IBC/IEBC Committee Hearing Agenda
July 8, 2019 2pm-5pm
City and County of Denver, Room 4i5

1. Roll Call and Introductions

2. Discussion and voting on Denver Building Code Administration provisions (DBCA)
   a. #470: Appendix S (Tabled from 6/23 hearing)

3. Discussion and voting on All Gender/Gender Neutral Restroom Proposals
   a. #181: DBC-IBC Section 2902 & (P111): IBC Sections 2902.1.4 and .7 (Proponents to combine into one proposal for the committee, direction given at 6/23 hearing)
   b. #182: DBC-IBC Section 2902
   c. (P110): IPC Section 403.1.1 and .2
   d. #319: IPC Section 403
   e. #320: IPC Section 403

4. Discussion and voting on 2 urgent proposals per staff
   a. P32: IBC Section 403.5.1
   b. P34: DBC-IBC Section 1005.3.1 and 1005.3.2

5. Discussion and voting on IBC/DBC-IBC Chapter 1
   a. #268: DBC-IBC Section 130.3

6. Discussion and voting on IBC/DBC-IBC Chapter 2 Definitions
   a. (P31)324: Balcony definition
   b. (P12)289: Dangerous definition deletion (#98 passed previously)

7. Discussion and voting on IBC/DBC-IBC Chapter 3
   a. #21: IBC Sections 302.1 and 310.6
   b. #99: DBC-IBC Sections 305 and 308.6.5 (Tabled from block vote 6/23)
   c. #100: IBC Section 306
   d. #40: IBC 308.5.5 (Also to be heard by IRC and IFC committees)
   e. (P91)398: IBC Section 310.3

Please note that any items that we do not get to in this hearing will be automatically transferred to the next scheduled hearing date and will be the first items on the agenda for that hearing.

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https://global.gotomeeting.com/install/799312877
Proposal #470 – Tabled to next hearing. 7-25
Proposal #P32 – Withdrawn by proponent.

Proposal # 492

Public Testimony in Support: Proponent- All Gender Restrooms- Proposal created as replacement, created to incorporate feedback and direction given at last hearing from committee. Paying attention to female perspective and privacy. This is a difficult one, but this proposal is the best option. Allows decrease of number of fixtures.

Public Testimony in Opposition: None

Questions from the Committee to Proponent:

1. Mentioned urinals? Would that go towards fixture count?
   a. Certain percentage can be included in separate compartments. Yes, it would go towards fixture count. Not more than 25% of the fixtures. Based on female opinion that urinals would be cleaner, allows things to move along more quickly.
   b. Include in water closet then urinal would not count towards fixture count, urinal in its own compartment then it does count toward 25% and would have to be signed.

2. Under 2902.2.1 Exception 2 Can you explain the calculation?
   a. Determine fractional number add and then round up, rather than rounding up first and then adding up.

3. Is this implying that you are establishing for each gender? Calculation per sex or either sex?
   a. Intent to provide male- female for calculations.

4. What about certain occupancies that have different male to female ratios?
   a. You could do that; you would round up once they are added together so 6.5 7.5 total would be 14 and that would be acceptable.

5. So, you could lose 1 total fixture when they are combined but no more than 1 fixture?
   a. Yes.

6. What about the case of 60% females, you would need more fixtures and it would be hard to determine ratio, doing this your right sizing because you can use either fixture? Why minimizing to 1 fixture?
   a. No published info regarding 1 per 75 male female ratios. Assumption is that numbers are accurate.
   b. Reductions that 21 block A allows are ambiguous, doesn’t take in to account the differences male vs female uses. Block A just has exceptions for separate facilities. More restrictive than these calculations. 150 people you need 2 because 1 per 75.

7. Where is provision to do calculation on urinals?
   a. Exception 2902.1.2.2

8. Percentage is relative to calculation for male?
   a. Intent is to allow when providing combined number, you merge all required water closets together and then 25% could be urinal.

9. Ratios are not balanced with male and female?
   a. In the Exception to sum the fraction of both and round up. Any fixture in all gender has to contribute equally to male and equally to female to make this even. Have to be equal.

Public request to hear P111 and #492

Committee Discussion:

Question to staff regarding whether if all that is provided is All Gender restroom, could we be in trouble from a legal standpoint, could this create a discrimination issue?

