1. **Roll Call and Introductions**

2. **Discussion and voting on Previously Tabled Proposals**
   a. #127: DBC-IFC Section 403.4.8
   b. #272: DBC-IFC Section 403.4.8
   c. #273: DBC-IFC Section 403.4.8.3
   d. #131: DBC-IBC Section 405
   e. #277: IBC Section 405.8

3. **Discussion and voting on IBC/DBC-IBC Chapter 4**
   f. #133: DBC-IBC Section 419

4. **Discussion and voting on IBC/DBC-IBC Chapter 5**
   a. (P109): IBC Section 503.1.4.1
   b. #82: DBC-IBC Section 507.14
   c. #12: DBC-IBC Section 510.2

5. **Discussion and voting on IBC/DBC-IBC Chapter 10**
   a. #177: DBC/IBC Section 1004.1.2
   b. #178: DBC/IBC Section 1004.3
   c. (P84): IBC Table 1004.5
   d. #134 DBC/IBC Section 1005.3.1 & 1005.3.2
   e. #135 DBC/IBC Section 1009.1
   f. #136 DBC/IBC Section 1009.6.4
   g. #142 DBC/IBC Section 1020.1

6. **Discussion and voting on IBC/DBC-IBC Chapter 11**
   a. (P44): IBC Section 1105.1

7. **Discussion and voting on IBC/DBC-IBC Chapter 15**
   a. (P108): IBC/DBC-IBC Section 1503.2.2
   b. (P112): IBC/DBC-IBC Section 1503.2.2
   c. (P105): IBC Section 1507.11-13.1

8. **Discussion and voting on IBC/DBC-IBC Chapter 16**
   a. (P166): DBC-IBC Section 1607.7.2 & 1607.15
   b. (P18): DBC-IBC Section 1609 & 1609.1.1.2
   c. (P17): IBC Section 1609 & 1609.1.1
   d. (P19): DBC-IBC Section 1609.3
   e. (P10): DBC-IBC Section 1613.2.2

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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Proposal # 127 (Previously Tabled)
The purpose of this proposal is to make the amendment text more efficient. The content of the amendment remains the same as before. DFD requires that all power loads listed in Section 403.4.8 be provided with emergency power. DFD also adds 'smoke control' to the list of power loads.

Public Testimony in Support: None
Public Testimony in Opposition: None

Original Motion: As-Submitted (AS)

Reason: This amendment is editorial, does some clean up within building code amendments that are already in fire code, maintains criteria for Denver to provide stand by power on emergency systems. Item #7 is editorial improvement, so it shows up correctly in the list.

Questions from the Committee to Proponent: None

Committee Discussion:
Every high-rise elevator has to have emergency power right now. (#4) Won’t this create a conflict? It shouldn’t create a conflict because it’s already in the code. Current code allows the power to be transferrable. This says just stand-by power doesn’t address transferrable power.
This language is not included in the fire code. It’s not listed out; it sends you back to IBC 403.

Final Motion: As Submitted
Final Vote: AS 0-9 Motion Fails

New Motion: Disapproval

Reason: Conflicts between proposal and the intended clarification within Denver amendments. With support of Denver fire, it is better to maintain current amendments.

Final Vote: D 9-0

Additional staff or committee comments for the record:
May need to look at correlation here within Fire and IBC since this was not passed. Specifically, Chapter 12.

Proposal # 131 (Previously Tabled)
The purpose of this revision is a correction. The revision includes the deletion of an inappropriate amendment and replaces it with what may have been the intent of that amendment and as necessary to coordinate DBC Section 403.4.8 with this Section. The current DBC amendment unintentionally removes a high-rise from additional safeguards required for underground portions of buildings by Section 405. The intent of the amendment was to ensure that additional requirements for high-rise buildings are not superseded by any lesser requirements for underground buildings. However, all requirements for underground buildings exceed those of a high-rise except for those of Section 405.8. IBC Section 405.8 requires the same standby and emergency power in underground buildings as that required for high-rise buildings. The proposed amendment is to replace the base-code power requirements for high-rise buildings with those amended by DBCA in Section 403.4.8. Coordination of this item was previously missed because DBC Section 403.4.8 was amended to match the Fire Code and the Fire Code does not have a section on underground buildings. The need to amend Section 405.8 to coordinate with the amended IFC was confirmed by Tony Caro.

