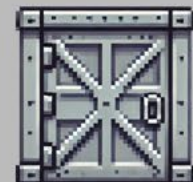


SUPER

**BUILDING
INSPECTOR**

DX





Whoa there friend, hold on a second. If you want to be a building inspector in this state you're going to need to pass a test!



2021 International Residential Code

2015 International Energy Conservation Code

2021 Utah State Building Code

2021 International Energy Conservation Code

2021 Utah State Existing Building Code

2021 Utah State Mechanical Code

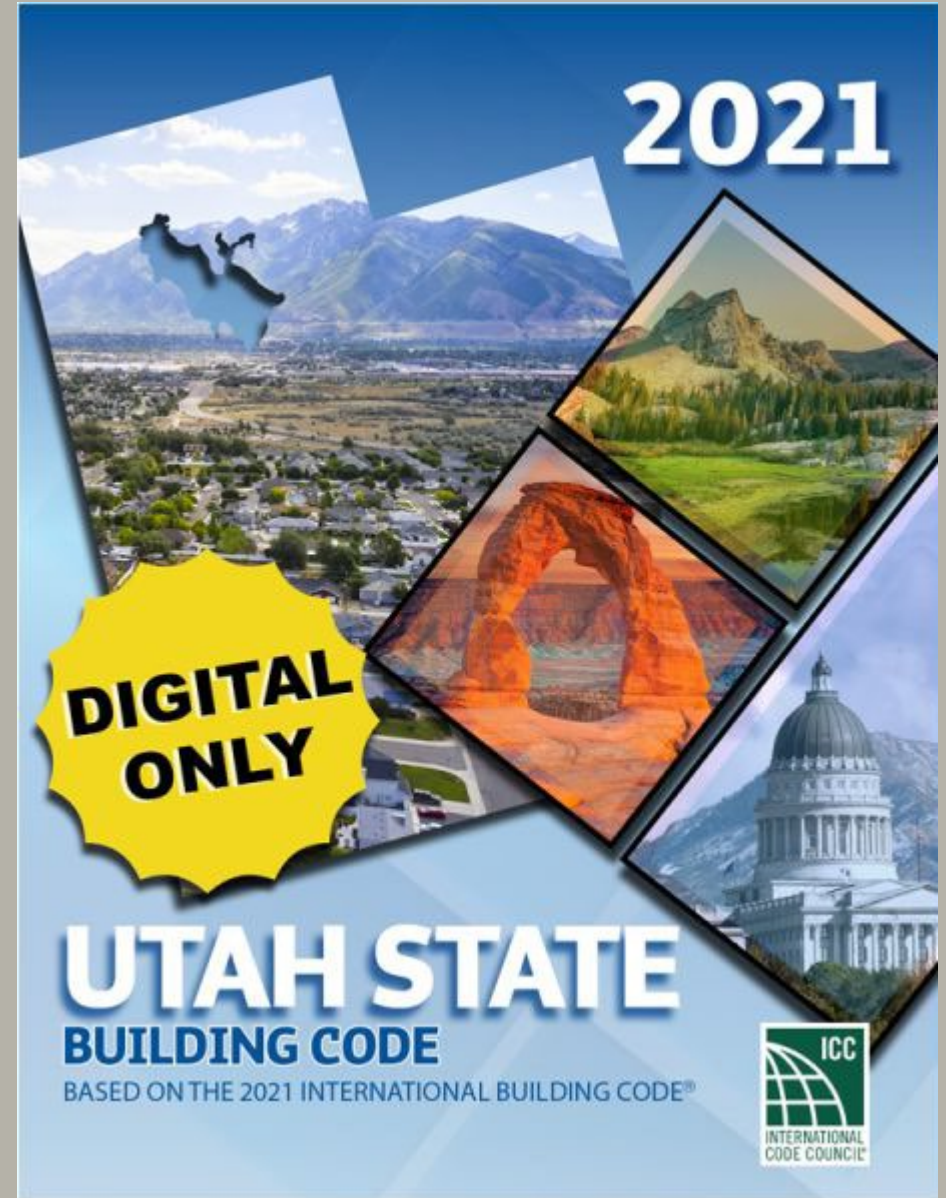
2021 Utah State Fuel Gas Code

2021 Utah State Plumbing Code

2021 Utah State Swimming Pool And Spa Code

Where To Get Codes

- iccsafe.org
- Madcad
 - Access is free for all licensed contractors.
 - Free access can be granted by emailing the state's chief building official: Thomas Peterson.
 - twpeterson@utah.gov
- Publications
 - ICC
 - CodeCheck



How can you deal with entities that don't follow code?

