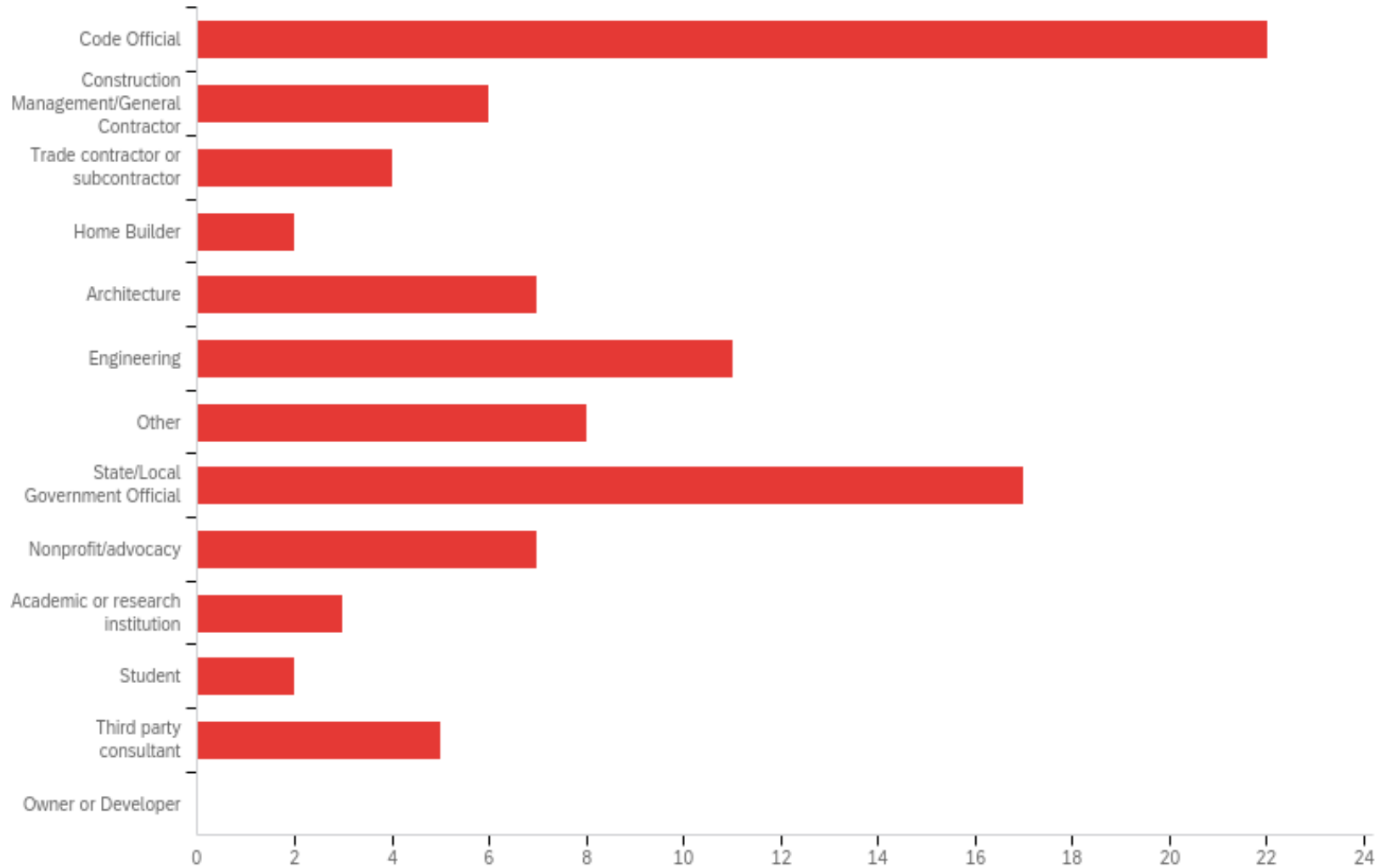


Survey results

Nebraska survey 2021

May 14, 2021

Q2 What industry do you work in? (select all that apply)



Q2 What industry do you work in? (select all that apply)

#	Answer	%	Count
1	Code Official	23.40%	22
2	Construction Management/General Contractor	6.38%	6
3	Trade contractor or subcontractor	4.26%	4
4	Home Builder	2.13%	2
5	Architecture	7.45%	7
6	Engineering	11.70%	11
7	Other	8.51%	8
8	State/Local Government Official	18.09%	17
9	Nonprofit/advocacy	7.45%	7

Q2 What industry do you work in? (select all that apply)

#	Answer	%	Count
10	Academic or research institution	3.19%	3
11	Student	2.13%	2
12	Third party consultant	5.32%	5
13	Owner or Developer	0.00%	0
	Total	100%	94

Q3. What is your current job title?

Account Manager

administrator

Building Department Director

Building Inspector

Building Official

Carpenter

Chief Building Inspector

Chief Building Official

Codes Consultant

Commercial Plan Review Engineer

Commercial Sales manager in hvac industry

Dean of Career and Technology

Director of Engineering

Electrical engineer

Electrical Inspector

Engineer

Engineering Sales

General Manager

General Manager/CEO

HERS Rarwe

Manager

Manager of Operations and Safety

Mechanical Engineer

Mechanical Engineer Project Manager

operations manager

owner builder

president

president of Knaggs Construction, Inc.

