

Board of Building Standards

CONFERENCE MEETING AGENDA

DATE: DECEMBER 16, 2022 TIME: 10:00 AM LOCATION: TRAINING RM 1, 6606 TUSSING RD, REYNOLDSBURG, OHIO 43068 Click here to join the meeting

Call to Order

2022 Dave Denison Award Presentation – Steve Regoli

Roll Call

Consideration of Minutes <u>MIN-1</u> November 18, 2022 Meeting Minutes

Certification Hearing

CH-1 Certification Hearing

Committee Reports

- <u>CR-1</u> Certification Committee Report
- <u>CR-2</u> Education Committee Report
- <u>CR-3</u> Code Committee Report
- CR-4 Committee-of-the-Whole

Ratification of Board Recognized Accreditation Bodies, Conformity Assessment Bodies & Industry Trade Association Certification Programs

No items for consideration

Recognition of Building Department Personnel

No items for consideration

Public Comments

Old Business

New Business

- NB-1 Petition #22-04 OBC Ch 11 Kim Boulter & Jennifer Corcoran of Changing Spaces Ohio
- NB-2 Petition 22-01 2020 NEC RCO
- NB-3 2022 Year End Report

Compensate Board Members for Work Performed at their Regular Rate

Future Meeting Schedule

January 20, 2023	August 11, 2023
February 17, 2023	September 22, 2023
March 31, 2023	October 20, 2023
May 12, 2023	November 17, 2023
June 23, 2023	December 15, 2023

Motion to Adjourn

File Attachments for Item:

MIN-1 November 18, 2022 Meeting Minutes

MINUTES BOARD OF BUILDING STANDARDS CONFERENCE MEETING & CERTIFICATION HEARING November 18, 2022

The Board of Building Standards Conference Meeting was called to order at 10:00 a.m., Friday, November 18, 2022 at 6606 Tussing Road, Reynoldsburg, Ohio, Chairman Timothy Galvin presiding.

Ms. Regina Hanshaw, Executive Secretary, called the roll and reported that the following Board members were present:

Julienne Cromwell, Structural Engineer Joseph F. Denk, Jr., Mechanical Engineer Timothy P. Galvin, General Contractor, Chair John Johnson, Construction Materials Terry McCafferty, Public Member Christopher Miller, Renewable Energy Jeff Samuelson, Architect Bailey Stanbery, Homebuilder Christie Ward, Mayor Greg Warner, Fire Service Paul Yankie, Energy Conservation

The following Board members were absent:

Gregory Barney, Industrialized Units John Pavlis, Homebuilder, Vice-Chair Don Leach, Attorney Jeff Tyler, Architect

A quorum of the Board was present.

The following staff members were present:

Megan Foley, Certification Program Administrator Debbie Ohler, Construction Codes Administrator Jay Richards, Assistant Construction Codes Administrator Mike Regan, IU Plans Examiner Andrew Rowan, AAG Jacob Erwin, AAG

No visitors were present.

Chairman Galvin welcomed Mayor Christie Ward of Lockbourne to the Board.

CONSIDERATION OF THE MINUTES

Mr. McCafferty moved and Mr. Johnson seconded to approve the minutes of the October 21, 2022 meeting.

Chairman Galvin called for the ayes and nays.

Motion carried unanimously.

CERTIFICATION HEARING

Chairman Galvin opened the hearing to hear testimony on the individuals and building departments appearing on the Final Certification Hearing Agenda in the Board's Meeting Packet at the Hearing tab. Ms. Foley informed the Board that the individuals and departments appear on the hearing agenda have been reviewed by the Certification Committee and determined to meet the requirements of certification.

COMMITTEE REPORTS

CR-1 Certification Committee Report

Mr. McCafferty gave the committee's report included in the Board's Meeting packet at Tab CR-1:

The Certification Committee met in person on November 17th, 2022, at the BBS Library, 6606 Tussing Road at 10:00 AM, with the following members present: Mr. Leach, Mr. McCafferty, Ms. Cromwell, Mr. Samuelson, Mr. Stanbery, Mr. Tyler, and Mr. Warner. Board Chairman Timothy Galvin was also present. The Committee makes the following recommendations, included in the November 18th, 2022 Board Packet at Tab CR-1, for the Board's consideration.

Also present at the meeting were BBS Staff, Regina Hanshaw and Megan Foley. Guest Chris Mullins attended the meeting virtually.

Recommend the following applications	s be approved following a certification hearing effective
immediately unless otherwise noted on	the certification hearing agenda:

Cert ID:	Name	Certification Granted	
8979	Aigner, Kristopher	Electrical Safety Inspector*	
8971	Brigner, Randy	Residential Building Inspector	
6283	Caldwell, James	Residential Building Inspector	
8978	Cunningham, Robert	Electrical Safety Inspector*	
8977	Farley, Shawn	Electrical Safety Inspector*	
8895	Flynn, Scott	Building Inspector	
8970	Haines, Jeffrey	Building Inspector	
8891	Hare, Bruce	Residential Building Official Residential Building Inspector	
702	Jacobs, Larry	Building Official	
8710	Julian, John	Residential Building Inspector	
4800	Langdon, Raymond	Building Official	
8965	LeMaster, Matthew	Electrical Safety Inspector	
		Building Inspector	
8969	Lynch, Benjamin	Plumbing Inspector	
8455	McGowan, Thomas	Fire Protection Plans Examiner Trainee	
8793	Mowry, Michael	Electrical Safety Inspector*	
		Plumbing Inspector	
8949	Mullins, Christopher	Building Inspector	
	Oliver, Christopher	Electrical Safety Inspector*	
8976	Sholtis, Scott	Electrical Safety Inspector*	
2227	Spruill Jr., James C.	Fire Protection Plans Examiner	
8974	Taylor, Ted	Plumbing Inspector	
8972	Thomas, William	Residential Building Official	
6251	Thompson, Arlington	Mechanical Plans Examiner	
6041	Woidke, John	Fire Protection Plans Examiner	
		Trainee	
8514	Young, Patrick	Residential Building Official	

*Electrical Safety Inspectors must complete examinations prior to issuance of interim certification ** Denotes approval conditioned on receipt of forms or fees or other conditions.

Building Department Certifications, Manufactured Homes Inspection Agency/Inspectors None this month

Personnel Certification Applications

Recommend the following applications be denied, additional information be requested, or other action as noted:

Aigner, Kristopher - BI Cert ID:8979 Current Certifications: none Committee Recommendation: Request additional information on structural experience

Monaco, Michael - BI Trainee, RBI Trainee Cert ID: 2073 Current Certifications: None, has held RBI Interim several times over last 10 years without completing requirements. Committee Recommendation: Request for completed trainee sponsor and supervisor forms.

Sholtis, Scott - BI Cert ID: 8976 Current Certifications: None Committee Recommendation: Request additional information on structural experience

Old Business BBS 2022-002 Investigation Summary Report (Arocho) Staff report reviewed by committee.

New Business Building Department Award Discussion The committee reviewed nomination materials. The committee recommends that the City of Columbus Building Department receive the 2022 Building Department Award, with honorable mentions to Medina, Lakewood and Beachwood Building Departments.

Complaint Summary Report The committee reviewed the complaint summary report.

Mr. Leach moved and Mr. Johnson seconded to approve the recommendations of the committee.

Chairman Galvin called for the ayes and nays.

Motion carried unanimously.

CR-2 Education Committee Report

There was no Education Committee Report.

CR-3 Code Committee Report

Mr. Denk gave the committee's report included in the Board's Meeting packet at Tab CR-3:

The Code Committee met on November 17, 2022 with the following members present: Mr. Denk, Ms. Cromwell, Mr. Miller, Mr. Samuelson, Mr. Stanbery, and Mr. Tyler. Board Chairman, Tim Galvin, was also present. The committee report is included in the November 18, 2022 Board Meeting Packet at tab CR-3 for the Board's consideration.

Call to Order The meeting was called to order by Mr. Denk at 1:03 P.M.

Approval of Minutes

Mr. Stanbery made the motion to approve the minutes of the Code Committee meeting held on October 20, 2022. Mr. Miller seconded the motion. The motion passed unanimously.

Petitions

Petition #22-03 OPC Section 312.2.2 – Tim Irven of Integrity Safety Solutions

Staff explained the history of the Ohio plastic pipe testing requirements in Section 312 of the OPC and that the petitioner is asking for recognition of a product that is not part of the plumbing system, but instead is part of the testing equipment used by the plumbing contractors to test the system for leaks. The committee tabled the item and asked staff to communicate with the petitioner and

explain that the board does not typically adopt rules for equipment used to test plumbing systems and see if the petitioner understands and is willing to consider withdrawing his petition.

Petition #22-04 OBC Ch 11 – Kim Boulter & Jennifer Corcoran of Changing Spaces Ohio Ms. Boulter and Ms. Corcoran presented their unique challenges and experiences as parents of adult children that cannot use the toilet facilities as most of the population can. They have created a campaign to add adult changing tables in public buildings to allow children with similar needs and their families to participate in the same activities that most of us take for granted. They are asking the Board to adopt OBC language that requires adult changing tables in certain new buildings. The language has already been approved for inclusion in the 2024 IBC and the next edition of the ICC A117.1 standard. The committee was generally supportive of the concept but tabled the item and asked staff to work with the petitioners to clarify some of the language. Recommendations of the Residential Construction Advisory Committee

Petition #22-01 RCO Ch 44 - Tom Moore of the Ohio Electrical Coalition

Staff explained that the petition to adopt the 2020 NEC was reviewed by the RCAC last month. The RCAC recommended adopting the 2020 NEC with some amendments. Staff stated that NEMA sent a letter to the Board requesting additional opportunity to provide comment on amendments. Mr. Stanbery made the motion to refer the petition back to the RCAC for reconsideration. Mr. Miller seconded the motion. The motion passed unanimously.

Old Business

Commercial Energy Code Review

Staff shared the COMcheck software checklists that users need to complete and certify when performing an ASHRAE 90.1-2019 energy code analysis to get the building model to pass. Two of the four sections proposed to be deleted by the committee (Section 6.4.3.6 (Humidification and Dehumidification Control) and Section 6.5.6.1 (Exhaust Air Energy Recovery for Nontransient Dwelling Units)) would require users to certify that they complied with the section in order to get the software to produce a passing score. The COMcheck software allows the user to state that the section does not apply to the other two sections proposed to be deleted by the committee (Section 8.4.2 (Automatic Receptacle Control) and Section 8.4.3 (Electrical Energy Monitoring)). The committee did not wish to render the software useless and decided to not delete Sections 6.4.3.6 and 6.5.6.1. Staff provided commentary from the ASHRAE User's Guide and the IECC Commentary publications to help the committee members understand the intent of those sections. Mr. Denk would like input from Mr. Johnson and Mr. Yankie at the next meeting before ending discussions on the commercial energy code. No action was taken.

OBC Draft rule review (Chapters 17-28)

Staff presented additional draft rules of the OBC and explained that staff would go through each chapter in greater detail at a later date to make the committee aware of the significant changes that staff is recommending for each chapter. No action was taken.

New Business

Mr. Miller mentioned that renewable energy sources such as solar and wind farms are becoming more frequently installed throughout the state and the technology and developers are steps ahead of the regulations that govern. He asked if the committee would be interested in learning more. The committee members agreed that would be a good idea. Mr. Miller and staff will work to schedule a presentation for the committee in 2023.

Adjourn

Mr. Miller made the motion to adjourn at 3:27 P.M. Mr. Stanbery seconded the motion. The motion passed unanimously.

Mr. Denk moved and Mr. Samuelson seconded to approve the recommendations of the committee.

Chairman Galvin called for the ayes and nays.

Motion carried unanimously.

CR-4 Committee-of-the-Whole

Ms. Hanshaw stated that the Board received one proposal in response to Request for Proposals for certification study from ICC which is included in the packet. The proposal still needed to be reviewed before contracting can begin.

RATIFICATION OF BOARD RECOGNIZED ACCREDITATION BODIES, CONFORMITY ASSESSMENT BODIES & INDUSTRY TRADE ASSOCIATION CERTIFICATION PROGRAMS

No items for consideration.

BUILDING DEPARTMENT SUPPORT AND OVERSIGHT

RE-1 Investigation Report 22-02 (Arocho)

Ms. Hanshaw summarized the investigation report regarding Andres Arocho's plumbing inspector certification. Ms. Hanshaw stated that the Board approved Mr. Arocho's application in January and after received a complaint alleging Mr. Arocho did not have the experience listed on the application. Board staff repeatedly asked for documentation supporting the application. Mr. Arocho failed to provide the documentation, therefore staff is recommending the Board issue a Notice of Opportunity for Hearing proposing to revoke Mr. Arocho's plumbing inspector certification.

After review of investigation report #22-02, Mr. McCafferty moved to accept the staff recommendation to close the investigation. Mr. McCafferty further moved for a notice of opportunity for hearing be issued proposing to revoke Andres Arocho's plumbing inspector certification for failure to provide documentation as requested and required by the Board for verification of his work experience as listed in his plumbing inspector certification application dated January 29, 2022. Mr. Warner seconded.

Chairman Galvin called for the ayes and nays.

Motion carried unanimously.

RE-2 Complaint Summary Report

Ms. Hanshaw presented the complaint summary report included in the Board's meeting packet at Tab RE-2:

John Perram, Plumbing Inspector #1153

On October 28, 2022, a formal complaint was received from Scott Schulke, Owner of S & S Contracting LLC, of Columbia Station, Ohio indicating that Mr. Perram was a behaving unprofessionally while performing a required inspection for a residential project located at 327 W. River Road. Mr. Schulke indicated that other contractors have experienced similar behavior and are now avoiding doing work in Medina County. Though Mr. Perram works for the Medina County Health District, he does hold OBBS certifications to enforce building codes. Recommendation: Authorize investigation.

Mr. McCafferty moved and Mr. Warner seconded to accept the summary report and staff recommendations included in the Complaint Status Report and to authorize an investigation of the actions of Mr. Perram in the performance of his duties as a certified plumbing inspector.

Chairman Galvin called for the ayes and nays.

Motion carried unanimously.

Franklin Township/Columbus, Ohio

On October 27, 2022, a complaint was received from Jenn H., a concerned citizen, indicating that Ohio Building codes were not being followed for a salvage yard located at 2112 Eakin Road Columbus, Ohio, listed as KGC Freight. The complainant provided inspection citations that have been issued from 6/9/202 through 10/12/22 by the Franklin Township Fire Department. The owner

has complied with older violations but is still being required for new. The authority having jurisdiction is the Fire department and they are currently continuing to monitor the property and violations. Any corrective measures in response to the violations cited by the Fire department that require building approvals would be enforced by the Franklin Township building department. Citations appear to be related to General means of egress and fire apparatus access into the site/buildings. Other citations include OFC violations of unsafe storage/stacking/combustible material requirements, fire protection systems and access to temporary unoccupied structures on the site. The Franklin County Zoning department is also involved with evaluating potential salvage operations violations.

Recommendation: Dismiss complaint. (Additionally, Board Staff will direct correspondence to Franklin County BD for coordination of enforcement where required related to Fire Department inspections/citations.)

Mr. McCafferty moved and Mr. Johnson seconded to accept the summary report and staff recommendations included in the Complaint Status Report and dismiss the complaint with no further action as no violation of the Board's rules has been identified.

Chairman Galvin called for the ayes and nays.

Motion carried unanimously.

