



**ASME A112.6.4-2022/
CSA B79.4:22**
National Standard of Canada
American National Standard



Roof, deck, and balcony drains



Legal Notice for Harmonized Standard Jointly Developed by ASME and CSA Group

Intellectual property rights and ownership

As between American Society of Mechanical Engineers (“ASME”) and Canadian Standards Association (Operating as “CSA Group”) (collectively “ASME and CSA Group”) and the users of this document (whether it be in printed or electronic form), ASME and CSA Group are the joint owners of all works contained herein that are protected by copyright, all trade-marks (except as otherwise noted to the contrary), and all inventions and trade secrets that may be contained in this document, whether or not such inventions and trade secrets are protected by patents and applications for patents. The unauthorized use, modification, copying, or disclosure of this document may violate laws that protect the intellectual property of ASME and CSA Group and may give rise to a right in ASME and CSA Group to seek legal redress for such use, modification, copying, or disclosure. ASME and CSA Group reserve all intellectual property rights in this document.

Disclaimer and exclusion of liability

This document is provided without any representations, warranties, or conditions of any kind, express or implied, including, without limitation, implied warranties or conditions concerning this document’s fitness for a particular purpose or use, its merchantability, or its non-infringement of any third party’s intellectual property rights. ASME and CSA Group do not warrant the accuracy, completeness, or currency of any of the information published in this document. ASME and CSA Group make no representations or warranties regarding this document’s compliance with any applicable statute, rule, or regulation.

IN NO EVENT SHALL ASME AND CSA GROUP, THEIR RESPECTIVE VOLUNTEERS, MEMBERS, SUBSIDIARIES, OR AFFILIATED COMPANIES, OR THEIR EMPLOYEES, DIRECTORS, OR OFFICERS, BE LIABLE FOR ANY DIRECT, INDIRECT, OR INCIDENTAL DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES, HOWSOEVER CAUSED, INCLUDING BUT NOT LIMITED TO SPECIAL OR CONSEQUENTIAL DAMAGES, LOST REVENUE, BUSINESS INTERRUPTION, LOST OR DAMAGED DATA, OR ANY OTHER COMMERCIAL OR ECONOMIC LOSS, WHETHER BASED IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR ANY OTHER THEORY OF LIABILITY, ARISING OUT OF OR RESULTING FROM ACCESS TO OR POSSESSION OR USE OF THIS DOCUMENT, EVEN IF ASME OR CSA GROUP HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES.

In publishing and making this document available, ASME and CSA Group are not undertaking to render professional or other services for or on behalf of any person or entity or to perform any duty owed by any person or entity to another person or entity. The information in this document is directed to those who have the appropriate degree of experience to use and apply its contents, and ASME and CSA Group accept no responsibility whatsoever arising in any way from any and all use of or reliance on the information contained in this document.

ASME and CSA Group have no power, nor do they undertake, to enforce compliance with the contents of the standards or other documents they jointly publish.

Authorized use of this document

This document is being provided by ASME and CSA Group for informational and non-commercial use only. The user of this document is authorized to do only the following:

If this document is in electronic form:

- load this document onto a computer for the sole purpose of reviewing it;
- search and browse this document; and
- print this document if it is in PDF format.

Limited copies of this document in print or paper form may be distributed only to persons who are authorized by ASME and CSA Group to have such copies, and only if this Legal Notice appears on each such copy.

In addition, users may not and may not permit others to

- alter this document in any way or remove this Legal Notice from the attached standard;
- sell this document without authorization from ASME and CSA Group; or
- make an electronic copy of this document.

If you do not agree with any of the terms and conditions contained in this Legal Notice, you may not load or use this document or make any copies of the contents hereof, and if you do make such copies, you are required to destroy them immediately. Use of this document constitutes your acceptance of the terms and conditions of this Legal Notice.



Standards Update Service

ASME A112.6.4-2022/CSA B79.4:22 July 2022

Title: *Roof, deck, and balcony drains*

To register for e-mail notification about any updates to this publication

- go to www.csagroup.org/store/
- click on **Product Updates**

The **List ID** that you will need to register for updates to this publication is **24298-1**

If you require assistance, please e-mail techsupport@csagroup.org or call 416-747-2233.

