

ABSTRACT

To provide an easily constructible steel wall having a wall body in which steel sheet piles capable of easily providing a high water stopping performance are coupled, and reinforced by a steel pipe or an H-shaped steel.

The wall body 4 is provided by coupling the plurality of hat-shaped steel sheet piles 1 by a joint. The steel pipe 2, which reinforces the wall body 4, is provided being arranged along a longitudinal direction of the wall body 4. A space is provided between the wall body 4 and the steel pipe 2. The wall body 4 is formed into a corrugated shape in which a projection and a recess are repeated in a longitudinal direction as a steel sheet pile wall. The steel pipe 2 is disposed such that a part thereof is being entered into a recessed portion of the wall body 4. A head portion of the wall body 4 is coupled to a head portion of the steel pipe 2. The wall body 4 and the steel pipe 2 are coupled by concrete. Load transmission is performed between the wall body 4 and the steel pipe 2. Accordingly, the steel wall 3 may have a structure in which an acting earth pressure and water pressure are received and shared by the wall body 4 and the steel pipe 2.