

Division B Part 7 Plumbing Changes

Highlighted Areas

Materials and Equipment

Piping and Resting

Drainage Systems

Venting Systems

Non-Potable Water

Non-Potable Water Systems

Division B Part 7 – Materials and Equipment

Editorial Changes - Harmonize with the National Plumbing Code

- The defined term "size" has been replaced with "nominal pipe size" or "NPS" to align with industry terminology.
- The term "certified to" has been replaced by "conform to" for consistency with the 2020 NPC with respect to referencing material standards

7.1.3.1 Lighting and Ventilation Requirements – requires lighting and ventilation where plumbing fixtures are installed

 New Sentence (1) prohibits plumbing fixtures from being located in a room without lighting and ventilation.

7.1.4.1.(1) Section Seismic Restraints and Design - New Section to provide seismic protection of plumbing systems

 New Sentence (1) - Plumbing systems in buildings constructed in accordance with Part 3 shall be designed and installed to accommodate the seismic forces addressed in Subsection 4.1.8

7.2.1.6. Working Pressure of Water Service Pipe - regulate working pressure to not less than max watermain pressure

New Sentence (1) - The working pressure rating of a water service pipe shall not be less than the
maximum water main pressure at their point of connection as established by the water supply
authority.

7.2.3.1. Traps – always require a cleanout plug at the lowest part of the trap or part of the trap removable for cleaning

- Clause 3(b) has been revised so that only part of the trap is required to be removable for cleaning purposes.
- Clause 3(c) has been removed as an option for cleanout provision when the trap is installed below the floor without a cleanout plug. be provided with a cleanout installed above the floor as close as practical downstream of the trap when the trap is, (i) installed below the floor, and (ii) not readily accessible for cleaning as required by Clause (a)
- Sentence (4) no longer makes reference to the S-trap.

7.2.5.15 Polyethylene of Raised Temperature Tube and Fittings - New Article Introduces PE-RT and acceptable uses

- New Sentence (1) Polyethylene of raised temperature (PE-RT) tube and manufacturer-approved fittings used in hot and cold potable water systems shall conform to CSA B137.18, "Polyethylene of raised temperature resistance (PE-RT) tubing systems for pressure applications."
- New Sentence (2) The use of PE-RT tube shall conform to Table 7.2.5.15.

Permitted Uses of Polyethylene of Raised Temperature (PE-RT) Tube Forming Part of Sentence 7.2.5.15.(2)

	Plumbing Purposes ⁽¹⁾									
Type of Drainage System			Venting System		Potable Water System			1		
Tube	Aboveground inside building	Underground under building	Building Sewer	Above- ground	Under- ground	Cold	Hot	Under building	Outside building	
PE-RT	N	N	N	N	N	P	P	Р	Р	

7.2.5.16 Cellular Core PVC Pipe and Fittings - New Article Introduces Cellular Core pipe

- New Sentence (1) Cellular core PVC pipe shall
 - a. Conform to ASTM F3128, "Standard Specification for Poly(Vinyl Chloride) (PVC)Schedule 40 Drain, Waste, and Vent Pipe with a Cellular Core," and
 - b. Be light grey, as specified in CSA B181.2, "Polyvinylchloride (PVC) and chlorinated polyvinylchloride (CPVC) drain, waste, and vent pipe and pipe fittings."
- New Sentence (2) Fittings and solvent cements for cellular core PVC pipe shall conform to CSA B181.2, "Polyvinylchloride (PVC) and chlorinated polyvinylchloride (CPVC) drain, waste, and vent pipe and pipe fittings."
- New Sentence (3) Cellular core PVC pipe shall only be used in residential buildings containing 1 or 2 dwelling units and in row houses that do not exceed 3 storeys in height.

7.2.7.1 Copper and Brass Pipe - Where copper pipe is permitted

- Revised Sentence (1) Copper pipe shall conform to
 - (a) ASTM B42, "Standard Specification for Seamless Copper Pipe, Standard Sizes," and
 - (b) Table 7.2.7.4.

Table 7.2.7.4.