President; Energy Analyst

Project Engineer

Project Manager

Retired

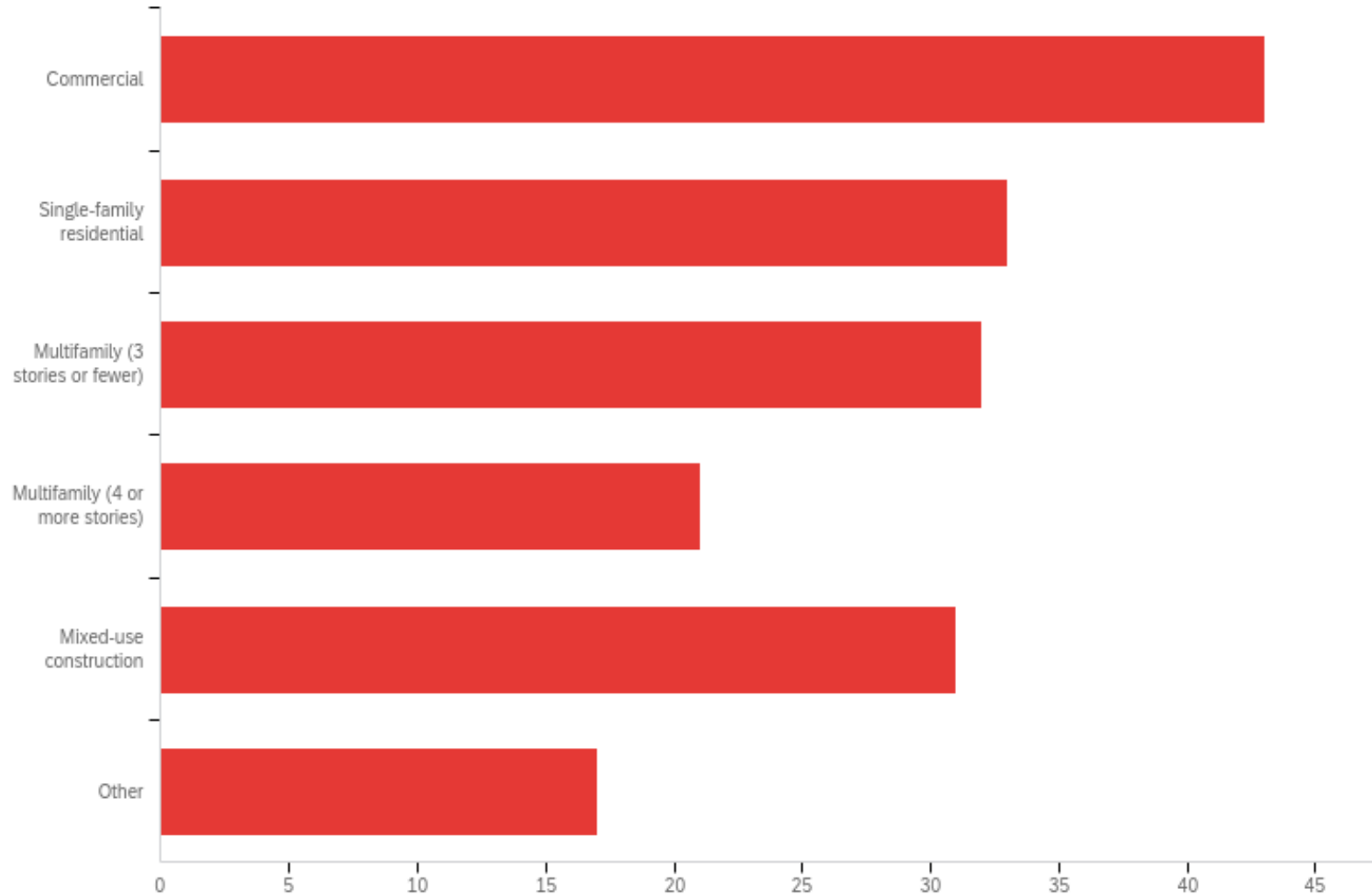
Retired code official

Street & Planning Director

Zoning Administrator, Building Inspector, Floodplain Manager

Zoning/Building Official and Interim Public Works Director

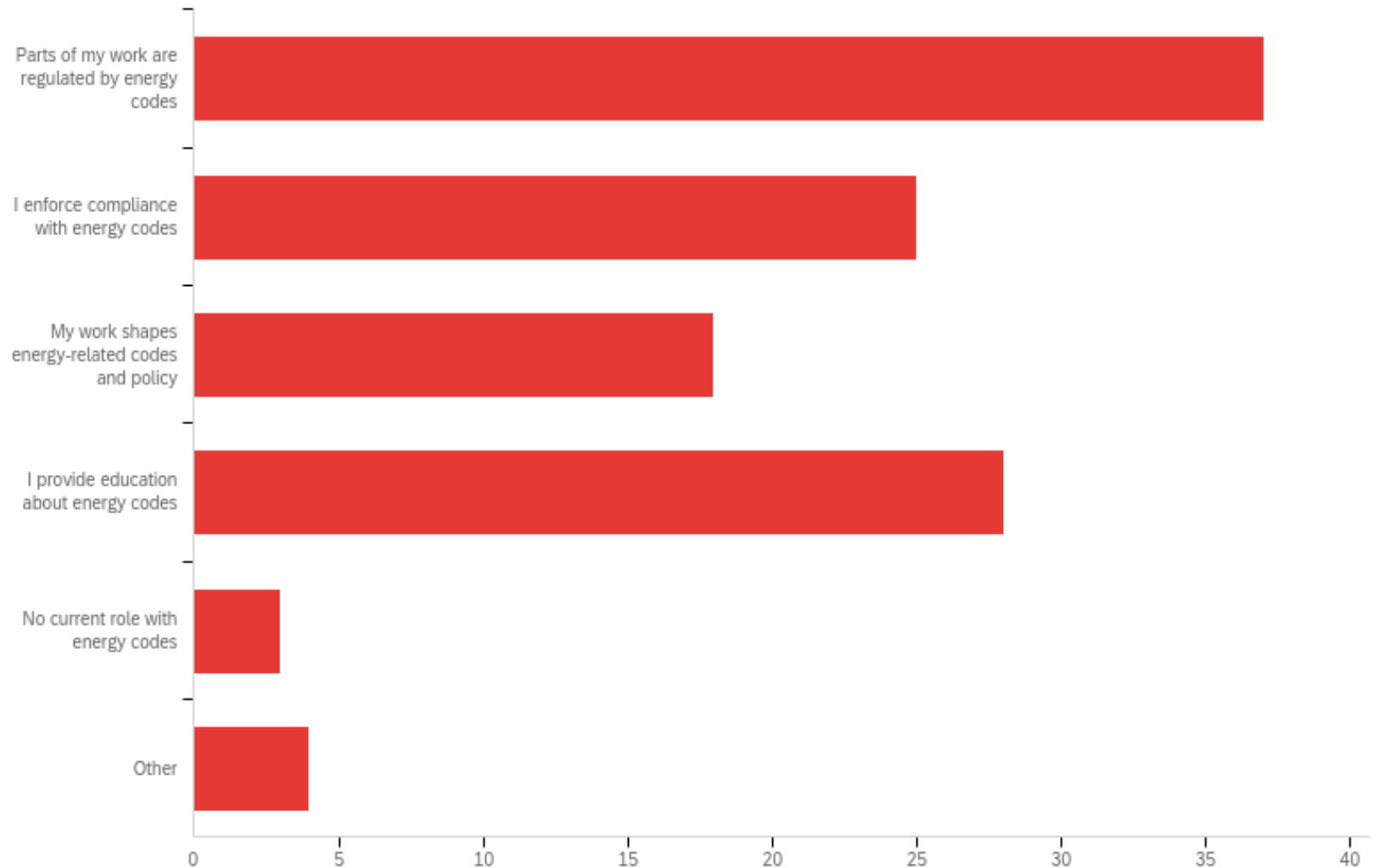
Q4 What type of projects do you typically work on? (select all that apply)



Q4 What type of projects do you typically work on? (select all that apply)

#	Answer	%	Count
1	Commercial	24.29%	43
2	Single-family residential	18.64%	33
3	Multifamily (3 stories or fewer)	18.08%	32
4	Multifamily (4 or more stories)	11.86%	21
5	Mixed-use construction	17.51%	31
6	Other	9.60%	17
	Total	100%	177

Q5 Select all that apply regarding the role of energy codes in your work:



Q5 Select all that apply regarding the role of energy codes in your work:

#	Answer	%	Count
1	Parts of my work are regulated by energy codes	32.17%	37
2	I enforce compliance with energy codes	21.74%	25
3	My work shapes energy-related codes and policy	15.65%	18
4	I provide education about energy codes	24.35%	28
5	No current role with energy codes	2.61%	3
6	Other	3.48%	4
	Total	100%	115

Q5 Select all that apply regarding the role of energy codes in your work:

