DENVER AMENDMENT PROPOSAL FORM
FOR CPD INTERNAL PROPOSALS TO THE 2016 DENVER BUILDING CODE AMENDMENTS AND THE 2018 INTERNATIONAL CODES

2018 CODE DEVELOPMENT CYCLE

1) Name: David Corman, P.E. Date: 6/25/2019

2) Proposals should be drafted in Word with the only formatting that is needed being **BOLDING**, **STRIKEOUT** AND **UNDERLINING**, Please do not provide additional formatting such as tabs, columns, etc.

Please use a separate form for each proposal submitted.

Is separate graphic file provided? ☐ Yes ☒ No

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**AMENDMENT PROPOSAL**

**Code Sections/Tables/Figures Proposed for Revision:**

The following Sections are proposed to be deleted without substitution:
DBC: 2902.2.2, 2902.2.2.2, 2902.4.2.1
IBC: 2902.2.1

The following Sections are proposed to be revised:
DBC: 2902.1, 2902.2.1, 2902.3.6 (renumbered to 2902.3.2), 2902.3.6 (renumbered from 2902.3.5), 2902.4, 2902.4.2, 2902.9 (renumbered to 2902.10)
IBC: 2902.1.1, 2902.1.2, 2902.1.3, 2902.2, 2902.4,

The following Sections are proposed to be renumbered without revision:
DBC: 2902.7 (renumbered to 2902.8), 2902.8 (renumbered to 2902.9)
IBC: 2902.5 (renumbered to 2902.6)

The Following Sections are proposed to be new:
IBC: 2902.1.2.1, 2902.1.2.2, 2902.3.6.1, 2902.3.6.2, 2902.3.6.3, 2902.5, 2902.5.1, 2902.5.2, 2902.5.3

**Proposal:**

IBC: Add new text as follows:

[P] Section 2901.1 Scope shall remove reference to the International Property Maintenance Code.

DBC: Delete without substitution:

Section 2902.1 Minimum number of fixtures is replaced in its entirety with the following:

2902.1 Minimum number of fixtures. Plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 2902.1. Type of occupancies not shown in Table 2902.1 shall be considered individually by the Code Official. The number of occupants shall be determined by the International Building Code, Table 1004.1.2. Occupancy classification shall be determined in
Exception:
The total occupant load shall not be required to be divided in half where approved statistical data indicate a distribution of the sexes of other than 50 percent of each sex.

2. Calculation of fixtures provided in toilet and bathing rooms identified as all-gender shall sum fractional numbers for each sex and then round up to the next whole number. Fixtures shall contribute equally to the number of male and female fixtures required.

IBC: Replace Section with the following:

[P] Section 2902.1.2 Single-user toilet facility and bathing room fixtures is replaced in its entirety with the following revised section and new subsections:

[P] 2902.1.2 Toilet and bathing room fixture designation. Toilet and bathing fixtures shall be located in single-user or multi-user toilet and bathing rooms and be identified for use by sex or gender in accordance with Section 2902.1.2.1 and Section 2902.1.2.2.

[P] 2902.1.2.1 Single-user toilet and bathing rooms. A single-user toilet and bathing room shall contain not more than one water closet, one bathtub, and one shower. Plumbing fixtures provided in single-user toilet and bathing rooms shall contribute toward the total number of required plumbing fixtures as calculated per Section 2902.1.1. Exception 2: Single-user toilet and bathing rooms, including family or assisted-use toilet and bathing rooms shall be identified for use by all genders.

Exception: In addition to a single water closet, one child-height water closet and one urinal shall be permitted to be located in a single-user toilet or bathing room. Toilet fixtures shall not be in separate compartments. Not more than one water closet, provided for each single-user toilet or bathing room shall contribute toward the total number of required plumbing fixtures.