Permitted Use of Copper Tube and Pipe
Forming Part of Sentences 7.2.7.1.(1) and 7.2.7.4.(2)

Type of Copper Tube	Water Distribution System		Building	Drainage	e System	Venting System	
or Pipe	Underground	Above-ground	Sewer	Underground	Above-ground	Underground	Above-ground
K & L hard temper	N	P	Р	Р	P	Р	Р
K & L soft temper	Р	P	N	N	N	N	N
M hard temper	N	Р	N	N	P	N	Р
M soft temper	N	N	N	N	N	N	N
DWV	N	N	N	N	P	N	Р

Notes to Table 7.2.7.4.:

(1) P = Permitted and N = Not Permitted.

7.2.7.4 Copper Tube - extend prohibition on copper use for urinals

• New Sentence (3) – Copper tube shall not be used for the fixture drain or the portion of the vent pipe below the flood level rim of a urinal

7.2.10.6 Valves, Supply and Waste Fittings

 New Sentence (2) - Except for lavatories in healthcare facilities, emergency eye washes, and emergency showers, supply fittings and individual shower heads shall have an integral means of limiting the maximum water flow rate to that specified in Table 7.2.10.6.

Table 7.2.10.6.
Water Flow Rates from Supply Fittings
Forming Part of Sentence 2.2.10.6.(2)

Supply Fittings	Maximum Water Flow Rate, LPM	
Lavatory supply fittings		
private	5.7	
public	1.9	
Kitchen supply fittings (except those in industrial, commercial or institutional kitchens)	8.3	
Shower heads	7.6	

Table 7.6.4.1.

Maximum Flow Rates for Water Supply Fittings
Forming Part of Sentence 7.6.4.1.(1)

Fitting	Maximum Flow, L/min	Test Pressure, kPa
Lavatory Faucets in Residential Occupancy	5.7	413
Lavatory Faucets in Other Occupancies	1.9	413
Kitchen Faucet	8.35	413
Shower Heads in Residential Occupancy	7.6	550
Shower Heads in Other Occupancies	9.5	550
Column 1	2	3

Water Temperature Control (7.2.10.7.): automatically maintain selected water temperature

- New Sentence (1) Except as provided in Sentences (2) and (3), water supplied to shower heads
 or bathtubs shall be controlled by an automatic compensating valve conforming to
 - a. ASME A112.18.1 / CSA B125.1, "Plumbing Supply Fittings," or
 - b. ASSE 1016 / ASME A112.1016 / CSA B125.16, "Performance Requirements for Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations."

Exceptions:

- New Sentence (2) The requirement in Sentence (1) is permitted to be waived where hot water supplied only to bathtubs is controlled by
 - (a) an automatic compensating valve conforming to CSA B125.3, "Plumbing fittings," or
 - (b) a temperature-limiting device conforming to ASSE 1070 / ASME A112.1070 / CSA B125.70, "Performance requirements for water temperature limiting devices."
- New Sentence (3) The requirement in Sentence (1) is permitted to be waived where the water
 is supplied by a single tempered water line controlled by an automatic compensating valve
 conforming to CSA B125.3, "Plumbing fittings."
- Revised Sentence (4) Except as provided in Sentences (5) and 7.6.5.3.(1), the maximum temperature of hot water supplied to fittings in a residential occupancy discharging from a shower head or into a bathtub shall not exceed 49°C. (requires all occupancies where showers provided, not just residential)

Exceptions:

- New Sentence (5) In healthcare facilities and retirement homes, the temperature of water discharging from a shower head or into a bathtub shall
 - a. Not exceed 43°C, and
 - b. Be adjusted at the shower or bathtub controls.

7.2.10.7.A Temperature Control Devices - Require Temp Control in Child Care Centres

- Revised Sentence (1) A water distribution system supplying hot water to any bathtub, shower or hand basin that is accessible to a patient or resident in a Group B, Division 2 or 3 occupancy or a resident of a group home, home for special care or residence for adults with developmental disabilities, or children within childcare centres shall have one or more temperature gauges and control devices that are
 - a. Accessible only to supervisory staff, and
 - b. Capable of being adjusted to ensure that the temperature of the water supplied to the fixtures does not exceed 49°C.

7.2.10.7.C Linings and Coatings of Water Storage Tanks - Not applicable to domestic tanks in a house

Revised Sentence (1) - Linings and coatings of domestic water storage tanks that come into contact
with potable water and are not within a secondary suite or an individual dwelling unit shall conform
to NSF/ANSI 61, "Drinking Water System Components - Health Effects."

