



Recommended techniques for the installation of unplasticized poly(vinyl chloride) (PVC-U) buried drains and sewers

Techniques recommandées pour la mise en place des canalisations d'assainissement enterrées en polychlorure de vinyle non plastifié (PVC-U)

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ISO/TR 7073 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*.

The reasons which led to the decision to publish this document in the form of a Technical Report type 2 are explained in the Introduction.

0 Introduction

This Technical Report incorporates the installation requirements for unplasticized poly(vinyl chloride) (PVC-U) buried drains and sewers of a large number of countries. However, owing to the comprehensive nature of the requirements given, it is recognized that they cannot be regarded as being appropriate to all countries, and therefore it was decided to publish these data as a Technical Report type 2.

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1 Scope

This Technical Report gives recommended procedures and considerations to be taken into account when handling and installing unplasticized poly(vinyl chloride) (PVC-U) gravity drain and sewer pipes and fittings up to, and including, 630 mm diameter.

It includes recommendations concerning trenchwork, pipelaying and backfilling, maintenance and repair, special considerations to be made when there is a high water table or frozen ground, and transport, storage and handling. Reference is made, where appropriate, to International Standards and to national requirements. These should always be referred to for further information by persons considering the use of unplasticized poly(vinyl chloride) (PVC-U) gravity drain and sewer pipes and fittings.

This Technical Report is intended to indicate what is considered to be good practice in average conditions, but it is accepted that in certain localities there may be special conditions which will necessitate modifications to the recommendations made.

The field of application and the classes of pipes used shall be in accordance with national standards and/or regulations.

2 Symbols

The symbols used in this Technical Report are illustrated in figure 1 and listed in table 1.

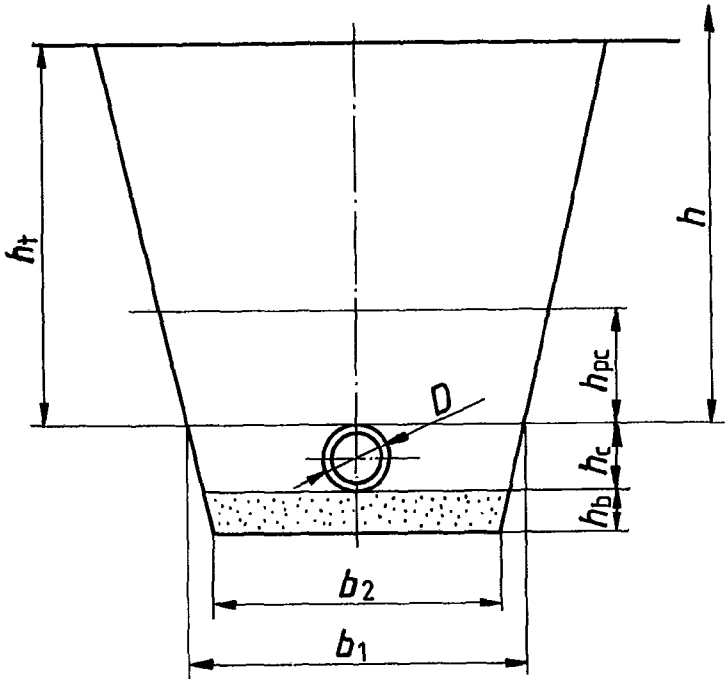


Figure 1 – Symbols

Table 1 – Symbols

Symbol	Definition
b_1	Width of trench at the level of the top of the pipe
b_2	Minimum width of the bottom of the trench
D	Nominal outside diameter of the pipe, in millimetres
h	Height from the crown of the pipe to the original ground level
h_b	Depth of the bedding
h_c	Height of the compacted sidefill material
h_{pc}	Height of the uncompacted material on top of the pipe
h_t	Height of total cover above the crown of the pipe
e	Nominal pipe wall thickness, in millimetres
S	Pipe series number
SDR	Standard dimension ratio, $SDR = D/e$