- Contact DFCM if it's a state job.
- For private sector start with the local building department.
- If the code violations directly relate to fire safety check with the fire marshal.
- DOPL may be able to assist in some situations.



Great work! Now let's get out there and inspect some buildings.





Job 1: Owner Build Deck

Who needs a contractor? Any real man knows how to build his own deck .





Where in the code?

- Commercial
 - 2304.10.3
- Residential
 - R602.3
- This is less a building code issue and more a manufacturer guidelines issue.

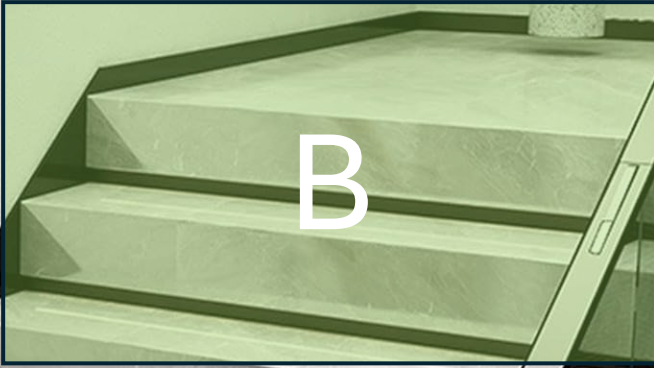
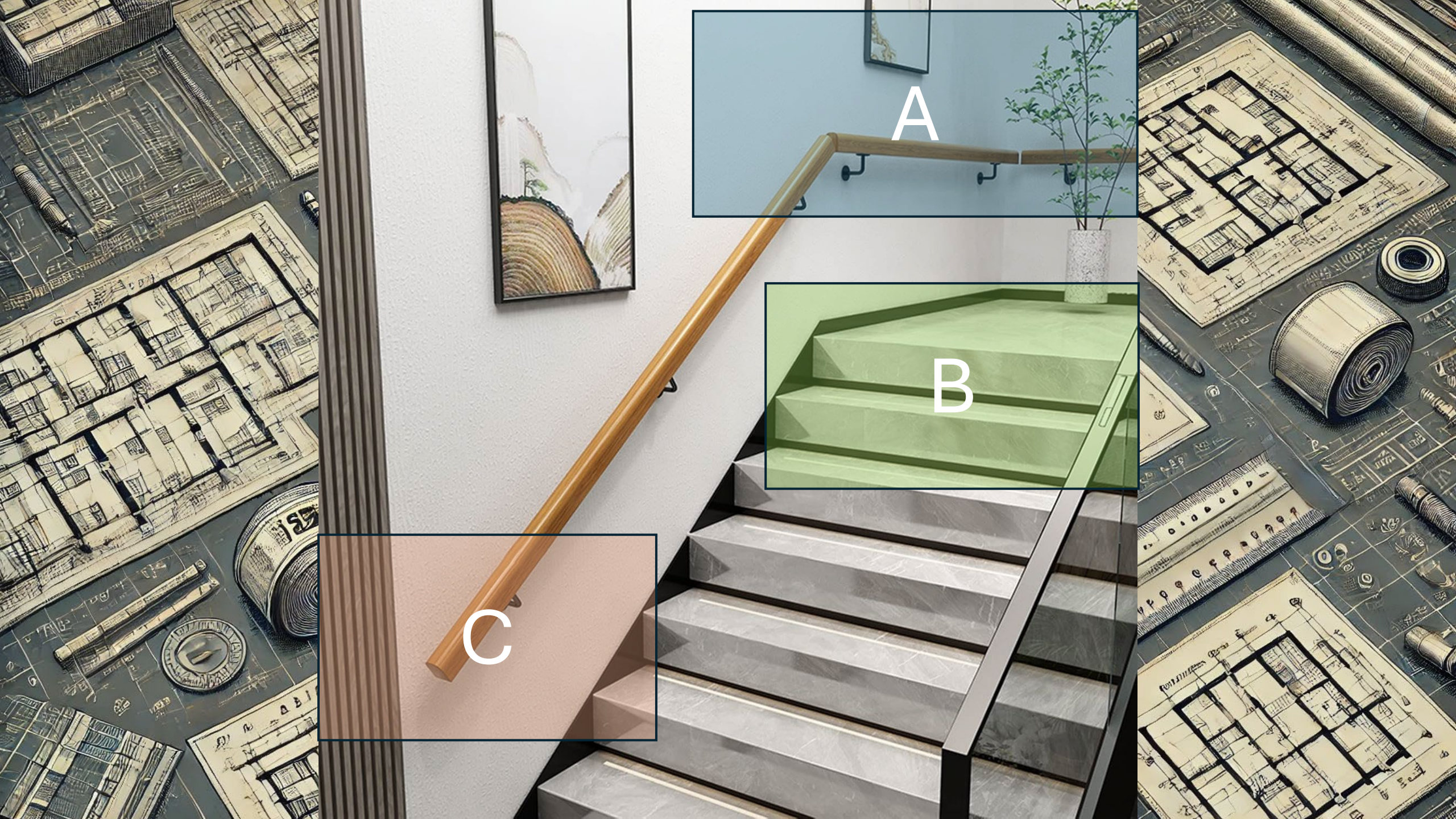




