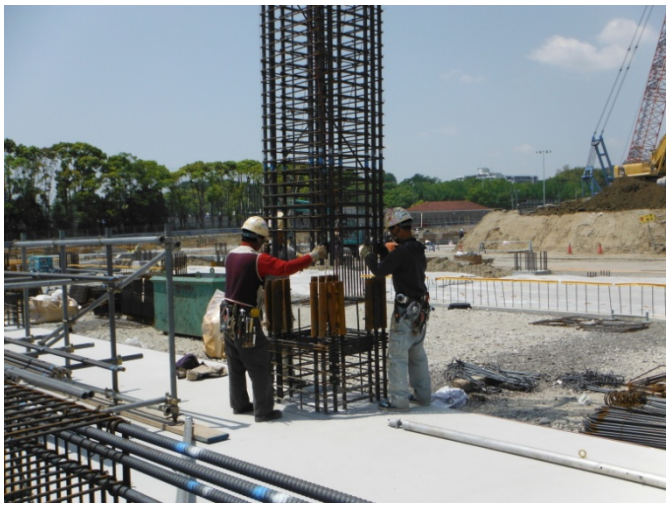
Suita City Football Stadium, Osaka, Japan

Owner: City of Suita, Osaka
Design: Takenaka Corp.
Yasui Architects & Engineers, Inc.
Contractor: Takenaka Corp.
Capacity: 40,000 seats Cost: U$140M
Construction: Dec. 2013～ Feb.2016
Structure: 6 story CIP - Precast Reinforced Concrete and Steel Structure
Const. area：24,712m^2, Total Const. area：66,355m^2
Land area：90,065m^2
Slim-Sleeve: 53,000 S8U～S11U for Precast beams
8,000 S11U for CIP columns
NXII Sleeve: 13,000 NXII-5～12 for Precast walls and columns

This project is a good example of public-private partnership that Gamba Osaka, a local football team has taken the operational management after it has been donated to the Suita City as a public facility made only by the private funds, such as donations. To save construction period and to improve aesthetic design, Precast members including precast column with Fc200N/mm^2 super high concrete were extensively used to complete in 22 months over 30 months planned by the conventional method and also save the number of skilled workers to 1/6. NMB Slim-Sleeves were used at precast raker beams, between precast beam- column, and CIP column rebar connections. NXII Sleeves were used at precast columns and handrail walls.

Construction Data Sheet

Slim-Sleeves used between precast beam-column connections.
Temporally slide the sleeve to one side rebar and slide back to middle of two bars at erection, and grout the sleeves. Much faster and productive compared with thread couplers, is the reason to use Slim-Sleeves.



First, install the Slim-Sleeves onto the rebar dowels from the foundation and erect the rebar cage above to slide in the sleeves at one time. High productivity at erection due to Slim-Sleeve multiple bar connection at one time.

Next, install the shear reinforcement around the sleeves, and grout the SS Mortar into the sleeves. Install forms around the rebars and pour concrete to make a CIP column.