Supplement to the NPC 2010: Intent Statements

Issued by the
Canadian Commission on Building and Fire Codes
National Research Council of Canada

First Release 2011

ISBN 0-660-19977-1
NR20-3/1-2010E

NRCC 53302

Published in Canada

Aussi disponible en français :
Supplément au CNP 2010 : Énoncés d'intention
CNRC 53302F
ISBN 0-660-97380-7

Introduction

Background

The 2010 edition of the National Model Construction Codes is presented in a format called “objective-based codes” that is structured in three Divisions (A, B and C). The Codes contain explicitly defined objectives and functional statements (see Division A), which are statements on the functions that the components of a building or facility must perform and the objectives that these functions must satisfy. Most of the Code provisions in Division B—called acceptable solutions—are linked to at least one of those objectives and functional statements.

The objectives and functional statements are developed through a process called “bottom-up analysis,” which involves the analysis of each provision in Division B of the Codes to determine its intent and then derive applicable objectives and functional statements. The bottom-up analysis is carried out by the standing committees of the Canadian Commission on Building and Fire Codes (CCBFC) with extensive support from the staff of the Canadian Codes Centre (CCC). The technical changes that were incorporated into Division B of the 2010 Codes also underwent the same bottom-up analysis.

NOTE: Application statements were published along with intent statements for the 2005 edition of the Codes. Intent and application statements, which are additional, non-mandatory information and not an integral part of the Codes, provide guidance to Code users. The intent statements contain useful information not available elsewhere that helps users understand the rationale behind each requirement. This contributes to a more accurate interpretation and application of acceptable solutions and a clearer understanding of what alternative solutions should achieve.

Unlike intent statements, application statements repeat the Code provisions in whole or in part and contain information that can be derived from reading related Code requirements. Following a review of the information in the application statements, and given the significant effort required to update them each Code cycle, the CCBFC concluded that maintaining the application statements was an unproductive use of resources and has therefore discontinued their publication.

The 2010 intent statements are included in the on-line versions of the 2010 Codes and are also available for viewing by users of the printed versions of the Codes.

Understanding the Content of the Supplement to the NPC 2010: Intent Statements

Only the provisions in Part 2 of Division B (i.e. the acceptable solutions not including their Appendix Notes) have intent and application statements and, if applicable, objectives and functional statements.

Clicking on a Sentence reference in the left-hand portion of the screen brings up an analysis window on the right-hand side, which contains that Sentence's applicable objectives, attributions and intent and application statements.

Code Reference

For the most part, entire Sentences are analyzed as units of text. In such cases, only the Sentence number is identified in the analysis window and the actual text of the Sentence can be found in the printed Code. In some instances, however, the analysis applies to only a portion of a Sentence; in such cases, the Clause or Subclause being analyzed is identified in the field entitled “Attribution” or the portion of text being analyzed is quoted or summarized in that field and introduced by the phrase “Applies to.”

Objective

The objectives attributed to the provisions or portions of provisions in Division B are derived from the bottom-up analysis. Each analysis window contains tabs displaying the acronyms for each objective attributed to the text being analyzed. Clicking on a tab reveals a panel containing the information related to

that objective attribution, e.g. OH1 Indoor Conditions.

Some provisions or portions of provisions in Division B have no objectives attributed to them. In such instances, the tab will display the symbol "+" rather than an objective such as OH1, OS3, etc. See a related discussion below under "Intent."

Attribution

The specific functional statements and sub-objectives attributed to the text being analyzed are presented in square brackets in the Attribution field. If the attributions and analysis (i.e. intent and application statements) apply to the entire Sentence, no explanatory text will appear before or after the square brackets; if they apply to only a portion of a Sentence, the square brackets will either be preceded by the Clause or Subclause identifier, or followed by a phrase beginning with "Applies to," which specifies which portion of the Sentence the attributions and analysis apply to.

Intent

An intent statement explains the purpose of a provision or portion of provision found in Division B. It reveals what the standing committee was trying to achieve by introducing the Code provision in the first place or what the Code-user community has come to understand as the reason for the provision's existence.

Generally speaking, intent statements present the consequences of non-compliance with a requirement. They try to answer the question "What are the undesirable thing(s) that might happen if this provision is not complied with?" In many cases, the initial consequences of non-compliance may lead to a chain of consequences; the link between those consequences and the overall objective of the provision may only become apparent in the description of the latter consequences in the chain. All functional statements and objectives identified in Division A and attributed to the provisions in Division B of the 2010 Codes are derived from the intent statements.

Not all Code provisions are technical requirements; some act as definitions, clarifications, application modifiers or pointers to another provision. In such cases, the intent statement explains the role the provision plays in the Code and there is no chain of consquences. These types of provisions have no objectives or functional statements attributed to them. Appendix Note A-1.1.2.1.(1) in Division B of the Code provides information on how these types of provisions shall be interpreted in regards to their relation to objectives and functional statements.

Serious effort was put into using a consistent, logical approach and standardized set of phrases and terms in the development of the intent statements. It is the ongoing responsibility of the standing committees to maintain, update and improve the intent and application statements over time. Any suggestions towards these endeavours are welcome.

"To Limit the Probability"

Many of the hazards and undesirable events the Codes address, such as deterioration, spread of fire and heat loss, can only be minimized, retarded or controlled through compliance; other undesirable events such as the ignition of fire or structural collapse can never be prevented with absolute assurance. This is why the phrase "to limit the probability" is used in the intent statements rather than "to prevent."

Using the phrase "to prevent" would mean that it is possible to comply fully with a requirement but still not meet its intent. The phrase "to limit the probability" was therefore adopted to clearly convey the notion that the Codes do not and cannot provide absolute protection.

Defined Terms

1) The words and terms in italics in this Code shall have the following meanings (an asterisk (*) following a defined word or term indicates that the definition for that word or term is taken from the NBC):

Additional circuit vent means a vent pipe that is installed between a circuit vent and a relief vent to provide additional air circulation.

Air admittance valve means a one-way valve designed to allow air to enter the drainage system when the pressure in the plumbing system is less than the atmospheric pressure. (See Appendix Note A-2.2.10.16.(1) of Division B.)

Air break means the unobstructed vertical distance between the lowest point of an indirectly connected soil-or-waste pipe and the flood level rim of the fixture into which it discharges. (See Appendix Note A-2.3.3.11.(2) of Division B.)

Air gap means the unobstructed vertical distance through air between the lowest point of a water supply outlet and the flood level rim of the fixture or device into which the outlet discharges. (See Appendix Note A-2.6.2.9.(2) of Division B.)

Alloyed zinc means an alloy of zinc having the corrosion resistance and physical properties of an alloy containing 0.15% titanium, 0.74% copper and 99.11% zinc, and so tempered as to be capable of being formed into the shape required for a watertight joint.

Auxiliary water supply means any water supply on or available to the premises other than the primary potable water supply. (See Appendix A.)

Backflow means a flowing back or reversal of the normal direction of the flow.

Backflow preventer means a device or a method that prevents backflow. (See Figure A-1.4.1.2.(1)-A in Appendix A.)

Back pressure means pressure higher than the supply pressure.

Back-siphonage means backflow caused by a negative pressure in the supply system. (See Figure A-1.4.1.2.(1)-B in Appendix A.)

Back-siphonage preventer (or vacuum breaker) means a device or a method that prevents back-siphonage. (See Figure A-1.4.1.2.(1)-C in Appendix A.)

Backwater valve means a check valve designed for use in a gravity drainage system.

Bathroom group means a group of plumbing fixtures installed in the same room, consisting of one domestic-type lavatory, one water closet and either one bathtub (with or without a shower) or one one-head shower.

Branch means a soil-or-waste pipe connected at its upstream end to the junction of 2 or more soil-or-waste pipes or to a soil-or-waste stack, and connected at its downstream end to another branch, a sump, a soil-or-waste stack or a building drain. (See Figure A-1.4.1.2.(1)-F in Appendix A.)

Branch vent means a vent pipe that is connected at its lower end to the junction of 2 or more vent pipes, and at its upper end, either to another branch vent or to a stack vent, vent stack or vent header, or terminates in open air. (See Figure A-1.4.1.2.(1)-D in Appendix A.)

*Building** means any structure used or intended for supporting or sheltering any use or occupancy.

Building drain means the lowest horizontal piping, including any vertical offset, that conducts sewage, clear-water waste or storm water by gravity to a building sewer. (See Figure A-1.4.1.2.(1)-F in Appendix A.)

Building sewer means a pipe that is connected to a building drain 1 m outside a wall of a building and that leads to a public sewer or private sewage disposal system.

Building trap means a trap that is installed in a building drain or building sewer to prevent the circulation of air between a drainage system and a public sewer. (See Appendix Note A-2.4.5.4.(1) of Division B.)

Care or detention occupancy means the occupancy or use of a building or part thereof by persons who require special care or treatment because of cognitive or physical limitations or by persons who are restrained from, or are incapable of, self-preservation because of security measures not under their control.

Check valve means a valve that permits flow in one direction but prevents a return flow.

Circuit vent means a vent pipe that serves a number of fixtures and connects to the fixture drain of the most upstream fixture.

Class 1 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the water service pipe to the sprinkler/standpipe system's outlets, is directly connected to the public water supply main only, has no pumps or reservoirs, and in which the sprinkler drains discharge to the atmosphere, to dry wells or to other safe outlets.

Class 2 fire sprinkler/standpipe system means a Class 1 fire sprinkler/standpipe system that includes a booster pump in its connection to the public water supply main.

Class 3 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the water service pipe to the sprinkler/standpipe system's outlets and is directly connected to the public water supply main as well as to one or more of the following storage facilities, which are filled from the public water supply main only: elevated water storage, fire pumps supplying water from aboveground covered reservoirs, or pressure tanks. The water in this sprinkler/standpipe system must be maintained in potable condition. (See Appendix A.)

Class 4 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the water service pipe to the sprinkler/standpipe system's outlets and is directly connected to the public water supply main (similar to Class 1 and Class 2 fire sprinkler/standpipe systems) and to an auxiliary water supply dedicated to fire department use that is located within 520 m of a pumper connection.

Class 5 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the water service pipe to the sprinkler/standpipe system's outlets and is directly connected to the public water supply main and also interconnected with an auxiliary water supply.

Class 6 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the water service pipe to the sprinkler/standpipe system's outlets and acts as a combined industrial water supply and fire protection system supplied from the public water supply main only, with or without gravity storage or pump suction tanks.

Cleanout means an access provided in drainage and venting systems to provide for cleaning and inspection services.

Clear-water waste means waste water with impurity levels that will not be harmful to health and may include cooling water and condensate drainage from refrigeration and air-conditioning equipment and cooled condensate from steam heating systems, but does not include storm water. (See Appendix A.)

Combined building drain means a building drain that is intended to conduct sewage and storm water.

Combined building sewer means a building sewer that is intended to conduct sewage and storm water.

Combined sewer means a sewer that is intended to conduct sewage and storm water.

*Combustible** means that a material fails to meet the acceptance criteria of

Continuous vent means a vent pipe that is an extension of a vertical section of a branch or fixture

drain. (See Figure A-1.4.1.2.(1)-E in Appendix A.)

Critical level means the level of submergence at which the back-siphonage preventer ceases to prevent back-siphonage.

Dead end means a pipe that terminates with a closed fitting.

Developed length means the length along the centre line of the pipe and fittings. (See Appendix Note A-2.5.6.3.(1) of Division B.)

Directly connected means physically connected in such a way that water or gas cannot escape from the connection.

Drainage system means an assembly of pipes, fittings, fixtures, traps and appurtenances that is used to convey sewage, clear-water waste or storm water to a public sewer or a private sewage disposal system, but does not include subsoil drainage pipes. (See Figure A-1.4.1.2.(1)-F in Appendix A.)

Dual vent means a vent pipe that serves 2 fixtures and connects at the junction of the trap arms. (See Figure A-1.4.1.2.(1)-G in Appendix A.)

*Dwelling unit** means a suite operated as a housekeeping unit used or intended to be used by one or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities.

Emergency floor drain means a fixture for the purposes of overflow protection that does not receive regular discharge from other fixtures, other than from a trap primer. (See Appendix A.)

*Fire separation** means a construction assembly that acts as a barrier against the spread of fire.

Fire service pipe means a pipe that conveys water from a public water main or private water source to the inside of a building for the purpose of supplying the fire sprinkler or standpipe systems.

Fixture means a receptacle, appliance, apparatus or other device that discharges sewage or clear-water waste, and includes a floor drain.

Fixture drain means the pipe that connects a trap serving a fixture to another part of a drainage system.

Fixture outlet pipe means a pipe that connects the waste opening of a fixture to the trap serving the fixture. (See Figure A-1.4.1.2.(1)-H in Appendix A.)

Fixture unit (as applying to drainage systems) means the unit of measure based on the rate of discharge, time of operation and frequency of use of a fixture that expresses the hydraulic load that is imposed by that fixture on the drainage system.

Fixture unit (as applying to water distribution systems) means the unit of measure based on the rate of supply, time of operation and frequency of use of a fixture or outlet that expresses the hydraulic load that is imposed by that fixture or outlet on the supply system.

Flood level rim means the top edge at which water can overflow from a fixture or device. (See Figure A-1.4.1.2.(1)-B in Appendix A.)

Flow control roof drain means a roof drain that restricts the flow of storm water into the storm drainage system.

Fresh air inlet means a vent pipe that is installed in conjunction with a building trap and terminates outdoors. (See Appendix Note A-2.4.5.4.(1) of Division B.)

*Indirect service water heater** means a service water heater that derives its heat from a heating medium such as warm air, steam or hot water.

Indirectly connected means not directly connected. (See Appendix Note A-2.3.3.11.(2) of Division B.)

Individual vent means a vent pipe that serves one fixture.

Interceptor means a receptacle that is installed to prevent oil, grease, sand or other materials from

passing into a drainage system.

Leader means a pipe that is installed to carry storm water from a roof to a storm building drain or sewer or other place of disposal.

Nominally horizontal means at an angle of less than 45° with the horizontal. (See Figure A-1.4.1.2.(1)-J in Appendix A.)

Nominally vertical means at an angle of not more than 45° with the vertical. (See Figure A-1.4.1.2.(1)-J in Appendix A.)

*Noncombustible** means that a material meets the acceptance criteria of

*Occupancy** means the use or intended use of a building or part thereof for the shelter or support of persons, animals or property.

Offset means the piping that connects the ends of 2 pipes that are parallel. (See Figure A-1.4.1.2.(1)-K in Appendix A.)

Offset relief vent means a relief vent that provides additional air circulation upstream and downstream of an offset in a soil-or-waste stack. (See Appendix Note A-2.5.4.4.(1) of Division B.)

*Plumbing system** means a drainage system, a venting system and a water system or parts thereof. (See Figure A-1.4.1.2.(1)-L in Appendix A.)

Potable means safe for human consumption.

*Private sewage disposal system** means a privately owned plant for the treatment and disposal of sewage (such as a septic tank with an absorption field).

Private use (as applying to the classification of plumbing fixtures) means fixtures in residences and apartments, in private bathrooms of hotels, and in similar installations in other buildings for one family or an individual.

Private water supply system means an assembly of pipes, fittings, valves, equipment and appurtenances that supplies water from a private source to a water distribution system.

Public use (as applying to the classification of plumbing fixtures) means fixtures in general washrooms of schools, gymnasiums, hotels, bars, public comfort stations and other installations where fixtures are installed so that their use is unrestricted.

Relief vent means a vent pipe that is used in conjunction with a circuit vent to provide additional air circulation between a drainage system and a venting system.

Riser means a water distribution pipe that extends through at least one full storey.

Residential full flow-through fire sprinkler/standpipe system means an assembly of pipes and fittings installed in a one- or two-family dwelling that conveys water from the water service pipe to the sprinkler/standpipe system's outlets and is fully integrated into the potable water system to ensure a regular flow of water through all parts of both systems.

Residential partial flow-through fire sprinkler/standpipe system means an assembly of pipes and fittings installed in a one- or two-family dwelling that conveys water from the water service pipe to the sprinkler/standpipe system's outlets and in which flow, during inactive periods of the sprinkler/standpipe system, occurs only through the main header to the water closet located at the farthest point of the two systems.

Roof drain means a fitting or device that is installed in the roof to permit storm water to discharge into a leader.

Roof gutter means an exterior channel installed at the base of a sloped roof to convey storm water.

Sanitary building drain means a building drain that conducts sewage to a building sewer from the most upstream soil-or-waste stack, branch or fixture drain serving a water closet.

Sanitary building sewer means a building sewer that conducts sewage.

*Sanitary drainage system** means a drainage system that conducts sewage.

Sanitary sewer means a sewer that conducts sewage.

*Service water heater** means a device for heating water for plumbing services.

Sewage means any liquid waste other than clear-water waste or storm water.

Size means the nominal diameter by which a pipe, fitting, trap or other similar item is commercially designated.

Soil-or-waste pipe or waste pipe means a pipe in a sanitary drainage system.

Soil-or-waste stack means a vertical soil-or-waste pipe that passes through one or more storeys, and includes any offset that is part of the stack.

Stack vent means a vent pipe that connects the top of a soil-or-waste stack to a vent header or to outside air. (See Figure A-1.4.1.2.(1)-G in Appendix A.)

*Storage-type service water heater** means a service water heater with an integral hot water storage tank.

Storey (as applying to plumbing) means the interval between 2 successive floor levels, including mezzanine floors that contain plumbing fixtures, or between a floor level and roof.

Storm building drain means a building drain that conducts storm water and is connected at its upstream end to a leader, sump or catch basin, and at its downstream end to a building sewer or a designated storm water disposal location.

Storm building sewer means a building sewer that conveys storm water.

Storm drainage system means a drainage system that conveys storm water.

Storm sewer means a sewer that conveys storm water.

Storm water means water that is discharged from a surface as a result of rainfall or snowfall.

Subsoil drainage pipe means a pipe that is installed underground to intercept and convey subsurface water.

*Suite** means a single room or series of rooms of complementary use, operated under a single tenancy and includes dwelling units, individual guest rooms in motels, hotels, boarding houses, rooming houses and dormitories, as well as individual stores and individual or complementary rooms for business and personal services occupancies.

Trap means a fitting or device that is designed to hold a liquid seal that will prevent the passage of gas but will not materially affect the flow of a liquid.

Trap arm means that portion of a fixture drain between the trap weir and the vent pipe fitting. (See Appendix Note A-2.5.6.3.(1) of Division B.)

Trap dip means the lowest part of the upper interior surface of a trap.

Trap seal depth means the vertical distance between the trap dip and the trap weir. (See Appendix Note A-2.2.3.1.(1) and (3) of Division B.)

Trap standard means the trap for a fixture that is integral with the support for the fixture.

Trap weir means the highest part of the lower interior surface of a trap. (See Appendix Note A-2.2.3.1.(1) and (3) of Division B.)

Vacuum breaker (see back-siphonage preventer).

Vent header means a vent pipe that connects any combination of stack vents or vent stacks to outside air. (See Figure A-1.4.1.2.(1)-I in Appendix A.)

Vent pipe means a pipe that is part of a venting system.

Vent stack means a vent pipe that is connected at its upper end to a vent header or that terminates in outside air and is connected at its lower end to the soil-or-waste stack at or below the lowest soil-or-waste pipe connection. (See Figure A-1.4.1.2.(1)-G in Appendix A.)

Venting system means an assembly of pipes and fittings that connects a drainage system with outside air for circulation of air and the protection of trap seals in the drainage system. (See Figures A-1.4.1.2.(1)-F and A-1.4.1.2.(1)-G in Appendix A.)

Waste pipe (see soil-or-waste pipe).

Water distribution system means an assembly of pipes, fittings, valves and appurtenances that conveys water from the water service pipe or private water supply system to water supply outlets, fixtures, appliances and devices.

Water service pipe means a pipe that conveys water from a public water main or private water source to the inside of the building.

Water system means a private water supply system, a water service pipe, a water distribution system or parts thereof.

