AMENDMENT PROPOSAL

Please provide all of the following items in your amendment proposal.

<table>
<thead>
<tr>
<th>Code Sections/Tables/Figures Proposed for Revision:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBC-IBC Appendix Q, SECTION Q101</td>
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<tr>
<td>DBC-IBC Appendix Q, SECTION Q103</td>
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<tr>
<td>DBC-IBC Appendix Q, SECTION Q108</td>
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<td>DBC-IBC Appendix Q, SECTION Q109</td>
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<td>DBC-IBC Appendix Q, SECTION Q111</td>
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<tr>
<td>DBC-IBC Appendix Q, SECTION Q112</td>
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</tbody>
</table>

Proposal:

Delete Denver amendment without substitution

SECTION Q 101
INTRODUCTION

Delete Denver amendment without substitution (note for clarity of review: **highlighted sections** will be retained and published in new Denver Policy)

SECTION Q103
GENERAL REQUIREMENTS

Q 103.1 General requirements. All access control system applications shall comply with all of the requirements contained in Section Q103 unless other specific provisions of Appendix Q modify these requirements.

Q 103.1.1 Mechanical free egress. All doors shall have *mechanical free egress* at all times unless otherwise approved by CPD.

Q 103.1.2 Fire-rated doors. Required fire-rated doors shall remain latched at all times the door is in a closed position.
Q 103.1.3 Modifying doors and door frames. Re-machining fire-rated doors or frames may void the fire label. Re-machining shall comply with the manufacturer’s specified procedures.

Q 103.1.4 Key lock boxes. Provision for ingress by way of an approved key box (e.g., “Knox Box”) for entry by emergency personnel shall be provided and shall be located in a FPB-approved location.

Q 103.1.5 Fail-safe wiring. When electric locks are held locked by the application of electric power, the wiring between the power supply and lock shall be installed in a fail-safe arrangement. All portions of the circuit shall be configured in a way that parallel conductors in a common cable or raceway shall have conductors of opposite polarity in the same cable or raceway. This arrangement assures that the lock releases if wires break or if parallel conductors are shorted. (See Figure Q 103.1.5.)

Q 103.1.6 Access control system power. Access control system power supplies shall comply with all of the following requirements:

1) “Plug-in” Class II power supplies along with their serving outlets shall be enclosed in a protective cabinet.
2) All power supplies other than “plug-in” Class II power supplies shall be hardwired to primary power.
3) When the manufacturer’s nameplate primary power requirement exceeds 180 volt-amperes, the power supply shall be served by a dedicated branch circuit. If power requirement is less than 180 volt-amperes, then an existing power outlet may be converted to a junction box serving the power supply.

Q 103.1.7 Hardware requirements. All access control system applications shall utilize hardware that complies with all of the requirements contained in Section Q103.1.7 unless specifically approved by other provisions of Appendix Q.

Q 103.1.7.1 Listing. All access control system units shall be listed for their intended use by an approved agency, such as UL or ETL, or as otherwise approved by CPD.

Q 103.1.7.2 Electrical compatibility. All components of the operating system shall be matched electrically in all ratings (i.e., voltage and current).

Q 103.1.7.3 Electric strikes. Doors or frames may be equipped with electric strikes that do not affect mechanical free egress. Electric strikes used on fire-rated doors shall be fail-secure and shall bear the appropriate fire listing.

Q 103.1.7.4 Electrified locksets. Approved and listed electrically modified locksets (mortise, cylindrical or unit type) that do not affect mechanical free egress are permitted.

Q 103.1.7.5 Electrically operated panic hardware. Approved and listed electrically operated panic hardware (rim, mortise, and concealed or vertical rod type) is permitted. The exit device shall bear appropriate fire rating when used on fire-rated doors.

Q 103.1.7.6 Electric bolts. Electric bolts, either flush or surface mounted, shall not be installed, altered or repaired.

Q 103.1.7.7 Shear-type magnetic locks. Shear-type magnetic locks shall not be installed, altered or repaired.