[P] 2902.1.2.2 Multi-user toilet and bathing rooms. Multi-user toilet and bathing rooms with not less than two water closet compartments, one water closet compartment and one urinal, or two bathing fixtures shall be provided as separate male and female facilities. Plumbing fixtures provided in multi-user toilet and bathing rooms shall contribute toward the total number of required plumbing fixtures for the sex to which they are designated.

Exceptions: Multi-user toilet rooms complying with Section 2902.5 are permitted to be identified for use by all genders. Water closets and lavatories provided in multi-user toilet rooms identified for use by all genders shall contribute toward the total number of required plumbing fixtures as calculated per Section 2902.1.1. Exception 2. Urinals provided in multi-user toilet rooms identified for use by all genders shall contribute to not more than 33 percent in Group A and E occupancies and 25 percent for all other occupancies of the required water closets.

IBC: Revise as follows:

[P] Section 2902.1.3 Lavatory distribution is amended by adding the following after the last sentence:

The required lavatories shall be permitted to be located within water closet compartments provided not less than the larger of one-half of the required lavatories or two lavatories shall be located outside of the water closet compartments.

IBC: Delete and replace with the following:

[P] Section 2902.2 Separate facilities and its exception is replaced in its entirety with the following:

[P] 2902.2 Minimum number of toilet facilities and bathing rooms. Where plumbing fixtures are required, a minimum of two accessible toilet facilities and two accessible bathing rooms shall be provided. Section 1109.2 Exception 3 to accessible toilet facility and bathing rooms requirements shall not apply to the two accessible toilet facilities and bathing rooms required by this section.

Exception: The minimum number of two toilet facilities and two bathing rooms shall not be required for the following:

1. Dwelling units and sleeping units.
2. Structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or fewer shall have not less than one accessible toilet and bathing room.
3. Mercantile occupancies in which the maximum occupant load is 100 or fewer shall have not less than one accessible toilet and bathing room.
4. Business occupancies in which the maximum occupant load is 25 or fewer shall have not less than one accessible toilet and bathing room.

DBC: Delete and substitute as follows:

[P] Section 2902.2.1 Family or assisted-use or gender neutral toilet facilities serving as separate facilities is replaced in its entirety with the following:

Exception: The minimum number of two toilet facilities and two bathing rooms shall not be required for the following:

1. Dwelling units and sleeping units.
2. Structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or fewer shall have not less than one accessible toilet and bathing room.
3. Mercantile occupancies in which the maximum occupant load is 100 or fewer shall have not less than one accessible toilet and bathing room.
4. Business occupancies in which the maximum occupant load is 25 or fewer shall have not less than one accessible toilet and bathing room.

DBC: Delete and substitute as follows:
2902.2.1 Family or assisted-use or gender-neutral toilet facilities serving as separate facilities. Where a building or tenant space requires a separate toilet facility for each sex and each toilet facility is required to have only one water closet, two family or assisted-use, or gender-neutral toilet facilities are required to serve as the required separate facilities. Toilet facilities shall be provided with signage in accordance with Section 2902.1.2. Both toilet facilities shall be fully accessible in accordance with IBC Chapter 11 and ICC A117.1-2009.

Section 2902.2.1 Family or assisted-use or gender-neutral toilet facilities serving as separate facilities is deleted in its entirety.

Delete without substitution:

Section 2902.2.2 Gender-neutral toilet facilities and its subsections is added:

2902.2.2 Gender-neutral toilet facilities. The following provision may be applied in lieu of Section 2902.2 for the purpose of separate toilet facilities for each sex. In no case shall the total number of fixtures provided be less than that as calculated in accordance with Section 2902.1.1.

Delete without substitution:

2902.2.2.2 Separate facilities when more than two water closets are required. Where a building or tenant space requires separate toilet facilities for each sex and either toilet facility is required to have more than one water closet, separate gender neutral single-occupant toilet facilities shall be permitted to serve as the code required facilities when each toilet facility is provided with one water closet and one lavatory in a separate single-occupant room:

Lavatories shall be provided in each toilet room in accordance with the International Plumbing Code. Such facilities shall not be required to be identified for exclusive use by either sex as required by Section 2902.4, and shall provide signage in accordance with Section 2902.4.2. Not less than 50% of the provided toilet facilities shall be fully accessible in accordance with IBC Section 1109.