7.2.11.3 Tracer Wire (7.2.11.3.): Additional option for tracer wire installed underground on fire service mains

- Revised Sentence (1) Except as provided in Sentence (2), every non-metallic water service pipe
 or fire service main shall have attached to it
 - a. a 14 gauge TW solid copper light coloured plastic coated tracer wire, shall be attached to every non-metallic water service pipe or fire service main or,
 - b. a 12 gauge copper clad steel light coloured plastic coated tracer wire.

7.3.3.1. Drilled and Tapped Joints - Allow drilled and tapped joints in sanitary drainage pipe and fittings

• **Sentence (1)** has been amended to allow drilled and tapped joints in sanitary drainage pipe and fittings only if suitable provision for drilling and tapping has been made.

7.3.3.2. Extracted Tees - Conditions for extracting tees in copper tube used in a water distribution system

- New Sentence (1) Tees may be extracted from the wall thickness of Types K and L copper tube used in a water distribution system, provided that,
 - a. A tool specifically designed for the purpose is used,
 - b. The branch is at least one NPS smaller than the tube in which the tee is formed,
 - c. The end of the branch incorporates a means to prevent it from penetrating into the run and thereby obstructing flow, and
 - d. The joint at the tee is brazed with a filler metal having a melting point not below 540°C.

7.3.3.4. Unions and Slip Joints

Revised Sentence (1) which prohibits union joints downstream of a trap weir in a drainage system
or venting system, has been amended to recognise the existing exception in Sentence 7.4.6.3.(6)
which allows the use of union joints for pumped sumps.

7.3.3.8 Connection of Floor Outlet Fixtures

• New Sentence (5) has been introduced to allow that floor mounted water closets can be attached to either the floor or floor flange.

Division B Part 7 - Piping and Testing

7.3.4.5. Support for Horizontal Piping

- Revised Sentence (2) Nominally horizontal piping shall be supported as stated in Table 7.3.4.5.
- Revised Sentence (3) to now specify PVC, CPVC or ABS plastic types for hanger support
- New Sentence (4) (Additional hanger restrictions for plastic pipe) Where PEX, PE-RT, PP-R, PE/AL/PE or PEX/AL/PEX plastic pipe or tube is installed, hangers shall not compress, cut or abrade the pipe.

Table 7.3.4.5.

Support for Nominally Horizontal Piping Forming Part of Sentence 7.3.4.5.(2)

Piping Material	Maximum Horizontal Spacing of Supports, m	Additional Support Conditions
ABS or PVC plastic pipe	1.2	At the end of branches or fixture drains an at changes in direction and elevation
ABS or PVC plastic trap arm or fecture drain pipe > 1 m long	n/a	As close as possible to the trap
Cast-iron pipe	3.0	At or adjacent to each hub or joint
Cast-iron pipe with mechanical joints that is ≤ 300 mm long between adjacent fittings	1.0	None
Copper tube or copper and brass pipe, hard temper diameter > NPS 1 diameter < NPS 1	3.0 2.5	None
Copper tube, soft temper	2.5	None
CPVC pipe	1.0	None
Galvanized iron or stoel pipe • diameter ≥ MPS 6 • diameter < NPS 6	3.75 2.5	None
Lead pipe	Throughout length of pipe	None
PE/AL/PE composite pipe	1.0	None
PEX/AL/PEX composite pipe	1.0	None
PEX plastic pipe	0.8	None
PE-RT tube	0.8	None
PP-R plastic pipe	1.0	At the end of branches and at changes in direction and elevation
Stainloss stool pipe		
 diameter ≥ NPS 1 diameter ≤ NPS 1 	3.0 2.5	None
Stainless steel tube		
 diameter ≥ NPS 1 diameter < NPS 1 	3.0 2.5	None

7.3.6.7 Ball Tests - Requires test Ball size for pipes less than 3"NPS

- Revised Sentence (2) The diameter of the ball shall be not less than
 - a. 50 mm where the size of the pipe is NPS 3 4 in. pipe or more, or
 - b. 25 mm where the size of the pipe is less than NPS 3.

7.4.2.1 Connections to Sanitary Drainage Systems

Subclause (1)(a)(ii) has been amended to require a backwater valve to be installed in the fountain fixture drain when the system is subject to backflow

Division B Part 7 – Drainage Systems

7.4.5.1 Traps for Sanitary Drainage Systems - Allow an interceptor with a water seal to serve as a trap.

 Revised Sentence (5) - An interceptor with an effective water seal of not less than 38 mm is permitted to serve as a trap. A grease interceptor shall not serve as a fixture trap and each fixture discharging through the interceptor shall be trapped and vented.

