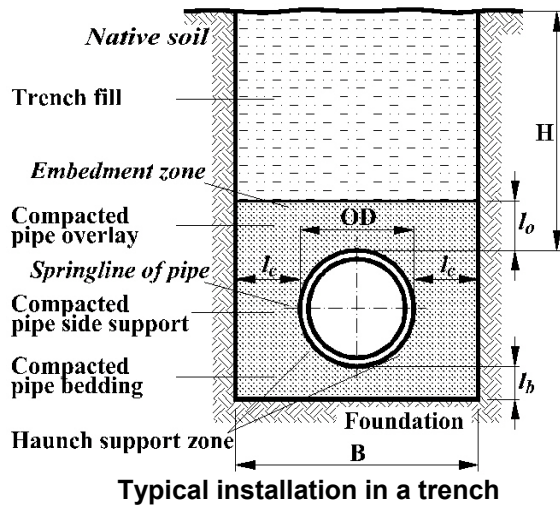


Installation Of Polyethylene And Bosspipe Pipelines



Minimum embedment zone dimensions

OD, mm	Minimum dimension, mm			
	l_b	l_c	l_o	$B = OD + 2l_c$
$\geq 75, \leq 150$	75	100	100	275 - 350
$> 150, \leq 300$	100	150	150	450 - 600
$> 300, \leq 450$	100	200	150	700 - 850
$> 450, \leq 900$	150	300	150	1050 - 1500

Minimum cover (H)

Loading condition	H^* , m
Not subject to vehicle loading	0.30
Land zoned for agricultural use	0.60
Subject to vehicular loading –	
(a) no carriageway;	0.45
(b) sealed carriageways; and	0.60
(c) unsealed carriageways	0.75
Pipelines in embankments or subject to construction equipment loads	0.75

* Under cultivated agricultural land H should not be less than 0.6 m. Railway crossings are covered by other requirements.

Trench is excavated to a width ensuring sufficient clearance between pipe and trench walls for placement and compaction of embedment materials, and for making and inspection of joints.

Excavate foundation to the line and grade specified. The bottom of the trench shall be free from ridges, hollows, lumps, large stones, etc. The trench shall be free of water.

Depending upon soil stability and depth, trench sides above the pipe crown may need to be sloped, stepped or widened. Sidewall bracing may be used, if necessary.

When a pipeline is installed on steep grades or in unstable soils, installation may involve use of alternative structural support.

The pipe bedding shall provide permanent support for the pipe.

The maximum particle size of readily compactable embedment materials is 7mm for DN225 Bosspipe, 10 mm for PE pipes under 100 mm OD and DN300 Bosspipe, 14 mm for PE pipes up to 160 mm OD and DN375 and DN450 Bosspipe, 20 mm for larger pipes.

The bedding material shall be placed and compacted, and shall uniformly support the pipeline along its length. Depressions for sockets and other fittings should be made in the bedding to allow the pipe barrel to rest firmly on the bedding over its entire length.

Pipes must be handled and lowered into position without being dropped, dumped, pushed, or rolled, chains shall not be used.

Bosspipe should be laid with socket end facing upstream. PE pipes may be welded in a string on the ground level prior to positioning in the trench.

The pipes should be positioned along the centreline of the trench. PE pipe welded string may be evenly bent to the specified radius.

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Pipe side supports and pipe overlay are constructed following jointing compacting the embedment material in layers of usually not more than 150 mm thick without use of heavy machinery.

Care should be taken that all levelling and alignment pegs, temporary packing and restraints, etc. are removed from pipeline embedment and all voids filled and compacted.

Trench fill may include excavated material free from large rocks, organic matter, or contaminated materials.