RE-3 2022 Building Department Award

Mr. McCafferty stated that the Board received 12 nominations for the 2022 David A Smith Building Department Award for the following departments:

Beachwood Cincinnati Columbus Hamilton County Hillsboro Kettering Lakewood Maple Heights Medina Reynoldsburg Summit County Wood County

This year we requested nominations to recognize departments that implemented innovative approaches to overcome the challenges of the pandemic as well as recruitment efforts to bring individuals into the code enforcement profession particularly from underrepresented groups.

Based on review of the nominations, the Certification Committee recommends that this year's award go to the City of Columbus.

Mr. McCafferty moved that the 2022 David A Smith Building Department Award be presented to City of Columbus. Mr. McCafferty further moved to designate Beachwood, Lakewood and City of Medina as honorable mention. Mr. Johnson seconded.

Chairman Galvin called for the ayes and nays.

Motion carried unanimously.

PUBLIC COMMENTS

There were no public comments.

OLD BUSINESS

There was no old business.

NEW BUSINESS

There was no new business.

COMPENSATE BOARD MEMBERS FOR WORK PERFORMED AT THEIR REGULAR RATE

Ms. Hanshaw reported that board members had performed committee and board work for the amount of hours, including board meetings, as follows:

Mr. Barney	0	Mr. Pavlis	0
Ms. Cromwell	16	Mr. Samuelson	16
Mr. Denk	16	Mr. Stanbery	16
Mr. Galvin	36	Mr. Tyler	8
Mr. Johnson	8	Ms. Ward	8
Mr. Leach	8	Mr. Warner	16
Mr. McCafferty	16	Mr. Yankie	18
Mr. Miller	8		

Mr. McCafferty moved and Mr. Warner seconded to compensate board members for the work performed at their regular rate.

Chairman Galvin called for the ayes and nays.

Motion carried unanimously.

FUTURE MEETINGS

December 16, 2022

2023 Proposed Meeting Dates

January 20, 2023	August 11, 2023
February 17, 2023	September 22, 2023
March 31, 2023	October 20, 2023
May 12, 2023	November 17, 2023
June 23, 2023	December 22, 2023

Ms. Hanshaw stated that based on feedback from Board members, the December 2023 meeting will be moved to December 15.

ADJOURNMENT

Mr. Samuelson moved and Mr. Miller seconded to adjourn. The Board adjourned at 10:30 a.m.

Timothy Galvin, Chairman Board of Building Standards

Regina Hanshaw, Executive Secretary Board of Building Standards

File Attachments for Item:

CH-1 Certification Hearing



Department of Commerce

BOARD OF BUILDING STANDARDS

DECEMBER 16, 2022 CERTIFICATION HEARING AGENDA

Notice is hereby given that the Board of Building Standards will convene for a certification hearing in accordance with the rules of the Board at 10:00 AM, December 16th, 2022 at the Board of Building Standards, Training Room 1, 6606 Tussing Road, Reynoldsburg, Ohio 43068.

The purpose of the hearing is to hear testimony from anyone wishing to speak to the proposed certification of building departments, local boards of building appeals, and building department personnel.

Cert ID	Name	Certification Granted	
6296	Antonelli, Leonard	Residential Mechanical Inspector	
8983	Baker, Justin	Building Inspector Mechanical Inspector	
8448	Ballard, Michael	Plumbing Inspector	
5968	Betscher, William	Electrical Plans Examiner	
8937	Brown, Kenneth	Residential Building Official	
		Electrical Safety Inspector Trainee	
		Alternative Trainee Plan approved	
8990	Budrevich, Gerald	Electrical Safety Inspector*	
		Electrical Plans Examiner	
8986	Cameron, Christopher	Residential Building Inspector	
8984	Capra, Dino	Residential Building Official**	
8931	Collins, Thomas	Residential Building Inspector	
8995	Danner, Dan	Electrical Safety Inspector*	
4807	Davis, Scott	Residential Building Inspector	
		Residential Mechanical Inspector	
8987	Duncan, David	Automatic Sprinkler System Designer	
5155	Fourman, Brett	Building Official	
8993	Gale, John	Plumbing Inspector	
	Hall, Gary	Residential Building Inspector	
8988	Hammond, David	Automatic Sprinkler System Designer	
6321	Howard, Shane	Mechanical Inspector	
8982	Jamison, Jamie	Building Inspector	
	Kommer, Guy	Electrical Safety Inspector	
812	Kurtz, Robert	Building Plans Examiner	
5630	Madden, Billy	Residential Building Official	
932	Mastrino, Christopher	Fire Protection Plans Examiner	

Timothy Galvin, Chairman



Department of Commerce

BOARD OF BUILDING STANDARDS

2066	Milliron, Marc	Residential Building Official Residential Plans Examiner Residential Building Inspector
9002	Mortensen, Kurt	Residential Building Inspector
8991	Muncy, John	Building Inspector
		Mechanical Inspector
		Electrical Safety Inspector
		Electrical Plans Examiner
		Residential Building Official
1146	Penza, John	Master Plans Examiner
	Roberts, David	Building Inspector
		Mechanical Inspector
		Residential Building Official
1426	Steppenbacker, Dale	Building Official**
8869	Velazquez Jr., Milton	Plumbing Plans Examiner**
8989	Weilinski, Brett	Fire Alarm System Designer
8998	Weiss III, Christian	Building Official
		Residential Building Official
8985	Wiley, Lyle	Residential Building Inspector
8997	Winans, Timothy	Residential Building Inspector

*Electrical Safety Inspectors must complete examinations prior to issuance of interim certification

** Denotes approval conditioned on receipt of fees or other conditions.

Building Department Certifications

City of Clayton - Modify Building Department Certification, Commercial and Residential Currently subdepartment to Montgomery County Proposing independent department, all services provided by NIC Exceptions: Plumbing, Med Gas

Huron County - Modification of Department Certification, Commercial Currently a subdepartment of Richland County Proposes independent department, with all services provided by SafeBuilt. Exceptions: Plumbing, Med Gas

Timothy Galvin, Chairman

File Attachments for Item:

CR-1 Certification Committee Report



BOARD OF BUILDING STANDARDS

CERTIFICATION COMMITTEE MEETING REPORT

The Certification Committee met in person on December 15th, 2022, at the BBS Library, 6606 Tussing Road at 10:00 AM, with the following members present: Mr. Leach, Mr. McCafferty, Ms. Cromwell, Mr. Samuelson, Mr. Stanbery, Mr. Tyler, Mr. Warner, and Ms. Ward. Board Chairman Timothy Galvin was also present. The Committee makes the following recommendations, included in the December 16th, 2022 Board Packet at Tab CR-1, for the Board's consideration.

Also present at the meeting were BBS Staff, Megan Foley and Laura Borso. Guests Marc Milliron, Charles Huber and Andrew Dickerson attended the meeting virtually.

Recommend the following applications be approved following a certification hearing effective immediately unless otherwise noted on the certification hearing agenda:

Cert ID	Name	Certification Granted	
6296	Antonelli, Leonard	Residential Mechanical Inspector	
8983	Baker, Justin	Building Inspector Mechanical Inspector	
8448	Ballard, Michael	Plumbing Inspector	
5968	Betscher, William	Electrical Plans Examiner	
8937	Brown, Kenneth	Residential Building Official	
		Electrical Safety Inspector Trainee	
		Alternative Trainee Plan approved	
8990	Budrevich, Gerald	Electrical Safety Inspector*	
		Electrical Plans Examiner	
8986	Cameron, Christopher	Residential Building Inspector	
8984	Capra, Dino	Residential Building Official**	
8931	Collins, Thomas	Residential Building Inspector	
8995	Danner, Dan	Electrical Safety Inspector*	
4807	Davis, Scott	Residential Building Inspector	
		Residential Mechanical Inspector	
8987	Duncan, David	Automatic Sprinkler System Designer	
5155	Fourman, Brett	Building Official	
8993	Gale, John	Plumbing Inspector	
	Hall, Gary	Residential Building Inspector	
8988	Hammond, David	Automatic Sprinkler System Designer	
6321	Howard, Shane	Mechanical Inspector	
8982	Jamison, Jamie	Building Inspector	
	Kommer, Guy	Electrical Safety Inspector	
812	Kurtz, Robert	Building Plans Examiner	

Timothy Galvin, Chairman

5630	Madden, Billy	Residential Building Official
932	Mastrino, Christopher	Fire Protection Plans Examiner
2066	Milliron, Marc	Residential Building Official
		Residential Plans Examiner
		Residential Building Inspector
9002	Mortensen, Kurt	Residential Building Inspector
8991	Muncy, John	Building Inspector
		Mechanical Inspector
		Electrical Safety Inspector
		Electrical Plans Examiner
		Residential Building Official
1146	Penza, John	Master Plans Examiner
	Roberts, David	Building Inspector
		Mechanical Inspector
		Residential Building Official
1426	Steppenbacker, Dale	Building Official**
8869	Velazquez Jr., Milton	Plumbing Plans Examiner**
8989	Weilinski, Brett	Fire Alarm System Designer
8998	Weiss III, Christian	Building Official
		Residential Building Official
8985	Wiley, Lyle	Residential Building Inspector
8997	Winans, Timothy	Residential Building Inspector

*Electrical Safety Inspectors must complete examinations prior to issuance of interim certification

** Denotes approval conditioned on receipt of forms or fees or other conditions.

Building Department Certifications, Manufactured Homes Inspection Agency/Inspectors

Swackhammer, Logan - MHI Committee Recommendation: Recommend approval

City of Clayton - Modify Building Department Certification, Commercial and Residential Currently subdepartment to Montgomery County Proposing independent department, all services provided by NIC Exceptions: Plumbing, Med Gas Committee Recommendation: Recommend approval

Huron County - Modification of Department Certification, Commercial Currently a subdepartment of Richland County Proposes independent department, with all services provided by SafeBuilt. Exceptions: Plumbing, Med Gas Committee Recommendation: Recommend approval

Timothy Galvin, Chairman

An Equal Opportunity Employer and Service Provider

Personnel Certification Applications

Recommend the following applications be denied, additional information be requested, or other action as noted:

Capra, Dino - RBO Certification ID: 8984 Current certifications: None Committee Recommendation: Recommend approval pending receipt of corrected forms

Downard, Dylan - BI Certification ID: Current Certifications: None Committee Recommendation: Contact applicant re: stated experience, suggest RBI, BI Trainee, invite to committee January 2023 to discuss application.

Monaco, Michael - RBI Certification ID: 2073 Current Certifications: None. Committee Recommendation: Table to January meeting: applicant is invited to discuss multiple interim certifications without completion of testing and Code Academy.

Puskas, Larry - BO Certification ID: 1201 Current Certifications: BI, ESI, RBO Committee Recommendation: Table to January meeting: applicant is invited to discuss multiple interim certifications without completion of testing.

Roberts, David - PI Certification ID: Current Certifications: None in Ohio Committee Recommendation: Request additional information on plumbing installation or inspection experience. Applicant is invited to January meeting to discuss plumbing experience.

Cozad, Tarren - RBI Certification ID: Current Certifications: None Staff Notes: Review experience, work listed not subject to inspection. Committee Recommendation: Recommend RBI Trainee: If applicant has department sponsor and supervisor, may be approved administratively.

Gelsamino, Michael - PI, ESI Certification ID: Current Certifications: None Committee Recommendation: Request additional information on plumbing and electrical installation.

Timothy Galvin, Chairman

An Equal Opportunity Employer and Service Provider

Velazquez Jr., Milton - PPE Certification ID: 8869 Current Certifications: PI, OCILB Plumbing Contractor Committee Recommendation: Approve pending receipt of forms and fees.

Steppenbacker, Dale – BO Certification ID: 1426 Current Certifications: BI, PI, ESI, PPE, RBO Committee Recommendation: Approve interim effective January 1, 2023.

Old Business

None this month

New Business

None this month.

Ohio Board of Building Standards 6606 Tussing Road Reynoldsburg, OH 43068-9009 Timothy Galvin, Chairman

614-644-2613 Fax 614 -644-3147 TTY/TDD 800-750-0750 com.ohio.gov/dico/bbs

File Attachments for Item:

CR-2 Education Committee Report



Board of Building Standards

EDUCATION COMMITTEE MEETING REPORT

The Education Committee met in person on December 15th, 2022, at the BBS Library, 6606 Tussing Road at 10:00 AM, with the following members present: Mr. McCafferty, Mr. Stanbery, Ms. Cromwell, Mr. Samuelson, Mr. Tyler, Ms. Ward, and Mr. Warner. Board Chairman Timothy Galvin was also present. The Committee makes the following recommendations, included in the December 16th, 2022 Board Packet at Tab CR-2, for the Board's consideration.

Also present at the meeting was BBS Staff Megan Foley. Guests Andrew Dickerson and Charles Huber attended the meeting virtually.

Course applications approved without alteration:

2020 National Electric Code (International Association of Electrical Inspectors SW) All certifications (6 hours)

Electrical Code Review (IAEI Northwest) All certifications (twelve sessions of two hours each)

Ohio Automatic Sprinkler and Standpipe Systems (Fire Tech Productions) All certifications (13 hours)

Ohio Diesel Fire Pump Technician (Fire Tech Productions) All Certifications (5 hours)

Ohio Fire Alarm and Detection Equipment (Fire Tech Productions) All certifications (11 hours)

Ohio Fire Pumps (Fire Tech Productions) All certifications (7.5 hours)

Ohio Household Fire Warning Equipment (Fire Tech Productions) All certifications (5 hours)

Ohio Plumbing Code Chapter 9: Vents and Venting Principles (Franklin County Public Health) All certifications (7 hours)

Exploring the Process of 2017 OBC and 2019 RCO (Molnar, David) All certifications (1 hour) Administrative Course

Exploring the Scope of 2017 OBC and 2019 RCO (Molnar, David) All certifications (1 hour) Administrative Course

Timothy Galvin, Chairman

614-644-2613 Fax 614 -644-3147 TTY/TDD 800-750-0750 com.ohio.gov/dico/bbs

An Equal Opportunity Employer and Service Provider

Course Applications Approvals with Modification, Denials, and Conditions as Noted.

2023 NEC Code Changes Part 1 (Wink Electric) All certifications (5 hours) ESIAC Recommendation: Not recommended for approval Committee Recommendation: Deny approval

2023 NEC Code Changes Part 2 (Wink Electric) All certifications (5 hours) ESIAC Recommendation: Not recommended for approval. Committee Recommendation: Deny approval

Old Business

None this month.

New Business

None this month.

Timothy Galvin, Chairman

614-644-2613 Fax 614 -644-3147 TTY/TDD 800-750-0750 com.ohio.gov/dico/bbs

An Equal Opportunity Employer and Service Provider

File Attachments for Item:

CR-3 Code Committee Report



Board of Building Standards

CODE COMMITTEE RECOMMENDATIONS

The Code Committee met on December 15, 2022 with the following members present: Mr. Denk, Ms. Cromwell, Mr. Johnson, Mr. Miller, Mr. Pavlis, Mr. Samuelson, Mr. Stanbery, Mr. Tyler, and Mr. Yankie. Board Chairman, Tim Galvin, was also present.

The committee report is included in the December 16, 2022 Board Meeting Packet at tab CR-3 for the Board's consideration.

December 15, 2022 Code Committee Meeting

Call to Order

The meeting was called to order by Mr. Denk at 1:10 P.M.