Visit CSA Group's policy on privacy at www.csagroup.org/legal to find out how we protect your personal information.

Canadian Standards Association (operating as “CSA Group”), under whose auspices this National Standard has been produced, was chartered in 1919 and accredited by the Standards Council of Canada to the National Standards system in 1973. It is a not-for-profit, nonstatutory, voluntary membership association engaged in standards development and certification activities.

CSA Group standards reflect a national consensus of producers and users — including manufacturers, consumers, retailers, unions and professional organizations, and governmental agencies. The standards are used widely by industry and commerce and often adopted by municipal, provincial, and federal governments in their regulations, particularly in the fields of health, safety, building and construction, and the environment.

More than 10 000 members indicate their support for CSA Group’s standards development by volunteering their time and skills to Committee work.

CSA Group offers certification and testing services in support of and as an extension to its standards development activities. To ensure the integrity of its certification process, CSA Group regularly and continually audits and inspects products that bear the CSA Group Mark.

In addition to its head office and laboratory complex in Toronto, CSA Group has regional branch offices in major centres across Canada and inspection and testing agencies in fourteen countries. Since 1919, CSA Group has developed the necessary expertise to meet its corporate mission: CSA Group is an independent service organization whose mission is to provide an open and effective forum for activities facilitating the exchange of goods and services through the use of standards, certification and related services to meet national and international needs.

For further information on CSA Group services, write to
CSA Group
178 Rexdale Boulevard
Toronto, Ontario, M9W 1R3
Canada

A National Standard of Canada is a standard developed by a Standards Council of Canada (SCC) accredited Standards Development Organization, in compliance with requirements and guidance set out by SCC. More information on National Standards of Canada can be found at www.scc.ca.

SCC is a Crown corporation within the portfolio of Innovation, Science and Economic Development (ISED) Canada. With the goal of enhancing Canada’s economic competitiveness and social well-being, SCC leads and facilitates the development and use of national and international standards. SCC also coordinates Canadian participation in standards development, and identifies strategies to advance Canadian standardization efforts.

Accreditation services are provided by SCC to various customers, including product certifiers, testing laboratories, and standards development organizations. A list of SCC programs and accredited bodies is publicly available at www.scc.ca.

Standards Council of Canada
600-55 Metcalfe Street
Ottawa, Ontario, K1P 6L5
Canada



La norme nationale du Canada n'est disponible qu'en anglais.

Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users to judge its suitability for their particular purpose.

**A trademark of the Canadian Standards Association, operating as “CSA Group”*

CSA Group

The Canadian Standards Association (operating as "CSA Group"), under whose auspices this National Standard has been produced, was chartered in 1919 and accredited by the Standards Council of Canada to the National Standards system in 1973. It is a not-for-profit, nonstatutory, voluntary membership association engaged in standards development and certification activities.

CSA Group standards reflect a national consensus of producers and users including manufacturers, consumers, retailers, unions and professional organizations, and governmental agencies. The standards are used widely by industry and commerce and often adopted by municipal, provincial, and federal governments in their regulations, particularly in the fields of health, safety, building and construction, and the environment.

More than 10 000 members indicate their support for CSA Group's standards development by volunteering their time and skills to Committee work.

CSA Group offers certification and testing services in support of and as an extension to its standards development activities. To ensure the integrity of its certification process, CSA Group regularly and continually audits and inspects products that bear the CSA Group Mark.

In addition to its head office and laboratory complex in Toronto, CSA Group has regional branch offices in major centres across Canada and inspection and testing agencies in fourteen countries. Since 1919, CSA Group has developed the necessary expertise to meet its corporate mission: CSA Group is an independent service organization whose mission is to provide an open and effective forum for activities facilitating the exchange of goods and services through the use of standards, certification and related services to meet national and international needs.

