STAR-shaped Foundation Beam Construction Method

– Abstract –

1. This technique creates large open holes as large as half the beam depth.

2. It can be utilized on various buildings such as condominium apartments and distribution warehouses.

3. This technique has obtained a performance verification certificate from the General Building Research Corporation of Japan in December 2014.

– Advantages –

1. It provides much more efficient reinforcement than the traditional method with a star-shaped reinforcement bar.

2. More than 1,800 mm beam depth is recommended for 600 mm diameter open hole. By implementing our technique, the beam depth can remain as small as 1,200 mm.

3. This technique also enables labor saving which results in lowering the principal basement and earthwork frame construction budget 5 to 10% compared to conventional methods.

Comparison between STARS Method with the conventional method