



**Bureau de normalisation
du Québec**

**BNQ 3624-130/2015
(R 2026)**

**Unplasticized Polyvinyl Chloride (PVC-U)
Pipe and Fittings — Pipes of 150 mm
in Diameter or Smaller**

STANDARD

BNQ 3624-130/2015
(R 2026)

Unplasticized Polyvinyl Chloride (PVC-U) Pipe and Fittings —
Pipes of 150 mm in Diameter or Smaller

*Tuyaux et raccords en polychlorure de vinyle non plastifié (PVC-U) —
Tuyaux d'un diamètre inférieur ou égal à 150 mm*

Bureau de normalisation du Québec

The Bureau de normalisation du Québec (BNQ) is a standardization organization based in Quebec and created in 1961. It is one of the standards development organizations accredited by the Standards Council of Canada (SCC) and as such, is part of the National Standards System.

As an administrative unit of Investissement Québec (IQ), the BNQ produces standards that meet the needs of the industry, of public and para-public organizations, and of concerned groups.

FIFTH EDITION — 2026-03-03

This edition reaffirms (reapproves) the edition dated January 21, 2015, which now includes Modification No. 1 dated May 23, 2025 and Modification No. 2 dated December 5, 2025. Consequently, this edition is equivalent to the previous edition.

This document is published in both French and English. In case of incompatibility, the French version prevails.

The decision resulting from the systematic review that will enable to determine whether the current document shall be modified, revised, reaffirmed or withdrawn will be implemented no later than at the end of March 2036.

ICS: 23.040.20; 23.040.45; 93.020.

REQUEST FOR INFORMATION AND PURCHASE

Any request for information or purchase of this document may be sent to the Bureau de normalisation du Québec (BNQ) by email at: bnqinfo@bnq.qc.ca or on the BNQ's website [<https://www.bnq.qc.ca>].

REVISION OF BNQ DOCUMENTS

Collaboration from BNQ document users is essential in keeping our documents up to date. Therefore, any suggestion aimed at improving their contents will be appreciated. We ask you to send us your suggestions or comments on the form at the end of this document.

The electronic or printed version of this document is for personal use only. Distribution to third parties, partners or clients, as well as saving, distribution or use on a computer network is forbidden without written agreement from the BNQ.

A notification by email mentioning the publication of a new edition of a revised document, amendments or errata will be sent to the email address used for the online purchase.

Notifications and the catalogue may be consulted at all times on the BNQ's website [<https://www.bnq.qc.ca>] to verify if a more recent version of a document exists or if amendments or errata have been published.

This document is the result of thousands of hours of work provided on a voluntary basis by many community experts. We thank you for taking this into account, and for your contribution through your purchase of this document for its evolution in the years to come.

© BNQ, 2026

All rights reserved. Unless otherwise specified, no part of this document may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilming, without written permission from the BNQ.

NOTICE

UNDERSTANDING OF THE NOTION OF EDITION

It is important to note that this edition implicitly includes all amendments and errata that might be published separately at a later date. It is the responsibility of the users of this document to verify whether any amendments or errata exist.

INTERPRETATION

The verb **shall** is used to express a requirement (mandatory) in order to conform to this document.

The verb **should**, or the equivalent expressions **is recommended that** and **ought to**, is used to express a recommendation or that which is advised, but not required. The verb **may** is used to express an option or that which is permissible within the limits of the standard.

Except for notes presented as **normative notes**, which set out mandatory requirements and which appear in the lower portion of figures and tables only, all other **notes** are **informative** (non-mandatory) and provide useful information intended to facilitate understanding or clarify the intent of a requirement or to add clarification or further details.

Normative annexes provide additional requirements (mandatory) in order to conform to this document. **Informative annexes** provide additional (non-mandatory) information intended to assist in the understanding or use of elements of this document or to clarify its implementation. They contain no mandatory requirements for the purpose of compliance with this document.

DISCLAIMER OF RESPONSIBILITY

This document was developed as a reference document for voluntary use. The BNQ assumes no responsibility or liability for any damages arising from the use of this document, its interpretation, or the implementation of its requirements. It is the user's responsibility to ensure and verify whether legislation or regulations make compulsory the use of this document or whether its use is required by trade regulations or market conditions, including, but not limited to, technical regulations, inspection plans originating from regulatory authorities, certification programs. It is also the responsibility of the user to consider limitations and restrictions specified in this document and to judge the suitability of this document for the user's purposes.