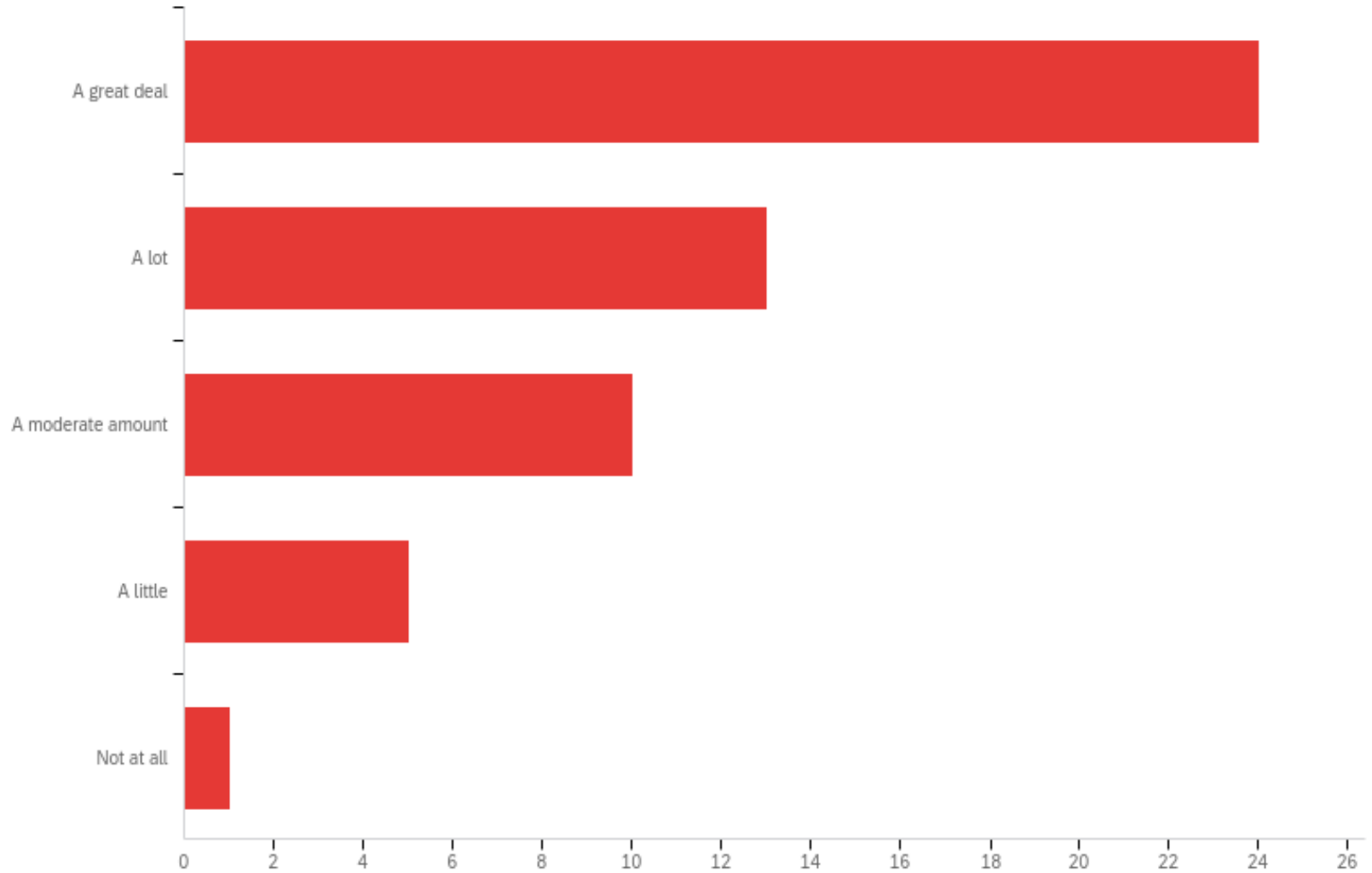
Other - Text

perform load calcs/information to contractors on jobs worked on

I'M chair of my HBA code committe

Effect of energy codes requirements on other aspects of construction regulated by codes. Vice-Versa

Q6 How often do you encounter the energy code in your work?



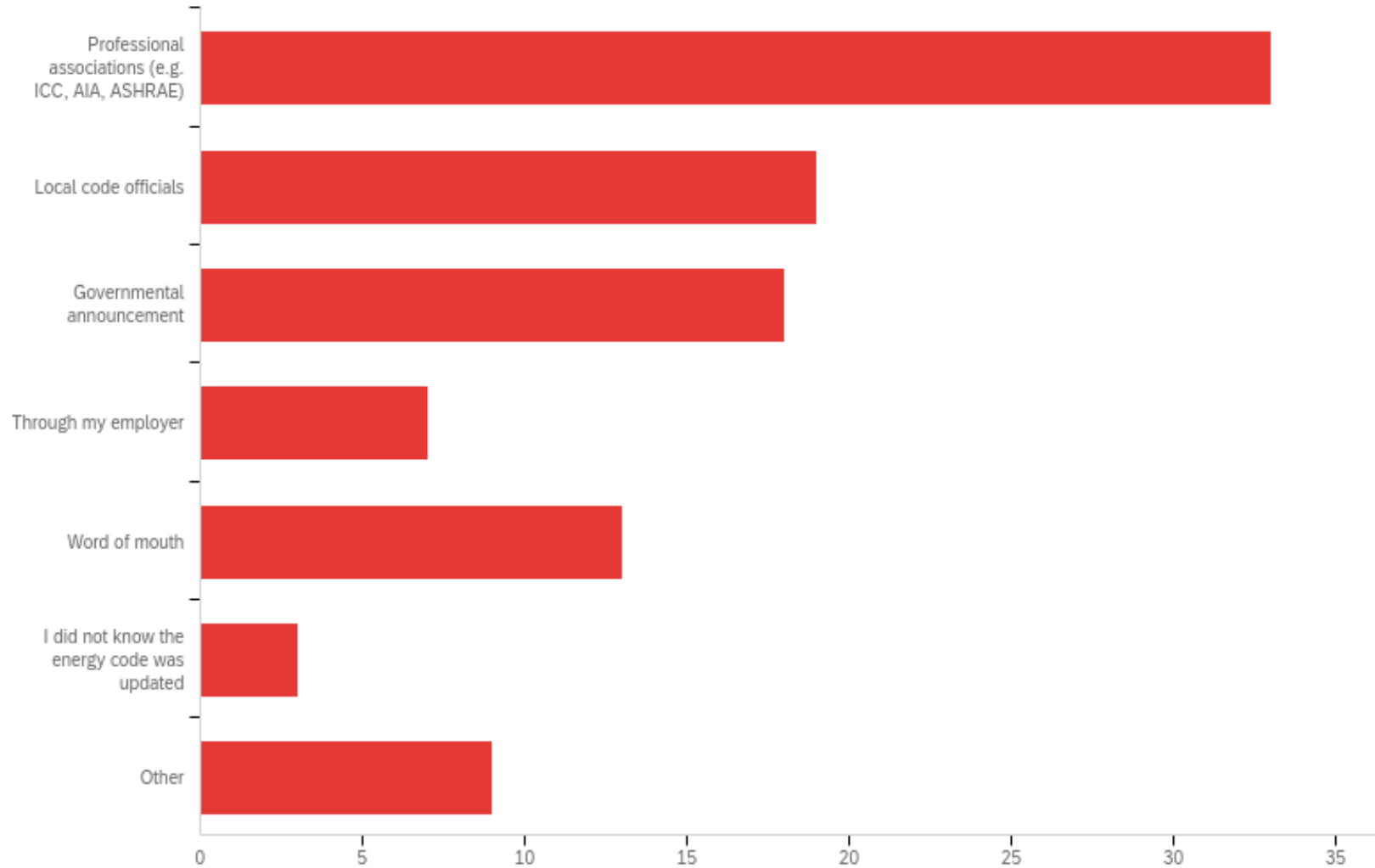
Q6 How often do you encounter the energy code in your work?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	6. How often do you encounter the energy code in your work?	1.00	5.00	1.98	1.09	1.19	53

Q6 How often do you encounter the energy code in your work?

#	Answer	%	Count
1	A great deal	45.28%	24
2	A lot	24.53%	13
3	A moderate amount	18.87%	10
4	A little	9.43%	5
5	Not at all	1.89%	1
	Total	100%	53

Q7 How did you learn about the new energy code update?



Q7 How did you learn about the new energy code update?

#	Answer	%	Count
1	Professional associations (e.g. ICC, AIA, ASHRAE)	32.35%	33
2	Local code officials	18.63%	19
3	Governmental announcement	17.65%	18
4	Through my employer	6.86%	7
5	Word of mouth	12.75%	13
6	I did not know the energy code was updated	2.94%	3
7	Other	8.82%	9
	Total	100%	102

Q7 How did you learn about the new energy code update?