Wet vent means a soil-or-waste pipe that also serves as a vent pipe and extends from the most downstream wet-vented fixture connection to the most upstream fixture connection. (See Appendix Note A-2.5.8.1.(2) of Division B.)

Yoke vent means a vent pipe that is connected at its lower end to a soil-or-waste stack and at its upper end to a vent stack or to a branch vent connected to a vent stack. (See Appendix Note A-2.5.4.3. of Division B.)

1) The objectives of this Code are as follows (see Appendix A):

OS Safety

An objective of this Code is to limit the probability that, as a result of the design or installation of the plumbing system, a person in or adjacent to the building or facility will be exposed to an unacceptable risk of injury.

OS1 Fire Safety

An objective of this Code is to limit the probability that, as a result of the design or installation of the plumbing system, a person in or adjacent to the building or facility will be exposed to an unacceptable risk of injury due to fire. The risks of injury due to fire addressed in this Code are those caused by—

OS1.1 - fire or explosion occurring

OS1.4 - fire safety systems failing to function as expected

OS2 Structural Safety

An objective of this Code is to limit the probability that, as a result of the design or installation of the plumbing system, a person in or adjacent to the building will be exposed to an unacceptable risk of injury due to structural failure. The risks of injury due to structural failure addressed in this Code are those caused by—

OS2.1 - loads bearing on the building elements that exceed their load-bearing capacity

OS3 Safety in Use

An objective of this Code is to limit the probability that, as a result of the design or installation of the plumbing system, a person in or adjacent to the building or facility will be exposed to an unacceptable risk of injury due to hazards. The risks of injury due to hazards addressed in this Code are those caused by—

OS3.1 - tripping, slipping, falling, contact, drowning or collision

OS3.2 - contact with hot surfaces or substances

OS3.4 - exposure to hazardous substances

OH Health

An objective of this Code is to limit the probability that, as a result of the design or installation of the plumbing system, a person will be exposed to an unacceptable risk of illness.

OH1 Indoor Conditions

An objective of this Code is to limit the probability that, as a result of the design or installation of the plumbing system, a person in the building or facility will be exposed to an unacceptable risk of illness due to indoor conditions. The risks of illness due to indoor conditions addressed in this Code are those caused by—

OH1.1 - inadequate indoor air quality

OH2 Sanitation

An objective of this Code is to limit the probability that, as a result of the design or installation of the plumbing system, a person in the building or facility will be exposed to an unacceptable risk of illness due to unsanitary conditions. The risks of illness due to unsanitary conditions addressed in this Code are those caused by—

OH2.1 - exposure to human or domestic waste

OH2.2 - consumption of contaminated water

OH2.3 - inadequate facilities for personal hygiene

OH2.4 - contact with contaminated surfaces

OH5 Hazardous Substances Containment

An objective of this Code is to limit the probability that, as a result of the design or installation of the plumbing system, the public will be exposed to an unacceptable risk of illness due to the release of hazardous substances from the building or facility.

OP Protection of the Building or Facility from Water and Sewage Damage

OP5 Protection of the Building or Facility from Water and Sewage Damage

An objective of this Code is to limit the probability that, as a result of the design or installation of the plumbing system, the building or facility will be exposed to an unacceptable risk of damage due to the leakage of service water or sewage.

Functional Statements

1) The objectives of this Code are achieved by measures, such as those described in the acceptable solutions in Division B, that are intended to allow the plumbing system to perform the following functions (see Appendix A):

F01 To minimize the risk of accidental ignition.

F02 To limit the severity and effects of fire or explosions.

F20 To support and withstand expected loads and forces.

F21 To limit or accommodate dimensional change.

F30 To minimize the risk of injury to persons as a result of tripping, slipping, falling, contact, drowning or collision.

F31 To minimize the risk of injury to persons as a result of contact with hot surfaces or substances.

F40 To limit the level of contaminants.

F41 To minimize the risk of generation of contaminants.

F43 To minimize the risk of release of hazardous substances.

F45 To minimize the risk of the spread of disease through communal shower facilities.

F46 To minimize the risk of contamination of potable water.

F62 To facilitate the dissipation of water and moisture from the building.

F70 To provide potable water.

F71 To provide facilities for personal hygiene.

F72 To provide facilities for the sanitary disposal of human and domestic wastes.

F80 To resist deterioration resulting from expected service conditions.

F81 To minimize the risk of malfunction, interference, damage, tampering, lack of use or misuse.

F82 To minimize the risk of inadequate performance due to improper maintenance or lack of maintenance.

Provision: 2.1.1.1.(1)

Intent(s)

Intent 1. To state the application of this Part.

Provision: 2.1.2.1.(1)

Objective
OH2

Attributions
[F72-OH2.1]

Intent(s)

Intent 1. To limit the probability that sanitary waste will discharge into an inappropriate disposal system, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.1.2.1.(2)

Objective
OH2

Attributions
[F72-OH2.1]

Intent(s)

Intent 1. To limit the probability that drainage systems will be overloaded, which could lead to raw sewage and storm water backing up into buildings, which could lead to flooding in buildings, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F72-OP5]

Intent(s)

Intent 1. To limit the probability that drainage systems will be overloaded, which could lead to raw sewage and storm water backing up into buildings, which could lead to flooding in buildings, which could lead to damage to the building or facility.

Provision: 2.1.2.2.(1)

Objective
OP5

Attributions
[F72-OP5]

Intent(s)

Intent 1. To limit the probability that storm water will be improperly disposed of, which could lead to flooding in buildings, which could lead to damage to the building or facility.

Provision: 2.1.2.3.(1)

Objective
OH2

Attributions
[F46-OH2.2]

Intent(s)

Intent 1. To limit the probability that water distribution systems in buildings will be connected to non-potable water sources, which could lead to the contamination of potable water distribution systems, which could lead to harm to persons.

Provision: 2.1.2.4.(1)

Objective
OH2

Attributions
[F71-OH2.1, OH2.3] [F70-OH2.1]

Intent(s)

Intent 1. To limit the probability that an interruption of water and sanitary services to an adjacent building will lead to an interruption of services to the building, which could lead to the unavailability of water for drinking, bathing, washing or flushing of fixtures, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.1.3.1.(1)

Objective
OH1

Attributions
[F40-OH1.1] Applies to the requirement for ventilation.

Intent(s)

Intent 1. To limit the probability that plumbing fixtures will be installed in locations that do not have sufficient ventilation, which could lead to a negative effect on indoor air quality, which could lead to harm to persons.

Objective
OS3

Attributions
[F30-OS3.1] Applies to the requirement for lighting.

Intent(s)

Intent 1. To limit the probability that plumbing fixtures will be installed in locations that do not have sufficient lighting, which could lead to persons tripping, falling or bumping into fixtures, which could lead to harm to persons.

Provision: 2.1.3.2.(1)

Objective
OH2

Attributions
[F40-OH2.1] [F41-OH2.4] [F71-OH2.3]

Intent(s)

Intent 1. To limit the probability that plumbing equipment will be inaccessible for maintenance, which could lead to blockages or failure, which could lead to flooding or leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Intent 2. To limit the probability that plumbing equipment will be inaccessible for cleaning, which could lead to bacteria growth, which could lead to unsanitary conditions, which could lead to harm to persons.

Intent 3. To limit the probability that plumbing equipment will be inaccessible, which could lead to unavailability for its intended use, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OH2

Attributions
[F82-OH2.1, OH2.2, OH2.3, OH2.4]

Intent(s)

Intent 1. To limit the probability that plumbing equipment will be inaccessible for maintenance, which could lead to failure of a trap seal or insufficient venting, which could lead to a negative effect on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F71-OH2.3] [F81-OH2.4]

Intent(s)

Intent 1. To limit the probability that plumbing equipment will be inaccessible for use, which could lead to discomfort, which could lead to harm to persons.

Intent 2. To limit the probability that plumbing equipment will be inaccessible for maintenance, which could lead to persons coming in contact with damaged equipment [such as sharp edges, cracks, broken or weakened parts], which could lead to harm to persons.

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that plumbing equipment will be inaccessible for maintenance, which could lead to blockages or failure, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Intent 2. To limit the probability that plumbing equipment will be inaccessible for use, which could lead to delays in accessing system controls such as shut-off and pressure-reducing valves, which could lead to excessive leakage or flooding, which could lead to damage to the building or facility.

Provision: 2.2.1.1.(1)

Objective
OH2

Attributions
[F80-OH2.1, OH2.2, OH2.3, OH2.4]

Intent(s)
Intent 1. To limit the probability that exposure to corrosive conditions will lead to premature failure of plumbing systems, which could lead to leakage or flooding, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F80-OP5]

Intent(s)
Intent 1. To limit the probability that exposure to corrosive conditions will lead to premature failure of plumbing systems, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Provision: 2.2.1.1.(2)

Objective
OH2

Attributions
[F80-OH2.1]

Intent(s)
Intent 1. To limit the probability that exposure to corrosive waste will lead to premature failure of drainage systems, which could lead to persons being exposed to sewer wastes, sewer gases or toxic fumes, which could lead to harm to persons.

Objective
OP5

Attributions
[F80-OP5]

Intent(s)
Intent 1. To limit the probability that exposure to corrosive waste will lead to premature failure of drainage systems, which could lead to the unwanted escape of waste material, which could lead to damage to the building or facility.

Provision: 2.2.1.2.(1)

Objective
OH2

Attributions
[F70-OH2.2]

Intent(s)
Intent 1. To limit the probability that contaminated materials will be used, which could lead to the contamination of potable water systems, which could lead to harm to persons.

Provision: 2.2.1.3.(1)

Intent(s)
Intent 1. To facilitate determination of compliance with the Code.

Provision: 2.2.1.3.(2)

Intent(s)
Intent 1. To facilitate determination of compliance with the Code.

Provision: 2.2.1.4.(1)

Intent(s)
Intent 1. To clarify that all references to tube and tubing used in a plumbing system have the same meaning as pipe and piping, and are to be treated in the same manner for the purpose of applying the National Plumbing Code of Canada.

Provision: 2.2.1.5.(1)

Objective
OH2

Attributions
[F20, F81-OH2.1, OH2.3] [F46-OH2.2]

Intent(s)
Intent 1. To limit the probability that internal pressure will lead to the failure of piping, fittings and joints, which could lead to exposure of persons to sewer waste or gases, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)
Intent 1. To limit the probability that internal pressure will lead to the failure of piping, fittings and joints, which could lead to the leakage of liquids, which could lead to damage to the building or facility.

Provision: 2.2.1.6.(1)

Objective
OH2

Attributions
[F20, F81-OH2.3]

Intent(s)
Intent 1. To limit the probability that internal pressure will lead to the failure of water service pipes, which could lead to persons being exposed to water at a high pressure, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)
Intent 1. To limit the probability that internal pressure will lead to the failure of water service pipes, which could lead to the leakage of liquids, which could lead to damage to the building or facility.

Provision: 2.2.2.1.(1)

Objective
OH2

Attributions
[F41-OH2.4]

Intent(s)
Intent 1. To limit the probability that fixture surfaces will be difficult to clean, which could lead to bacteria growth, which could lead to harm to persons.

Provision: 2.2.2.2.(1)

Objective
OH2

Attributions
[F80-OH2.1, OH2.4]

Intent(s)
Intent 1. To limit the probability that plumbing fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OS3

Attributions
[F80-OS3.1]

Intent(s)

Intent 1. To limit the probability that plumbing fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to unsafe conditions, which could lead to harm to persons.

Provision: 2.2.2.2.(2)

Objective
OH2

Attributions
[F80-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that vitreous china fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OS3

Attributions
[F80-OS3.1]

Intent(s)

Intent 1. To limit the probability that vitreous china fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to unsafe conditions, which could lead to harm to persons.

Provision: 2.2.2.2.(3)

Objective
OH2

Attributions
[F80-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that enamelled cast iron fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OS3

Attributions
[F80-OS3.1]

Intent(s)

Intent 1. To limit the probability that enamelled cast iron fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to unsafe conditions, which could lead to harm to persons.

Provision: 2.2.2.2.(4)

Objective
OH2

Attributions
[F80-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that porcelain enamelled steel fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OS3

Attributions
[F80-OS3.1]

Intent(s)

Intent 1. To limit the probability that porcelain enamelled steel fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to unsafe conditions, which could lead to harm to persons.

Provision: 2.2.2.2.(5)

Objective
OH2

Attributions
[F80-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that stainless steel fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OS3

Attributions
[F80-OS3.1]

Intent(s)

Intent 1. To limit the probability that stainless steel fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to unsafe conditions, which could lead to harm to persons.

Provision: 2.2.2.2.(6)

Objective
OH2

Attributions
[F80-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that plastic fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OS3

Attributions
[F80-OS3.1]

Intent(s)

Intent 1. To limit the probability that plastic fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to unsafe conditions, which could lead to harm to persons.

Provision: 2.2.2.2.(7)

Objective
OH2

Attributions
[F80, F41-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that hydromassage bathtubs and associated equipment will not meet proper standards, which could lead to such tubs not performing in the way intended, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OS3

Attributions
[F71, F80-OS3.1]

Intent(s)

Intent 1. To limit the probability that hydromassage bathtubs and associated equipment will not meet proper standards, which could lead to such tubs not performing in the way intended, which could lead to unsafe conditions, which could lead to harm to persons.

Provision: 2.2.2.2.(8)

Objective
OH2

Attributions
[F41, F71, F80-OH2.1, OH2.3, OH2.4]

Intent(s)

Intent 1. To limit the probability that macerating toilet systems will not meet proper standards, which could lead to such systems not performing in the way intended, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OS3

Attributions
[F71, F80-OS3.1]

Intent(s)

Intent 1. To limit the probability that macerating toilet systems and associated equipment will not meet proper standards, which could lead to such toilet systems not performing in the way intended, which could lead to unsafe conditions, which could lead to harm to persons.

Provision: 2.2.2.3.(1)

Objective
OH2

Attributions
[F80-OH2.1]

Intent(s)

Intent 1. To limit the probability that water will leak into building components through walls or floors, which could lead to bacteria growth, which could lead to harm to persons.

Objective
OP5

Attributions
[F80-OP5]

Intent(s)

Intent 1. To limit the probability that water will leak into building components through walls or floors, which could lead to damage to the building or facility.

Provision: 2.2.2.3.(2)

Objective
OH2

Attributions
[F80-OH2.1]

Intent(s)

Intent 1. To limit the probability that an excessive amount of water from shower heads will flow into a drain, which could lead to the drain overflowing, which could lead to water leakage into building components, which could lead to bacteria growth, which could lead to harm to persons.

Objective
OP5

Attributions
[F40-OP5]

Intent(s)

Intent 1. To limit the probability that an excessive amount of water from shower heads will flow into a drain, which could lead to the drain overflowing, which could lead to water leakage into building components, which could lead to damage to the building or facility.

Provision: 2.2.2.3.(3)

Objective
OH2

Attributions
[F45-OH2.1]

Intent(s)

Intent 1. To limit the probability that persons will be exposed to waste water from adjacent showers being used by other persons, which could lead to the spread of disease, which could lead to harm to persons.

Provision: 2.2.2.3.(4)

Objective
OH2

Attributions
[F45-OH2.1]

Intent(s)

Intent 1. To limit the probability that persons will be exposed to waste water from adjacent showers being used by other persons, which could lead to the spread of disease, which could lead to harm to persons.

Intent(s)

Intent 1. To exempt column showers from the minimum horizontal distance requirements of Sentence 2.2.2.3.(4) since the inherent circular installation of the heads [on the column] will maintain spray separation.

Provision: 2.2.2.4.(1)

Objective
OH2

Attributions
[F41, F81-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that contaminated overflows [from food debris] will not be identified, cleaned and disinfected, which could lead to the contamination of food and utensils, which could lead to harm to persons.

Provision: 2.2.2.5.(1)

Objective
OH2

Attributions
[F30-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that persons using the fixture will contact the contaminated front of the fixture, which could lead to the spread of disease, which could lead to harm to persons.

Provision: 2.2.3.1.(1)

Objective
OH1

Attributions
[F81, F40-OH1.1]

Intent(s)

Intent 1. To limit the probability that inertia of the water flow [pressure differential] and evaporation, or malfunction of mechanical devices, will lead to the failure of trap seals, which could lead to the leakage of sewer gases into the building, which could lead to a negative effect on indoor air quality, which could lead to harm to persons.

Intent 2. To limit the probability that leakage from the failure of trap seals will not be identified and corrected, which could lead to the leakage of sewer gases into the building, which could lead to a negative effect on indoor air quality, which could lead to harm to persons.

Provision: 2.2.3.1.(2)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To modify the requirements of Sentence 2.2.3.1.(1) [specifically Clause 2.2.3.1.(1)(a)], which would otherwise permit a lesser depth, on the basis that a greater minimum trap seal depth will provide additional protection where exposure to acid gases is possible in an acid waste system. This [greater seal depth] is to limit the probability that inertia of the water flow [pressure differential] and evaporation, or malfunction of mechanical devices, will lead to the failure of trap seals, which could lead to the leakage of sewer gases into the building, which could lead to a negative effect on indoor air quality, which could lead to harm to persons.

Objective
OH1

Attributions
[F81-OP5]

Intent(s)

Intent 1. To modify the requirements of Sentence 2.2.3.1.(1) [specifically Clause 2.2.3.1.(1)(a)], which would otherwise permit a lesser depth, on the basis that a greater minimum trap seal depth will provide additional protection where exposure to acid gases is possible in an acid waste system. This [greater seal depth] is to limit the probability that inertia of the water flow [pressure differential] and evaporation, or malfunction of mechanical devices, will lead to the failure of trap seals, which could lead to the leakage of sewer gases into the building, which could lead to a negative effect on indoor air quality, which could lead to harm to persons.

Provision: 2.2.3.1.(3)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3, OH2.4]

Intent(s)

Intent 1. To limit the probability that traps will not be cleaned, which could lead to the accumulation of solids in the trap, which could lead to blockage of the trap, which could lead to waste water backing up, overflowing and flooding, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that traps will not be cleaned, which could lead to the accumulation of solids in the trap, which could lead to blockage of the trap, which could lead to overflowing and flooding, which could lead to damage to the building or facility.

Intent(s)

Intent 1. To exempt from the requirement for a cleanout plug at the lowest point of the trap applications where the configuration of the sink makes access to the cleanout plug impractical.

Provision: 2.2.3.1.(4)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that traps will not be properly sealed, which could lead to the leakage of sewer gases into the building, which could lead to harm to persons.

Provision: 2.2.3.1.(5)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that leakage from the failure of certain trap seals will not be identified and corrected, which could lead to the leakage of sewer gases into the building, which could lead to harm to persons.

Provision: 2.2.3.2.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3, OH2.4]

Intent(s)

Intent 1. To limit the probability that interceptors will not be cleaned, which could lead to the accumulation of material in the interceptor, which could lead to the blockage of flow or the failure to intercept waste materials, which could lead to waste water backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.3.2.(2)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3, OH2.4] [F46-OH2.2]

Intent(s)

Intent 1. To limit the probability that inadequate design will lead to air binding of grease interceptors, which could lead to a buildup of waste gas pressure, which could lead to the blockage of waste flow, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Intent 2. To limit the probability that installation of grease interceptors with a water jacket will lead to, if a crack develops in the wall between the interceptor and the water jacket, contamination of potable water, which could lead to harm to persons.

Provision: 2.2.3.3.(1)

Objective
OH2

Attributions
[F82-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that the failure of less robust traps will not be detected and corrected, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

Intent 2. To limit the probability that a lack of accessibility will lead to tubular metal or plastic traps not being cleaned, which could lead to the accumulation of solids in the trap, which could lead to waste water backing up, overflowing and flooding, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F82-OP5]

Intent(s)

Intent 1. To limit the probability that the failure of less robust traps will not be detected and corrected, which could lead to the leakage of sewage, which could lead to damage to the building or facility.

