

## Installation Guide Lockable Dowels

### Slab-to-Slab Lockable Dowels

Although installation is shown for the ESDQ-L20, the procedure is the same for the HLDQ-L30.

Nail the sleeve to the formwork either central in the slab or for slab depths over 300mm so the top of the void former is level with the top of the slab. Do not remove the label over the nailing plate as this prevents ingress of concrete into the sleeve.

Fix the local reinforcement to Engineer's detail based on Leviat's recommendations. Pour the concrete, and when of sufficient strength, strike the formwork.

Puncture the label to reveal the cylindrical sleeve only and insert the dowel until it is approximately 20mm from the back of the void former. Ensure the lid is secured to prevent debris from entering the void former.

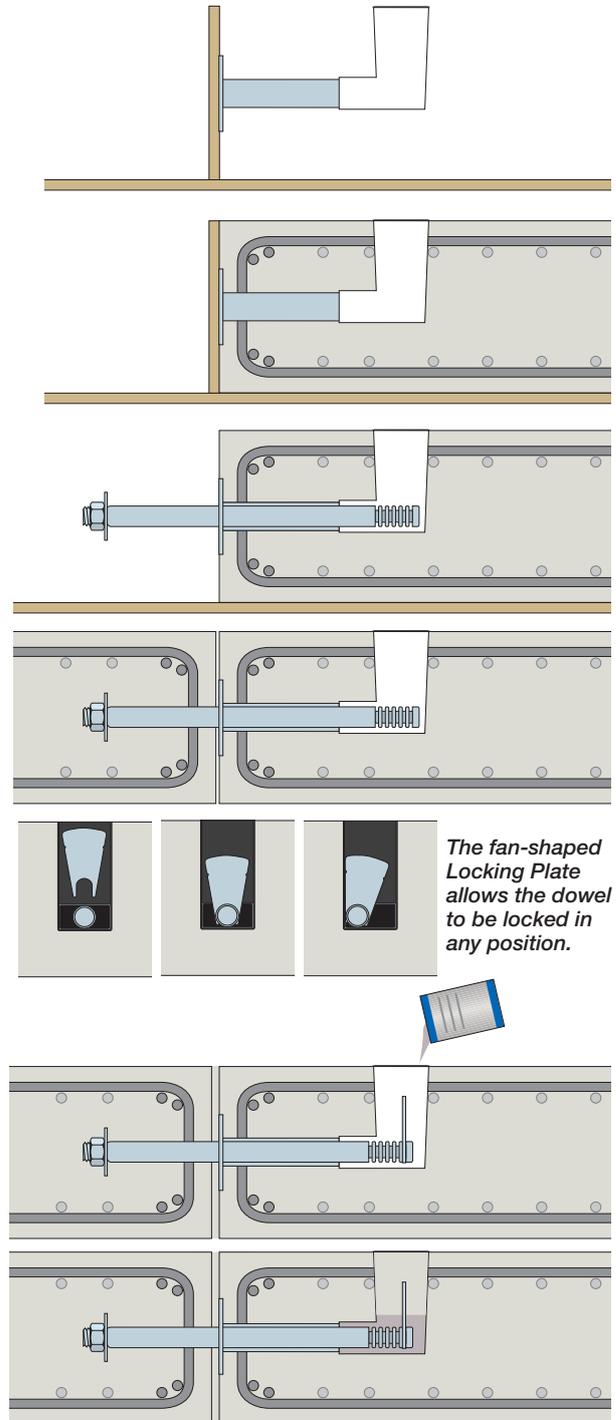
Fix the local reinforcement around the dowel component and pour the concrete.

After a predetermined time period (generally 60-120 days), when movement between the slabs has stabilised and the joint between the slabs has been filled, the dowel is ready to be locked. Fit the Locking Plate on a groove in the centre of the void former.

Mix the two-part epoxy resin and pour into the void former. It is essential the resin flows along the stainless steel box section towards the joint and reaches the notches on the locking plate, which indicate minimum resin depth. Joint must be filled before resin is installed; Leviat can provide information on a suitable joint filler.

After 24 hours the void former can be filled with cementitious material, level with the top of the slab, to complete the installation. The locked dowel continues to transfer vertical load between the slabs, but movement can no longer take place.

**Notes:** Where deep concrete pours are proposed, the installation will require further consideration. More robust fixing of the sleeve and dowel components will be necessary, to avoid displacement during casting of the concrete. Ensure joint has been filled before pouring resin.

