

Manufacturer's Declaration

for temporary works calculation of Stremaform[®] formwork elements

By this Manufacturer's Declaration, MAX FRANK GmbH & Co. KG confirm that all products within the range of our Stremaform[®] formwork elements fulfil the ultimate limit state design according to the temporary works calculation (static report) dd. 24.01.2020, project: 460/2017 T.

The static verifications in the ultimate limit state were carried out for a

- **maximum fresh concrete pressure $\sigma_{hk,max} = 45 \text{ kN/m}^2$**
(thickness $h \leq 2000 \text{ mm}$ or installation dimension $\leq 1800 \text{ mm}$)
- **maximum fresh concrete pressure $\sigma_{hk,max} = 32,7 \text{ kN/m}^2$**
(thickness $h \leq 3800 \text{ mm}$ or installation dimension $\leq 3600 \text{ mm}$)

in compliance with the following boundary conditions:

- hydrostatic fresh concrete pressure $\sigma_{hk,max,hydr} = \gamma_c * H$
- specific weight (bulk density) of the fresh concrete pressure $\gamma_c = 25 \text{ kN/m}^3$
- adherence to the product-specific installation instructions for Stremaform[®] formwork elements acc. to MAX FRANK Homepage www.maxfrank.com.

According to DIN 18218 or CIRIA Report 108, the admissible rate of pouring v [m/h] is determined by the load-bearing capacity (hydrostatic or maximum fresh concrete pressure) of the Stremaform[®] formwork elements and the final setting of the used concrete.

The following Stremaform[®] design variants have been demonstrated (image 1)

- Stremaform[®] formwork elements with an **intermediate stiffening** up to an **installation dimension of $\leq 500 \text{ mm}$** (installation dimension $> 300 - \leq 500 \text{ mm}$: intermediate stiffening **with a stirrup** for Stremaform[®] formwork elements with a sealing)
- Stremaform[®] formwork elements with a **stiffening** up to an **installation dimension of $\leq 800 \text{ mm}$**

- Stremaform® formwork elements with a **stiffening and back anchoring** up to an **installation dimension of ≤ 3600 mm**

Bracing depending on the installation dimension

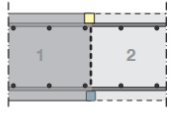
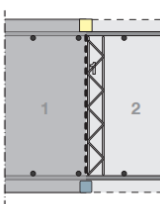
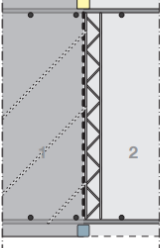
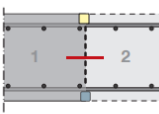
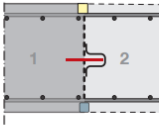
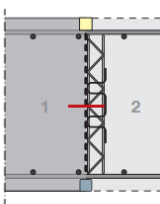
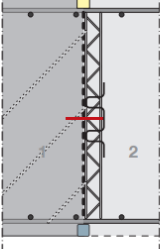
	Installation dimension ≤ 300 mm	Installation dimension ≤ 500 mm	Installation dimension ≤ 800 mm	Installation dimension ≤ 3600 mm
Without sealing				
Within sealing				
	intermediate stiffening with such an installation dimension no further stiffenings are necessary	intermediate stiffening a stirrup at the sealing level stabilizes the entire construction	stiffening lattice girders stabilize the element against the concrete pressure	stiffening with back anchoring in addition to the lattice girders, a back-anchoring in the 1st concrete section is recommended

Image 1: Stremaform® design variants

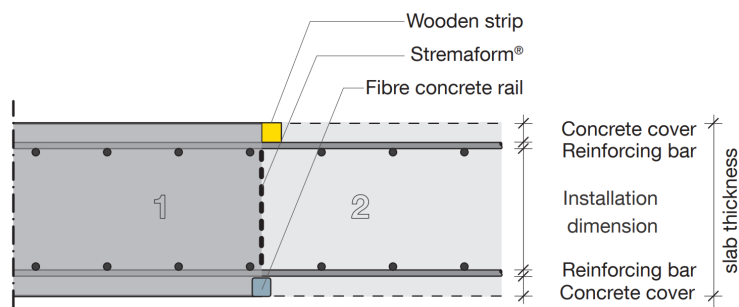


Image 2: Difference between the installation dimension and slab thickness

MF Product Management

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