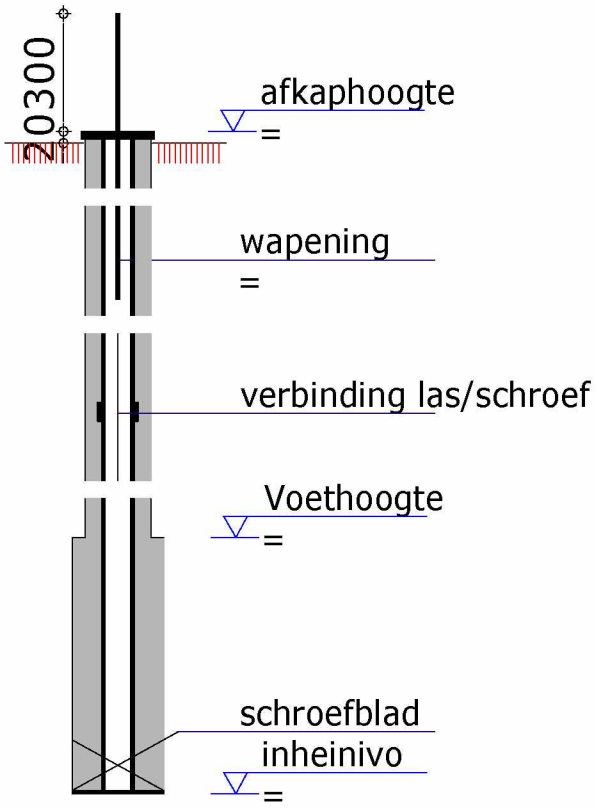
# Berekening Schroefinjectiepaal

| | | | | | |
|---|---|---|---|---|---|
| werk | 21/1628 | versie | 1 | datum | 15-apr-21 |
| opdrachtgever | Aann.bedr. Termaaten b.v. | | | | |
| lokatie | Waalsteeg 8-10 Amsterdam | | | | |
| sondering | Hooyberg 210503-1 dd 9 feb 2018 | | | NAP | referentie |




ALG PAALDETAIL

| | | | | | |
|---|---|---|---|---|---|
| grondwaterstand | NAP | - | | | |
| peil | NAP | 0,00 | | | |
| maaiveld | NAP | -0,70 | | | |
| o.k.fundering | NAP | -1,00 | | | |
| neg kleef nivo | NAP | -1,00 | | | |
| pos kleef nivo | NAP | -15,50 | | | |
| voetnivo | NAP | -19,00 | | | |

## paalgegevens

| | | |
|---|---|---|
| buisdiameter | 0,114 | m |
| paaldiameter | 0,180 | m |
| wanddikte | 0,009 | m |
| voetdiameter | 0,350 | m |

## belastingen

| | | |
|---|---|---|
| $F_{s;d}$ | 510 | kN |
| $L_{schacht;nk}$ | 0,00 | m |
| $p_{s;nk;rep}$ | 0,00 | MPa |
| $F_{s;nk;d}$ | 0 | kN |
| $F_d$ | 510 | kN |

## grondmechanisch

| | | |
|---|---|---|
| $\beta$ | 1,000 | - |
| $\alpha_p$ | 0,7 | - |
| $\alpha_s$ | 0,008 | - |
| $\xi_3$ | 1,39 | - |
| s | 1 | |
| $K_{o;tan\alpha}$ | 0,25 | - |
| $\tau_{m;b}$ | 1,2 | - |
| $\tau_{i;rep}$ | 13 | kPa/m |
| $\tau_{i;sat;rep}$ | 3 | kPa/m |
| $q_{c;I;gem}$ | 20,34 | MPa |
| $q_{c;II;gem}$ | 20,34 | MPa |
| $q_{c;III;gem}$ | 7,60 | MPa |
| $q_{b;max}$ | 9,78 | MPa |
| $R_{b;cal}$ | 941 | kN |
| $\delta L$ | 3,50 | m |
| $p_{r;max;sch}$ | 0,079 | MPa |
| $R_{s;cal}$ | 304 | kN |
| $R_{cd}$ | **746** | kN |
| u.c. | 0,68 | - |

## materiaalgegeven

| | | |
|---|---|---|
| betonkwaliteit | C20/25 | - |
| btnstaalkwal. FeB | 500 | HWL |
| hoofdwapening | 1ø12 | - |
| wapening lengte | 3 | m |
| steklengte | 0,4 | m |
| $A_b$ | 20714 | $mm^2$ |
| $f'_b$ | 15 | MPa |
| $f_{s;d}$ | 435 | MPa |
| $N'_d/(f'_b*A_b)$ | 1,6414E-06 | - |
| e | 0,010 | m |
| $N'_d/(f'_b*A_b)*e/h$ | 9,1189E-08 | - |
| $\omega_{ot}$ | 0,3 | - |
| $A_s$ | 62 | $mm^2$ |
| $A_{s;aanw}$ | 113 | $mm^2$ |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**HARMENJANSWEG 5 zw 2011 AZ HAARLEM**
**MOB** 5.1,2,e **plukk@xs4all.nl**


**van toepassing zijn DNR 2011**