

UNIVERSITY OF MINNESOTA  
College of Continuing and  
Professional Studies  
353 Ruttan Hall  
1994 Buford Avenue  
Saint Paul, MN 55108

U.S. Postage  
PAID  
Minneapolis, MN  
BULK



We are an ICC Preferred Provider

# 65th Annual Institute for Building Officials

January 6–21, 2021



## 65th Annual Institute for Building Officials

College of Continuing and Professional Studies, University of Minnesota

[ccaps.umn.edu/buildingofficials](https://ccaps.umn.edu/buildingofficials)

January 6–21, 2021



[ccaps.umn.edu/buildingofficials](https://ccaps.umn.edu/buildingofficials)

Building • Electrical • Elevator • Engineers • Fire •  
Housing • Manufactured Home Installers • Mechanical •  
Permit Technicians • Plumbing • Residential Building Contractor



College of Continuing  
& Professional Studies

UNIVERSITY OF MINNESOTA

# 65th Annual Institute for Building Officials

## Program Session Dates

<b>Electrical</b>	January 6–7, 2021	Wednesday–Thursday	<b>Fire</b>	January 14–15, 2021	Thursday–Friday
<b>Plumbing</b>	January 6–7, 2021	Wednesday–Thursday	<b>Housing</b>	January 14–15, 2021	Thursday–Friday
<b>Building</b>	January 11–15, 2021	Monday–Friday	<b>Elevator</b>	January 20–21, 2021	Wednesday–Thursday
<b>Mechanical</b>	January 11–13, 2021	Monday–Wednesday			

## We are now an approved ICC Preferred Provider!

ICC certificate holders must obtain a specified number of ICC Preferred Provider CEUs every three years in order to maintain their certifications. Check the institute's website ([ccaps.umn.edu/buildingofficials](http://ccaps.umn.edu/buildingofficials)) to view approved courses!

## Continuing Education Credit

The University of Minnesota has applied for State of Minnesota continuing education credit for all sessions at this year's Institute. Check the conference website for complete continuing education credit information and approval status for each presentation—[ccaps.umn.edu/buildingofficials](http://ccaps.umn.edu/buildingofficials).

## Fees and Registration

The registration fee is \$85 per day through December 10, 2020, and \$100 per day starting December 11. A few specialty classes may have a higher registration fee. Special Classes include:

- **2018 International Building Code Performing Nonstructural Plan Reviews.** Wednesday, Jan 13 & Thursday, Jan 14 (2-Day Class) - \$215
- **On-Site Septic Systems.** Friday, Jan 15 - \$185

Fee includes access to presentations, handout materials, and CE credit for State of MN, WI, MPCA, or ICC. If you need to cancel your registration, a refund—minus \$30 cancellation fee—will be issued if you provide written notice by December 23, 2020. Cancellations after this date will be ineligible for a refund.

## Registration Options

Registration will take place exclusively online this year through the conference website.

NEW THIS YEAR – Paper forms are no longer available. Online options include:

- Individual credit card payment
- All other payment types (billing, check, third-party credit card)

## NEW! ONLINE CONFERENCE DETAILS

Due to continued safety concerns around COVID-19, we have decided to move the 2021 AIBO conference exclusively online. While we won't be seeing you in person, we are still thrilled to offer an exciting virtual program lineup.

## Presentations via Zoom

All AIBO presentations will be held via Zoom. To ensure you are able to view and participate in the sessions successfully, please visit the technology help page on the conference website for helpful resources. Also, once you register, conference planners will send you detailed information about joining the sessions.

## Registration Questions

612-625-2900 or [ccapsreg@umn.edu](mailto:ccapsreg@umn.edu)

Check the Institute website for additional information including continuing education credit status, program schedule, presentation descriptions, and online registration. [ccaps.umn.edu/buildingofficials](http://ccaps.umn.edu/buildingofficials)

