

3.7 and Gender-Inclusive Washroom Guide National Building Code-2019 Alberta Edition



This guide is intended to provide information regarding the provision of the minimum required number of water closets in a building, space or facility in accordance with National Building Code-2019 Alberta Edition (NBC(AE)).

Guide users are responsible for assessing and determining whether the information is appropriate for the particular circumstances. City of Edmonton, and its agents, employees and contractors do not make any warranties or guarantees as to the completeness or accuracy of the contained information, and accepts no liability whatsoever for any defect, deficiency, error, or omission in any statement or information contained in, or in any way related to, the use of the information contained in this guide which is not intended to provide legal or other professional advice. If legal or other professional expertise is required with respect to a specific issue or circumstance, seek services of a competent professional. Refer to [NBC-2019AE, available at no charge from the National Research Council](#), for exact wording and final determination of compliance. Any questions, errors or omissions may be brought to our attention by email to: BuildingSafetyCodes@edmonton.ca RE: 3.7 and Gender-Inclusive Washrooms Guide feedback.

Table of Contents

Gender-Inclusive Washroom Facilities	1
Accessible Washroom Facilities	2
Interpretation	2
Water Closet Count Table	3
Code References - 3.7.2.2. Water Closets	5

Gender-Inclusive Washroom Facilities

Building and business owners recognizing the diversity of gender identity and expression of their employees and clients may desire to construct a gender-inclusive washroom facility consisting of a series of rooms each containing a single water closet for use by any person. Conventional gender-designated facilities sometimes lack privacy and may discourage comfortable and safe use for gender-diverse communities, persons with disabilities, and children and other people who may require assistance. Distribution of water closets by sex is recognized to not always correlate availability and demand. Gender-inclusive facilities promote increased privacy, choice, efficiency and flexibility in meeting user needs. [See this provincial Guideline](#) for further discussion of gender-inclusivity in facility design.

The total number of WCs provided must be sufficient for occupancy type and occupant load, based on fixture counts listed in NBC(AE):B:3.7.2.2.: for females for $\frac{1}{2}$ of the occupant load plus for males for $\frac{1}{2}$ of the occupant load, except where otherwise provided for in Sentence 3.7.2.2.(1). Count **all** occupants when determining water closet requirements; e.g., staff facilities are sometimes isolated from patrons' facilities, in which case the intended user-count is better separated into two groups.

Facilities must either conform to all prescriptive regulatory requirements, or their design, construction and operation must comply with a formally-accepted variance: an [alternative solution](#) based on code intent as described in functional and objective statements in NBC(AE).

Accessible Washroom Facilities

Accessibility requirements are located primarily in Section 3.8 of Division B of NBC(AE), and additional information is in the [3.8 Accessibility Guide](#). Among the many provisions of Section 3.8, the following are notable as applicable to this guide.

3.8.2.1. indicates that accessibility requirements apply to all buildings, except as listed in this Article. While non-wheelchair-accessible washrooms in an upper storey or basement not required to be wheelchair accessible are acceptable, all other aspects of accessibility (e.g., door hardware, etc.) must be provided.

3.8.2.3. calls for a barrier-free path of travel throughout all normally occupied floor areas, except where a barrier-free path of travel for persons using wheelchairs is not required as listed in this Article.

3.8.2.8. details plumbing facility requirements, including but not limited to Sentences

(1), (2) Washrooms in a barrier-free path of travel must be barrier-free per 3.8.3. except where within

- a suite < 500 m2 in area of any occupancy, and barrier-free washrooms on the **same floor area within 45 m** are available for use during normal business hours and without going outside to access another part of the building; or
- a suite of residential or care occupancy that is not Government of Alberta-funded per 3.8.1.1.(3).

(3) At least one barrier-free washroom is required in the entrance storey, except

- in a residential building; or
- where a barrier-free path signed per 3.8.2.10.(2) is provided to barrier-free washroom(s) elsewhere in the building.

