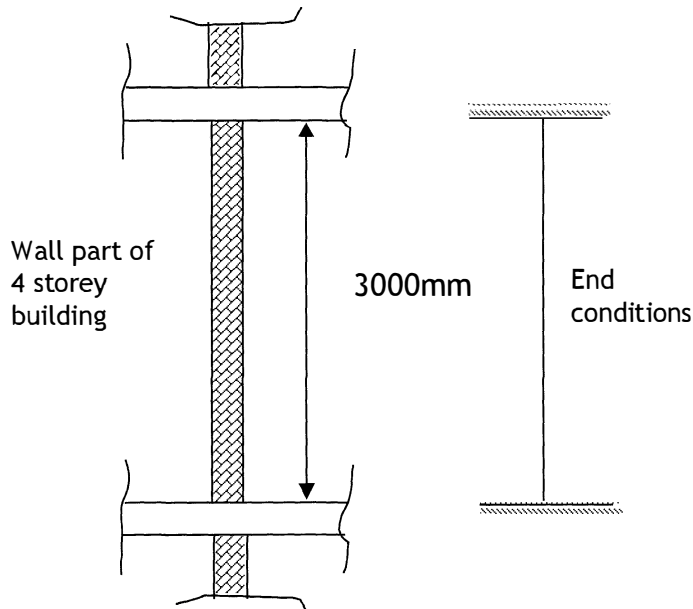


DESIGN EXAMPLE F1



Determine the fire resistance period of a single leaf 102,5 mm brickwork wall constructed in Group 1 standard format clay masonry brick units assembled in an M4 general purpose mortar. The masonry unit gross dry density is 1600 kg/m^3 . The design vertical load is 180 kN/m and the design resistance is 207 kN/m.

Reassess the fire resistance period using a single leaf 140 mm blockwork wall constructed in Group 1 dense aggregate concrete masonry block units assembled in an M4 general purpose mortar. The masonry unit gross dry density is 1450 kg/m^3 . The design vertical load is 180 kN/m and the design resistance is 228 kN/m.

Reassess the fire resistance period of both walls above as non-loadbearing single leaf walls.