# 65th Annual Institute for Building Officials

January 6–21, 2021

## Program Schedule

Wednesday, January 6, 2021		Thursday, January 7, 2021
<b>Electrical</b>		
7:30–8:00	<b>Registration</b>	
8:00–9:45	<b>2020 NEC Changes • Chapters 1 and 2</b> <i>Dean Hunter, Marty Kumm, Minnesota Department of Labor and Industry</i>	<b>NFPA 70E</b> <i>Trevor Turek, John Kjome, Minneapolis Electrical JATC</i>
9:45–10:00	<b>Break</b>	
10:00–11:45	<b>2020 NEC Changes • Chapters 1 and 2 (Continued)</b>	<b>NFPA 70E (Continued)</b>
11:45–12:30	<b>Lunch</b>	
12:30–2:15	<b>2020 NEC Changes • Chapters 3 to 9</b> <i>Randy Klossner, Dave Blank, City of Saint Paul</i>	<b>VFD Technology and Case Studies</b> <i>Todd Olmschenk, Malloy Electric</i>
2:15–2:30	<b>Break</b>	
2:30–4:00	<b>2020 NEC Changes • Chapters 3 to 9 (Continued)</b>	<b>Transformers</b> <i>Jeff Fecteau, Underwriters Laboratories</i>
4:00	<b>Adjourn</b>	

Wednesday, January 6, 2021		Thursday, January 7, 2021
<b>Plumbing</b>		
7:30–8:00	<b>Registration</b>	
8:00–9:45	<b>Minnesota State Plumbing Code Updates for Cross Connection Control: Water Treatment and Water Temperature Control</b> <i>Rich Davison, Soderhom Associates/Water Control Corporation</i>	<b>Ins and Outs of Plumbing Plan Review</b> <i>Brad Williams, Minnesota Department of Labor and Industry</i>
9:45–10:00	<b>Break</b>	
10:00–11:45	<b>Minnesota State Plumbing Code Updates for Cross Connection Control: Water Treatment and Water Temperature Control (Continued)</b>	<b>Top 10 Common Drain, Waste, and Vent Violations</b> <i>Brad Jensen, Minnesota Department of Labor and Industry</i>
11:45–12:30	<b>Lunch</b>	
12:30–2:15	<b>Minnesota State Plumbing Code Updates for Cross Connection Control: Water Treatment and Water Temperature Control (Continued)</b>	<b>Legionella and Building Water Risk Management</b> <i>Zachary Barnaal, Minnesota Department of Labor and Industry</i>
2:15–2:30	<b>Break</b>	
2:30–4:00	<b>Minnesota State Plumbing Code Updates for Cross Connection Control: Water Treatment and Water Temperature Control (Continued)</b>	<b>Utility Inspection Inside of the Property Line</b> <i>Kara Topper, Minnesota Department of Labor and Industry</i>
4:00	<b>Adjourn</b>	

Participants are required to stay for the entire day to receive full credit. Partial credit will not be given. Attendees should bring the new plumbing code book to both days of plumbing sessions. Code books will not be provided or available for purchase.

