The instructions below refer to the HSD-ULTRA High Capacity Shear Dowel. The HSD Shear Dowel is installed in a similar manner.

Components

The HSD-Set consists of HSD-D Dowel Component and HSD-S Sleeve Component.

The HSD-ULTRA-Set consists of HSD-ULTRA-D Dowel Component and HSD-ULTRA-S Sleeve Component.

Both, HSD Shear Dowel and HSD-ULTRA High Capacity Shear Dowel are available as versions that allow vertical movement. These are marked as HSD-V and HSD-ULTRA-V, respectively.

The HSD-V-Set consists of the HSD-D Dowel Component and the HSD-SV Sleeve Component.

The HSD-ULTRA-V-SET consists of the HSD-ULTRA-D Dowel Component and the HSD-SL Sleeve Component.

Dowel and sleeve are delivered separately and have to be combined on site after the concrete has hardened.

Installation

1. Ensure that the part numbers of the components match the specifications in the drawings.

2. Nail sleeve to formwork. Do not remove the sticky label, this prevents concrete from entering the sleeve.

Make sure, the sleeve is installed in the right direction.
The label on the sleeve indicates the upper side!

Make sure the sleeves are installed as accurately as possible in the horizontal plane to allow unimpeded horizontal movement of the dowel. Improper installation leads to binding of the dowel in the sleeve as it tries to move. This causes concrete cracking – and is the leading cause of failure in dowel systems.

Installation

③ Place the local reinforcement around the sleeve and pour the concrete.

- Ensure proper concrete vibration to accomplish appropriate concrete compaction around the sleeve!
- Ensure that the reinforcement bars are installed as specified by the engineer!

④ When the concrete has achieved sufficient strength, remove the formwork and peel off or puncture the label.

⑤ Position the compressible joint filler.

⑥ Push the dowel component through the filler until it is fully inserted in the sleeve.

- Make sure, the dowel is installed in the right direction. The Label on the dowel indicates upper side of the dowel!!

⑦ Install rebar cage and pour the concrete.

- Ensure proper concrete vibration to accomplish appropriate concrete compaction around the dowel!!
- Ensure that the reinforcement bars are installed as specified by the engineer!