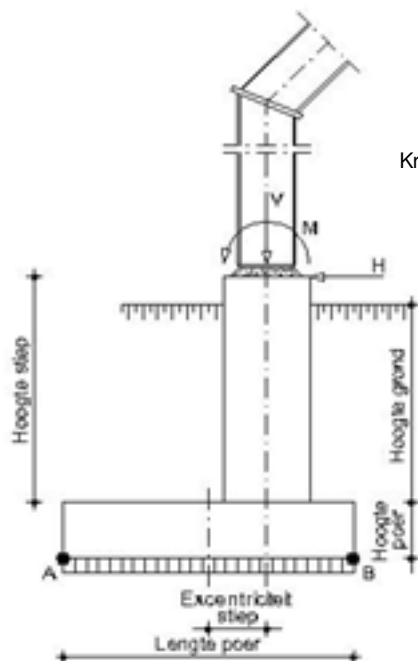


**Projektschrijving.****Kantelen, evenwicht, schuiven en gronddruk poer volgens Eurocode****Knoop :** A**Grondparameters:**

|                       |                    |
|-----------------------|--------------------|
| $\phi = 32,5^\circ$   | $K_{sur,a} = 0,30$ |
| $\phi_d = 28,3^\circ$ | $K_{sur,p} = 3,32$ |

**Belastingsfactoren:**

| BC | $\gamma_{tg}$ |
|----|---------------|
| A  | 0,9           |
| B  | 1,35          |

**Maximale reacties uit de belastingscombinaties:**

| BC | $H_d$<br>[kN] | $V_d$<br>[kN] | $M_d$<br>[kNm] |
|----|---------------|---------------|----------------|
| FC | 50,00         | 60,00         |                |

**Afmetingen poer:**

|                      | Lengte<br>[mm] | Breedte<br>[mm] | Hoogte<br>[mm] | Gewicht<br>[kN/m <sup>2</sup> ] | $V_{rep}$<br>[kN] |
|----------------------|----------------|-----------------|----------------|---------------------------------|-------------------|
| Poer                 | 2200           | 2200            | 300            | 24,0                            | 34,85             |
| Grond                | 2450           | 2450            | 500            | 18,0                            | 54,02             |
| Stiep                | 300            | 300             | 1000           | 24,0                            | 1,35              |
| Excentriciteit stiep |                | 0               |                | Totaal:                         | 90,22             |

**Kantelen:** Maximale U.C. = 0,42

| BC | $M_k A$ | $M_k B$ | $M_s A$ | $M_s B$ | Om A | Om B |
|----|---------|---------|---------|---------|------|------|
| A  | 65,00   |         | 155,32  |         | 0,42 |      |
| B  | 65,00   |         | 199,98  |         | 0,33 |      |

**Evenwicht bij negatieve kracht:**

| BC | $V_{d,spant}$ | $V_{d,poer}$ | $\Delta V$ |
|----|---------------|--------------|------------|
| A  |               |              |            |
| B  |               |              |            |

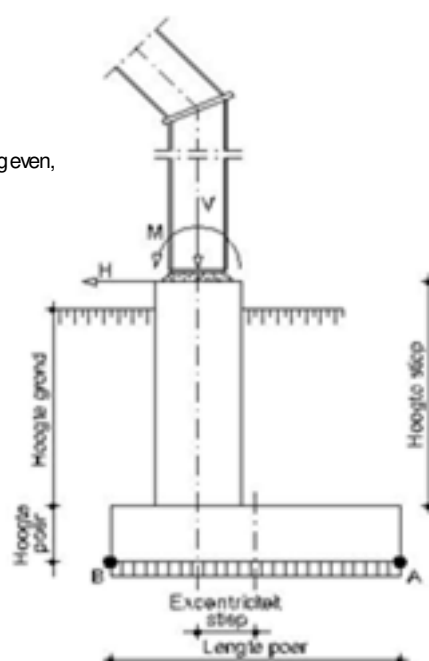
Evenwicht: 0 &gt; 0, Voldoet

**Schuiven:** Maximale U.C. = 0,7

| BC | $H_d$ | $\Delta V$ | $S_{h,d}$ | $F_{e,h,d}$ | U.C. |
|----|-------|------------|-----------|-------------|------|
| A  | 50,00 | 141,20     | 48,18     | 23,3318     | 0,70 |
| B  | 50,00 | 181,80     | 62,03     | 23,3318     | 0,59 |

**Gronddruk:**  $\sigma_{max,s,d}$  55,65 kN/m<sup>2</sup>

| BC | N      | M      | e    | $A_{ef}$ | $\sigma_{s,d}$ |
|----|--------|--------|------|----------|----------------|
| A  | 141,20 | 90,32  | 0,64 | 2,81     | 50,17          |
| B  | 181,80 | 134,98 | 0,74 | 3,27     | 55,65          |

**Knoop :****Grondparameters:**

|                       |                    |
|-----------------------|--------------------|
| $\phi = 32,5^\circ$   | $K_{sur,a} = 0,30$ |
| $\phi_d = 28,3^\circ$ | $K_{sur,p} = 3,32$ |

**Belastingsfactoren:**

| BC | $\gamma_{tg}$ |
|----|---------------|
| A  | 0,9           |
| B  | 1,35          |

**Maximale reacties uit de belastingscombinaties:**

| BC | $H_d$<br>[kN] | $V_d$<br>[kN] | $M_d$<br>[kNm] |
|----|---------------|---------------|----------------|
|    | 1,00          | 1,00          |                |

**Afmetingen poer:**

|                      | Lengte<br>[mm] | Breedte<br>[mm] | Hoogte<br>[mm] | Gewicht<br>[kN/m <sup>2</sup> ] | $V_{rep}$<br>[kN] |
|----------------------|----------------|-----------------|----------------|---------------------------------|-------------------|
| Poer                 | 2200           | 2200            | 300            | 24,0                            | 34,85             |
| Grond                | 2400           | 2400            | 500            | 18,0                            | 51,84             |
| Stiep                | 300            | 300             | 1000           | 24,0                            | 1,35              |
| Excentriciteit stiep |                | 0               |                | Totaal:                         | 88,04             |

**Kantelen:** Maximale U.C. = 0,01

| BC | $M_k A$ | $M_k B$ | $M_s A$ | $M_s B$ | Om A | Om B |
|----|---------|---------|---------|---------|------|------|
| A  |         | 1,30    |         | 88,26   |      | 0,01 |
| B  |         | 1,30    |         | 131,84  |      | 0,01 |

**Evenwicht bij negatieve kracht:**

| BC | $V_{d,spant}$ | $V_{d,poer}$ | $\Delta V$ |
|----|---------------|--------------|------------|
| A  |               |              |            |
| B  |               |              |            |

Evenwicht: 0 &gt; 0, Voldoet

**Schuiven:** Maximale U.C. = 0,02

| BC | $H_d$ | $\Delta V$ | $S_{h,d}$ | $F_{e,h,d}$ | U.C. |
|----|-------|------------|-----------|-------------|------|
| A  | 1,00  | 82,20      | 28,05     | 23,3318     | 0,02 |
| B  | 1,00  | 122,80     | 41,90     | 23,3318     | 0,02 |

**Gronddruk:**  $\sigma_{max,s,d}$  25,01 kN/m<sup>2</sup>

| BC | N      | M      | e    | $A_{ef}$ | $\sigma_{s,d}$ |
|----|--------|--------|------|----------|----------------|
| A  | 80,23  | 86,96  | 1,08 | 4,77     | 16,83          |
| B  | 119,85 | 130,54 | 1,09 | 4,79     | 25,01          |