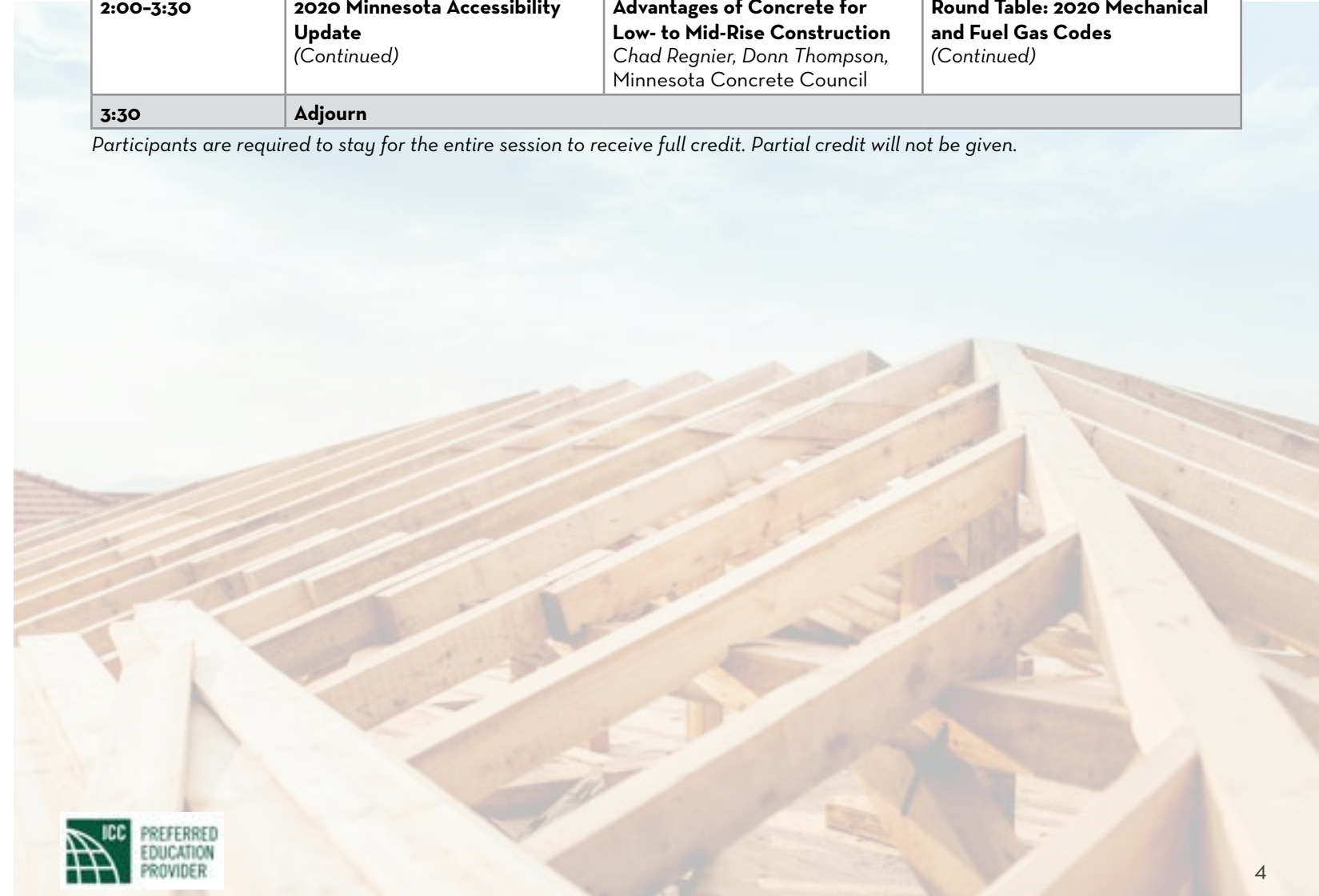


Monday, January 11, 2021				
7:15-8:00	Registration			
8:00-9:30	State of the State Scott McLellan and Scott McKown, Minnesota Department of Labor and Industry			
9:30-9:45	Break			
Building			Mechanical	
9:45-11:15	Introduction to Electronic Plan Review Emily Bolles, Jennifer Nissen, Samantha Dengerud, University of Minnesota	From Building Science to Control Layers to High-Performance Enclosures Pat Huelman, University of Minnesota	Understanding the Building Code for Special Event Centers Scott McKown, Minnesota Department of Labor and Industry	Minnesota 2020 Energy Code Don Sivigny, Minnesota Department of Labor and Industry
11:15-12:15	Lunch			
12:15-1:45	Remote Inspection Practices Thaddeus Arrowsmith, Arrow PC	From Building Science to Control Layers to High-Performance Enclosures (Continued)	OSHA Overview Kyle Casey, Minnesota Department of Labor and Industry	Changes to the Minnesota Mechanical and Fuel Gas Code Tim Manz, Minnesota Department of Labor and Industry
1:45-2:00	Break			
2:00-3:30	Remote Inspection Practices (Continued)	From Building Science to Control Layers to High-Performance Enclosures (Continued)	OSHA Overview (Continued)	Changes to the Minnesota Mechanical and Fuel Gas Code (Continued)
3:30	Adjourn			

Participants are required to stay for the entire session to receive full credit. Partial credit is not permitted.