For further information on CSA Group services, write to
CSA Group
178 Rexdale Boulevard, Toronto, Ontario,
Canada M9W 1R3

American National Standards Institute

The American National Standards Institute (ANSI), Inc. is the nationally recognized coordinator of voluntary standards development in the United States through which voluntary organizations, representing virtually every technical discipline and every facet of trade and commerce, organized labor and consumer interests, establish and improve the some 10 000 national consensus standards currently approved as American National Standards.

ANSI provides that the interests of the public may have appropriate participation and representation in standardization activity, and cooperates with departments and agencies of U.S. Federal, State and local governments in achieving compatibility between government codes and standards and the voluntary standards of industry and commerce.

ANSI represents the interests of the United States in international nontreaty organizations such as the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). The Institute maintains close ties with regional organizations such as the Pacific Area Standards Conference (PASC) and the Pan American Standards Commission (COPANT). As such, ANSI coordinates the activities involved in the U.S. participation in these groups.

ANSI approval of standards is intended to verify that the principles of openness and due process have been followed in the approval procedure and that a consensus of those directly and materially affected by the standards has been achieved. ANSI coordination is intended to assist the voluntary system to ensure that national standards needs are identified and met with a set of standards that are without conflict or unnecessary duplication in their requirements.

Responsibility of approving American standards rests with the
American National Standards Institute, Inc.
25 West 43rd Street, Fourth floor
New York, NY 10036

ASME/CSA Standard

ASME A112.6.4-2022/CSA B79.4:22 Roof, deck, and balcony drains



®A trademark of the Canadian Standards Association and CSA America Inc., operating as "CSA Group"

*Published in July 2022 by CSA Group
A not-for-profit private sector organization
178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3
1-800-463-6727 • 416-747-4044*

Visit the CSA Group Online Store at www.csagroup.org/store/

*The American Society of Mechanical Engineers (ASME)
Two Park Avenue
New York, NY 10016-5990, USA
1-800-843-2763*

Visit the ASME Online Store at www.asme.org

Commitment for Amendments

This Standard is issued jointly by the American Society of Mechanical Engineers (ASME) and the Canadian Standards Association (Operating as “CSA Group”). Amendments to this Standard will be made only after processing according to the Standards writing procedures of both ASME and CSA Group.

The American Society of Mechanical Engineers (ASME)
Two Park Avenue
New York, NY 10016-5990
USA
1-800-843-2763
Visit the ASME Online Store at
www.asme.org

ISBN 978-1-7918-7519-3
Copyright © 2022 by The American Society of Mechanical Engineers (ASME)

This Standard is available for public review on a continuous basis. This provides an opportunity for additional public input from industry, academia, regulatory agencies, and the public at large.

Published in July 2022 by
CSA Group
A not-for-profit private sector organization
178 Rexdale Boulevard
Toronto, Ontario, Canada
M9W 1R3
1-800-463-6727 or 416-747-4044
Visit the CSA Group Online Store at
www.csagroup.org/store/

ISBN 978-1-4883-4099-4
ICS 91.140.80
© 2022 Canadian Standards Association

All rights reserved. No part of this publication may be reproduced in any form whatsoever without the prior permission of the publisher.

Contents

ASME A112 Standards Committee on Plumbing Materials and Equipment 4

ASME A112.6.4 Project Team on Roof Drains 8

CSA Technical Committee on Drains and Interceptors 10

ASME/CSA Harmonization Task Group on Drains 14

Preface 16

1 Scope 18

- 1.1 Inclusions 18
- 1.2 Exclusions 18
- 1.3 Illustrations 18
- 1.4 Terminology 18
- 1.5 Units of measure 18
- 1.6 Alternatives 18

2 Reference publications 19

3 Definitions and abbreviations 22

- 3.1 Definitions 22
- 3.2 Abbreviations 23

4 General 23

- 4.1 General purpose roof drains 23
 - 4.1.1 Primary 23
 - 4.1.2 General purpose roof drain with overflow and flashing flange 23
 - 4.1.3 General purpose roof drain with integral overflow 23
- 4.2 Gutter or cornice roof drain 23
- 4.3 Parapet roof drain 24
 - 4.3.1 Overview 24
 - 4.3.2 Parapet roof drain with flashing flange 24
 - 4.3.3 Parapet roof drain with overflow 24
- 4.4 Promenade or deck roof drain 24

