

Meeting Minutes: Construction Codes Advisory Council

Date: Nov. 21, 2024
Time: 9:30 a.m.
Location: DLI, 443 Lafayette Rd. N., St. Paul, MN 55155 / WebEx

Members

1. Karl Abrahamson
2. Scott Anderson
3. Lori Bauer (WebEx)
4. Chris Ferguson (WebEx)
5. Arne Grant
6. Barry Greive (WebEx)
7. Duane Hendricks (WebEx)
8. Tom Jenson (WebEx)
9. David Kegler
10. Russ Landry (WebEx)
11. Shelonda Marie-Alves (WebEx)
12. Matt Marquis (alternate for Mark Worms)
13. Greg Metz – Chair
14. Dan McConnell
15. Mara Peterson
16. Reed Sprung (WebEx)
17. Steve Ubl

Members Absent

Mark Brunner (nor alternate)
Mike Paradise (nor alternate)
William Pim (nor alternate)
Mark Worms (alternate attended)

Staff & Visitors

Kate Perushek – Deputy Commissioner
Jeff Lebowski – Atty for CCAC, DLI
Lyndy Logan – DLI
Daniel Becker – DLI (WebEx)
Mike Bunnell – DLI
Todd Green – DLI
Karen Gridley – DLI

Alexis Johnson – DLI (WebEx)
Dan Kelsey – DLI
Lee Gladitsch – DLI (WebEx)
Britt McAdamis – DLI
Josiah Moore – DLI
Heidi Neumueller – Cuningham (WebEx)
Chad Payment – DLI (WebEx)
Angela Peterson (CEE)
Matt Peterson – DLI
Sean O’Neil – DLI
Wendy Rannenberg – DLI
Ryan Rehn – DLI
Bill Reinke – DLI
Chris Rosival – DLI
Steve Shold – DLI
Mark Sneep – DLI
Amanda Spuckler – DLI
Amanda Swenson – SFM
Jim Weaver – DLI
Mary Barnett – UrbanWorks Architecture
Nick Erickson – Housing First MN
Eric Fowler – Fresh Energy (WebEx)
Grace Greene - HFMN
Ross MacPherson – AeroSeal (WebEx)
Jeff Mang – Mang Consulting (WebEx)
Ilana Percher – Commerce
Angela Peterson – CEE
Erin Sherman – RMI (WebEx)
Gary Thaden – MMCA
Elizabeth Torske – CNGC (WebEx)

1. Call to order

- A. Chair Metz called the meeting to order at 9:31 a.m.
- B. Ryan Rehn (chair alternate) took roll call and a quorum was established with 15 of 20 members present. Shelonda Marie-Alves joined via WebEx at 9:35 a.m., resulting in 16 of 20 members present. Christopher Ferguson joined via WebEx at 9:50 a.m., resulting in 17 of 20 members present in person or remotely. A quorum was maintained throughout the meeting.

- C. Announcements/Introductions – Chair Metz
- Everyone present in person and remotely can hear all discussions.
 - All votes will be taken by roll call if any member is attending remotely.
 - All handouts discussed and WebEx instructions are posted on the [Council's website](#).
 - Congratulations to Steve Ubl on his retirement and special thanks for his contributions to the code knowledge and development community serving on multiple TAGs and for his service on this council.
- D. WebEx instructions/procedures were read aloud.

2. Approval of meeting agenda

A motion was made by McConnell, seconded by Peterson, to approve the agenda as presented. The roll call vote was unanimous with 16 votes in favor; the motion carried.

3. Approval of previous minutes

A motion was made by Landry, seconded by Anderson, to approve the Jul. 30, 2024, meeting minutes as presented. The roll call vote was unanimous with 16 votes in favor; the motion carried.

4. Regular business

Expenses were approved.

5. Department update

Deputy Commissioner Perushek encouraged members to present legislative proposals related to building codes to the CCAC and shared updates from the department.

Christopher Ferguson joined the meeting via WebEx at 9:50 a.m., resulting in 17 voting members present.

6. Division update – see [presentation](#)

- A. CCLD update – Todd Green
- B. BOT Grants Program update – Greg Metz
- C. [Highlights and updates from the 2024 Code Cycle Technical Advisory Groups](#)
- a. MN Rules Chapters 1300, 1301, 1302, and 1303 Administration, etc.
 - b. MN Rules Chapter 1305 (Commercial) Building Code
 - c. MN Rules Chapter 1307 Elevators and Related Devices
 - d. MN Rules Chapter 1311 Conservation Code for Existing Buildings
 - e. MN Rules Chapter 1341 Accessibility Code
 - f. MN Rules Chapter 1346 Mechanical & Fuel Gas Code + IRC Mechanical
 - g. Structural Provisions

Barry Greive departed the meeting at 11:00 a.m. resulting in 16 voting members present.

A motion was made by Peterson, seconded by Jensen, to approve the 2024 International Model Codes Review TAG Report ([see Attachment A](#)) dated Nov. 14, 2024, and authorize DLI staff to proceed with preliminary draft rulemaking. The roll call vote was unanimous with 16 votes in favor; the motion carried.

- D. Other Rulemaking
- a. Adult-sized changing facilities
 - b. Window cleaning safety

7. Regular business – Greg Metz, Chair

None

8. New Business – Greg Metz, Chair

A. MR 1322 – Residential Energy Code TAG – reaffirmation & adjustment

A motion was made by Landry, seconded by Peterson, to modify the Residential Energy Code TAG to substitute stakeholder representation where previous members are no longer available to serve. The roll call vote was unanimous with 16 votes in favor; the motion carried.