In limited legal knowledge no, there could not be a discrimination for only having All Gender.
Original Motion: A/S with Intent to Modify (ASM)

Modification:

Easier to clean and maintain the partitions, goes into more detail, problem is with the urinals, counter intuitive to say All Gender but there are parts of it that are not All Gender. Urinals are Gender Specific. This has been used in Europe for years, genders are not different there, we don’t need something different than what has clearly worked there for years. Would like to move to strike all parts of this that include urinals.

Modification #1 Strike last sentence and add exception P902.4.2
2902.5.3 delete and urinals in first sentence. “A urinal shall be permitted only within a water closet compartment; such urinal shall not contribute to the minimum fixture count.”

Support:
Could strike and it could be an exception to put urinals in a traditional water closet but would not count towards the fixture count. Strike section starting with Urinals.

Level of discomfort with sharing toilet with a man.
It is happening in Denver in every restaurant right now.

Design and privacy are important and balance, provides flexibility and forward thinking.

This is an option, not adding or changing requirements.

Opposition:
Think we should have water closet and urinal; any gender could use that compartment. It would be as an option. Maybe installing more fixtures, no more water usage. Address some of the sanitation concerns.

10 male and 10 females, you count the closet with urinal and toilet as one of each. Anyone can go to any of the restrooms. 15 compartments with both and 5 with just toilets.

Can’t have a urinal alone in a compartment. If the sign says All Gender, then you walk in and it’s a urinal it’s not All Gender.

No developers are going to put urinals and toilets in one compartment, not cost effective in the long run, don’t believe this will be used.

Don’t think we should go in and change based on Denver.

Modification Vote: 8-1 Passes
Currently Denver gets requests to do this, this gives the option for them to get there legally. In IPC hearing at national level, most voting members did not think this would pass and then everyone panicked and voted everything down, the other proposals that were voted down all addressed the privacy concerns. From 2021 need to do a version that adds privacy

Final Motion: As Modified (AM)
Final Vote: AM 8-0-1
Proposal # P111

Public Testimony in Support: Proponent – Asked to come up with single proposal, couldn’t get there, decided to leave this proposal as an option for the committee. More in harmony with what’s in the 2021 IBC and IPC. Proposal #492 is more aggressive. Changed multiuser to All Gender. Doesn’t allow urinals in All Gender bathrooms.

Public Testimony in Opposition: None

Questions from the Committee to Proponent:

1. P111 is less aggressive than #492? Most significant difference is that there are no urinals, where does that fall in aggressive?
   a. Proponent rephrase, content of these code sections this proposal has less strike throughs and changes than proposal before, that’s what was meant by aggressive. Less content change to current code.

2. 2902.1.2 You have amended language for fixture calculations, new language if you use All Gender and you may get stuck with the lowest number of fixtures?
   a. This came out of what was approved in 2021 I Codes hearings. It may be misplaced. You look at total number of fixtures required based on design occupant load, split up how you’d like can do some male female, some gender you have to have the total count required by the code.
   b. This section is not about how to calculate, it’s about how to consider the number of fixtures you’ve provided. Calculation section is separate from this section.

3. So, once you’ve determined the number of fixtures you can sign them 10 total toilets, can put male gender on 5 and female on 4, 1 all gender. Have I disproportioned fewer female fixtures?
   a. Separate sex and x number of toilets, I don’t think you can put x number of men’s water closets left over.

4. Does this language make it so that there is a loophole? Maybe more review and enforcement
   a. Signage meant to exclude 1 sex for use of the restroom, now they can be used by either sex.

5. Could this create a need to do above the minimum # of fixtures in order to keep balanced between male female?
   a. Potentially, but that would fall more on a review inspection perspective. That problem could exist with the current code.

6. When you go to this concept, are you saying you can go all gender across the board, or 4 all gender and then 4 men?
   a. One is simpler and doesn’t address, other says fixtures and all gender has to be equally distributed. Already in code that you can do a men’s room and then all gender, currently don’t allow that due to discrimination, should be enforced regardless of being in the code. Enforcement would be based on no discrimination.

7. Fixture calculations says total occupant load is not divided in half. How do you calculate fixtures if not clear that you maintain that segregation for assembly occupancies?
   a. Separate and add them together.