5 Materials 24

- 5.1 General 24
- 5.2 Metals 24
 - 5.2.1 Aluminum 24
 - 5.2.2 Bronze 24
 - 5.2.3 Cast iron 24
 - 5.2.4 Ductile iron 24
 - 5.2.5 Nickel-bronze 24
 - 5.2.6 Stainless steel 25
 - 5.2.7 Copper sheet 25
 - 5.2.8 Sheet steel used in paint grip drain bodies 25

5.3	Polymeric compounds	25
5.3.1	Acrylonitrile-butadiene-styrene (ABS)	25
5.3.2	Polyethylene (PE)	25
5.3.3	Polypropylene (PP)	25
5.3.4	Polyvinylchloride (PVC)	25
5.3.5	Polyvinylidene fluoride (PVDF)	25
5.3.6	Nylon	25
5.4	Steel fasteners	25
5.5	Finishes	26
5.5.1	General	26
5.5.2	Non-organic finishes	26
5.5.3	Organic finishes	26
6	Accessories	27
6.1	General	27
6.2	Extension collar	27
6.3	Under-deck clamp	27
6.4	Expansion joint	27
6.5	Drain body or sump receiver plate	27
7	Design requirements	27
7.1	Outlet centrelines	27
7.2	Outlet connections	27
7.2.1	General	27
7.2.2	Threaded outlet connections	27
7.2.3	Inside caulk outlet connections	27
7.2.4	Hub (push-on) outlet connections	27
7.2.5	Spigot (no hub or mechanical joint) outlet connections	28
7.2.6	Solvent-cemented outlet connections	28
7.2.7	O-ring, gasketed, and rubber coupling outlet connections	28
7.2.8	Butt welded outlet connections	28
7.3	Drain body sump thickness	28
7.4	Dimensions	28
7.4.1	Dome or grate open area	28
7.4.2	Overflow size	28
8	Loading test — Loading classifications	28
9	Weathering test	29
9.1	Test specimens	29
9.2	Test procedure	29
9.3	Pass/fail criteria	29
10	Flow measurement	29
10.1	Overview	29
10.2	Flow measurement apparatus	29
10.3	Flow rate measurement procedures	29
10.3.1	Procedure	29
10.3.2	Flow measurements	30

10.3.3	Setup	30
10.3.4	Transducer calibration	30
10.4	Achieving head elevations	30
10.5	Establishing head elevations	30
10.6	Data collection and steady state verification	30
10.6.1	Data recording	30
10.6.2	Steady state verification	31
10.7	Measurement method	31
10.7.1	Head elevation	31
10.7.2	Flow rate	31
10.8	Roof Drain Performance Report	31
11	Manufacturer's literature	31
11.1	Roof drain performance data	31
11.2	Additional data	31
12	Markings	32
12.1	Marking requirements	32
12.2	Marking locations	32
12.3	Permanent markings	32

ASME A112 Standards Committee on Plumbing Materials and Equipment

W. M. Smith	American Society of Plumbing Engineers, Montgomery, Alabama, USA	<i>Chair</i>
S. Rawalpindiwala	Kohler Co., Kohler, Wisconsin, USA	<i>Vice-Chair</i>
M. R. Gibeault	Kohler Co., Kohler, Wisconsin, USA	<i>Alternate</i>
A. L. Guzman Rodriguez	American Society of Mechanical Engineers, New York, New York, USA	<i>Staff Secretary</i>
R. K. Adler	City of San Jose, San Jose, California, USA	
J. A. Ballanco	JB Engineering & Code Consulting, PC, Munster, Indiana, USA	
J. E. Bertrand	Watts Water Technologies, Inc., Avon, Ohio, USA	
C. Haldiman	Watts Regulator, North Andover, Massachusetts, USA	<i>Alternate</i>
T. Burger	ASSE International, Mokena, Illinois, USA	
R. Burnham	Zurn Industries LLC, Erie, Pennsylvania, USA	
M. Campos	ICC Evaluation Service, LLC, Brea, California, USA	
S. L. Cavanaugh	Cavanaugh Consulting, Santa Fe, New Mexico, USA	<i>Contributing Member</i>
W. E. Chapin	Professional Code Consulting, LLC, Cullman, Alabama, USA	