Approval of Minutes

Mr. Stanbery made the motion to approve the minutes of the Code Committee meeting held on November 17, 2022. Mr. Miller seconded the motion. The motion passed unanimously.

Petitions

Petition #22-03 OPC Section 312.2.2 - Tim Irven of Integrity Safety Solutions

Staff shared that after a discussion with the petitioner, he was appreciative of the call and the information and wrote an email withdrawing the petition.

Petition #22-04 OBC Ch 11 – Kim Boulter & Jennifer Corcoran of Changing Spaces Ohio

Staff shared revised language that intended to clarify the proposed requirements for required adult changing tables vs. nonrequired adult changing tables and added performance requirements for the table, given that no industry standard exists. Ms. Boulter and Ms. Corcoran answered questions of the committee and stated that the proposed code language meets the intent of their petition. Mr. Pavlis made the motion to approve Petition #22-04 as modified by staff and the committee and to include the revised language in the next edition of the OBC Chapter 11. Mr. Johnson seconded the motion. The motion passed unanimously.

Recommendations of the Residential Construction Advisory Committee

Petition #22-01 RCO Ch 44 – Tom Moore of the Ohio Electrical Coalition

Staff explained that the petition to adopt the 2020 NEC was reconsidered by the RCAC this week. After listening to stakeholder testimony again and reconsidering the proposed amendments to the 2020 NEC, the RCAC recommended no change to their original recommendation of adopting the 2020 NEC with amendments. Mr. Pavlis made the motion to approve the recommendation of the RCAC and to adopt the revised RCO language as soon as possible. Mr. Stanbery seconded the motion. The motion passed unanimously.

Old Business

Commercial Energy Code Review

Staff presented the draft of the OBC Chapter 13 rule to-date with two ASHRAE 90.1-2019 amendments (deleting Automatic Receptacle Control and Electrical Energy Monitoring requirements) and a summary of commercial and residential changes from the 2018 to the 2021 edition of the IECC as well as a comparison table of prescriptive changes for the most recent IECC residential provisions and reminded the committee that the IECC-R is applicable to low-rise residential buildings within the scope of the OBC. Staff asked whether the committee, for consistency, wanted the same amendments to be made to the 2021 IECC commercial provisions. The committee discussed the pros and cons of ERV technology and discussed the possibility of changing the threshold square footage for requiring the ERVs in small dwelling units. The committee decided to continue their research on the significant energy code changes. No action was taken.

Ohio Board of Building Standards 6606 Tussing Road Reynoldsburg, OH 43068-9009

An Equal Opportunity Employer and Service Provider

OBC Draft rule review (Chapters 4, 12, 29, 30, 32, & 33)

Staff presented additional draft rules of the OBC and explained that staff would go through each chapter in greater detail at a later date to make the committee aware of the significant changes that staff is recommending for each chapter. No action was taken.

New Business

Staff presented a flowchart outline of the 2021 International Existing Building Code (IEBC) and draft cross reference tables that enables users to compare language in the current 2017 OBC Chapter 34 to similar language in the IEBC. Staff explained that the ICC code development process has eliminated the existing buildings Chapter 34 in the IBC and that any language that we add to Ch 34 would all be considered Ohio language and would need to be added to our regulatory restriction count. Adopting the IEBC by reference would considerably help minimize the number of regulatory restrictions in the OBC Ch 34. The committee directed staff to continue work on the cross references and to finalize a recommendation to the committee for consideration. No action was taken.

Adjourn

Mr. Miller made the motion to adjourn at 3:45 P.M. Mr. Tyler seconded the motion. The motion passed unanimously.

File Attachments for Item:

NB-1 Petition #22-04 OBC Ch 11 - Kim Boulter & Jennifer Corcoran of Changing Spaces Ohio

BOARD OF BUILDING STANDARDS

APPLICATION
FOR
RULE CHANGE



Pursuant to section 3781.12 of the Revised Code and rules adopted by the Board of Building Standards, application is herewith submitted to adopt, amend, or annul a rule adopted by the Board pursuant to section 3718.10 of the Revised Code. 6606 Tussing Road, P.O. Box 4009 Reynoldsburg, Ohio 43068-9009 (614) 644-2613 bbs@ohio.gov www.com.state.oh.us/dico/bbs/default.aspx

	For BBS use:	
Petition #:	22-04	
Date Recy'd	Nov. 8, 2022	

Submitter:	Kim Boulter, Jennifer Corcoran	Changing Spaces Ohio	
Address:	(Contact Name) 6441 Spinnaker Dr.	(Organization/Company)	
	(Include Room	n Number, Suite, etc.)	
Lewis Ce	nter OH	43035	
	ity) (State)	(Zip)	
Telephone Nur	nber: <u>(614) 600-0973</u>	Fax Number:	
Date:	E-mail	Address: ChangingSpacesOH@gmail.co	<u>om</u>
Code Section:	Ohio Building Code, Chapter 11		
-	nation of Proposed Change (attach additiona		
We ask th	hat the Board adopt new building co	ode regarding Family/companion care	
		request that Council adopt ICC/ANSI	
-		· ·	
A117.1 in	OBC Section 1112 to include the to	echnical requirements for adult changing	
stations f	ound in the next edition of ICC/ANS	SI A117 1	
See attac	hed.		
Explanation of	Cost Impact of Proposed Code Change*:	Although building cost will be slightly higher due to install	the
		room, businesses will profit from an increased customer b	
Our state wi	Il experience increased tourism and travel once p	people with disabilities and medical conditions can stop at	rest
	the adult changing table.	· · · · · · · · · · · · · · · · · · ·	
	onal cost information as necessary to justify any stater	ment of cost increase or cost decrease.	

	Submittal (attach additional sheets if necessary):
1. Sponsor:	Changing Spaces Ohio; Kim Boulter and Jennifer Corcoran, Advocates
	Organization sponsoring or requesting the rule change (if any)
2. Rule Title:	4101:1-11-01 Accessibility, Sections 1109 and 1112
	Title of rule change
3. Purpose/ Objective:	For Ohio to adopt code regarding adult changing stations so that new buildings will install an adult changing table according to the scope and specifications of E142-21 and ICC/ANSI A117.1. This is important because, according to the ICC Adult Changing Facilities work group: "Limiting access to those who need adult changing stations decreases the community size dramatically. Nationally, the Centers for Disease Control and Prevention (CDC) reports 61 Million adults (26% of the US population) have some form of disability, with 24.1% affected in the areas of mobility, independent living, and self care. Further, each of those folks need assistance, and likely travel with additional family members. Once this population is taken out of the community, businesses are also losing a large potential of support and income. Providing our citizens more opportunities to participate in the community and patronize local establishments strengthens communities, allowing all family members to engage or travel together as one family nucleus. Currently many families have to make the choice to participate in activities outside of the home with only a portion of their family.
	We have also added section 613.2.4 <i>Directional Signage to Adult Changing Stations</i> to help orient occupants of any facility to the location of the adult changing station. This piece of equipment is not located in every family/assisted care restroom, so it is important to show exactly where in the facility users should go to locate it. Technical justification for the proposed rule change
4. Formatted	
Rule Language	See the attached proposed addition to the Ohio Building Code.
(Using Strike-out for Deleted Text and Underline for Added Text)	This petition requests to add two new sections to address adult changing stations. One is a scoping change in Chapter 11 at the end of Section 1109. Adding Section 1109.17 is adopting ICC model code language that will be included in the upcoming 2024 IBC per code change proposal E142-21 (include a copy with this petition – optional) The other is a change to the ANCI ICC A117.1 referenced standard for accessible and useable buildings and facilities. Changes to ICC A117.1 are included in Chapter 11 under Section 1112. Adding item #3 under 1112.4 Changes to ICC A117.1, chapter 6 is adopting language that will be included in the next edition of the ICC A117.1 standard.
	Use strike-out for deleted text and underline for added text
5. Notes:	 To encourage uniformity among states using model codes, it is recommended that the submitter first submit any code change directly to ICC and participate in the national model code development process. Please provide a copy of application and documentation. Use a separate form for each code change proposal.

Proposed change #1: Add new section 1109.17 to the Ohio Building Code as follows:

<u>1109.17 Adult Changing Stations.</u> Where provided, adult changing stations shall be accessible. Where required, adult changing stations shall also comply with Sections 1109.17.1 through 1109.17.4.

- **<u>1109.17.1 Where required.</u>** At least one adult changing station shall be provided in all the <u>following locations:</u>
 - 1. In assembly and mercantile occupancies, where family or assisted-use toilet or bathing rooms are required by with Section 1109.2.1.
 - 2. In Group B occupancies providing educational facilities for students above the 12th grade, where an aggregate of twelve of more male and female water closets are required to serve the classrooms and lecture halls.
 - 3. In Group E occupancies, where a room or space used for assembly purposes requires an aggregate of six or more male and female water closets for that room or space.
 4. In highway rest stops and highway service plazas.
- **1109.17.2 Room.** Adult changing stations shall be located in toilet rooms that include only one water closet and only one lavatory. Fixtures located in such rooms shall be included in determining the number of fixtures provided in an occupancy. The occupants shall have access to the required adult changing station at all times that the associated occupancy is occupied.

Exception: Adult changing stations shall be permitted to be located in family or assisted toilet rooms required in Section 1109.2.1.

- <u>1109.17.3 Prohibited location.</u> Suggestion: The accessible route from the entrance to the building to an accessible adult changing station shall not require travel through secure doors or security checkpoints.
- <u>1109.17.4 Travel distance.</u> The adult changing station shall be located on an accessible route such that a person is no more than two stories above or below the story with the adult changing station and the path of travel to such facility shall not exceed 2000 feet.

Proposed change #2: Modify section 1112.4 of the Ohio Building Code as follows:

1112.4 Changes to ICC A117.1, Chapter 6. Modify the following:

1. Change the last sentence in Section 603.3 to read: Where mirrors are located above counters that do not contain lavatories, the mirror shall be mounted with the bottom edge of the reflecting surface 35 inches (890 mm) maximum above the floor. (Remainder of section and exception to remain unchanged).

- 2. Change Section 604.10.2 to read: **Size.** The minimum area of an ambulatory accessible compartment shall be 60 inches (1525 mm) minimum in depth and a width of 35 inches (890 mm) minimum and 37 inches (940 mm) maximum.
- 3. <u>Add new section 613, in its entirety, to read as follows:</u>

SECTION 613 ADULT CHANGING STATIONS

613.1 General. Adult changing stations shall comply with Section 613.2 through 613.4.

- **613.2 Installation location.** Where provided, adult changing stations shall be installed in accordance with the locations specified in Section 613.2.1, 613.2.2 or 613.2.3.
 - **613.2.1.** Single user or family or assisted use toilet or bathing room. Where adult changing stations are provided in a toilet room with only one water closet and one lavatory, or in a family or assisted-use toilet or bathing room, the room shall provide all of the following components:
 - 1. <u>A dispenser for soap complying with Section 308.</u>
 - 2. <u>A hand towel dispenser or hand dryer complying with Table 603.6.</u>
 - 3. <u>A coat hook located in close proximity to the changing surface.</u>
 - 4. <u>A waste receptacle.</u>
 - 5. <u>Signage indicating "Adult Changing Station" provided at the entrance to the</u> room and complying with the visual character requirements in Section 703.2.
 - 6. <u>Signage indicating the weight capacity and instructions for operation of the changing station within the room.</u>
 - **613.2.2 Multi-user toilet or bathing room.** Where adult changing stations are provided in a multi-user toilet or bathing room, the adult changing station shall be located in a compartment that includes all of the following components:
 - 1. Privacy provided by walls, curtains or partitions enclosing the compartment.
 - 2. A turning space complying with Section 304.
 - 3. A lavatory complying with Section 606.
 - 4. A dispenser for soap complying with Section 308.
 - 5. A hand towel dispenser or hand dryer complying with Table 603.6.
 - 6. A coat hook in close proximity to the changing surface.
 - 7. A waste receptacle.
 - 8. Signage indicating "Adult Changing Station" provided at the entrance to the room and complying with the visual character requirements in Section 703.2.
 - 9. Signage indicating the weight capacity and instructions for operation of the changing station within the compartment.
 - **613.2.3 Room or space other than a toilet room or bathing room.** Where adult changing stations are provided in a room or space other than a toilet or bathing room and including, but not limited to, nurses' work areas, therapist work areas, or special

education classrooms, the adult changing station shall be located in a compartment or room that includes all of the following components:

- 1. Privacy provided by walls, curtains or partitions.
- 2. A turning space complying with Section 304.
- 3. A lavatory complying with Section 606 or an alcohol-based hand sanitizer dispenser.
- 4. Where a lavatory is provided in the compartment or room, provide a dispenser for soap.
- 5. Where a lavatory is provided in the compartment or room, provide a hand towel dispenser or hand dryer complying with Table 603.6.
- 6. A waste receptacle.
- 7. Signage indicating the weight capacity and instructions for operation of the changing station within the room.

613.2.4 Directional Signage to Adult Changing Stations.

Location of the adult changing station is to be identified on any directional graphic of the <u>facility</u>.

- 613.3 Room clearances. An adult changing station and its supporting structure shall not obstruct required clear floor spaces and clearances at accessible elements, maneuvering clearances at doors, or the wheelchair turning spaces.
- 613.4 Changing surface. A changing surface shall be provided and shall comply with Section 613.4.
 - **<u>613.4.1 Size.</u>** The changing surface shall be 70 inches (1778mm) minimum in length and 30 inches (762mm) minimum in width.
 - 613.4.2 Height adjustability. The changing surface height shall be adjustable at variable heights from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface.
 - **Exception:** Where the adult changing station is not required by the administrative authority, a fixed height changing surface shall be permitted and shall be mounted with the top of the changing surface 19 inches (483mm) minimum and 23 inches (584 mm) maximum above the floor.
 - 613.4.3 Clearances. Clearances complying with Sections 613.4.3.1 and 613.4.3.2 shall be provided adjacent to the changing surface, measured when the surface are in the operational position.
 - **<u>613.4.3.1 Side clearance.</u>** A 36-inch (914mm) deep minimum side clearance shall be provided along the open long side of the changing surface.

- **Exception:** In the raised position, the side rail shall be permitted to overlap the side clearance.
- 613.4.3.2 End clearance. A 36-inch (914mm) wide minimum end clearance shall be provided along the depth of one end of the changing surface. The width of the end clearance shall extend the depth of the changing surface and the side clearance.

Exceptions:

- 1. A 24-inch (610 mm) wide minimum end clearance shall be permitted where a clear floor space complying with Section 305.3 is provided within the room beyond the clearances for the changing surface.
- 2. Where installed in locations specified in Section 613.2.3, end clearances complying with Section 613.4.3.2 is not required.

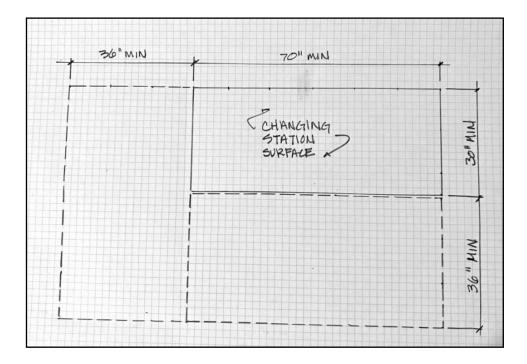


Figure 613.4.3 Changing surface and clearances

- **<u>613.4.4 Side rail.</u>** Where side rails are provided at the changing surface they shall comply with Sections 613.4.4.1 and 613.4.4.2.
 - **613.4.4.1 Size and location.** Side rails shall be a minimum of 2/3 of the length of the changing surface and shall be centered +/- 3 inch (75 mm) along the long open sides of the changing surface.