(4) Universal washrooms per 3.8.3.12. may be built instead of altering existing public washrooms in an existing building.

(5) At least one barrier-free stall constructed per 3.8.3.11. must be provided per 10 WCs or portion thereof, where a required barrier-free washroom contains more than one WC. Note

- typical open-top/open-bottom stall construction is permissible if within gender-designated washroom facilities;
- where the washroom facility is gender-inclusive, the **WCs must be in enclosing rooms per 3.7.2.2.(17)**, each being
 - a lit, sprinklered (if applicable), ventilated room with lockable floor-to-ceiling walls and full-height door,
 - adjacent/in visual proximity to one or more universal washrooms, and
 - adjacent to lavatories where a lavatory is not contained within the room itself.

Interpretation

Where a barrier-free path of travel **is proposed** in a new building or addition, washrooms must be barrier-free per 3.8.2.8. and minimum WC count is

- if gendered washrooms, based on values in columns **4** and **5** of [Water Closet Count Table](#), below, or
- if gender-inclusive washrooms, based on value in column **7** or **8** of [Water Closet Count Table](#), below.

Where a barrier-free path of travel **exists** in an existing building being altered, with

- no change of occupancy or use or intensity of use proposed,
- existing non-accessible washrooms to be retained while adding required barrier-free facilities, and
- adequate WCs for the proposed occupant load per columns **4** and **5** of [Water Closet Count Table](#) exist,

then an additional universal washroom for every 10 existing WCs or portion thereof is acceptable.

Where a barrier-free path of travel **does not exist and is not required**, minimum WC count is

- if gendered washrooms, based on values in columns **4** and **5** of [Water Closet Count Table](#), below, and
- if gender-inclusive washrooms, based on the value in column **6** of [Water Closet Count Table](#), below.

In gender-inclusive facilities, urinals within fixture rooms may be additional to the minimum WC count requirement, or be substituted for some of the WCs per 3.7.2.2.(5): for 2/3 of WCs required for males, except that if only 2 WCs are required only 1 urinal may be substituted for 1 WC, exemplified in column **8**.



Signage indicating the service provided within each fixture room must be provided, with focus on the service--fixture(s) provided--not on gender. Provide unambiguous signage indicating 'WC' OR 'urinal' OR 'WC + urinal' in appropriate graphical or textual form.

See CSA B651-18 for visual information signs (4.5.2, 4.5.3 and 4.5.4) and tactile/braille characters (4.5.6.2 and 4.5.6.3).

An owner/operator may determine that a site-specific review or hazard assessment may be advisable for certain locations. Where determined that fixture room monitoring is required, door latches as described in 3.8.3.12.(1)(b)(i) and distress alarms may be considered. The fixture partitions in gender-inclusive facilities shall fully separate fixtures one from another to preclude physical contact and unwanted visual surveillance. Full-height doors may be modified through an alternative solution process that is to demonstrate approximately equal or better safety and performance than the prescriptive solution, accepted by the permit office as a specific variance.

Water Closet Count Table

The following table represents the interpretation for acceptable minimum numbers of water closets required to meet the intent of Article 3.7.2.2. and Section 3.8., including for existing facilities where construction is proposed.