8. Urinals prohibited but is currently in IPC. Will there be a companion code proposal for the IPC to address this?
   a. Substitution for water closets, top of table. Thought this was addressed 2902.1 Exception 6. Doesn’t say you can’t have urinals but does say you have to have water closets and lavatory fixtures.

9. Even though this is less complex, doesn’t address some of the people not represented here today. Females surveyed were adamantly against all gender restrooms. Not sure how this
addresses their concerns, maybe we need more care and more language to address those areas of concerns.
  a. No response to question.
10. Talk about differences from compartment perspective regarding privacy?
  a. More privacy in this proposal, doesn’t allow 4.5-inch clear space at the bottom, put in to make it easier to clean, probably walls to ceiling they would require sprinkler head in each compartment. Did add about door height under .5 inch. Combine under cut with grill over top of door, could take care of ventilation and exhaust issue in each compartment. Higher level of privacy.
11. 492 you can urinals and they are in a room? P111 no urinals?
  a. Yes, that’s correct.

**Committee Discussion:**
Last sentence refers to singular stall, has to be gender neutral.

Concern seems to be that distribution of fixtures can be unbalanced male, female to create uneven female male facilities.

**Original Motion: Disapprove (D)**
**Final Motion: Disapproved (D)**
**Final Vote:** Disapproval Passes 8-1

**Additional staff or committee comments for the record:**

**Proposal # P181 Withdrawn**
**Proposal # P182 Withdrawn**

**Proposal # P34**
The IBC Section 1005.3 allows the egress capacity of the stairways in inches to be at the ratio of 0.2”/person and for the non-stairways at the ratio of 0.15”/person in sprinkler protected buildings where an emergency fire alarm voice communication is provided. The DBCA increases the ratios to 0.25” and 0.175” respectively.

**Public Testimony in Support:** Proponent – Code has gone back and forth on egress.
**Public Testimony in Opposition:** None
**Questions from the Committee to Proponent:** None

**Committee Discussion:**
2021 proposal to decrease the square footage so we will see even higher loads on these floor plates, so that means we need to maintain the capacity to get these people out of the building.

**Original Motion: As-Submitted (AS)**

**Support:**
Denver uses elevators for evacuation. 90% of evacuations happen in elevators. Provision is so confusing because of design .25 and .75 no support, just a number.

Problem from an existing building standpoint. Areas where we see problems from reviewer standpoint is the confusion going to new factor, all existing can put x number more people on that floor plate and now that’s safe.

This brings consistency to the code.
Opposition:
From life safety standpoint, in Denver based on personnel and number of companies responding. We designate 1 stairway for evacuation and one for equipment. Increased factors given fire fighters and union crews some level of comfort, NFPA 101 uses more conservative factors .3 and .2 for other components. Fire Department opposes this proposal. Current use of office space is driving occupant load far above exit capacity. Putting more people on floors with not enough exit capacity. All factors together have limited life safety over last 2 code cycles.

Are our procedures different from other jurisdictions?
Yes, we are limited in personnel as well as apparatuses. Some cities shut down one set of stairs. To put in perspective Denver has fewer firefighters today than we did in 1972 and think about our population and number of high rises.

Final Motion: As Submitted (AS)
Final Vote: AS 3-4-1 Fails Disapproval 4-3-1
Additional staff or committee comments for the record:

Proposal # 268
The change to exemption item#5 provides a notification to the reader that Public Works will require permits in certain instances when a building permit is not otherwise required. #16 is editorial change.
Public Testimony in Support: None
Public Testimony in Opposition: None
Questions from the Committee to Proponent: None
Original Motion: A/S with Intent to Modify (ASM)
Modification #1: Change wording to clarify that permit is from Public Works, this could be confused that they are looking for building permits. “Permits shall be required through the Department of Public Works for all retaining walls constructed in association with water detention retention ponds.”
Vote on Modification#1: 9-0 Passes
Modification #2: Add Public Works to list of those permits that may be required.
Vote on Modification#2: 9-0 Passes
Committee Discussion:
Support: Clarifies an unknown.
Opposition:
Final Motion: As Modified (AM)
Final Vote: AM 9-0
Additional staff or committee comments for the record:

Proposal # P31
Add definition for Projection and Balcony.
Public Testimony in Support: Proponent – Regarding projection. Building code projections and balconies, code doesn’t define projections and balconies, mixing and matching requirements. Unclear what to do with floor construction. This clarifies the confusion regarding projections and balconies.
Public Testimony in Opposition: None
Questions from the Committee to Proponent:
1. Says enclosed 2 sides is a balcony, this seems to say something that projects from face of building is a projection.
   a. Yes, balcony is recessed, cubby hole goes inside. Brings clarity to shallow balconies in
residential buildings.