P. V. DeMarco	IAPMO, Dayton, New Jersey, USA	
N. E. Dickey	Hansgrohe, Inc., Alpharetta, Georgia, USA	
G. S. Duren	Code Compliance, Inc., S Pasadena, Florida, USA	
R. Emmerson	Consultant, Arlington Heights, Illinois, USA	
K. Ernst	OS&B, Oakville, Ontario, Canada	
R. L. George	Plumb-Tech Design and Consulting Services L.L.C, Newport, Michigan, USA	
D. Gleiberman	Sloan Valve Co., Los Angeles, California, USA	
J. W. Lauer	Sloan Valve Company, Anaheim, California, USA	<i>Alternate</i>
M. Guard	Regulosity, LLC, Wauwatosa, Wisconsin, USA	
G. W. Harrison	Wayne Harrison Consulting, Edmond, Oklahoma, USA	
L. Himmelblau	Chicago Faucet, Des Plaines, Illinois, USA	
J. Kendzel	American Supply Association, Itasca, Illinois, USA	<i>Contributing Member</i>
J. M. Koeller	Koeller and Co., Yorba Linda, California, USA	
N. M. Kummerlen	Consultant, Lorain, Ohio, USA	<i>Contributing Member</i>

C. J. Lagan	American Standard/LIXIL, Piscataway, New Jersey, USA	
M. Malatesta	American Standard/LIXIL, Piscataway, New Jersey, USA	<i>Alternate</i>
W. H. LeVan	Cast Iron Soil Pipe Institute, Auburn, Alabama, USA	
D. Parney	Cast Iron Soil Pipe Institute, Mundelein, Illinois, USA	<i>Alternate</i>
D. Marbry	Fluidmaster, Inc., San Juan Capistrano, California, USA	
R. Mata	American Society of Plumbing Engineers, Mentor, Ohio, USA	
D. Liang	CSA Group, Toronto, Ontario, Canada	<i>Contributing Member</i>
L. A. Mercer	IAPMO Group, Valley City, Ohio, USA	
J. Menard	CSA Group, Toronto, Ontario, Canada	<i>Contributing Member</i>
A. Murra	Abraham Murra Consulting, Rancho Santa Margarita, California, USA	
D. Orton	NSF International, Ann Arbor, Michigan, USA	
A. Ciechanowski	NSF International, Ann Arbor, Michigan, USA	<i>Alternate</i>
R. Pickering	Eastern Research Group, Inc., Morrisville, North Carolina, USA	<i>Contributing Member</i>
A. Poon	Delta Faucet Company, Indianapolis, Indiana, USA	

B. Ramkarran	Infinity Drains, LTD., Amityville, New York, USA	<i>Contributing Member</i>
S. A. Remedios	Remedios Consulting LLC, London, Ontario, Canada	
M. Sigler	International Code Council, Orlando, Florida, USA	
G. L. Simmons	Charlotte Pipe & Foundry, Charlotte, North Carolina, USA	
W. B. Morris	Charlotte Pipe & Foundry, Charlotte, North Carolina, USA	<i>Alternate</i>
S. Tanner	US Environmental Protection Agency, Washington, District of Columbia, USA	<i>Contributing Member</i>
J. C. Watson	Elkay Manufacturing, Downers Grove, Illinois, USA	
M. Weiss	Plumbing and Drainage Institute, Polson, Montana, USA	
W. C. Whitehead	Whitehead Consulting Services, Red Oak, Texas, USA	
S. J. McDanal	Jay R. Smith Mfg. Co., Montgomery, Alabama, USA	<i>Alternate</i>