Job 2: Commercial Stairwell

Hurry up, the sooner you're off
my site the better.





Continuity

- Commercial: Section 1012.8.2
- Residential: R311.7.8.4
- Handrails shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends shall be returned or shall terminate in newel posts or safety terminals.

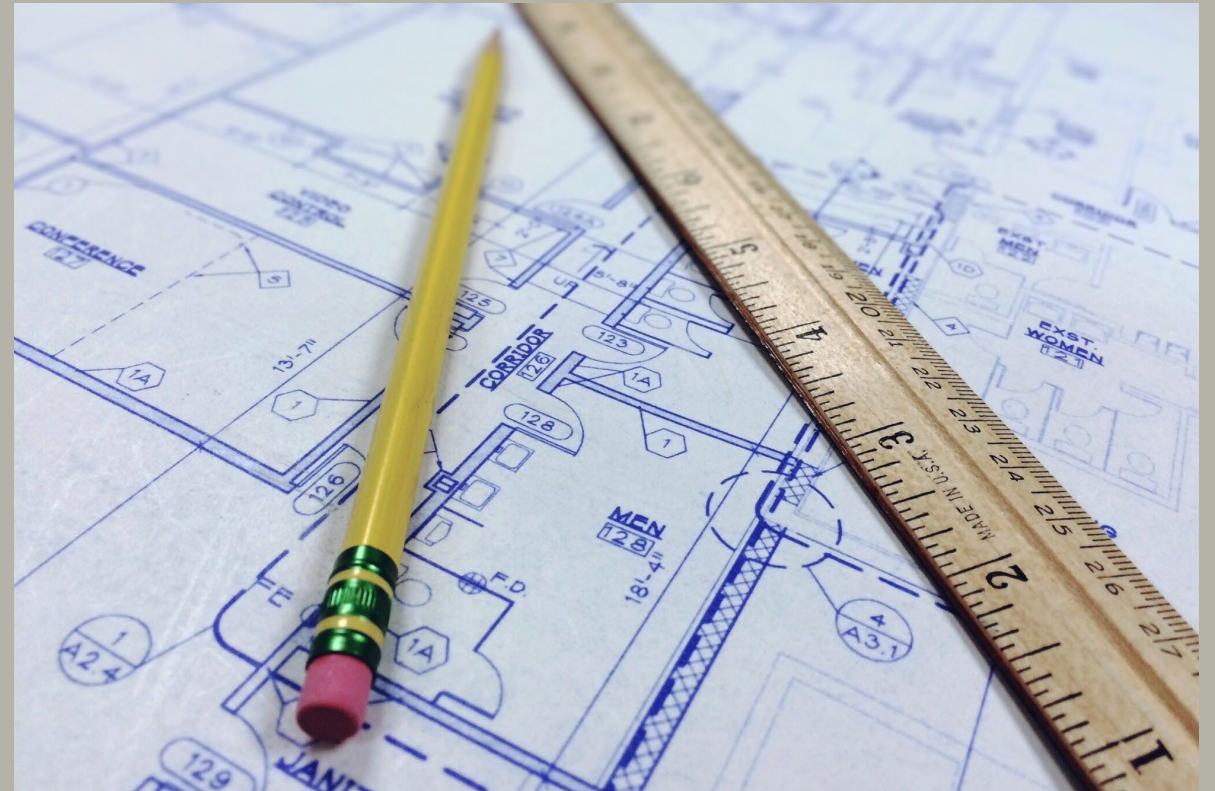




**QUICK
TIP**

Missing Documentation

- The most common reason builders fail inspection.
- Required documents differ by building department.
 - Call ahead to see what you need to have ON-SITE.
- Things you could be asked for:
 - Engineer's foundation letter
 - Structural plans
 - Truss drawings
 - Plans for HVAC ductwork and gas piping
 - Energy code documentations





**Job 3: Basement Remodel
(2nd Visit)**

Okay fine, we did the fireblocking.
Can you please let us move on now?





R302.11.1 – Fireblocking Materials

- Except as provided in Section R302.11, Item 4, fireblocking shall consist of the following materials.
 1. Two-inch (51 mm) nominal lumber.
 2. Two thicknesses of 1-inch (25.4 mm) nominal lumber with broken lap joints.
 3. One thickness of 23/32-inch (18.3 mm) wood structural panels with joints backed by 23/32-inch (18.3 mm) wood structural panels.
 4. One thickness of 3/4-inch (19.1 mm) particleboard with joints backed by 3/4-inch (19.1 mm) particleboard.
 5. One-half-inch (12.7 mm) gypsum board.
 6. One-quarter-inch (6.4 mm) cement-based millboard.
 7. Batts or blankets of mineral wool or glass fiber or other approved materials installed in such a manner as to be securely retained in place.
 8. Cellulose insulation installed as tested in accordance with ASTM E119 or UL 263, for the specific application.



R302.11 Fireblocking

- 4. At openings around vents, pipes, ducts, cables and wires at ceiling and floor level, with an approved material to resist the free passage of flame and products of combustion. The material filling this annular space shall not be required to meet the ASTM E136 requirements.



**QUICK
TIP**

SB185 – Residential Building Inspections

- If a city fails to provide an inspection in 3 business days applicant can engage a 3rd party inspector.
- 3rd party must be licensed and on a list of approved inspectors.
- Local regulator pays for the inspection.



