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**UNPLASTICIZED POLYVINYLCHLORIDE
(PVC-U) PIPES AND FITTINGS FOR BURIED
DRAINAGE AND SEWAGE SYSTEMS -
SPECIFICATIONS**

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Údarás um Chaighdeán Náisiúnta na hÉireann

DECLARATION

OF

SPECIFICATION

ENTITLED

UNPLASTICIZED POLYVINYLCHLORIDE (PVC-U) PIPES AND FITTINGS FOR
BURIED DRAINAGE AND SEWAGE SYSTEMS – SPECIFICATIONS

AS

THE IRISH STANDARD SPECIFICATION FOR

UNPLASTICIZED POLYVINYLCHLORIDE (PVC-U) PIPES AND FITTINGS FOR
BURIED DRAINAGE AND SEWAGE SYSTEMS – SPECIFICATIONS

EOLAS - The Irish Science and Technology Agency in exercise of the power conferred by section 20 (3) of the Industrial Research and Standards Act, 1961 (No. 20 of 1961) and the Science and Technology Act, 1987 (No. 30 of 1987), and with the consent of the Minister for Industry and Commerce, hereby declares as follows:

1. This instrument may be cited as the Standard Specification (Unplasticized Polyvinylchloride (PVC-U) Pipes and Fittings for Buried Drainage and Sewage Systems – Specifications) Declaration, 1990.
2. (1) The Specification set forth in the Schedule to this declaration is hereby declared to be the standard specification for Unplasticized Polyvinylchloride (PVC-U) Pipes and Fittings for Buried Drainage and Sewage Systems – Specifications.
(2) The said standard specification may be cited as Irish Standard 424 : 1990 or as I.S. 424 : 1990.

Foreword

This Irish Standard has been produced as an interim measure, until a European Standard is issued, to replace the existing Department of Local Government Provisional Specification for soil pipes, drains, sewers and fittings made of unplasticized Polyvinylchloride (uPVC) 1977 which needs a complete updating. It is based principally on ISO*/DIS 4435 and aims to prepare the industry for the new CEN** Standard and the open market conditions of 1992.

Main deviations from ISO/DIS 4435 are as follows:-

This Standard specifies additional pipes with nominal sizes of 355 and 450 (ISO 161 Part 1) and omits the nominal size of 125. It specifies the use of swept fittings in certain cases. It requires the impact strength test for pipes and does not permit an alternative test to this but allows a tensile strength test as an alternative to the internal pressure test for nominal sizes of 110 and 160. It does not require an impact strength test for fittings. It includes marking provisions and requires that the colour of the pipes and fittings shall normally be brown.

ISO/DIS 4435 Clause 5.1.2 leaves the choice of size range of pipes to the national standards bodies and at the request of industry and users only Series 20 from Table 3 of ISO/DIS 4435 is included in this Standard.

It is proposed to replace this Standard by the CEN Standard as soon as it is published.

*International Standards Organization

**European Committee for Standardization

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SCHEDULE

UNPLASTICIZED POLYVINYLCHLORIDE (PVC-U) PIPES AND FITTINGS FOR BURIED DRAINAGE AND SEWERAGE SYSTEMS - SPECIFICATIONS

1. SCOPE

This Standard specifies unplasticized polyvinylchloride (PVC-U) pipes and fittings with elastomeric sealing ring joints for outside diameters from 110 to 630 mm and with cemented type joints for outside diameters from 110 to 200 mm, intended for buried gravity drain and sewer pipes for the transportation of soil and waste discharge of domestic and industrial origin, and surface water.

In case of industrial discharge, chemical and temperature resistance have to be taken into account.

2. NORMATIVE REFERENCES

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. At the time of publication, the editions indicated were valid. Members of IEC* and ISO maintain registers of currently valid International Standards.

ISO 265-1 : 1988	Pipes and fittings of plastics materials - Fittings for domestic and industrial waste pipes - Basic dimensions - Metric series - Part 1: Unplasticised polyvinyl chloride (PVC-U).
ISO 580 : __ ¹	Fittings of injection-moulded unplasticized polyvinyl chloride (PVC-U) - Hot oven test.
ISO 1167 : __ ²	Thermoplastics pipes for the transport of fluids - Determination of the resistance to internal pressure.
ISO 2505 : 1981	Unplasticized polyvinyl chloride (PVC) pipes - Longitudinal reversion - Test methods and specification.
ISO 2507 : 1982	Unplasticized polyvinyl chloride (PVC) pipes and fittings - Vicat softening temperature - Test method and specification.
ISO 3127 : 1980	Unplasticized polyvinyl chloride (PVC) pipes for the transport of fluids - Determination and specification of resistance to external blows.
ISO 3504 : __ ³	Pipes of polyvinyl chloride (PVC) - Determination and specification of tensile properties.

¹To be published. (Revision of ISO 580 : 1973.)

²To be published. (Revision of ISO 1167 : 1973.)

³To be published.

*International Electro-Technical Commission

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