- B. MR 1323– Commercial Energy Code TAG – (adoption of the 2022 ASHRAE 90.1 with addenda)
Landry pointed out that ASHRAE, a key player in energy efficiency, was not listed. He acknowledged the involvement of many stakeholders. Chair Metz expressed uncertainty about including ASHRAE, given the presence of other groups focused on energy conservation and engineering. Steve Shold, a CCLD employee and energy codes expert, introduced himself. Shold mentioned that some TAG members represent the ASHRAE committee, although they are not officially designated by the chapter. Despite not being explicitly listed, ASHRAE is represented in the committee.

A motion was made by Grant, seconded by Anderson, to establish a Technical Advisory Group, as presented, to develop recommendations for the next generation of MN Rule 123 the Commercial Energy Code, based upon the 2022 ASHRAE 90.1 Standard and all approved amendments at the time the TAG completes its work. The roll call vote was unanimous with 16 votes in favor; the motion carried.

9. Open Forum

None

10. Council member discussion

None

11. Announcements

The CCAC meets 1-3 times per year. Meeting notifications are sent one week prior. Please contact Lyndy.Logan@state.mn.us if you would like to be added to these notifications.

12. Adjournment

A motion was made by Marquis, seconded by Kegler, to adjourn the meeting at 11:16 a.m. The roll call vote was unanimous with 16 votes in favor; the motion carried.

Respectfully Submitted,

Lyndy Logan

Executive Secretary to the CCAC

Green meeting practices

The State of Minnesota is committed to minimizing in-person environmental impacts by following green meeting practices. DLI is minimizing the environmental impact of its events by following green meeting practices. DLI encourages you to use electronic copies of handouts or to print them on 100% post-consumer processed chlorine-free paper, double-sided.

Attachment A



2024 International Model Codes Review

November 14, 2024

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Technical Advisory Group Review of the 2024 International Model Building Codes

Introduction

The Minnesota Legislature requires the Commissioner of the Department of Labor and Industry to review the International Model Building Codes every six years for their potential adoption as amended for use in Minnesota, beginning with the 2018 edition of the model codes.¹ The Commissioner must consult with the Construction Codes Advisory Council (“CCAC”).² The CCAC is to review the new model codes in order to provide recommendations to the Commissioner for their adoption and recommendations for revisions to current Minnesota Rules.³ To facilitate their review of the model codes, the CCAC appointed nine Technical Advisory Groups (“TAGs”) and their members to review the 2021 and 2024 International Model Building Codes (“I-codes”), compare them to the current Minnesota rules which largely adopt the 2018 I-codes as amended for use in Minnesota, and report their findings.

Each TAG held open meetings that allowed the public to attend and participate in the review and discussion of changes in the 2021 and the 2024 I-codes. As a result, TAG members and the public identified concerns and drafted code change proposals to address those concerns. The TAG members and the public also discussed and identified any significant issues raised by those proposals.

Many of these code change proposals were editorial such as renumbering Minnesota rule parts to align with the 2024 I-codes or deleting code sections from Minnesota rules that are no longer necessary because the 2024 I-codes have adopted similar language. These types of changes recommended by TAG members do not require CCAC review because they do not present meaningful or substantive changes to the provisions of the 2024 I-codes or current Minnesota rules.

This report highlights some of the more significant changes in the 2024 I-codes and those code change proposals that TAG members recommend to the CCAC. This report does not include a review of the International Residential Code (“IRC”) because TAG members have only recently started their review. The TAG reviewing the International Building Code (“IBC”) has not completed their review, but an appendix below includes an update on their progress and code change proposals that have been reviewed.

The appendixes also discuss code change proposals that TAG members could not agree to recommend to the CCAC or were not reviewed, as well as the membership roster for each of the TAGs.

- Appendix A summarizes code change proposals that the Commercial Building Code TAG members have agreed to recommend to the CCAC and those code change proposals that they did not agree to

¹ See [Minnesota Statutes, section 326B.106](#).

² See [Minnesota Statutes Section 326B.106, subdivision 1](#).

³ See [Minnesota Statutes Section 326B.07](#).

recommended but identify as areas of concern with the provisions of the 2024 I-codes or current Minnesota code provisions and suggest modifications.

- Appendix B summarizes code change proposals TAG members did not agree to recommend to the CCAC, but identify as areas of concern with the provisions of the 2014 I-codes or current Minnesota code provisions and suggest modifications.
- Appendix C describes code change proposals that TAG members were unable to review because they were received after the final meeting date.
- Appendix D lists the TAGs, their members, and the organizations they represent.

