

## General

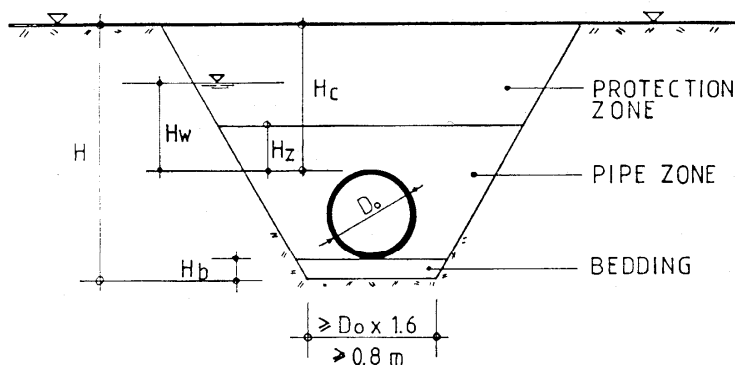
Pipes might be connected to length outside the trench, steel support or other and lifted into the final position in one piece, using lifting cranes. This is possible due to the light weight of the pipes.

Pipes can also be connected in the final position in the trench or on support decks.

It has been demonstrated, that pipe stiffness is not the only design factor of buried HDPE pipe systems.

Control of deflection is achieved permanently by control of the earthwork surrounding buried systems. ASTM practice D – 2321 should be followed to achieve this control.

## Underground pipe installation



$$H_b = 100 \rightarrow 150 \text{ mm}$$

$$H_z = 0.25 \rightarrow 0.50 \text{ m}$$

### **Calculation of static loads**

- ISO 9969
- ATV A 127 (German regulation)

### **Radial elasticity**

The perfect elasticity of our pipes can react to settlements in their environment.

Due to the deformation performance, loads are diverted to the pipe surrounding soil and the load acting to the pipe is diminished.

Within a short time the pipe surrounding area will balance and the deformation stops.

### **Axial elasticity**

The outside profile acts as an anchor to the soil. For this reason there are neglectable minor axial extensions of the pipeline. Due to this reason our profile pipes are nearly unaffected by temperature variations.

### **Installation on supports**

Distances of supports are to be calculated acc. pipe weight and size.

Special pipe supports needed to avoid punctual loads to the pipe.