Other - Text

product representative

Track Energy Legislation for the State Energy Office

I was involved with the Legislation

State Legislation

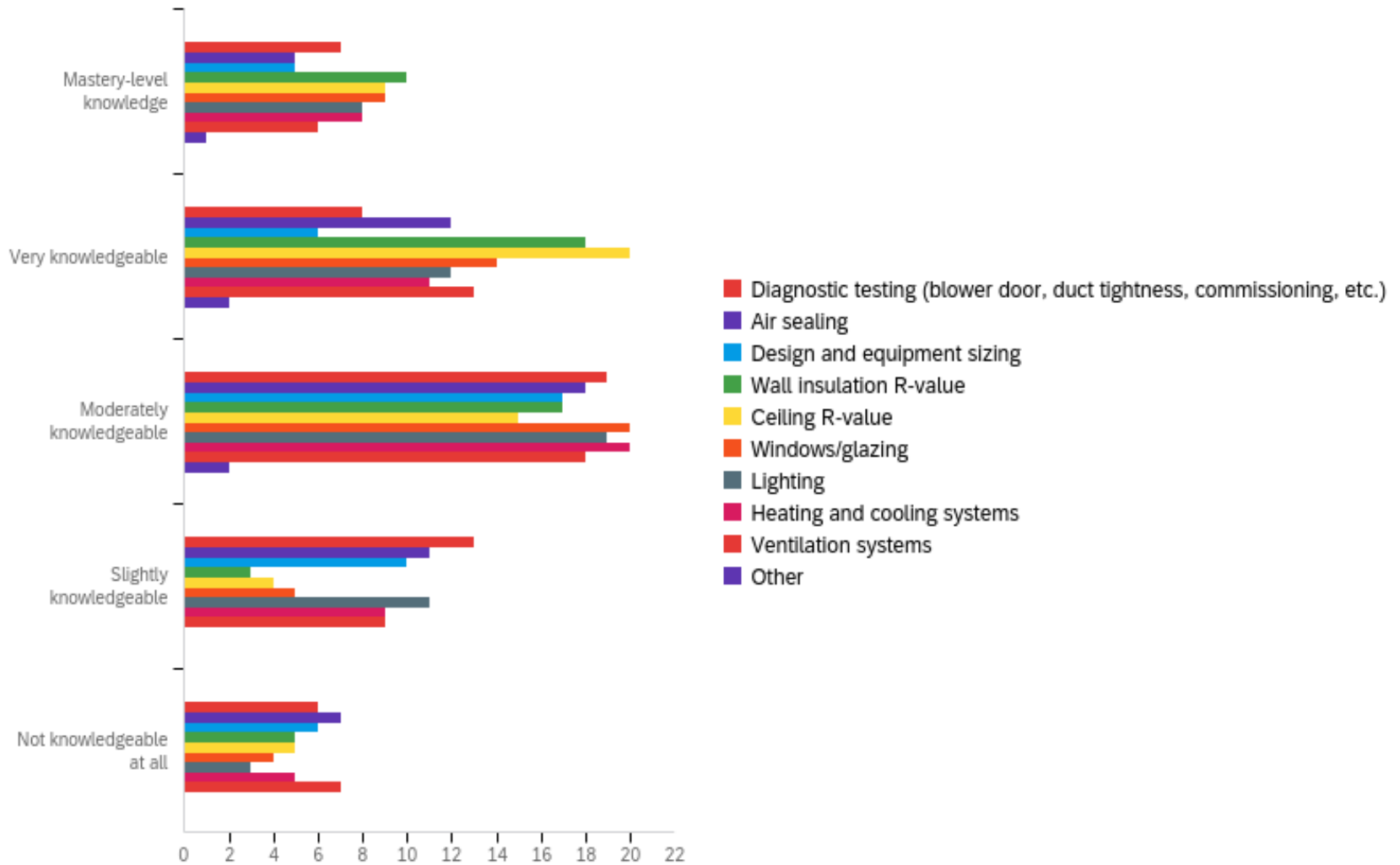
Trade Associates

Participated in legislation adopting IECC

Participation in legislation adopting IECC

was involved with the development of the codes

Q8 How knowledgeable do you feel about the following changes in the energy code (2018 IECC)?



Q9 How has the code update changed the work that you do?

9. How has the code update changed the work that you do?

Trying to work out if they apply to the small projects I do. If so, we need to spend more money on more expensive options.

Give more consideration to exterior assemblies used

Increased the requirements for building envelope. Increased the amount of education I perform with clients and contractors.

I may need to educate my clients better as well as the contractors who construct the facilities about certain tests if we have to do the blower door test.

surprisingly, very little. there has been very little adoption or enforcement to date of the newer energy codes by our cities/AHJ.

Changed policies

Has not changed

N/A

We have new code minimums to design to.

Q9 How has the code update changed the work that you do?

9. How has the code update changed the work that you do?

Electric utilities are by the NESC.

NA

Not really

We pay very close attention to the code requirements and use them daily in our designs. This impacts our calculations, equipment selections and design. We also are asked often by Architects to assist in wall/window evaluations to meet the code.

Projects are taking the energy code requirements more seriously and getting me/my firm involved earlier in the design to perform energy modeling (to use the Total Building Performance compliance pathway).

Updating Knowledge

Very little

makes easier/and can give answers with in little time

Unfortunately not enough. I spend a significant amount of time trying to convince local code officials and political leaders not to amend out all of the changes. Unfortunately, I typically am acting alone without any support from MEEA, NDEE, ASHRAE, AIA, local contractor unions, other organizations, or local code officials. In fact, often I'm working against local code officials who do not

Q9 How has the code update changed the work that you do?

9. How has the code update changed the work that you do?

Increased time on energy related matters. Energy conservation effects on other code requirements.

Not sure.

Yes. COMchecks are more difficult to pass. A lot of questions about economizers and the need for ERV's in conjunction with fresh air intake. Resistance against the need for skylights for smaller buildings.

More inspections

Fight every day with builders

more items to look for at inspection

Extensive education to the contractors and general public. It is continual.

It hasn't yet as we have not updated our code as we have until June 1st is my understanding.

I do a lot of explaining. The question I get the most is how do you get R48 in a ceiling/roof assembly?

Q9 How has the code update changed the work that you do?

9. How has the code update changed the work that you do?

none

it has resulted in numerous complaints from contractors, Developers, and Architects

Made it much more difficult and costly to construct, while reducing our profit margin

Added requirements for plug load control.

Increased time of educating insulators and contractors on minimum insulation requirements

As a HVAC Duct Tester, tighter duct leakage rates have made me warn my HCAC customers that they have to improve their workmanship & warn them that local code waivers to allow building cavities as Return Ducts are more difficult to seal to meet new test limits. Also to caution Builders that HERS Rating Certification will require compliance to the unamended code (including Ventilation & no bldg cavities used as Ducts) to show 2018 code compliance on their certificates.

We are a local municipal government, so the change directly impacts what we enforce. It also makes us educators of contractors, homeowners, designers and the elected public officials.

Q9 How has the code update changed the work that you do?