TAG Recommendations

Administration and Minnesota Provisions TAG (Chapters 1300, 1301, 1302, and 1303)

Administration and Minnesota Provisions TAG members met eight times to review Minnesota Rules chapters 1300, 1301, 1302, and 1303. These chapters address the Minnesota State Building Code requirements for administration, building official certification, construction approvals, and Minnesota provisions, respectively. TAG members received ninety-nine code change proposals. The Administration and Minnesota Provisions TAG members were in agreement to recommend to the CCAC the following significant code change proposals as an amendment to Minnesota Rules chapters 1300, 1301, 1302, and 1303:

Recommended Code Changes for Chapter 1300

- Amend existing Minnesota Rules, part 1300.0040, subpart 2, to permit all historic buildings to comply with Minnesota Rules, chapter 1311. This will allow greater design flexibility for the renovations of historic homes.
- Amend existing Minnesota Rules, part 1300.0040, subpart 2, to permit structures classified as IRC-3 occupancies to be designed in compliance with the requirements for Group R-2 occupancies in Minnesota Rules, chapter 1305. Currently, townhouses must be constructed in accordance with the requirements of chapter 1309, which requires each townhouse unit to be provided with separate utilities, which has resulted with conflicts with utility providers in dense urban areas. The code change will allow townhouses to have shared utility connections.
- Amend existing Minnesota Rules, part 1300.0110, subpart 14, to require the approval of the fire code official whenever a performance-based fire and life safety design involves matters regulated by the Minnesota State Fire Code.
- Amend existing Minnesota Rules, part 1300.0130, subpart 8, to require the submission of structural designs prior to the issuance of permit for the construction of foundation and footings. The proposal also requires mechanical, plumbing, and electrical system designs to be submitted prior to the issuance of a permit for buildings required to comply with either the Minnesota Residential Energy Code or Minnesota Commercial Energy Code.
- Amend existing Minnesota Rules, part 1300.0160, subpart 2, to clarify that the building permit and plan review fees only include the valuation of the work regulated by the Minnesota State Building Code and

any other fees charged at the time that the permit fee is collected must be identified separately to the permit applicant.

- Amend existing Minnesota Rules, part 1300.0160, to specify that plan review and permit fees collected for the administration of the Minnesota State Building Code are to be expended for costs associated with code administration including plan review, inspection, administration, continuing education, equipment, software, and overhead.

Recommended Code Changes for Chapter 1301

- Repeal existing Minnesota Rules, part 1301.0200, to delete requirements for Class I Building Official certification. This certification has not been issued since July 1, 1990, and there are no longer any individuals with this certification.
- Amend existing Minnesota Rules, part 1301.0300, to revise building official certification prerequisite points awarded for education and experience and eliminate references to obsolete organizations.
- Amend existing Minnesota Rules, part 1301.1000, subparts 1 and 2, to award continuing education hours instead of units and eliminate references to obsolete organizations.
- Amend existing Minnesota Rules, 1301.1000, subpart 3, to require certified building officials and certified building officials limited to complete three hours of continuing education related to the plan review and inspection of plumbing systems during each two-year certification period.
- Amend existing Minnesota Rules, part 1301.1600, subpart 1, to require construction code inspectors to register with the Department and report completed continuing education.

Recommended Code Changes for Chapter 1303

- Repeal existing Minnesota Rules, part 1303.1200, that requires restroom facilities in public accommodations to have a ratio of 3:2 water closets for women be provided to the total number of water closets and urinals provided for men. This rule part is no longer necessary because the model codes contain comparable requirements.
- Repeal existing Minnesota Rules, part 1303.1300, which requires parking spaces be provided for commuter vans. These spaces generally go unused because commuter vans are rarely used.
- Repeal existing Minnesota Rules, parts 1303.1500 subparts 4 and 5, that requires a minimum space be provided for recyclable materials based on a building's use. The proposal repeals these rule parts to allow building owners and designers more flexibility in determining the size of the space necessary for recyclable materials.
- Amend existing Minnesota Rules, part 1303.2402, to add a new subpart requiring testing of the newly installed radon control system before a certificate of occupancy is issued.
- Amend existing Minnesota Rules, part 1303.1600, requirements for minimum footing depth for frost protection based on ASCE 32-01 and more recent climate data. The proposal adds a third zone and revises the counties assigned to Zone I and Zone II as follows:

Zone I: Anoka, Benton, Big Stone, Blue Earth, Brown, Carver, Chippewa, Chisago, Cottonwood, Dakota, Dodge, Faribault, Fillmore, Freeborn, Goodhue, Hennepin, Houston, Isanti, Jackson,

Kanabec, Kandiyohi, Lac qui Parle, Le Sueur, Lincoln, Lyon, Martin, McLeod, Meeker, Mille Lacs, Mower, Murray, Nicollet, Nobles, Olmsted, Pine, Pipestone, Ramsey, Redwood, Renville, Rice, Rock, Scott, Sherburne, Sibley, Stearns, Steele, Swift, Wabasha, Waseca, Washington, Watonwan, Winona, Wright, and Yellow Medicine.

Zone II: Aitkin, Carlton, Cass, Clay, Cook, Crow Wing, Douglas, Grant, Hubbard, Itasca, Lake, Morrison, Otter Tail, Pope, St. Louis (south of a line connecting the eastern and western St. Louis County borders via highways MN-169 to MN-116 to MN-23), Stevens, Todd, Traverse, Wadena, and Wilkin.

Zone III: Becker, Beltrami, Clearwater, Kittson, Koochiching, Lake of the Woods, Mahnommen, Marshall, Norman, Pennington, Polk, Red Lake, Roseau, and St. Louis (north of a line connecting the eastern and western St. Louis County borders via highways MN-169 to MN-116 to MN-23).

The minimum footing depths for heated and semi-heated buildings are revised to 36 inches in Zone I, 48 inches in Zone II, and 60 inches in Zone III. An additional 12 inches of depth is required for the footings of unheated buildings.

- The Structural Tag members were in agreement to recommend the code change proposal revising frost depth requirements.