613.4.4.2 Rail positioning. Side rails shall be capable of being raised and lowered. The side rail shall be fixed in place when in the raised position. The top of the side rail shall extend 5 inches (127mm) minimum above the top of the changing surface.

The Columbus Dispatch

FAMILY

Ohio disability-rights group advocates for more public adult changing tables



<u>Danae King</u> The Columbus Dispatch

Published 6:00 a.m. ET Dec. 6, 2022

Kim Boulter has used bathroom floors, angled the back of her van away from onlookers in various parking lots and cleared off conference room tables in order to change her 9-year-old son.

Aiden has developmental disabilities that necessitate him needing protective undergarments that must be changed, and since he was about 3 years old, she has struggled to use weight-limited baby-changing tables typically found in public restrooms.

People with disabilities feel forgotten: 'The pandemic has not been very good to me': People with disabilities feel forgotten

"Laying someone on the dirty restroom floor to change them is very undignified, and it's very unsafe for the caregiver lifting that heavy person," Boulter said. "It's undignified to have your loved one exposed in public and not be afforded that same privacy that everyone else enjoys in the restroom."

She began to realize that it will become even more challenging as Aiden grows older and heavier and goes through puberty. So the Lewis Center mother decided to do something to change the circumstances.

In March, she teamed up with Dayton mother Jennifer Corcoran, and the two began advocating through a national campaign called Changing Spaces for more appropriate, safe and private changing tables for their children and other adults and children who need them.

"Jennifer and I are working hard to try to make our whole state more accessible and more inclusive for individuals with developmental disabilities and medical conditions that need this accommodation," Boulter said.

Changing Spaces Ohio was born through their partnership, and it joined chapters in 14 other states. Its goals include spreading awareness about the lack of appropriate changing facilities for older children and adults and advocating for height-adjustable adult-size changing tables in public restrooms.

No good options

In her advocacy, Boulter has reached out to places her family frequents — such as doctor's offices, libraries and parks — to educate people on the need for the tables.

She has found that many people don't realize adult changing tables are needed because bathroom habits aren't a frequent topic of discussion, even among those within the disability community.

Opinion: 'We see all of you.' People with disabilities not 'forgotten' through COVID-19

Because of the necessity of changing her son - and the fact that there are few places where she can do it - her family misses out on many activities, Boulter said. And, as she realized, there are other disabled people, older than Aiden, who have been living at home for years, isolated because they are unable to go out into their community.

"I wanted to go ahead and start this advocacy in the hopes that, as my son gets older, he'll have more possibilities to be included and to go to places in our city and our state and travel," she said.

'Invisible barriers'

Since Boulter began her work, more local places have added or have begun the process to add adult changing tables, she said.

The Franklin Park Conservatory has added one; Ohio State University plans to add two to its new hospital tower; and Orange Township agreed to add two to local parks, she said.

I Am Boundless: New health facilities poised for late summer opening in Worthington

Boulter, who also has reached out to cities and other municipalities about the issue, keeps an updated list of places that have the tables, as well as other resources, such as some table models for purchase, on changingspacescampaign.com/ohio.

She said she hopes more places would add them and eliminate what she calls 'invisible barriers' for people like her son to be included in typical daily activities.

Building it into the code

Installing one of the tables isn't difficult, Boulter said, though they do cost anywhere from \$2,800 to \$20,000, a barrier Changing Spaces Ohio is hoping to overcome by forming a nonprofit to help fund the tables.

Advocacy also is occurring to make adult changing stables standard in new buildings, Boulter said.

Ableism? Disabled parents say their differences are being used against them in Ohio family courts

Experts are working to include the requirement in the 2024 International Building Code, a model code developed every three years that is used in all 50 states, Boulter said.

Until it's standard procedure, some local organizations and businesses are being proactive.

The Franklin County Board of Developmental Disabilities learned of the need for more adult changing tables through Boulter and is in the process of installing one at its administration building, said Jed Morison, superintendent and CEO.

'You move on': As eviction drew near, mother and quadriplegic son uproot to new Bellefontaine home

"We thought, 'Let's do that, and we can serve as a model for others,'" said Morison, who noted the board has such tables at its school facility but not for public use. "We're all about community access."

'We want everybody to have access'

The Columbus Zoo and Aquarium also is focused on community access, said Karen Schenk, senior director of planning and design. In a family restroom in the zoo's Adventure Cove is a universal changing table, opened in the fall of 2020, and Schenk said she's hoping for the zoo to get more in the future because the park is so large.

The zoo began getting inquiries about adult changing rooms a few years ago, Schenk said, and set to work to figure out how to get one. It was successful due in part to the help of Ol

Brohard, a local girl advocating for the zoo to have the changing table because of her late brother's need.

Dublin woman, a self-advocate, named to county board of developmental disabilities

"You always feel badly when you discover that you're falling short on what people's needs are," Schenk said. "If we can be a place for everybody to come visit and have a good experience, that's what we want to be."

dking@dispatch.com

@DanaeKing

Places in Central Ohio with adult changing tables, according to Changing Spaces

Ohio:The Columbus Zoo and AquariumDelaware County Board of Developmental DisabilitiesFranklin Park ConservatoryNationwide Children's Hospital, 7 locations across the main campus and Dublin Close to Home Ohio State University Speech Language AAC ClinicOhio State University Optometry ClinicWe Rock the Spectrum, Columbus

Language based on code change proposal E142-21 and ICC A117.1 with Ohio amendments.

[JR; SC: E142-21 is applicable to the 2024 IBC. Should the proposal be included in the next OBC code update, the section numbering should be coordinated with the 2021 IBC. I suggest a new Section 1110.18 for scope of required adult changing stations and Section 1113 for accessibility of all adult changing stations provided.]

Proposed change #1:

Add new section 1110.18 to the 2024 Ohio Building Code as follows:

- **1110.18** Adult changing stations. Where provided, adult changing stations are to be accessible in accordance with ICC A117.1 and Section 1113. Where required, adult changing stations are required per Section 1110.18.1, to also comply with compliance with Sections 1110.18.2 through 1110.18.4 is also required.
 - **<u>1110.18.1</u>** Where required. At least one adult changing station is to be provided in all the following locations:
 - 1. In assembly and mercantile occupancies, where family or assisted-use toilet or bathing rooms are required by Section 1110.2.1.
 - 2. In Group B occupancies providing educational facilities for students above the 12th grade, where an aggregate of twelve of more male and female water closets are required to serve the classrooms and lecture halls.
 - 3. In Group E occupancies, where a room or space used for assembly purposes requires an aggregate of six or more male and female water closets for that room or space.
 - 4. In highway rest stops and highway service plazas.
 - **1110.18.2 Room.** Adult changing stations are to be located in toilet rooms that include only one water closet and only one lavatory. Fixtures located in such rooms are to be included in determining the number of fixtures provided in an occupancy. The occupants are to have access to the required adult changing station at all times that the associated occupancy is occupied.
 - **Exception:** Adult changing stations are permitted to be located in family or assisted toilet rooms required in Section 1110.2.1.
 - **1110.18.3 Prohibited location.** The accessible route from separate sex toilet or bathing rooms to an accessible adult changing station shall not require is prohibited to include travel through security checkpoints.
 - **1110.18.4 Travel distance.** The adult changing stations station is to be located on an accessible route such that a person is no more than two stories above or below the story with the adult changing station and the path of travel to such facility is less than 2000 feet.

Based on current development of the new section 613 in the 2023 A117.1 with proposed petitioner language and proposed staff amendments

Proposed change #2: Add new section 1113 to the 2024 Ohio Building Code as follows:

SECTION 11 ADULT CHANGING STATIONS

- **1113.1 General.** [Whether required or not required,] Adult changing stations are to comply with Section 1113.2 through 1113.4. [See Section 1110.18 for additional requirements applicable to required adult changing stations.]
- **1113.2 Installation location.** Required adult changing stations are to be installed in accordance with Section 1113.2.1. Where Non-required adult changing stations are to be installed in accordance with the locations specified in Section 1113.2.1, 1113.2.2 or 1113.2.3 based on the proposed location of the adult changing station.
 - **1113.2.1. Single user or family or assisted use toilet or bathing room.** Where adult changing stations are provided in a toilet room with only one water closet and one lavatory, or in a family or assisted-use toilet or bathing room, the room is to have all of the following components:
 - 1. <u>A dispenser for soap complying with Section 308 of ICC A117.1</u>.
 - 2. <u>A hand towel dispenser or hand dryer complying with Table 603.6 of ICC</u> <u>A117.1.</u>
 - 3. <u>A coat hook located in close proximity to the changing surface.</u>
 - 4. <u>A waste receptacle.</u>
 - 5. <u>Signage indicating "Adult Changing Station" provided at the entrance to</u> the room and complying with the visual character requirements in Section 703.2 of ICC A117.1.
 - 6. <u>Signage indicating the weight capacity and instructions for operation of the changing station within the room.</u>
 - **1113.2.2 Multi-user toilet or bathing room.** Where adult changing stations are provided in a multi-user toilet or bathing room, the adult changing station is to be located in a compartment that includes all of the following components:
 - 1. Privacy provided by walls, curtains or partitions enclosing the compartment.
 - 2. <u>A turning space complying with Section 304 of ICC A117.1</u>.
 - 3. <u>A lavatory complying with Section 606 of ICC A117.1</u>.

Based on current development of the new section 613 in the 2023 A117.1 with proposed petitioner language and proposed staff amendments

- 4. <u>A dispenser for soap complying with Section 308 of ICC A117.1</u>.
- 5. <u>A hand towel dispenser or hand dryer complying with Table 603.6 of ICC</u> <u>A117.1.</u>
- 6. <u>A coat hook in close proximity to the changing surface.</u>
- 7. <u>A waste receptacle.</u>
- 8. <u>Signage indicating "Adult Changing Station" provided at the entrance to the</u> room and complying with the visual character requirements in Section 703.2 <u>of ICC A117.1.</u>
- 9. <u>Signage indicating the weight capacity and instructions for operation of the changing station within the compartment.</u>
- **1113.2.3 Room or space other than a toilet room or bathing room.** Where adult changing stations are provided in a room or space other than a toilet or bathing room and including, but not limited to, nurses' work areas, therapist work areas, or special education classrooms, the adult changing station is to be located in a compartment or room that includes all of the following components:
 - 1. <u>Privacy provided by walls, curtains or partitions.</u>
 - 2. <u>A turning space complying with Section 304 of ICC A117.1</u>.
 - 3. <u>A lavatory complying with Section 606 of ICC A117.1</u> or an alcoholbased hand sanitizer dispenser.
 - 4. <u>Where a lavatory is provided in the compartment or room, provide a dispenser for soap.</u>
 - 5. Where a lavatory is provided in the compartment or room, provide a hand towel dispenser or hand dryer complying with Table 603.6 of ICC <u>A117.1.</u>
 - 6. <u>A waste receptacle.</u>
 - 7. <u>Signage indicating the weight capacity and instructions for operation of the changing station within the room.</u>
- **1113.2.4 Directional signage to adult changing stations.** Location The locations of the adult changing stations are to be identified on any directional graphic of the facility used to orient the public visitor.

1113.3 Room clearances. An adult changing station and its supporting structure shall

Based on current development of the new section 613 in the 2023 A117.1 with proposed petitioner language and proposed staff amendments

not is not permitted to obstruct the required clear floor spaces and clearances at accessible elements, maneuvering clearances at doors, or the wheelchair turning spaces.

<u>1113.4 Changing surface.</u> A changing surface is to be provided and is to comply with <u>Section 1113.4.</u>

- **1113.4.1 Size.** The changing surface is to be 70 inches (1778mm) minimum in length and 30 inches (762mm) minimum in width.
- **1113.4.2 Height adjustability.** The changing surface height is to be adjustable at variable heights from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface.
 - **Exception:** Where the adult changing station is not required by the administrative authority, a fixed height changing surface is permitted and is to be mounted with the top of the changing surface 19 inches (483mm) minimum and 23 inches (584 mm) maximum above the floor.
- **1113.4.3 Clearances.** Clearances complying with Sections **11**13.4.3.1 and **11**13.4.3.2 are to be provided adjacent to the changing surface, measured when the surface is in the operational position.
 - **1113.4.3.1 Side clearance.** A side clearance measuring 36-inch (914mm) deep wide, minimum, side clearance is to be provided along the open the entire length of at least one long side of the changing surface.
 - **Exception:** In the raised position, the side rail is permitted to overlap the side clearance.
 - **1113.4.3.2 End clearance.** A-An end clearance measuring 36-inch (914mm) wide, minimum, end clearance is to be provided along the depth of one end the entire length of at least one short side of the changing surface. The width of the end clearance is to extend the depth of the changing surface and the side clearance.

Exceptions:

- 1. A 24-inch (610 mm) wide minimum end clearance is permitted where a clear floor space complying with Section 305.3 of ICC A117.1 is provided within the room beyond the clearances for the changing surface.
- 2. Where installed in locations specified in Section 1113.2.3, end clearances complying with Section 1113.4.3.2 is not required.

[Add figure from ICC A117.1 here] Figure 613.4.3

Based on current development of the new section 613 in the 2023 A117.1 with proposed petitioner language and proposed staff amendments

<u>Changing surface and clearances</u>

- **1113.4.4 Side rail.** Where side rails are provided at the changing surface, they are to comply with Sections **11**13.4.4.1 and **11**13.4.4.2.
 - **1113.4.4.1 Size and location.** Side rails are to be a minimum of 2/3 of the length of the changing surface and are to be centered +/- 3 inch (75 mm) along the long open sides of the changing surface.
 - **1113.4.4.2 Rail positioning.** Side rails are to be capable of being raised and lowered. The side rail is to be fixed in place when in the raised position. The top of the side rail is to extend 5 inches (127mm) minimum above the top of the changing surface.

4101:1-11-01 Accessibility.

<u>Chapter 11 of the International Building Code, 2021 edition, as adopted by</u> reference and modified in the OBC Section 101.1, is further modified as follows:

(A) <u>Replace section 1102.1 with the following:</u>

- **1102.1 Design.** Buildings and facilities shall be designed and constructed to be *accessible* in accordance with this code and ICC A117.1. Any references to ICC A117.1 throughout this code are to be applied with the following amendments:
 - 1. <u>Change the last sentence in Section 603.3 of ICC A117.1, to</u> read:

Where mirrors are located above counters that do not contain lavatories, the bottom edge of the reflecting surface of the mirror is to be 35 inches (890 mm) maximum above the floor.

(B) Add new section 1102.2 to read as follows:

1102.2 Existing buildings. Existing buildings are to comply with Section 3411. Where an existing building is required to comply with the provisions of Chapter 11, any reference to ICC A117.1 is to the edition of ICC A117.1 identified in Chapter 35 for existing buildings.

(C) <u>Modify section 1104.4 Exception #1 as follows:</u> <u>Add the phrase "per *story*" after the area limit of 3,000 square feet (278.7m²) in exception #1.</u>

(D) <u>Modify section 1110.1 as follows:</u> Change the range of sections from "1110.2 through 1110.16" to "1110.2 through 1110.18."