9. How has the code update changed the work that you do?

very little, I build beyond min code -energystar and zero energy ready homes

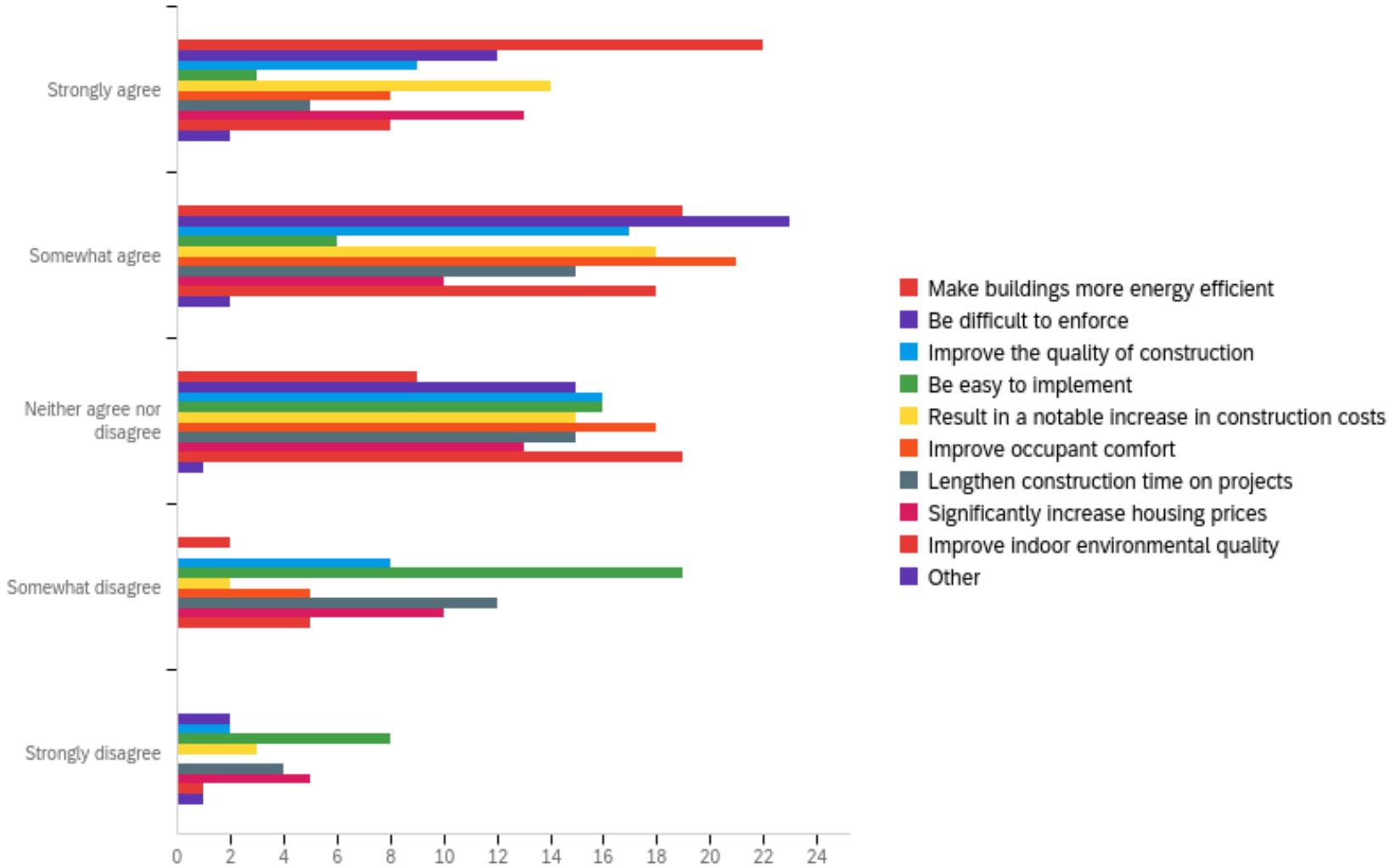
More Focus on Systems applications to Building and Quality

Yes.

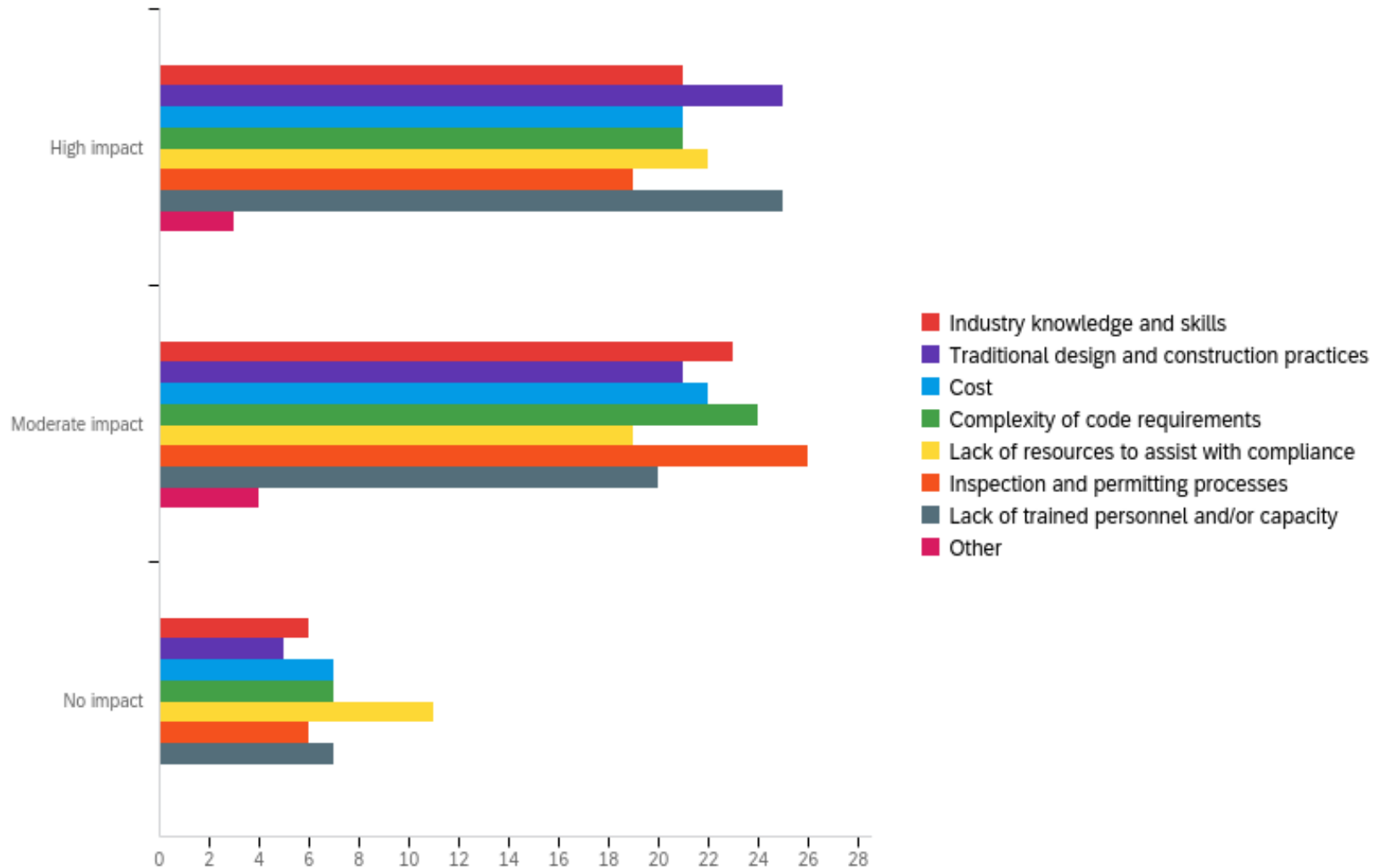
Effect of Energy code on other code regulated aspects of construction and vice versa