Provision: 2.2.4.1.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that turbulence at an abrupt change in flow direction will lead to a reduction of flow capacity of drainage systems, which could lead to waste water backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.4.1.(2)

Objective
OH2

Attributions
[F81-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that turbulence and interference between flows from opposite branches will lead to a reduction of flow capacity in drainage systems, which could lead to waste water backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.4.2.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that turbulence and interference between flows from opposite branches will lead to a reduction of flow capacity in drainage systems, which could lead to waste water backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.4.2.(2)

Objective
OH2

Attributions
[F81-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that discharge from one water closet will enter another water closet, which could lead to flooding and overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

Intent 2. To limit the probability that blockages in water closet or urinal drainage systems will be difficult to clear or clean out using drain-cleaning equipment, which could lead to flooding and overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that discharge from one water closet will enter another water closet, which could lead to flooding and overflow, which could lead to damage to the building or facility.

Intent 2. To limit the probability that blockages in water closet or urinal drainage systems will be difficult to clear or clean out using drain-cleaning equipment, which could lead to flooding and overflow, which could lead to damage to the building or facility.

Provision: 2.2.4.3.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that waste water flow will be subjected to abrupt changes in direction, which could lead to turbulence, which could lead to blockages or inadequate flow capacity, which

could lead to waste water backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.4.3.(2)

Objective
OH2

Attributions
[F81-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that waste water flow will be subjected to abrupt changes in direction, which could lead to turbulence, which could lead to blockages or inadequate flow capacity, which could lead to waste water backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.1.(1)

Objective
OH2

Attributions
[F20-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that asbestos-cement pipe and associated fittings will not meet proper standards, which could lead to such pipe and fittings not performing in the way intended, which could lead to failure of the pipe or fittings, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.1.(2)

Objective
OH2

Attributions
[F20-OH2.1, OH2.4]

Intent(s)

Intent 1. To exempt asbestos-cement pipe and fittings from the application of Sentence 2.2.5.1.(1), which would otherwise require conformance to certain standards, if certain conditions are met [the pipe and fittings meet the standards described in Sentence 2.2.5.1.(1) or certain other standards].

This is to limit the probability that asbestos-cement pipe and fittings will not meet proper standards, which could lead to such products not performing in the way intended, which could lead to failure of the pipe or fittings, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.2.(1)

Objective
OH2

Attributions
[F20-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that asbestos-cement water pipe, couplings and bends will not meet proper standards, which could lead to such pipe, couplings and bends not performing in the way intended, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that asbestos-cement water pipe, couplings and bends will not meet proper standards, which could lead to such pipe, couplings and bends not performing in the way intended, which could lead to the failure of the pipe, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Provision: 2.2.5.2.(2)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that the pipe will be subject to mechanical or physical damage, which could lead to the failure of the pipe, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Provision: 2.2.5.3.(1)

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that concrete pipe will not meet proper standards, which could lead to such pipe not performing in the way intended, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.3.(2)

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that certain joints used in concrete pipe will not meet proper standards, which could lead to such joints not performing in the way intended, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.3.(3)

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that the performance of field-fabricated fittings will fall below a level established by the referenced standard, which could lead to failure, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.3.(4)

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that concrete pipe will not be continuously supported, which could lead to the leakage of sewage from joints caused by normal expansion and contraction, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.3.(5)

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that materials will not conform to a recognized standard, which could lead to the performance of the materials falling below a level established by the referenced standard, which could lead to failure, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.4.(1)

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that vitrified clay pipe and fittings will not meet proper standards, which could lead to failure, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.4.(2)

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that couplings and joints for vitrified clay pipe will not meet proper standards, which could lead to failure, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.4.(3)

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that vitrified clay pipe and fittings will be used above ground or inside buildings where they may be subject to mechanical damage, which could lead to leakage or flooding, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.5.(1)

Objective
OH2

Attributions
[F20-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that polyethylene water pipe, tubing and fittings will not meet proper standards, which could lead to such pipe, tubing and fittings not performing in the way intended, which could lead to failure, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that polyethylene water pipe, tubing and fittings will not meet proper standards, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.5.5.(2)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that polyethylene water pipe [and associated fittings] will be used for a purpose other than as a water service pipe [e.g. hot water service], which could lead to the failure of the pipe or associated fittings due to the inability of the pipe material to withstand service conditions, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Provision: 2.2.5.5.(3)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that butt fusion fittings for polyethylene pipe will not meet proper standards, which could lead to the failure of such fittings, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Provision: 2.2.5.6.(1)

Objective
OH2

Attributions
[F72-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that performance will fall significantly below expectations, which could lead to failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.7.(1)

Objective
OH2

Attributions
[F20-OH2.2]

Intent(s)

Intent 1. To limit the probability that crosslinked polyethylene pipe and associated fittings will not meet proper standards, which could lead to inadequate performance, which could lead to failure, which could lead to contamination of potable water, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that crosslinked polyethylene pipe and associated fittings will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to failure, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Provision: 2.2.5.8.(1)

Objective
OH2

Attributions
[F20-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that PVC water pipe, fittings and solvent cement will not meet proper standards, which could lead to pipe, fittings and solvent cement not performing in the way intended, which could lead to failure, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that PVC water pipe, fittings and solvent cement will not meet proper standards, which could lead to pipe, fittings and solvent cement not performing in the way intended, which could lead to failure, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Intent 2. To limit the probability that normal operating pressures will lead to failure of the PVC water pipe, fittings or solvent cement, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Provision: 2.2.5.8.(2)

Objective
OH2

Attributions
[F20-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that PVC water pipe fittings will not meet proper standards, which could lead to such fittings not performing in the way intended, which could lead to their failure, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that PVC water pipe fittings will not meet proper standards, which could lead to such fittings not performing in the way intended, which could lead to the failure of the fittings, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Provision: 2.2.5.8.(3)

Objective
OH2

Attributions
[F20-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that PVC injection moulded gasketed fittings will not meet proper standards, which could lead to such fittings not performing in the way intended, which could lead to the failure of the fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that PVC injection moulded gasketed fittings will not meet proper standards, which could lead to such fittings not performing in the way intended, which could lead to the failure of the fittings, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Provision: 2.2.5.8.(4)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that temperatures from hot water will soften and weaken pipe or fitting materials, which could lead to the failure of the pipe and fittings, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Provision: 2.2.5.9.(1)

Objective
OH2

Attributions
[F20-OH2.2, OH2.3, OH2.4]

Intent(s)

Intent 1. To limit the probability that CPVC hot and cold water pipe, fittings and solvent cements will not meet proper standards, which could lead to such pipe, fittings and solvent cements not performing in the way intended, which could lead to the failure of the pipe, fittings or solvent cement, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that CPVC hot and cold water pipe, fittings and solvent cements will not meet proper standards, which could lead to such pipe, fittings and solvent cements not performing in the way intended, which could lead to the failure of the pipe, fittings or solvent cement, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Provision: 2.2.5.9.(2)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that normal operating temperatures and pressures will lead to the failure of CPVC piping systems, which could lead to leakage or flooding, which could lead to damage to the building or facility.

Provision: 2.2.5.10.(1)

Objective
OH2

Attributions
[F20, F80, F81-OH2.1, OH2.3]

Intent(s)
Intent 1. To limit the probability that the performance of plastic pipe, fittings and solvent cement will fall significantly below expectations, which could lead to failure of such pipe, fittings and cement, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.11.(1)

Objective
OH2

Attributions
[F20, F80, F81-OH2.1, OH2.3]

Intent(s)
Intent 1. To limit the probability that performance of the solvent cement will fall significantly below expectations, which could lead to cement failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.11.(2)

Objective
OH2

Attributions
[F20, F80, F81-OH2.1, OH2.3]

Intent(s)
Intent 1. To limit the probability that an inappropriate cement will be used, which could lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.12.(1)

Objective
OH2

Attributions
[F20, F80, F81-OH2.1, OH2.3]

Intent(s)
Intent 1. To limit the probability that performance will fall significantly below expectations, which could lead to pipe and fittings not performing in the way intended, which could lead to failure of the pipe and fittings, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.12.(2)

Intent(s)

Intent 1. To direct Code users to fire safety requirements in the National Building Code of Canada for combustible piping materials.

Provision: 2.2.5.12.(3)

Intent(s)

Intent 1. To direct Code users to fire safety requirements referenced in the National Building Code of Canada for noncombustible piping materials penetrating fire separations or fire stops.

Provision: 2.2.5.13.(1)

Objective

OH2

Attributions

[F20, F80, F81-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that the performance of the PE/AL/PE composite pipe and fittings will fall significantly below expectations, which could lead to the failure of such pipe and fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective

OP5

Attributions

[F20-OP5]

Intent(s)

Intent 1. To limit the probability that the performance of the PE/AL/PE composite pipe and fittings will fall significantly below expectations, which could lead to the failure of such pipe and fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.5.13.(2)

Objective

OP5

Attributions

[F20-OP5]

Intent(s)

Intent 1. To limit the probability that the use of materials that are unable to meet high-temperature service conditions will lead to the failure of pipes and fittings, which could lead to leakage, which could lead to damage to the building or facility.

Objective

OH2

Attributions

[F20-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that the use of materials that are unable to meet high-temperature service conditions will lead to the failure of pipes and fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.13.(3)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that the performance of the PE/AL/PE composite pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OH2

Attributions
[F20-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that the performance of the PE/AL/PE composite pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.13.(4)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that the performance of the fittings for PE/AL/PE composite pipe will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OH2

Attributions
[F20-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that the performance of the fittings for PE/AL/PE composite pipe will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.5.14.(1)

Objective
OH2

Attributions
[F20-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that performance of the PEX/AL/PEX composite pipe and fittings will fall significantly below expectations, which could lead to failure of such pipe and fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that performance of the PEX/AL/PEX composite pipe and fittings will fall significantly below expectations, which could lead to failure of such pipe and fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.5.15.(1)

Objective
OH2

Attributions
[F20-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that performance of the polypropylene pipe and fittings will fall significantly below expectations, which could lead to failure of such pipe and fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that performance of the polypropylene pipe and fittings will fall significantly below expectations, which could lead to failure of such pipe and fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.6.1.(1)

Objective
OH2

Attributions
[F20-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that performance of the drainage piping, vent piping and fittings will fall significantly below expectations, which could lead to such pipe and fittings not performing in the way intended, which could lead to failure, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.6.1.(2)

Objective
OH2

Attributions
[F20-OH2.2]

Intent(s)

Intent 1. To limit the probability that use of inappropriate materials for expected service conditions, will lead to corrosion, which could lead to contamination of water, which could lead to harm to persons.

Provision: 2.2.6.2.(1)

Objective
OH2

Attributions
[F20-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that performance of cast iron fittings will fall significantly below expectations, which could lead to failure of such fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.6.3.(1)

Objective
OH2

Attributions
[F20-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that performance of threaded cast iron drainage fittings will fall significantly below expectations, which could lead to failure of such fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.6.3.(2)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that inappropriate fittings will lead to an inability to resist expected water pressures, which could lead to leakage, which could lead to flooding, which could lead to damage to the building or facility.

Provision: 2.2.6.4.(1)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that performance of cast iron water pipes will fall significantly below expectations, which could lead to failure of such pipes, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OH2

Attributions
[F20-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that performance of cast iron water pipes will fall significantly below expectations, which could lead to failure, which could lead to leakage of such pipes, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.6.4.(2)

Objective
OH2

Attributions
[F80-OH2.2]

Intent(s)

Intent 1. To limit the probability that performance of the cement mortar lining will fall significantly below expectations, which could lead to corrosion of the cast iron pipe, which could lead to contamination of water, which could lead to harm to persons.

Provision: 2.2.6.4.(3)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that performance of cast iron fittings for cast iron or ductile iron water pipes will fall significantly below expectations, which could lead to failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.6.4.(4)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that performance of rubber gasket joints for cast iron and ductile iron pressure water pipes will fall significantly below expectations, which could lead to failure of such gasket joints, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.6.5.(1)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that performance of screwed cast iron water fittings will fall significantly below expectations, which could lead to failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.6.5.(2)

Objective
OH2

Attributions
[F80-OH2.2]

Intent(s)

Intent 1. To limit the probability that inadequate corrosion protection will lead to the inability of cast iron fittings to resist the corrosive effects of water, which could lead to contamination of water, which could lead to harm to persons.

Provision: 2.2.6.5.(3)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that the use of fittings that are dimensionally incompatible with recognized drainage system jointing methods will lead to a blockage of flow, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.6.6.(1)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that performance of screwed malleable iron water fittings will fall significantly below expectations, which could lead to failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.6.6.(2)

Objective
OH2

Attributions
[F80-OH2.2]

Intent(s)

Intent 1. To limit the probability that inadequate corrosion protection will lead to the inability of cast iron fittings to resist the corrosive effects of water, which could lead to contamination of water, which could lead to harm to persons.

Provision: 2.2.6.6.(3)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that the use of fittings that are dimensionally incompatible with recognized drainage system jointing methods will lead to a blockage of flow, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.6.7.(1)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3] [F46-OH2.2]

Intent(s)

Intent 1. To limit the probability of exposure of bare steel pipe surfaces to a combination of water and air, which could lead to corrosion, which could lead to:

- for drainage systems, leakage, or
- for water systems, contamination of water.

This is to limit the probability of unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.6.7.(2)

Intent(s)

Intent 1. To exempt galvanized steel pipe from the application of Sentence 2.2.6.7.(1) for certain uses, and if conditions are met.

Provision: 2.2.6.7.(3)

Objective
OH2

Attributions
[F46-OH2.2]

Intent(s)

Intent 1. To limit the probability that the use of inappropriate piping materials will lead to corrosion, which could lead to failure, which could lead to contamination of the water supply, which could lead to harm to persons.

Intent 2. To exempt, from the prohibition to use galvanized steel pipe and fittings in water distribution systems, those situations where the water is used for industrial processes and would not create a health hazard, or where the repair of an existing system with similar materials will not increase the risk.

Provision: 2.2.6.7.(4)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that performance of galvanized steel DWV pipe and fittings will fall significantly below expectations, which could lead to failure of such pipe and fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F80-OP5]

Intent(s)
Intent 1. To limit the probability that performance of galvanized steel pipe and fittings will fall significantly below expectations, which could lead to failure of such pipe and fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.6.8.(1)

Objective
OP5

Attributions
[F80-OP5]

Intent(s)
Intent 1. To limit the probability that performance of corrugated steel pipe and couplings will fall significantly below expectations, which could lead to failure of such pipe and couplings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.6.8.(2)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)
Intent 1. To limit the probability that the use of nonsealing drainage piping materials in locations where joints are required to be watertight will lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.6.8.(3)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)
Intent 1. To limit the probability that an inappropriate coupling design will lead to:

- entry of roots or infiltration of surrounding material, which could lead to obstruction of flow, which could lead to storm water surcharge, or
- misalignment or separation of joints, which could lead to pipe system leakage, which could lead to soil erosion or flooding.

This is to limit the probability of water damage to the building or facility.

Provision: 2.2.6.9.(1)

Objective
OP5

Attributions
[F80-OP5]

Intent(s)
Intent 1. To limit the probability that the use of sheet metal leaders in locations where they are not visible will lead to undetected corrosion, which could lead to failure, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.7.1.(1)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3] Applies to *drainage systems* and *venting systems*.
[F46-OH2.2] Applies to *water systems*.

Intent(s)
Intent 1. In drainage systems or venting systems, to limit the probability that performance of copper pipe will fall significantly below expectations, which could lead to failure of such pipe, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Intent 2. In water systems, to limit the probability that performance of copper pipe will fall significantly below expectations, which could lead to failure of such pipe, which could lead to contamination, which could lead to harm to persons.

Objective
OP5

Attributions
[F80-OP5]

Intent(s)
Intent 1. To limit the probability that performance of copper pipe will fall significantly below expectations, which could lead to failure of such pipe, which could lead to leakage of water systems, which could lead to damage to the building or facility.

Provision: 2.2.7.1.(2)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3] Applies to *drainage systems* and *venting systems*.
[F46-OH2.2] Applies to *water systems*.

Intent(s)
Intent 1. In drainage systems or venting systems, to limit the probability that performance of brass pipe will fall significantly below expectations, which could lead to failure of such pipe, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Intent 2. In water systems, to limit the probability that performance of brass pipe will fall significantly below expectations, which could lead to failure of such pipe, which could lead to contamination, which could lead to harm to persons.

Objective
OP5

Attributions
[F80-OP5]

Intent(s)
Intent 1. To limit the probability that performance of brass pipe will fall significantly below expectations, which could lead to failure of such pipe, which could lead to leakage of water systems, which could lead to damage to the building or facility.

Provision: 2.2.7.2.(1)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3] Applies to *drainage systems* and *venting systems*.
[F46-OH2.2] Applies to *water systems*.

Intent(s)
Intent 1. In drainage systems or venting systems, to limit the probability that performance of brass or bronze pipe flanges and flanged fittings will fall significantly below expectations, which could lead to failure of such flanges and fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Intent 2. In water systems, to limit the probability that performance of brass or bronze pipe flanges and flanged fittings will fall significantly below expectations, which could lead to failure of such flanges and fittings, which could lead to contamination, which could lead to harm to persons.

Objective
OP5

Attributions
[F80-OP5]

Intent(s)
Intent 1. To limit the probability that performance of brass or bronze pipe flanges and flanges fittings will fall significantly below expectations, which could lead to failure of such flanges and fittings, which could lead to leakage of water systems, which could lead to damage to the building or facility.

Provision: 2.2.7.3.(1)

Objective
OP5

Attributions
[F80-OP5]

Intent(s)

Intent 1. To limit the probability that performance of brass or bronze threaded water pipe fittings will fall significantly below expectations, which could lead to failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.7.3.(2)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that fittings with rough interior surfaces will lead to blockages or rodding difficulties, which could lead to drainage system surcharges, which could lead to sewage overflowing, which could lead to harm to persons.

Provision: 2.2.7.4.(1)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3] Applies to *drainage systems* and *venting systems*.
[F46-OH2.2] Applies to *water systems*.

Intent(s)

Intent 1. In drainage systems or venting systems, to limit the probability that performance of copper tubing will fall significantly below expectations, which could lead to failure of such tubing, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Intent 2. In water systems, to limit the probability that performance of copper tubing will fall significantly below expectations, which could lead to failure of such tubing, which could lead to contamination, which could lead to harm to persons.

Objective
OP5

Attributions
[F80-OP5]

Intent(s)

Intent 1. To limit the probability that performance of copper tubing will fall significantly below expectations, which could lead to failure of such tubing, which could lead to leakage of water systems, which could lead to damage to the building or facility.

Provision: 2.2.7.4.(2)

Objective
OH2

Attributions
[F80-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that the installation of types of copper tubing that are inappropriate to the specific requirements of the application, in regards to jointing, wall thickness and corrosion resistance, will lead to system failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.7.4.(3)

Objective
OH2

Attributions
[F80-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that the use of inappropriate materials will lead to corrosion from exposure to urine, which could lead to perforation of the drainage system, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.7.5.(1)

Objective
OH2

Attributions
[F80-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that performance of solder-joint fittings will fall significantly below expectations, which could lead to failure of such fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.7.5.(2)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that fittings that are incompatible with jointing methods and service conditions, for pressurized water systems, will lead to water system failure, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.7.6.(1)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that performance of solder-joint fittings will fall significantly below expectations, which could lead to failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.7.6.(2)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)
Intent 1. To limit the probability that performance of solder-joint fittings will fall significantly below expectations, which could lead to failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.7.7.(1)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)
Intent 1. To limit the probability that performance of flared-joint fittings will fall significantly below expectations, which could lead to failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.7.7.(2)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)
Intent 1. To limit the probability that performance of flared-joint fittings will fall significantly below expectations, which could lead to failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.7.8.(1)

Objective
OH2

Attributions
[F46, F20-OH2.2, OH2.3]

Intent(s)
Intent 1. To limit the probability that inappropriate materials will lead to:

- dissolved lead in water systems, which could lead to contamination of potable water, or
- an inability to resist the pressure of back filling operations, which could lead to collapse of the pipe, which could lead to sewage backing up.