Public Testimony in Support: None
Public Testimony in Opposition: None

Questions from the Committee to Proponent: None

Original Motion: As-Submitted (AS)

Committee Discussion:
2016 DBCA inadvertently deleted a section of requirements for stand by and emergency power systems for unground buildings. This would bring those requirements back in to the code.
Fire code already requires emergency and stand by as interchangeable. Emergency power is already permissible under the IFC. Can use emergency for stand by but not stand by for emergency. This would bring stand by in to discussion, up until now it was strictly emergency. Concern that adding stand by here can create confusion since Denver does not allow stand by power. Might be better to just refer this to the high-rise section of the code to avoid confusion.

**Final Motion:** As Submitted

**Final Vote:** AS 0-9 Fails

**New Motion:** As Modified

**Modification:**
“An emergency power system complying with section 2702 shall be provided for power loads classified as stand by and specified in section 405.8.1”

**Vote on Modification:** Passes 9-0

**Final Vote:** As Modified 9-0 Passes

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

**Proposal # 133 (Requested to be moved down in the Agenda)**
Live/Work Units sections is revised only to make the section more efficient. This Section is intended to have the same effect as the previous amendment but with language better coordinated with the IBC. The one exception to this is that DBCA Section 419.6 Means of egress is deleted and replaced with the slightly more restrictive IBC text.

**Proposal # P109**
To address guard height at occupied roofs.

**Public Testimony in Support:** None

**Public Testimony in Opposition:** None

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

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

**Reason:** Good and necessary clarification. It avoids conflict with City of Denver Department of Public Health for minimum 60-inch pool barrier.

**Committee Discussion:**
From Structural stand point, guards have to be designed to a certain load, question on where you apply that load. This needs some clarification or direction as to where those guard loads to be applied.
Proposal is to coordinate height with the pool requirements from Public Health. Tried to stay out of the structural. This doesn’t say how to load them, just states the 60-inch barrier to coordinate.

**Final Motion:** As Submitted

**Final Vote:** AS 7-0-1

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

**Proposal # 82**
Section 507.14 allows existing buildings to maintain their current area so long as they were constructed legally under the prevailing building code and conforms to Category 1 or 2 of Table 507.14. The Table describes conditions under which reduced side yards are allowed. Apart from the 20’ open space, the provisions are redundant with the provisions of IBC 507.

**Public Testimony in Support:** Proponent- Attempt to fulfill mandate to remove unnecessary amendments. This is very specific for side yards on unlimited area buildings. If we have situation with existing unlimited area it needs personal attention through admin provisions or modifications. Table has flaws where it requires use of the code and the table which isn’t possible, table tries to over ride
code, footnote almost negates the whole table.

Public Testimony in Opposition: None

Original Motion: As-Submitted (AS)

Reason: Simply carried forward in code with limited use. Now that IEBC is established and used, we have a more fundamental foundation to apply model code language.

Committee Discussion:
Would this be treated on a case by case basis?
Yes. Would look at admin modification for reasonable expansion requirements.

Final Motion: AS Submitted

Final Vote: AS Passes 9-0

Additional staff or committee comments for the record:

Proposal # 12
The proposed amendment maintains Denver clarification of vertical offsets being limited within the height of a story.

Public Testimony in Support: Attempt to take amendment that Denver developed previously and incorporate language from 2018 model code regarding podium buildings. This brings forward Denver amendment with 2018 model code language in it.

Public Testimony in Opposition: Vertical offset for 3-hour fire resistance rating not addressed last code cycle. 2018 allows and tells how to construct. 2018 doesn’t put height limit on vertical step. Denver doesn’t need to be different than national code.

Rebuttal Support: In Block Vote we approved current language limiting the offset to less than a full story, if we disapprove this it will conflict with what we had already approved. May be a correlation issue.

Rebuttal in Opposition: This was pulled from block vote. Confusion says it’s modifying DBC-IBC, but it is modifying words from 2018 IBC. Language in base code does not define fire resistance of not less than 3 hours, doesn’t specify what kind of separation it is.

Original Motion: A/S with Intent to Modify (ASM)

Modification: Strike underlined sentence so that it does not limit the offset. Add (2nd sentence item 1) “The vertical offset shall be constructed as a fire barrier....” Replace under lined with “Shall be constructed as a fire barrier”

Vote on Modification: 8-0-1 Passes

Committee Discussion:
It is the committee’s intent to move forward with modified language, if this exists in something we already approved, this would replace it entirely. It is not the intent to restrict vertical offset.

Final Motion: As Modified

Final Vote: AS 8-0-1

Additional staff or committee comments for the record:

Proposal # 177
The amendment is unnecessary as there are no unique characteristics or hazards associated with the use, occupancy, or patrons of bars, taverns, or similar uses in Denver, Colorado when compared to any other major city in the United States. The 2018 IBC adequately addresses the requirement for occupant load in concentrated assembly areas by specifying an occupant load factor of 5 net for standing space.