7.4.5.2 Traps for Storm Drainage Systems - Requirements for the trap that protects a floor drain connected to storm

- New Sentence (2) A floor drain that drains to a storm drainage system shall be protected by a trap
 that
 - a. is located between the floor drain and a leader, storm building drain or storm building sewer,
 - b. may serve all floor drains located in the same room, and
 - c. need not be protected by a vent pipe.

7.4.6.3 Sumps or Tanks – require a water and airtight cover

• New Sentence (3) has been added to require a water and airtight cover where the sump or tank receives subsurface water from a subsoil drainage pipe

7.4.7.1 Cleanouts for Drainage Systems - Change in direction permitted on pipes not more than 6"

- New Sentence (5) A building sewer shall not change direction or slope between the building and
 public sewer or between cleanouts, except that pipes not more than NPS 6 may change direction
 - a. by not more than 5° every 3 m, or
 - b. by the use of fittings with a cumulative change in direction of not more than 45°.
- Revised Sentence (7) Clause 7(b) has been amended to require a cleanout fitting not more than 3 m upstream of the bottom of the stack (used to be 1000mm)

7.4.7.2 Size and Spacing of Cleanouts – increases developed length between building and first manhole

 Revised Sentence (3) - The developed length of a building sewer between the building and the first manhole to which the building sewer connects shall not exceed 75 m. 30 m.

7.4.9.3 Size of Fixture Outlet Pipes – Specify sizing requirements for clothes washer trap not draining into laundry trays

- Revised Sentence (3) Where clothes washers do not drain to a laundry tray, the trap inlet shall be not less than NPS 2 and be fitted with a vertical standpipe that is not less than 600 mm long measured from the trap weir and terminates above the flood level rim of the clothes washer.
- Revised Notes to Table 7.4.9.3 clarify that there is no requirement for hydraulic load for emergency floor drains.

7.4.10.3 Hydraulic Loads from Fixtures with a Continuous Flow – amended to address flow drains to a combined sewer

Revised Sentence (2) - Where a fixture or equipment that produces a continuous or semi-continuous
flow drains to a combined sewer or to a storm sewer, storm drainage system, the hydraulic load
from the fixture is 900 L for each litre per second of flow.

7.4.10.6 Hydraulic Loads to Soil or Waste Pipes - New Tables 7.4.10.6.B and 7.4.10.6.C added

7.4.10.7 Hydraulic Loads on Branches - Reference to Table 7.4.10.7. in Sentence (1) replaced by new Table 7.4.10.6.B for hydraulic load that is drained to a branch.

7.5.4.5. Fixtures Draining into Vent Pipes

• Revised Sentence (1) to require the section of the vent pipe that acts as a wet vent to be not less than NPS 2.

Table 7.4.10.6-B

Maximum Permitted Hydraulic Load Drained to a Branch
Forming Part of Sentences 7.4.10.6.(2), 7.4.10.7.(1) and 7.5.7.3.(2)

Nominal Pipe Size of Branch, NPS	Maximum Hydraulic Load, fixture units
1¼	2
11/4	3
2	6
3	27
4	180
5	390
6	700
8	1 600
10	2 500
12	3 900

Table 7.4.10.6.-C⁽¹⁾

Maximum Permitted Hydraulic Load Drained to a Sanitary Building Drain or Sewer Forming Part of Sentence 7.4.10.6.(2) and Article 7.4.10.8.

Nominal Pipe			Maximum Hydraulio	CLoad, fixture units			
Size of Drain or	Slope ⁽ⁱ⁾						
Sewer, NPS	1 in 400	1 in 200	1 in 133	1 in 100	1 in 50	1 in 25	
3	n/a	n/a	n/a	n/a	27	36	
4	n/a	n/a	n/a	180	240	300	
5	n/a	n/a	380	390	480	670	
6	n/a	n/a	600	700	840	1 300	
8	n/a	1 400	1 500	1 600	2 250	3 370	
10	n/a	2 500	2 700	3 000	4 500	6 500	
12	2 240	3 900	4 500	5 400	8 300	13 000	
15	4 800	7 000	9 300	10 400	16 300	22 500	

7.4.10.10 Hydraulic Loads to Roof Gutters - Sentence (1) in new Article 7.4.10.10. references Table 7.4.10.10. for hydraulic loads Table 7.4.10.10.

