

MAXICULVERT

Twin-wall Culvert Pipe

INSTALLATION GUIDE

This guide is intended to provide general information for the effective and safe installation of Maxipipe. For detailed information, refer to AS/NZS 2566:2000: "Buried flexible pipelines." When designed and installed correctly, Maxiculvert will provide continuous service life in excess of 50 years.

Trenches need to be wide enough to accommodate not only the Maxiculvert but also compaction of the haunch support area. To minimise the load on the Maxiculvert, keep the trench width as close as possible to the values in Table 1. Where parallel Maxiculverts are being laid within a single trench, use the 'pipe spacing' guide in Table 1. Table 1 also outlines the minimum embedment zone dimensions for bedding and overlay support. Adequate drainage of the trench during installation is required to avoid flooding and potential floating of the Maxiculvert.

Subject to loading conditions, Maxiculvert is to be installed at a depth greater than the minimum cover in Table 2. Maximum cover depends on the bedding materials, level of compaction and the type of pipe being used.

Lay Maxiculvert with the integral socket facing upstream, with joints being performed in the trench. Watertight joints can be achieved using EPDM rings* (supplied separately). The bottom of the trench must support the Maxiculvert continuously along its length. Maxiculvert can be cut down to size with a hand saw or power saw.

Embedment materials should be granular with a particle size between 14 and 20mm. Where crushed materials are used, the materials must be free of sharp edges.

Compaction of the embedment materials is essential. Areas include bedding support, haunch support, side support and overlay support as shown in Figure 1. These areas must be compacted to a specified relative compaction, and uniformly support the Maxiculvert along its length.

Excavated materials can be compacted as trench fill as long as it is free from large rocks and contaminated material. Trench fill must not be mechanically compacted until there is adequate cover to prevent pipe damage.

* Further installation details on EPDM rings are available on request.

Limitation of liability

No liability will be accepted by RD Manufacturing Ltd, nor is any guarantee, warranty or undertaking given or implied in respect of any act or omission by RD Manufacturing Ltd in respect to any injury, loss or damaged suffered by a customer, loss or damage suffered by a customer for or user of the Maxipipe range, which may in any degree be attributed to the use of such products or their installation and testing or to the use of data, design materials or advice given by RD Manufacturing Ltd as to the use of these products or their installation or testing and not withstanding any want of care on the part of RD Manufacturing Ltd in compiling or giving any such advice or information.

FIGURE 1 - INSTALLATION IN A TRENCH

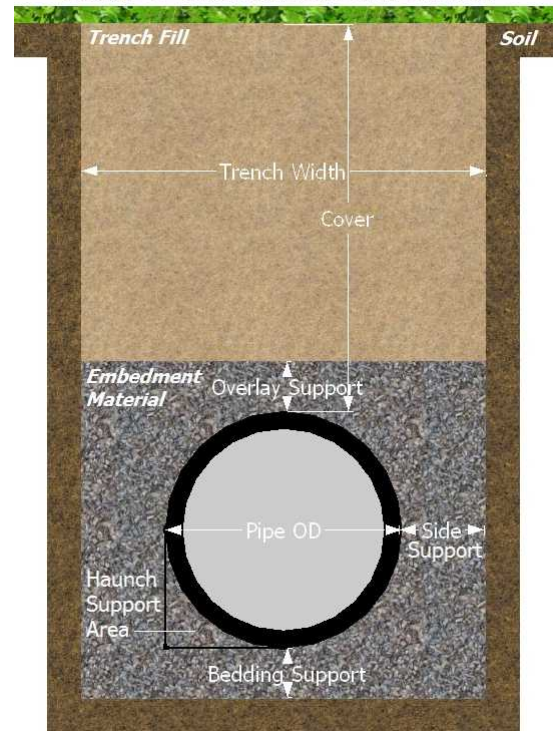


TABLE 1 - MINIMUM EMBEDMENT ZONE DIMENSIONS

Pipe OD	Maxiculvert DN	Minimum Values (mm)			
		Bedding Support	Side Support	Overlay Support	Pipe Spacing
75 - 150	100	75	100	100	100
>150 - 300	150 - 225	100	150	100	150
>300 - 450	300 - 375	100	200	150	200
>450 - 900	450 - 750	150	300	150	300
>900 - 1500	1000 - 1200	150	350	200	350
>1500 - 4000	1500	150	0.25*OD	300	0.25*OD

TABLE 2 - MINIMUM COVER

Loading Conditions	Cover Height
Under areas not subject to traffic or heavy loading	0.30m
Under areas zoned for agricultural use	0.60m
Under unsealed roads or subject to heavy loading	0.75m