Public Testimony in Support: None

Public Testimony in Opposition: The idea behind this being in the code was to address what we are seeing in the field: lack of uniform distribution of occupant load, you get concentrations in certain areas, you under estimate occupant load.
Original Motion: As-Submitted (AS)

Reason: Brought in to DBC in 2015 the justification was some evidence of density of occupants surrounding bar and bar top and as such was used as support to provide this in 2016 codes. Based on national code and other large jurisdictions codes there are no other jurisdictions that restrict or define occupants at bars as strictly as Denver does. Not sure building code amendment is the vehicle to combat overcrowding.

Committee Discussion:
What enforcement do these jurisdictions utilize?

Not sure. Don’t believe the enforcement was covered in the studies.

Don’t think amendment as it currently exists is correlated with enforcement.

Seems punitive to all bars that may be having desire for the maybe 2-3% that may be overcrowded.

Not sure code should be punitive. They should be able to design under what is normally acceptable, adding costs to these buildings may not be fair.

DFD would say safety outweighs the cost.

When the city had funding for enforcement it was better, now DFD is on a reactionary basis. Seems to be happening more and more frequently now that it is known that we are not able to be proactive and inspecting for overcrowding. This amendment allows DFD to better prepare for funding reduction.

Feel the amendment is not able to help with enforcement.

Reduce by stating a larger occupant load, helps us to plan and design for the overcrowding issues.

Existing bars would already be overcrowded, this would just address new bars.

Yes. Occupant loads are often updated with new certificates around NFL season start based on need to provide to large TV companies the capacity for pricing.

Right now, this overcrowding is only addressed if a complaint is called in. DFD dispatches a Chief and they determine if they need to evacuate and count to an acceptable occupant load based on the buildings placard.

Think this could be more a DFD policy to be drafted more specifically to meet their needs.

Final Motion: As Submitted

Final Vote: AS 6-3 Passes

Additional staff or committee comments for the record:

Proposal # P84

The 2018 IBC revises the occupant load factor for business area to be 150 (gross) instead of 100 (gross), resulting in an occupant load that is reduced by a third compared to the 2015 IBC. The purpose of this proposal is to add a net area occupant load factor to better reflect actual occupant load from spaces or individual tenant suites.

Public Testimony in Support: Proponent – 2018 made a change to occupant load factor in business areas. Reduced occupant load by 1/3. Basis was occupant load studies in office buildings gross area and number of people divided, studies never got more than 150. Calculation doesn’t account for people being concentrated in one area. This proposal allows 150 gross or 100 net whichever gives you the greatest occupant load.

Issue is short sided for long term. Assembly factors didn’t change. Systems were designed on lower occupant loads harder to permit other occupancies in that building, locks them in to low density occupant load office space.

Public Testimony in Opposition: None

Questions from the Committee to Proponent:

1. With this if plans come in and numbers are higher, does this stop us from saying we are going to review based on the furniture?

   a. No, the point is we won’t have to go that route as often. Almost every office space
will need to use this based on the seat count.

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

**Reason:** Stand on proponent’s reason statement.

**Committee Discussion:**
This was submitted in 2015 and 2018. Not much gross relative to core & shell, only thing gross is stairs, hoist way, and shaft. This really means 100 gross not 100 net. This goes against IBC and NFPA 101.

Think this is appropriate for Denver since we are seeing higher occupancy loads. All major cities are experiencing this. Looking at real numbers we are hitting occupancy loads that are much higher.

Studies done 1995 concerned that studies are based on open floor plans and the new methodology is not accounted for. 100 net may be more appropriate until we can handle new office concept.

Very confusing to calculate gross versus net, with throwing in 150 and 50, just makes it a little more confusing and forces to calculate for both gross and net which is already difficult. Suggest dropping 150 to 100.

**Final Motion:** As Submitted

**Final Vote:** AS 6-3 Passes

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

**Proposal # 178**
The 2018 IBC Section 1004.9 already requires the posting of assembly occupant loads where there is an occupant load of 50 or more. The current Denver amendment imposes a more restrictive requirement than the 2018 IBC, requiring all spaces of assembly function with 40 or more occupants to comply. There are no characteristics unique to the City and County of Denver that justify a different compliance threshold than that required by the 2018 IBC.

