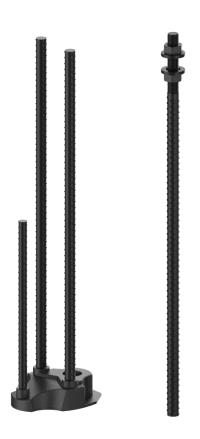




# **MOMENT MPS-T Precast Shoe Installation Instruction**



## Procedure - In Precast Factory

1. Drill holes onto bottom column formwork, according to location of Moment Precast Shoe. The hole size on formwork varies according to MPS-T size. Refer to Table 1.

MPS-T Size	MPS-T Fixer Threading	Required Hole Size (mm)
MPS-T16	M10	11
MPS-T20	M12	13
MPS-T24	M16	17
MPS-T30	M16	17
MPS-T39	M16	17

Table 1: Hole size on formwork for MPS-T fixer installation





- 2. Screw in both Tension and Compression rebars onto MPS-T Base Plates, forming an assembly. Tighten the rebars using a wrench.
- 3. Secure MPS-T assembly to formwork using MPS-T Fixer. The Fixer consist of 3 parts; Bolt, Bolt Plate, and Wing Nut. First, unscrew the Bolt from the Bolt Plate. Next place the Bolt Plate on the hole of the MPS-T Base Plate. Then, screw in the Bolt including wing nut from the opposite side of formwork. Finally, tighten the Wing Nut.
- 4. There are 2 types of recess formers; Edge Recess Former and Corner Recess Former. Place the suitable type recess former on the MPS-T cavity as shown in
- 5. Figure 1. Ensure both Top and Bottom parts are used.
- 6. Secure recess formers using GI wire or masking tape. This prevents the recess former from moving about during concrete pouring.

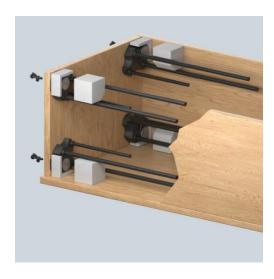


Figure 1: MPS-T installation onto formwork, using corner recess formers





## Procedure - On Site - Anchor Bolt Installation

- 1. The MPS-T Anchor bolts are delivered pre-assembled as a set with 2 nuts and 2 washers.
- 2. To install and concrete, it is recommended to use a reusable frame, as shown in Figure 2.
- 3. The anchor bolts are then screwed and secured onto this frame. Refer to Table 2 for recommended clearance hole diameter.
- 4. The Anchor Bolts must be correctly positioned and set in the specific axes and planes. Protect the bolt threads from dirt e.g. concrete splatter when pouring the concrete by using MPS-T End Caps.



Figure 2: Reusable frame for anchor bolt installation on site

MPS Size	Diameter of the clearance holes in the fixture (mm)	
MPS-T 16	18	
MPS-T 20	22	
MPS-T 24	26	
MPS-T 30	33	
MPS-T 39	42	

Table 2: Hole size on formwork for MPS-T anchor bolt installation





## Procedure - On Site - Column Installation



Figure 3: Column installation on site

- 1. Adjust and set the bottom nuts and washers of the anchor bolts to the required height, shown as shown in Figure 3.
- 2. Positioning and subsequent adjustment of heavy columns is facilitated with shims which are placed dead center under the column.
- 3. When moving columns by crane the anchor bolts threads must be protected using MPS-T End Caps.
- 4. Maneuver the precast column over the anchor bolts with a crane and slowly lower into the correct position.
- 5. Fix the upper washers and nuts to the anchor bolts and tighten by hand.
- 6. Small, lightweight columns: steel shims are not required; the weight of the column rests on the bottom nuts. The column can be adjusted vertically in both directions by turning the bottom nuts.
- 7. Large heavy columns: the weight of the column is rested on a stack of steel shims in the central point under the column, the bottom nuts are adjusted to a level 5 mm lower. The column weight rests only on the shims.
- 8. By turning the upper nuts the column is vertically adjusted in both axes.





9. Tighten the upper and lower nuts by hand using suitable wrench, see Figure 4.



Figure 4: Tighten upper and lower nuts using suitable wrench

- 10. The joint between the column, the foundation and the recess must be filled with an appropriate highstrength low-shrink mortar according to manufacturer's specification.
- 11. The mortar strength must be at least the same strength as the concrete used for the column concrete. Full load capacity is only achieved after the mortar has fully cured.
- 12. Filling may be done from the side or with a cast-in pour-pipe, as shown in Figure 5.

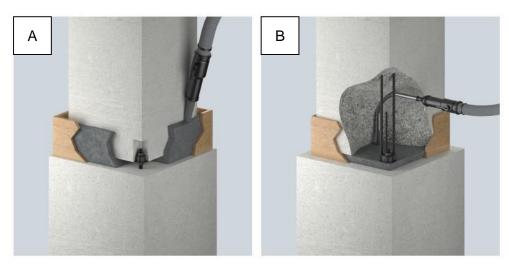


Figure 5: Optional grouting processes: from side (A) or cast-in pour-pipe (B)

13. The process must be carefully monitored to ensure all cavities are completely and evenly filled with mortar and the finish flush with the column.

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