This section shall not be applied to multiple stalls within a single room and/or shared lavatories.

Exception:
For those occupancies in Table 2902.1 that require more water closets or more lavatories for females than for males (A-1, A-3, A-4, and A-5), those additional water closets and lavatories shall be located in facilities specifically designated female. At least one of the additional female water closets and lavatories shall be fully accessible in accordance with Chapter 11. Signage shall be provided in accordance with Section 2902.4, exclusive of the exception.

DBC: Revise and renumber as follows:

[EII] Sections 2902.3.62 “Prohibited toilet room location” shall be amended by adding the following to the last sentence:

Access to toilet rooms shall not be through food preparation areas, food storage areas, or ware washing or utensil storage areas, except for toilet room facilities rooms provided exclusively for the use of employees who primarily work in the food preparation area.

DBC/IBC: Delete and substitute (with renumbering) with the following:

Section 2902.3.5 Door locking is replaced in its entirety with the following:

2902.3.5 Door locking. Where a toilet room is provided for the use of multiple occupants, the egress door for the room shall not be lockable from the inside of the room. This section does not apply to family or assisted use toilet rooms.

Single occupant toilet rooms where there is only one water closet, even if that water closet is enclosed with a water closet compartment or if that single occupant toilet room includes a separate urinal, must have the egress door be lockable from the inside of the room. This single occupant toilet room must comply with IBC Section 2902.2.1 as amended.

Section 2902.3.6 Door locking is replaced in its entirety with the following section and its new subsections:

[P] 2902.3.6 Door locking. Door locking of toilet rooms, bathing rooms and toilet compartments shall comply with this section.

[P] 2902.3.6.1 Multi-user toilet and bathing rooms. The egress door for the room shall not be lockable from the inside of the room.

[P] 2902.3.6.2 Single-user toilet and bathing rooms. The egress door for the room shall be lockable from the inside of the room for privacy. The privacy lock shall be in accordance with Sections 1010.1.9.1 and 1010.1.9.2.

Exceptions:

1. Privacy locking shall not be required in sleeping units or dwelling units.
2. Where approved in Group I occupancies, toilet room privacy is not required where care recipients or detainees require observation for clinical or security reasons.
2902.3.6.3 All-gender multi-user toilet rooms toilet compartment doors. Toilet compartment doors in all-gender multi-user toilet rooms shall have a privacy lock that has an indicator which notifies occupants on the exterior side of the door when the door is secured from the inside of the compartment.

DBC/IBC: Revise as follows:

[P] Section 2902.4. Signage is amended by adding the following Exception:

Exception: Toilet facilities that have only one water closet shall not be identified for exclusive use by either sex and shall be deemed to meet the requirements of this section. Signage shall be provided in accordance with Section 2902.4.2. Lavatories shall be provided in each toilet room in accordance with the International Plumbing Code.

Section 2902.4.2 Gender-neutral signage and its subsections are added:

2902.4.2.1 Existing facilities. After April 30, 2018, all existing single-occupant toilet facilities (consisting of one water closet and one lavatory), and family or assisted-use toilet facilities, shall be provided with signage in accordance with Section 2902.4.2 above.

[P] Section 2902.4 Signage is amended and its new subsection added as follows:

[P] 2902.4 Signage. Required public facilities shall be provided with signs that designate the sex or gender as required by Section 2902.2.2. Signs shall be readily visible and located near the entrance to each toilet facility or bathing room. Signs for accessible toilet and bathing rooms facilities shall comply with Section 1111.

[P] 2902.4.2 Signage for urinal compartments in all-gender multi-user toilet rooms. Urinal compartments located in all-gender multi-user toilet rooms shall be signed as containing a urinal.

Exception: Compartments that have both a water closet and a urinal, where the urinal does not contribute towards the required number of fixtures, need not be signed.

