

# ISO 21138-1:2007-10 (E)

Plastics piping systems for non-pressure underground drainage and sewerage -  
Structured-wall piping systems of unplasticized poly(vinyl chloride) (PVC-U),  
polypropylene (PP) and polyethylene (PE) - Part 1: Material specifications and  
performance criteria for pipes, fittings and system

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms, definitions, symbols and abbreviated terms .....	3
3.1	Terms and definitions .....	3
3.2	Symbols .....	6
3.3	Abbreviated terms .....	7
4	Material .....	7
4.1	General .....	7
4.2	Sealing ring retaining components .....	7
4.3	Sealing rings .....	7
4.4	Fused or welded joints .....	7
5	Designation of wall construction .....	7
6	Colour .....	8
7	Geometrical characteristics .....	8
8	Types of fitting .....	8
8.1	General .....	8
8.2	Design length of fittings .....	11
9	Functional characteristics .....	11
10	Relation between ring stiffness, installation technique and resulting deflection .....	11
Annex A (informative) General material characteristics of PVC-U, PP and PE pipes and fittings .....		13
Annex B (informative) General performance characteristics of PVC-U, PP and PE pipes and fittings .....		14
Annex C (informative) Structural design .....		15
Bibliography .....		18