1	2	3	4	5	6	7	8	Notes
Occupancy or Use	Persons served, each sex	Total # served	#WC req'd: females	#WC req'd: males	#WC req'd total	UW indicates Universal Washroom per 3.8.3.12. GIW indicates Gender-Inclusive single user Washroom GIU indicates Gender-Inclusive Urinal per 3.7.2.2.(5).		
A See 3.7.2.2.(6) General assembly except as listed below	≤10 occupants: single WC acceptable per 3.7.2.2.(4)					1UW		
	1-25	50	1	1	2	1UW+1GIW		
	26-50	100	2	1	3	1UW+2GIW		
	51-75	150	3	2	5	1UW+4GIW	1UW+3GIW+1GIU	
	76-100	200	4	2	6	1UW+5GIW	1UW+4GIW+1GIU	
	101-125	250	5	3	8	1UW+7GIW	1UW+5GIW+2GIU	
	126-150	300	6	3	9	1UW+8GIW	1UW+6GIW+2GIU	...1B-F per 1 to 10WC
	151-175	350	7	4	11	2UW+9GIW	2UW+7GIW+2GIU	2B-F per 11 to 20WC...
	176-200	400	8	4	12	2UW+10GIW	2UW+8GIW+2GIU	
	201-250	500	9	5	14	2UW+12GIW	2UW+9GIW+3GIU	
	251-300	600	10	5	15	2UW+13GIW	2UW+10GIW+3GIU	
	301-350	700	11	6	17	2UW+15GIW	2UW+11GIW+4GIU	
	351-400	800	12	6	18	2UW+16GIW	2UW+12GIW+4GIU	
	401-500	1000	13	7	20	2UW+18GIW	2UW+14GIW+4GIU	...2B-F per 11 to 20WC
	501-600	1200	14	7	21	3UW+18GIW	3UW+14GIW+4GIU	3B-F per 21 to 30WC...
	601-700	1400	15...	8	23	3UW+20GIW	3UW+15GIW+5GIU	
>400	...	13+1:100	7+1:200	See Sentence 3.7.2.2.(6)				
A2 See 3.7.2.2.(7) Childcare & Primary School@ 1:25F 1:30M	1-25	50	1	1	2	1UW+1GIW		
	26-30	60	2		3	1UW+2GIW		
	31-50	100		2	4	1UW+3GIW	1UW+2GIW+1GIU	
	51-60	120	3		5	1UW+4GIW	1UW+3GIW+1GIU	
	61-75	150		3	6	1UW+5GIW	1UW+3GIW+2GIU	
	76-90	180	4		7	1UW+6GIW	1UW+4GIW+2GIU	
	91-100	200		4	8	1UW+7GIW	1UW+5GIW+2GIU	
	101-120	240	5		9	1UW+8GIW	1UW+6GIW+2GIU	
	121-125	250		5	10	1UW+9GIW	1UW+6GIW+3GIU	...1B-F per 1 to 10WC
	126-150	300	6...		11	2UW+9GIW	2UW+6GIW+3GIU	2B-F per 11 to 20WC...
	>150	6+1:25	5+1:30	See Sentence 3.7.2.2.(7)			

Source: National Building Code-2019 Alberta Edition and NRC. Every project is unique. Commentary and clarification is for information only and may not apply to conditions or circumstances specific to a particular project. Refer to NBC-2019AE for exact wording and final determination of compliance. 8 December 2022