MARKING AND LABELLING REQUIREMENTS

This document may contain requirements for marking and/or labelling. In this event, in addition to meeting such requirements, it is also the responsibility of the suppliers of products to comply with the applicable national, provincial or territorial laws and regulations of the jurisdictions in which the products are distributed.

FOREWORD

This standard was developed in compliance with the Standards Council of Canada (SCC)'s Requirements and Guidance for standards development organizations. Its reaffirmation was approved by a Standards Development Committee, whose members were:

Suppliers

ABDEL-AHAD, Suzanne	TabiPlast
BÉRARD, Guylaine	Bow Plumbing Group
CHARKY, Alain	IPEX
KIROUAC, Stéphane	Brunet Group
PAWELCZAK, Michael	Westlake Pipes & Fittings

Users

BÉLANGER, Hélène	Ville de Québec
GAUTHIER, Samuel	TGC
ST-LAURENT, Didier	Municipalité régionale de comté (MRC) de Bellechasse
WHISSEL, Maxime	Corporation des officiers municipaux en bâtiment et en environnement du Québec (COMBEQ)

General Interest

COUILLARD, Claude	Centre d'expertise et de recherche en infrastructures urbaines (CERIU)
HASSANABADI, Hojjat Mahi	Investissement Québec, Vice-présidence (VP) Innovation

LORANGER, Marc-Antoine

Ministère des Transports et de la Mobilité
durable (MTMD)

NGUYEN, Khanh Quoc

Coalia

SCHIFFINO, Anibal Jose

Ministère de l'Environnement, de la Lutte contre
les changements climatiques, de la Faune et des
Parcs (MELCCFP)

Bureau de normalisation du Québec (BNQ) Coordination Team

FAYE, Moustapha

TREMBLAY, Carole

The 2015 edition of this standard was prepared and approved by a Standards Development Committee, whose voting members were:

BERGERON, Marie-Claude	Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC) — Direction des eaux municipales
BERGERON, Stéphane	Association des ingénieurs municipaux du Québec (AIMQ)
CARON, Jean-Yves	Les plastiques Abénaki inc.
CAZA, Alain	Groupe béton Brunet for Next Polymers
COUILLARD, Claude	Ville de Québec — Service de l'ingénierie
GINGRAS, Jean	Corporation des officiers municipaux en bâtiment et en environnement du Québec (COMBEQ)
GRENIER, Daniel	Centre de recherche industrielle du Québec (CRIQ)
LEROUX, Alain	IPEX
LORANGER, Marc-Antoine	Ministère des Transports du Québec — Service des matériaux d'infrastructures
PATENAUDE, Rowena	Groupe Royal
PHARAND, Jacques	Ville de Montréal
ST-DENIS, Jacques	Laboratoire Intertek
VÉZINA, Christian	Roy Vézina associés
GAGNÉ, Nicole (standards developer)	Bureau de normalisation du Québec (BNQ)

TABLE OF CONTENTS

	Page	
1	PURPOSE AND SCOPE	1
2	NORMATIVE REFERENCES	1
2.1	GENERAL	1
2.2	DOCUMENTS FROM A STANDARDS BODY	2
3	DEFINITIONS	3
4	CLASSIFICATION	4
5	GENERAL REQUIREMENTS	4
5.1	MATERIAL USED IN MANUFACTURING OF PIPE AND FITTINGS	4
5.1.1	Virgin PVC plastic	4
5.1.2	Reworked PVC plastic	4
5.1.3	Recycled PVC plastics	5
5.1.4	Industrial PVC scrap	5
5.2	GENERAL CHARACTERISTICS OF PIPE AND FITTINGS	5
5.3	JOINTING OF PIPES AND FITTINGS	5
5.3.1	Solvent-cement joints (bonded joints)	5
5.3.2	Gasket-seal joints	6
6	SPECIFIC REQUIREMENTS	6
6.1	DIMENSIONAL CHARACTERISTICS	6
6.1.1	Pipe and fitting dimensions	6
6.1.2	Effective pipe length L	6
6.1.3	Thickness i of virgin PVC layers (coextruded multilayer smooth-wall pipe)	6
6.1.4	Out-of-roundness	6
6.2	MECHANICAL AND PHYSICAL CHARACTERISTICS	7
6.2.1	Stiffness	7
6.2.2	Compression resistance	7
6.2.3	Impact resistance	7
6.2.4	Joint tightness	7

