

Flooring material comprising sheet-shaped floor elements (1) with a mainly square or rectangular shape. The floor elements (1) are provided with edges (2), a lower side (5) and an upper decorative layer (3). The floor elements (1) are intended to be joined by means of joining members (10). The floor elements (1) are provided with male joining members (10^I) on a first edge (2^I) while a second edge (2^{II}) of the floor elements (1) are provided with a female joining member (10^{II}). The male joining member (10^I) is provided with a tongue (11) and a lower side (5) groove (12) while the female joining member (10^{II}) is provided with a groove (13) and a cheek (14), the cheek (14) being provided with a lip (15). The floor elements (1) are provided with a male vertical assembly joining member (10^{III}) on a third edge (2^{III}) while a fourth, opposite, edge (2^{IV}) is provided with female vertical assembly joining member (10^{IV}). The floor elements (1) are alternatively provided with a male vertical assembly joining member (10^{III}) on a third edge (2^{III}) while a fourth, opposite, edge (2^{IV}) also is provided with male vertical assembly joining member (10^{III}). Adjacent male vertical assembly joining members (10^{III}) are hereby joined by means of a separate vertical assembly joining profile (30). Two adjacent edges (2) of a floor element (1) can hereby, at the same time, and in the same turning motion, be joined with a floor element (1) adjacent to the first edge (2^I) and a floor element adjacent to the third or fourth edge (2^{III} and 2^{IV} respectively).