This is to limit the probability of unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.7.8.(2)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3, OH2.4]

Intent(s)
Intent 1. To limit the probability that inappropriate installation will lead to waste buildup or retention of liquid in closet bends, which could lead to blockages, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.8.1.(1)

Objective
OH2

Attributions
[F80, F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that performance of pipes and fittings will fall significantly below expectations, which could lead to an inability to resist exposure to acid or corrosive waste, which could lead to the perforation of pipes and fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OS3

Attributions
[F80, F81-OS3.2, OS3.4]

Intent(s)
Intent 1. To limit the probability that performance of pipes and fittings will fall significantly below expectations, which could lead to corrosion, which could lead to the perforation of pipes and fittings, which could lead to leakage of acid or corrosive wastes, which could lead to harm to persons.

Provision: 2.2.9.1.(1)

Objective
OP5

Attributions
[F80-OP5]

Intent(s)

Intent 1. To limit the probability that inappropriate jointing material will lead to an inability to accommodate expected pipe movement, which could lead to crumbling of the jointing material, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OH2

Attributions
[F80-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inappropriate jointing material will lead to an inability to accommodate expected pipe movement, which could lead to crumbling of the jointing material, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.9.2.(1)

Objective
OP5

Attributions
[F80-OP5]

Intent(s)

Intent 1. To limit the probability that performance of solders for solder joint fittings will fall significantly below expectations, which could lead to failure of such solders, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OH2

Attributions
[F80-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that performance of solders for solder joint fittings will fall significantly below expectations, which could lead to failure of such solders, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.9.2.(2)

Objective
OH2

Attributions
[F46-OH2.2]

Intent(s)

Intent 1. To limit the probability that high lead content will lead to the transfer of excessive amounts of lead from jointing solders to potable water, which could lead to contamination of potable water, which could lead to harm to persons.

Provision: 2.2.9.2.(3)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that performance will fall significantly below expectations, which could lead to failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.9.2.(4)

Objective
OH2

Attributions
[F20, F80, F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that performance will fall significantly below expectations, which could lead to failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.10.1.(1)

Objective
OH2

Attributions
[F80-OH2.1]

Intent(s)

Intent 1. To limit the probability that performance of brass floor flanges will fall significantly below expectations, which could lead to failure, which could lead to leakage of such flanges, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.10.2.(1)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inappropriate materials will lead to corrosion, on exposure to water, which could lead to failed or insecure connections, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.10.3.(1)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3] Applies to *drainage systems*.
[F46-OH2.2] Applies to *water systems*.

Intent(s)

Intent 1. To limit the probability that inappropriate materials will lead to corrosion, which could lead to:

- for drainage systems, an inability to gain access for maintenance purposes, which could lead to blockage, which could lead to drainage system backup, which could lead to exposure to sewage, or
- for water systems, contamination of potable water.

This is to limit the probability of harm to persons.

Provision: 2.2.10.3.(2)

Objective
OH2

Attributions
[F80-OH2.1]

Intent(s)

Intent 1. To limit the probability that insufficiently durable cleanout fittings will lead to failure after repeated removals and reinstallations, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.10.4.(1)

Objective
OP5

Attributions
[F80-OP5]

Intent(s)

Intent 1. To limit the probability that performance of groove and shoulder type mechanical couplings will fall significantly below expectations, which could lead to failure of such couplings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.10.4.(2)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that performance of mechanical couplings will fall significantly below expectations, which could lead to failure of such couplings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.10.5.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that the installation of fittings, which are susceptible to misalignment, will lead to system blockage, which could lead to leakage or overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that the installation of fittings, which are susceptible to misalignment, will lead to system blockage, which could lead to leakage or overflow, which could lead to damage to the building or facility.

Provision: 2.2.10.6.(1)

Objective
OP5

Attributions
[F80-OP5]

Intent(s)

Intent 1. To limit the probability that the performance of supply fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.10.6.(2)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that the performance of waste fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.2.10.7.(1)

Objective
OS3

Attributions
[F80-OS3.2]

Intent(s)

Intent 1. To limit the probability that an inappropriate shower valve type or nonconformance of valves to the appropriate standard will lead to an inability to control water temperature, which could lead to:

- exposure to excessively high water temperatures at shower heads, or
- unexpected variations in water temperature, due to the use of other fixtures.

This is to limit the probability of harm to persons.

Provision: 2.2.10.7.(2)

Intent(s)

Intent 1. To exempt showers from the application of Sentence 2.2.10.7.(1) where the water supply is controlled by a master thermostatic mixing valve.

Provision: 2.2.10.7.(3)

Objective
OS3

Attributions
2.2.10.7.(3)(a) **[F31-OS3.2]**
2.2.10.7.(3)(b) **[F30-OS3.1]**

Intent(s)

Intent 1. To limit the probability that an inability to limit water temperature, or to balance water pressure, will lead to excessive pressure or temperature fluctuations in potable water systems, which could lead to exposure to excessively high water temperatures or cold water shock at shower heads, which could lead to harm to persons.

Provision: 2.2.10.7.(4)

Objective
OS3

Attributions
[F31-OS3.2]

Intent(s)

Intent 1. To limit the probability that an inability to limit water temperature will lead to exposure to excessively high water temperatures in a bathtub, which could lead to harm to persons.

Provision: 2.2.10.8.(1)

Objective
OH2

Attributions
2.2.10.8.(1)(c) and 2.2.10.8.(1)(d) **[F80-OH2.1] [F81-OH2.4]**

Intent(s)

Intent 1. To limit the probability that inappropriate design will lead to:

- inadequate flow volume, which could lead to inefficient cleansing of fixtures,
- lack of a means of adjusting flow rate to suit varying water pressures, which could lead to incomplete flushing action, or
- back-siphonage, which could lead to contamination of the water supply.

This is to limit the probability of unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
2.2.10.8.(1)(a) and 2.2.10.8.(1)(b) **[F80, F81-OP5]**

Intent(s)

Intent 1. To limit the probability that an inappropriate design will lead to failure to shut off, which could lead to flooding, which could lead to damage to the building or facility.

Provision: 2.2.10.9.(1)

Objective
OH2

Attributions
[F40, F46-OH2.4]

Intent(s)

Intent 1. To limit the probability that an inappropriate orifice design will lead to user contact with the surface of bubblers, or deflection of the water stream to bubbler surfaces, which could lead to the consumption of contaminated water, which could lead to harm to persons.

Provision: 2.2.10.9.(2)

Objective
OH2

Attributions
[F41, F46-OH2.2]

Intent(s)

Intent 1. To limit the probability that inadequate water flow will lead to user contact with the surface of bubblers, which could lead to contamination of bubbler surfaces, which could lead to the consumption of contaminated water, which could lead to harm to persons.

Provision: 2.2.10.9.(3)

Objective
OH2

Attributions
[F41, F46-OH2.2]

Intent(s)
Intent 1. To limit the probability that the installation of bubblers on inappropriate fixtures will lead to locating bubblers where they might be subject to unsanitary conditions, which could lead to the consumption of contaminated water, which could lead to harm to persons.

Provision: 2.2.10.10.(1)

Objective
OH2

Attributions
[F46-OH2.2]

Intent(s)
Intent 1. To limit the probability that performance of back-siphonage preventers and backflow preventers will fall significantly below expectations, which could lead to failure or inadequate operation of such preventers, which could lead to backflow or back-siphonage of waste or sewage, which could lead to contamination of water, which could lead to harm to persons.

Provision: 2.2.10.10.(2)

Objective
OH2

Attributions
[F46-OH2.2]

Intent(s)
Intent 1. To limit the probability that performance of back-siphonage preventers will fall significantly below expectations, which could lead to failure or inadequate operation of such preventers, which could lead to backflow or back-siphonage of waste or sewage, which could lead to contamination of water, which could lead to harm to persons.

Provision: 2.2.10.11.(1)

Objective
OS3

Attributions
[F31-OS3.2]

Intent(s)
Intent 1. To limit the probability that performance of temperature relief, pressure relief, combined temperature and pressure relief and vacuum relief valves will fall significantly below expectations, which could lead to failure or inadequate operation of such valves, which could lead to an inability to regulate the temperature or pressure of water, which could lead to:

- excessively high water temperatures, or
- excessively high water pressure.

This is to limit the probability of harm to persons.

Objective
OP5

Attributions
[F31-OP5]

Intent(s)

Intent 1. To limit the probability that performance of temperature relief, pressure relief, combined temperature and pressure relief and vaccum relief valves will fall significantly below expectations, which could lead to failure or inadequate operation of such valves, which could lead to an inability to regulate the temperature or pressure of water, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.10.12.(1)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that performance of direct acting valves will fall significantly below expectations, which could lead to failure or inadequate operation of such valves, which could lead to an excessively high water pressure, which could lead to failure of pipes or fixtures, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.10.13.(1)

Objective
OS3

Attributions
[F81-OS3.2]

Intent(s)

Intent 1. To limit the probability that performance of equipment for solar heating of potable water will fall significantly below expectations, which could lead to an inability to limit water temperature, which could lead to excessively high water temperatures, which could lead to harm to persons.

Objective
OH2

Attributions
[F46-OH2.2]

Intent(s)

Intent 1. To limit the probability that performance of equipment for solar heating of potable water will fall significantly below expectations, which could lead to backflow, which could lead to contamination of potable water, which could lead to harm to persons.

Objective
OP5

Attributions
[F80, F81-OP5]

Intent(s)
Intent 1. To limit the probability that performance of equipment for solar heating of potable water will fall significantly below expectations, which could lead to an inability to limit or accommodate water pressure, which could lead to failure or the inadequate operation of equipment, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.10.14.(1)

Objective
OP5

Attributions
[F80, F81-OP5]

Intent(s)
Intent 1. To limit the probability that inappropriate material or inadequate thickness of material will lead to inadequate water resistance or inadequate strength, which could lead to failure, which could lead to roof leakage, which could lead to damage to the building or facility.

Provision: 2.2.10.14.(2)

Objective
OP5

Attributions
[F80, F81-OP5]

Intent(s)
Intent 1. To limit the probability that performance of prefabricated flashing will fall significantly below expectations, which could lead to inadequate water resistance or inadequate strength, which could lead to failure, which could lead to roof leakage, which could lead to damage to the building or facility.

Provision: 2.2.10.15.(1)

Objective
OP5

Attributions
[F20, F80-OP5]

Intent(s)
Intent 1. To limit the probability that the performance of water hammer arresters will fall significantly below expectations, which could lead to failure of the water hammer arresters, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.2.10.16.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that the installation of inappropriate air admittance valves or of valves that do not conform to the appropriate standard will lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.3.1.1.(1)

Intent(s)

Intent 1. To state the application of Section 3.

Provision: 2.3.2.1.(1)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that the inappropriate use of caulked lead drainage joints will lead to leakage at joints, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.2.1.(2)

Objective
OH2

Attributions
[F80-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequate packing or inadequate caulking will lead to leakage at joints, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.2.1.(3)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that leakage at joints will not be detected, which could lead to entry of waterborne pollutants into buildings, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.2.1.(4)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that excessive flow pressure on caulked joints will lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.2.2.(1)

Objective
OH2

Attributions
[F80, F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that an inappropriate use of wiped joints will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F80, F81-OP5]

Intent(s)
Intent 1. To limit the probability that an inappropriate use of wiped joints will lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.2.2.(2)

Objective
OH2

Attributions
[F80, F81-OH2.1, OH2.2, OH2.3]

Intent(s)
Intent 1. To limit the probability of:

- an inappropriate bonding material,
- inadequate width of bonding surface, or
- inadequate joint thickness.

This is to limit the probability of joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.2.2.(3)

Objective
OH2

Attributions
[F80, F81-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inadequate contact area between flange surfaces will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.2.3.(1)

Objective
OH2

Attributions
[F80, F81-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that an obstruction or deposit of debris in water supply pipes will lead to inadequate water flow, which could lead to negative effects on the operation of fixtures, which could lead to unsanitary conditions, which could lead to harm to persons.

Intent 2. To limit the probability that obstruction or deposit of debris in drainage pipes will lead to obstruction of flow, which could lead to blockage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.2.3.(2)

Objective
OH2

Attributions
[F70-OH2.2]

Intent(s)

Intent 1. To limit the probability that the application of compounds to the interior of piping systems will lead to contamination of potable water, which could lead to harm to persons.

Provision: 2.3.2.4.(1)

Objective
OH2

Attributions
[F20, F81-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that performance will fall significantly below expectations, which could lead to failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.2.5.(1)

Objective
OH2

Attributions
[F20, F81-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that improperly formed flared joints will lead to an inadequate seal, which could lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20, F81-OP5]

Intent(s)

Intent 1. To limit the probability that improperly formed flared joints will lead to an inadequate seal, which could lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.2.5.(2)

Objective
OH2

Attributions
[F20, F81-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that the use of inappropriate materials will lead to cracking of pipes, which could lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20, F81-OP5]

Intent(s)

Intent 1. To limit the probability that the use of inappropriate materials will lead to cracking of pipes, which could lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.2.6.(1)

Objective
OH2

Attributions
[F20-OH2.1, OH2.2, OH2.3]

Intent(s)
Intent 1. To limit the probability that an inappropriate joint design will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)
Intent 1. To limit the probability that an inappropriate joint design will lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.2.7.(1)

Objective
OH1

Attributions
[F20, F81-OH1.1] Applies to bell and spigot joints in *venting systems*.

Intent(s)
Intent 1. To limit the probability that the inappropriate use of cold-caulked joints will lead to joint failure, which could lead to leakage, which could lead to entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F20, F81-OH2.1, OH2.3] Applies to bell and spigot joints in *drainage systems* or *venting systems*.

Intent(s)
Intent 1. To limit the probability that the inappropriate use of cold-caulked joints will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20, F81-OP5]

Intent(s)
Intent 1. To limit the probability that the inappropriate use of cold-caulked joints will lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.2.7.(2)

Objective
OH1

Attributions
[F20, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inappropriate practice will lead to joint failure, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OP5

Attributions
[F20, F81-OP5]

Intent(s)

Intent 1. To limit the probability that an inappropriate practice will lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OH2

Attributions
[F20, F81-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inappropriate practice will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.2.7.(3)

Objective
OH2

Attributions
[F20-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inadequate depth or inappropriate installation procedures will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.3.1.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inadequate provision, such as material thickness or reinforcement, for drilling and tapping, will lead to joint failure, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F20, F81-OH2.2, OH2.3]

Intent(s)
Intent 1. To limit the probability that inadequate provision, such as material thickness or reinforcement, for drilling and tapping, will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.3.2.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)
Intent 1. To limit the probability that branch tubes will protrude excessively into run tubes, which could lead to flow obstruction, which could lead to the inadequate operation of fixtures, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)
Intent 1. To limit the probability that:

- inappropriate tools will be used, which could lead to inadequate joint strength,
- excessively large branch sizes will be used, which could lead to excessive weakening of run tubes, or
- the strength of brazing material will be inadequate, which could lead to inadequate joint strength.

This is to limit the probability of joint failure, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.3.3.(1)

Objective
OH1

Attributions
[F20-OH1.1]

Intent(s)

Intent 1. To limit the probability of embrittlement of material or stress concentration points, which could lead to joint failure, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F20-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability of embrittlement of material or stress concentration points, which could lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.3.3.(2)

Objective
OH2

Attributions
[F80-OH2.2]

Intent(s)

Intent 1. To limit the probability that the application of heat will lead to damage to zinc coatings, which could lead to inadequate corrosion resistance, which could lead to corrosion, which could lead to contamination of potable water, which could lead to harm to persons.

Objective
OP5

Attributions
[F80-OP5]

Intent(s)

Intent 1. To limit the probability that the application of heat will lead to damage to zinc coatings, which could lead to inadequate corrosion resistance, which could lead to joint or pipe failure, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.3.4.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inappropriate joint design installed downstream of a trap weir will lead to failure, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inappropriate joint design installed downstream of a trap weir will lead to failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.3.4.(2)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that installation in inaccessible areas, of joints that are subject to loosening, will lead to undetected leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that installation in inaccessible areas, of joints that are subject to loosening, will lead to undetected leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.3.5.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that connections will be made in a manner that compromises the ability to drain plumbing systems, which could lead to standing water or sewage in pipes, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F70, F80-OH2.2]

Intent(s)

Intent 1. To limit the probability that increaser or reducer fittings will be installed in a manner that compromises the ability to drain plumbing systems, which could lead to standing water in pipes, which could lead to corrosion, which could lead to contamination of potable water, which could lead to harm to persons.

Provision: 2.3.3.6.(1)

Objective
OH1

Attributions
[F80-OH1.1]

Intent(s)

Intent 1. To limit the probability that the use of inappropriate adaptors, connectors or mechanical joints will lead to electrolytic corrosion, which could lead to joint failure, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OP5

Attributions
[F80-OP5]

Intent(s)

Intent 1. To limit the probability that the use of inappropriate adaptors, connectors or mechanical joints will lead to electrolytic corrosion, which could lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OH2

Attributions
[F80-OH2.1]

Intent(s)

Intent 1. To limit the probability that the use of inappropriate adaptors, connectors or mechanical joints will lead to electrolytic corrosion, which could lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.3.7.(1)

Objective
OP5

Attributions
[F21, F81-OP5]

Intent(s)

Intent 1. To limit the probability that the inadequate design or installation of leaders will lead to an inability to lead rainwater to the ground without contact with the building, which could lead to damage to the building or facility.

Provision: 2.3.3.8.(1)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inappropriate connections to fixture drains will lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.3.8.(2)

Objective
OH2

Attributions
[F80-OH2.1]

Intent(s)

Intent 1. To limit the probability that joining inappropriate materials will lead to excessive corrosion of flanges, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.3.8.(3)

Intent(s)

Intent 1. To modify the application of Sentence 2.3.3.8.(2) where corrosion is not likely.

Provision: 2.3.3.8.(4)

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequate fastening will lead to joint leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OS3

Attributions
[F20-OS3.1]

Intent(s)
Intent 1. To limit the probability that inadequate mounting will lead to the damage or collapse of fixtures, which could lead to harm to persons.

Provision: 2.3.3.8.(5)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that an inappropriate sealant will lead to joint leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.3.8.(6)

Objective
OH2

Attributions
[F21-OH2.1]

Intent(s)
Intent 1. To limit the probability that an inadequate extension will lead to joint failure from contraction, expansion and/or building shrinkage, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.3.9.(1)

Objective
OH1

Attributions
[F21-OH1.1]

Intent(s)
Intent 1. To limit the probability that an inappropriate design will lead to an inability to accommodate movement due to shrinkage, settlement, or temperature- or soil-related expansion and contraction of vent pipes in DWV systems, which could lead to the failure of pipes, joints or fixtures, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F21-OH2.1]

Intent(s)

Intent 1. To limit the probability that an inappropriate design will lead to an inability to accommodate shrinkage, settlement, or temperature- or soil-related expansion and contraction of drain and waste pipes in DWV piping systems, which could lead to the failure of pipes, joints or fixtures, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F21-OP5]

Intent(s)

Intent 1. To limit the probability that an inappropriate design will lead to an inability to accommodate shrinkage, settlement, or temperature- or soil-related expansion and contraction of piping systems, which could lead to the failure of pipes, joints or fixtures, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.3.10.(1)

Objective
OH1

Attributions
[F20-OH1.1]

Intent(s)

Intent 1. To limit the probability that bending hard temper copper tubing will lead to cracking, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that bending hard temper copper tubing will lead to cracking, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.3.11.(1)

Objective
OH2

Attributions
[F81-OH2.2, OH2.4]

Intent(s)

Intent 1. To limit the probability that an inappropriate drain termination of indirectly connected fixtures or devices will lead to contact with sewage or waste water that may back up in systems, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.3.11.(2)

Objective
OH2

Attributions
[F81-OH2.2, OH2.4]

Intent(s)

Intent 1. To limit the probability that an inadequately sized air break will lead to backflow into locations intended to be sanitary, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.3.12.(1)

Objective
OP5

Attributions
[F20, F80-OP5]

Intent(s)

Intent 1. To limit the probability that inappropriate jointing methods will lead to an inability to accommodate expected pipe movement, which could lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.3.12.(2)

Objective
OP5

Attributions
[F20, F80-OP5]

Intent(s)

Intent 1. To limit the probability that the inability to easily access a joint and repair it will lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.4.1.(1)

Objective
OH2

Attributions
[F20-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that inadequate support will lead to an inability to resist expected gravity loads, which could lead to the failure of drainage system piping, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OS3

Attributions
[F20-OS3.1]

Intent(s)

Intent 1. To limit the probability that inadequate support will lead to an inability to resist expected gravity loads, which could lead to the failure of the piping system, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that inadequate support will lead to an inability to resist expected gravity loads, which could lead to the failure of the piping system, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.4.1.(2)

Objective
OH2

Attributions
[F20-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequate attachment or instability will lead to joint leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OS3

Attributions
[F20-OS3.1]

Intent(s)

Intent 1. To limit the probability that inadequate attachment or instability will lead to an inability to support the person using it, which could lead to falling, which could lead to harm to persons.