1	2	3	4	5	6	7	8	Notes
Occupancy or Use	Persons served, each sex	Total # served	#WC req'd: females	#WC req'd: males	#WC req'd total	UW indicates Universal Washroom per 3.8.3.12. GIW indicates Gender-Inclusive single user Washroom GIU indicates Gender-Inclusive Urinal per 3.7.2.2.(5).		
A2 See 3.7.2.2.(8) Places of Worship & Funerals	1-150	300	1	1	2	1UW+1GIW		
	151-300	600	2	2	4	1UW+3GIW	1UW+2GIW+1GIU	
	301-450	900	3	3	6	1UW+5GIW	1UW+3GIW+2GIU	
B1, B2 See 3.7.2.2.(9) per specific needs of the detention or treatment facility B3 See 3.7.7.2.(10) non-suite of care facility (ward, etc) ≥1WC per 10 occupants C See 3.7.7.2.(10) non-dwelling-unit facility (dormitory, etc): ≥1WC per 10 occupants C See 3.7.7.2.(11) dwelling unit suite of residential--and B3 suite of care-- ≥1WC per unit								
D See 3.7.2.2.(12)	≤10 occupants: single WC acceptable per 3.7.2.2.(4)					1UW		
	1-25	50	1	1	2	1UW+1GIW		
	26-50	100	2	2	4	1UW+3GIW	1UW+2GIW+1GIU	
	51-100	200	3	3	6	1UW+5GIW	1UW+3GIW+2GIU	
	101-150	300	4	4	8	1UW+7GIW	1UW+5GIW+2GIU	
	151-200	400	5	5	10	1UW+9GIW	1UW+6GIW+3GIU	...1B-F per 1 to 10WC
	201-250	500	6	6	12	2UW+10GIW	1UW+7GIW+4GIU	2B-F per 11 to 20WC...
Add 1:50 additional females and 1:50 additional males; i.e., 2WC per additional 100 persons								
E See 3.7.2.2.(13)	Floor Area FA ≤ 500m² - may count STAFF ONLY per shift per Table 3.7.2.2.-B							
	FA ≤ 500m² - single WC acceptable per (4) if ≤10 STAFF					1UW		
	1-25	50 staff	1	1	2	1UW+1GIW		
	26-50	100 staff	2	2	4	1UW+3GIW	1UW+2GIW+1GIU	
	1-150	300	1	1	2	1UW+1GIW		
	151-300	600	2		3	1UW+2GIW		
	>300	...	3+1:150	1+1:300	See Sentence 3.7.2.2.(13)			
F See 3.7.2.2.(14)	≤10 occupants: single WC acceptable per 3.7.2.2.(4)					1UW		
	1-10	20	1	1	2	1UW+1GIW		
	11-25	50	2	2	4	1UW+3GIW	1UW+2GIW+1GIU	
	26-50	100	3	3	6	1UW+5GIW	1UW+3GIW+2GIU	
	51-75	150	4	4	8	1UW+7GIW	1UW+5GIW+2GIU	
	76-100	200	5	5	10	1UW+9GIW	1UW+6GIW+3GIU	...1B-F per 1 to 10WC
	101-130	260	6	6	12	2UW+10GIW	2UW+6GIW+4GIU	2B- per :11 to 20WC...
	131-160	320	7	7	14	2UW+12GIW	2UW+8GIW+4GIU	

Code References - 3.7.2.2. Water Closets

Each NBC(AE) provision of Article 3.7.2.2. Water Closets is copied into a blue box, followed by the City of Edmonton Safety Codes Permits and Inspections Section plain-language interpretation of the requirement based on objectives and functional statements of NBC(AE):B:Table 3.10.1.1. and applicable Appendix Notes.

1) Except as permitted by Sentence (4), water closets shall be provided for each sex assuming that the occupant load is equally divided between males and females, unless the proportion of each sex expected in the building can be determined with reasonable accuracy. (See Note A-3.7.2.2.(1).)

(1) Provide water closets (WCs) for **all persons**, assuming the occupant load is equally divided female/male unless the actual proportion can be predicted, except as allowed per Sentence (4) where 1 WC may serve up to 10 persons.
Note: A-3.7.2.2.(1) Water Closets. 3.7.2.2.(1) assumes that there will be a sufficient number of persons in the building to justify the provision of separate WC facilities for both males and females. In some circumstances overall low occupant loads would not require more than one water closet for males and one water closet for females and yet the building has more than one storey.

2) If a single universal washroom is provided in accordance with the requirements of Section 3.8., the total number of persons in the building used to determine the number of water closets to be provided, is permitted to be reduced by 10 before applying Sentence (6), (7), (8), (12), (13) or (14).

(2) If a single universal washroom is provided on an accessible path of travel, a total building occupant load used to determine #WC required **may be reduced** by 10 before applying these Sentences:

- (6), (7) or (8) all assembly occupancies,
- (12) office/personal service occupancies,
- (13) mercantile/retail occupancies >500m², or
- (14) industrial occupancies.

RE: use of term 'building|suite':

For a building divided into suites of A, D, E or F occupancies, where each suite is functionally accessed

- *directly from the exterior only or exterior exit facility only, the suite may be treated as a "building" for the purpose of application of this Sentence; and*
- *from an interior public corridor (with/without exterior access also), a suite **not served by washrooms available to the public** as required in Sentence (15) may be treated as a "building" for the purpose of application of this Sentence.*

3) Except as permitted by Sentence (2), if only one universal washroom is provided in accordance with Section 3.8., the water closet in this room shall not be taken into consideration in determining the number of water closets required by this Article, unless a single water closet is permitted in accordance with Sentence (4).

