

Second edition
2018-02

**Plastics piping systems for renovation
of underground non-pressure
drainage and sewerage networks —**

**Part 1:
General**

*Systèmes de canalisations en plastique pour la rénovation des réseaux
de branchements et de collecteurs d'assainissement enterrés sans
pression —*

Partie 1: Généralités



Reference number
ISO 11296-1:2018(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols and abbreviated terms	7
4.1 Symbols	7
4.2 Abbreviated terms	7
5 Pipes at the “M” stage	8
5.1 Materials	8
5.2 General characteristics	8
5.3 Material characteristics	8
5.4 Geometric characteristics	8
5.5 Mechanical characteristics	8
5.6 Physical characteristics	8
5.7 Jointing	8
5.8 Marking	8
6 Fittings at the “M” stage	9
6.1 Materials	9
6.2 General characteristics	9
6.3 Material characteristics	9
6.4 Geometric characteristics	9
6.5 Mechanical characteristics	9
6.6 Physical characteristics	9
6.7 Jointing	9
6.8 Marking	9
7 Ancillary components	10
8 Fitness for purpose of the installed lining system at the “I” stage	10
8.1 Materials	10
8.2 General characteristics	10
8.3 Material characteristics	10
8.4 Geometric characteristics	10
8.5 Mechanical characteristics	10
8.6 Physical characteristics	11
8.7 Additional characteristics	11
8.8 Sampling	11
8.9 Regional requirements for the installed lining system	11
9 Installation practice	11
9.1 Preparatory work	11
9.2 Storage, handling and transport of pipes and fittings	11
9.3 Equipment	11
9.3.1 General	11
9.3.2 Inspection equipment	12
9.3.3 Lifting equipment	12
9.4 Installation	12
9.4.1 General	12
9.4.2 Safety precautions	12
9.4.3 Simulated installations	12
9.5 Process-related inspection and testing	13
9.6 Lining termination	13
9.7 Reconnection to the existing pipeline system	13