



Performance requirements for plastics pipes and fittings for use in underground drainage and sewage

Aptitude à l'emploi des tubes et raccords en matière plastique utilisés pour l'assainissement enterré

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ISO/TR 7074 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 3 are explained in section 1.

SECTION 1 - HISTORICAL BACKGROUND

1. DISCUSSIONS IN ISO

Work within ISO/TC 5/SC 6 (now ISO/TC 138) on a specification for plastics pipes and fittings made of UPVC for use in underground sewage was approved at the sub-committee meeting in Stockholm in 1969 when Working Group A was established and the responsibility for drafting the specification allocated later on to a Task Group (now ISO/TC 138/SC 1/AGH-1 - Buried drain and sewer pipes).

At the WG 1 meeting in Berlin in 1972 the U.K. proposed that TG 1 should give consideration to the so-called Box Loading Test (BLT) as described in BS 4660. This was accepted.

The "Specification for pipes and fittings of unplasticized polyvinyl chloride (UPVC) for buried drain and sewer pipes" (doc. 138/1 N 161) was forwarded to TC 138 level by resolution in Madrid in 1972 without any functional test requirements for pipes or fittings and at the same time it was decided that TG 1 should continue its specification work on the quality testing of fittings.

The above mentioned specification, now ISO/DIS 4435, was accepted with 24 approvals, 2 disapprovals and no abstentions (see doc 138 N 153).

After having finalized the leakproofness tests for fittings, TG 1 was, by resolution of WG 1 in Bremen in 1974, to continue under the leadership of Finland developing suitable tests for pipes and fittings.

Since then, in the period 1974-1978, nine further Task Group meetings were held keeping in mind the following terms of reference:

- To prepare a functional performance test (type test by nature), considering the long term durability of fittings, which simulates, as far as possible, practical conditions.
- To develop a simple production quality control test, especially for injection moulded drainage fittings, which examines the strength of the weld line, which may be weaker than the the fitting in general.

The main task, being derived from the actual initiative, was to study the testing of UPVC assemblies but the AHG has also studied the applicability of the methods established to other plastics materials: no final conclusions have been drawn however.

During the work of TG 1 it became evident that no unanimous proposal could be reached within the TG upon the methods to be used and therefore TG 1 agreed that all prepared descriptions of test methods should be circulated to the WG 1 meeting in Tel Aviv for wider consideration. At the meetings in November 1977 it was agreed that documents 138/1 N 369, N 370 and N 371 should be compiled into a Technical Report.