Maximum Permitted Hydraulic Load Drained to a Roof Gutter Forming Part of Article 7.4.10.10.

		Maximum Hydraulic Load, L Slope				
Nominal Pipe Size of Gutter, NPS	Area of Gutter,cm ³					
MrS		1 in 200	1 in 100	1 in 50	1 in 25	
3	22.8	406	559	812	1 140	
4	40.5	838	1 190	1 700	2 410	
5	63.3	1 470	2 080	2 950	4 170	
6	91.2	2 260	3 200	4 520	6 530	
7	124.1	3 250	4 600	6 500	9 190	
8	162.1	4 700	6 600	9 400	13 200	
10	253.4	8 480	12 000	17 000	23 600	

7.4.10.11 Hydraulic Loads on Leaders – Table updated to include non-circular Leaders

Circulai	Table 7.4.10.11.
	Maximum Permitted Hydraulic Load Drained to a Leader
	Forming Part of Sentence 7.4.10.11.(1)

Circular	Leader	Non-Circu	lar Leader
Nominal Pipe Size of Leader, NPS	Maximum Hydraulic Load, L	Area of Leader, cm ²	Maximum Hydraulic Load, L
2	1 700	20.3	1 520
21/2	3 070	31.6	2 770
3	5 000	45.6	4 500
4	10 800	81.1	9 700
5	19 500	126.6	17 600
6	31 800	182.4	28 700
8	68 300	324.3	61 500

Division B Part 7 – Venting Systems

7.5.6.5 Terminals – New provisions for vent pipes to property line and additional frost protection options

- Revised Sentence (4) Except for a fresh air inlet, where a vent pipe is terminated in open air, the terminal shall be located
 - a. not less than 1 m above **and** or not less than 3.5 m in any other direction from every air inlet, openable window or door,
 - b. not less than 2 m above **and**—or not less than 3.5 m in any other direction from a roof that supports an occupancy,
 - c. not less than 2 m above ground, and
 - d. not less than 1.8 m from every property line.
- Revised Sentence (6) Where a vent pipe passes through a roof and may be subject to frost closure, or an outside wall of a building, it shall be protected from frost closure by
 - a. increasing its diameter at least one **NPS**, but not less than **NPS 3**, 3 in. in size immediately before it penetrates the roof,
 - b. insulating the pipe, or
 - c. protecting it in some other manner.

Air Admittance Valves as a Vent Terminal (7.5.9.2.): Dimension of 100mm above fixture being vented

• Revised Sentence (2) - Air admittance valves shall be located

- a. **not less than 100 mm** above the **fixture drain being vented**, flood level rim of the fixture it serves.
- b. within the maximum developed length permitted for the vent, and
- c. not less than 150 mm above insulation materials. d. Installed in a location not subject to back pressure

7.6.3.4. - Revised Sentence (5) In residential buildings containing more than one dwelling unit one or two dwelling units, the water system may be sized in accordance with table 7.6.3.4., provided, the minimum water pressure at the entry to the building is 200 kPa, the total maximum length of the water system is 90 m, and the hydraulic loads are not less than 100% of the total hydraulic load

Water Pipe Size	Water Velocity (m/s)						
	2.	4	1.5	3.0			
		Hydraulic Load (Fixture U	Jnits)				
	More than One dwelling	One dwelling unit					
1/2"	Up to 7	Up to 7	4	8			
3/4"	7 to 16	7 to 26	9	21			
1"	16 to 31	26 to 31	18	43			
1%"	31 to 57	31 to 57	30	83			

Division B Part 7 – Non-Potable Water

7.7.1.1. General -

- Revised Sentence (1) Non-potable water systems shall be designed, fabricated and installed in accordance with this Subsection and good engineering practice.
- Revised Sentence (2) Except as permitted provided in Sentence (2) and (3) and Subsection 7.7.2., non-potable water systems shall only be used to supply water closets, urinals, trap seal primers, and directly connected underground irrigation systems that only dispense water below the surface of the ground. shall not be connected to a potable water system.
- New Sentence (3) Non-potable water systems shall not be used to supply fixtures in healthcare facilities.
- **New Sentence (4) -** Where a non-potable water system is supplied by a potable water system, the potable water system shall be protected in accordance with Article 7.6.2.1. (Protection from contamination CSA B64.10)
- New Sentence (5) Where the static pressure at any fixture in a non-potable water system may exceed 550 kPa, a pressure-reducing valve shall be installed to limit the maximum static pressure at the fixture to 550 kPa.