Elevators and Related Devices Code TAG (Chapter 1307)

Elevators and Related Devices Code TAG members met four times to review the most recent versions of the American Society of Mechanical Engineers (“ASME”) standards that Minnesota Rules, has adopted by reference in chapter 1307. The TAG members were in agreement that the following ASME standards should be adopted:

- ASME A17.1/CSA B44-2022 Safety Code for Elevators and Escalators.
- ASME A17.3-2023 Safety Code for Existing Elevators and Escalators.
- ASME A17.5-2019 Elevator and Escalator Electrical Equipment.
- ASME A17.7/CSA B44.7-2007 Performance-Based Safety Codes for Elevators and Escalators.
- ASME A18.1-2023 Safety Standard for Platform Lifts and Stairway Chairlifts.
- ASME A90.1-2023 Safety Standard for Belt Manlifts.
- ASME B20.1-2021 Safety Standard for Conveyors and Related Equipment.

Recommended Code Changes

TAG members received 41 code change proposals and recommend the following significant code change proposals as amendments to modify the ASME standards:

- Modify section 2.27.1.1 of the ASME A17.1/CSA B44-2022 to not require elevators be provided with two-way emergency communication systems that display messages or videos because compliance may be difficult in areas that lack sufficient broadband or cellular service.

- Modify sections 2.2.3.1 and 2.2.3.2 of the ASME A17.1/CSA B44-2022 to require a guard between elevator pits to prevent injury to elevator personnel that may occur due to the movement of an adjacent elevator.
- Modify section 3.4.1(c) of the ASME A17.3 to require existing installations be provided with a cartop handrail, which is currently required for new elevators.
- Amend existing Minnesota Rules, part 1307.0090, subpart 8, to require drive chains, steps, and treadways be removed by elevator personnel when escalators or moving walks are removed from service.

Significant Changes to the ASME Standards

- Section 2.2.4 of the ASME A17.1/CSA B44-2022 requires a means be provided to detect elevator personnel using a pit ladder and to prevent the elevator from moving when the pit is accessed.
- Section 2.13.5 of the ASME A17.1/CSA B44-2022 requires passenger elevators be equipped with a door detection device that detects objects approaching the door opening.
- Sections 3.26.1, 3.26.12, 3.26.13, and 8.14.1 (b) of the ASME A17.1/CSA B44-2022 add requirements for the use of remote interaction operation that allows off-site systems to interact with the automatic operation features of elevators that are connected to the internet.
- Section 8.14 of the ASME A17.1/CSA B44-2022 requires internet connected or enabled devices that interface with an elevator controller to have security features.
- Sections 3.10 and 3.13 of the ASME A17.3-2023 require existing elevators be provided with protection from unintended movement and ascending car overspeed.
- Section 4.7.9 of the ASME A17.3-2023 requires existing hydraulic elevators be provided with a system to monitor and prevent the operation of an elevator with faulty door contact circuits. A similar system is currently required for existing electric elevators.
- Sections 5.3.13 and 9.6.14 of the ASME A17.3-2023 requires a device be installed to stop an existing escalator or moving walk from operating when the comb plate moves vertically. The comb plate is located at the ends of the escalator and the vertical movement of the comb plate is a tripping hazard. The comb plate vertical safety device requirement will affect escalators and moving walks installed prior to 1999.

Existing Building Code TAG (Chapter 1311)

The Existing Building Code TAG members met seven times to review the 2024 International Existing Building Code (“IEBC”) and Minnesota Rules, chapter 1311, which adopts the 2018 IEBC with amendments. TAG members received sixteen code change proposals. The Existing Building Code TAG members recommend adopting the 2024 IEBC with the following significant proposed code changes:

Recommended Code Changes

- Modify chapter 3 of the 2024 IEBC to add a section to require additions, new work constituting alterations, reconstruction due to substantial damage, substantial improvements, or substantial energy improvements, and Level 3 Alterations to comply with Minnesota Residential Energy Code or Minnesota Commercial Energy Code.
- Modify chapter 3 of the 2024 IEBC to add a section to require the installation of electric vehicle (“EV”) charging infrastructure in buildings where more than ten parking spaces are added and the work area is undergoing a Level 2 alteration or an addition that exceeds 50 percent of the building area or when an existing building is undergoing an alteration or change of occupancy that adds dwellings units.
- Modify tables 1011.5, 1011.6, and 1011.7 of the 2024 IEBC to add buildings constructed in accordance with the IRC to the list of occupancy classifications and assign a hazard category for those buildings for the purposes of converting IRC structures to commercial occupancies.
- Modify section 804.5.1.1 of the 2024 IEBC to permit a single exit from spaces in the basement, first, second, or third story above grade plane and occupiable roofs over the first or second story above grade plane that comply with certain conditions. The proposal deletes the third condition that would permit a single exit in a Group R-2 occupancies with any number of stories with not more than four units per floor.

Significant Changes to the 2024 IEBC

- New section 309 of the 2024 IEBC requires additions and replacements of exterior wall coverings and exterior wall envelopes to comply with the requirements for new construction in the IBC if the added or replaced exterior wall covering or exterior wall envelope involves two or more continuous stories and comprises more than 15 percent of the total wall area on any side of the building.

