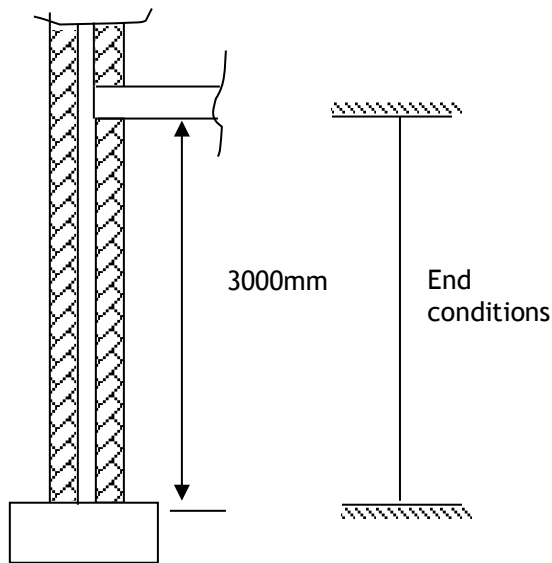


### DESIGN EXAMPLE V3



#### Assume

102,5 mm Group 1 clay brick masonry unit outer skin

140 mm thick Group 1 concrete block masonry unit inner skin

Units are supplied with attestation of conformity Category I

75mm cavity

Designation M4 general purpose mortar

Class 1 execution control will be used on site

The lower lift of a 4-storey cavity wall carries a design load of 130 kN/m run.  
10 kN/m of this is applied at an eccentricity of  $t/6$  to the inner leaf of the bottom lift.  
The remaining load from the floors above is applied concentrically to the same leaf.

What strength of concrete block masonry unit is required? Calculate the vertical load capacity of the wall with the block masonry unit strength actually selected.