very little, I have always built beyond code

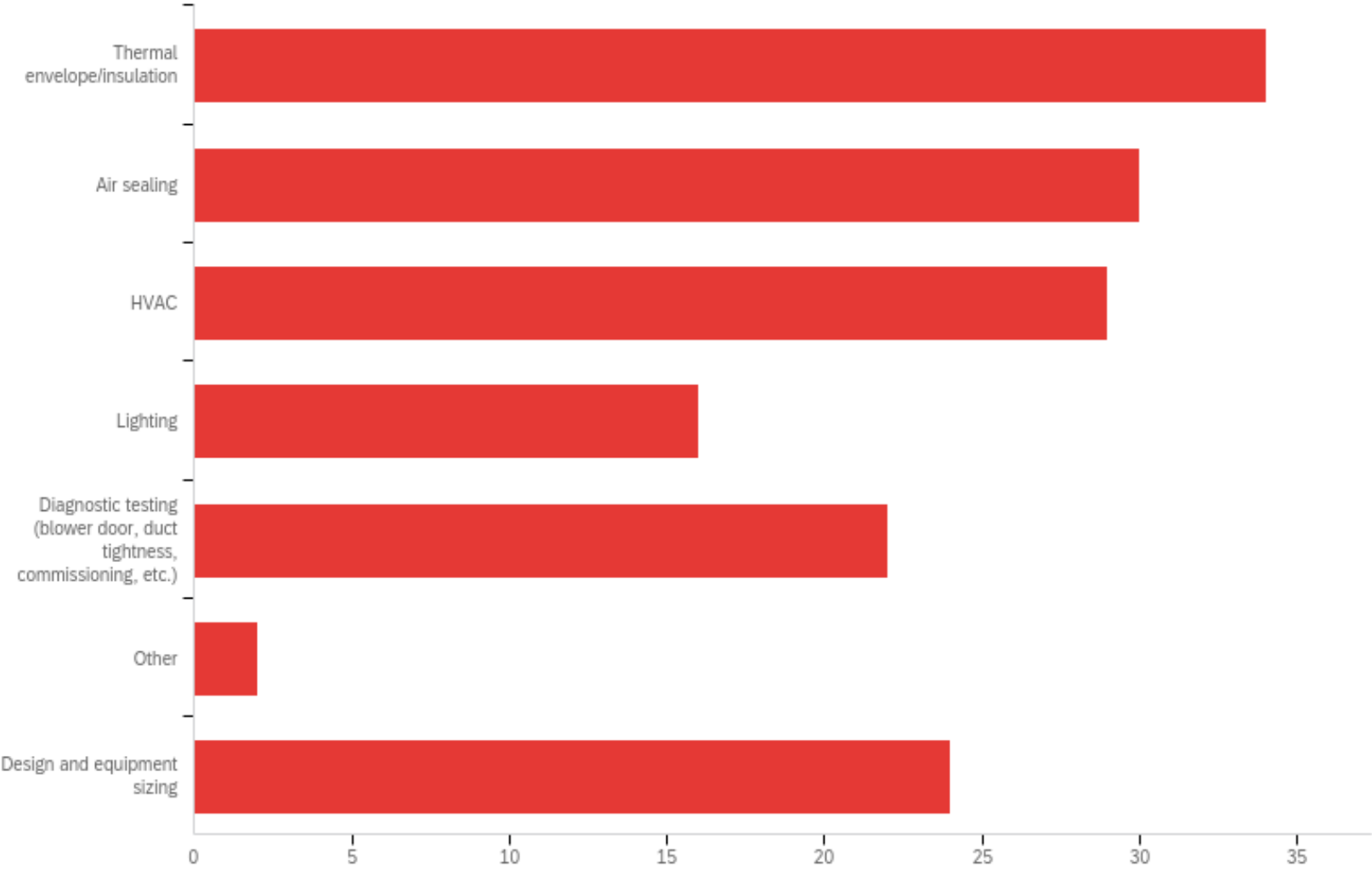
Q10 Rate the following statements with regards to the impact of the updated energy code (2018 IECC). The updated energy code will:



Q11 How significant are the following barriers to implementing the energy code in your work?



Q12 Which aspects of the updated code do you feel are the most important? (select the 3 most important)



Q12 Which aspects of the updated code do you feel are the most important? (select the 3 most important)

#	Answer	%	Count
1	Thermal envelope/insulation	21.66%	34
2	Air sealing	19.11%	30
3	HVAC	18.47%	29
4	Lighting	10.19%	16
5	Diagnostic testing (blower door, duct tightness, commissioning, etc.)	14.01%	22
6	Other	1.27%	2
7	Design and equipment sizing	15.29%	24
	Total	100%	157

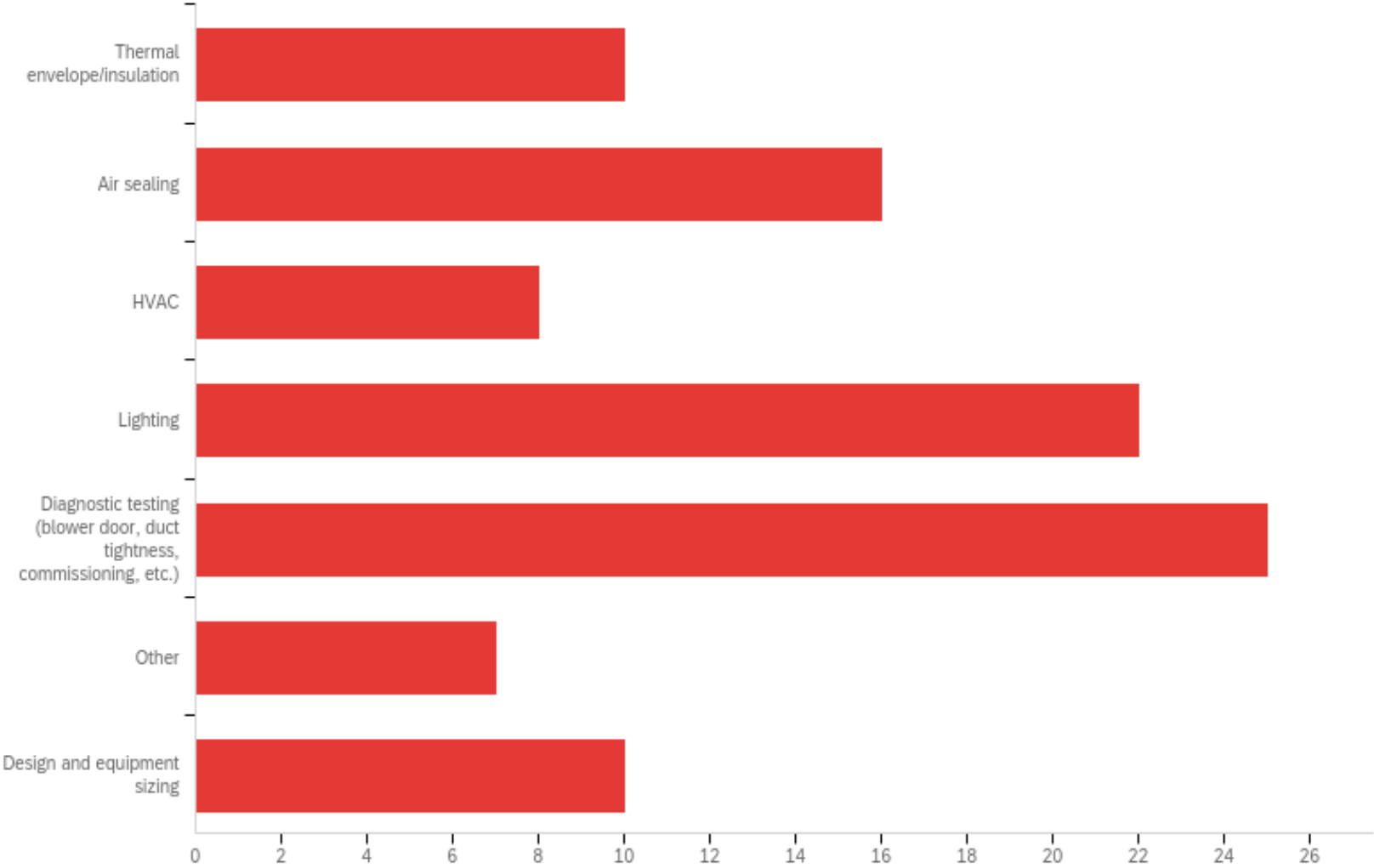
Q12 Which aspects of the updated code do you feel are the most important? (select the 3 most important)