Accessibility Code TAG (Chapter 1341)

The Accessibility Code TAG members met seven times to review chapter 11 of the 2024 IBC, section 306 of the 2024 IEBC, the 2017 edition of the ICC A117.1 Accessible and Usable Buildings and Facilities standard (“ICC A117.1”), and Minnesota Rules, chapter 1341. TAG members received twenty-six code change proposals. The Accessibility Code TAG members were in agreement to recommend adoption of chapter 11 of the 2024 IBC, section 306 of the 2024 IEBC, and the 2017 edition of the ICC A117.1 with the following significant code change proposals recommended as amendments:

Recommended Code Changes

- Modify section 1107 of the 2024 IBC to add requirements for the minimum number of accessible EV charging spaces and modify section 502.11 of the ICC A117.1 to include technical criteria for accessible EV charging spaces including requirements for space size, access aisle, signage, and an accessible route from the space to the EV charger. This proposal had been previously recommended by the EV Charging

Facilities TAG. The Accessibility Code TAG also recommended a new proposal with criteria for accessible EV charging angled parking spaces.

- Modify section 1108.5 of the 2024 IBC to require at least 10 percent but not less than one of each type of dwelling unit or sleeping unit to be an accessible unit in Group I-2 nursing homes and I-2 assisted living facilities with dementia care. All other units must be provided with accessible toilet rooms that comply with Minnesota Department of Health licensing rules.
- Modify section 1108.6 of the 2024 IBC to require sleeping units within Group R-3 occupancies that are state licensed care facilities to comply with the same requirements for accessible units and Type B units as congregate living facilities and boarding houses.
- Modify section 107 of the ICC A117.1 to define “existing building” and “existing facility” as a building or facility that was erected or for which a building permit was issued prior to the effective date of the 2026 Minnesota State Building Code. This proposal clarifies the buildings that are required to comply with the new ICC A117.1 requirements for circular turning spaces, length of the clear floor space, and T-shaped turning spaces.
- Amend adopted Minnesota Rules, part 1346.0613, to include criteria for the installation of adult changing stations in multi-user toilet rooms.

Significant Changes to the 2024 IBC

- Section 1105.1 of the 2024 IBC requires power operated doors be provided at public entrances that are required to be accessible in Group A1, A2, A3 and A4 occupancies with occupant loads that are more than 300 and in Group B, M, and R-1 occupancies with occupant loads that are more than 500. Previously, power door operators were an option for accessible entrance doors.
- Section 1110.2 of the 2024 IBC allows assisted toileting and bathing facilities as a compliance option for Group I assisted living facilities. The Minnesota Department of Health (“MDH”) supports the new provisions for Group I-1 occupancies but will continue to require 90 percent of patient sleeping rooms in Group I-2 nursing homes comply with Minnesota Rules, part 4658.4510, and the remaining 10 percent of sleeping rooms be fully accessible.

Significant Changes to the ICC A117.1-2017

- The diameter of the circular turning space for new buildings is increased from 60 inches to 67 inches.
- The length of the required clear floor space in new buildings is increased from 48 inches to 52 inches. The new length does not apply to Type B dwelling or sleeping units which are permitted to have a clear floor space that is 48 inches in length.
- The size of the T-shaped turning space is increased for new buildings and three compliance options are provided. The new options for the dimensions of the T-shaped turning space are:
 1. 60 inches by 68 inches with arms and base 36 inches in width and 8-inch-long chamfered inner corners at the intersection of the arms and base;

2. 60 inches by 64 inches with arms that are 38 inches in width and 42-inch base; or
3. 60 inches by 64 inches with arms and base that are 40 inches in width.

Mechanical and Fuel Gas Code TAG (Chapter 1346)

The Mechanical and Fuel Gas Code TAG members met sixteen times so far to review the 2024 International Mechanical Code (“IMC”), 2024 International Fuel Gas Code (“IFGC”), and Minnesota Rules chapter 1346, which adopts the 2018 IMC and 2018 IFGC with amendments. The TAG will continue to meet to consider the adoption of chapters 12 through 24 of the 2024 IRC as the mechanical and fuel gas requirements for one- and two-family dwellings and townhouses. TAG members received 45 code change proposals. The Mechanical and Fuel Gas Code TAG members the adoption of the 2024 IMC and 2024 IFGC with the following significant code change proposals as amendments:

Recommended Code Changes

- Amend existing Minnesota Rules, chapter 1346, to apply to all buildings other than those constructed in accordance with the IRC.
- Amend existing Minnesota Rules, part 1346.0050, to no longer incorporate by reference ANSI/ASHRAE 62.2 Ventilation and Acceptable Indoor Air Quality Residential Buildings.
- Modify section 404.1 of the 2024 IMC to exempt buildings that accommodate 5 or fewer motor vehicles from carbon monoxide and nitrogen dioxide detector requirements.
- Modify section 403 of the 2024 IMC to require balanced ventilation systems in multifamily dwelling units in buildings that are required to comply with the Minnesota Mechanical Code.
- Modify section 507 of the 2024 IMC to add airflow rates for commercial kitchen exhaust hoods used for existing unlisted Type 1 hoods.
- Modify section 1101.1 of the 2024 IMC to allow the use of refrigerants permitted by Minnesota Statutes, section 326B.106, subdivision 17.
- Modify section 508.1 of the 2024 IMC to clarify the requirements for conditioning makeup air supplied during the operation of commercial kitchen exhaust systems.
- Repeal existing Minnesota Rules, part 1346.5501, subpart 3, and revert to the 2024 IFGC model code language for permitted chimney liners. This will permit the use of clay flue lining complying with the requirements of ASTM C315 or equivalent, listed chimney lining systems, and other approved materials that can resist flue gases and condensate.

Significant Changes to the 2024 IMC and 2024 IFGC

- The 2024 IMC addresses the use Group A2L and B2L refrigerants and includes requirements for refrigerant piping identification, machinery rooms, and the high-probability systems used for human comfort that use Group A2L refrigerants.