(E) <u>Add new section 1110.17 as follows:</u> <u>1110.17 Mail receptacles. Where provided, mail receptacles are to be</u> <u>accessible in accordance with Sections 1110.17.1 or 1110.17.2.</u>

1110.17.1 Dwelling units and sleeping units. Where mail receptacles are provided for *Accessible*, *Type A* or *Type B*

dwelling and *sleeping units*, *accessible* mail receptacles are to be provided in accordance with 1110.17.1.1 or 1110.17.1.2.

- **1110.17.1.1 Centralized mail receptacles.** Where each individual mail compartment of a centralized mail receptacle is assigned to a specific *dwelling unit* or *sleeping unit*, the individual mail compartments are to comply with 1110.17.1.1.1 or 1110.17.1.1.2.
 - **<u>1110.17.1.1.1 Buildings without an elevator.</u>** In a structure without an elevator, all individual mail compartments assigned to *Accessible Units*, *Type A Units* and *Type B* Units in each location are to be accessible.
 - **1110.17.1.1.2 Buildings with an elevator.** In a structure with an elevator, fifty percent of all individual mail compartments in each location are to be *accessible*. Individual mail compartments assigned to *Accessible* and *Type A units* are to be included in the *accessible* mailboxes.
 - <u>**1110.17.1.1.3 Parcel lockers.** All parcel lockers of centralized mail receptacles are to be *accessible*.</u>
- **1110.17.1.2 Individual house-mounted and curbside mail** receptacles. Where an individual house-mounted or curbside mail receptacle serves a *dwelling unit* or *sleeping unit* that is required to be an *Accessible unit*, *Type A unit* or *Type B unit*, the mail receptacle are to be *accessible*.
- <u>1110.17.2 Other occupancies.</u> Where mail receptacles are provided in occupancies not falling within the purview of Section <u>1110.17.1</u>, at least 5 percent, but not less than one, of each type in each location, are to be *accessible*.

(F) Add new section 1110.18 as follows:

1110.18 Adult changing stations. Where provided, adult changing stations are to be accessible in accordance with ICC A117.1 and Section 1113. Where adult changing stations are required per Section 1110.18.1, compliance with Sections 1110.18.2 through 1110.18.4 is also required.

- **<u>1110.18.1 Where required.</u>** At least one adult changing station is to be provided in all the following locations:
 - 1. In assembly and mercantile occupancies, where family or assisted-use toilet or bathing rooms are required by Section <u>1110.2.1.</u>
 - 2. In Group B occupancies providing educational facilities for students above the 12th grade, where an aggregate of twelve of more male and female water closets are required to serve the classrooms and lecture halls.
 - 3. In Group E occupancies, where a room or space used for assembly purposes requires an aggregate of six or more male and female water closets for that room or space.
 - 4. In highway rest stops and highway service plazas.
- **1110.18.2 Room.** Adult changing stations are to be located in toilet rooms that include only one water closet and only one lavatory. Fixtures located in such rooms are to be included in determining the number of fixtures provided in an occupancy. The occupants are to have access to the required adult changing station at all times that the associated occupancy is occupied.
 - Exception: Adult changing stations are permitted to be located in family or assisted toilet rooms required in Section <u>1110.2.1.</u>
- **<u>1110.18.3</u> Prohibited location.** The accessible route to an accessible adult changing station is prohibited to include travel through security checkpoints.
- **1110.18.4 Travel distance.** The adult changing stations station is to be located on an accessible route such that a person is no more than two stories above or below the story with the adult changing station and the path of travel to such facility is less than 2000 feet.

(G) <u>Replace section 1111.1 with the following:</u>

1111.1 Scope. Recreational facilities located within a building that is within the scope of this code are to comply with this section. Provisions of the federal law, contained in Chapters 2 and 10 of the

2010 ADA Standards for Accessible Design, may apply to the design of recreational facilities that are outside the scope of this code.

(H) Modify section 1111.4.8 as follows:

(1) <u>Add the following note with three exceptions at the end of section</u> <u>1111.4.8.2 to read as follows:</u>

Note: Coordination is to be performed for amusement rides regulated by the Ohio department of agriculture to determine whether the ride provides at least one wheelchair space, amusement ride seat designed for transfer, or transfer device.

Exceptions:

- 1. Amusement rides that are controlled or operated by the rider are not required to comply with this section.
- 2. Amusement rides designed primarily for children, where children are assisted on and off the ride by an adult, are not required to comply with this section.
- 3. Amusement rides that do not provide seats that are builtin or mechanically fastened are not required to comply with this section.
- (2) <u>Replace section 1111.4.8.3 with the following:</u> 1111.4.8.3 Minimum number. Deleted.

(I) Add new section 1111.4.16 to read as follows:

- **1111.4.16 Golf Facilities.** Buildings and amenities serving a golf course, such as parking areas, golf cart rental stations, toilet rooms, clubhouses and other structures are to be *accessible* and be located on an *accessible route*.
 - **1111.4.16.1 Golf Courses.** Golf course elements directly associated with practicing and playing the golf course such as the tee grounds, tee boxes, putting greens, golf cart paths, practice putting greens, practice teeing grounds, and teeing stations at driving ranges are not regulated by this code.

(J) Add new section 1112.1.1 to read as follows:

1112.1.1 Signs to designate accessible parking spaces and passenger loading zones. *Accessible* parking spaces, van-*accessible* spaces and passenger loading zones required by section 1106 to be reserved for individuals with disabilities, are to be provided with a sign mounted on a fixed or movable post or otherwise affixed in a vertical position so that the sign is clearly visible to the driver of a vehicle when parked in such a location. A notice is to be affixed to this sign or posted adjacent to it that states the amount of the fine established by section 4511.99 of the Revised Code for the offense of parking a vehicle in this location if it is not legally entitled to do so.

Note: The fine established by section 4511.99 of the Revised Code is to be not less than two hundred fifty dollars nor more than five hundred dollars.

(K) Add new section 1113 to read as follows:

SECTION 1113

ADULT CHANGING STATIONS

- **<u>1113.1 General.</u>** Adult changing stations are to comply with Section <u>1113.2 through 1113.4.</u>
- 1113.2 Installation location. Required adult changing stations are to be installed in accordance with Section 1113.2.1. Nonrequired adult changing stations are to be installed in accordance with Section 1113.2.1, 1113.2.2 or 1113.2.3 based on the proposed location of the adult changing station.
 - 1113.2.1. Single user or family or assisted use toilet or bathing room. Where adult changing stations are provided in a toilet room with only one water closet and one lavatory, or in a family or assisted-use toilet or bathing room, the room is to have all of the following components:
 - 1. <u>A dispenser for soap complying with Section 308 of ICC</u> <u>A117.1.</u>
 - 2. <u>A hand towel dispenser or hand dryer complying with</u> <u>Table 603.6 of ICC A117.1.</u>
 - 3. <u>A coat hook located in close proximity to the changing surface.</u>
 - 4. <u>A waste receptacle.</u>
 - 5. <u>Signage indicating "Adult Changing Station" provided</u> <u>at the entrance to the room and complying with the visual</u> <u>character requirements in Section 703.2 of ICC A117.1.</u>
 - 6. <u>Signage indicating the weight capacity and instructions</u> for operation of the changing station within the room.

1113.2.2 Multi-user toilet or bathing room. Where adult

changing stations are provided in a multi-user toilet or bathing room, the adult changing station is to be located in a compartment that includes all of the following components:

- 1. <u>Privacy provided by walls, curtains or partitions</u> enclosing the compartment.
- 2. <u>A turning space complying with Section 304 of ICC</u> <u>A117.1.</u>
- 3. A lavatory complying with Section 606 of ICC A117.1.
- 4. <u>A dispenser for soap complying with Section 308 of ICC</u> <u>A117.1.</u>
- 5. <u>A hand towel dispenser or hand dryer complying with</u> <u>Table 603.6 of ICC A117.1.</u>
- 6. <u>A coat hook in close proximity to the changing surface.</u>
- 7. <u>A waste receptacle.</u>
- 8. <u>Signage indicating "Adult Changing Station" provided</u> <u>at the entrance to the room and complying with the visual</u> character requirements in Section 703.2 of ICC A117.1.
- 9. <u>Signage indicating the weight capacity and instructions</u> for operation of the changing station within the compartment.

1113.2.3 Room or space other than a toilet room or bathing

room. Where adult changing stations are provided in a room or space other than a toilet or bathing room and including, but not limited to, nurses' work areas, therapist work areas, or special education classrooms, the adult changing station is to be located in a compartment or room that includes all of the following components:

- 1. Privacy provided by walls, curtains or partitions.
- 2. <u>A turning space complying with Section 304 of ICC</u> <u>A117.1.</u>
- 3. <u>A lavatory complying with Section 606 of ICC A117.1</u> or an alcohol-based hand sanitizer dispenser.
- 4. <u>Where a lavatory is provided in the compartment or</u> room, provide a dispenser for soap.
- 5. Where a lavatory is provided in the compartment or room, provide a hand towel dispenser or hand dryer complying with Table 603.6 of ICC A117.1.
- 6. <u>A waste receptacle.</u>
- 7. <u>Signage indicating the weight capacity and instructions</u> for operation of the changing station within the room.

47

- **1113.2.4 Directional signage to adult changing stations.** <u>Location</u> The locations of the adult changing stations are to be identified on any directional graphic of the facility used to orient the public visitor.
- **1113.3 Room clearances.** An adult changing station and its supporting structure is not permitted to obstruct the required clear floor spaces and clearances at accessible elements, maneuvering clearances at doors, or the wheelchair turning spaces.
- **<u>1113.4 Changing surface.</u>** A changing surface is to be provided and is to comply with Section 1113.4.
 - **<u>1113.4.1 Size.</u>** The changing surface is to be 70 inches (1778mm) minimum in length and 30 inches (762mm) minimum in width.
 - 1113.4.2 Height adjustability. The changing surface height is to be adjustable at variable heights from 17 inches (432mm) minimum to 38 inches (965mm) maximum above the floor as measured to the top of the changing surface.
 - Exception: Where the adult changing station is not required, a fixed height changing surface is permitted and is to be mounted with the top of the changing surface 19 inches (483mm) minimum and 23 inches (584 mm) maximum above the floor.
 - **1113.4.3 Clearances.** Clearances complying with Sections <u>1113.4.3.1 and 1113.4.3.2 are to be provided adjacent to the</u> <u>changing surface, measured when the surface is in the</u> <u>operational position.</u>
 - **1113.4.3.1 Side clearance.** A side clearance measuring 36inch (914mm) wide, minimum, is to be provided along the entire length of at least one long side of the changing surface.
 - **Exception:** In the raised position, the side rail is permitted to overlap the side clearance.

1113.4.3.2 End clearance. An end clearance measuring 36inch (914mm) wide, minimum, is to be provided along the entire length of at least one short side of the changing surface. The end clearance is to extend the depth of the changing surface and the side clearance.

Exceptions:

- 1. A 24-inch (610 mm) wide minimum end clearance is permitted where a clear floor space complying with Section 305.3 of ICC A117.1 is provided within the room beyond the clearances for the changing surface.
- 2. Where installed in locations specified in Section <u>1113.2.3</u>, end clearances complying with Section <u>1113.4.3.2</u> is not required.
- **<u>1113.4.4 Side rail.</u>** Where side rails are provided at the changing surface, they are to comply with Sections 1113.4.4.1 and 1113.4.4.2.
 - <u>1113.4.4.1 Size and location.</u> Side rails are to be a minimum of 2/3 of the length of the changing surface and are to be centered +/- 3 inch (75 mm) along the long open sides of the changing surface.
 - **1113.4.4.2 Rail positioning.** Side rails are to be capable of being raised and lowered. The side rail is to be fixed in place when in the raised position. The top of the side rail is to extend 5 inches (127mm) minimum above the top of the changing surface.

File Attachments for Item:

NB-2 Petition 22-01 - 2020 NEC RCO

March 17, 2022

Ms. Regina Hanshaw Executive Secretary Ohio Board of Building Standards 6606 Tussing Road Reynoldsburg, OH 43068

Subject: Petition to Update NFPA 70

Dear Ms. Hanshaw:

Pursuant to Ohio Revised Code Section 3781.12, please find attached a petition from the Ohio Electrical Coalition requesting the Ohio Board of Building Standards update the 2017 edition of NFPA 70 to the 2020 edition of NFPA 70 for the Residential Code of Ohio.

Thank you for your time and consideration regarding this matter.

Sincerely,

Tom Moore

Ohio Electrical Coalition Petition to update referenced standard (NFPA 70) National Electrical Code for the Residential Code of Ohio

Table of Contents

Application for Rule Change	3
Ohio Electrical Coalition Petition	5
Ohio Chapter IAEI	10
Ohio Building Officials Association	11
National Fire Protection Association	13
Greater Cincinnati Electrical Association	14
Underwriters Laboratories	15
Independent Electrical Contractors	17
Schneider Electric	18
Siemens	19
National Electrical Manufacturers Association	20

BOARD OF BUILDING STANDARDS

APPLICATION FOR RULE CHANGE

Pursuant to section 3781.12 of the Revised Code and rules adopted by the Board of Building Standards, application is herewith

submitted to adopt, amend, or annul a rule adopted by the Board pursuant to section

3718.10 of the Revised Code.



6606 Tussing Road, P.O. Box 4009 Reynoldsburg, Ohio 43068-9009 (614) 644-2613 bbs@ohio.gov www.com.state.oh.us/dico/bbs/default.aspx

-		
For	BBS	use.

Petition #:

Date Recv'd:

Submitter: Ohio Electrical Coalition Thomas E Moore (Organization/Company) (Contact Name) 3462 Brunk Road Address: (Include Room Number, Suite, etc.) Akron Ohio 44312 (City) (State) (Zip) **Telephone Number:** <u>330-289-7932</u> Fax Number: _ Date: March 17, 2022 tmoore1767@gmail.com E-mail Address: Code Section: Referenced Standard NFPA 70: 4101:8-34 & 4101:8-44-01 General Explanation of Proposed Change (attach additional sheets if necessary): Please see attachment Explanation of Cost Impact of Proposed Code Change*: _____Please see attachment *Attach additional cost information as necessary to justify any statement of cost increase or cost decrease.

Form: 1536

Information on Submittal (attach additional sheets if necessary):		
1. Sponsor:		
	Ohio Electrical Coalition	
	Organization sponsoring or requesting the rule change (if any)	
2. Rule Title:	4101:8-34 Electrical: 3401.1 Electrical and 4101:8-44-01	
	Referenced Standards 70-20 National Electrical Code Title of rule change	
3. Purpose/ Objective:	Please see attachment	
4. Formatted	Technical justification for the proposed rule change	
4. For matteu Rule Language	Please see attachment	
(Using Strike-out for Deleted Text and Underline for Added Text)		
	Use strike-out for deleted text and underline for added text	
5. Notes:	 To encourage uniformity among states using model codes, it is recommended that the submitter first submit any code change directly to ICC and participate in the national model code development process. Please provide a copy of application and documentation. Use a separate form for each code change proposal. 	

March 16, 2022

Ohio Board of Building Standards Regina Hanshaw, Executive Secretary 6606 Tussing Road Reynoldsburg, Ohio

Re: Petition to update referenced standard (NFPA 70) National Electrical Code 2017 edition to the 2020 edition

Rule Titles:

4101:8-34 Electrical: **3401.1 Electrical.** The provisions of the National Electrical Code, NFPA 70, shall be incorporated herein and shall govern the installation, testing and operation of the electrical systems of one-, two- and three-family dwellings and their accessory structures. <u>except for the following:</u>

1. Section 210.8(A)(2) shall be modified to read: Garages, and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use except for the receptacle located to serve a garage door opener when the device is a single receptacle and located in the ceiling.