6.3	CHEMICAL CHARACTERISTICS	7
6.3.1	Chemical-agent resistance	7
6.3.2	Verification of the extrusion quality of the PVC pipe	7
6.3.3	Verification of the moulding quality of the PVC fittings	7
6.4	SOLAR RADIATION RESISTANCE	8
6.5	VERIFICATION OF THE FUSION LINE	8
6.6	PERFORATED PIPE FOR BUILDING DRAINAGE	8
7	TEST AND CONTROL METHODS	8
7.1	CONTROL OF DIMENSIONAL CHARACTERISTICS	8
7.1.1	General	8
7.1.2	Diameters	8
7.1.3	Pipe-wall thickness	9
7.1.4	Pipe length	9
7.1.5	Out-of-roundness	9
7.1.6	Fitting dimensions	9
7.2	TESTING	10
7.2.1	General	10
7.2.2	Stiffness test	10
7.2.3	Load-deflection test	10
7.2.4	Impact-resistance test	11
7.2.5	Chemical-agent resistance test	11
7.2.6	Solvent-cement joint watertightness test	12
7.2.7	Verification of the fusion line	12
8	MARKING AND HANDLING	13
8.1	MARKING	13
8.1.1	Pipe	13
8.1.2	Fittings	13
8.2	HANDLING	14
Table 1 —	Pipe stiffness	15
Table 2 —	Minimum energy required for impact resistance test	15
Figure 1 —	Dimensions of smooth-wall pipe produced by single extrusion	16
Figure 2 —	Dimensions of coextruded multilayer smooth-wall pipe	17
Figure 3 —	Socket dimensions for solvent-cement joints	18
Figure 4 —	Socket dimensions for gasket-seal joints	19
Figure 5 —	Moulded-fitting mounting lengths	20
Figure 6 —	Effective pipe length L	21

Figure 7 —	Drilling template of perforated pipe used to prevent ochre deposits in foundation drains	22
Annex A —	Physical properties of elastomer gasket seals made of vulcanized rubber	23
Table A.1 —	Table of physical properties	23
Annex B —	Information and recommendations on the storage and handling of pipe and fittings	24
Annex C —	Informative references	26

1 **PURPOSE AND SCOPE**

This standard specifies the characteristics and test methods relating to pipe and fittings, manufactured from unplasticized poly(vinyl chloride) [PVC-U], with a nominal diameter smaller than or equal to 150 mm, used in underground applications for conveying wastewaters flowing by gravity.

This standard applies to pipes whose wall is smooth inside and outside, fabricated by single extrusion or by multiple coextruded layers (multilayer wall). These pipes are generally equipped with sockets for permanent solvent-cement bonding or for gasket-seal jointing.

This standard applies especially to the drainage piping listed below:

- a) sewage piping, branches and sanitary building drains connected to the municipal sewage system;
- b) sewage piping, installed under buildings (private domain connections);
- c) sewage piping, installed outside of buildings (private domain connections);
- d) perforated pipes for the drainage of buildings to reduce the risk of other deposits in drains (see Clause 6.6).

This standard also applies to moulded poly(vinyl chloride) fittings of a diameter less than or equal to 150 mm for joining pipes covered in this standard, as well as with pipes covered in Standard BNQ 3624-050.

This standard was developed to serve as a reference document for conformity assessment activities of specific products.

NOTE — Conformity assessment is defined as the systematic examination of the extent to which a product fulfils specified requirements.

2 **NORMATIVE REFERENCES**

2.1 **GENERAL**

The references below (including any amendment or errata) are normative references, and are therefore considered mandatory. They are essential to the understanding and use of this standard, and are cited in appropriate places in the text.

It should be noted that a dated (normative and informative) reference refers to that specific edition of the reference, while a non-dated reference refers to the latest edition of the reference in question.

NOTE — This standard also cites informative references, which are listed in an annex.