

ABSTRACT

METHOD OF DESIGNING COLUMN-BEAM JOINT, METHOD OF MANUFACTURING COLUMN-BEAM JOINT, AND COLUMN-BEAM JOINT STRUCTURE

In a method of designing a column-beam joint according to the present disclosure, rotational resistance per unit rotation angle of a portion of a steel beam inside concrete in the column-beam joint is defined as rotational rigidity, a required moment resistance acting on the column from the steel beam is calculated using a load supported by the steel beam and the rotational rigidity, and at least one of a distance between respective ends of the steel beam or a cross-sectional shape of the steel beam is adjusted such that the required moment resistance calculated does not exceed a maximum moment resistance that can be resisted by the column-beam joint.

FIG.1