7.7.2.1 General - New requirements for rainwater harvesting systems and storm and grey water reuse (7.7.2)

- New Sentence (1) For the purposes of this Subsection, rainwater shall mean storm water discharged from an above-ground roof surface.
- New Sentence (2) For the purposes of this Subsection, a non-potable rainwater harvesting system shall mean a storage tank, a pump, pipes, fittings and other plumbing appurtenances used to collect and distribute rainwater, but shall not include a rain barrel not connected to a plumbing system.

Division B Part 7 – Non-Potable Water Systems

7.7.2.2 Permitted Applications – limits the supply of harvested rainwater applications

New Sentence (1) - Non-potable rainwater harvesting systems are only permitted to supply

- a. water closets and urinals,
- b. clothes washers,
- c. floor-mounted service sinks and laundry trays,
- d. trap primers,
- e. irrigation systems,
- f. hydronic systems,
- g. make-up water systems for heat rejection systems, or
- h. any other application where the harvested rainwater is not expected to be ingested or inhaled.

7.7.2.3 Roof Design - New Article introduces requirements for design of roofs

- New Sentence (1) Roof surfaces that supply rainwater to a non-potable rainwater harvesting system shall be inaccessible to vehicular and pedestrian traffic.
- New Sentence (2) Roofing components and conveyance systems in contact with rainwater that is supplied to a non-potable rainwater harvesting system shall be constructed of materials that will not introduce substances into the rainwater that could adversely affect its intended end use

7.7.2.4 Non-Potable Rainwater Harvesting System Design – New Article introduces requirements for design of system

- New Sentence (1) Non-potable rainwater harvesting systems and their connections shall be designed, fabricated and installed in accordance with this Subsection and good engineering practice.
- New Sentence (2) Non-potable rainwater harvesting systems shall not collect water discharged from an evaporative heat rejection system.
- New Sentence (3) Non-potable rainwater harvesting systems shall be provided with a means to
 treat the harvested rainwater in such a manner that the quality of the delivered non-potable water
 conforms to appropriate provincial or territorial requirements or, in the absence of such
 requirements, the systems shall conform to Sentence (4).
- New Sentence (4) Except as provided in Sentence (3), non-potable rainwater harvesting systems shall be provided with
 - a. water treatment system consisting of
 - i. a debris screen with a mesh size of not more than 6 mm ahead of the storage tank inlet,
 - ii. a first-flush diversion system with a capacity of not less than 0.3 L/m2 of roof area ahead of the storage tank inlet,
 - iii. a calming inlet or settling chamber ahead of the storage tank inlet,
 - iv. a device to prevent the entrainment of sediment into the pump, and
 - v. where the harvested rainwater is used for an indoor application, a filter with a mesh size of not more than 50 µm ahead of the storage tank inlet, or
 - b. a means to treat the harvested rainwater in such a manner that the delivered non-potable water contains not more than the maximum acceptable levels of contaminants stated in CSA B805 / ICC 805, "Rainwater harvesting systems."

7.7.2.4 Non-Potable Rainwater Harvesting System Design

- New Sentence (5) Where the static pressure at any fixture in a non-potable rainwater harvesting system may exceed 550 kPa, a pressure reducing valve shall be installed to limit the maximum static pressure at the fixture to 550 kPa.
- New Sentence (6) Storage tanks in non-potable rainwater harvesting systems shall be designed and installed in accordance with
 - a. CAN/CSA-B126.0, "General requirements and methods of testing for water cisterns," and
 - b. CAN/CSA-B126.1, "Installation of water cisterns."

- New Sentence (7) Storage tanks in non-potable rainwater harvesting systems shall be equipped
 with an overflow that directs excess rainwater to
 - a. a public storm sewer,
 - b. a public combined sewer,
 - c. a storm water management system, or
 - d. a designated storm water disposal location.
- New Sentence (8) Where the storage tank outlet is located below the level of the adjoining street, the storage tank overflow required by Sentence (7) shall
 - a. with an indirect connection that is not located within the building, or
 - b. be equipped with a backwater valve.
- New Sentence (9) Make-up water connections to non-potable rainwater harvesting systems shall
 - a. be equipped with a reduced pressure principle backflow preventer, or
 - b. have an air gap.