Provision: 2.3.4.1.(3)

Objective
OS3

Attributions
[F20-OS3.1]

Intent(s)

Intent 1. To limit the probability that inadequate support will lead to the transfer of the load to piping, which could lead to pipe failure, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

Objective
OH2

Attributions
[F20-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequate support will lead to the transfer of the load to piping, which could lead to pipe failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.4.2.(1)

Objective
OS3

Attributions
[F20-OS3.1]

Intent(s)

Intent 1. To limit the probability that shared support will lead to an inability to resist expected gravity loads, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

Objective
OH2

Attributions
[F20-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that shared support will lead to an inability to resist expected gravity loads, which could lead to failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)
Intent 1. To limit the probability that shared support will lead to an inability to resist expected gravity loads, which could lead to failure, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.4.3.(1)

Objective
OH2

Attributions
[F80-OH2.1, OH2.3]

Intent(s)
Intent 1. To limit the probability that electrically incompatible materials will lead to galvanic or electrolytic corrosion, which could lead to the failure of tubing or pipes, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OS3

Attributions
[F80-OS3.1]

Intent(s)
Intent 1. To limit the probability that electrically incompatible materials will lead to galvanic or electrolytic corrosion, which could lead to the failure of hangers, supports, tubing or pipes, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

Objective
OP5

Attributions
[F80-OP5]

Intent(s)
Intent 1. To limit the probability that electrically incompatible materials will lead to galvanic or electrolytic corrosion, which could lead to the failure of tubing or pipes, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.4.4.(1)

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequate support will lead to an inability of pipes or joints to resist expected compressive and tensile stresses due to self-weight, which could lead to the failure of pipes or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective

OS3

Attributions

[F20-OS3.1]

Intent(s)

Intent 1. To limit the probability that inadequate support will lead to an inability of pipes or joints to resist expected compressive and tensile stresses due to self-weight, which could lead to the failure of pipes or joints, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

Provision: 2.3.4.4.(2)

Objective

OH2

Attributions

[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that excessive support spacing will lead to an inability of pipes or joints to resist expected compressive and tensile stresses due to self-weight, which could lead to the failure of pipes or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective

OS3

Attributions

[F20-OS3.1]

Intent(s)

Intent 1. To limit the probability that excessive support spacing will lead to an inability of pipes or joints to resist expected compressive and tensile stresses due to self-weight, which could lead to the failure of pipes or joints, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

Objective

OP5

Attributions

[F20-OP5]

Intent(s)

Intent 1. To limit the probability that excessive support spacing will lead to an inability of pipes or joints to resist expected compressive and tensile stresses due to self-weight, which could lead to the failure of pipes or joints, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.4.5.(1)

Objective
OS3

Attributions
[F20-OS3.1]

Intent(s)

Intent 1. To limit the probability that inadequate bracing will lead to excessive swaying or buckling, which could lead to the failure of the piping system, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

Objective
OH2

Attributions
[F20-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequate bracing will lead to excessive swaying or buckling, which could lead to the failure of the piping system, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that inadequate bracing will lead to excessive swaying or buckling, which could lead to the failure of the piping system, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.4.5.(2)

Objective
OS3

Attributions
[F20-OS3.1]

Intent(s)

Intent 1. To limit the probability that excessive support spacing will lead to an inability of pipes or joints to resist expected bending stresses due to self-weight and the weight of contents, which could lead to the failure of pipes or fittings, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that excessive support spacing will lead to an inability of pipes or joints to resist expected bending stresses due to self-weight and the weight of contents, which could lead to the failure of pipes or fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that excessive support spacing will lead to an inability of pipes or joints to resist expected bending stresses due to self-weight and the weight of contents, which could lead to the failure of pipes or fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.4.5.(3)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that inappropriate installation practices will lead to undue strain on pipes or fittings, which could lead to the failure of pipes or fittings, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OS3

Attributions
[F20, F81-OS3.1]

Intent(s)

Intent 1. To limit the probability that inappropriate installation practices will lead to undue strain on pipes or fittings, which could lead to the failure of pipes or fittings, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that inappropriate installation practices will lead to undue strain on pipes or fittings, which could lead to the failure of pipes or fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.4.5.(4)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that inappropriate hangers or hanger installation will lead to damage to soft pipe materials by abrasion, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OS3

Attributions
[F81-OS3.1]

Intent(s)

Intent 1. To limit the probability that inappropriate hangers or hanger installation will lead to damage to soft pipe materials by abrasion, which could lead to the failure of pipes or fittings, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

Provision: 2.3.4.5.(5)

Objective
OP5

Attributions
[F20, F21-OP5]

Intent(s)

Intent 1. To limit the probability that inadequate hanger strength will lead to an inability of pipes or joints to resist expected bending stresses due to self-weight and the weight of contents, which could lead to the failure of pipes or fittings, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OS3

Attributions
[F20-OS3.1]

Intent(s)

Intent 1. To limit the probability that inadequate hanger strength will lead to an inability of pipes or joints to resist expected bending stresses due to self-weight and the weight of contents, which could lead to the failure of pipes or fittings, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequate hanger strength will lead to an inability of pipes or joints to resist expected bending stresses due to self-weight and the weight of contents, which could lead to the failure of pipes or fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.4.5.(6)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that inadequate anchorage of hangers will lead to an inability to support the weight of pipes and their contents, which could lead to the failure of pipes or fittings, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OS3

Attributions
[F20-OS3.1]

Intent(s)

Intent 1. To limit the probability that inadequate anchorage of hangers will lead to an inability to support the weight of pipes and their contents, which could lead to the failure of pipes or fittings, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

Objective
OH2

Attributions
[F20-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequate anchorage of hangers will lead to an inability to support the weight of pipes and their contents, which could lead to the failure of pipes or fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.4.6.(1)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)

Intent 1. To limit the probability that discontinuous support will lead to inadequate support, which could lead to the failure of pipes or joints, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that discontinuous support will lead to inadequate support, which could lead to the failure of pipes or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.4.6.(2)

Intent(s)

Intent 1. To exempt nominally horizontal piping from the application of Sentence 2.3.4.6.(1) where pipe is adequately supported by hangers.

Provision: 2.3.4.7.(1)

Objective
OS3

Attributions
[F81-OS3.1]

Intent(s)

Intent 1. To limit the probability that inadequate support will lead to vent pipes collapsing and falling from the building, which could lead to harm to persons.

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that inadequate support will lead to vent pipes collapsing, which could lead to damage to roofs or structures on roofs, which could lead to roof leakage, which could lead to damage to the building or facility.

Provision: 2.3.5.1.(1)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that inappropriate backfill materials or practices will lead to damage to piping, which could lead to the failure of pipes or joints, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inappropriate backfill materials or practices will lead to damage to piping, which could lead to the failure of pipes or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.5.2.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequate structural protection will lead to damage to piping, which could lead to the failure of pipes or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.5.3.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inappropriate installation will lead to walls bearing on pipes, which could lead to the failure of pipes or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F81-OP5]

Intent(s)
Intent 1. To limit the probability that an inappropriate installation will lead to walls bearing on pipes, which could lead to the failure of pipes or joints, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.5.4.(1)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)
Intent 1. To limit the probability that inadequate frost protection will lead to the contents of pipes freezing, which could lead to ruptures in the pipes, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)
Intent 1. To limit the probability that inadequate frost protection will lead to the contents of pipes freezing, which could lead to ruptures in the pipes, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.5.5.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)
Intent 1. To limit the probability that inadequate protection will lead to mechanical damage to plumbing systems, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that inadequate protection will lead to mechanical damage to plumbing systems, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.5.6.(1)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that the inadequate insulation of storm water leaders will lead to the formation of condensation, which could lead to damage to the building or facility.

Provision: 2.3.6.1.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3] Applies to *drainage systems*.

Intent(s)

Intent 1. To limit the probability that failure to conduct tests will lead to undetected leakage in drainage systems, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OH1

Attributions
[F81-OH1.1] Applies to *venting systems*.

Intent(s)

Intent 1. To limit the probability that failure to conduct tests will lead to undetected leakage in venting systems, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.3.6.1.(2)

Objective
OH1

Attributions
[F81-OH1.1] Applies to *venting systems*.

Intent(s)

Intent 1. To limit the probability that failure to conduct final inspections will lead to undetected leakage at fixture connections or in venting systems, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F81-OH2.1, OH2.3] Applies to *drainage systems*.

Intent(s)
Intent 1. To limit the probability that failure to conduct final inspections will lead to undetected leakage at fixture connections or in drainage systems, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.6.1.(3)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that failure to conduct inspections or tests will lead to undetected leakage at fixture connections or in venting systems, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)
Intent 1. To limit the probability that failure to conduct inspections or tests will lead to undetected leakage at fixture connections or in drainage systems, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.6.1.(4)

Objective
OH1

Attributions
[F81-OH1.1] Applies to *venting systems*.

Intent(s)
Intent 1. To limit the probability that failure to inspect and test completed venting systems will lead to undetected leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F81-OH2.1, OH2.3] Applies to *drainage systems*.

Intent(s)

Intent 1. To limit the probability that failure to inspect and test completed drainage systems will lead to undetected leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.6.1.(5)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inappropriate slopes, obstructions or improperly oriented reducing fittings will lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.6.2.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that, except for pipes that are not connected to a sewer or are protected by a trap, an inability to withstand required tests will lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.6.2.(2)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inability to meet a ball test will lead to inappropriate slopes, obstructions or improperly oriented reducing fittings, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.6.3.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inability to withstand required tests will lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.3.6.4.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inadequate height of tested portions of systems will lead to inadequate head, which could lead to inaccurate results, which could lead to in-service leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequate height of tested portions of systems will lead to inadequate head, which could lead to inaccurate results, which could lead to in-service leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.6.4.(2)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that unsealed openings or an inadequate test duration will lead to inaccurate test results, which could lead to in-service leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that unsealed openings or an inadequate test duration will lead to inaccurate test results, which could lead to in-service leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.6.5.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inadequate air pressure or an inadequate test duration will lead to inaccurate test results, which could lead to in-service leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequate air pressure or an inadequate test duration will lead to inaccurate test results, which could lead to in-service leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.6.6.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inappropriate test protocol will lead to inaccurate results, which could lead to in-service leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inappropriate test protocol will lead to inaccurate results, which could lead to in-service leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.6.6.(2)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that unsealed openings, inadequate air pressure or an inadequate test duration will lead to inaccurate test results, which could lead to in-service leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that unsealed openings, inadequate air pressure or an inadequate test duration will lead to inaccurate test results, which could lead to in-service leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.6.7.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inadequate ball density will lead to it floating in water-filled pipes, which could lead to an inability to conduct the test, which could lead to inappropriate slopes, obstructions or improperly oriented reducing fittings, which could lead to inadequate sewage flow, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.6.7.(2)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inadequate ball diameter will lead to an unrealistic test, which could lead to undetected flow problems, which could lead to inadequate flow, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.3.7.1.(1)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)
Intent 1. To limit the probability that failure to conduct water or air tests prior to putting systems into service will lead to undetected leakage, which could lead to damage to the building or facility.

Provision: 2.3.7.1.(2)

Intent(s)
Intent 1. To clarify that systems may be tested in sections or as a whole.

Provision: 2.3.7.1.(3)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)
Intent 1. To limit the probability that a failure to conduct tests will lead to undetected leakage in prefabricated potable water systems, which could lead to damage to the building or facility.

Provision: 2.3.7.1.(4)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)
Intent 1. To limit the probability that the failure to test complete systems, after installation of a prefabricated portion, will lead to undetected leakage in the site-installed portion or at the junction of the two portions, which could lead to damage to the building or facility.

Provision: 2.3.7.2.(1)

Objective
OP5

Attributions
[F20-OP5]

Intent(s)
Intent 1. To limit the probability that inadequate resistance to water pressure will lead to leakage, which could lead to damage to the building or facility.

Provision: 2.3.7.2.(2)

Objective
OS3

Attributions
[F20, F81-OS3.1]

Intent(s)
Intent 1. To limit the probability that an inadequate resistance to water pressure will lead to leakage, which could lead to harm to persons.

Provision: 2.3.7.3.(1)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)
Intent 1. To limit the probability that the failure to expel air will lead to an inability to detect slow leaks, which could lead to damage to the building or facility.

Provision: 2.3.7.3.(2)

Objective
OH2

Attributions
[F70-OH2.2]

Intent(s)
Intent 1. To limit the probability that the use of non-potable water for testing will lead to contamination of pipes, which could lead to contamination of potable water, which could lead to harm to persons.

Provision: 2.4.1.1.(1)

Intent(s)
Intent 1. To state the application of Subsection 2.4.1.

Provision: 2.4.2.1.(1)

Objective
OH2

Attributions
[F72-OH2.1] Applies to *fixtures* that are *directly connected* to *sanitary drainage systems*.

Intent(s)
Intent 1. To limit the probability that waste will be improperly directed, which could lead to backflow, which could lead to exposure to contaminated waste, which could lead to harm to persons.

Objective
OH2

Attributions
2.4.2.1.(1)(a) **[F81-OH2.2]**

Intent(s)

Intent 1. To exempt drinking fountains from having to connect directly to a sanitary drainage system because the discharge is clear and odour free, and would not cause contamination as long as backflow protection is provided, where there is a direct connection to a storm drainage system.

This is to limit the probability of backflow, which could lead to exposure to contaminated waste, which could lead to harm to persons.

Objective
OH2

Attributions
2.4.2.1.(1)(b) **[F81-OH2.2]**

Intent(s)

Intent 1. To exempt drainage pans from having to connect directly to a sanitary drainage system because the discharge is clear and odour free, and would not cause contamination as long as backflow protection is provided, where there is a direct connection to a storm drainage system.

This is to limit the probability of backflow, which could lead to exposure to contaminated waste, which could lead to harm to persons.

Objective
OH2

Attributions
2.4.2.1.(1)(c) **[F81-OH2.1]**

Intent(s)

Intent 1. To exempt floor drains from having to connect to sanitary drainage systems under circumstances where their discharge is clear and odour free and would not cause contamination.

This is to limit the probability that backflow will lead to exposure to contaminated waste, which could lead to harm to persons.

Objective
OH2

Attributions
2.4.2.1.(1)(d) **[F81-OH2.1]**

Intent(s)

Intent 1. To exempt fixtures or appliances that discharge clear-water waste from being connected to sanitary drainage systems because the discharge is clear and odour free and would not cause contamination.

This is to limit the probability that backflow will lead to exposure to contaminated waste, which could lead to harm to persons.

Objective
OH2

Attributions
2.4.2.1.(1)(e) **[F81-OH2.1]**

Intent(s)

Intent 1. To exempt fixtures or appliances that discharge clear-water waste from being directly connected to the drainage system because the discharge is clear and odour free and would not cause contamination if there is backflow.

This is to limit the probability that backflow will lead to exposure to contaminated waste, which could lead to harm to persons.

Provision: 2.4.2.1.(2)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inadequate distance between soil-or-waste pipes and other, nominally horizontal soil-or-waste pipes or nominally horizontal offsets in soil-or-waste stacks that receive high volumes or velocity of discharge, will lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.2.1.(3)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that flushing flow of water closets will lead to siphonage of water from fixture traps, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.2.1.(4)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that the flow of sudsy water from clothes washers will lead to the blockage of vents, which could lead to water being siphoned from fixture traps, which could lead to the entry

of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.2.1.(5)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that the flow of sudsy water from clothes washers will lead to the blockage of vents, which could lead to water being siphoned from fixture traps, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.2.2.(1)

Objective
OH2

Attributions
[F81-OH2.2]

Intent(s)
Intent 1. To limit the probability of backflow from drainage systems into rainwater tanks, which could lead to contamination of water in the tank, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.2.3.(1)

Objective
OH2

Attributions
[F81-OH2.2]

Intent(s)
Intent 1. To exempt certain fixtures that discharge clear waste from the requirement for an indirect connection in Clause 2.4.2.1.(1)(e), and to permit direct connection to a branch that:

- has a size of not less than 1.25 in., and
- is terminated above the flood level rim of a directly connected fixture to form an air break.

This is to limit the probability of backflow, which could lead to sewage contamination of clear water, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.2.3.(2)

Objective
OH2

Attributions
[F81-OH2.1, OH2.4]

Intent(s)

Intent 1. To exempt certain fixture drains from the requirement for an indirect connection in Sub-clauses 2.4.2.1.(1)(a)(i) and 2.4.2.1.(1)(b)(ii), and to permit direct connection to pipes that:

- are terminated to form an air break above the flood level rim of fixtures that are directly connected to sanitary drainage systems, and
- are extended through roofs when fixtures on 3 or more storeys are connected to them.

This is to limit the probability of backflow protection, which could lead to sewage contamination of food preparation fixtures or sterilization devices, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.2.3.(3)

Objective
OH2

Attributions
[F81-OH2.4]

Intent(s)

Intent 1. To exempt certain fixture drains from the requirement for an indirect connection in Sub-clauses 2.4.2.1.(1)(c)(iii) to 2.4.2.1.(1)(d)(iv), and to permit direct connection to pipes that:

- are terminated to form an air break above the flood level rim of fixtures that are directly connected to storm drainage systems, and
- are extended through roofs when fixtures on 3 or more storeys are connected to them.

This is to limit the probability that backflow will lead to sewage contamination of clear-water waste fixtures and devices, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.3.1.(1)

Objective
OH2

Attributions
[F81-OH2.4]

Intent(s)

Intent 1. To limit the probability that the absorption of urine will lead to the contamination of wall or floor surfaces, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.3.2.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.4]

Intent(s)

Intent 1. To limit the probability that an inappropriate location of indirect connections will lead to an inability to detect flooding or sewage surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.3.3.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that the inappropriate location of fixtures that discharge organic waste will lead to blockages within grease interceptors, which could lead to waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.3.3.(2)

Intent(s)
Intent 1. To supersede the application of Sentence 2.4.3.3.(1) and allow the installation of organic solids interceptors where they will not create unsanitary conditions.

Provision: 2.4.3.4.(1)

Objective
OS1

Attributions
[F81-OS1.1]

Intent(s)
Intent 1. To limit the probability that a discharge of flammable, dangerous or toxic chemicals into drainage systems will lead to explosions or fires, which could lead to harm to persons.

Objective
OH5

Attributions
[F43-OH5]

Intent(s)
Intent 1. To limit the probability that a discharge of flammable, dangerous or toxic chemicals into drainage systems will lead to the release of hazardous substances, which could lead to harm to persons..

Provision: 2.4.3.5.(1)

Objective
OH2

Attributions
[F72-OH2.1]

Intent(s)
Intent 1. To limit the probability that a macerating toilet system will be installed where connection to a gravity sanitary drainage system is available, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.3.6.(1)

Objective
OP5

Attributions
[F62-OP5]

Intent(s)

Intent 1. To limit the probability that the lack of a drain will lead to the accumulation of water in elevator pits, which could lead to the accumulation of moisture or flooding, which could lead to damage to the building or facility.

