

## Manufacturer's Declaration

# for temporary works calculation of Stremaform<sup>®</sup> formwork elements

By this Manufacturer's Declaration, MAX FRANK GmbH & Co. KG confirm that all products within the range of our Stremaform<sup>®</sup> 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<sup>®</sup> formwork elements acc. to MAX FRANK Homepage [www.maxfrank.com](http://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<sup>®</sup> formwork elements and the final setting of the used concrete.

The following Stremaform<sup>®</sup> design variants have been demonstrated (image 1)

- Stremaform<sup>®</sup> 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<sup>®</sup> formwork elements with a sealing)
- Stremaform<sup>®</sup> 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

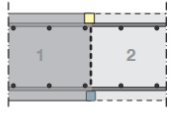
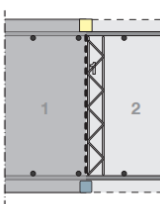
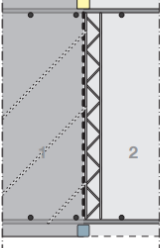
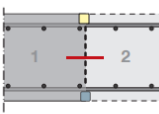
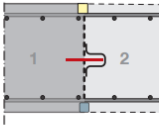
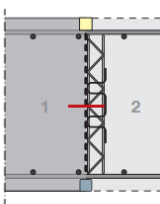
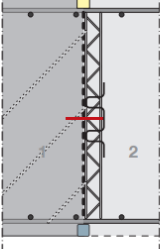
	Installation dimension ≤ 300 mm	Installation dimension ≤ 500 mm	Installation dimension ≤ 800 mm	Installation dimension ≤ 3600 mm
<b>Without sealing</b>				
<b>Within sealing</b>				
	intermediate stiffening with such an installation dimension no further stiffen- ings are necessary	intermediate stiffening a stirrup at the sealing level stabilizes the entire construc- tion	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

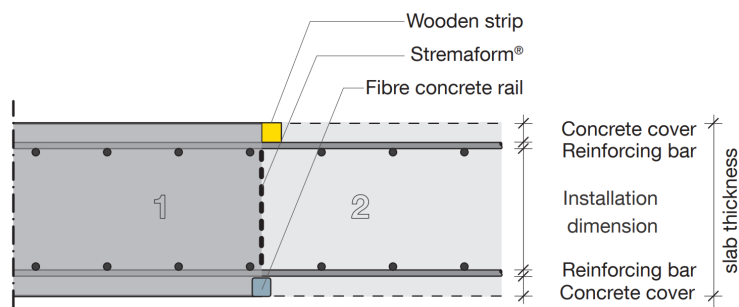


Image 2: Difference between the installation dimension and slab thickness

### MF Product Management

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