ASME A112.6.4 Project Team on Roof Drains

M. Weiss	Plumbing & Drainage Institute (PDI), Polson, Montana, USA	<i>Chair</i>
J. A. Ballanco	JB Engineering & Code Consulting, PC, Munster, Indiana, USA	
A. Bird	Futurologies Consulting, Oro-Medonte, Ontario, Canada	
T. Burger	ASSE International, Mokena, Illinois, USA	
R. Burnham	Zurn Industries LLC, Erie, Pennsylvania, USA	
M. Campos	ICC Evaluation Service, LLC, Brea, California, USA	
N. E. Dickey	Hansgrohe, Inc., Alpharetta, Georgia, USA	
G. Froeter	East Lake Ventures LLC, Sterling, Illinois, USA	
R. L. George	Plumb-Tech Design and Consulting Services L.L.C, Monroe, Michigan, USA	
G. W. Harrison	Wayne Harrison Consulting, Edmond, Oklahoma, USA	
R. Hetzler	Watts Water Technologies, Inc., Hendersonville, North Carolina, USA	
R. Mata	American Society of Plumbing Engineers, Mentor, Ohio, USA	
S. J. McDanal	Jay R. Smith Mfg. Co., Montgomery, Alabama, USA	

D. Orton	NSF International,, Ann Arbor, Michigan, USA	
K. Thompson	Plumbing Manufacturers International (PMI), McLean, Virginia, USA	
B. Tubaugh	Josam Company,, Michigan City, Indiana, USA	
D. Viola	IAPMO, Mokena, Illinois, USA	<i>Contributing Member</i>
L. Viswanathan	Oatey Co., Cleveland, Ohio, USA	

CSA Technical Committee on Drains and Interceptors

R. Beaulieu	Canplas Industries Ltd, Barrie, Ontario, Canada <i>Category: Producer Interest</i>	<i>Chair</i>
B. Brown	Schier Products, Edwardsville, Kansas, USA	<i>Non-voting</i>
T. Burger	ASSE International, Cleveland, Ohio, USA	<i>Non-voting</i>
R. Burnham	Zurn Industries LLC, Erie, Pennsylvania, USA <i>Category: Producer Interest</i>	
M. Constantin	City of Edmonton, Edmonton, Alberta, Canada <i>Category: Regulatory Authority</i>	
J. Costa	Good Harbour Labs, Mississauga, Ontario, Canada	<i>Non-voting</i>
P. Despatis	Régie du bâtiment du Québec, Montréal, Québec, Canada <i>Category: Regulatory Authority</i>	
N. Dickey	Hansgrohe, Inc, Alpharetta, Georgia, USA <i>Category: Producer Interest</i>	
G. Emberson	Contour Industries Inc., Toronto, Ontario, Canada	<i>Non-voting</i>
R. Fenney	Fenney & Associates Inc, London, Ontario, Canada	<i>Non-voting</i>
S. Ferrazzo	Green Turtle - Zurn, Charlotte, North Carolina, USA	<i>Non-voting</i>

B. Ghaly	Watts Regulator Co., Burlington, Ontario, Canada <i>Category: Producer Interest</i>	
M. Gordon	Regional Municipality of Waterloo, Cambridge, Ontario, Canada <i>Category: Regulatory Authority</i>	
A. Guzman Rodriguez	American Society of Mechanical Engineers (ASME), New York, New York, USA	<i>Non-voting</i>
G. Hale	The Corporation of the Town of Markham, Markham, Ontario, Canada <i>Category: Regulatory Authority</i>	
G. W. Harrison	Wayne Harrison Consulting, Edmond, Oklahoma, USA <i>Category: User/General Interest</i>	
E. Ho	IAPMO Group, Markham, Ontario, Canada <i>Category: User/General Interest</i>	
K. S. Hui	Ontario Ministry of Municipal Affairs, Toronto, Ontario, Canada	<i>Non-voting</i>
D. Liang	CSA Group, Toronto, Ontario, Canada <i>Category: User/General Interest</i>	
K. Loucks	Schier Products Company, Vancouver, Washington, USA <i>Category: Producer Interest</i>	
R. Mata	American Society of Plumbing Engineers, Mentor, Ohio, USA	
A. Mikrogiannakis	Goslyn Canada, Aurora, Ontario, Canada <i>Category: Producer Interest</i>	
A. Murra	Abraham Murra Consulting, Rancho Santa Margarita, California, USA	<i>Non-voting</i>