Provision: 2.4.4.1.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that an inability to treat sewage or waste will lead to damage or blockage of sewage disposal systems, which could lead to leakage or sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.4.2.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that high-temperature discharge will lead to damage to pipes or joints, which could lead to blockages, which could lead to leakage or sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.4.3.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that entry of materials that could congeal or solidify in drainage systems will lead to blockage, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.4.3.(2)

Objective
OS1

Attributions
[F81-OS1.1]

Intent(s)

Intent 1. To limit the probability that the discharge into drainage systems of waste containing oil or gasoline will lead to explosions or fires, which could lead to harm to persons.

Objective
OH5

Attributions
[F43-OH5]

Intent(s)

Intent 1. To limit the probability that the discharge into drainage systems of waste containing oil or gasoline will lead to harm to persons.

Provision: 2.4.4.3.(3)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that the discharge of materials that would settle and accumulate in drainage systems will lead to blockage, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.4.3.(4)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that interceptors with an inadequate capacity will lead to blockage of drainage systems, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.4.4.(1)

Objective
OS3

Attributions
[F80-OS3.4]

Intent(s)

Intent 1. To limit the probability that, should backflow occur, a lack of protection by traps or indirect connections will lead to exposure to corrosive or acid waste or fumes, which could lead to harm to persons.

Intent 2. To limit the probability that the discharge of full-strength corrosive or acid waste into drainage systems will lead to corrosive damage to pipes or fittings, which could lead to leakage, which could lead to the entry of corrosive or acid gases into occupied space, which could lead to harm to persons.

Provision: 2.4.4.4.(2)

Objective
OH5

Attributions
[F43-OH5]

Intent(s)

Intent 1. To limit the probability that an inability to neutralize corrosive or acid waste will lead to the discharge of full-strength corrosive or acid waste into drainage systems, which could lead to harm to persons.

Objective
OH2

Attributions
[F80-OH2.1]

Intent(s)

Intent 1. To limit the probability that an inability to neutralize corrosive or acid waste will lead to the discharge of full-strength corrosive or acid waste or fumes into drainage systems, which could lead to corrosive damage to pipes or fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.5.1.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that sharing traps among multiple fixtures will lead to trap seal failure, which could lead to inadequate protection of fixtures, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.5.1.(2)

Intent(s)

Intent 1. To exempt certain fixtures from the requirement in Sentence 2.4.5.1.(1) for separate traps, and to permit the use of a single trap where a number of traps would be required, where traps serve compartments of the same fixture or similar fixtures that are in the same room.

Provision: 2.4.5.1.(3)

Intent(s)

Intent 1. To exempt certain fixtures from the requirement in Sentence 2.4.5.1.(1) for separate traps, and permit the use of a single trap where a number of traps would ordinarily be required, where:

- traps serve compartments of similar drains or fixtures that are in the same room, and
- there is no likelihood of discharge that could decay and produce toxic substances.

Provision: 2.4.5.1.(4)

Intent(s)

Intent 1. To exempt certain fixtures from the requirement in Sentence 2.4.5.1.(1) for separate traps, where the fixtures are otherwise protected and where they discharge only clear-water waste. An exception is made for drinking fountains which require individual trap protection to avoid backflow of air and gases from the indirectly connected drain pipe to the drinking fountain.

Provision: 2.4.5.1.(5)

Intent(s)

Intent 1. To modify the application of Sentence 2.4.5.1.(1) and consider interceptors that have an appropriate water seal depth to serve as a trap.

Provision: 2.4.5.1.(6)

Objective

OH1

Attributions

[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inadequate connection of the discharge line will lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective

OP5

Attributions

[F81-OP5]

Intent(s)

Intent 1. To limit the probability that waste will be improperly directed, which could lead to backflow, which could lead to flooding, which could lead to damage to the building or facility.

Provision: 2.4.5.2.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that a direct connection between storm and sanitary drainage systems will lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Intent 2. To exempt the upper end of leaders that terminate:

- at roofs that are used only for weather protection,
- not less than 1 m above or not less than 3.5 m in any other direction from air inlets, openable windows or doors, and
- not less than 1.8 m from property lines.

Provision: 2.4.5.2.(2)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To exempt traps from the requirement of Sentence 2.5.1.1.(1) for a vent pipe because storm drainage systems are inherently vented.

This is to limit the probability that a direct connection between floor drains that are not vented and storm drainage systems will lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.5.2.(3)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that the lack of a trap will lead to the formation of ice plugs, which could lead to the blockage of drain inlets or grilles, which could lead to flooding, which could lead to damage to the building.

Provision: 2.4.5.3.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that the absence of an appropriately placed cleanout will lead to an inability to clean traps, which could lead to blocked drainage pipes, which could lead to backflow and spillage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.5.4.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that the absence of cleanouts, or inappropriately placed cleanouts, will lead to an inability to clean building traps, which could lead to a blockage, which could lead to backflow and spillage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.5.5.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that the loss of a trap water seal will lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.6.1.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that overloading soil-or-waste pipes will lead to a surcharge of such combined drainage systems, which could lead to backflow and spillage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.6.1.(2)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability of overloading waste-treatment systems, which could lead to backflow and spillage, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.6.1.(3)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that:

- unused open ends will lead to the entry of sewer gases into occupied space, or that
- inappropriately graded dead ends will lead to septic accumulation in drainage systems, which could lead to the generation of noxious gases.

This is to limit the probability of negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.6.2.(1)

Objective
OH2

Attributions
[F81-OH2.2]

Intent(s)
Intent 1. To limit the probability that the leakage of sewage from pipes will lead to contamination of potable water, or food-handling or processing equipment, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.6.3.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that the lack of a suitable receptacle for receiving sewage from fixtures installed below the level of a building sewer will lead to an inability to drain the fixtures, which could lead to the drainage system backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.6.3.(2)

Objective
OH2

Attributions
[F81-OH2.1] Applies to the watertightness of sumps or tanks.

Intent(s)

Intent 1. To limit the probability that inadequate watertightness will lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that:

- inadequate airtightness will lead to leakage, or
- inadequate venting will lead to the buildup of sewer gases within tanks or sumps, which could lead to back pressure, which could lead to resistance to flow.

This is to limit the probability of the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.6.3.(3)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that the lack of a means to transfer the contents of sumps or tanks into building drains or building sewers will lead to the drainage system backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.6.3.(4)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that an inadequate sump capacity will lead to overfilling sumps, which could lead to the drainage system backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.6.3.(5)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that the inappropriate location of discharge pipes from sewage pumps or ejectors will lead to overloading building drains upstream of building traps, which could lead to the drainage system backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.6.3.(6)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that, when pumps are not running, the lack of check valves will lead to backflow from sewers into sumps or tanks, which could lead to the drainage system backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.6.3.(7)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequate sizing of discharge piping will lead to pump failure, which could lead to the drainage system backing up, which could lead to surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.6.4.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability of a restriction of waste flow in building drains or sewer systems, which could lead to the drainage system backing up, which could lead to surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that a restriction of air flow between sewers and venting systems will lead to inadequate venting, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.6.4.(2)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that a restriction of air flow between sewers and venting systems will lead to inadequate venting, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability of waste flow in building drains, which could lead to the drainage system backing up, which could lead to surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.6.4.(3)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that a backup of public sewers will lead to backflow into building drainage systems, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.6.4.(4)

Intent(s)
Intent 1. To modify the application of Sentence 2.4.6.4.(3) and allow gate valves or backwater valves, where removable screw caps are installed on the upstream side of traps to prevent backflow.

Provision: 2.4.6.4.(5)

Intent(s)

Intent 1. To modify the application of Sentence 2.4.6.4.(3) and allow the connection of the gate valve or backwater valve to the same branch.

Provision: 2.4.6.4.(6)

Objective

OH2

Attributions

[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that inappropriate backup protection will lead to sewage backflow into subsoil drainage pipes, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.6.5.(1)

Objective

OH2

Attributions

[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that:

- an inadequate drain pipe size will lead to frost-related blockage, which could lead to flow restriction, which could lead to sewage backup,
- an inappropriate terminal connection will lead to unauthorized disconnection, an inability to withstand repeated connection and disconnection, or an inadequate seal, which could lead to leakage at the connection,
- inadequate protection from mechanical damage or frost-heave, or soil-settlement-related damage, will lead to leakage,
- inappropriate termination will lead to system failure, or
- the design or construction is inappropriate, which could lead to system failure or leakage.

This is to limit the probability of unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.1.(1)

Objective

OH2

Attributions

[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that a lack of cleanouts will lead to an inability to clear drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.1.(2)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that inappropriately located cleanouts will lead to an inability to clear drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.1.(3)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that the lack of cleanouts, or inappropriately located cleanouts, will lead to an inability to clear blockages in horizontal branches or drains serving leaders, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.1.(4)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequately sized cleanouts for large-diameter sewers will lead to drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.1.(5)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that excessive direction or slope changes in small-diameter sewers will lead to an inability to clear system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.1.(6)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that an inappropriate or inaccessible location for cleanouts will lead to an inability of sewer cleaning equipment to clean adequately, which could lead to drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.1.(7)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that the lack of cleanouts, or inappropriately located cleanouts, will lead to an inability to remove blockages in the soil-or-waste stack, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.1.(8)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that the lack of cleanouts will lead to an inability to clear overflow material not intercepted by interceptors, which could lead to sanitary drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.1.(9)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that an excessive change of direction will lead to an inability to clear drains that carry food waste, which could lead to sanitary drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.2.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequate size or excessive spacing of cleanouts will lead to an inability to clear portions of pipes, which could lead to sanitary drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.2.(2)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that excessive spacing between manholes will lead to an inability of cleaning equipment to clear drainage systems, which could lead to sanitary drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.2.(3)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that an excessive developed length will lead to an inability of cleaning equipment to clear drainage system blockages, due to equipment limitations, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.2.(4)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that an excessive developed length will lead to an inability to clear sewer system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.2.(5)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that inappropriately oriented, unidirectional cleanouts will lead to an inability to clear drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.3.(1)

Objective
OS3

Attributions
[F20-OS3.1]

Intent(s)

Intent 1. To limit the probability that inadequate structural strength will lead to an inability to support expected structural loads, which could lead to the collapse of manholes, which could lead to harm to persons.

Provision: 2.4.7.3.(2)

Objective
OH1

Attributions
2.4.7.3.(2)(a) and 2.4.7.3.(2)(c) **[F81-OH1.1]**

Intent(s)

Intent 1. To limit the probability that inadequate airtightness of manhole covers will lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Intent 2. To limit the probability that inadequate venting will lead to a pressure buildup of sewer gases in manholes, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OS1

Attributions
2.4.7.3.(2)(a) and 2.4.7.3.(2)(c) **[F81-OS1.1]**

Intent(s)

Intent 1. To limit the probability that inadequate airtightness of manhole covers will lead to the accumulation and subsequent ignition of flammable sewer gases in occupied space, which could lead to harm to persons.

Intent 2. To limit the probability that inadequate venting will lead to a pressure buildup of flammable sewer gases in manholes, which could lead to ignition of the gases from a nearby ignition source, which could lead to harm to persons.

Objective
OS3

Attributions
2.4.7.3.(2)(b) **[F20-OS3.1]**

Intent(s)

Intent 1. To limit the probability that inadequate design of ladders will lead to a collapse under loads imposed by the environment and the maintenance or inspection personnel, which could lead to harm to persons.

Provision: 2.4.7.3.(3)

Objective
OS3

Attributions
[F30-OS3.1]

Intent(s)

Intent 1. To limit the probability that inadequate size or inappropriate taper orientation will lead to workers becoming wedged or confined in manholes, which could lead to harm to persons.

Provision: 2.4.7.3.(4)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that an inappropriate design will lead to the accumulation of solids or standing sewage in manholes, which would become septic and cause blockage, which could lead to sanitary drainage system backup, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.4.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that an inappropriate design for cleanouts or access covers will lead to inadequate accessibility, which could lead to an inability to clear drainage system blockages, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.4.(2)

Objective
OS3

Attributions
2.4.7.4.(2)(a) **[F81-OS3.1]**

Intent(s)

Intent 1. To limit the probability that an inappropriate location for cleanouts will lead to protrusions above floors or depressions in floors, which could lead to tripping, which could lead to harm to persons.

Objective
OH2

Attributions
2.4.7.4.(2)(b) **[F81-OH2.1]**

Intent(s)

Intent 1. To limit the probability that the use of untrapped cleanouts as floor drains will lead to, when cleanout covers are removed, the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.7.4.(3)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that a change of direction between cleanouts and traps will lead to inadequate accessibility, which could lead to an inability to clear trap blockages, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.7.4.(4)

Objective
OH2

Attributions
[F81-OH2.1] Applies to drainage piping.

Intent(s)

Intent 1. To limit the probability that an excessive change of direction will lead to inadequate accessibility for cleaning equipment, which could lead to an inability to clear blockages in drainage piping, which could lead to drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OH1

Attributions
[F81-OH1.1] Applies to vent piping.

Intent(s)

Intent 1. To limit the probability that an excessive change of direction will lead to inadequate accessibility for cleaning equipment, which could lead to an inability to clear blockages in vent piping, which could lead to inadequate venting, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.7.4.(5)

Objective
OH2

Attributions
[F43-OH2.1]

Intent(s)

Intent 1. To limit the probability that persons will be exposed to waste containing bodily fluids, which could lead to the spread of disease, which could lead to harm to persons.

Provision: 2.4.8.1.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that an inadequate slope will lead to insufficient flow velocity to move solids in the system, which could lead to blockages in waste pipes, which could lead to a sanitary drainage system backup, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.8.2.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an excessive developed length of untrapped drainage pipe containing drainage effluent will lead to the entry of noxious odours into occupied spaces, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.9.1.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequate size will lead to flow restrictions, which could lead to the accumulation of sludge and solids, which could lead to drainage system blockages, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inadequate size will lead to inadequate venting of drainage systems, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.9.2.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequate size will lead to flow restrictions, which could lead to the accumulation of sludge and solids, which could lead to drainage system blockages, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.9.2.(2)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that inadequate size will lead to inadequate flow capacity for the discharge of three or more water closets flushing simultaneously and draining to a common horizontal waste pipe, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.9.2.(3)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that inadequate size of soil-or-waste stacks will lead to inadequate flow capacity for the discharge of seven or more water closets flushing simultaneously and draining, with other fixtures, to a common soil-or-waste stack, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.9.2.(4)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that an inadequate size of discharge pipe will lead to an inadequate flow capacity for the discharge of macerating toilets, which could lead to a surcharge, which could lead to flooding, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.9.3.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that inadequate size of fixture outlet pipes for the flow capacity of specific fixtures will lead to an inadequate flow, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.9.3.(2)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To supersede the requirement in Sentence 2.4.9.3.(1) for minimum fixture outlet pipe size, where fixture outlets serve multiple compartments of the same sink that might be drained simultaneously and for which the hydraulic load is likely to be higher, but not likely to be as high as would be imposed by separate sinks.

This is to limit the probability that inadequate size will lead to an inability to drain multiple sink compartments simultaneously, which could lead to a backup, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.9.3.(3)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that a standpipe of inadequate length will lead to inadequate flow, which could lead to a surcharge, which could lead to flooding, which could lead to damage to the building or facility.

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that a standpipe of inadequate length will lead to trap seal failure, which could lead to the entry of sewer gases, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.4.9.4.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequate size will lead to flow restrictions, which could lead to a drainage system backup, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.9.5.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)
Intent 1. To limit the probability that hydraulic load drained to inappropriately sized leaders will lead to a backup or overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.9.5.(2)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that hydraulic load drained to inappropriately sized leaders will lead to a backup or overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.10.1.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that the failure to include all significant sources of loads in calculating hydraulic load on drainage pipes will lead to inadequate hydraulic load assumptions, which could lead to the installation of inadequately sized pipe, which could lead to flow restrictions, which could lead to a drainage system backup, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.10.2.(1)

Intent(s)
Intent 1. To direct Code users to a table in the Code that contains requirements for minimum hydraulic load to be assumed for fixtures.

Provision: 2.4.10.2.(2)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequate hydraulic load assumptions for items not mentioned in Sentence 2.4.10.2.(1) will lead to inadequately sized fixture outlet pipes, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.10.3.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequate hydraulic load assumptions will lead to inadequately sized fixture outlet pipes, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.10.3.(2)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that inadequate hydraulic load assumptions will lead to inadequately sized fixture or equipment outlet pipes, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.10.4.(1)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that the inappropriate calculation of the hydraulic load will lead to inadequately sized drainage systems, which could lead to an inability to drain roofs or paved surfaces adequately, which could lead to flooding, which could lead to damage to the building or facility.

Objective
OS2

Attributions
[F20, F81-OS2.1]

Intent(s)

Intent 1. To limit the probability that the inappropriate calculation of the hydraulic load will lead to inadequately sized drainage systems, which could lead to an inability to drain roofs or paved surfaces adequately, which could lead to excessive structural loads, which could lead to structural failure, which could lead to harm to persons.

Provision: 2.4.10.4.(2)

Objective
OP5

Attributions
[F20, F81-OP5]

Intent(s)
Intent 1. To limit the probability that the inappropriate calculation of the hydraulic load will lead to inadequately sized drainage systems, which could lead to an inability to drain roofs or paved surfaces adequately, which could lead to flooding, which could lead to damage to the building or facility.

Intent 2. To limit the probability that an inadequate design for roofs or drainage systems will lead to water pooling, which could lead to leakage, which could lead to damage to the building or facility.

Objective
OH2

Attributions
2.4.10.4.(2)(a), 2.4.10.4.(2)(d) and 2.4.10.4.(2)(e) **[F41, F81-OH2.4]**

Intent(s)
Intent 1. To limit the probability that inadequate drainage will lead to stagnant water remaining on roof tops, which could lead to the growth of mould or mildew, which could lead to harm to persons.

Objective
OS2

Attributions
2.4.10.4.(2)(b) and 2.4.10.4.(2)(c) **[F20, F81-OS2.1]**

Intent(s)
Intent 1. To limit the probability that an inadequate load carrying capacity for a roof or excessive depth of water on the roof will lead to an inability of roofs to support gravity loads imposed by standing water, which could lead to structural collapse, which could lead to harm to persons.

Intent(s)
Intent 1. To supersede the requirement in Sentence 2.4.10.4.(1) for hydraulic load assumptions, where flow control roof drains are installed, on the basis that water will be held on roof surfaces for a controlled period of time.

Provision: 2.4.10.4.(3)

Objective
OP5

Attributions
[F20, F81-OP5]

Intent(s)

Intent 1. To limit the probability that the inappropriate calculation of the hydraulic load will lead to inadequately sized drainage systems, which could lead to an inability to drain roofs or paved surfaces adequately, which could lead to flooding, which could lead to damage to the building or facility.

Intent 2. To limit the probability that inappropriate hydraulic load assumptions will lead to an inadequate design for roofs or drainage systems, which could lead to an inability to drain roofs effectively and in time, which could lead to water pooling, which could lead to the leakage of water, which could lead to damage to the building or facility.

Objective

OS2

Attributions

[F20, F81-OS2.1]

Intent(s)

Intent 1. To limit the probability that inappropriate hydraulic load assumptions will lead to an inadequate design for roofs or drainage systems, which could lead to an inability of roofs to support gravity loads imposed by standing water, which could lead to structural collapse, which could lead to harm to persons.

Provision: 2.4.10.4.(4)

Objective

OP5

Attributions

[F21, F81-OP5]

Intent(s)

Intent 1. To limit the probability that roofs will not be provided with adequate emergency overflow measures, which could lead to unintended retention of water or pooling, which could lead to water infiltration, which could lead to damage to the building or facility.