2. Section 210.8(A)(5) shall be modified to read: Unfinished portions or areas of the basement not intended as habitable

rooms.

Exceptions:

1. A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground-fault circuit-interrupter protection.

2. A single receptacle located to serve a sump pump shall not be required to have ground-fault circuitinterrupter protection when there is a duplex receptacle with ground-fault circuit-interrupter protection within six (6) feet of the sump pump.

3. Section 210.8(D) shall be deleted.

4. Section 210.12(A) shall be modified to read:

All 120-volt single-phase, 15- and 20-ampere branch circuits supplying outlets or devices installed in dwelling unit kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sun rooms, recreational rooms, closets, hallways, laundry rooms, or similar rooms or areas shall be protected by any of the means described in 210.12(A)(1) through (6):

(l) A listed combination-type arc-fault circuit interrupter, installed to provide protection of the entire branch circuit.

(2) A listed branch/feeder-type AFCI installed at the origin of the branch-circuit in combination with a listed outlet branch-circuit type arc-fault circuit interrupter installed at the first outlet box on the branch circuit. The first outlet box in the branch circuit shall be marked to indicate that it is the first outlet of the circuit.

(3) A listed supplemental arc protection circuit breaker installed at the origin of the branch circuit in combination with a listed outlet branch-circuit type arc-fault circuit interrupter installed at the first outlet box on the branch circuit where all of the following conditions are met:

a. The branch-circuit wiring shall be continuous from the branch-circuit overcurrent device to the outlet branch-circuit arc-fault circuit interrupter.

b. The maximum length of the branch-circuit wiring from the branch-circuit overcurrent device to the first outlet shall not exceed 15.2 m (50 ft.) for a 14 AWG conductor or 21.3 m (70 ft.) for a 12 AWG conductor.

c. The first outlet box in the branch circuit shall be marked to indicate that it is the first outlet of the circuit.

(4) A listed outlet branch-circuit type arc-fault circuit interrupter installed at the first outlet on the branch circuit in combination with a listed branch-circuit overcurrent protective device where all of the following conditions are met:

a. The branch-circuit wiring shall be continuous from the branch-circuit overcurrent device to the outlet branch-circuit arc-fault circuit interrupter.

b. The maximum length of the branch-circuit wiring from the branch-circuit overcurrent device to the first outlet shall not exceed 15.2 m (50 ft.) for a 14 AWG conductor or 21.3 m (70 ft.) for a 12 AWG conductor.

c. The first outlet box in the branch circuit shall be marked to indicate that it is the first outlet of the circuit.

d. The combination of the branch-circuit overcurrent device and outlet branch-circuit AFCI shall be identified as meeting the requirements for a system combination-type AFCI and shall be listed as such.

(5) If RMC, IMC, EMT, Type MC, or steel-armored Type AC cables meeting the requirements of 250.118, metal wireways, metal auxiliary gutters, and metal outlet and junction boxes are installed for the portion of the branch circuit between the branch-circuit overcurrent device and the first outlet, it shall be permitted to install a listed outlet branch-circuit type AFCI at the first outlet to provide protection for the remaining portion of the branch circuit.

(6) Where a listed metal or nonmetallic conduit or tubing or Type MC cable is encased in not less than 50 mm (2 in.) of concrete for the portion of the branch circuit between the branch-circuit overcurrent device and the first outlet, it shall be permitted to install a listed outlet branch-circuit type AFCI at the first outlet to provide protection for the remaining portion of the branch circuit. Exception No 1: Where an individual branch circuit to a fire alarm system installed in accordance with 760.41(B) or 760.121(B) is installed in RMC, IMC, EMT, or steel-sheathed cable, Type AC or Type MC, meeting the requirements of 250.118, with metal outlet and junction boxes, AFCI protection shall be permitted to be omitted.

Exception No. 2: Branch circuits supplying receptacle outlets installed to serve only the kitchen countertop surfaces shall be permitted to be installed without arc-fault circuit interrupter protection.

4101:8-44-01 Referenced standards: 70-17 National Electrical Code 70-20 National Electrical Code

Submitter: Thomas E. Moore, Ohio Electrical Coalition, 3462 Brunk Rd, Akron, Ohio 44312, 330-289-7932, tmoore1767@aol.com

Sponsor: Ohio Electrical Coalition

Reason and Technical Justification for Rule Change:

Pursuant to O.R.C. 3781.12, the Ohio Electrical Coalition respectfully requests the Ohio Board of Building Standards update the 2017 edition of NFPA 70 with the 2020 edition of NFPA 70 for one-two- and three-family dwellings.

The purpose of NFPA 70 is simple and straightforward; to protect persons and property from hazards arising from the use of electricity. For over 125 years the National Electrical Code has codified requirements that establish a minimum level of safety for electrical systems installed in homes, businesses and elsewhere. As the use of electrically powered equipment has increased throughout our history, so has the need to develop requirements that allow new technologies to be safely implemented into workplaces and homes.

NFPA 70 is created through an exhaustive stakeholder consensus process that considers input from a balance of interests and reflects the collective knowledge of qualified electricians, electrical inspectors, manufacturers, testing lab personnel, and other professionals that review and act on input from the public with the singular focus of ensuring safe electrical installations.

The OBBS has taken an important step in public safety with moving forward with the adoption process for the 2020 NEC for all structures regulated by the Ohio Building, Mechanical and Plumbing Codes, which includes 4-family and larger multifamily dwellings. Ohio citizens are highly dependent on reliable and safe electrical power where they work, where they recreate and most importantly, where they live. Adoption of the 20120 NFPA 70 for the Residential Code of Ohio will ensure the same level of protection is provided, regardless of the size of the dwelling unit.

In addition to a request to update to the 2020 edition of NFPA 70, this petition is also requesting deletion of the Ohio specific amendments to NFPA 70 sections 210.8(A)(2) & (A)(5), 210.8(D) and 210.12(A). The potential for a shock hazard is not simply reduced by the fact that the receptacle is in a dedicated space. From a hazard-based safety-engineering standpoint, you would only want to defeat or eliminate a primary safety device if the hazard could be greater if the safety device was not defeated. One would have to make this case with a sump pump, garage door opener or dishwasher if the GFCI were to be eliminated from that location.

Published data from the U.S. Consumer Product Safety Commission show a decreasing trend in the number of electrocutions in the United States since the introduction of GFCI devices. The US Consumer Product Safety Commission (US CPSC) conducted a cost/benefit analysis of a proposal for additional GFCIs in new residential installations.¹ As reflected in this study, the expected benefits would be a reduction of societal costs associated with residential electrocutions, which translates to the benefit of this life-saving technology being greater than the initial upfront cost.

The original call for enhanced branch circuit and cord protection came from the CPSC based on fires attributed to electrical origin. The manufacturers, in concert with Underwriters Laboratories, worked to develop a product and a product standard to address the CPSC concern. The AFCI was the product developed as the means to mitigate the types of circuit malfunctions that circuit breakers and fuses are not designed to protect against. Modern technology has provided us with the opportunity to incorporate this next generation of circuit protection devices into homes and other occupancies. These devices advance the cause of electrical safety by providing early reaction and circuit interruption where wiring systems concealed within walls and ceilings are damaged. Requirements for AFCIs have been included in NFPA 70 since the 1999 edition. These devices also respond to damaged appliance cords, a known cause of home fires. The current amendment removes these requirements from receptacles serving kitchen countertops, which lessen the level of protection provided for the public.

The US Fire Administration published a report² in May 2019 that shows a decline in the number of fires attributed to electrical malfunction. Data for the 10-year period of 2008 to 2017 reflected a 14% decrease in fires, 19% decrease in deaths, 34% decrease in injuries and 35% decrease in dollar loss.

Following are some key changes that impact electrical safety:

Keeping the regulatory document current with industry trends in new technology and delivery and generation of electric power.

- 230.67. New requirement covering surge protection for dwelling units aligns with the everchanging electrical industry landscape to protect against surges that can damage sensitive electronics and systems found in most modern appliances, safety devices and equipment used in dwellings. With the expanded use of distributed energy resources, these can also contribute introduction of surges into the system.
- 230.85. New requirement for emergency disconnecting means at one- and two-family dwelling

units to ensure first responders can safely remove power from an involved structure.

- Article 242 Overvoltage Protection new article addresses installation requirements for Surge-Protective Devices (SPD) and Surge Arrestors used to achieve this protection.
- Article 625 Electric Vehicle Power Transfer System requirements for electric vehicles and supply equipment to encompass bidirectional current exchange.
- Updates to Articles 690 Solar Photovoltaic (PV) Systems, 706 Energy Storage Systems, Article 710 Standalone Systems and Article 712 Direct-Current Micro-grids continue to support new and expanding technologies, which has immeasurable societal benefits at both a micro- and macro-economic perspective.

Examples of new and revised requirements that may provide relief on the overall cost of the electrical system.

- 210.11(C)(3) & (4). Revision specifies which receptacle outlets are required to be on the required 20 ampere circuit for bathrooms and garages which provides more flexibility with circuiting in those areas.
- Article 220 Branch-Circuit, Feeder, and Service Load Calculations Several revisions to this article, including the modernization of the tables currently in use for calculations, which has been extensively revised to reflect improvements in energy efficiency and may grant substantial relief for sizing of service and feeder distribution systems.
- 225.30(B). Revised to permit multiple smaller feeders, with smaller conductors and lower rated OCPD's to allow more flexibility with the design.

Protecting electrical workers while maintaining or servicing electrical or electrically powered equipment.

- 230.62(C). New requirement that provides additional shock protection with barriers to be placed in service equipment to prevent inadvertent contact.
- 230.71(B). Requirements for service disconnecting means is revised by eliminating the risk of the inability to establish an electrically safe work condition for justified energized work that must be performed within service equipment enclosures with more than one service disconnect.

Protecting people from electric shock in homes, workplaces and places of recreation.

- First introduced in the early 1970s, their continued expansion to cover areas in homes and workplaces where occupants are particularly susceptible to electric shock accidents can be directly attributed to reductions in electrocutions and electric shock accidents.
- Revision to add floating buildings to the scope of Article 555 and revised to provide greater flexibility with the application of ground-fault protection requirements.

These examples illustrate the importance of regularly updating NFPA 70 in order to recognize new methods and installation practices for safely distributing electrical power, safe interaction with electrical systems, to address safety concerns not previously covered in the referenced standard and to put new requirements in place that facilitate the safe implementation of new technology covering the generation, distribution and management of electrical power. This is the work performed during the revision process by the volunteer industry subject matter experts who serve on the NFPA technical committees. Updating to the 2020 NFPA 70 is a vitally important and proactive step for consumer protection and for the safe advancement of new electrical system technology.

The cost impact of complying with the 2020 edition of NFPA 70 will vary depending on the design approach and should be considered holistically by considering the safety benefit alongside of the cost. Additionally, there are numerous types of materials, equipment and device options in the electrical marketplace, and multiple methods for achieving code compliance. The coalition is prepared to submit a cost impact analysis if petition is approved to begin the review and rulemaking process.

Updating NFPA 70 makes sure communities continue to provide an acceptable level of public safety while supporting the latest technological advances, which is core to the mission of the OBBS.

This petition is submitted on behalf of the Ohio Electrical Coalition, which is comprised of a broad cross section of industry stakeholders committed to moving electrical safety forward in the State of Ohio through timely adoption of the 2020 edition of NFPA 70. Ohio citizens expect their electrical system will be safe from fire and shock hazards. This code update will ensure that Ohio remains at the forefront of technological developments in the electrical industry and ensure that electrical systems are safe for homeowners and citizens across Ohio, the most important stakeholder in the adoption and enforcement of construction safety codes.

The coalition members look forward to supporting the OBBS with moving forward with revising and updating Ohio electrical safety requirements that will enable us to be competitive and enhance the safety of our workforce, communities, and families.

Sincerely,

Ohio Electrical Coalition

<u>¹Consumer Product Safety Commission – Economic Considerations – GFCIs</u> <u>²US Fire Administration – Residential Building Electrical Malfunction Fire Trends (2008-2017)</u>



President Karl Frederick Central Division

First Vice-President Zach Jenkins Northwest Division

Second Vice-President William Buetler Western Reserve

Immediate Past-President Michael Koken Eastern Division

Secretary/Treasurer Lorenzo Adam Southwest Division

Inspector Member Pete Baldauf Southwest Division

Inspector Member Jeff Affolter Akron Division

Western Section Chapter Representative Jeff Grassi Western Reserve Division

Education Chairman Gaylord Poe Southwest Division

Historian Armand Lenarz Akron Division

"Let the Code Decide" OHIO CHAPTER International Association of Electrical Inspectors

March 16, 2022

Ohio Board of Building Standards 6606 Tussing Rd Reynoldsburg, OH 43068

Subject: 2020 NFPA 70, National Electrical Code (NEC) Update

The Ohio Chapter IAEI strongly encourages the Ohio Board of Building Standards to update its current NFPA 70, from the 2017 edition to the 2020 edition for Residential Code of Ohio regulated occupancies and supports the petition submitted on behalf of the Ohio Electrical Code Coalition. The OBBS has proven time and time again that they are at the forefront of public safety by adopting codes that ensure the health, safety and security of the occupants or users of buildings.

The NEC provides for the practical safeguarding of persons and property from the hazards arising from the use of electricity.

In addition to new requirements to address advancing alternative technologies and improved safety for the electrical worker, the 2020 NEC also expands important safety requirements for dwelling unit occupancies. While expansion of important safety requirements may add cost, the 2020 NEC also includes requirements that provide economic relief.

The Ohio Chapter IAEI Board of Directors respectfully requests the OBBS move forward with updating the NFPA 70, NEC, to the 2020 edition. Embracing these requirements by updating to the 2020 NEC is an important step forward with public safety.

Respectfully,

Karl J Frederick

Karl Frederick, President On behalf of the Board Members of the Ohio Chapter IAEI







PO BOX 1506, COLUMBUS OH 43216-1506 oboa.clubexpress.com

March 15, 2022

CHAPTER MEMBERS BOCONEO	Ohio Board of Building Standards PO Box 4009 Reynoldsburg OH 43068-9009
COCOA	SUBJECT: Petition to Amend Residential Code of Ohio to Adopt 2020 Edition
FBOA	National Electrical Code
MVBOC	Ohio Building Officials' Association Resolution 2021-4 (attached) adopted by the
NCOBOA	general membership November 8, 2021 supports a petition for the Residential Code of Ohio to adopt the 2020 Edition National Fire Protection Association
NWOBOA	standard 70, National Electrical Code.
OCPT	Sincerely,
ODPCA	
SWOBOA	Robut G. Efst
SWOFSC	Robert Eifert President
	Atch a/s

AN ASSOCIATION FOR ADVANCEMENT OF THE CODE COMPLIANCE INDUSTRY



OHIO BUILDING OFFICIALS ASSOCIATION

RESOLUTION 2021-4

of the



ANNUAL MEETING OF THE MEMBERS

concerning

A CODE CHANGE PETITION IMPLORING THE OHIO BOARD OF BUILDING STANDARDS TO ADOPT THE 2020 NFPA 70 (NATIONAL ELECTRICAL CODE) AS THE REFERENCE STANDARD FOR RESIDENTIAL CONSTRUCTION

WHEREAS the Board of Building Standards formulates and adopts rules governing the erection, construction, repair, and alteration of buildings known as the Ohio Building Code, Ohio Mechanical Code, Ohio Plumbing Code, and the Residential Code of Ohio; and

WHEREAS on September 2, 2021, the Board of Building Standards issued a notice of its intent to amend the Ohio Administrative Code to update rules for the Ohio Building, Mechanical, and Plumbing Codes to reference the the 2020 edition of NFPA 70 (National Electrical Code); and

WHEREAS the reference standard for Residential Code of Ohio would remain the 2017 edition of NFPA 70 (National Electrical Code); and

WHEREAS many electrical contractors and designers work on both Residential and Non-Residential projects requiring them to learn, maintain and work from two standards which would cause unnecessary burden as well as additional expense; and

WHEREAS Ohio Building Officials Association members who are charged with enforcement of Ohio building codes, recognize the need for consistent enforcement of a single reference standard for effective plan approval and inspection of electrical work on both Residential and Non-Residential projects.