- The 2024 IMC no longer prohibits the use of domestic ductless range hoods in Groups I-1 and I-2 occupancies.

Conclusion

1. TAG members reviewed the 2024 I-codes and recommend the adoption of the of the 2024 IEBC, the accessibility provisions of the 2024 IBC and the 2024 IEBC, the 2024 IMC, and the 2024 IFGC. TAG members also recommend updating the codes and standards that regulate elevators and related devices and updating the administration provisions of the Minnesota State Building Code.
2. TAG members reviewed and recommended adoption of code change proposals that modify the 2024 I-codes or amend an existing Minnesota code provision as described in this report to promote consistency among the building codes, to ensure uniform safety standards, and to accommodate Minnesota's climatic conditions.

Appendix A

The Commercial Building Code TAG has not completed their review of the 2024 IBC. However, Appendix A includes significant code change proposals the TAG has recommended as amendments and those code change proposals that they did not agree to recommend but identify as areas of concern with the provisions of the 2024 IBC or current Minnesota code provisions and suggest modifications.

Commercial Building Code TAG (Chapter 1305)

The Commercial Building Code TAG members met seventeen times to review the 2024 International Building Code ("IBC") and Minnesota Rules, chapter 1305, which adopts the 2018 IBC with amendments. TAG members received over 100 code change proposals. The Commercial Building Code TAG members recommend the adoption of the 2024 IBC and are continuing to review code change proposals. Based on their review so far, the TAG members recommended the following significant code change proposals as amendments to modify the 2024 IBC:

Recommended Code Changes

- Modify section 202 of the 2024 IBC to add definitions for "assisted living" and "assisted living with dementia care" because these facilities are now required to be licensed by the Minnesota Department of Health.
- Amend existing Minnesota Rules, part 1305.0302, to add assisted living facilities and assisted living facilities with dementia care to the table that provides occupancy classifications for different types of care facilities.
- Modify section 406.2.7 of the 2024 IBC to include requirements for EV charging spaces that were recommended by the Electric Vehicle Charging Facilities TAG.
- Modify table 506.2 of the 2024 IBC to limit the allowable area factor for Group R-3 occupancies dependent upon construction type and if the building is equipped with an automatic sprinkler system.
- Modify section 1006.3.3 to permit a single exit stairway in Group R-2 occupancies that are up to 4 stories above grade plane, with four or fewer dwelling units per story, and each story that has a maximum floor area of 4,000 square feet. The proposal requires the building be provided with an automatic sprinkler system that complies with NFPA 13, a stairway that is 48 inches in width, and corridors and intervening spaces associated with the stairway that are 44 inches in width. Each dwelling unit must be provided with an emergency escape and rescue opening.
 - Recent International Code Council Committee Action Hearings #2 took steps to approve similar language for the 2027 IBC, pending the final outcome of a Public Comment Hearing in early 2026.
- Amend existing Minnesota Rules, part 1305.1011, to permit ship stairs as a component of the means of egress for unoccupiable roofs and equipment and service pits. This proposal includes requirements for ship stair construction located in the 2024 IBC and existing chapter 1346, the Minnesota Mechanical and Fuel Gas Code, and changes the existing requirement to permit risers spaced between 6.5 inches and 14 inches in height.

- Modify section 1028.5 of the 2024 IBC to require the surface of the exit discharge to the public way or safe dispersal area be a maintainable surface that is free of ice and snow.
 - Some TAG members were concerned about the difficulty of maintaining a surface free and clear of ice and snow in Minnesota's climate conditions.
- Modify section 1210.3 of the 2024 IBC to include requirements for water closet compartments in multi-user toilet rooms that are not separated by sex. The water closet compartment walls must extend from the floor to the ceiling and the doors cannot be undercut by more than a half-inch. The proposal requires a lavatory be provided in 20 percent but not less than one compartment in occupancies other than Group E occupancies and in 40 percent but not less than 2 compartments in Group E occupancies as well as other requirements specific to the needs of Group E occupancies.
 - Some TAG members were concerned that compliance with the requirements for compartment wall and door height may be difficult for existing facilities when undergoing conversion to multi-user toilet rooms not separated by sex.
- Modify section 1809.5.1 of the 2024 IBC to require frost protection be provided at exterior landings for exterior doors used for egress purposes.

Other Code Change Proposals

TAG members did not agree to recommend the following code change proposal:

- Modify section 1204.1 of the 2024 IBC to require all dwellings to have a habitable space that is provided with natural light.
- Modify table 2902.1 of the 2024 IBC to add a footnote that permits one-third of plumbing fixtures in existing buildings other than Group E and Group I occupancies to be converted to facilities that are not separated by sex.
 - Some TAG members were concerned that the proposal does not include requirements for the compartment walls and doors or other features that provide privacy.

Significant Changes to the 2024 IBC

- Adds Type IV-A, IV-B, and IV-C construction which allows for taller mass timber buildings with more stories above grade and greater allowable areas.
- Includes provisions for the repurposing of intermodal shipping containers as buildings and structures.

Code Change Proposals Not Reviewed by TAG Members

- Modify section 414.2.3 of the 2024 IBC to add an exception that permits areas classified as Group H-2, H-3, H-4, and H-5 occupancies and separated by fire barriers to not be considered a control area when determining the maximum number of allowable control areas within a building.

Appendix B

TAG members did not agree to recommend all code change proposals they reviewed. Although TAG members did not agree to recommend the following code change proposals, the CCAC should be aware of the concerns they identify.