Objective

OS2

Attributions

[F20, F81-OS2.1]

Intent(s)

Intent 1. To limit the probability that roofs will not be provided with adequate emergency overflow measures, which could lead to overloading of the roof structure, which could lead to structural collapse, which could lead to harm to persons.

Provision: 2.4.10.5.(1)

Objective

OH2

Attributions

[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that the inappropriate conversion of fixture units to hydraulic load in litres will lead to inadequate hydraulic load assumptions, which could lead to the installation of an inadequately sized drain pipe, which could lead to flow restrictions, which could lead to a drainage system backup, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.10.6.(1)

Objective
OH2

Attributions
[F72-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that hydraulic load drained to inappropriately sized soil-or-waste stacks will lead to a drainage system backup, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.10.6.(2)

Objective
OH2

Attributions
[F72-OH2.1, OH2.3]

Intent(s)

Intent 1. To modify the requirement in Sentence 2.4.10.6.(1), that would otherwise permit a higher load, where nominally horizontal offsets in soil-or-waste stacks are 1.5 m or more in length and resistance to flow is higher.

This is to limit the probability that hydraulic load drained to inappropriately sized soil-or-waste stacks will lead to a drainage system backup, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.10.7.(1)

Objective
OH2

Attributions
[F72-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that hydraulic load drained to inappropriately sized branches will lead to a backup, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.10.8.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that hydraulic load drained to inappropriately sized sanitary building drains or sanitary building sewers will lead to a backup, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.10.9.(1)

Objective

OH2

Attributions

[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that hydraulic load drained to inappropriately sized storm building drains, storm building sewers or combined building sewers will lead to a backup or overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.4.10.10.(1)

Objective

OP5

Attributions

[F81-OP5]

Intent(s)

Intent 1. To limit the probability that hydraulic load drained to inappropriately sized roof gutters will lead to an overflow or a backup, which could lead to damage to the building or facility.

Provision: 2.4.10.11.(1)

Objective

OP5

Attributions

[F81-OP5]

Intent(s)

Intent 1. To limit the probability that hydraulic load drained to inappropriately sized leaders will lead to an overflow or a backup, which could lead to damage to the building or facility.

Provision: 2.4.10.12.(1)

Objective

OP5

Attributions

[F81-OP5]

Intent(s)

Intent 1. To limit the probability that hydraulic load drained to inappropriately sized traps will lead to a backup or overflow, which could lead to damage to the building or facility.

Provision: 2.4.10.13.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that hydraulic load drained to inappropriately sized storm sewers will lead to a backup or overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.5.1.1.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that inadequate venting will lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.1.1.(2)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that inadequate venting will lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.1.1.(3)

Intent(s)
Intent 1. To exempt floor drain traps meeting the stated conditions, from venting requirements.

Provision: 2.5.1.1.(4)

Intent(s)
Intent 1. To exempt traps meeting the stated conditions from venting requirements because, if these traps siphon, the trap seal will be replenished naturally.

Provision: 2.5.2.1.(1)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that a soil-or-waste stack will not have adequate capacity to serve as a multi-storey wet vent, which could lead to an inability to accommodate expected hydraulic loads, which could lead to siphonic action or back pressure on wet-vented fixtures, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.3.1.(1)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability of improper or inadequate circuit venting of horizontal branches, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.3.1.(2)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that fixtures will be improperly or inadequately vented, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.3.1.(3)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that a relief vent will be inadequately connected to the branch that forms part of a circuit-vented system, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.3.1.(4)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that a soil-or-waste pipe will act as a relief vent under improper conditions, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.3.1.(5)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that a relief vent will serve as a combined relief vent under improper conditions, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.3.1.(6)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that additional circuit vents will not be provided where needed, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.3.1.(7)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that a soil-or-waste pipe will serve as an additional circuit vent under improper conditions, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.3.1.(8)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that elements will be inadequately connected to circuit vents and additional circuit vents, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.3.1.(9)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that a circuit-vented branch will be inadequately sized, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.3.1.(10)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that additional circuit vents will be inadequately sized, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.3.1.(11)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that the hydraulic load on a circuit vent will be improperly calculated, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.4.1.(1)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that the lack of a venting connection will lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.4.2.(1)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inadequate venting of soil-or-waste stacks will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.4.2.(2)

Intent(s)

Intent 1. To exempt soil-or-waste stacks that serve as wet vents from the requirement to have a vent stack as stated in Sentence 2.5.4.2.(1)

Provision: 2.5.4.2.(3)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inadequate protection for connections against back pressure caused by surge flow in the soil-or-waste stack will lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.4.2.(4)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that:

- hydraulic load from fixtures discharging simultaneously will lead to siphonic action or back pressures,
- discharge from water closets will lead to the siphonage of downstream traps,
- hydraulic load from fixtures located on higher storeys will lead to trap seal failure due to compression of air below the connection, or
- the failure of wet vent sections to conform to wet vent requirements will lead to siphonic action or back pressures.

This is to limit the probability of trap seal failure in a vent stack that functions as a wet vent, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.4.3.(1)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inadequate venting will lead to a piston effect of flow that typically fills a high proportion of a pipe's cross-sectional area, which could lead to back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.4.3.(2)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that the connection of yoke vents by means of an inappropriate fitting or at an inappropriate location will lead to the accumulation of sewage in yoke vents, which could lead to a reduced vent capacity, which could lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.4.3.(3)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that blockages in soil-or-waste pipes that are served by yoke vents will lead to the backflow of sewage into vent stacks via yoke vents, which could lead to blockage of the vent, which could lead to a reduced vent capacity, which could lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.4.3.(4)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To exempt certain soil-or-waste stack installations from the requirement for a yoke vent, where alternative venting is provided.

This is to limit the probability that inadequate venting will lead to back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons [see Sentence 2.5.4.3.(1)].

Provision: 2.5.4.4.(1)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inadequate relief venting at offsets in soil-or-waste stacks that are subject to a high hydraulic load will lead to a piston effect of flow that typically fills a high proportion of a pipe's cross-sectional area due to changes in direction, which could lead to back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.4.5.(1)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that a vent will not have adequate capacity to serve as a wet vent, which could lead to an inability to accommodate expected hydraulic loads, which could lead to siphonic action or back pressure on wet-vented fixtures, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.5.1.(1)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that a lack of vent pipes or the installation of vent pipes in a location where they are susceptible to blockage by the contents in the sump or tank will lead to an accumulation of gases, which could lead to a buildup of pressure in the sump or tank, which could lead to a restricted flow to the sump or tank, which could lead to backups, which could lead to the entry of sewage into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.5.5.2.(1)

Objective
OS1

Attributions
[F40, F81-OS1.1]

Intent(s)

Intent 1. To limit the probability that inadequate venting will lead to an accumulation of flammable or explosive gases, which could lead to an explosion or fire, which could lead to harm to persons.

Objective
OH2

Attributions
[F72, F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequate venting will lead to a buildup of excessive gas pressure in interceptors, which could lead to an inability of sewage to flow into interceptors, which could lead to backups, which could lead to the entry of sewage into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inadequate venting will lead to a buildup of excessive gas pressure in interceptors, which could lead to the seepage of toxic or noxious gases into buildings, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.5.2.(2)

Objective
OS1

Attributions
[F40, F81-OS1.1]

Intent(s)

Intent 1. To limit the probability that pressure differentials within oil interceptors will lead to an accumulation of flammable or explosive gases, which could lead to an explosion or fire, which could lead to harm to persons.

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that pressure differentials within oil interceptors will lead to a buildup of excessive gas pressure in interceptors, which could lead to the seepage of toxic or noxious gases into buildings, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.5.2.(3)

Objective
OS1

Attributions
[F40, F81-OS1.1]

Intent(s)

Intent 1. To limit the probability that a lack of vent pipes or the installation of vent pipes in a location where they are susceptible to blockage will lead to a restricted flow to the sump, which could lead to backups, which could lead to the entry of waste into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.5.5.2.(4)

Objective
OS1

Attributions
[F40, F81-OS1.1]

Intent(s)

Intent 1. To limit the probability that inadequate venting will lead to an accumulation of flammable or explosive gases, which could lead to an explosion or fire, which could lead to harm to persons.

Provision: 2.5.5.2.(5)

Objective
OS1

Attributions
[F40, F81-OS1.1]

Intent(s)

Intent 1. To limit the probability that inadequate venting will lead to an accumulation of flammable or explosive gases, which could lead to an explosion or fire, which could lead to harm to persons.

Provision: 2.5.5.3.(1)

Objective
OS3

Attributions
[F80, F81-OS3.4]

Intent(s)

Intent 1. To limit the probability that the interconnection of the two types of vents will lead to the entry of corrosive gases into sanitary venting systems, which could lead to the accelerated deterioration of vent piping, which could lead to the entry of corrosive gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.5.4.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inadequate make-up air provision in drainage systems will lead to back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.5.5.(1)

Objective
OH1

Attributions
[F81-OH1.1] Applies to *venting systems*.

Intent(s)
Intent 1. To limit the probability that the inadequate provision for venting and drainage of future installations of fixtures will lead to performance that is below expectations, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OH2

Attributions
[F81-OH2.1, OH2.3] Applies to *drainage systems*.

Intent(s)
Intent 1. To limit the probability that the inadequate provision for venting and drainage of future installations of fixtures will lead to performance that is below expectations, which could lead to backups, which could lead to the entry of sewage or contaminated water into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.5.5.5.(2)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that the inadequate provision for venting of future installations of fixtures will lead to performance that is below expectations, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.6.1.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that depressions in vent pipes will lead to an accumulation of liquids from condensation or backflow, which could lead to obstruction of the vent capacity, which could lead to inadequate venting, which could lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Objective
OS1

Attributions
[F81-OS1.1]

Intent(s)

Intent 1. To limit the probability that depressions in vent pipes will lead to an accumulation of liquids from condensation or backflow, which could lead to obstruction of the oil interceptor's vent capacity, which could lead to an accumulation of flammable or explosive gases in buildings, which could lead to an explosion or fire, which could lead to harm to persons.

Provision: 2.5.6.2.(1)

Objective
OS1

Attributions
[F81-OS1.1]

Intent(s)

Intent 1. To limit the probability that wind-induced pressure on the vent will obstruct its ability to conduct the flow of gases to the outside, which could lead to an accumulation of explosive or flammable gases in buildings, which could lead to an explosion or fire, which could lead to harm to persons.

Provision: 2.5.6.2.(2)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that soil or waste will obstruct a vent pipe, which could lead to inadequate venting, which could lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.6.2.(3)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that improperly capped vents will lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.6.3.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inappropriate location for the fixture traps will lead to:

- an inadequate trap arm length, which could lead to blockage of vents by solids leaving traps,
- an excessive trap arm fall, which could lead to excessive siphonic action on traps,
- an excessive trap arm direction change, which could lead to flow obstructions between traps and vent connections, and
- the evaporation of trap seals due to air movement in DWV systems.

This is to limit the probability of vent or trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.6.3.(2)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that an excessive cumulative change of direction will lead to flow restrictions between siphonic action fixtures and soil-or-waste piping to which they connect, which could lead to waste water backup and surcharge, which could lead to the entry of sewage into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.5.6.3.(3)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that excessive distance between connections of fixture drains to fixtures and vent pipes will lead to excessive siphonic action at fixture drains such that it would prevent re-establishing trap seals after flushing, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.6.3.(4)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that excessive distance between the connections of fixture drains to fixtures and vent pipes will lead to excessive siphonic action at fixture drains such that it would prevent re-establishing trap seals after use, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.6.4.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inadequate vertical height above the flood level rim of fixtures will lead to backflow into vent pipes in the event of blockages in drainage systems, which could lead to an obstruction of vent piping by soil or waste, which could lead to inadequate venting, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.6.4.(2)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inappropriate connection will lead to backflow into vent pipes in the event of blockages in drainage systems, which could lead to an obstruction of vent piping by soil or waste, which could lead to inadequate vent capacity, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.6.5.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that vent pipes will terminate in buildings, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.6.5.(2)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that vent pipes are terminated in a way that will allow the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.6.5.(3)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that vent pipes located outside of buildings will be improperly installed, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.6.5.(4)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that an inadequate distance between vent pipes that could emit sewer gases and occupancies or openings in building envelopes that could provide access to occupancies, will lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.6.5.(5)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inadequate terminal height will lead to blockage from snow or the entry of rainwater or water from melting snow into vents, which could lead to the obstruction of vents, which could lead to inadequate venting, which could lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.6.5.(6)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inadequate frost protection will lead to blockage of vents due to freeze-up of condensation, which could lead to inadequate venting, which could lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.7.1.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inadequate vent pipe size will lead to an insufficient volume of air in venting systems, which could lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.7.2.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inadequate size of other vent connections will lead to an insufficient volume of air in venting systems, which could lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.7.3.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that an inadequate relief vent capacity will lead to an inadequate volume of air in venting systems, which could lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.7.3.(2)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that an inadequate vent capacity will lead to an insufficient volume of air in venting systems, which could lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.7.4.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)
Intent 1. To limit the probability that an inadequate relief vent capacity will lead to an insufficient volume of air in venting systems, which could lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.7.5.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)
Intent 1. To limit the probability that a yoke vent of excessive size will lead to an excessive cross-flow of venting gases through soil-or-waste piping systems, which could lead to a reduced drainage capacity,

which could lead to backups, which could lead to the entry of sewage or contaminated water into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.5.7.6.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that an inadequate vent size will lead to restricted air flow from manholes when waste water is flowing toward manholes, which could lead to airlock and flow restriction of waste, which could lead to backups, which could lead to contact with sewage or contaminated water, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.5.7.7.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that an inadequate vent size will lead to restricted air flow from sumps when waste water is flowing toward sumps, which could lead to airlock, which could lead to flow restriction of waste, which could lead to backups, which could lead to the entry of sewage or contaminated water into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.5.7.7.(2)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that an inadequate vent size will lead to a restricted air flow from sumps when waste water is flowing toward sumps, which could lead to airlock, which could lead to flow restriction of waste, which could lead to backups, which could lead to the entry of sewage or contaminated water into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

Intent(s)

Intent 1. To exempt from the requirements of Sentence 2.5.7.7.(1) sumps that would require vent pipes larger than 4 in. since larger vent pipes are not likely to perform significantly better in a pressure equalization role.

Provision: 2.5.7.7.(3)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inadequate venting will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.8.1.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an excessive hydraulic load draining into wet vents will lead to an insufficient volume of air in wet venting systems where piping functions as both waste and vent piping, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.8.1.(2)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that the determination of the size of a wet vent will include the hydraulic load from the most downstream fixture or symmetrically connected fixtures, which could lead to improperly sized vents, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.8.2.(1)

Objective
OH1

Attributions
[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inadequate vent size will lead to inadequate venting capacity, which could lead to insufficient air volume, which could lead to trap seal failure, which could lead to the entry

of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.8.2.(2)

Intent(s)

Intent 1. To specify that the length of individual vents or dual vents is not taken into consideration in the determination of their size.

Provision: 2.5.8.3.(1)

Objective

OH1

Attributions

[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inadequate vent size will lead to inadequate venting capacity, which could lead to an insufficient volume of air, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.8.3.(2)

Intent(s)

Intent 1. To define what is meant by "length" in reference to branch vents for the purposes of applying Table 2.5.8.3.

Provision: 2.5.8.3.(3)

Intent(s)

Intent 1. To define what is meant by "length" in reference to vent headers for the purposes of applying Table 2.5.8.3.

Provision: 2.5.8.3.(4)

Intent(s)

Intent 1. To define what is meant by "length" in reference to circuit vents for the purposes of applying Table 2.5.8.3.

Provision: 2.5.8.3.(5)

Intent(s)

Intent 1. To define what is meant by "length" in reference to continuous vents for the purposes of applying Table 2.5.8.3.

Provision: 2.5.8.4.(1)

Intent(s)

Intent 1. To direct Code users to Table 2.5.8.4. for the sizing of vent stacks and stack vents.

Provision: 2.5.8.4.(2)

Intent(s)

Intent 1. To define what is meant by "length" in reference to stack vents and vent stacks for the purposes of applying Table 2.5.8.4.

Provision: 2.5.8.4.(3)

Objective

OH1

Attributions

[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an inadequate vent size will lead to an inadequate venting capacity, which could lead to an insufficient volume of air, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.8.4.(4)

Objective

OH1

Attributions

[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that an insufficient extension of stack vents will lead to inadequate venting capacity, which could lead to an insufficient volume of air, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.8.4.(5)

Objective

OH1

Attributions

[F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that building drains will not be vented due to frozen manhole covers, which could lead to an inadequate venting capacity, which could lead to an insufficient volume of air,

which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.8.5.(1)

Intent(s)

Intent 1. To specify that the length of the vents listed is not taken into consideration in the determination of their size.

Provision: 2.5.9.1.(1)

Intent(s)

Intent 1. To supersede the requirement stated in Sentence 2.5.1.1.(1) regarding venting so as to permit the use of air admittance valves.

Provision: 2.5.9.2.(1)

Objective

OH1

Attributions

[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that the lack of a venting connection will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.9.2.(2)

Objective

OH1

Attributions

[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inappropriate venting will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.9.3.(1)

Objective

OH1

Attributions

[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that installation in an inappropriate location will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.9.3.(2)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that inappropriate installation will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.9.3.(3)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that the installation of air admittance valves with an inappropriate rating will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.9.3.(4)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability that the airtightness of the enclosure will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Intent 2. To limit the probability that an inability to access air admittance valves for inspection and maintenance purposes will lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.5.9.3.(5)

Objective
OH1

Attributions
[F40, F81-OH1.1]

Intent(s)

Intent 1. To limit the probability of siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

Provision: 2.6.1.1.(1)

Objective
OS3

Attributions
[F31-OS3.2]

Intent(s)

Intent 1. To limit the probability that inconsistency in the location of controls will lead to persons confusing hot water controls for cold water controls, which could lead to exposure to scalding hot water, which could lead to harm to persons.

Provision: 2.6.1.1.(2)

Objective
OH2

Attributions
[F71-OH2.3]

Intent(s)

Intent 1. To limit the probability that an inappropriate design will lead to inadequate water temperatures for bathing or cleaning, which could lead to poor hygiene and unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.1.2.(1)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that an inability to drain or blow out systems will lead to freezing as a result of heating system failure or seasonal shutdown, which could lead to failure and leakage of water, which could lead to damage to the building or facility.

Provision: 2.6.1.3.(1)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that a lack of shut-off valves or inappropriately located shut-off valves will lead to an inability to quickly shut off the water supply if leaks occur, which could lead to damage to the building or facility.

Provision: 2.6.1.3.(2)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that a lack of shut-off valves or inappropriately located shut-off valves will lead to an inability to quickly shut off the water supply in the event of leakage, which could lead to damage to the building or facility.

Provision: 2.6.1.3.(3)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that a lack of shut-off valves or inappropriately located shut-off valves will lead to an inability to quickly shut off the water supply if leaks occur, which could lead to damage to the building or facility.

Provision: 2.6.1.3.(4)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that the lack of shut-off valves or inappropriately located shut-off valves will lead to an inability to quickly shut off water in the event of leaks, which could lead to damage to the building or facility.

Provision: 2.6.1.3.(5)

Objective
OH2

Attributions
[F70, F72-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that a lack of shut-off valves in each suite will lead to widespread water service interruption in the building in the event of leakage in a suite or of maintenance, renovations or repairs being performed in a suite, which could lead to a lack of water for bathing and cleaning, which could lead to poor hygiene and unsanitary conditions, which could lead to harm to persons in other parts of the building.