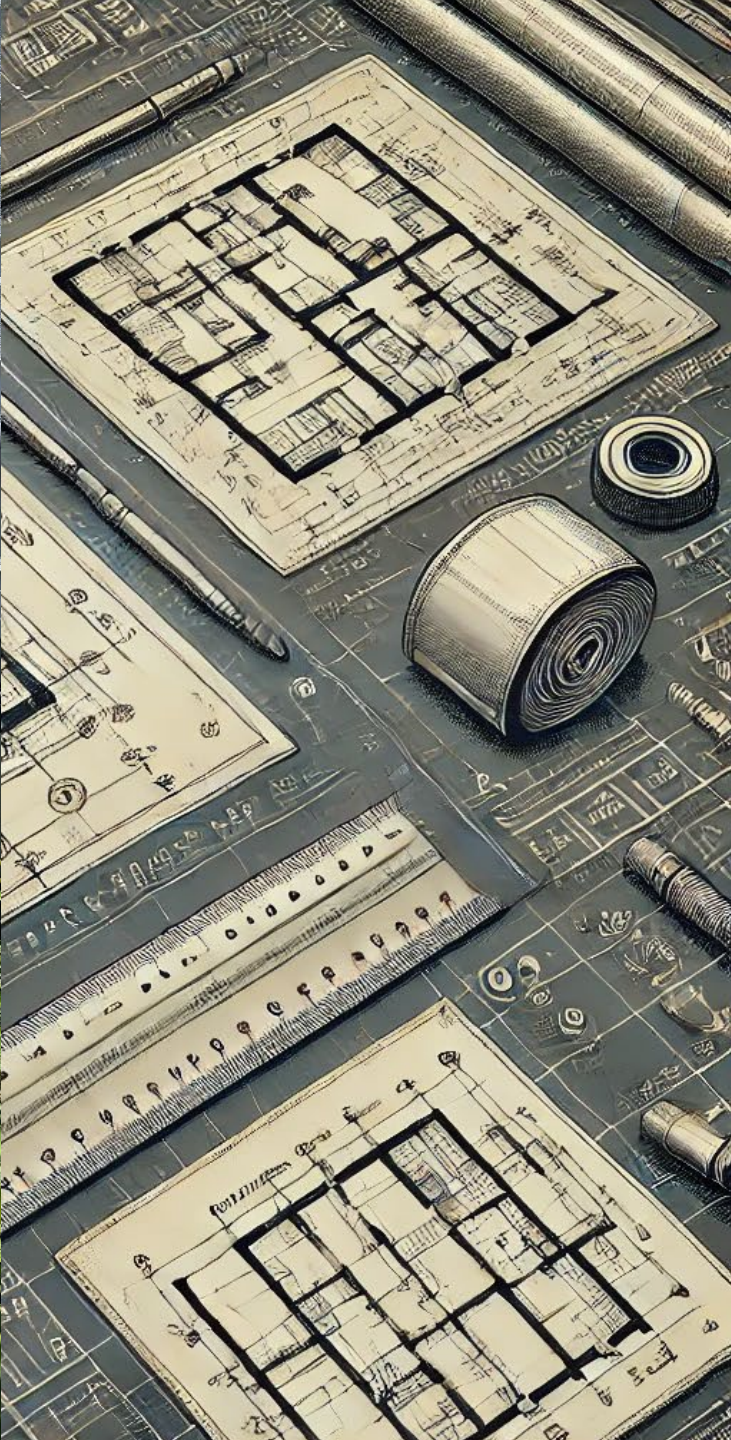
