

The invention relates to a flow calming assembly (10) for a nuclear reactor comprising a vessel (12) and an enclosure (14) situated in the vessel (12) wherein a fluid circulates from the vessel (12) to the enclosure (14) at a bottom part of the vessel (12). The flow calming assembly (10) comprises an outer calming device (28) with openings for fluid passage, the outer calming device (28) comprising an upper part (34) and a lower part (36), the upper part (34) comprising a flared or conical collar extending between an upper end (38) and a lower end (40), the lower part (36) having a shape presenting a symmetry along a main axis (D), the lower part (36) extending from the lower end (40) of the upper part (34). The invention further relates to associated reactor and installing method.