Provision: 2.6.1.3.(6)

Objective
OH2

Attributions
[F70, F72-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that a lack of shut-off valves on fixtures will lead to widespread water service interruption in the event of leakage, or of maintenance, renovations or repairs being performed on any one fixture, which could lead to inadequate water for washing or cleaning, which could lead to poor hygiene and unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.1.3.(7)

Objective
OH2

Attributions
[F70, F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that a lack of shut-off valves on pipes to hot water tanks will lead to widespread water service interruption in the building, house or suite in the event of leakage, or of maintenance or repairs being performed on hot water tanks, which could lead to inadequate water for bathing or cleaning, which could lead to poor hygiene and unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.1.4.(1)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that inadequate frost protection for an exterior water pipe or an inability to isolate and drain the exterior portion of water pipes in winter will lead to freezing, which could lead to failure, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.6.1.5.(1)

Objective
OP5

Attributions
[F20, F81-OP5]

Intent(s)

Intent 1. To limit the probability that the lack of a check valve will lead to inadvertent entry of hot water into water service pipes, which could lead to weakening of piping or fitting material, which could lead to leakage under pressure, which could lead to damage to the building or facility.

Provision: 2.6.1.6.(1)

Objective
OH2

Attributions
[F72-OH2.1]

Intent(s)

Intent 1. To limit the probability that an inadequate water capacity for flushing will lead to the accumulation of waste in fixtures, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.1.6.(2)

Objective
OH2

Attributions
[F72-OH2.1]

Intent(s)

Intent 1. To limit the probability that a lack of individual, manually operated flushing devices will lead to fixtures not being flushed after each use, which could lead to the accumulation of waste in fixtures, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.1.7.(1)

Objective
OS3

Attributions
[F31, F81-OS3.2]

Intent(s)

Intent 1. To limit the probability that a lack of pressure-relief valves, excessively high opening pressure of pressure-relief valves or an inappropriate location for pressure-relief valves will lead to water pressure in hot water tanks exceeding the tanks' rated working pressure, which could lead to rupture or bursting of storage tanks, which could lead to harm to persons.

Provision: 2.6.1.7.(2)

Objective
OS3

Attributions
[F81-OS3.1, OS3.2]

Intent(s)
Intent 1. To limit the probability of water in hot water tanks exceeding 99°C under all operating conditions, which could lead to the formation of steam, which could lead to pressure in hot water tanks exceeding the tanks' rated working pressure, which could lead to storage tank rupture or steam in water distribution systems, which could lead to exposure to pressurized steam, which could lead to harm to persons.

Provision: 2.6.1.7.(3)

Intent(s)
Intent 1. To clarify that requirements for pressure relief and temperature relief are permitted to be satisfied by a combination device.

Provision: 2.6.1.7.(4)

Objective
OS3

Attributions
2.6.1.7.(4)(a) **[F31-OS3.2] [F81-OS1.1]**
2.6.1.7.(4)(b) **[F81-OS3.1, OS3.2]**

Intent(s)
Intent 1. To limit the probability that:

- the lack of pressure-relief valves will lead to water pressure in hot water tanks exceeding the tanks' rated working pressure, or
- the lack of temperature relief valves will lead to an inability to vent excessively high-temperature water, which could lead to the formation of steam, which could lead to pressure in hot water tanks exceeding the tanks' rated working pressure.

This is to limit the probability of rupture or bursting of storage tanks, which could lead to harm to persons.

Provision: 2.6.1.7.(5)

Objective
OS3

Attributions
[F31-OS3.2]

Intent(s)

Intent 1. To limit the probability that:

- inadequate size will lead to back pressure at relief valve outlets, which could lead to interference with proper pressure relief for protected devices,
- inadequate rigidity, inappropriate slope, inappropriate termination or excessive space between the end of the pipe and a floor drain will lead to misdirection of vented water,
- inadvertent blockage, connection or extension of pipes will lead to inoperability of relief systems, or
- use of inappropriate materials will lead to an inability to withstand temperatures to which it may be exposed, which could lead to failure of pipes.

This is to limit the probability of exposure to hot water or steam, which could lead to harm to persons.

Objective

OH2

Attributions

2.6.1.7.(5)(b) **[F81-OH2.2]** Applies to the size of *air breaks*.

Intent(s)

Intent 1. To limit the probability that the lack of an appropriate air break will lead to backflow from sanitary drainage systems, which could lead to contamination of water in tanks, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.1.7.(6)

Objective

OS3

Attributions

[F31-OS3.2]

Intent(s)

Intent 1. To limit the probability that:

- the lack of relief valves will lead to an inability to vent excessively high-temperature water, or
- the inappropriate location of relief valves will lead to an inability to sense the highest temperature of water in tanks, which could lead to the failure of temperature relief valves to vent excessively high-temperature water.

This is to limit the probability of water exceeding 99°C under all operating conditions, which could lead to the formation of steam, which could lead to pressure in hot water tanks exceeding the tanks' rated working pressure, which could lead to storage tank rupture, or steam in water distribution systems, which could lead to exposure to pressurized steam, which could lead to harm to persons.

Provision: 2.6.1.7.(7)

Objective

OS3

Attributions

[F31-OS3.2]

Intent(s)

Intent 1. To limit the probability that the installation of shut-off valves will lead to isolation of relief valves, which could lead to inoperability of relief valves, which could lead to pressure in hot water tanks exceeding the tanks' rated working pressure, which could lead to tank failure and exposure of persons to pressurized steam, which could lead to harm to persons.

Provision: 2.6.1.7.(8)

Objective
OS3

Attributions
[F81-OS3.2]

Intent(s)

Intent 1. To limit the probability that the lack of a vacuum relief valve will lead to excessively low air pressure in tanks, which could lead to the fracture or collapse of tanks, which could lead to leakage of hot water, which could lead to harm to persons.

Provision: 2.6.1.7.(9)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that water will leak from the tank onto elements below, which could lead to damage to the building or facility.

Provision: 2.6.1.7.(10)

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that the drain pan will be inadequate [with regard to size, connected pipes, and location of drains] to contain and conduct any water that leaks from the tank, which could lead to damage to the building or facility.

Provision: 2.6.1.8.(1)

Objective
OS3

Attributions
[F31-OS3.2] [F81-OS3.4]

Intent(s)

Intent 1. To limit the probability that performance will fall significantly below expectations, which could lead to an inability to limit water temperature, which could lead to excessively high water temperatures, which could lead to harm to persons.

Objective
OH2

Attributions
[F70-OH2.2]

Intent(s)
Intent 1. To limit the probability that performance will fall significantly below expectations, which could lead to the backflow of heat-transfer media into potable water lines, which could lead to contamination of potable water, which could lead to harm to persons.

Provision: 2.6.1.9.(1)

Objective
OS3

Attributions
[F20, F81-OS3.2]

Intent(s)
Intent 1. To limit the probability that inadequate protection of water pipes will lead to excessive water hammer, which could lead to water distribution system failure, which could lead to leakage of high-temperature water, which could lead to harm to persons.

Objective
OP5

Attributions
[F20, F81-OP5]

Intent(s)
Intent 1. To limit the probability that inadequate protection of water pipes will lead to excessive water hammer, which could lead to water distribution system failure, which could lead to damage to the building or facility.

Provision: 2.6.1.10.(1)

Objective
OH2

Attributions
[F71, F70, F46-OH2.2, OH2.3]

Intent(s)
Intent 1. To limit the probability that:

- inadequate size will lead to inadequate water volume, which could lead to inadequate water for cleaning or washing,
- termination below ground will lead to backflow of groundwater into potable water systems,

- inadequate protection from mechanical damage, will lead to damage to below-ground pipes during installation or removal of mobile homes, which could lead to leakage or backflow of groundwater into potable water systems,
- inadequate protection from frost-related movement will lead to damage to below-ground pipes, which could lead to backflow of groundwater into potable water systems, or
- the lack of a curb stop and a means of draining pipes, which could lead to freezing of water trapped inside pipes, which could lead to damage to pipes, which could lead to backflow of groundwater into potable water systems.

This is to limit the probability of unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.1.11.(1)

Objective
OP5

Attributions
[F20, F81, F46-OP5]

Intent(s)
Intent 1. To limit the probability that inadequate protection will lead to an inability to resist pressure buildup in a closed loop due to thermal expansion of water within a closed water distribution system, which could lead to damage to or failure of pipes or fittings, which could lead to leakage, which could lead to damage to the building or facility.

Provision: 2.6.1.12.(1)

Objective
OS3

Attributions
[F40-OS3.4]

Intent(s)
Intent 1. To limit the probability that an insufficient hot water storage temperature will lead to the proliferation of legionella bacteria, which could lead to harm to persons.

Provision: 2.6.2.1.(1)

Objective
OH2

Attributions
[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)
Intent 1. To limit the probability that inappropriate design or installation of devices could cause backflow and cause contamination of potable water, which could lead to harm to persons.

Provision: 2.6.2.1.(2)

Objective
OH2

Attributions
[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that inappropriate water treatment devices or apparatus will lead to intrusion of substances into the potable water system, which could lead to contamination of potable water systems, which could lead to harm to persons.

Provision: 2.6.2.1.(3)

Objective
OH2

Attributions
[F70, F81, F82-OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that the performance of backflow preventers will fall significantly below expectations, which could lead to the entry of contaminants from surrounding environments under backflow conditions into potable water, which could lead to the contamination of potable water, which could lead to harm to persons.

Provision: 2.6.2.2.(1)

Objective
OH2

Attributions
[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inappropriate connection will lead to back-siphonage from connected sources other than potable water, which could lead to contamination of potable water systems, which could lead to harm to persons.

Provision: 2.6.2.2.(2)

Objective
OH2

Attributions
[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequate protection will lead to back-siphonage, which could lead to contamination of potable water supply systems, which could lead to harm to persons.

Provision: 2.6.2.3.(1)

Objective
OH2

Attributions
[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)
Intent 1. To limit the probability that inadequate backflow protection will lead to an inability to resist back pressure from connected sources containing other than potable water, which could lead to contamination of potable water systems, which could lead to harm to persons.

Provision: 2.6.2.3.(2)

Objective
OH2

Attributions
[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)
Intent 1. To limit the probability that inadequate backflow protection will lead to an inability to resist back pressure, which could lead to backflow, which could lead to contamination of potable water supply systems with non-toxic substances, which could lead to harm to persons.

Provision: 2.6.2.3.(3)

Objective
OH2

Attributions
[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)
Intent 1. To limit the probability that inadequate backflow protection will lead to an inability to resist back pressure, which could lead to backflow of toxic substances, which could lead to contamination of potable water supply systems, which could lead to harm to persons.

Provision: 2.6.2.4.(1)

Intent(s)
Intent 1. To exempt certain residential full flow-through fire sprinkler/standpipe systems from the requirement to a have backflow preventer.

Provision: 2.6.2.4.(2)

Objective
OH2

Attributions
[F46, F70, F81-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequate backflow protection will lead to an inability to resist back-siphonage or back pressure, which could lead to the contamination of potable water systems with water from fire sprinkler/standpipe systems, which could lead to harm to persons.

Provision: 2.6.2.4.(3)

Objective

OH2

Attributions

[F46, F70, F81-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequate backflow protection will lead to an inability to resist back-siphonage or back pressure from fire department pumper connections, which could lead to the contamination of potable water systems with water from fire sprinkler/standpipe systems, which could lead to harm to persons.

Provision: 2.6.2.4.(4)

Objective

OH2

Attributions

[F46, F70, F81-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequate backflow protection will lead to an inability to resist back-siphonage or back pressure from fire department connections, which could lead to the contamination of potable water systems with water from fire sprinkler/standpipe systems, which could lead to harm to persons.

Provision: 2.6.2.5.(1)

Objective

OH2

Attributions

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that interconnection of unregulated private water supply systems with public water systems will lead to the contamination of public water systems, which could lead to harm to persons.

Provision: 2.6.2.6.(1)

Objective

OH2

Attributions

[F70, F81, F82-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inability to isolate portions of potable water systems in such buildings or facilities will lead to the spread of contaminated water beyond the premise of origin, which could lead to the spread of a potentially severe health hazard, which could lead to harm to persons.

Provision: 2.6.2.7.(1)

Objective
OH2

Attributions
[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that a lack of backflow protection of hose bibbs will lead to back-siphonage, which could lead to contamination of potable water systems, which could lead to harm to persons.

Provision: 2.6.2.8.(1)

Objective
OH2

Attributions
[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that contaminants and construction debris in uncleaned water systems will lead to contamination of potable water systems, which could lead to harm to persons.

Provision: 2.6.2.9.(1)

Objective
OH2

Attributions
[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inappropriate location for air gaps will lead to the ingress of noxious vapours from surrounding environments under backflow conditions into water distribution systems, which could lead to contamination of potable water systems, which could lead to harm to persons.

Provision: 2.6.2.9.(2)

Objective
OH2

Attributions
[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequate air gaps will lead to the ingress of waterborne contaminants from surrounding environments into water distribution systems under backflow conditions, which could lead to contamination of potable water systems, which could lead to harm to persons.

Provision: 2.6.2.10.(1)

Intent(s)

Intent 1. To clarify "critical level" for purposes of Sentences 2.6.2.10.(3) and Sentence 2.6.2.10.(4).

Provision: 2.6.2.10.(2)

Objective

OH2

Attributions

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inappropriate location of installation will lead to vacuum breaker failures due to prolonged exposure to water supply pressure, which could lead to the ingress of contaminants from surrounding environments under backflow conditions into potable water supplies, which could lead to contamination of potable water, which could lead to harm to persons.

Provision: 2.6.2.10.(3)

Objective

OH2

Attributions

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inadequate installed height for vacuum breakers will lead to the entry of contaminants from surrounding environments under back-siphonage conditions into potable water systems, which could lead to contamination of potable water, which could lead to harm to persons.

Provision: 2.6.2.10.(4)

Objective

OH2

Attributions

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inadequate installed height for pressure vacuum breakers will lead to the entry of contaminants from surrounding environments under back-siphonage conditions into potable water systems, which could lead to contamination of potable water, which could lead to harm to persons.

Provision: 2.6.2.11.(1)

Objective
OH2

Attributions
[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)
Intent 1. To limit the probability that the lack of back-siphonage preventers will lead to the entry of contaminants from water closet tanks or bowls under back-siphonage conditions into potable water systems, which could lead to contamination of potable water, which could lead to harm to persons.

Provision: 2.6.2.12.(1)

Objective
OH2

Attributions
[F70, F81, F46-OH2.1, OH2.2, OH2.3]

Intent(s)
Intent 1. To limit the probability that the installation of a bypass or other devices that would make backflow preventers ineffective will lead to the entry of contaminants from surrounding environments under backflow conditions into potable water systems, which could lead to contamination of potable water, which could lead to harm to persons.

Provision: 2.6.3.1.(1)

Objective
OH2

Attributions
[F71, F72-OH2.1, OH2.3]

Intent(s)
Intent 1. To limit the probability that an inadequate flow will lead to the malfunction of fixtures in water distribution systems, which could lead to inadequate water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.3.1.(2)

Objective
OH2

Attributions
[F72-OH2.1] [F70-OH2.2] [F71-OH2.3]

Intent(s)
Intent 1. To limit the probability that an inappropriate design, fabrication or installation of potable water systems will lead to performance of potable water systems that is significantly below expectations, which could lead to an inability to deliver sufficient quantities of water on demand for drinking, bathing, fixture flushing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.3.1.(3)

Objective
OS1

Attributions
[F81-OS1.4]

Intent(s)

Intent 1. To limit the probability that inadequate flow will lead to an insufficient supply of water to the fire sprinkler system, which could lead to improper operation of the system in a fire situation, which could lead to the fire not being suppressed or contained, which could lead to the spread of fire, which could lead to harm to persons.

Objective
OH2

Attributions
[F70, F71-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that an inadequate flow will lead to the malfunction of fixtures in potable water distribution systems, which could lead to inadequate water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that inadequate flow will lead to an insufficient supply of water to the fire sprinkler system, which could lead to improper operation of the system in a fire situation, which could lead to the fire not being suppressed or contained, which could lead to the spread of fire, which could lead to damage to the building or facility.

Provision: 2.6.3.2.(1)

Objective
OH2

Attributions
[F71, F72-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that undersized water distribution systems will lead to inadequate water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.3.2.(2)

Objective
OH2

Attributions
[F71, F72-OH2.1, OH2.3]

Intent(s)
Intent 1. To limit the probability that undersized water distribution systems will lead to inadequate water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.3.2.(3)

Objective
OH2

Attributions
[F71, F72-OH2.1, OH2.3]

Intent(s)
Intent 1. To limit the probability that undersized water distribution systems will lead to inadequate water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.3.2.(4)

Objective
OH2

Attributions
[F81-OH2.1, OH2.2]

Intent(s)
Intent 1. To limit the probability that undersized water distribution systems will lead to inadequate water for flushing, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.3.3.(1)

Objective
OS3

Attributions
[F81-OS3.2]

Intent(s)
Intent 1. To limit the probability that a lack of protection against excessive static pressure in water system piping at fixtures will lead to high-velocity discharge from faucets or fixtures, which could lead to harm to persons.

Intent 2. To limit the probability that a lack of protection against excessive static pressure in water system piping at the fixture will lead to the rupturing of plumbing system components, which could lead to harm to persons.

Provision: 2.6.3.4.(1)

Objective
OH2

Attributions
[F71, F72-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequately sized water service piping will lead to an inadequate supply of water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.3.4.(2)

Objective
OH2

Attributions
[F71, F72-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that inadequately sized water service piping will lead to an inadequate supply of water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.3.4.(3)

Objective
OH2

Attributions
[F71, F72-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that undersized connectors will lead to an inadequate supply of water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.3.4.(4)

Objective
OH2

Attributions
[F81-OH2.3]

Intent(s)

Intent 1. To limit the probability that undersized piping will lead to an inadequate supply of hot water for bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.3.4.(5)

Objective
OH2

Attributions
[F71, F72-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that undersized water distribution systems will lead to inadequate water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.6.3.5.(1)

Objective
OH2

Attributions
[F81-OH2.1, OH2.3]

Intent(s)

Intent 1. To limit the probability that a lack of protection against excessive flow velocities in water system piping will lead to erosion of the piping material, which could lead to the rupturing of piping, which could lead to unsanitary conditions, which could lead to harm to persons.

Objective
OP5

Attributions
[F81-OP5]

Intent(s)

Intent 1. To limit the probability that a lack of protection against excessive flow velocities in water system piping will lead to erosion of the piping material, which could lead to the rupturing of piping, which could lead to damage to the building or facility.

Objective
OS3

Attributions
[F81-OS3.1]

Intent(s)

Intent 1. To limit the probability that a lack of protection against excessive flow velocities in water system piping will lead to erosion of the piping material, which could lead to the rupturing of piping, which could lead to harm to persons.

Provision: 2.7.1.1.(1)

Objective
OH2

Attributions
[F46-OH2.2]

Intent(s)

Intent 1. To limit the probability that the interconnection of non-potable and potable water systems will lead to contamination of potable water systems, which could lead to harm to persons.

Provision: 2.7.2.1.(1)

Objective
OH2

Attributions
[F46-OH2.2]

Intent(s)

Intent 1. To limit the probability that inadequate identification will lead to the inadvertent interconnection of non-potable and potable water systems, which could lead to contamination of potable water systems, which could lead to harm to persons.

Provision: 2.7.3.1.(1)

Objective
OH2

Attributions
[F46-OH2.2]

Intent(s)

Intent 1. To limit the probability that an inappropriate location for non-potable water piping will lead to contamination of potable water or food, which could lead to consumption of contaminated substances, which could lead to harm to persons.

Provision: 2.7.3.2.(1)

Objective
OH2

Attributions
[F46-OH2.2]

Intent(s)

Intent 1. To limit the probability that an inappropriate location for outlets from non-potable water systems will lead to the inadvertent use of non-potable water for functions which require potable water, which could lead to the consumption of contaminated substances, which could lead to harm to persons.

Provision: 2.7.4.1.(1)

Objective
OH2

Attributions
[F81-OH2.1]

Intent(s)

Intent 1. To limit the probability that a lack of water will lead to fixtures not being flushed after each use, which could lead to the accumulation of waste in fixtures, which could lead to unsanitary conditions, which could lead to harm to persons.

Provision: 2.7.4.1.(2)

Objective
OH2

Attributions
[F82-OH2.2]

Intent(s)

Intent 1. To limit the probability of inappropriate use of non-potable water, which could lead to harm to persons.