B. Orr	City of London, London, Ontario, Canada <i>Category: Regulatory Authority</i>	
D. Orton	NSF International, Ann Arbor, Michigan, USA <i>Category: User/General Interest</i>	
T. P. Palkon	IAPMO R&T, Mokena, Illinois, USA	<i>Non-voting</i>
H. Parlee	City of Edmonton, Edmonton, Alberta, Canada	<i>Non-voting</i>
F. Piazza	Richmond Hill, Ontario, Canada	<i>Non-voting</i>
A. Puddicomb	City of Toronto, Toronto Water, Toronto, Ontario, Canada <i>Category: Regulatory Authority</i>	
S. A. Remedios	Remedios Consulting, London, Ontario, Canada <i>Category: User/General Interest</i>	
D. Rockwell	Rockwell Supplies, Lower Sackville, Nova Scotia, Canada	<i>Non-voting</i>
W. Smith	American Society of Plumbing Engineers (ASPE), Montgomery, Alabama, USA	<i>Non-voting</i>
C. Spagnuolo	Region of Peel, Mississauga, Ontario, Canada <i>Category: Regulatory Authority</i>	
M. Weiss	PDI, Polson, Montana, USA <i>Category: User/General Interest</i>	
F. Winter	Canplas, Barrie, Ontario, Canada	<i>Non-voting</i>

M. Khalil	CSA Group, Toronto, Ontario, Canada	<i>Project Manager</i>
J. Menard	CSA Group, Toronto, Ontario, Canada	<i>Project Manager</i>

ASME/CSA Harmonization Task Group on Drains

E. Ho	IAPMO Group, Markham, Ontario, Canada	<i>Chair</i>
J. A. Ballanco	JB Engineering & Code Consulting, PC, Munster, Indiana, USA	
R. Beaulieu	Canplas Industries Ltd., Barrie, Ontario, Canada	
A. Bird	Futurologies Consulting, Oro-Medonte, Ontario, Canada	
T. Burger	ASSE International, Mokena, Illinois, USA	
R. Burnham	Zurn Industries LLC, Erie, Pennsylvania, USA	
M. Campos	ICC Evaluation Service, LLC, Brea, California, USA	
N. E. Dickey	Hansgrohe, Inc., Alpharetta, Georgia, USA	
G. Froeter	East Lake Ventures LLC, Sterling, Illinois, USA	
R. L. George	Plumb-Tech Design and Consulting Services L.L.C., Monroe, Michigan, USA	
G. W. Harrison	Wayne Harrison Consulting, Edmond, Oklahoma, USA	
R. Hetzler	Watts Water Technologies, Inc., Hendersonville, North Carolina, USA	
R. Mata	American Society of Plumbing Engineers, Mentor, Ohio, USA	

S. J. McDanal	Jay R. Smith Mfg. Co., Montgomery, Alabama, USA
D. Orton	NSF International, Ann Arbor, Michigan, USA
K. Thompson	Plumbing Manufacturers International (PMI), McLean, Virginia, USA
B. Tubaugh	Josam Company, Michigan City, Indiana, USA
C. Rylant	Jay R. Smith Mfg. Co., Montgomery, Alabama, USA
S. Remedios	Remedios Consulting, London, Ontario, Canada
D. Viola	IAPMO, Mokena, Illinois, USA
M. Weiss	Plumbing & Drainage Institute (PDI), Polson, Montana, USA
W. Whitehead	Whitehead Consulting Services, Red Oak, Texas, USA

Preface

This is the first edition of ASME A112.6.4/CSA B79.4, *Roof, deck, and balcony drains*. It supersedes CSA B79, *Commercial and residential drains and cleanouts*, published in 2008, and the ASME A112.6.4, *Roof, deck, and balcony drains Standards*.

