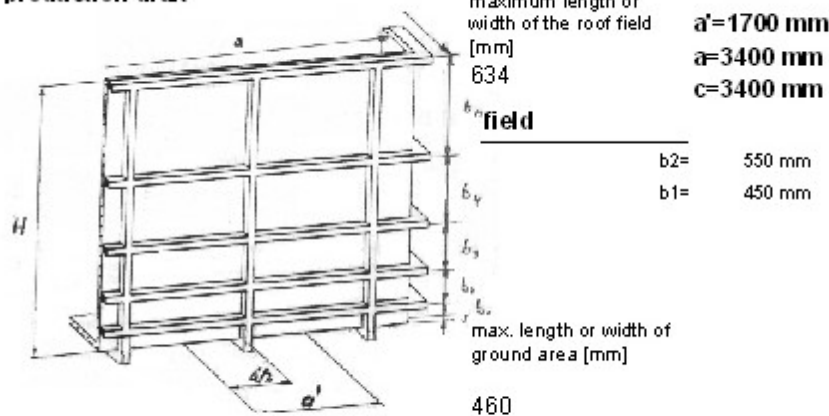


Tankdesigner – Tank Calculations Sample production draft

production draft



nec. wall thickness **17,5 mm**
 next possible thickness out of prod. range **20 mm**
 nec. base thickness **20 mm**

rim reinforcement:

sq. and rect. tubing
steel profile (ST37)

field	B	H	s
2	40	± 60	± 3

nec. reinforcement in solid thermoplastic con
thermoplastic stiffener made from PE 80

allowable deflection acc. DVS 1%		allowable deflection 2.5% (not acc. DVS)		allowable deflection 5% (not acc. DVS)	
H	B	H	B	H	B
465,0	± 40,0	357,0	± 40,0	284,0	± 40,0

circumferential reinforcement:

sq. and rect. tubing
steel profile (ST37)

field	B	H	s
1	40	± 60	± 2

nec. reinforcement in solid thermoplastic con
thermoplastic stiffener made from PE 80

allowable deflection acc. DVS 1%		allowable deflection 2.5% (not acc. DVS)		allowable deflection 5% (not acc. DVS)	
H	B	H	B	H	B
404,0	± 40,0	298,0	± 40,0	236,0	± 40,0

vertical stiffener

sq. and rect. tubing steel profile (ST 40 ± 60 ± 2 mm (B ± H ± s)

for all stiffener: B = flange width = wall contact surface

Please pay attention to following preconditions: The distance between the edge of the tank and the first vertical stiffener should not exceed 0.5 of the distance between the vertical support. All vertical supports have to be fixed in the base area to avoid a deflection at the base point. This can be realized by following constructive methods: - Welding of the vertical stiffener to an equal base stiffener that is placed underneath the tank's base plate and connected with the vertical support placed at opposite side (see above drawing). Due to this joint construction a certain base reinforcement becomes nec. Minimum base support please find shown next to above drawing. - Fixation of the vertical stiffener at the ground with an adequate welding technique. - or like adequate methods