Q 103.1.7.8 Non-binding hardware. Hardware shall be non-binding in design and function.

Delete Denver Appendix Q sections in entirety and republish in policy or guide:
Note: Show the proposal using strikethrough, underline format. At the beginning of each section, one of the following instruction lines are also needed:

- Revise as follows
- Add new text as follows
- Delete and substitute as follows
- Delete without substitution

Supporting Information:

SECTION Q101 INTRODUCTION

Q101.1 Background. This section provides a history of the development of Appendix Q since 1990. As stated within the body of the text, policies were written to address the deficiencies of the base code. The 2018 IBC, Section 1010, addresses most of the types of access control systems found in Appendix Q. As this section is narrative in nature, it can be deleted from the DBC.

Q101.2 Purpose and intent. This section provides a description on the how Appendix Q is utilized. The initial sentence states “The purpose of this appendix is to combine all of the various DBC requirements and previous policy requirements for access control documents”. The 2018 IBC addresses most of the situations found in Appendix Q. And while all information relevant to access control may not be captured in one document or section, the 2018 IBC does provide proper paths to related sections and or definitions. Additionally, this section does not specifically address any section of the base code and can be deleted.

Q101.3 Prevailing policy. This section lists the previous access control policies that were adopted by the City and County and Denver. These policies have been superseded by the current Appendix Q. The 2018 IBC and its provisions for access control will now supersede Appendix Q. This section is informative and does not specifically address any section of the base code and can be deleted.

Q101.4 Modified IBC provisions. This section lists the current sections of the 2015 IBC that have been amended to reference Appendix Q. The 2018 IBC and its provisions for access control will now supersede Appendix Q and thus this section can be deleted.

SECTION Q103 GENERAL REQUIREMENTS

Q103.1 General requirements. This section states that “all access control system applications shall comply with all of the requirements contained in Section Q103 unless other specific provisions of Appendix Q modify these requirements”. The 2018 IBC and its provisions for access control will now supersede Appendix Q. This amendment can be deleted.

Q103.1.1 Mechanical free egress. The term mechanical free egress is currently defined as door hardware that mechanically unlocks and unlatches the door from the egress side with a single motion with the use of a key, card or any special knowledge or effort. The two main parts of this definition are covered in the following sections of the 2018 IBC:

2018 IBC 1010.1.9: Except as specifically permitted by this section, egress doors shall be readily openable from the egress side without use of a key or special knowledge or effort.

2018 IBC 1010.1.9.6: The unlatching of any door or leaf shall not require more than one operation.

Since the intent of the definition is contained within the above sections of the 2018 IBC, this amendment can be deleted.

Q103.1.2 Fire-rated doors. The requirement for this section is that fire-rated doors shall remain latched at all times the door is in the closed position. The 2018 IBC address the requirements for fire-rated doors in section 716.2.6.1. which require fire-doors to be latching and self- or automatic-closing. The two exceptions to this rule only happen in rare instances. This amendment can be deleted.

Q103.1.3 Modifying doors and door frames: There is not a section in the 2018 IBC that specifically regulates modifying doors and forms. Alterations to existing elements are governed by the IEBC The path back to the IBC starts with IEBC 503.1 which states alterations to any building or structure shall comply with the requirements of the International Building Code. 2018 IBC Section 716 has specific requirements for fire door and fire door frame labels (716.2.9.11 and 716.2.9.4). This amendment can be deleted.

Q103.1.4 Key lock boxes. Key box locations should be regulated by 2018 IBC Section 506 Key Boxes. This amendment can be deleted.

Q103.1.5 Fail safe wiring. The 2018 IBC does not address wiring configurations. The wiring conditions outlined in this are relevant and should be included in either a policy or an access control permitting guide. Figure Q103.1.5 should be included. This amendment should be relocated to a policy or access control permitting guide.
**Q103.1.6 Access control system power.** The 2018 IBC does not address power requirements for access control. Similar to fail safe wiring, access control system power and its requirements are relevant and should be included in either a policy or an access control permitting guide.