Administration and Minnesota Provisions TAG (Chapters 1300, 1301, 1302, and 1303)

Other Code Change Proposals

- Amend existing Minnesota Rules, part 1300.0110, subpart 8, to require a municipal Department of Building Safety to retain code record documents in perpetuity.
 - The costs associated with the proposed change is overly burdensome to municipalities although it would provide information that may be useful for existing buildings undergoing alteration or addition.
- Amend existing Minnesota Rules, chapter 1300, to prohibit the denial of a building permit or certificate of occupancy based on aesthetics, square footage of building and accessory structures, or amenities.
 - The proposed change addresses concerns related to municipal zoning ordinances and are not within the scope of the Minnesota State Building Code.
- Amend existing Minnesota Rules, part 1300.0160, to require the Department to develop a table outlining the inspection time for new dwelling units based on the square footage of the structure and would require building permit fees for one- and two-family dwellings and townhouses to be based on the cost per square foot. The proposed change would also require municipalities to place building permit fees in a segregated fund.
 - A statutory change is necessary to base building permit fees on square footage rather valuation. The management of municipal finances is not within the scope of the Minnesota State Building Code.
- Amend existing Minnesota Rules, part 1303.2402, to not permit a certificate of occupancy to be issued for a building until the radon test result is less than 4 pCi/L.

Elevators and Related Devices Code TAG (Chapter 1307)

Other Code Change Proposals

- Modify ASME A17.1/CSA B44-2022 to delete section 2.8.7. The proposal is intended to prohibit the installation of emergency responder radio coverage equipment in elevator hoistways and cars due to the possible hazards to elevator personnel.
- Modify sections 2.26.13.1, 2.26.13.2, 2.26.13.6, and 8.6.11.16 of the ASME A17.1/CSA B44-2022 that address requirements for remote interaction operation. The proposals require an on-site means of disabling the remote interaction operation be provided, limit the use of remote interaction operation to

elevator personnel, and limits the use of remote interaction operation to certain functions such as parking the elevator, door dwell time, and changing the car parking floor.

Existing Building Code TAG (Chapter 1311)

Other Code Change Proposals

- Amend existing Minnesota Rules, part 1311.0020, subpart 9, so references to the “residential code” or the “International Residential Code” mean Minnesota Rules Chapter 1309, the Minnesota Residential Code. The proposal is intended to allow existing one- and two-family dwellings and townhouses to comply with chapter 1311 when undergoing repair, alternation, or addition.
 - Some TAG members expressed interest in adopting provisions for existing one- and two-family dwellings and townhouses as amendments to chapter 1309. However, existing 1309.0100, subpart 2, permits additions, alterations, or repairs to existing one- and two-family dwellings and townhouses be made without conforming to all requirements of the current Minnesota Residential Code, provided the addition or alteration conforms to current code and any repairs do not adversely affect any structural member or fire-resistive element.
 - The scope of chapter 1311 includes existing commercial buildings that would otherwise be required to comply with Minnesota Rules, chapter 1305. Existing one- and two-family dwellings and townhouses are only permitted to comply with chapter 1311 when undergoing a change to an occupancy classification that is governed by chapter 1305.

Accessibility Code (Chapter 1341)

Other Code Change Proposals

- Amend adopted Minnesota Rules, part 1346.0613, to require adult changing stations in locations required by the code and those that are otherwise provided to comply with the same technical criteria.
 - The TAG members do not recommend this code change proposal because it is not consistent with forthcoming national criteria for adult changing stations. Furthermore, the adopted criteria is intended to allow design flexibility for the placement of adult changing stations in locations such as nurses’ work areas, therapist work areas, or special education classrooms.

Mechanical and Fuel Gas Code TAG (Chapter 1346)

Other Code Change Proposals

TAG members did not agree to recommend the following code change proposal:

- Modify the 2024 IBC to delete section 402 that permits the use of natural ventilation.

Appendix C

The Department continued to receive code change proposals after TAG members had completed their meetings and review of the I-codes. TAG members were unable to review and discuss these code change proposals and consequently cannot provide a recommendation to the CCAC. The following code change proposals suggest significant changes to 2024 I-code provisions or a current Minnesota Rule provision and may require CCAC review.

Accessibility Code

Code Change Proposals Not Reviewed by TAG Members

- Modify section 1110.2.5 of the 2024 IBC to add requirements for the number of accessible water closet compartments in multi-user toilet rooms not separated by sex. The proposal requires 20 percent but not less than 2 of the total compartments be wheelchair accessible and 20 percent of the total compartments but not less than 2 be ambulatory-accessible with an exception that requires only one ambulatory-accessible water closet in toilet rooms-containing only 3 water closets.
 - The Commercial Building Code TAG recommended a code change proposal that permits multi-user toilet rooms not separated by sex. That TAG also recommends this proposal as well to maintain the same number of wheelchair and ambulatory-accessible toilet compartments that is required for multi-user toilet rooms that are separated by sex.

Appendix D

The CCAC appointed nine TAGs and their members to review the 2015 and 2018 International Model Building Codes (“I-codes”), compare them to the current Minnesota rules, which largely adopt the 2012 I-codes as amended for use in Minnesota. The members of the TAG were appointed to represent associations with experience with each of the model codes. Below is a list of TAG members and the organizations they represent.

