

Berekening doorspuitbaarheid

dd 01-11-2018

betreft : nieuwbouw woning Rivierdijk 65
Hardinxveld-G'om

slaapkamer 1 $10,18 \text{ m}^2 \times 6 \text{ ltr/sec/m}^2 = 61 \text{ ltr/sec}$

2x draaikiëpraam max open 90° $\beta = 1$
 $h \times br \times \beta$

$$A_n = 1,296 \times 0,866 \times 1 = 1,12 \text{ m}^2$$

$$\leq A_n = \frac{2 \times 224 \text{ m}^2}{2} = 224 \text{ m}^2$$

$v = 0,1 \text{ m/s}$ (spuiten door 1 gevel)

$$Q_v = A_n \times v \times 1000 \quad 224 \times 0,1 \times 1000 = 224 \text{ ltr/sec}$$

$$224 \text{ ltr/sec} > 61 \text{ ltr/sec} \rightarrow \text{voldoet}$$

slaapkamer 2 $10,74 \text{ m}^2 \times 6 \text{ ltr/sec/m}^2 = 64 \text{ ltr/sec}$

2x draaikiëpraam max open 90° $\beta = 1$

$$A_n = 1,296 \times 0,866 \times 1 = 1,12 \text{ m}^2$$

$$\leq A_n = \frac{2 \times 224 \text{ m}^2}{2} = 224 \text{ m}^2$$

$v = 0,1 \text{ m/s}$ (spuiten door 1 gevel)

$$Q_v = A_n \times v \times 1000 \quad 224 \times 0,1 \times 1000 = 224 \text{ ltr/sec}$$

$$224 \text{ ltr/sec} > 64 \text{ ltr/sec} \rightarrow \text{voldoet}$$

blad 1

Kantoor $10,34 \text{ m}^2 \times 6 \text{ ltr/sec/m}^2 = 62 \text{ ltr/sec}$

2x draaikiepraam max open 90° $\beta = 1$

$$A_n = 1,296 \times 0,866 \times 1 = 1,12 \text{ m}^2$$

$$\sum A_n = \frac{2 \times}{2,24 \text{ m}^2}$$

$v = 0,1 \text{ m/s}$ (spuien door 1 gevel)

$$q_v = A_n \times v \times 1000 \quad 2,24 \times 0,1 \times 1000 = 224 \text{ ltr/sec}$$

$$224 \text{ ltr/sec} > 62 \text{ ltr/sec} \rightarrow \text{voldoet}$$

hobbykamer $13,34 \text{ m}^2 \times 6 \text{ ltr/sec/m}^2 = 80 \text{ ltr/sec}$

2 deuren max open 90° $\beta = 1$

$$A_n = 1,756 \times 2,30 \times 1 = 4,04 \text{ m}^2$$

$v = 0,1 \text{ m/s}$ (spuien door 1 gevel)

$$q_v = A_n \times v \times 1000 \quad 4,04 \times 0,1 \times 1000 = 404 \text{ ltr/sec}$$

$$404 \text{ ltr/sec} > 80 \text{ ltr/sec} \rightarrow \text{voldoet}$$

Kapsalon $25,61 \text{ m}^2 \times 6 \text{ ltr/sec/m}^2 = 154 \text{ ltr/sec}$

2 deuren max open 90° $\beta = 1$

$$A_n = 1,756 \times 2,30 \times 1 = 4,04 \text{ m}^2$$

$v = 0,1 \text{ m/s}$ (spuien door 1 gevel)

$$q_v = A_n \times 0,1 \times 1000 \quad 4,04 \times 0,1 \times 1000 = 404 \text{ ltr/sec}$$

$$404 \text{ ltr/sec} > 154 \text{ ltr/sec} \rightarrow \text{voldoet}$$

blad 2

Woonkamer + open keuken $65,02 \text{ m}^2 \times 6 \text{ ltr/sec/m}^2 = 390 \text{ ltr/sec}$

6 x draaikiepraam max open 90° $\beta = 1$

$$A_n = 1,296 \times 0,866 \times 1 = 1,12 \text{ m}^2 \times 6 = 6,72 \text{ m}^2$$

2 x dubbele deur max open 90° $\beta = 1$

$$A_n = 1,756 \times 2,30 \times 1 = 4,04 \text{ m}^2 \times 2 = 8,08 \text{ m}^2$$

$$\leq A_n \quad \underline{14,80 \text{ m}^2}$$

$$v = 0,4 \text{ m/s} \text{ (spuien door 2 gevels)}$$

$$q_v = A_n \times v \times 1000 \quad 14,80 \times 0,4 \times 1000 = 5920 \text{ ltr/sec}$$

$$5920 \text{ ltr/sec} > 390 \text{ ltr/sec} \rightarrow \text{voldoet}$$

Slaapkamer 3 $10,40 \text{ m}^2 \times 6 \text{ ltr/sec/m}^2 = 62,40 \text{ ltr/sec}$

2 x draaikiepraam max open 90° $\beta = 1$

$$A_n = 1,296 \times 0,866 \times 1 = 1,12 \text{ m}^2$$

$$\leq A_n \quad \begin{matrix} 2 \times \\ \underline{2,24 \text{ m}^2} \end{matrix}$$

$$v = 0,1 \text{ m/s} \text{ (spuien door 1 gevel)}$$

$$q_v = A_n \times v \times 1000 \quad 2,24 \times 0,1 \times 1000 = 224 \text{ ltr/sec}$$

$$224 \text{ ltr/sec} > 62 \text{ ltr/sec} \rightarrow \text{voldoet}$$