IBC: Add the following:

[P] Section 2902.5 All-gender multi-user toilet rooms and its subsections are added:

[P] 2902.5 All-gender multi-user toilet rooms. Where all-gender multi-user toilet rooms are provided, they shall be in accordance with this Section.

[P] 2902.5.1 Minimum number of fixtures. All-gender multi-user toilet rooms shall contain not less than six toilet compartments and three lavatories.

Exception: Where a single-user toilet room is clustered at a single location with an all-gender multi-user toilet room, the all-gender multi-user toilet room shall be permitted to contain not less than three toilet compartments and two lavatories.

[P] 2902.5.2 Clearance. Toilet rooms shall be provided with a minimum clearance between all opposing toilet compartments, walls, lavatories and countertops of not less than 60 inches (1,524 mm).

[P] 2902.5.3 Toilet compartments. Water closets and urinals shall each be provided in individual compartments. Compartments shall be permitted to include walls, partitions and doors and shall begin at the floor and extend to the finished ceiling, have no sightlines when the door is in the closed position and have a lockable door in accordance with Section 2902.3.6.3.

Exceptions:

1. Compartment door undercut shall be permitted to be not more than 0.5 inches (13 mm).

2. Air transfer grills at the entrance side of a compartment shall be allowed where they are provided at a height not less than 80 inches (2,032 mm).

3. Partial-height toilet compartments are permitted where they begin at a height not more than 4.5 inches (114.3 mm) and extend to a height not less than 96 inches (2,438.4 mm) above the finished floor surface.

IBC: Revise as follows (renumber only):

[EIH] Section 2902.5g Drinking fountain location is revised.

IBC: Revise as follows (renumber only):
[P] Section 2902.67 Small occupancies location is revised.

DBC: Revise as follows (renumber only):

[EH] Section 2902.78 Toilet room accessories is added:

[EH] 2902.78 Toilet room accessories. A minimum of one hand-drying facility shall be provided in each toilet room where lavatories are provided.

DBC: Revise as follows (renumber only):

[EH] Section 2902.89 Location of service sinks is added:

[EH] 2902.89 Location of service sinks. Service sinks are required on each floor where toilet facilities are provided as defined below:

1. In food service facilities and occupancies,
2. In Group R occupancies that have food, drink, or ice for consumption or handling.

DBC: Revise as follows (with renumbering):

Section 2902.910 Restaurants/Drive-in facilities is added:

Restaurants/Drive-in facilities.

1. The number of occupants for a drive-in restaurant or drive-in theater shall be considered as equal to twice the number of parking stalls.
2. Employee toilet facilities are not to be included in the above restaurant requirements.

In addition to plumbing facilities otherwise required by Section 2902.1, public toilet facilities shall be provided to serve an occupant load equal to twice the number of parking stalls provided at drive-in restaurants and drive-in movie theaters.

Supporting Information:

Purpose: These proposed amendments are intended to bring alignment with the IBC revisions, include clarifying language derived from “ICC final changes to the group A 2021 I-Codes,” restructure the current CCD single-user toilet facility requirements (clarifying interpretation), and add language for permitted use of all-gender multi-used toilet facilities. These proposed amendments enhance CDUs all-inclusive toilet facility regulations by allowing for (not requiring) use of all-gender multi-user toilet facilities (with restrictions) representing an evolution of the 2016 City and County of Denver (CCD) amendments by opening the door for all-gender multi-user toilet facilities. In other words, the proposed amendments allow CCD to be on the forefront of toilet facility inclusiveness while all-gender becomes more mainstream (and the building code’s catch up which may not happen until 2024 or beyond).

Reasons: Since first amended on December 19, 2016, all single-occupant restrooms within the CCD required most notably gender-neutral signage. The overwhelming consensus at that time is well represented by Mayor Michael Hancock’s statement “Denver will take every step we can to remove barriers for our people while creating more convenience. This is who we are as a city and I’m very proud of that. This code change was a commonsensical action that we know will allow people to live their lives without anxiety about something as simple as bathroom access. This is also another way in which Denver demonstrates that we are a welcoming and inclusive place to call home for all our people.”