Building Code Administration TAG

TAG representation	Member	Employer	Association
DLI staff	Greg Metz	DLI	Construction Codes and Licensing Division (CCLD)
	Paul Swett	DLI	CCLD
Code compliance	Scott Anderson	City of Minneapolis	Large Municipalities
	Arlen Madsen	City of Eagan	AMBO
	Tyler Krahn	City of Rochester	AMBO
	Lonnie Johnson	City of Hastings	AMBO
Building officials	Jerry Backlund	City of Hastings	AMBO
	Jared Ellingson	University of Minnesota	Post secondary education
Residential building industry	Mike Swanson	Brandl-Anderson Homes	Housing First
Licensed architect	David Selinsky	ISG Architects & Engineers	American Institute of Architects Minnesota (MN AIA)

Commercial Building Code TAG

TAG representation	Member	Employer	Association
DLI staff	Ryan Rehn	DLI	CCLD
	Britt McAdamis	DLI	CCLD
Municipal building official	Jerry Norman	City of Rochester	AMBO
	Steve Ubl	City of St. Paul	AMBO
Code compliance	Scott Anderson	City of Minneapolis	Large municipalities

Commercial plan review	Clayton Talbot	University of Minnesota	Post secondary education
	Dori Dufresne	University of Minnesota	Post secondary education
Fire code official	Forrest Williams	State Fire Marshal	
Licensed architect	Gerhard Guth	HGA Architects, Inc.	MNAIA
	Tara Ketchum	AIA	AIA
Building code specialist	Barry Greive	Target Corp.	Building owners
	Larry Farris	BKV Group	Design and development

Commercial Building Code and Fire Code Compatibility TAG

TAG representation	Member	Employer	Association
DLI staff	Ryan Rehn	DLI	CCLD
	Britt McAdamis	DLI	CCLD
	Dean Mau	DLI	CCLD
Municipal building official	Jerry Norman	City of Rochester	AMBO
	Steve Ubl	City of St. Paul	AMBO
Code compliance	Jim Williamette	City of St. Paul	AMBO
State Fire Marshal	Forrest Williams	State Fire Marshal	
Licensed design professional	Vince DiGiorno	KOMA Inc	MN AIA
	Scott Oswald	IGH Architects & Engineers	FMAM

Elevators and Related Devices Code TAG

TAG representation	Member	Employer	Association
DLI staff	Jim Weaver	DLI	CCLD
	Mark Sneep	DLI	CCLD
Code compliance	Mark Kenny	City of St. Paul	Large municipalities
Manufacturer representative	Travis Hegg	Otis Elevator	National Elevator Industry Incorporated
Licensed design professional	David Selinsky	ISG Architects & Engineers	MN AIA
Elevator consultant – building owners	Troy Tileras	Schumacher Elevator	Elevator Association of Minnesota
Workers	Ryan Parkos	International Union of Elevator Constructors	Labor

Existing Building Code TAG

TAG representation	Member	Employer	Association
DLI staff	Mike Bunnell	DLI	CCLD
	Wendy Rannenberg	DLI	CCLD
Code compliance	Scott Anderson	City of Minneapolis	Large municipalities
	Lisa Consie	City of Duluth	FMAM
	Greg Karow	Independent building official	AMBO
Building official	Jerry Backlund	City of Hastings	AMBO
Licensed architect	Whitney Loughheed	JLG Architects	MN AIA
Commercial plan reviewer	Clayton Talbot	University of Minnesota	Post secondary education

Accessibility Code TAG

TAG representation	Member	Employer	Association
DLI staff	Karen Gridley	DLI	CCLD
	Lee Gladitsch	DLI	CCLD
Municipal building official	Dave Matthews	City of Lakeville	AMBO
	Chris Machmer	City of Duluth	AMBO
Licensed design professionals	Haidee Tan	MN AIA	MN AIA
Accessibility specialist	David Fenley	Minnesota Council on Disability	
	Mara Peterson	Julee Quarve-Peterson, Inc	CCAC
Commercial plan reviewer	Dori Dufresne	University of Minnesota	Post secondary education

Mechanical and Fuel Gas Code TAG

TAG representation	Member	Employer	Association
DLI staff	Chris Rosival	DLI	CCLD
	Tim Manz	DLI	CCLD
Building officials	Kevin Johnson	City of St. Cloud	Mechanical inspectors
	Kirk Luthe	City of Rochester	AMBO
	Brian Stemwedel	City of Golden Valley	AMBO
Licensed design professional	Jennifer Books	Miller Dunwiddie	MN AIA
Mechanical engineers	John Smith		American Council of Engineering Companies of MN
	Lewis Johnson		ASHRAE
Trade union representative	Mario Salute	City of St. Paul	Sheet Metal Workers Local #10
Mechanical inspector	Troy Burger	University of Minnesota	Post secondary education

Structural TAG

TAG representation	Member	Employer	Association
DLI staff	Dan Kelsey	DLI	CCLD
	Wendy Rannenberg	DLI	CCLD
Municipal building official	Kyle Dimler	City of Hutchinson	AMBO
	Randy Johnson	City of Maplewood	AMBO
Licensed engineers	Craig Oswell	Oswell Engineering and Consulting, LLC	BAMN
	Christopher Kehl	Braun Intertec	ACEC, MnSEA
	John Timm	BKBM Structural & Civil Engineers	MN AIA, AIA, ACEC, MnSEA
	Mitch Okeson	Sandman Engineering	MnSEA, ACEMN
	Rueben Verdoljack	LHB	MnSEA, ACEMN
Building performance	Eric Boyd	Arcxis	Housing First