**Q103.1.7 Hardware requirements.** Hardware shall be regulated by the 2018 IBC. Items not addressed by the base code shall be either deleted or relocated to a policy or an access control permitting guide.

**Q103.1.7.1 Listing.** The 2018 IBC contains four sections that require compliance with UL 294. These sections include 1010.1.9.7, 1010.1.9.8, 1010.1.9.9 and 1010.1.9.10. This amendment can be deleted.

**Q103.1.7.2 Electrical compatibility.** The 2018 IBC does not address electrical compatibility for access control. It is recommended that this amendment be included in either a policy or an access control permitting guide.

**Q103.1.7.3 Electric strikes.** By nature of their operation, electric (door) strikes do not impede mechanical free egress. 2018 IBC 716.2.6.1 regulate fire rated door hardware. 2018 IBC 716.2.6.21 mandates latching requirements for fire doors. This amendment can be deleted.

**Q103.1.7.4. Electrified locksets.** Locking systems, as required per 2018 IBC 1010.1.9.7, 1010.1.9.8, 1010.1.9.9 and 1010.1.9.10 shall be UL 294 compliant. This amendment can be deleted.

**Q103.1.7.5 Electrically operated panic hardware.** Requirements of panic hardware are stated in 2018 IBC 1010.1.10. The mention of fire exit hardware implies that panic hardware shall be rated in fire door assembly. Locking systems, as required per 2018 IBC 1010.1.9.7, 1010.1.9.8, 1010.1.9.9 and 1010.1.9.10 shall be UL 294 compliant. This amendment can be deleted.

**Q103.1.7.6 Electric bolts.** Manually operated bolts are regulated by 2018 IBC 1010.1.9.5. It can be assumed that electric bolts must abide by the requirements of manual flush bolts. This amendment can be deleted.

**Q103.1.7.8 Non-binding hardware.** 2018 IBC 1010.1.9 states “openable from the egress side without the use of a key or special knowledge or effort”. Special effort can be interpreted as non-binding. This amendment can be deleted.

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**Note:** The following items are required to be included:

**Purpose:** The proponent shall clearly state the purpose of the proposed amendment to physical, environmental and customary characteristics that are specific to the City and County of Denver (e.g., clarify the Code; revise outdated material; substitute new or revised material for physical, environmental and customary characteristics; add new requirements to the Code; delete current requirements, etc.)

**Reasons:** The proponent shall justify changing the current Code provisions, stating why the proposal is necessary to reflect physical, environmental and customary characteristics that are specific to the City and County of Denver. Proposals that add or delete requirements shall be supported by a logical explanation which clearly shows why the current does not reflect physical, environmental and customary characteristics that are specific to the City and County of Denver and explains how such proposals will improve the Code.

**Substantiation:** The proponent shall substantiate the proposed amendment based on technical information and substantiation. Substantiation provided which is reviewed and determined as not germane to the technical issues addressed in the proposed amendment shall be identified as such.

**Bibliography (as needed):** The proponent shall submit a bibliography when substantiating material is associated with the amendment proposal. The proponent shall make the substantiating materials available for review.

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**Referenced Standards:**

Click or tap here to enter text.

List any new referenced standards that are proposed to be referenced in the code.

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**Impact:**

None

**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 construction; □ Increase □ Reduce ☒ No Effect
- The effect of the amendment proposal on the cost of design; □ Increase □ Reduce ☒ No Effect
<table>
<thead>
<tr>
<th><strong>Departmental Impact:</strong></th>
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<tbody>
<tr>
<td>None</td>
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**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
  - Reduce
  - No Effect

- The effect of the amendment proposal on the cost of enforcement/inspection:
  - Increase
  - Reduce
  - No Effect

- Is the amendment proposal more- or less-restrictive than the I-Codes;  
  - More
  - Less
  - Same