Tuesday, January 12, 2021			
Building			Mechanical
7:15-8:00	Registration		
8:00-9:30	2020 Minnesota Accessibility Update Karen Gridley, Greg Metz, Minnesota Department of Labor and Industry	Concrete Materials Joshua Edwards, Minnesota Concrete Council	Mechanical Failures Andy Thielin, Engineering Systems, Inc
9:30-9:45	Break		
9:45-11:15	2020 Minnesota Accessibility Update (Continued)	Concrete Testing & Special Inspections Alfred Gardner, Minnesota Concrete Council	Mechanical Failures (Continued)
11:15-12:15	Lunch		MAPMO Meeting
12:15-1:45	2020 Minnesota Accessibility Update (Continued)	Concrete Slabs & New Reinforcing Technologies John Lee, Minnesota Concrete Council	Round Table: 2020 Mechanical and Fuel Gas Codes Andy Woitel, City of Minneapolis; Jared Ellingson, Aaron Havlicek, City of Saint Paul; Jerry McKenzie, University of Minnesota
1:45-2:00	Break		
2:00-3:30	2020 Minnesota Accessibility Update (Continued)	Advantages of Concrete for Low- to Mid-Rise Construction Chad Regnier, Donn Thompson, Minnesota Concrete Council	Round Table: 2020 Mechanical and Fuel Gas Codes (Continued)
3:30	Adjourn		

Participants are required to stay for the entire session to receive full credit. Partial credit will not be given.



Wednesday, January 13, 2021				
Building			Mechanical	
7:15-8:00	Registration			
8:00-9:30	DLI/CCLD Conservation Code and Mechanical Code Update <i>Greg Metz, Mike Bunnell, Chris Rosival, Minnesota Department of Labor and Industry</i>	Two-Day Course. Special Registration Required  2018 International Building Code Performing Nonstructural Plan Reviews - Day 1 <i>John Gibson, International Code Council</i>	Residential Energy, Dwelling as a System <i>Ed VonThoma, Building Knowledge Inc.</i>	Workplace Air Quality in a COVID-19 World <i>Stephen Sickle, Air Quality Engineering, Inc.</i>
9:30-9:45	Break			
9:45-11:15	DLI/CCLD Conservation Code and Mechanical Code Update <i>(Continued)</i>	2018 International Building Code Performing Nonstructural Plan Review - Day 1 <i>(Continued)</i>	Residential Energy, Dwelling as a System <i>(Continued)</i>	Commercial Kitchen Exhaust Filtration Utilizing Electrostatic Precipitators <i>Stephen Sickle, Air Quality Engineering, Inc.</i>
11:15-12:15	Lunch			
12:15-1:45	DLI/CCLD Conservation Code and Mechanical Code Update <i>(Continued)</i>	2018 International Building Code Performing Nonstructural Plan Reviews - Day 1 <i>(Continued)</i>	Key Commercial Energy Code Compliance & Review Issues <i>Russ Landry, Di Sui, Center for Environment and Energy, Minnesota</i>	IFC Chapter 24 and NFPA 33 Spray Finishing Requirements <i>Geoff Raifsnider, Global Finishing Solutions</i>
1:45-2:00	Break			
2:00-3:30	DLI/CCLD Conservation Code and Mechanical Code Update <i>(Continued)</i>	2018 International Building Code Performing Nonstructural Plan Review - Day 1 <i>(Continued)</i>	Key Commercial Energy Code Compliance & Review Issues <i>(Continued)</i>	Balanced Ventilation, Lessons Learned from the Field <i>Mike Wilson, Dakota Supply Group and Minneapolis Community and Technical College</i>
3:30	Adjourn			

Participants are required to stay for the entire session to receive full credit. Partial credit will not be given.