(3) IF only 1 universal washroom is provided in B and C occupancies per Sentences (9), (10) and (11), it's an extra that may **not** be considered in determining #WC required, **unless** a single WC meets occupant load needs of the building|suite as allowed per Sentence (4).

Sentence (2) does not apply to B and C occupancies

4) Both sexes are permitted to be served by a single water closet if the occupant load in an occupancy referred to in Sentence (6), (10), (12), (13), (14) or (16) is not more than 10.

(4) 1 WC may serve a building|suite with up to 10 occupants in occupancies referred to in these Sentences:

- (6) **except** primary (below Gr 7) schools, daycare/childcare premises, faith and funeral premises,
- (10) non-suite care and non-dwelling unit settings (congregate- or dormitory-type settings),
- (12) office/personal service occupancies,
- (16) mercantile/retail occupancies ≤500m² with staff ≤10,
- (13) mercantile/retail occupancies >500m²; occupant load ≤10, or
- (14) industrial occupancies.

5) Urinals are permitted to be substituted for two thirds of the number of water closets required by this Article for males, except that if only 2 water closets are required for males, one urinal is permitted to be substituted for one of the water closets.

(5) Urinals may replace ⅔ of req'd WC's for male person count, except may replace 1 if only 2 WC req'd/provided.

6) Except as permitted by Sentences (4), (7) and (8), the number of water closets required for assembly occupancies shall conform to Table 3.7.2.2.-A.

(6) A assembly occupancies #WC use Table 3.7.2.2.-A except as allowed per Sentence (4) where 1 WC may serve a building | suite with up to 10 occupants **except** as

- specified in Sentence (7) for primary (below Gr 7) school and daycare/childcare, and
- specified in Sentence (8) for faith and funeral premises.

Sentence (2) may be applied before making calculations per Table 3.7.2.2.-A.

7) The number of water closets required for primary schools and daycare centres shall be at least one for each 30 males and one for each 25 females.

(7) A2 primary (below Gr 7) school and daycare/childcare premises: #WC $\geq 1:25$ females and $\geq 1:30$ males results always in a minimum of 2 WC provided.
*Sentence (2) may be applied before making calculations; Sentence (4) does **not** apply.*
School-age children 5 years of age and older as of the last day of a calendar year shall be provided with WC facilities conforming to Sentence (17). Childcare facilities may contain WCs with modified partitions without partition doors.

8) The number of water closets required for places of worship and undertaking premises shall be at least one for each 150 persons of each sex

(8) A2 Faith and funeral premises: #WC $\geq 1:150$ women + #WC $\geq 1:150$ men $\rightarrow \geq 2:300$ persons: always minimum 2 WC.
*Sentence (2) may be applied before making calculations; Sentence (4) does **not** apply.*

9) The number of water closets required for a treatment or detention occupancy shall be determined on the basis of the special needs of the occupancy.

(9) B1, B2 detention or treatment facilities #WC is based on the requirements of the particular occupancy.
*Sentence (2) does **not** apply; Sentence (4) does **not** apply.*

10) Except as permitted by Sentences (4) and (7), the number of water closets required for a care or residential occupancy shall be at least one for each 10 persons of each sex.

(10) B3, C care or residential occupancies #WC @ ≥ 1 WC:10 persons each sex, except as allowed per

- Sentence (4) where 1 WC may serve a building | suite with up to 10 occupants, and
- Sentence (7) which appears to be direction for daycare no longer classified as B occupancy.

*Sentence (2) does **not** apply; Note Sentence (11).*

11) At least one water closet shall be provided for each dwelling unit.

(11) C dwelling unit: #WC @ ≥ 1 /dwelling unit and--by extension-- ≥ 1 :**B3** self-contained suite of care.

