ASME A112.6.4-2003

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ROOF, DECK, AND BALCONY DRAINS

AN AMERICAN NATIONAL STANDARD

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FOREWORD

The American National Standards Committee A112 was established on July 27, 1955 to standardize plumbing materials and equipment. Its first organizational meeting was held on July 22, 1958. Panel No. 21 was created on May 1, 1964, to establish standards for roof drains, floor drains, backwater valves, and other drainage specialties. Its scope was the recommendation of suitable existing standards in cooperation with interested sponsors, or the development of adequate new standards as needed for roof drains, floor drains, and other drains as used or installed in plumbing systems. The committee has since been reorganized as an ASME Standards Committee.

The ASME A112 Committee was restructured during 1998 in accordance with the ASME Redesign Process and Panel 21 Working Group 1 became Project Team 6.4. The project team met twice to update this Standard and incorporated criteria from the International Association of Plumbing and Mechanical Official's Product Standards PS 41 and PS 47.

This Standard was preceded by ANSI A112.21.2M-1983, which was withdrawn in 1995.

Suggestions for the improvement of this Standard are welcome. They should be sent to the American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-0509.

This Standard was approved as an American National Standard on August 14, 2003.

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ASME A112 STANDARDS COMMITTEE
Standardization of Plumbing Materials and Equipment

(The following is the roster of the Committee at the time of approval of this Standard.)

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CORRESPONDENCE WITH THE A112 COMMITTEE

General. ASME Standards are developed and maintained with the intent to represent the consensus of concerned interests. As such, users of this Standard may interact with the Committee by requesting interpretations, proposing revisions, and attending Committee meetings. Correspondence should be addressed to:

Secretary, A112 Standards Committee
The American Society of Mechanical Engineers
Three Park Avenue
New York, NY 10016-5990

Proposing Revisions. Revisions are made periodically to the Standard to incorporate changes that appear necessary or desirable, as demonstrated by the experience gained from the application of the Standard. Approved revisions will be published periodically.

The Committee welcomes proposals for revisions to this Standard. Such proposals should be as specific as possible, citing the edition, the paragraph number(s), the proposed wording, and a detailed description of the reasons for the proposal, including any pertinent documentation. When appropriate, proposals should be submitted using the A112 Project Initiation Request Form.

Interpretations. Upon request, the A112 Committee will render an interpretation of any requirement of the Standard. Interpretations can only be rendered in response to a written request sent to the Secretary of the A112 Standards Committee.

The request for interpretation should be clear and unambiguous. It is further recommended that the inquirer submit his/her request in the following format:

Subject:	Cite the applicable paragraph number(s) and the topic of the inquiry.
Edition:	Cite the applicable edition of the Standard for which the interpretation is being requested.
Question:	Phrase the question as a request for an interpretation of a specific requirement suitable for general understanding and use, not as a request for an approval of a proprietary design or situation. The inquirer may also include any plans or drawings that are necessary to explain the question; however, they should not contain proprietary names or information.

Requests that are not in this format will be rewritten in this format by the Committee prior to being answered, which may inadvertently change the intent of the original request.

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 or Subcommittee. ASME does not "approve," "certify," "rate," or "endorse" any item, construction, proprietary device, or activity.

Attending Committee Meetings. The A112 Standards Committee schedules meetings as needed, which are open to the public. Persons wishing to attend any meeting should contact the Secretary of the A112 Standards Committee. The A112 home page contains information on future meeting dates and locations.

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ROOF, DECK, AND BALCONY DRAINS

1 GENERAL

1.1 Scope

This Standard establishes minimum design requirements for roof drains, including general purpose, gutter and cornice, parapet and promenade, balcony, or deck types, which convey rainwater from the roof area of building structures. It includes definitions, nomenclature, outlet types and connections, dome or grate-free area, top loading classifications, materials and finishes, and accessories.

1.2 Units of Measurement

Values are stated in U.S. Customary units and the International System of Units (SI). The U.S. Customary units shall be considered as the standard.

1.3 Illustrations

The illustrations (figures) included in this Standard are intended only to describe and portray typical roof drain types and are not intended to restrict design or to be used for specification purposes.

1.4 Reference Standards

The following documents form a part of this Standard to the extent specified herein. The latest issue shall apply.

ASTM A 48, Grey Iron Castings
ASTM A 74, Cast Iron Soil Pipe and Fittings
ASTM A 307, Carbon Steel Externally Threaded Fasteners
ASTM A 525, Specification for General Requirements for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process
ASTM A 527, Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Lock-Forming Quality
ASTM A 536, Ductile Iron Castings
ASTM A 563, Carbon and Alloy Steel Threaded Nuts
ASTM A 888, Hubless Cast Iron Sanitary Drainage Systems
ASTM B 16, Free Cutting Brass Rod, Bar and Shapes for Use in Screw Machines
ASTM B 152, Specification for Copper Sheet, Strip, Plate and Rolled Bar
ASTM B 370, Specification for Copper Sheet and Strip for Building Construction
ASTM C 564, Rubber Gaskets for Cast Iron Soil Pipe and Fittings
ASTM C 584, Copper Alloy Sand Castings for General Applications
ASTM C 1440, Thermoplastic Elastomeric (TPE) Gasket Materials for Drain, Waste, and Vent (DWV), Sewer, Sanitary and Storm Plumbing Systems
ASTM D 1248, Polyethylene Plastic Molding and Extrusion Materials
ASTM D 1784, Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds
ASTM D 2661, Acrylonitrile Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste and Vent Pipe and Fittings
ASTM D 2665, Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste and Vent Pipe and Fittings
ASTM D 3965, Rigid Acrylonitrile-Butadiene-Styrene (ABS) Compounds for Pipe and Fittings
ASTM D 4066, Nylon Injection and Extrusion Materials
ASTM D 4101, Propylene Plastic Injection and Extrusion Materials
ASTM D 4329, Practice for Operating Light- and Water-Exposure (Fluorescent UV-Condensation Type) for Exposure of Plastic
ASTM F 628, Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste and Vent Pipe with a Cellular Core
ASTM G 23, Practice for Operating Light- and Water-Exposure Apparatus (Carbon-Arc Type) for Exposure of Non-Metallic Materials

Publisher: American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959

ASME B1.20.1, Pipe Threads, General Purpose (Inch)

Publisher: The American Society of Mechanical Engineers (ASME International), Three Park Avenue, New York, NY 10016-5990; Order Department: 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

CSA B602, Mechanical Couplings for Drain, Waste, and Vent Pipe and Sewer Pipe

Publisher: The Canadian Standards Association (CSA), 5060 Spectrum Way, Mississauga, ON L4W 5N6, Canada

1.5 Definitions

1.5.1 General

blow hole: a hole in casting due to air or gas in the metal or mold.

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