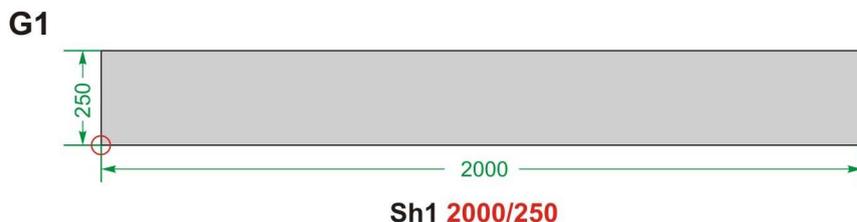


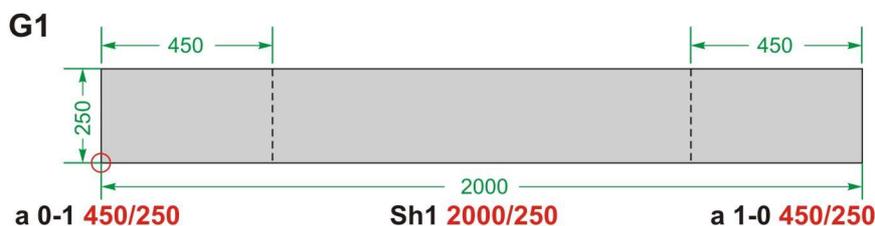
3.3. Composite elements

A composite column is every vertical element composed by a number of rectangular members, one of which is considered to be a shear wall i.e. has a length to thickness ratio ≥ 4 .

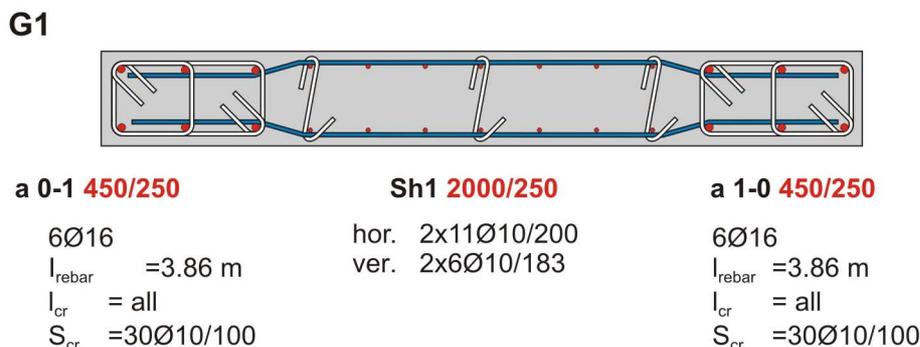
The simplest composite column is the one-member shear wall, like G1.



From a static point of view, G1 is composed by the shear wall Sh1 which has a section equal to 2000/250.



From a reinforcement point of view, G1 is composed of the hidden (boundary) columns a0-1 and a1-0 with 250/450 section and the shear wall's main body Sh1 with a section of 2000/250 (including the length of the two boundary columns).



The G1 reinforcement consists of the clearly defined reinforcement of the three members that comprise the composite element, the two orthogonal columns and the shear wall's main body.

In this specific example as well as in the others that follow, the horizontal rebars have been anchored by bending. It is obvious that any other type of anchorage from those mentioned in the previous chapter could have been chosen.

