

Design Solutions of Unique Buildings and Structures

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Abstract: The paper describes a new design solution of diaphragm stiffness for a multistory building, including a high-rise building, which eliminates the possibility of its combined action with the frame of the building on the vertical loads. This is achieved by the design of elements of shear wall coupling and current methods of determining wind effects on building enclosure, which include engineering calculations by reference data, experimental tests in the wind tunnel, numerical computer simulation. The features and examples of each of these methods are discussed.