Thursday, January 14, 2021					
Building			Fire	Housing	
7:15-8:00	Registration				
8:00-9:30	Inspector Round Table (Commercial) <i>Kyle Klatke, City of Brooklyn Park; Greg Karow, City of Winona; Clayton Talbot, University of Minnesota; Todd Hoekstra, City of Minneapolis</i>	Two-Day Course. Special Registration Required  2018 International Building Code Performing Nonstructural Plan Reviews - Day 2 <i>John Gibson, International Code Council</i>	Deck Construction under the 2020 MN Residential Code <i>Steve Shold, Minnesota Department of Labor and Industry</i>	2020 Minnesota State Fire Code Update <i>Jacob Lindquist, Minnesota State Fire Marshals Office</i>	Legal Aspects of Code Administration <i>Linda Pieczynski, Code Attorney</i>
9:30-9:45	Break				
9:45-11:15	Inspector Round Table (Commercial) <i>(Continued)</i>	2018 International Building Code Performing Nonstructural Plan Reviews - Day 2 <i>(Continued)</i>	Deck Construction Under the 2020 MN Residential Code <i>(Continued)</i>	2020 Minnesota State Fire Code Update <i>(Continued)</i>	Unsafe Structures and Equipment <i>Linda Pieczynski, Code Attorney</i>
11:15-12:15	Lunch				
12:15-1:45	Inspector Round Table (Residential) <i>Peter Kulczyk, City of Minneapolis; John Schmidt, City of Chaska; Joel McPherson, City of Brooklyn Park; Greg Karow, City of Winona</i>	2018 International Building Code Performing Nonstructural Plan Reviews - Day 2 <i>(Continued)</i>	Deck Construction under the 2020 MN Residential Code <i>(Continued)</i>	2020 Minnesota State Fire Code Update <i>(Continued)</i>	Right of Entry <i>Linda Pieczynski, Code Attorney</i>
1:45-2:00	Break				
2:00-3:30	Inspector Round Table (Residential) <i>(Continued)</i>	2018 International Building Code Performing Nonstructural Plan Reviews - Day 2 <i>(Continued)</i>	Deck Construction under the 2020 MN Residential Code <i>(Continued)</i>	2020 Minnesota State Fire Code Update <i>(Continued)</i>	Special Issues in Enforcement <i>Linda Pieczynski, Code Attorney</i>
3:30	Adjourn				

Participants are required to stay for the entire session to receive full credit. Partial credit will not be given.

Friday, January 15, 2021					
Building		Fire	Housing		
7:15-8:00	Registration				
8:00-9:30	<b>Special Registration Required</b>	<b>Engineered Wood Products, Tall Walls, and 2020 Code</b> <i>Mark Weegman, Weyerhaeuser</i>	<b>Protecting Duct and Air Transfer Openings</b> <i>Rich Walke, Creative Technology, Inc.</i>	<b>Storage Occupancies: Part 1 NFPA Requirements</b> <i>Natalie Buckman, Summit Fire Consulting</i>	<b>Public Health Nuisance from a Public Health Prospective</b> <i>Joe Jurusik, Hennepin County</i>
	<b>On-Site Septic Systems</b> <i>David Gustafson, University of Minnesota</i>				
9:30-9:45	Break				
9:45-11:15	<b>On-Site Septic Systems (Continued)</b>	<b>Engineered Wood Products, Tall Walls, and 2020 Code (Continued)</b>	<b>Protecting Duct and Air Transfer Openings (Continued)</b>	<b>Storage Occupancies: Part 1 NFPA Requirements (Continued)</b>	<b>Mold in Homes- A Public Health Perspective</b> <i>Daniel Tranter, Minnesota Department of Health</i>
11:15-12:15	Lunch				
12:15-1:45	<b>On-Site Septic Systems (Continued)</b>	<b>Wood Frame Construction Details and 2020 MN Residential Code</b> <i>Adam Barthel, City of Minneapolis</i>	<b>Commercial Roofing Assemblies 101</b> <i>Doug Latawicz, Beacon Building Supply</i>	<b>Storage Occupancies: Part 2 MSFC and Existing Buildings</b> <i>Scott Futrell, Futrell Fire Consult + Design</i>	<b>Understanding Your Work Style (DiSC Presentation)</b> <i>John Schindell, Training Director with PeopleKeys DiSC Insights</i>
1:45-2:00	Break				
2:00-3:30	<b>On-Site Septic Systems (Continued)</b>	<b>Wood Frame Construction Details and 2020 MN Residential Code (Continued)</b>	<b>Commercial Roofing Assemblies 101 (Continued)</b>	<b>Storage Occupancies: Part 2 MSFC and Existing Buildings (Continued)</b>	<b>Understanding Your Work Style (DiSC Presentation) (Continued)</b>
3:30	Adjourn				

Participants are required to stay for the entire session to receive full credit. Partial credit will not be given.

