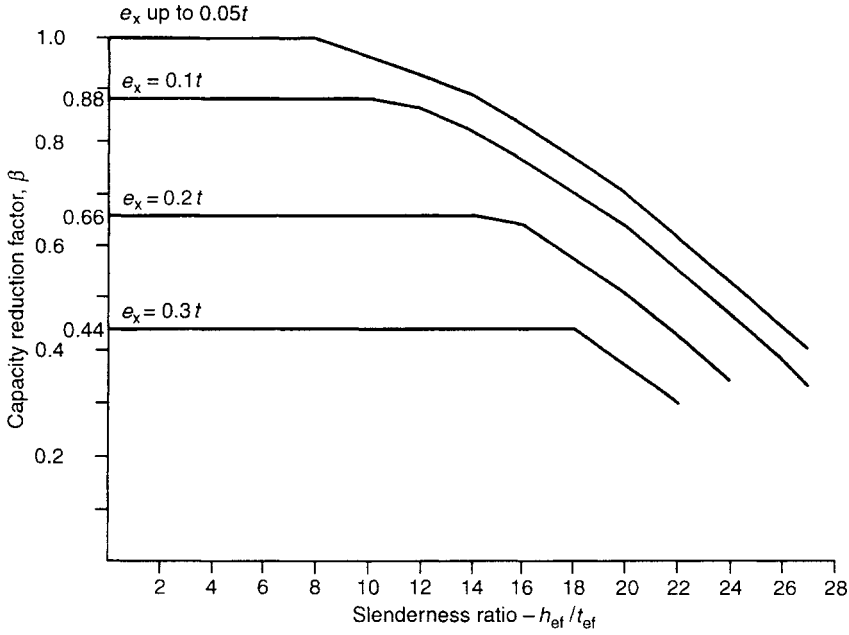

Fig. 4.4 Capacity reduction factor β in BS 5628.

As will be apparent, this method of calculating the capacity reduction factor for slenderness and eccentricity embodies a good number of assumptions, and the simple rules given for estimating the eccentricity at the top of a wall are known to be inaccurate—generally the eccentricities calculated by the code method are very much smaller than experimental values. This, however, may be compensated by the empirical formula used for calculating the additional eccentricity, e_a, and by the other assumptions made in calculating the reduction factor. The final result for loadbearing capacity will be of variable accuracy but, protected as it is by a large safety factor, will result in structures of very adequate strength.

The remaining part of Section 4 deals with concentrated loads and with walls subjected to lateral loading. Concentrated loads on brickwork are associated with beam bearings, and higher stresses are permitted in the vicinity of these loads. The code distinguishes three types of beam bearing, as shown in Fig. 4.5. The local design strength, calculated on a uniform bearing stress, for type 1 bearings is $1.25f_k/\gamma_m$ and for type 2 bearings $1.5f_k/\gamma_m$. Careful inspection of the diagram shown in Fig. 4.5 is necessary to see within which category a particular detail may come, and the logic of the categories is by no means clear. However, it can be seen that under type 1, a slab spanning at right angles to a wall is allowed a

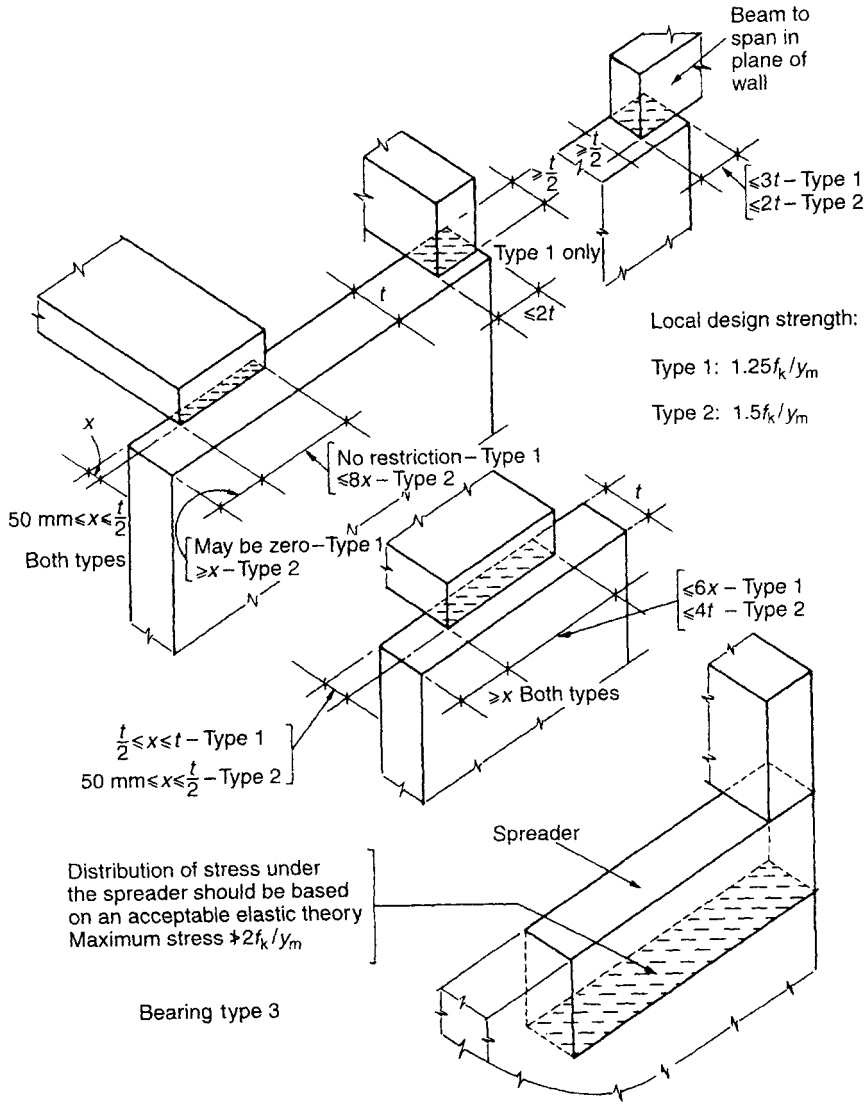

Fig. 4.5 Design stresses in vicinity of various beam and slab bearings according to BS 5628.