12) Except as permitted by Sentence (4), the number of water closets required for a business and personal services occupancy shall conform to Table 3.7.2.2.-B.

(12) D office/personal service occupancies #WC use Table 3.7.2.2.-B except as allowed per

- Sentence (4) where 1 WC may serve a building | suite with up to 10 occupants.

Sentence (2) may be applied before making calculations per Table 3.7.2.2.-B

13) Except as permitted by Sentences (4) and (16), the number of water closets required for a mercantile occupancy shall be at least one for each 300 males and one for each 150 females.

(13) E mercantile occupancies #WC @ $\geq 1:300$ males and $\geq 1:150$ females, except as allowed per

- Sentence (4) where 1 WC may serve a retail building | suite with up to 10 occupants (staff + customers); and
- Sentence (16) where for mercantile floor area $\leq 500\text{m}^2$ may use Table 3.7.2.2.-B wherein #WC may be based on maximum **staff**/shift only (not building | suite occupants) except as allowed per Sentence (4) if ≤ 10 **staff**/shift.

Sentence (2) may be applied before making calculations per Table 3.7.2.2.-B

14) Except as permitted by Sentence (4), the number of water closets required for an industrial occupancy shall conform to Table 3.7.2.2.-C.

(14) F industrial occupancies #WC use Table 3.7.2.2.-C except as allowed per Sentence (4) where 1 WC may serve a building | suite with up to 10 occupants.
Sentence (2) may be applied before making calculations per Table 3.7.2.2.-C

15) In a building whose floor area is more than 600 m² and that includes one or more individual tenant spaces for a *business and personal services occupancy* or *mercantile occupancy*, water closets shall be located so that they are accessible to the public when the building is occupied.

(15) WCs must be accessible to the public during open hours in a building that includes D and/or E tenant space(s) in a floor area >600 m² (floor area on a storey excludes exits and vertical service shafts).

16) The number of water closets required in a suite of mercantile occupancy whose area is not more than 500 m² is permitted to be determined in accordance with Table 3.7.2.2.-B based solely on the total number of staff.

(16) E mercantile occupancy with floor area $\leq 500\text{m}^2$, use Table 3.7.2.2.-B based on **#staff/shift**, except as allowed per Sentence (4) where 1 WC may serve a building | suite with up to **10 staff** count.
Sentence (2) does **not** apply; Note Sentence (13) for WC calculation for retail premises exceeding 500sqm.

17) If a room contains

- a) not more than 1 water closet, the doorway to the room shall be provided with a full-height door that is capable of being locked from the inside, or
- b) no fewer than 2 water closets or at least 1 water closet and 1 urinal, the room shall be designed so that water closets and urinals are not visible from the entrance to the room.

(17) ALL occupancies: Where a room contains

1 WC **or** 1 WC+1 urinal, and is intended for a **single user**, the room must be

- with a doorway with full-height door lockable from the inside
- a universal washroom per 3.8.3.12, where required to be barrier-free;

or

≥ 2 WC **or** $\geq 1\text{WC} + \geq 1$ urinal, and is intended for **multiple users**, unwanted visual surveillance is to be limited through room design that ensures

- WCs and urinals are not visible from the room entrance, including in mirror reflection,
- where the room is gender-inclusive, enclosing rooms provided within it for each WC **or** urinal fixture are
 - with full-height walls and doorway with full-height door lockable from the inside,
 - lit, and
 - ventilated

Note that, to limit risk of pathogenic microorganism transfer, sufficient lavatories and accessories are to be

- contained within each room containing a water closet, or
- adjacent or visually proximate to each room

18) Except for facilities provided in accordance with Section 3.8., every stall containing a water closet shall be not less than 1 400 mm deep and 800 mm wide.

19) Water closet stalls shall be constructed of smooth, easily cleanable material.

20) In other than suites of residential occupancy, a room in which a water closet or urinal is installed shall be mechanically ventilated to the exterior of the building.