Wednesday, January 20, 2021		Thursday, January 21, 2021
Elevator		
7:30-8:00	Registration	
8:00-9:45	<b>ASME A17.1-2016/CSA B44-16 Safety Code for Elevators &amp; Escalators</b> <i>Scott Hultstrom, Elevator Industry Work Preservation Fund</i>	<b>ASME A17.1-2016/CSA B44-16 Safety Code for Elevators &amp; Escalators</b> <i>Scott Hultstrom, Elevator Industry Work Preservation Fund</i>
9:45-10:00	Break	
10:00-11:45	<b>NFPA 70-2020 National Electric Code</b> <i>Scott Hultstrom, Elevator Industry Work Preservation Fund</i>	<b>ASME A17.1-2016/CSA B44-16 Safety Code for Elevators &amp; Escalators, Periodic Inspection &amp; Tests</b> <i>Scott Hultstrom, Elevator Industry Work Preservation Fund</i>
11:45-12:30	Lunch	
12:30-2:15	<b>ASME A90.1-2015 Safety Code for Belt Manlifts</b> <i>Eric Rogers, Elevator Industry Work Preservation Fund</i>	<b>NFPA 70-2020 National Electric Code</b> <i>Scott Hultstrom, Elevator Industry Work Preservation Fund</i>
2:15-2:30	Break	
2:30-4:00	<b>ASME A17.6-2017 Standard for Elevator Suspension, Compensation, and Governor Systems</b> <i>Scott Russell, Elevator Industry Work Preservation Fund</i>	<b>ASME A17.1-2016/CSA B44-16 Safety Code for Elevators &amp; Escalators, Alternative Test Methodologies</b> <i>Scott Russell, Elevator Industry Work Preservation Fund</i>
4:00	Adjourn	

Participants are required to stay for the entire day to receive full credit. Partial credit will not be given.



# Planning Committee

\*Chair \*\*Co-Chair

## Building Subcommittee

**Michael Grannes**, City of Eagan

**Daniel (DJ) Hennessy**, City of Maple Grove

**David Hoban**, City of Minneapolis

**Chad Payment**, State of Minnesota

**Daniel Pederson**, City of Minneapolis

**Liz Riel**, City of Minneapolis

**Andy Schreder**, Rum River Construction  
Consultants

**\*\*Ryan Smith**, City of Columbia Heights

**David Tank**, City of Saint Paul

**\*Eric Tessman**, City of Chanhassen

**Steve Thorp**, University of Minnesota

## Electrical Subcommittee

**Dean Hunter**, State of Minnesota

**Marty Kumm**, State of Minnesota

**Dan Moynihan**, City of Saint Paul

**Trevor Turek**, Minneapolis Electrical JATC

**John Williamson**, State of Minnesota

## Elevator Subcommittee

**Larry Fogleson**, State of Minnesota

**\*Patrick Johnson**, State of Minnesota

**\*\*Todd King**, State of Minnesota

**Dennis Stocke**, Van Deusen & Associates

## Fire Subcommittee

**\*\*Natalie Buckman**, Summit Companies

**\*\*Scott Segner**, Summit Companies

**Cary Smith**, City of Saint Louis Park

## Housing Subcommittee

**\*Shelonda Marie-Alves**, City of West Saint Paul

**\*\*Ben Pierson**, City of Apple Valley

**Michael Pivec**, City of Saint Louis Park

## Mechanical Subcommittee

**\*\*Tim Daugherty**, City of Minneapolis

**Aaron Havlicek**, City of Saint Paul

**Jerry McKenzie**, City of Saint Paul

**\*Andy Woitel**, City of Minneapolis

## Plumbing Subcommittee

**\*David Skallet**, City of Saint Louis Park

**\*\*Kara Topper**, State of Minnesota

## University of Minnesota Coordinators

**Kristi Fischer**, College of Continuing and  
Professional Studies

**Maddie Grover**, College of Continuing and  
Professional Studies

**Suzanne Butler**, College of Continuing and  
Professional Studies

**Erin Cargill**, College of Continuing and  
Professional Studies



The University of Minnesota shall provide equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression.

Disability accommodation will be provided upon request. This booklet is available in alternative formats. Please call Suzanne Butler at 612-625-2391 or email [ccapsconf5@umn.edu](mailto:ccapsconf5@umn.edu).

© 2020 Regents of the University of Minnesota. All rights reserved.