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**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 3:  
Pipes and fittings with non-smooth external surface, Type B**

*Systèmes de canalisations en plastique pour les branchements et les collecteurs d'assainissement sans pression enterrés — Systèmes de canalisations à parois structurées en poly(chlorure de vinyle) non plastifié (PVC-U), polypropylène (PP) et polyéthylène (PE) —*

*Partie 3: Tubes et raccords avec une surface externe non lisse, type B*



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## Contents

Page

Foreword.....	iv
Introduction .....	v
<b>1 Scope .....</b>	<b>1</b>
<b>2 Normative references .....</b>	<b>2</b>
<b>3 Terms, definitions, symbols and abbreviated terms.....</b>	<b>4</b>
<b>3.1 Terms and definitions.....</b>	<b>4</b>
<b>3.2 Symbols .....</b>	<b>4</b>
<b>3.3 Abbreviated terms .....</b>	<b>5</b>
<b>4 Material .....</b>	<b>5</b>
<b>4.1 General.....</b>	<b>5</b>
<b>4.2 Unplasticized poly(vinyl chloride) (PVC-U).....</b>	<b>6</b>
<b>4.3 Polypropylene (PP).....</b>	<b>7</b>
<b>4.4 Polyethylene (PE).....</b>	<b>9</b>
<b>4.5 Sealing ring retaining components.....</b>	<b>11</b>
<b>4.6 Sealing rings .....</b>	<b>11</b>
<b>4.7 Fused or welded joints .....</b>	<b>11</b>
<b>4.8 Adhesives for PVC-U .....</b>	<b>11</b>
<b>5 Designation of wall construction and examples of typical jointing methods .....</b>	<b>12</b>
<b>5.1 Wall constructions designated as Type B.....</b>	<b>12</b>
<b>5.2 Designation and design of joints .....</b>	<b>13</b>
<b>6 General characteristics for pipes and fittings — Colour .....</b>	<b>13</b>
<b>7 Geometrical characteristics.....</b>	<b>13</b>
<b>7.1 General.....</b>	<b>13</b>
<b>7.2 Dimensions.....</b>	<b>13</b>
<b>7.3 Types of fitting .....</b>	<b>17</b>
<b>8 Physical characteristics .....</b>	<b>18</b>
<b>8.1 Unplasticized poly(vinyl chloride) (PVC-U).....</b>	<b>18</b>
<b>8.2 Polypropylene (PP).....</b>	<b>19</b>
<b>8.3 Polyethylene (PE).....</b>	<b>19</b>
<b>9 Mechanical characteristics .....</b>	<b>20</b>
<b>9.1 Mechanical characteristics of pipes .....</b>	<b>20</b>
<b>9.2 Mechanical characteristics of fittings.....</b>	<b>22</b>
<b>10 Performance requirements .....</b>	<b>24</b>
<b>11 Marking .....</b>	<b>25</b>
<b>11.1 General.....</b>	<b>25</b>
<b>11.2 Minimum required marking.....</b>	<b>25</b>
<b>Annex A (normative) Virgin PVC-U material.....</b>	<b>27</b>
<b>Annex B (normative) Utilization of non-virgin PVC-U material.....</b>	<b>28</b>
<b>Annex C (normative) Virgin PP material .....</b>	<b>31</b>
<b>Annex D (normative) Utilization of non-virgin PP material .....</b>	<b>32</b>
<b>Annex E (normative) Virgin PE material .....</b>	<b>34</b>
<b>Annex F (normative) Utilization of non-virgin PE material .....</b>	<b>35</b>
<b>Annex G (informative) Survey of possible use of reprocessable and recyclable material.....</b>	<b>38</b>
<b>Bibliography .....</b>	<b>39</b>

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 21138-3 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 1, *Plastics pipes and fittings for soil, waste and drainage (including land drainage)*.

ISO 21138 consists of the following parts, under the general title *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*
- *Part 2: Pipes and fittings with smooth external surface, Type A*
- *Part 3: Pipes and fittings with non-smooth external surface, Type B*

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## Introduction

ISO 21138 is the system standard covering the plastics piping systems for non-pressure underground drainage and sewerage, in particular thermoplastics structured-wall piping systems.