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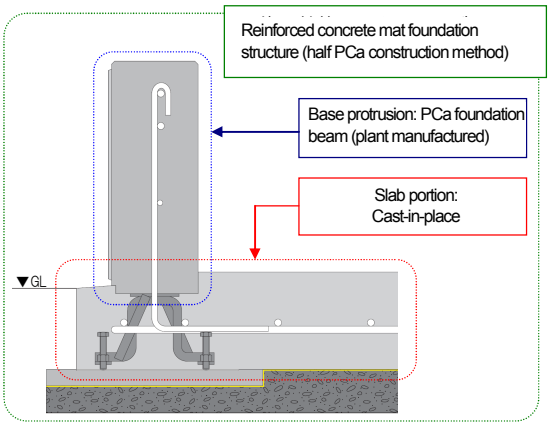
Sumitomo Forestry Co., Ltd.
Sigma Base Limited Liability Partnership

Introducing a Precast Concrete Foundation Construction Method

—Improving Building Precision for Custom-built Detached Housing Foundations and Achieving Quicker, Streamlined Construction—

Sumitomo Forestry Co., Ltd. (President and Representative Director: Akira Ichikawa; Head Office: Chiyoda-ku, Tokyo) and precast housing foundation company, Sigma Base Limited Liability Partnership (President: Yoshihiro Aizawa; Head Office: Chiyoda-ku, Tokyo) announced today the joint development of a new precast concrete (PCa) mat foundation construction method, that utilizes high-quality foundation beams, that were manufactured and supervised at a dedicated plant. This method offers benefits including improved construction accuracy, rationalization and a reduction in building time.

Sigma Base LLP is a consortium, established in April 2008, consisting of four major concrete manufacturers—Aizawa Concrete Corporation (Tomakomai City, Hokkaido), Maeta Concrete Industry Ltd. (Sakata City, Yamagata Prefecture), Hanshin Kogyo K.K. (Ono City, Hyogo Prefecture), and Infratec Co., Ltd. (Kagoshima City, Kagoshima Prefecture). The goal is to establish a business model to promote the use of precast concrete for housing foundations. A new mat foundation construction method using PCa was developed integrating the expertise in pre-casting concrete foundation beams possessed by Sigma Base LLP with Sumitomo Forestry's proprietary technologies for foundation structural design and construction knowhow.



In general, a reinforced concrete mat foundation is created at the construction site by pouring concrete over steel rebar that has been laid out. In contrast to this, the jointly developed method uses the half PCa construction method whereby the foundation beams (hereinafter the PCa foundation beams) are manufactured at a dedicated plant, shipped to the construction site and installed where the foundation slab is laid. The newly developed method makes it possible to attain execution precision by using the Sigma Base LLP's patented slide method for the rail joints and the jack/bolt method for adjusting the level of the PCa foundation beams. The aim is to improve efficiency at the construction site by using cast-in-place concrete for the foundation slabs. Also, by firmly binding the joints, mainly between PCa foundation beams, and between PCa foundation beams and the foundation slab, the entire reinforced concrete mat foundation was evaluated and approved by The Building Center of Japan.

Furthermore, through integration with Sumitomo Forestry's proprietary optimal foundation design and by implementing structural calculations for the foundation depending on the plan for each residence, it is possible to develop an optimal design for PCa foundation beams and foundation slabs, and enable the sharing of parts and improve efficiency. Consequently, in contrast with the conventional cast-in-place construction method, by using the PCa mat foundation construction method, the foundation construction period is reduced by about half, while costs remain roughly the same.

The new addition of the PCa mat foundation construction method to its list of foundation construction methods will allow Sumitomo Forestry to recommend optimal methods to customers, based mainly on design plans and construction conditions. The PCa foundation beams will be gradually introduced in Miyagi, Fukushima, Hyogo, and Okayama prefectures, as a supply system is already in place. The ultimate goal is to adopt the PCa foundation beams as a standard specification nationwide.

Moreover, Sigma Base LLP, which handles production management and supply of the PCa foundation beams, aims to gradually expand its production system into the areas where Sumitomo Forestry is employing the PCa mat foundation construction method.