

## SECTION 9. DESIGN FOR TENSION

Any **mortarless** masonry member designed to resist axial tension must be reinforced as it is only the reinforcement that carries the tensile load. The design axial tensile force must be such that:

$$F_{dt} \leq \Phi f_{sy} A_s$$

Where:  $F_{dt}$  = The design tension force acting on the cross section

$\Phi$  = 0.60 for tension

$f_{sy}$  = the design yield strength of the reinforcement

$A_s$  = the total cross-sectional area of the main reinforcement

Note however that the main reinforcement in the direction of the axial load must comply with the following (AS3700 Clause 8.10):

- a) It must be located symmetrically in the cross-section
- b) It must include reinforcement with a cross-sectional area of at least 100 mm<sup>2</sup> within 300mm of the edges of the member parallel to the main reinforcement
- c) It must be placed at centres not exceeding 2000 mm