BE IT RESOLVED that the members of this organization here assembled on Monday November 8, 2021 do hereby support a code change petition imploring the Ohio Board of Building Standards to adopt the 2020 NFPA 70 (National Electrical Code) as the reference standard for the Residential Code of Ohio.

11/08//2021

NATIONAL FIRE PROTECTION ASSOCIATION



The leading information and knowledge resource on fire, electrical and related hazards

March 14, 2022

Ms. Regina Hanshaw Executive Secretary Ohio Board of Building Standards 6606 Tussing Rd Reynoldsburg, OH 43068

Dear Ms. Hanshaw:

NFPA 70 focuses on the proper installation of electrical systems and equipment to protect people and property from hazards arising from the use of electricity. As electrical equipment has become more complex and widespread, the NFPA 70 has adapted to meet new challenges. Revised every three years to allow for new technologies and improved installation safety practices, NFPA 70 is a ready-to-use, comprehensive standard suitable for adoption.

NFPA 70 is developed and produced by the National Fire Protection Association (NFPA), an independent, not-for-profit standards developing organization and advocate of fire, building, and electrical safety. Since 1911, NFPA has been the sponsor of NFPA 70 and the requirements of this standard have continued to evolve with America's reliance on reliable and safe electrical energy. NFPA 70 is developed through an open, transparent, and balanced process accredited by the American National Standards Institute.

The NFPA 70 community has worked diligently to make sure safe installation rules are in place for the continuously changing electrical industry landscape. The 2020 edition of NFPA 70 has been issued by the NFPA Standards Council.

NFPA supports the petition filed on behalf of the Ohio Electrical Coalition, to update the 2017 edition of NFPA 70 to the 2020 edition. We encourage the Ohio Board of Building Standards to move forward by providing its citizens with the appropriate level of safety outlined in the 2010 edition of NFPA.

Sincerely,

erelandarios

Meredith Hawes Regional Director, North Central Region National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169



March 16, 2022

Regina Hanshaw, Executive Secretary **Board of Building Standards** 6606 Tussing Rd P. O. Box 4009 Reynoldsburg, OH 43068-9009

Re: Greater Cincinnati Electrical Association (GCEA) support for timely adoption of the entire "2020 NEC"

Dear Regina,

I am writing on behalf of the GCEA. The GCEA is an association that represents the interest of our members who are electrical industry companies in the greater Cincinnati area. Our mission is to provide "Quality electric service" to our community. We pursue this mission by providing on-going training, by stressing safety, and by providing a venue for communications across the different electrical company divisions necessary for a complete electrical community. GCEA membership includes electrical contractors, electrical material distributors, manufacturers, manufacturer reps, utilities, and electrical safety inspectors.

The GCEA's Board of Trustees would like to state it is in full support of the Ohio Code Coalition's petition in regards to the timely adoption of the "2020 National Electrical Code" (2020 NEC) for all electrical installations including 1, 2, and 3 - family dwellings.

Typically our members are working daily on multiple jobs in various stages of completion and having two versions of the NEC active at one time is awkward and causes an additional concern on each project. The GCEA strongly supports the alleviation of this burden on our industry.

Sincerely

Relif

Terrence J. Eiber

Executive Director, GCEA P.O. Box 58183 Cincinnati, OH 45258 513-922-6501



March 16, 2022

Ohio Board of Building Standards Regina Hanshaw, Executive Secretary 6606 Tussing Road Reynoldsburg, OH 43068

Subject: Support for Petition to update the referenced National Electrical Code to the 2020 edition

Dear Secretary Hanshaw,

We at Underwriters Laboratories (UL) are deeply committed to advancing the safety of the citizens of the state of Ohio. UL believes NFPA 70, the National Electrical Code© (NEC©) serves as an important tool in advancing that safety. Adoption of the most current edition of the code, in this case the 2020 NEC© by the Ohio Board of Building Standards is critical to keeping pace with safety science. Pursuant to the Ohio Revised Code 3781.12, I am writing on behalf of UL to request that the State of Ohio move forward with the adoption of 2020 NFPA 70 NEC as requested in the petition filed by the Ohio Electrical Coalition.

UL is driven by our global safety Mission- promoting safe living and working environments by the application of safety science and hazard-based safety engineering. Founded in 1894, UL has earned a reputation as a global leader in product safety standards development, testing and certification, especially in the areas of fire and electrical safety, the basis of UL's founding. UL therefore works closely with the electrical installation community to coordinate product safety standardization/certification with the installation safety practice to achieve the most desirable safety outcomes.

In conclusion, UL urges the Ohio Board of Building Standards to ensure the safety of its citizens by adopting the latest electrical safety requirements as represented by the 2020 edition of the NEC©.

Should you have any questions, please contact our representative for Ohio, Tom Lichtenstein, at <u>thomar.r.lichtenstein@ul.com</u> or by phone at (847) 664-2160.

Sincerely,

Oebrah Jennings-Course

Deborah Jennings-Conner VP, Regulatory Services

UL LLC 12 Laboratory Drive

Underwriters Laboratories Inc. 333 Pfingsten Road, Northbrook, IL 60062-2096 USA T: 847.272.8800 / F: 847.272.8129 / W: UL.com



PO Box 13995 Research Triangle Park, NC 27709 T: (919) 549-1603 M: (919) 308-4888 W: ul.com

cc: Tom Lichtenstein Senior Regulatory Engineer



Independent Electrical Contractors of Greater Cincinnati 586 King's Run Dr. Cincinnati, OH 45232 Ph 513-542-0400 www.iec-cincy.com

March 10, 2022

Regina Henshaw, Executive Secretary Ohio Board of Building Standards 6606 Tussing Rd. Reynoldsburg, OH 43068-9009

RE: 2020 National Electrical Code Adoption

Dear Regina,

The Independent Electrical Contractors of Greater Cincinnati request a rule change to update the 2017 edition of NFPA 70 with the 2020 edition of NFPA 70 in accordance with ORC 3781.12.

The 2020 NEC provides numerous changes that will enhance public safety and advance new methods, materials and installation practices. It also includes important changes to rules used for certain calculations which modernize and acknowledge improvements in energy efficiency which may account for and contribute savings in the overall cost of an electrical system.

Living in a strong, technology-driven consumer world that regularly sees advancements, in said technologies, warrants regular and up-to-date standards for implementation to help ensure the safety of the end-user and their property. Updating to the 2020 NEC provides a critical and necessary step towards continued consumer health preservation and evolution of safely implementing technologies in electrical systems.

The NEC is the most widely adopted consensus Code in the world. Consensus is a key word when developing the document. The NFPA provides the document rules and governing procedures that stipulate all NEC changes have had public input and public review. Technical committee membership classifications are used to maintain balanced Code Making Panels that represent their Principal interest to ensure changes are necessary and in the best interest of public safety.

I urge the state of Ohio to adopt the 2020 NEC without delay or modifications to the document.

Sincerely,

Matthew Hittinger

Matthew Hittinger Executive Director Independent Electrical Contractors of Greater Cincinnati

March 11, 2022



Ms. Regina Hanshaw Executive Secretary Ohio Board of Building Standards 6606 Tussing Road Reynoldsburg, OH 43068

Re: Schneider Electric Supports the Ohio Electrical Coalition Petition to Adopt the 2020 Edition of the National Electrical Code for the Residential Code of Ohio.

Dear Ms. Hanshaw:

I am writing to inform you of Schneider Electric's support of the Ohio Electrical Coalition Petition to Adopt the 2020 Edition of the National Electrical Code for the Residential Code of Ohio.

As a global specialist in energy management, Schneider Electric offers integrated solutions across multiple market segments, including leadership positions in Utilities & Infrastructures, Industrial & Machine manufacturers, Non-residential buildings, Data Centers & Networks. Focused on making energy safe, reliable, efficient, productive and green, Schneider Electric 750 plus Ohio employees are located in various offices and four manufacturing facilities across the state. We support thousands of additional direct and indirect jobs in Ohio by working with over 400 vendors and suppliers located in the state.

Schneider Electric continues to advocate for timely adoption of the National Electrical Code (NEC). The NEC focuses on the proper installation of electrical systems and equipment which supports safe electrical infrastructure installations further advancing the safe use of electricity. Our products are designed and manufactured to comply with the most current edition of the NEC. Electrical infrastructure that does not utilize the most current electrical code restricts the use of the most current technology and can be less efficient and more costly for not only Schneider Electric to manufacturer, but also for the construction industry to implement.

The adoption of the 2020 NEC will permit the construction industry to take advantage of the most costeffective infrastructure solution and utilize emerging technological advancements while enhancing safety in Residential buildings in the state.

Once again, Schneider Electric urges the OBBS to promptly initiate the review and adoption of the 2020 NEC for the Residential Code of Ohio.

Sincerely,

Don Iverson Manager of Industry Codes & External Affairs

Schneider Electric 1601 Mercer Rd Lexington, KY 40511 Tel. (517) 204-0559 www.us.schneider-electric.com

SIEMENS

March 15, 2022

Ms. Regina Hanshaw Executive Secretary Ohio Board of Building Standards 6606 TUssing Road Reynoldsburg, OH 43068

Re: Support Adoption of 2020 Edition of the National Electrical Code

Dear Ms. Hanshaw,

I am writing in support of updating the Residential Code of Ohio from the 2017 edition of the National Electrical Code® (NEC) to the 2020 edition of the NEC. For many years, Ohio has been one of the first states to adopt the entire current electrical code on a regular revision schedule, demonstrating that the safety of its citizens and economic well-being of its industry is of upmost importance.

Siemens employs 1,959 people throughout Ohio who, along with their families, would be impacted by this update. There are 21 Siemens locations reporting \$611M in sales last year. Income tax paid to the state exceeds \$450k with employee wages exceeding \$226M.

Updating the National Electric Code® to the current 2020 edition with no amendments would help to keep Ohio residents safe.

Thank you for your consideration on this important issue.

With kind regards,

Ashley Bryant Senior Product Manager, Electronic Circuit Breakers Siemens Industry, Inc. 3617 Parkway Lane Peachtree Corners, GA 30092, USA Tel.: +1 404 697-1587 mailto:ashley.bryant@siemens.com

5400 Triangle Parkway Norcross, GA 30092 USA Tel.: +1 770-326-2000 Fax: +1 770-326-2211 www.usa.siemens.com/lowmediumvoltage



lational Electrical Manufacturers Association

March 17, 2022

Ms. Regina Hanshaw Executive Secretary Ohio Board of Building Standards 6606 Tussing Road Reynoldsburg, OH 43068

Re: NEMA Supports Adoption of 2020 Edition of the National Electrical Code

Dear Ms. Hanshaw:

On behalf of the National Electrical Manufacturers Association (NEMA), I am writing to express support for the update of the Residential Code of Ohio from the 2017 edition of the National Electrical Code[®] (NEC) to the 2020 edition of the NEC.

As the association representing over 325 electrical and medical imaging manufacturers that make the equipment used in a variety of sectors—electric transmission and distribution, commercial and residential buildings, water treatment and delivery, transportation, industrial processes, food, healthcare, agriculture, and manufacturing—NEMA supports regulatory action and programs that efficiently provide affordable, safe, and reliable electricity to the American public. NEMA member companies have a significant presence in the state of Ohio, representing 44 companies with 142 manufacturing and engineering facilities that support the state's economy. Member companies in Ohio collectively employ over 70,077 state residents.

NEMA has long supported timely adoption of the National Electrical Code[®] (NEC) by state and local jurisdictions. We maintain that prompt adoption of the most current edition of the NEC is the best way to ensure a uniform and up-to-date standard of safety for all occupants in the built environment. Current codes mean safer and more economically prosperous communities.

The NEC focuses on the proper installation of electrical systems and equipment to protect people and property from hazards arising from the use of electricity in the built environment. The code also allows for the safe use of new technologies including electric vehicle charging equipment and distributed generation such as solar photovoltaic panels.

Through adoption of the 2020 NEC, businesses today will be able to take advantage of lower infrastructure start-up and operational costs through new and improved technology. For instance, modernized rules in the 2020 NEC, used for the calculations of improvements in energy efficiency, may provide relief for the overall cost of the electrical system. Additionally, requirements relating to alternative energy continue to stay relevant so as to not become a barrier to the implementation of those technologies as they evolve.

National Electrical Manufacturers Association 1300 North 17th Street, Suite 900 - Rosslyn, VA 22209 Once again, NEMA urges the Ohio Board of Building Standards to maintain this tradition of excellence by adopting the 2020 edition of the NEC. If you have any questions, please contact Tim McClintock at <u>Tim.McClintock@nema.org</u> or (303) 749-9782.

Sincerely,

Todd Sims Director, Government Relations National Electrical Manufacturers Association

Ohio Board of Building Standards

6606 Tussing Rd.

Reynoldsburg, OH 43068

Regina Hanshaw, Executive Director, esteemed members of the Board and the Residential Code Advisory Committee.

This letter is in support of the Residential Code of Ohio (RCO) referencing the 2020 NEC (NFPA70-20). Currently Ohio has modified the 2017 NEC and proposes to add two (2) additional modifications that directly affect safety and the integrity of residential safety systems that are required in 1,2 and 3 Family dwellings.

Deleting 2020 NEC Section 230.67 for surge protection puts devices containing electronic circuits at risk for failure. The list of devices includes AFCI and GFCI receptacle outlets and circuit breakers that provide integral protection of our citizens where they live. Surge protection installed at the incoming electrical service as required in 230.67 has been shown to provide protection of these devices from surges and spikes produced on the utility side, lightning strikes and many other transient events that have been shown to disable these safety devices. Additionally, the smoke detectors and carbon monoxide alarms required by RCO 314/315 are subject to the same risk for failure and mitigating any loss of the protection provided by these devices is of tantamount importance to the safety of the citizen. An added benefit is the protection of the electronic 'chip' component of the smart appliances that are found in todays homes. Many of the manufacturers recommend installing surge protection upstream of their products.

Modification of 2020 NEC 210.8(A) limiting GFCI protections to only 15 and 20 ampere receptacle outlets only, directly affect the safety of the occupants of a 1, 2 and 3 family dwelling. Providing GFCI protection for the laundry and kitchen areas is a long standing provision of the NEC in its goal of mitigating hazards and providing 'practical safeguarding of persons and property from the hazards arising from the use of electricity'. Inclusion of 250 volt receptacle outlets located within six (6) feet of a sink in these areas is a huge step in accomplishing this goal.