Other - Text

Compliance pathways

Thermal bypass

Q13. Which aspects of the updated code do you feel are the least important? (select the 3 least important)



Q13. Which aspects of the updated code do you feel are the least important? (select the 3 least important)

#	Answer	%	Count
1	Thermal envelope/insulation	10.20%	10
2	Air sealing	16.33%	16
3	HVAC	8.16%	8
4	Lighting	22.45%	22
5	Diagnostic testing (blower door, duct tightness, commissioning, etc.)	25.51%	25
6	Other	7.14%	7
7	Design and equipment sizing	10.20%	10
	Total	100%	98

Q13. Which aspects of the updated code do you feel are the least important? (select the 3 least important)

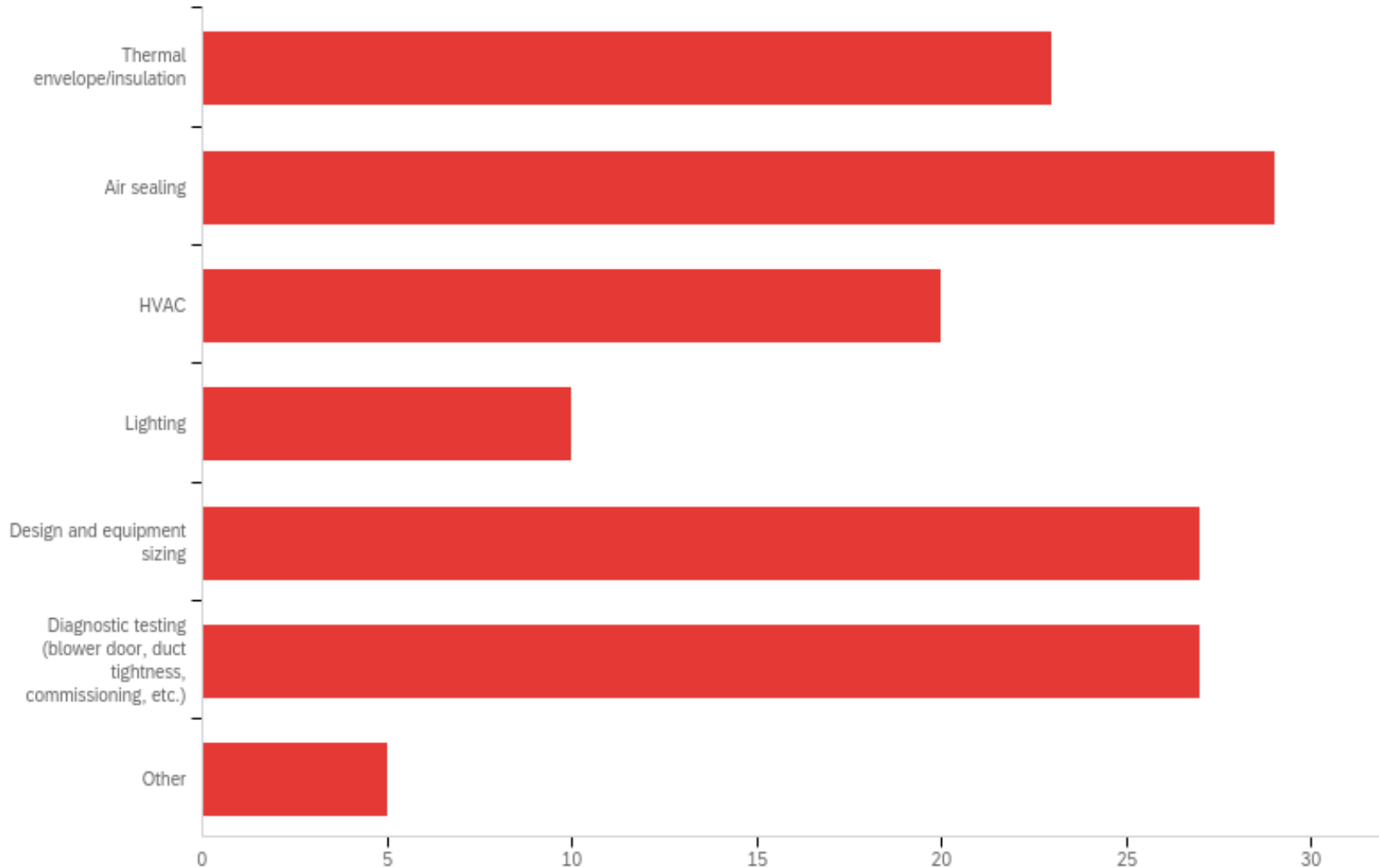
Other - Text

On-site supply renewable energy

All of gthe above are important & difficult to say which ones are the least

I selected other since I feel HVAC is still important

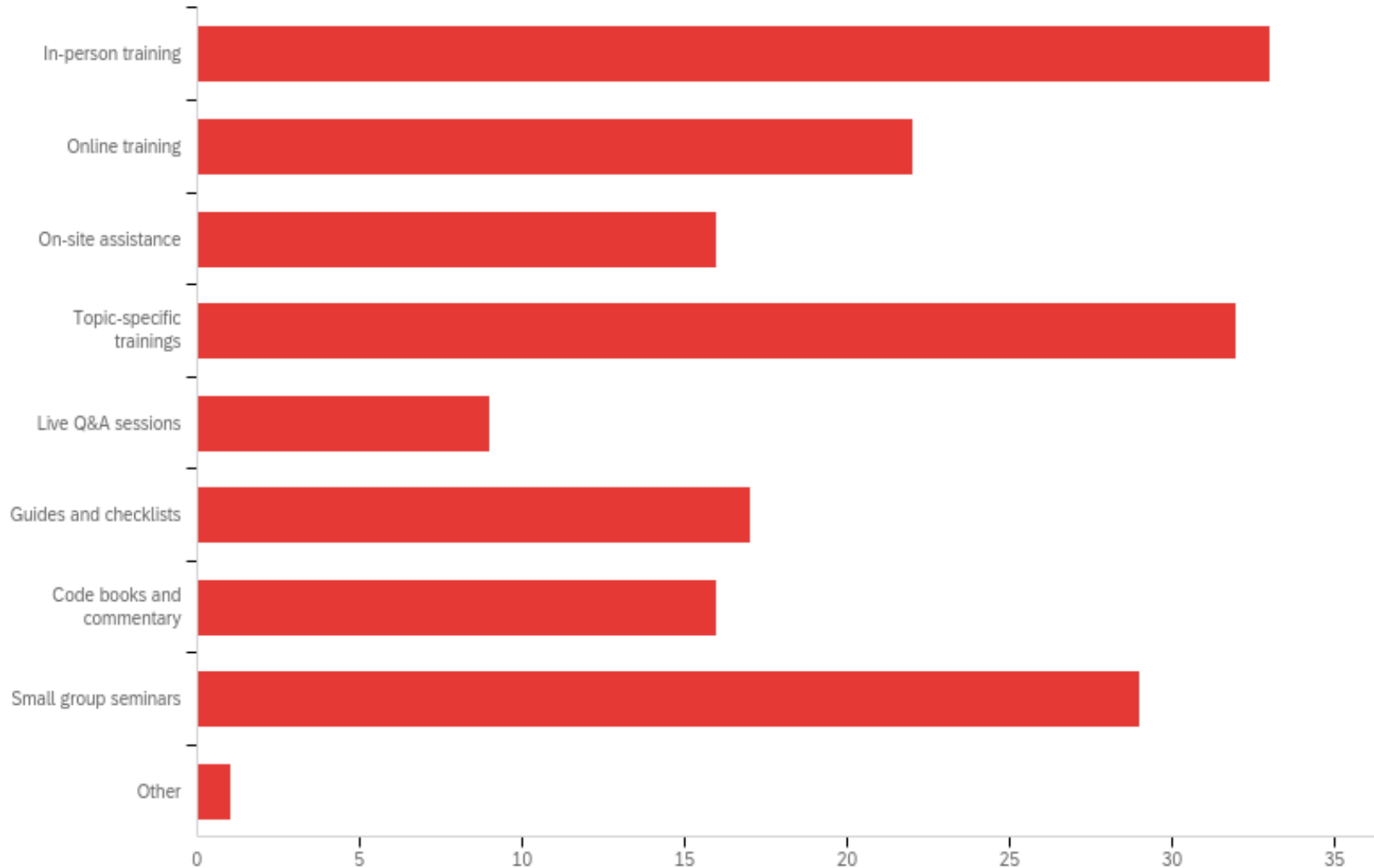
Q14 Which aspects of the updated code do you feel your industry needs more training on? (select all that apply)



