

Effective for Story-height reduction

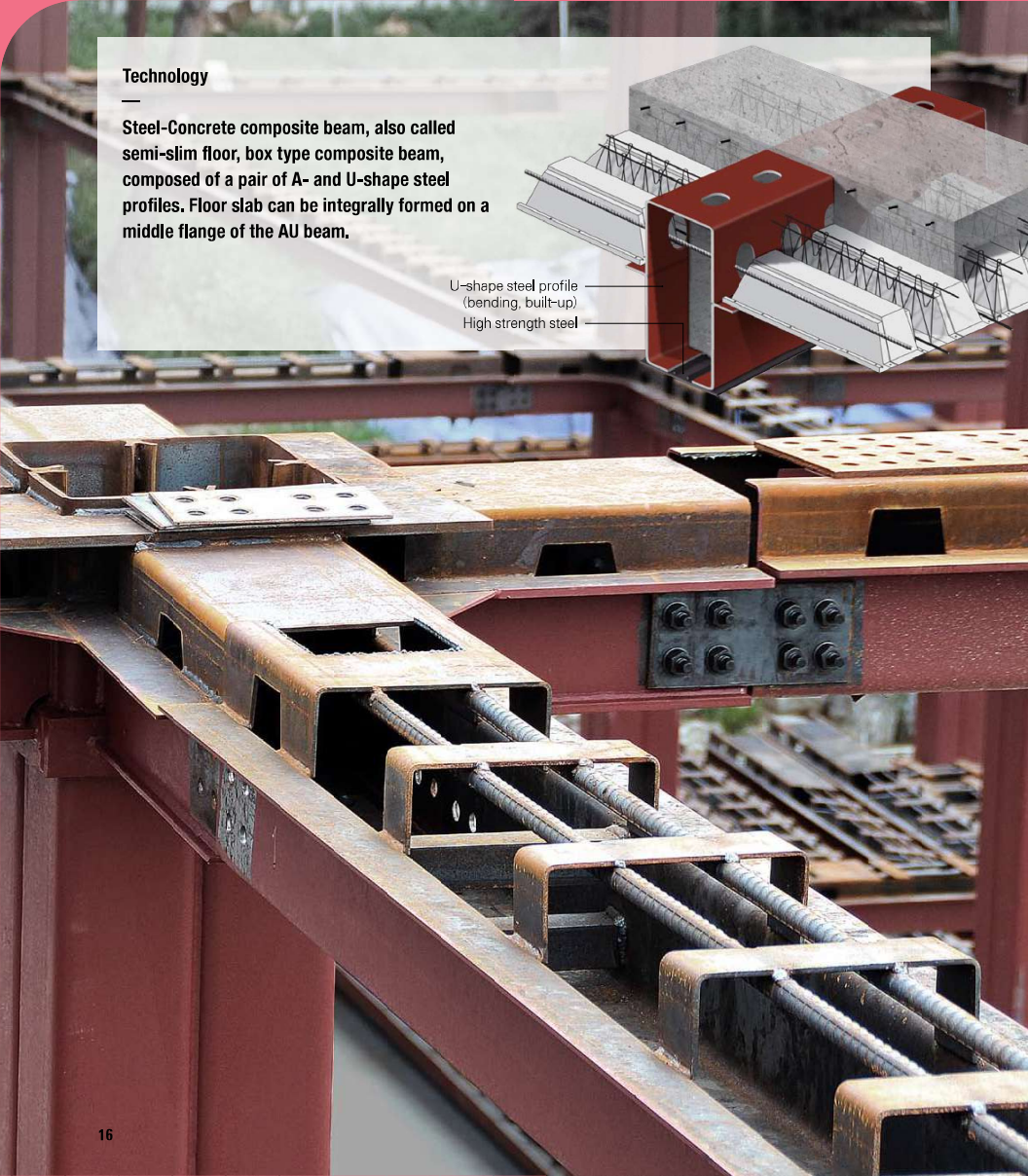
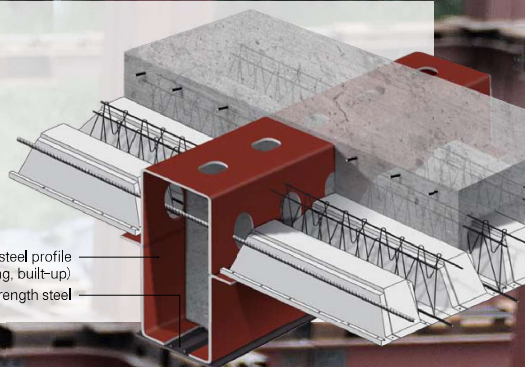
AU Beam

SLIM AU Concrete Filled Composite Beam

Technology

Steel-Concrete composite beam, also called semi-slim floor, box type composite beam, composed of a pair of A- and U-shape steel profiles. Floor slab can be integrally formed on a middle flange of the AU beam.

U-shape steel profile
(bending, built-up)
High strength steel



Characteristics/Merits

Floor system

Cap type anchor

Floor height reduction

- 1-way Floor System : with 4 AU girders, no small beam is necessary
- Steel anchor is unnecessary : A-shape cap functions to anchors
- Deck plate installation on edges of U-shape beam : 20% floor height reduction

Improvement of cross-section stability

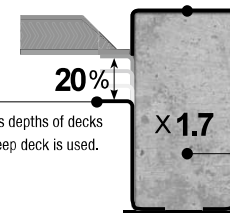
- Steel anchor integral cap without studs
- Closed shape → higher bending stiffness
- Effective for long-span beam on top-down construction

Concrete-filled beam

- Bending stiffness and strength improved
- 1.7 times better bending performance due to composite actions

Deck height control

- Floor height reduction due to various depths of decks
- Sub-beam can be removed when deep deck is used.
- 20% floor height reduction



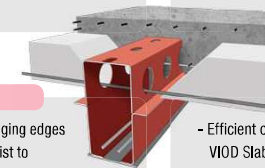
Features

A-shape cap steel anchor

- Closed cross-section improve structural capacities
- Composite action is enhanced by the cap

Easy reinforcement on compression/tension parts

- Compression part : reinforced by stiffeners on A-shape cap
- Tension part : reinforced by higher strength steel



U-shape beam

- function to concrete form and deck's hanging edges
- function to confinement member and resist to tension force

Wide floor system

- Efficient on 200mm deep deck plate (D-Deck, Cap Deck), VIOD Slab and hollow precast concrete slab

Applications

