## SitaDSS assembly guidelines

## PE-pipe fixing rule

## PE pipelines $\leq 1.0 \mathrm{~m}$ are installed without individual suspension.

PE pipes from 1.0 to 3.0 m are suspended with SitaDSS Single, see table 1 for the clamp spacing.
PE pipes $\geq 3.0 \mathrm{~m}$ are mounted with an accompanying rail (SitaDSS Rail). For pipe clamp spacing of the SitaDSS Clamp, see also table 1.

The thermal length changes in the vertical and horizontal pipe lines are stopped by the formation of fixed points at the beginning and end of the respective line.


## Legend

## Distance between

La SitaDSS Downs - vertical fastening
Lb Suspensions of the SitaDSS Rail

Ld Suspension of the SitaDSS Rail and a mounting rail fixed point
Le SitaDSS Clamps - horizontal mounting
Lf Suspension of the SitaDSS Rail and a fixed point of the structure
Lg Structural fixed points

Lz Recommended wall clearance

## Dimensions

Table 2
for pipes DN 40 to $160 \leq 2.5 \mathrm{~m}$
for pipes DN 200 to $315 \leq 2.0 \mathrm{~m}$
$\leq 300 \mathrm{~mm}$
Table 1
$\leq 300 \mathrm{~mm}$
for pipes DN 40 to $200 \leq 15.0 \mathrm{~m}$
for pipes DN 250 and $315 \leq 10.0 \mathrm{~m}$
Table 2

## General rule:

The connection underneath the rainwater outlet and the lower outlet bend at the emergency drainage downpipe to the outside is installed by use of a $88.5^{\circ}$ bend, all other changes of direction are made with $45^{\circ}$ bends.

Table 1: (distance Le see chart)

| DN | Distance |
| :---: | :--- |
| 40 | 0.75 m |
| $50-90$ | 0.90 m |
| 110 | 1.10 m |
| 125 | 1.20 m |
| 160 | 1.60 m |
| 200 | 2.00 m |
| 250 | 2.00 m |
| 315 | 2.00 m |

Table 2: (distance La see chart)

| DN | Clamp spacing La | Connection | Recommended wall spacing Lz |
| :---: | :---: | :---: | :---: |
| $40-63$ | 0.75 m | $1 / 2^{\prime \prime}$ | max. 0.50 m |
| $75-110$ | 1.50 m | $1 / 2^{\prime \prime}$ | max. 0.50 m |
| 125 | 1.50 m | $1 / 2^{\prime \prime}$ | max. 0.50 m |
| $160-200$ | 2.00 m | $1^{\prime \prime}$ | max. 0.50 m |
| 250 | 2.00 m | $1^{\prime \prime}$ | max. 0.40 m |
| 315 | 1.50 m | $1^{\prime \prime}$ | $\max .0 .35 \mathrm{~m}$ |

## In detail:

(1) Horizontal fixed point design in nominal sizes DN 40 to DN 160 $1 x$ SitaDSS clamp and $2 x$ electrofusion sleeves
(2) Horizontal fixed point design in nominal sizes DN 200 to DN 315 $2 x$ SitaDSS clamp and $1 x$ electrofusion sleeve
(3) One clamp before and one behind each branch

Fixed point design vertical in nominal sizes DN 40 to 160: $1 x$ SitaDSS Down and $2 x$ electrofusion sleeves
5 Vertical fixed point design in nominal sizes DN 200 to 315: $2 x$ SitaDSS Down and $1 x$ electrofusion sleeve


## Pipe sizes and weights

To adapt the distances to the building structure, the specified dimensions may be reduced but not increased. Furthermore, the permissible load of the building structure must be taken into account, especially roof constructions using trapezoidal metal sheets.

The load-bearing capacity (in $\mathrm{kg} / \mathrm{m}^{2}$ ) of trapezoidal steel roof structures is essentially determined by the substructure (carrier field width) and dependent of the trapezoidal profile.In any case, the approval of the structural engineer must be obtained.

The maximum suspension distances of the rail (Lb) can be taken from the following table, the suspension distances LB are reduced depending on possible loads to the roof construction.

| $\begin{gathered} \text { DN } \\ O D^{*} \times \text { wall } \\ (\mathrm{mm} \times \mathrm{mm}) \end{gathered}$ | ```Pipe + water + rail + clamp (kg/m)``` | $15 \mathrm{~kg} / \mathrm{m}^{2}$ | $20 \mathrm{~kg} / \mathrm{m}^{2}$ | $25 \mathrm{~kg} / \mathrm{m}^{2}$ | $30 \mathrm{~kg} / \mathrm{m}^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Suspension Lb (m) | Suspension Lb (m) | Suspension Lb (m) | Suspension Lb (m) |
| $40 \times 3.0$ | 3.70 | 2.50 | 2.50 | 2.50 | 2.50 |
| $50 \times 3.0$ | 4.36 | 2.50 | 2.50 | 2.50 | 2.50 |
| $56 \times 3.0$ | 4.87 | 2.50 | 2.50 | 2.50 | 2.50 |
| $63 \times 3.0$ | 5.61 | 2.45 | 2.50 | 2.50 | 2.50 |
| $75 \times 3.0$ | 6.96 | 2.15 | 2.50 | 2.50 | 2.50 |
| $90 \times 3.5$ | 8.89 | 1.65 | 2.25 | 2.50 | 2.50 |
| $110 \times 4.3$ | 12.06 | 1.24 | 1.65 | 2.00 | 2.45 |
| $125 \times 4.9$ | 14.85 | 1.00 | 1.35 | 1.65 | 2.00 |
| $160 \times 6.2$ | 22.82 | $\bigcirc$ | $\bigcirc$ | 1.10 | 1.30 |
| $200 \times 7.7$ | 34.14 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| $250 \times 9.6$ | 53.40 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | 0 |
| $315 \times 12.0$ | 82.49 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

[^0]$\boldsymbol{O}=\underline{\text { Special construction required. Cannot be implemented with individual suspension on the structure! }}$


[^0]:    *OD = outside diameter (mm)