Q14 Which aspects of the updated code do you feel your industry needs more training on? (select all that apply)

#	Answer	%	Count
1	Thermal envelope/insulation	16.31%	23
2	Air sealing	20.57%	29
3	HVAC	14.18%	20
4	Lighting	7.09%	10
5	Design and equipment sizing	19.15%	27
6	Diagnostic testing (blower door, duct tightness, commissioning, etc.)	19.15%	27
7	Other	3.55%	5
	Total	100%	141

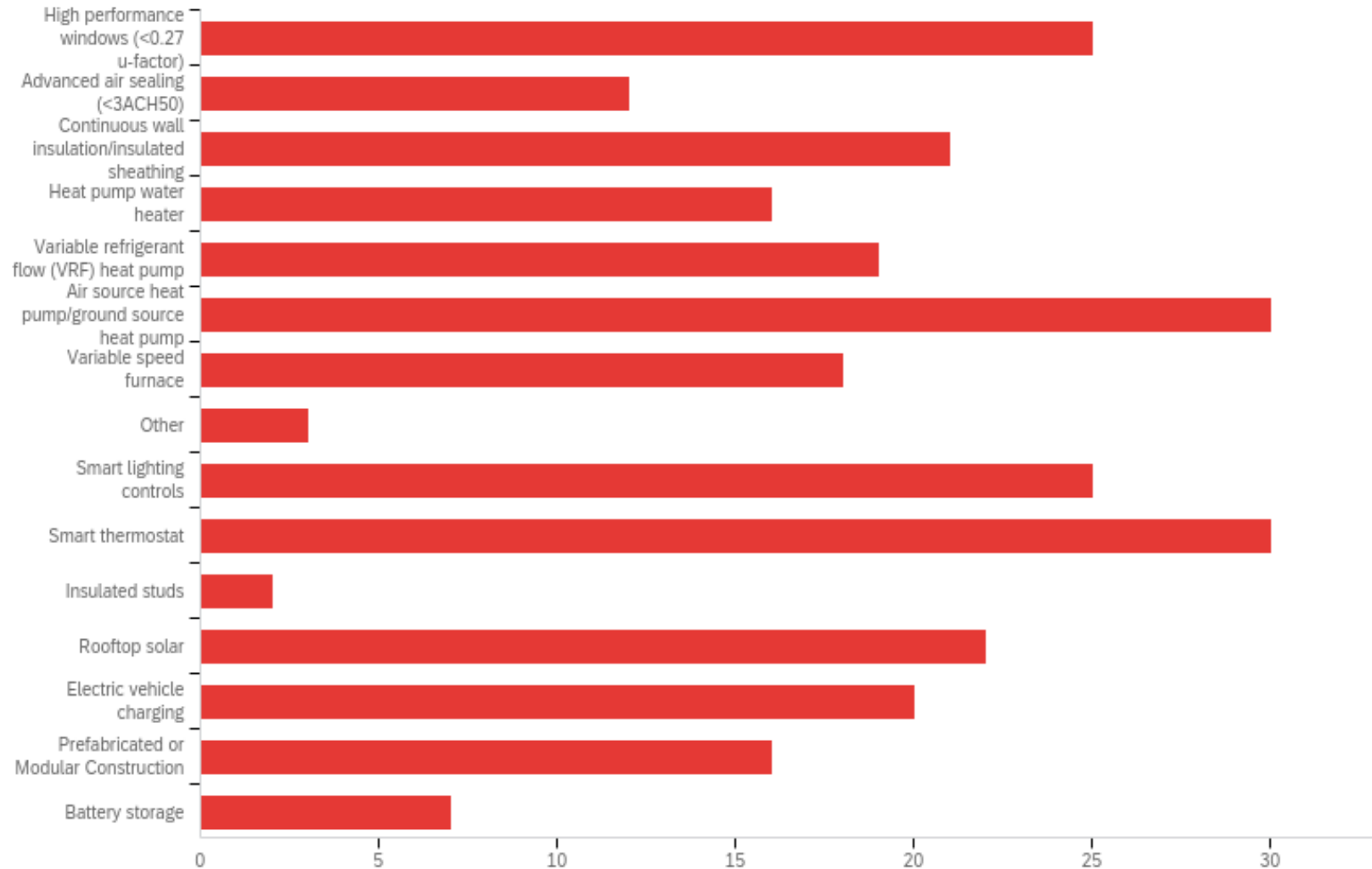
Q15. What are the best ways you prefer to learn about the energy code? (select all that apply)



Q15. What are the best ways you prefer to learn about the energy code? (select all that apply)

#	Answer	%	Count
1	In-person training	18.86%	33
2	Online training	12.57%	22
3	On-site assistance	9.14%	16
4	Topic-specific trainings	18.29%	32
5	Live Q&A sessions	5.14%	9
6	Guides and checklists	9.71%	17
7	Code books and commentary	9.14%	16
8	Small group seminars	16.57%	29
9	Other	0.57%	1

Q16. Which of the following technologies have you implemented/used in your work? (select all that apply)



Q16. Which of the following technologies have you implemented/used in your work? (select all that apply)

#	Answer	%	Count
1	High performance windows (<0.27 u-factor)	9.40%	25
2	Advanced air sealing (<3ACH50)	4.51%	12
3	Continuous wall insulation/insulated sheathing	7.89%	21
4	Heat pump water heater	6.02%	16
5	Variable refrigerant flow (VRF) heat pump	7.14%	19
6	Air source heat pump/ground source heat pump	11.28%	30

Q16. Which of the following technologies have you implemented/used in your work? (select all that apply)

#	Answer	%	Count
7	Variable speed furnace	6.77%	18
8	Other	1.13%	3
9	Smart lighting controls	9.40%	25
10	Smart thermostat	11.28%	30
11	Insulated studs	0.75%	2
12	Rooftop solar	8.27%	22
13	Electric vehicle charging	7.52%	20
14	Prefabricated or Modular Construction	6.02%	16
15	Battery storage	2.63%	7

Q17. How significant are the following barriers to implementing advanced energy efficiency technologies in your work?