**Public Testimony in Support:** Delete this as it is not specific to Denver. Causes delays by requiring this signage.

**Public Testimony in Opposition:** There are times when there are gaps and errors in the codes. Technology changes that have to be addressed per amendments. This is more of a fire issue, brought to us mostly for micro-breweries in the past. They would get permitted for door that swung wrong way and no exit sign. Inspection teams would go out and find 75 people in a space posted occupant load for 49. Managers don’t know that exit is not sufficient. By putting in this requirement it decreases the pressure on the fire department. Manager would have to make conscious decision to go above the posted occupant load.

**Rebuttal in Support:** This is for all assembly functions not just night clubs.

This room we are in would require a sign, because it’s all assembly functions.

**Rebuttal in Opposition:** Assembly Function is what we are doing here now, but it’s not necessarily assembly occupancy. You can overcrowd a room easily. It should be posted for managers that if they are filling their tasting room with over 42 occupants, it is posted that they are violating the code.

**Questions from the Committee to Proponent:**

1. **Assembly Uses and a B Use would be applicable to this?**
   a. Justification in nightclubs, a lot of assembly functions that are B occupancies. This is applying to way more than just night clubs right now.

2. **Would you be opposed to directing this to uses of concern?**
   a. No. Not opposed to that.

3. **Struggle to find anywhere where this a threshold of 40 instead of the typical 50, why the 40?**
   a. The occupant counts we are seeing are generally between 40-50. 40 based on what
lounge occupant loads were coming in at.

4. Is this requiring signage for adult educational classrooms over 40?
   a. We were seeing more issues in tasting rooms, lounges. No opposition if the focus was
      narrowed to the uses of concern.

5. To alleviate this problem, if tasting room wants to have 75, they could install a 2nd exit and
   signage?
   a. Yes, they could. Stay below 50 or change design.

**Original Motion: A/S with Intent to Modify (ASM)**

**Modification:** Bring back the stricken language and change to say for every room.

1004.9.1 After assembly function...

“Every room or space within a bar tavern or similar area that is an assembly function with an
occupant load of 40 or more.”

“Bars Taverns and Similar Areas” should be section title.

**Committee Discussion:**

Think we are amending code that is unnecessary.

From enforcement perspective we are putting things in that are irrelevant from code design
perspective. Nothing specific to Denver that makes 40 the number instead of 50 everywhere else.

**Vote on Modification: 5-4 Passes**

**Final Motion:** As Modified

**Final Vote:** AM 5-4 Passes

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

Proposal # 134

The current Denver amendment is more restrictive than the 2018 IBC, resulting in a greater egress width requirement. Denver has no unique characteristics that justify greater egress width per occupant than that required by the 2018 IBC.

**Public Testimony in Support:** Intent is to collaborate with DFD. Understanding was that because code has gone up and down this was proposed to maintain consistency. Additionally, proposal statement to get this in previously said this was necessary because voice alarm does not provide an added protection. This amendment is for voice alarm and sprinkler, so the justification did not make sense. We were tasked to find reason this is specific to Denver and it was tough to find justification as to why this is specific to Denver.

2006 IBC allowed .2 .15 2009 dropped it, 2012 brought it back but added voice alarm. Has been consistent since then. Based on occupant load we just voted 1 per 100 now if IBC allows 1 per 150 and allows this catches every assembly occupancy with voice communication. This is penalizing small buildings with voice communication and now occupant load higher, but not allowing reduced space.

**Public Testimony in Opposition:** No correlation between voice evacuation, sprinklers and egress width. If you have fire crews coming up and stairs are narrow it makes more difficult for fire crews. Denver fought this after 911 based on operational issues, need ability to move personnel up and down stairs for rescue. Previously council said these stairs allowed here are not wide enough.

During new core & shell where they look to maximize usage and floor plate it makes it, so they are designed to traditional capacity. Working in building department to reduce the occupant load in these spaces. Ultimately by having a better factor of width there is sufficient exits in case spaces are being utilized to the max. We are accommodating by lower they occupant loads this balances by saying lower occupant but every occupant does need a sufficient width for egress.

**Questions from the Committee to Proponent:**

1. So, this says trying to reduce occupant load, any provision that says you can reduce it, we just voted to keep 100 occupant load factor for offices?
   a. Administratively, only by admin mod and those are granted infrequently. Would be more interpretive.

2. For High Rise, 2 stairways assumption is both stairways used for egress, DFD uses elevators to
investigate, isn’t that the case that DFD uses elevators?
   a. Yes, initially but this is for all buildings, not just high rise.
3. Would there be an objection to modify this to only apply to high rises?
   a. Proponent - No, think voice alarm is frequent on high rises.
   b. DFD – Would oppose – Modern High Rise (especially super high rises) accommodate fire operations better. It’s the non-super high rise existing (Denver has 200+) and smaller buildings that the standard procedure calls for wider stair ways. Width is a necessity.