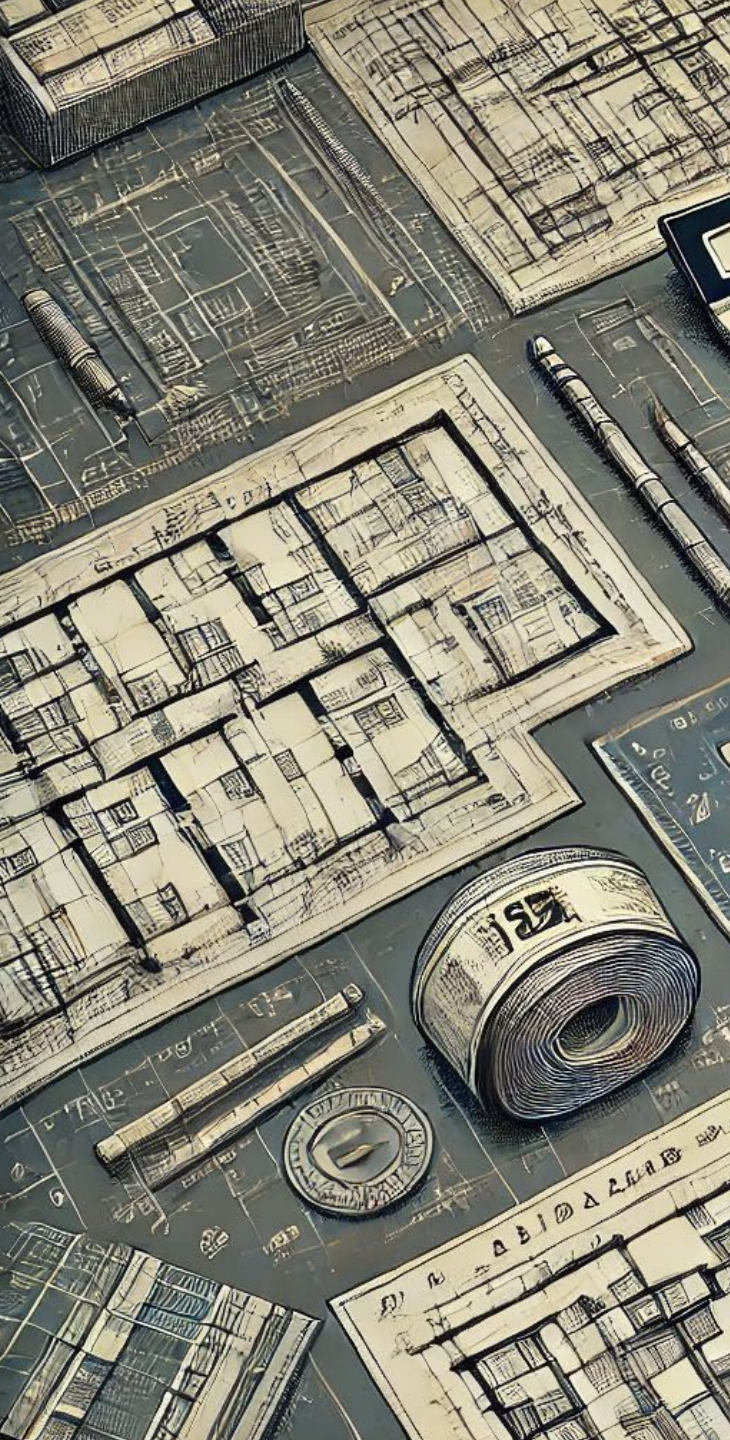
Job 5: New HVAC In Remodel

