

ABSTRACT

CONNECTION USING STEEL TUBE COLUMN INFILLED WITH CONCRETE
AND METHOD OF PRODUCING SAME

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Provided is a connection using a CFT column that can more effectively transmit vertical loads applied either to a beam formed from an H-shaped steel or a CFT column to the concrete filled in a steel tube column such that it can withstand larger loads. As a steel tube column 10 filled with concrete 12, an internally-ribbed steel tube that has a plurality of ribs extending spirally at intervals on its inner surface and a convex bead extending spirally on its outer surface is used. A pair of outer diaphragms 20, 30 are welded to the outer peripheral surface of the steel tube column, and a beam or RC slab is connected thereto. A convex bead 16 is discontinued at an interval at a position where the outer diaphragms 20, 30 are to be arranged, wherein the interval is equal to or greater than a thickness of each outer diaphragm, and the outer diaphragms 20, 30 are arranged so as to be fitted into a portion where the convex bead is discontinued.

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(Figure 1)