With the 2016 amendments, the CCD provided increased inclusiveness the LGBTQ community, caregivers of the elderly and disabled, parents of small children, and customers who should not have to wait in line when there is an empty single-stall restroom available. To further advance all-inclusiveness, this amendment proposal modifies the “gender-neutral” terminology to more current “all-gender” language which is preferred because it is explicitly inclusive of everyone whereas, “gender-neutral” can imply an absence of expressed gender.

Using phrases like “both sexes” and “either sex,” the IBC and the proposed changes to the 2021 International Build Code use language that falls short of all-inclusiveness for they infer a binary masculine/feminine gender model which does not represent transgender or gender non-conforming communities. As such, these proposed amendments take CCD past the 2021 IBC providing better all-inclusive language.

With regards to the increased privacy needs for all-gender multi-user toilet facilities, the 2021 IBC proposed incorporates increased privacy requirements for all-gender (expressed as “either sex” in the IBC language) multi-user toilet facilities. This amendment proposal incorporates and expands on the 2021 IBC proposed changes with specific requirements for minimum facility occupancy size, water closet compartments, urinal compartments, maximum number of urinals, and minimum occupant clearance space. These specific requirements
recognized that a more conservative and gradual approach would be welcomed by those who are opposed to making a whole sale transition from the binary gender model.

The current “gender-neutral” DBC code language and structure is somewhat disjointed and potentially leads to confusion when interpreting (amongst designers, plan reviewers, contractors and inspectors). Except for removing the requirement to provide additional female facilities where all-gender facilities are provided in occupancies requiring more female plumbing fixtures than for male (which is in alignment with the 2018 IBC), the main body of the DBC single-user toilet facility requirements have been maintained and reorganized in Section 2902.1.2.1 Single-user toilet and bathing rooms.

This proposal includes a slight reduction of required number of plumbing fixtures when combining required male/female required plumbing fixtures into all-gender facilities (see Exception 2 of Section 2902.1.1). This is similar the language offered in the ICC final changes Group A 2021 I-Codes which allows the required number of plumbing fixtures to be based on the required number for separate facilities or based on the aggregate of any combination of single-user and multi-user toilet facilities (language in the proposed amendment is intended to clarify this calculation, whereas the 2021 I-Codes is somewhat ambiguous).

This proposed amendment also offers some clarifications to CCD’s current DBC that are in addition to the all-gender toilet facility items:

• DBC Section 2902.3.2 (previously 2902.3.6) Prohibited toilet room location, was clarified by revising “Access to toilet rooms shall not be through food preparation areas, food storage areas, or ware washing or utensil storage areas, except for toilet room facilities provided exclusively for the use of employees who primarily work in the food preparation area.” This recognizes that toilet facilities shall not be accessed through food preparation areas for those employees that may periodically work in the food preparation area but may also work in other areas that have increased public exposure (such as wait staff, hosts, managers, etc.).

• DBC Section 2902.10 Drive-in facilities (previously 2902.09 Restaurants) was restructured for clarity but maintains the previous requirements.

**Substantiation:**

Ensuring people feel comfortable using all-gender multi-user toilet facilities is of paramount importance. Use of all-gender multi-user toilet facilities is gaining momentum, however, quantifying safety, comfort level and privacy is not well established. Adding to the complexity of implementing all-gender multi-user toilet facilities is that perception of safety, comfort, and privacy varies by the individual (and it is reasonable to assume that thresholds inside all-gender multi-user toilet rooms are lower than in separated male/female facilities). Although limiting multi-user toilet facilities to separated male/female may offer a more traditional and straight forward enforcement approach, it remains discriminatory and outdated. Difficulties and controversies aside, it is highly likely that all-gender multi-user toilet facilities eventually be nationally codified. Rather than waiting for completely refined metrics to be developed, communities like CCD that are proactive in their transition to an all-inclusive society would benefit by having reasonable mechanisms in place to ensure a successful transition.

