

# Concrete

The sporadic use of concrete for internal walls in basements began to occur in the early 1900s.

In the 1930s, a few buildings were constructed with situ-cast, transverse and load-bearing concrete walls on all floors.

Interior load-bearing concrete walls also appeared among the numerous attempts to use alternative building materials and methods in the 1950s.

Practically every technique available at the time has been used for their construction – from on-site layer-by-layer pouring to various forms of moveable formwork and pouring methods.

There were also examples emerging of wall elements prefabricated at mobile field factories.

With the introduction of industrialised construction in the early 1960s, the normal shell structure was replaced with modular construction and assembly using prefabricated concrete elements as load-bearing structures.

Concrete walls made as room-high elements en masse at stationary factories were in widespread use in the construction of multi-storey housing from the 1960s up to the end of the century.

By far the largest part of this type of construction is carried out using load-bearing transverse walls rather than longitudinal load-bearing (main) partitions, which are used to a lesser extent.

Wall elements of prefabricated concrete are normally solid and non-reinforced, except where reinforcement is required at door openings or in the assembly of elements that involve the transfer of particularly strong or different forces.

Widths of 12M (120 cm) and 24M (240 cm) and a height of 26M (260 cm) were standard. Standard thicknesses were 150 mm and 180 mm.

In the final decades of the century it became widespread to manufacture wall elements as larger units customised for the individual building.