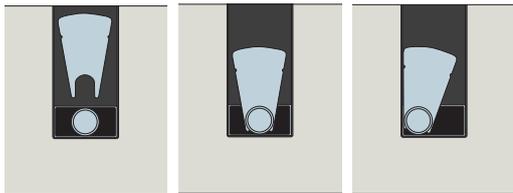


## Slab-to-Wall Lockable Dowels

Nail the threaded anchor to the formwork so the dowel will be central in the adjoining slab or within 150mm of the top of slabs over 300mm. Fix the local reinforcement and cast the concrete. Reinforcement around the Ancon Threaded Anchor should be a minimum diameter of 12mm, installed at maximum 200mm vertical and horizontal centres.

When concrete reaches sufficient strength, strike the formwork and remove nailing plate. Screw the dowel into the anchor. Puncture the label of the sleeve to reveal the cylindrical sleeve only. Push the sleeve over the dowel, until the dowel is approximately 20mm from the back of the void former. Ensure the lid is secured to prevent debris from entering the void former.

Tie sleeve to reinforcement and pour concrete. After a predetermined time period (generally 60-120 days), when movement between the slabs has stabilised and the joint between the slabs has been filled, the dowel is ready to be locked. Fit the Locking Plate on a groove in the centre of the void former.

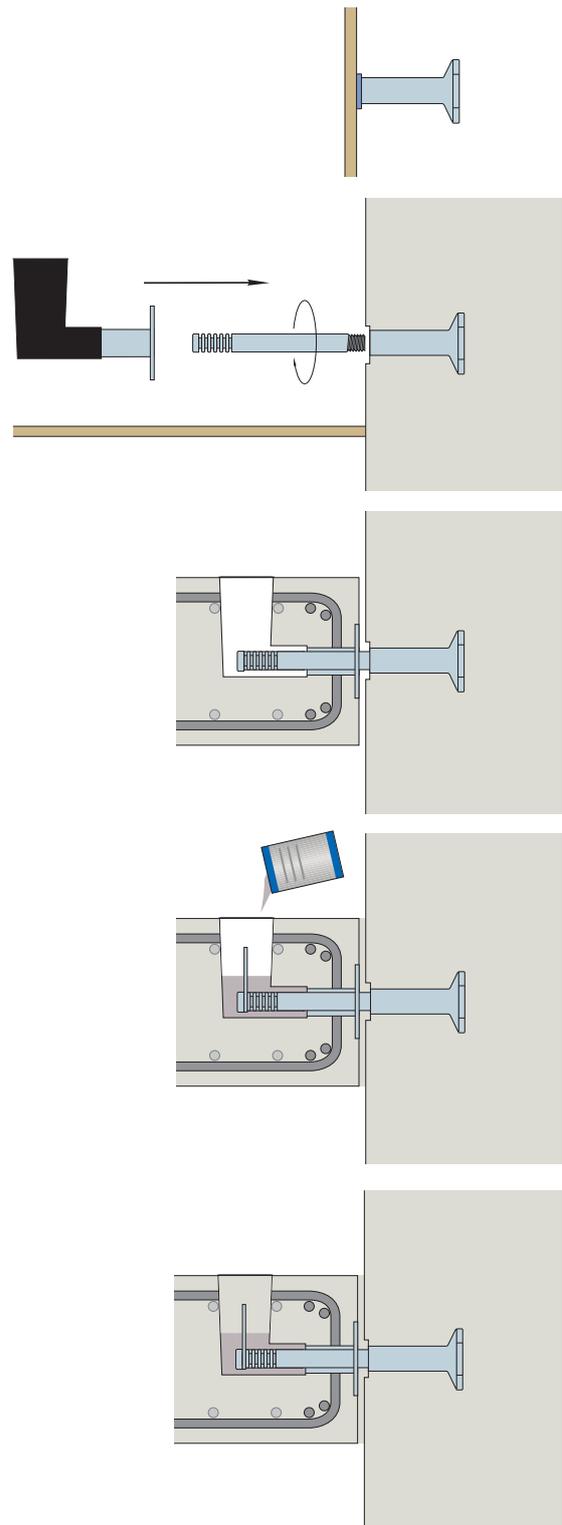


*The fan-shaped Locking Plate allows the dowel to be locked in any position.*

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