The following specific requirements have been added to address safety, comfort level, and privacy concerns for occupants of all-gender multi-user toilet rooms:

Size restrictions: In general, the larger an all-gender multi-user toilet facility becomes, the safer its occupants feel due to the presence of multiple people and more space to physically maneuver in. It follows that by requiring a minimum occupant size and clearance space in all-gender multi-user toilet facilities it would help alleviate the potential for individuals to feel overwhelmingly unsafe and uncomfortable in smaller all-gender multi-user toilet facilities. To address this concern, the proposed DBC Section 2902.5.1 requires separated facilities for multi-user restrooms with 5 or less toilets. The proposed amendment allows exception for smaller (as small as three toilets) all-gender multi-user toilet facilities provided a single-user restroom is clustered in the same location with the multi-user facility. These requirements could be eased over time as the more design metrics become available, but for the time being this offers a practical safeguard.

Toilet compartments: The current water closet compartment requirements are designed for same sex toilet facilities and a not intended for accommodating individuals of varying genders in the same toilet facility. Section 2902.5.3 Toilet compartments has strict privacy requirements that requires the compartment wall or partition be full height, does not allow for any sight lines when the door is in the closed position, and requires that the door is lockable from the inside and has an indicator notifying someone on the outside of the toilet compartment when it is occupied. These requirements have been developed trying to accommodate a wide spectrum of privacy and comfort thresholds as well as offering some housekeeping and mechanical function practicality. There is an exception that allows for a space at the floor that does not exceed 4.5 inches. The 4.5 inches was established to be aligned with the partition wall industry that commonly uses values that are slightly more than 4 inches. Further support of the 4.5 inches is that it will not allow passage of an object the size of a small adult head. Also, included in the exception is the allowance to use tall partial-height toilet compartment wall, partitions, and doors that must be a minimum of 8’-0” tall of solid wall/partition.

Urinal separation: Urinal separation for a male designated multi-user facility is well established and it is common accepted practice to provide a bank of urinals with (modest) privacy partitions between each fixture. Adapting this approach to apply to all-gender multi-user toilet facilities is quite complex and if applied too liberally could lead to exceeding the privacy and comfort thresholds of individuals with lower thresholds. This proposal places limitations on the quantity of urinals provided in all-gender multi-user toilet rooms and requires that they be placed in individual signed compartments.
Bibliography:
ICC final changes to the group A 2021 I-Codes for IPC sections IPC P15-18( http://media.iccsafe.org/code-development/group-a/IPC.pdf )

Referenced Standards:
No additional proposed standards

Impact:
The amendment proposed will have no impact to existing single-user toilet facilities. It also has no mandated effect on all-gender multi-user toilet facilities because the proposed amendments for all-gender toilet facilities are optional and are provided for those entities that want to use them in their buildings or tenant spaces. In some cases, providing all-gender multi-user toilet facilities may slightly reduce the number of plumbing fixtures required offering a potential cost savings.

Note:
- The effect of the amendment proposal on the cost of construction; ☒ No Effect
- The effect of the amendment proposal on the cost of design; ☒ No Effect
- Is the amendment proposal more- or less-restrictive than the I-Codes; ☒ No Effect

Departmental Impact:
The amendment proposed will have no departmental impact to existing single-user toilet facilities. When utilized, the plan review effort will be slightly increased due to enforcement of additional requirements for all-gender multi-user toilet facilities. The change in level of effort for the inspection team is negligible for they already provide inspection for toilet facilities (it will just be with a different set of rules).

Note: The proponent shall discuss the impact of the proposed amendment and indicate one of the following for each point below regarding the amendment proposal:
- The effect of the amendment proposal on the cost of review; ☒ Increase
- The effect of the amendment proposal on the cost of enforcement/inspection; ☒ No Effect