Original Motion: Disapprove (D)
Reason: Full support for Fire Team, they have to deal with emergency if they need this area then we should keep this for them to operate effectively.

Committee Discussion:
Don’t believe this is substantiated nationally. Understand concern from fire department but code standard should be utilized and not modified.

Support goal of city to clean up amendments and match model code where we can. There are substantial arguments based on Denver fire operations to support disapproval.

Final Motion: Disapproval
Final Vote: D 6-3 Passes
Additional staff or committee comments for the record:

Proposal # 135
This amendment was identical to the base building code with the exception of the reference to IBCA 403.5.7 and Exception 1 items a-d. Exception 1 of the base building code was removed from the 2018 IBC since accessible means of egress in existing buildings are addressed in Chapter 3 of 2018 IEBC. Items a-d provide clarity but do not need to be included in an amendment to change code. The reference to IBCA 403.5.7 is helpful but not necessary.

Public Testimony in Support: Proponent- Remove section due to it being address 305.6 of IEBC. Item 1 A-D may be the concern here and the reason why this was pulled from block vote, 305.3 of IBC addresses some of these 305.6 also addresses. One concern here is existing space that was permitted at a time when accessible means of egress were required then you chop up that space, then you have tenant in the middle of it, now that tenant isn’t required to have accessible means of egress. Proposing that issue covered in A-D is covered in 305.3 of IBC.
This is not currently in code, code moved anything about accessible means of egress to the IEBC. Taking out of IBC is just a coordination.

Public Testimony in Opposition: None

Original Motion: As-Submitted (AS)
Reason: Necessary to delete unnecessary language in Denver amendments. It exists in model existing building code.

Final Motion: As Submitted
Final Vote: 8-0 AS Passes
Additional staff or committee comments for the record:

Proposal # 136
1009.6.4 of the amendment corresponds with the 2018 base building code. 1009.6.4.1 introduces additional requirements for elevator lobby areas of refuge. Denver has no unique characteristics that require a different level of protection for elevator lobby areas of refuge. Additionally, both exceptions are covered elsewhere in the code. IBC 709.4.2 already addresses smoke-barrier walls enclosing areas of refuge or elevator lobbies, and specifically states “A smoke and draft control door
assembly as specified in 716.5.3.1 shall not be required at each elevator hoist way door opening....”

This amendment is not necessary.

**Public Testimony in Support:** Proponent – Removing this amendment, first portion is consistent with base building code. Amended 1009.6.4.1 hard to find where this was necessary, high rises are exempt, sprinklered building doesn’t require area of refuge. So, likelihood of building needing elevator to serve as accessible means of egress but not being sprinklered is low. 3006.2 and 3006.3 address Hoist way protection. This is unnecessary.

**Public Testimony in Opposition:** None

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

**Reason:** Based on previous conversation.

**Questions from the Committee to Proponent:**

1. Handicapped evacuation occurs through elevator you don’t want area of refuge in stair way for accessibility?
   a. Correct.

2. This is saying make elevator lobby area of refuge for accessibility.
   a. High Rises exempt. Scenario where this would apply, elevator with 2 doors, 1 of them opens in to an area of refuge and 1 opens in to another room. This section would require protection on that opposite door but doesn’t apply to high rises and those buildings elevator lobby area of refuge which isn’t required in sprinklered buildings.

3. There is another proposal to require refuge areas in High Rise.
   a. This is to delete amendments to these sections, not to delete these sections, the base building code still has these sections.

**Committee Discussion:**

Elevator lobby area of refuge being removed creates conflict within the code, we passed a proposal to call all lobbies areas of refuge.

If you delete this then pressurized hoist way has to have area of refuge.

Think 709.4.2 last sentence addresses the area of concern.

Only amendment would be deleted, base code would remain and does address the areas of concern.

Main change in current amendment “Openings and Elevator Shaft enclosures other than those directly serving an area of refuge shall be protected from the intrusion of smoke” That’s all that has been added. The double elevator door on the floor plate, the elevator door in to area of refuge never has to be protected based on fire barrier protection. The other side we added has to be protected as smoke and draft control. Exception says if you’re smoke or high rise you don’t have to protect the other door, if you’re pressurized. Chapter 30 covers it and has the exception (3007.6.2).

**Final Motion:** As Submitted

**Final Vote:** AS 7-0

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