

Load Support System**Project:**

Distributor: _____

Project Name: _____

City: _____

Estimated SoilWeb® area (L x W):

_____ m x _____ m = _____ m²Tender: Yes ☐ No ☐

Projected Bid Date: _____

Planned construction: _____

Known competitors: _____

Describe problem to be solved by the SoilWeb® system:
(Please provide a sketch or cross section!)

Alternative/ Conventional way of construction (without SoilWeb®):

SoilWeb® Construction Design Method Standards:

- National Annex - **Eurocode 7 DIN EN 1997-1/NA:2010-12**: Geotechnical design - Part 1: General rules
- German Standard **DIN 4017**: proof of sufficient safety against shear failure (limited state analysis)
- German Standard **DIN 4019**: Settlements are calculated on basis of soil failure (serviceability analysis)
- **BR470** WORKING PLATFORMS FOR TRACKED PLANT

Disclaimer/ Limitation of use

The accuracy of preliminary designs / evaluations based on PRFs depends on the quality of the provided data. Specific values / information which cannot be provided reduce the quality and reliability of preliminary designs since comparable values have to be assumed. Evaluations / Preliminary designs are copyrighted and specifically based upon the unique characteristics of Soiltec's SoilWeb® products, the general European Geotechnical Guidelines and our research work. A final design shall be prepared by a licensed professional engineer based on actual field conditions or can be ordered separately with us.



Load Support System

Design information

- | | |
|---|---|
| <input type="checkbox"/> Redevelopment | <input type="checkbox"/> New construction |
| <input type="checkbox"/> Paved construction | <input type="checkbox"/> Unpaved construction |
| <input type="checkbox"/> Temporary construction | <input type="checkbox"/> Permanent construction |

Kind of construction?

- | | | |
|---|---|--|
| <input type="checkbox"/> Major Highway | <input type="checkbox"/> Industrial area | <input type="checkbox"/> Parking area |
| <input type="checkbox"/> Public Highway | <input type="checkbox"/> Container Terminal | <input type="checkbox"/> Agricultural road |
| <input type="checkbox"/> Airport | <input type="checkbox"/> Railway | <input type="checkbox"/> Dyke/ Levee |
| <input type="checkbox"/> Private Road | | |
| <input type="checkbox"/> Other _____ | | |

Requirements (SoilWeb® stabilized construction)

Minimum E-v2 value on top of the construction (MN/ m²) _____

or Minimum CBR-value on top of the construction (%) _____

or Maximum allowable deformation (mm) _____

Load parameter (according to DIN 1072)

- | | |
|--|---|
| <input type="checkbox"/> Truck 60 tons
(P = 100 kN; A = 0,12 m ² ; σ = 833 kN/m ²) | <input type="checkbox"/> Van 9 tons
(P = 30 kN; A = 0,052 m ² ; σ = 577 kN/m ²) |
| <input type="checkbox"/> Truck 30 tons
(P = 50 kN; A = 0,08 m ² ; σ = 625 kN/m ²) | <input type="checkbox"/> Van 6 tons
(P = 20 kN; A = 0,04 m ² ; σ = 500 kN/m ²) |
| <input type="checkbox"/> Truck 16 tons
(P = 50 kN; A = 0,08 m ² ; σ = 625 kN/m ²) | <input type="checkbox"/> Van 3 tons
(P = 10 kN; A = 0,04 m ² ; σ = 250 kN/m ²) |
| <input type="checkbox"/> Truck 12 tons
(P = 40 kN; A = 0,06 m ² ; σ = 666 kN/m ²) | <input type="checkbox"/> Car
(P = 7 kN; A = 0,04 m ² ; σ = 175 kN/m ²) |
| <input type="checkbox"/> Other _____ | |

Max. axle load _____ kN Contact area (tyre) _____ m²

Number of axles/ tyres _____ Tyre pressure _____ kN/m²



Load Support System

Load repetitions

Estimated number of crossings?

- | | |
|--|--|
| <input type="checkbox"/> more than 32 Million | <input type="checkbox"/> between 0.3 and 0.8 Million |
| <input type="checkbox"/> between 10 and 32 Million | <input type="checkbox"/> between 0.1 and 0.3 Million |
| <input type="checkbox"/> between 3 und 10 Million | <input type="checkbox"/> less than 0.1 Million |
| <input type="checkbox"/> between 0.8 und 3 Million | <input type="checkbox"/> Other |

Crossings/ Day _____

Design life _____ (Years)

Crossings/ Design life _____

Subgrade

Plate load test, E_{V2} -value [MN/m²] _____

or California bearing ratio, CBR-Wert [%] _____

or undrained cohesion; c_u -value [kN/m²] _____

Module of stiffness [MN/m²] _____

Angle of internal friction [°] _____

Specific weight [kN/m³] _____

Ground water table [m] _____

Filling material SoilWeb®

Angle of internal friction [°] _____

Max. grain size [mm] _____

Conventional pavement design without SoilWeb®

Layers	Angle of internal friction [°]	Specific weight [kN/m ³]	Layer thickness [m]	Module of stiffness E_s [kN/m ²]
1				
2				
3				
4				
5				

Load Support System**Additional information**Layers are modifiable ☐ not modifiable ☐Total construction thickness modifiable ☐ not modifiable ☐

If no data (load parameters, subgrade, filling material) is provided, following values will be used for the calculation:

Traffic load: SLW 60 (60 tons), 10 Million crossings (paved constructions)/ 1 Million crossings (unpaved constructions)

Allowable deformation: 10 mm (paved constructions), 50 mm (unpaved constructions)

Subgrade: $E_{v2} = 10 \text{ MN/m}^2$ / CBR 2%

Filling material: Angle of internal friction = 35°

Logistics information☐ Cost estimation☐ Quotation☐ Preliminary design/ Calculation needed by (date): _____