This Standard was prepared by the ASME/CSA Harmonization Task Group on Drains under the jurisdiction of the ASME A112 Standards Committee on Plumbing Materials and Equipment and the CSA Technical Committee on Drains and Interceptors. The ASME A112 Standards Committee operates under the jurisdiction of the ASME Board on Standardization and Testing and the CSA Technical Committee operates under the jurisdiction of the CSA Strategic Steering Committee on Construction and Civil Infrastructure.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

This Standard was approved as an American National Standard by the American National Standards Institute on June 15, 2022.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

ASME Notes:

- 1) *The next edition of this standard is scheduled for publication in 2025.*
- 2) *This standard was developed under procedures accredited as meeting the criteria for American National Standards and it is an American National Standard. The standards committee that approved the code or standard was balanced to ensure that individuals from competent and concerned interests had an opportunity to participate. The proposed standard was made available for public review and comment, which provided an opportunity for additional public input from industry, academia, regulatory agencies, and the public-at-large.*
- 3) *ASME does not “approve,” “rate,” or “endorse” any item, construction, proprietary device, or activity. ASME does not take any position with respect to the validity of any patent rights asserted in connection with any items mentioned in this document, and does not undertake to insure anyone utilizing a standard against liability for infringement of any applicable letters patent, nor does ASME assume any such liability. Users of a standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, is entirely their own responsibility.*
- 4) *Participation by federal agency representatives or persons affiliated with industry is not to be interpreted as government or industry endorsement of this standard.*
- 5) *ASME accepts responsibility for only those interpretations of this document issued in accordance with the established ASME procedures and policies, which precludes the issuance of interpretations by individuals.*
- 6) *Upon request, ASME will issue an interpretation of any requirement of this standard. An interpretation can be issued only in response to a request submitted through the online Interpretation Submittal Form. The form is accessible at <http://go.asme.org/InterpretationRequest>. ASME procedures provide for reconsideration of any interpretation when or if additional information that might affect an interpretation is available. Further, persons aggrieved by an interpretation may appeal to the cognizant ASME committee.*

Interpretations are published on the ASME website under the Committee Pages at <http://cstools.asme.org/> as they are issued.

CSA Notes:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
- 3) *This publication was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this publication.*
- 4) *This Standard is subject to review within five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee.*
- 5) *To submit a request for interpretation of this Standard, please send the following information to inquiries@csagroup.org and include “Request for interpretation” in the subject line:*
 - a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
 - b) *provide an explanation of circumstances surrounding the actual field condition; and*
 - c) *where possible, phrase the request in such a way that a specific “yes” or “no” answer will address the issue.*

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at standardsactivities.csa.ca.

- 6) *Attention is drawn to the possibility that some of the elements of this Standard may be the subject of patent rights. CSA Group is not to be held responsible for identifying any or all such patent rights. Users of this Standard are expressly advised that determination of the validity of any such patent rights is entirely their own responsibility.*

ASME A112.6.4-2022/CSA B79.4:22

Roof, deck, and balcony drains

1 Scope

1.1 Inclusions

This Standard specifies design and performance requirements for roof drains. This Standard applies to the following types of roof drains:

- a) general purpose;
- b) gutter and cornice;
- c) parapet and promenade;
- d) balcony; and
- e) deck.

1.2 Exclusions

This standard does not apply to siphonic roof drains covered under ASME A112.6.9/CSA B79.9.

1.3 Illustrations

Figures [1](#) through [7](#) describe and portray typical roof drains and are not intended to restrict design or to specify requirements.

1.4 Terminology

In this Standard, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

1.5 Units of measure

The values given in either SI (metric) or U.S. Customary units of measure are equivalent in application; however, each measurement system is to be used independently of the other. In this Standard, U.S. Customary units are shown in parentheses. Combining values from the two measurement systems can result in non-conformance with this Standard.

1.6 Alternatives

The requirements of this Standard are not intended to prevent the use of alternative designs, materials, or methods of construction, provided such alternatives meet the intent and requirements of this Standard.