2. Last thing in balconies says depth of balconies is 4 feet or less, but projections says balconies are projections?
   a. Projections are cantilever or wall hung elements. Balconies extending beyond exterior wall.
   b. Just limiting the depth to 4 feet.

3. Fire protection and fire rating?
   a. Sprinkler protection required, if you have type 4 construction and you have 4 feet deep balcony, balcony can be wood, and fire protected but not rated. Because it’s considered a projection at that dept. Beyond 4 feet it becomes floor.

4. Face of building would no longer be judging point for opening, what’s justification for that?
   a. Only the depth of it, under 2018 if building projects out you go back to the wall behind. This one is just limited to 4 feet.

5. What happens if you have a recess that is 5 feet but other side 2 feet.
   a. Is one side being 5 feet, it’s going to catch that, it becomes a floor and has to be rated beyond 4 feet.

6. Should recessed be called terrace?
   a. No, this is already permitted by base code.
   b. Proposal is simply to say don’t consider anything beyond 4 feet a balcony.

7. Scope would be to have reduced fire safety but greater openings?
   a. Could be depending on wall behind could be rated, allows floor to be rated and back of balcony to be the percentage opening. Building that comes down first level is recessed 25 ft, you have floor then you go up, backside is exterior wall not the drip edge of the building.

8. Maybe call these exterior decks instead of balconies
   a. Currently under IBC balcony doesn’t limit the depth, can have nonrated floor and considers rear wall of balcony exterior wall.

9. Could you change to recessed balconies or exterior balconies?
   a. 702.5.3 Combustible projections extending to within 5 feet then regulates the material, then brings balconies into projection.

10. If you took out definition for balconies, if you get rid of that, you would have the same thing? Don’t feel like the definition of balconies is necessary, does it change what you’re trying to do?
    a. No, it doesn’t.

11. Is what you’re worried about these deep balconies and talking about floor? Are you after balconies that recede no longer exempt from fire rating?
    a. Yes.

**Committee Discussion:**
As architectural engineer a balcony is a projection. From structural what you’re doing redefines balcony and common usage. Doesn’t change design but contrary to common usage.

Code says the same thing, just limiting the depth.

These were previously defined in the code.

Concern is the ability to stretch out and make your openings bigger.

Structurally it doesn’t change design, but this does give the flexibility whether it is occupied or not.

Think this may be better in Chapter 7 vs a definition in Chapter 2.
We removed all this provision from Denver amendments and went back to base code, this proposal would be bringing something back.

This needs more discussion it is a problem within plan review, there is great confusion on this subject.

**Original Motion: Disapprove (D)** – Because of the complexity of the definition that meets the provision. Based on block vote on exterior walls took out Denver amendments and went back to base code.

**Final Motion: Disapproved (D)**

**Final Vote:** D 4-4 Moderator Tie Breaker

**Moderator:** Table to allow Masoud time to work on this proposal move to 705.

**Additional staff or committee comments for the record:**

**Proposal # P12**

The primary purpose of this amendment proposal is to return the Denver Building Code’s definition of Dangerous to agreement with the definition of Dangerous that is included in both the IBC and the IEBC, and which is identical to the definition indicated above without condition number 3. Because condition number 3 was added by amendment to the 2016 DBC, making this change means that there is no longer the need for a Denver amendment to the definition of Dangerous.

**Public Testimony in Support:** Proponent – Denver amended definition of Dangerous in IBC and IEBC, already proposal put IBC definition back to what’s in the IBC consistent with Denver’s code. Needs to be done for IEBC as well.

**Public Testimony in Opposition:** None

**Questions from the Committee to Proponent:** None

**Committee Discussion:** None

**Original Motion: As-Submitted (AS)** Necessary for consistency from IBC and IEBC

**Final Motion:** As Submitted (AS); As Modified (AM); Disapproved (D)

**Final Vote:** 8-0 AS

**Additional staff or committee comments for the record:**