Having different adoptions of the same code creates confusion for the installer and enforcement community as multi-family installations under the OBC do not contain these same modifications. As an example, apartment units would be required to have safety devices not required in a single family home but they are both dwelling units. This is inconsistent and hazardous to the occupant. Code development includes stakeholders from all facets of society and the National Electrical Code Panels are made up of individuals who represent all interests of the manufacturing, safety, electrical, and construction industries. Their collected experience and expertise are utilized in the formation and adoption of the most current codes and standards.

Updating to the 2020 NEC is a vitally important and a proactive step for economic savings, consumer protection and the safety advancements of new electric system technology. Using and referencing the most current codes and standards is necessary for a progressive state and its citizens to keep pace with changes to technology and safety enhancements.

Up-to-date safety standards promote the use of new technology, which has immeasurable societal benefits from an economic perspective. Additionally, this helps to promote and spur new business opportunities and economic growth for Ohio and its citizens.

These new requirements have been added to help communities accomplish the goal of making our buildings safer, more energy efficient, and reliable in the event of disasters or emergencies. Advancement of technology requires up todate codes and standards for safe implementation, to ensure that the end-user can take advantage of these innovations without endangering themselves, others, or their property.

The citizens of Ohio deserve and expect the best that is offered for their homes, occupations, places we work at, worship at, play and entertain. The intent of the National Electrical Code is the 'practical safeguarding of persons and property from the hazards arising from the use of electricity'. All of the changes and new technology that we are witnessing require proper installation and safety requirements that are found in the most current code. They need to be adopted and utilized for the protection of the public. We need to do all that we can to accomplish that.

Respectfully submitted,

Michael J Farrell III

Member of IAEI, IBEW, ICC, NFPA, OBOA



March 18, 2022

Ms. Regina Hanshaw Executive Secretary Ohio Board of Building Standards 6606 Tussing Road Reynoldsburg, OH 43068

Re: Eaton Supports Ohio Electrical Coalition Petition to update the 2017 edition of the National Fire Protection Association (NFPA) 70 with the 2020 edition of NFPA 70.

Dear Ms. Hanshaw:

I am writing to express Eaton's support of the State of Ohio to update the 2017 edition of NFPA 70 with the 2020 edition of NFPA 70.

Eaton employs over 1,300 associates at 5 locations in the State of Ohio and spends over \$350 million with Ohio-based businesses every year. Eaton's electrical business is a global leader with expertise in power distribution and circuit protection; backup power protection; control and automation; lighting and security; structural solutions and wiring devices; solutions for harsh and hazardous environments; and engineering services.

For many years, Ohio has championed the standard of excellence by being one of the first states in the nation to adopt the newest edition of the National Electrical Code[®] - putting the safety of its citizens and economic well-being of its industry first. Updating NFPA 70 makes sure communities continue to provide an acceptable level of public safety while supporting the latest technological advances, which is core to the Ohio Board of Building Standards (OBBS) mission.

Eaton has long supported timely and un-amended adoption of the National Electrical Code[®] (NEC) by state and local jurisdictions. We believe that adoption of the most current edition of the NEC[®] promotes a uniform and up-to-date standard of safety for all occupants in the built environment. Current codes produce safer and more economically prosperous communities.

Once again, Eaton urges the OBBS to maintain this tradition of excellence by adopting the 2020 edition of NFPA 70.

If you have any questions, please contact me at (636) 515-6083. Thank you for your time and consideration of this important matter.

Sincerely,

Kevin S. Arnold, P.E. Manager of Codes & Standards

4101:8-34-01 Electrical.

[Comment: When a reference is made within this rule to a federal statutory provision, an industry consensus standard, or any other technical publication, the specific date and title of the publication as well as the name and address of the promulgating agency are listed in rule 4101:8-44-01 of the Administrative Code. The application of the referenced standards shall be limited and as prescribed in section 102.5 of rule 4101:8-1-01 of the Administrative Code.]

SECTION 3401 ELECTRICAL

3401.1 *Electrical. The provisions of the National Electrical Code, NFPA 70, shall* be incorporated herein and shall govern the installation, testing and operation of the electrical systems of one-, two- and three-family dwellings and their accessory structures including the following amendments (1) through (4).

For the purposes of this Chapter, any reference in NFPA 70 to "one- and twofamily dwellings" will include "one-, two- and three-family dwellings." Where the requirement identifies a one-family dwelling or a two-family dwelling, a threefamily dwelling is a "multi-family dwelling" (i.e. Section 210.52(E)(1)).

1. Section 210.8(A) shall be modified to read:

- (A) Dwelling units. All 125-volt, single phase, 15- and 20-ampere receptacles installed in locations specified in 210.8(A)(1) through (A)(11) shall have ground fault circuit interrupter protection for personnel.
- 2. <u>Section 210.8(A)(2) shall be modified to read:</u>
 - (2) Garages, and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use *except for the* receptacle located to serve a garage door opener when the device is a single receptacle and located in the ceiling.
- *<u>Section 210.8(F) shall be modified to read:</u>*

(F) Outdoor Outlets. All outdoor outlets for dwellings, other than those covered in 210.8(A)(3), Exception to (3), that are supplied by single-phase branch circuits rated 150 volts to ground or less. 50 amperes or less, shall have a ground-fault circuit-interrupter protection for personnel.

Exceptions:

- <u>1.</u> <u>Ground-fault circuit-interrupter protection shall not be required</u> on lighting outlets other than those covered in 210.8(C).
- 2. <u>Ground-fault circuit-interrupter protection shall not be</u> required on outlets for listed hvac equipment.
- 4. Section 230.67 shall be deleted.

<u>SECTION 3402</u> <u>EMERGENCY AND STANDBY POWER SYSTEMS</u>

3402.1 *Installation. Emergency and standby power systems shall be installed in accordance with this code and NFPA 70. The performance, classification, transfer, testing, and maintenance of emergency and standby power systems shall also comply with either NFPA 110 (liquid- and gas- fueled systems) or NFPA 111 (battery and inertia systems), as applicable.*

3402.1.1 Stationary generators. Stationary emergency and standby power generator assemblies shall be listed in accordance with UL 2200.

3402.1.1.1 Engine-driven generators. The installation of liquid- and gas-fueled stationary internal combustion engines and gas turbines used to drive generator assemblies shall meet the requirements of NFPA 37.

3402.1.1.1.1 Fuel tanks connected to generator assemblies. Fuel tanks piped to and supplying fuel for engine-driven generator assemblies may be enginemounted, located inside of a building, outside of a building, or on a roof in accordance with NFPA 37 or NFPA 30.

3402.1.1.1.1 Engine-mounted tanks. Engine-mounted tanks located outdoors may be located in accordance with Section 4.1.4 of NFPA 37 and shall be vented in accordance with NFPA 30. Engine-mounted tanks shall be provided with adequate clearance to enable filling, maintenance, and testing, shall be safeguarded against public access, and shall be protected from impact.

3402.1.1.1.1.2 Other fuel tanks. Fuel tanks, other than engine-mounted tanks, piped to and supplying the generator engine shall be located, installed, and vented in accordance with the applicable sections of NFPA 37 or located, installed, and vented in accordance with NFPA 30.

3402.1.1.1.2 Gaseous fuel supply. Where an internal combustion engine

supplied with gaseous fuel powers emergency or standby generators, the fuel gas storage and piping system shall comply with NFPA 37 and Chapter 24.



November 2, 2022

Ms. Regina Hanshaw Executive Secretary Ohio Board of Building Standards 6606 Tussing Rd Reynoldsburg, OH 43068

Re: NEMA Supports Ohio Electrical Coalition Petition 22-01 to Adopt the 2020 Edition of NFPA 70 for One, Two, and Three Family Dwellings

Dear Ms. Hanshaw:

The National Electrical Manufacturers Association (NEMA) is the leading trade association of the electroindustry, including electrical equipment and medical imaging manufacturers. The approximately 325 member companies manufacture products used in the generation, transmission and distribution, control, and end-use of electricity. NEMA member companies have a significant presence in the state of Ohio, <u>employing over 70,000</u> manufacturing and engineering jobs and contributing <u>over \$8 billion dollars</u> to the state's economy.

NEMA writes to you today to express **support of the Ohio Electrical Coalition's petition 22-01 to update the current edition of NFPA 70 (National Electrical Code® or NEC) to the 2020 edition of NFPA 70** for one, two, and three- family dwellings. For many years, Ohio has championed the standard of excellence by adopting the most recent edition of the National Electrical Code®, making Ohio a leader in protecting the safety of its citizens.

The electroindustry has a robust history in supporting the safe installation and usage of electrical equipment and products. In particular, NEMA has strongly supported timely adoption of the most current edition of the NEC by state and local jurisdictions. The timely adoption of the most current edition of the NEC promotes a uniform and modern standard of safety for all occupants in the built environment. Current codes produce safer and more economically prosperous communities.

The NEC, developed by the National Fire Protection Association (NFPA), is the foundation of the country's electrical safety system since 1897. The NEC is created through an exhaustive stakeholder consensus process that considers input from a balance of interests and reflects the collective knowledge of qualified electricians, electrical inspectors, manufacturers, testing lab personnel, and other professionals, including representation from the National Association of Home Builders (NAHB). That stakeholder consensus process requires supermajority support for any new modifications to the Code. Updated to include technological advancements, adopting the latest version of NEC is the best way to encourage uniform implementation of installation requirements and consistency throughout the built environment.

Pursuant to Ohio Revised Code Section 3781.12, the Ohio Electrical Coalition filed a petition to update the Residential Code of Ohio with the 2020 edition of NFPA 70 with the Ohio Board of Building Standards (BBS). The BBS procedurally forwarded the petition to the Residential Construction Advisory Committee (RCAC) for recommendation. At their May 2022 meeting, the RCAC elected to delay review of the petition at until its August 24th meeting. An overview of significant updates to the 2020 edition of NFPA 70 was provided during the August RCAC meeting, and no additional actions were taken by the committee. The RCAC met next on October 19th, at which time proposed amendments were presented and voted-on by the committee. This was the first time the proposed amendments were made available to the Committee and the public.

In the past, stakeholders have had the opportunity to discuss proposed amendments with the agency in advance of those amendments being formally considered and voted-on by the RCAC. During previous adoption processes, the RCAC held multiple open meetings with coalition members and general public. This provided ample opportunity for stakeholders to provide input, to help the RCAC make informed decisions in the interest of public safety.

We appreciate some of the updates included in the RCAC's approved proposal and understand and agree with some of the compromises made by the Committee, but it's our strong view that the proposed amendments significantly compromise electrical safety protections provided to Ohioans.

The rationale supporting the inclusion of the requirements for implementation of these safety devices being considered for amendment is compelling and their inclusion minimizes tragedies, including devastating fatalities, severe injuries, and extensive property loss. Ohio has long been recognized as a leader in electrical safety through the state's adoption and enforcement of the NEC. To proceed with the proposed rules changes is a dangerous disservice to the citizens of Ohio who have an expectation that they can safely interface with the electrical systems within their homes, businesses, institutions, and recreational facilities.

Considering the substantial potential impacts to public safety in Ohio, we request the RCAC's draft language for the 2020 NEC be excluded from the BBS November agenda to provide an opportunity for additional discussions with the Department before RCAC forwards a final recommendation to the BBS.

Sincerely,

Spencer Pederson, VP of Public Affairs



December 12, 2022

ATTN: Ms. Regina Hanshaw Executive Secretary Ohio Board of Building Standards Residential Construction Advisory Committee 6606 Tussing Rd. Reynoldsburg, OH 43068

Re: Support for Ohio Electrical Coalition Petition to update the 2017 edition of the National Fire Protection Association (NFPA) 70 with the 2020 edition of NFPA 70

Dear Ms. Hanshaw:

The Ohio Manufacturers' Association (OMA) is the largest statewide business association comprised solely of manufacturers. With more than 1,300 members, OMA is the leading voice advocating to protect and grow Ohio manufacturing.

Safety is the number one priority for Ohio's manufacturers. Our members prioritize important safety measures every day in the operation of their facilities and it's equally important that the State of Ohio ensures and advances electrical safety protections provided to workers and residents in the built environment. The National Electrical Code (NEC), developed by the National Fire Protection Association (NFPA) is the foundation of Ohio's electrical safety system. Updating Ohio's residential code to the 2020 edition of NFPA 70 is an important, proactive step towards consumer protection and electrical safety afforded to Ohio residents by this newer edition - including important protections for fire and electrical safety.

Updates to construction and building codes advance safety and quality in the built environment and bolster industry, driving more economically prosperous communities. As electrical products and delivery technologies evolve, so do the challenges of safely integrating technology into electrical systems. The 2020 edition of NFPA 70 includes key requirements that ensure electrical installations continually meet minimum safety requirements and perform as expected, while preventing harm to life and property.

While we understand the RCAC is considering adopting amendments to the code, OMA strongly encourages the Committee to adopt the new edition as written. Ohio has long been a leader in electrical safety and we are proud of this legacy. Removing protections provided by the code would only reduce the level of electrical safety protections provided to Ohioans and hinder the uniform implementation of installation requirements across the state. By recommending adoption of the 2020 edition of NFPA 70 without amendment to the Board of Building Standards, the RCAC will strengthen the level of safety protection in the build environment across the state.

Thank you for your time and consideration of our support for the Ohio Electrical Coalition Petition to update the NFPA 70 to the 2020 edition.

Sincerely,

Juitson Almoth

Lindsey Short, Director of Public Policy Services The Ohio Manufacturers' Association



Eaton 1000 Eaton Blvd Cleveland, OH 44122

ATTN: Ms. Regina Hanshaw, Executive Secretary Residential Construction Advisory Committee Ohio Board of Building Standards 6606 Tussing Road Reynoldsburg, OH 43068

Re: Eaton Supports Ohio Electrical Coalition Petition to update the 2017 edition of the National Fire Protection Association (NFPA) 70 with the 2020 edition of NFPA 70.

Eaton has been operating in Ohio for over 100 years and currently employs over 1,300 team members at 5 locations across the state. Additionally, Eaton spent more than \$400 million with Ohio suppliers last year. Our employees develop, manufacture, and sell safe and reliable electrical equipment. Our workforce provides market leading electrical solutions used in general construction, performing to the highest standards of safety and reliability. Many of these products are installed in homes, commercial buildings, industrial facilities, and utilities across Ohio.

We commend the Residential Construction Advisory Committee (RCAC) for moving forward with the adoption process for latest edition of NFPA 70. Current codes produce safer and more economically prosperous communities.

For many years, Ohio has championed the standard of excellence by being regularly adopting the newest edition of the National Electrical Code[®] - prioritizing the safety of its citizens and economic well-being of its industry. Updating NFPA 70 ensures communities continue to provide an acceptable level of public safety while supporting the latest technological advances, which is core to the Ohio Board of Building Standards (OBBS) mission.

Eaton has long supported timely and un-amended adoption of the National Electrical Code[®] (NEC) by state and local jurisdictions. We believe that adoption of the most current edition of the NEC[®] promotes a uniform and up-to-date standard of safety for all occupants in the built environment. We understand the RCAC is considering recommendations for amendments to certain provisions of the Code, and urge caution given any amendments will negatively impact Ohioans by reducing the level of life safety and property protections provided to residents. This is especially true when considering protections for highamperage circuits, including 250v circuits, which pose a greater life safety risk.

Thank you for your time and consideration of this important matter.

Sincerely, Gerry O'Connor Codes Specialist