

# Tubbox® Multi column formers Installation Guidelines

## A. Transport

- Always transport Tubbox® Multi on a flat level surface supported over its whole length. It is important to avoid any pressure points on the form surface.
- Protect Tubbox® Multi column formers from abrasive loading.
- Always securely fasten Tubbox® Multi down on pallets during transport.

### Attention:

This column former was produced to a procedure controlled according to DIN EN 9001, tested and delivered in faultless condition. Transport damages or any other faults must be indicated on the freight papers upon receipt of the material. Our guarantee is restricted only to damages which are noted on the freight papers immediately upon receipt of the goods.

## B. Storage

- Always store Tubbox® Multi (assembled or unassembled) horizontally and protect the internal casting surface.

## C. Assembly

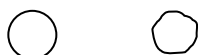
- Place Tubbox® Multi with the markings facing towards the floor.
- Strip off the internal protective film.
- Pull together the two ends, lock profile rails into place and install tighteners by slightly pressing profile rails.
- Install tighteners so that the locking pin can be hit in from the upper side (observe marking).
- Install a tightener at each of the marked positions; at least 3 per metre are required.
- Fix all tighteners loosely and align them accordingly.
- Once all tighteners are in position fasten them tightly simultaneously by carefully hitting the locking pins in with a hammer.

## D. Installation

- Prior to erecting the column former ensure that the reinforcement and spacers are correctly positioned. Lower Tubbox® Multi gently over the reinforcement avoiding unnecessary contact with the surface of the former.
- Tubbox® Multi markings must remain visible at all times.
- Tubbox® Multi must be secured safely in position at the base. It is best to use the special MAX FRANK "footpoint" support. Alternatives are acceptable provided they securely position the column former and maintain the shape.
- Tubbox® Multi must also be supported by propping near the top. Fasten in position the MAX FRANK head piece using clamping straps. Appropriate props should then be used to position and support the column formwork.
- If not using the MAX FRANK head piece and clamping straps, please ensure for any other system that large-surface prop heads are used to avoid pressure points.
- Before concreting, please check that the form is the correct height, that it is in the correct position and that it is vertical.

### Attention:

Do not force the column former over out of position reinforcement or over protruding spacers. Such spacers or reinforcement bars will damage the formwork during installation. Additionally, the formwork is likely to be pressed into an oval shape.



## E. Concreting (acc. to DIN 1045)

- Initially pour to a height of 30 cm only and compact. Check former alignment and roundness and then continue with pour.
- Avoid free fall heights in excess of 1.0 m to prevent segregation of the concrete.
- Use either a concrete chute or pump hose (preferable) to pour in stages of approx. 50 cm and then compact.
- Pouring rate according to fresh concrete pressure
- Only use immersion vibrators for compaction. The use of external vibrators is prohibited.
- Take precautions to avoid the delivery hose or vibrator touching the inner surface of the former!
- Re-vibrate after finish of all concreting, recheck alignment and dimensions.

## F. Stripping

Tubbox® Multi should remain in position for a similar duration to that of other formed elements. Observe the specification requirements regarding curing times, etc.

Start by knocking all the locking pins loose. Once they are loose start to remove each tightener in turn. The former should then be gently peeled back exposing the concrete surface. Immediately upon stripping all concrete residues should be removed from the surface of the former using a damp cloth. If not to be reused immediately the former and all accessories should be stored securely to avoid damage. Take particular care to protect the inner surface of the former.

Please note that the final finished surface is influenced by many factors other than the surface of the formers, such as concrete mix, placement technique, degree of compaction, curing, etc, all of which are outside the control of MAX FRANK.

## G. Reuse

Before re-use, the inner surface of the former should be clean and coated with a high quality release agent (Trennfit Super or equivalent) using a soft, clean cloth.

**Tubbox® Multi is designed to be reusable. However, the exact number of uses that are possible cannot be determined in advance as they depend upon conditions outside the control of MAX FRANK such as careful handling, cleaning and storage of the column formers between uses.**

**The company MAX FRANK does not have any influence on the above conditions, nor the concrete and its placement. We therefore cannot be held liable for the concreting results and surface finish produced with re-use of Tubbox® Multi column formers.**

Above installation details are given according to our best knowledge and experiences. We shall be delighted to discuss with you any aspects of your column former project.

|   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|