DRIVE BY



Just installed this brand new
Lennox. Purrs like a kitten.







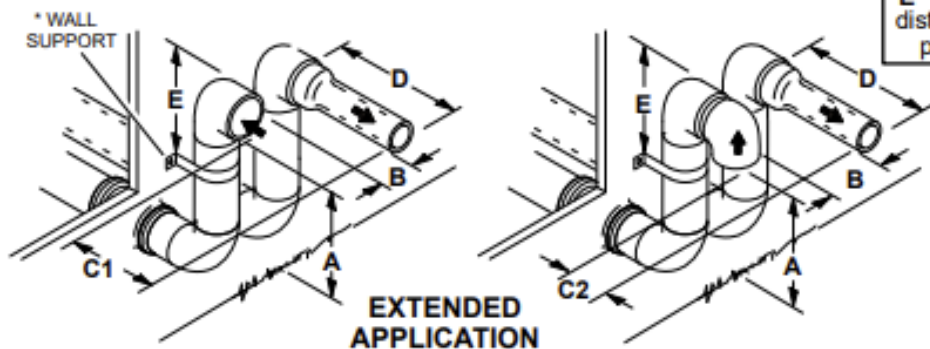
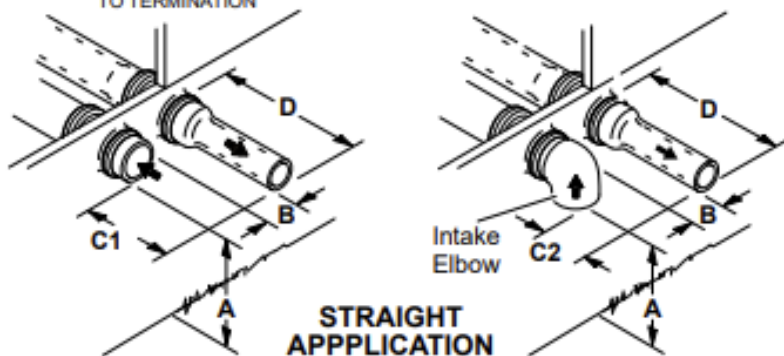
Exhaust / Intake clearance

- ICC does not specify any required distance.
- Guidelines are left entirely up to the manufacturer.



FIELD FABRICATED WALL TERMINATION

NOTE - FIELD-PROVIDED REDUCER MAY BE REQUIRED TO ADAPT LARGER VENT PIPE SIZE TO TERMINATION



	2" (51mm) Vent Pipe	3" (76mm) Vent Pipe
A - Minimum clearance above grade or average snow accumulation	12" (305 mm)	12" (305 mm)
B - Maximum horizontal separation between intake and exhaust	6" (152 mm)	6" (152 mm)
C1 - Minimum from end of exhaust to inlet of intake	8" (203 mm)	8" (203 mm)
C2 - Minimum from end of exhaust to inlet of intake	6" (152 mm)	6" (152 mm)
D - Maximum exhaust pipe length	12" (305 mm)	20" (508 mm)
E - Maximum wall support distance from top of each pipe (intake/exhaust)	6" (152 mm)	6" (152 mm)

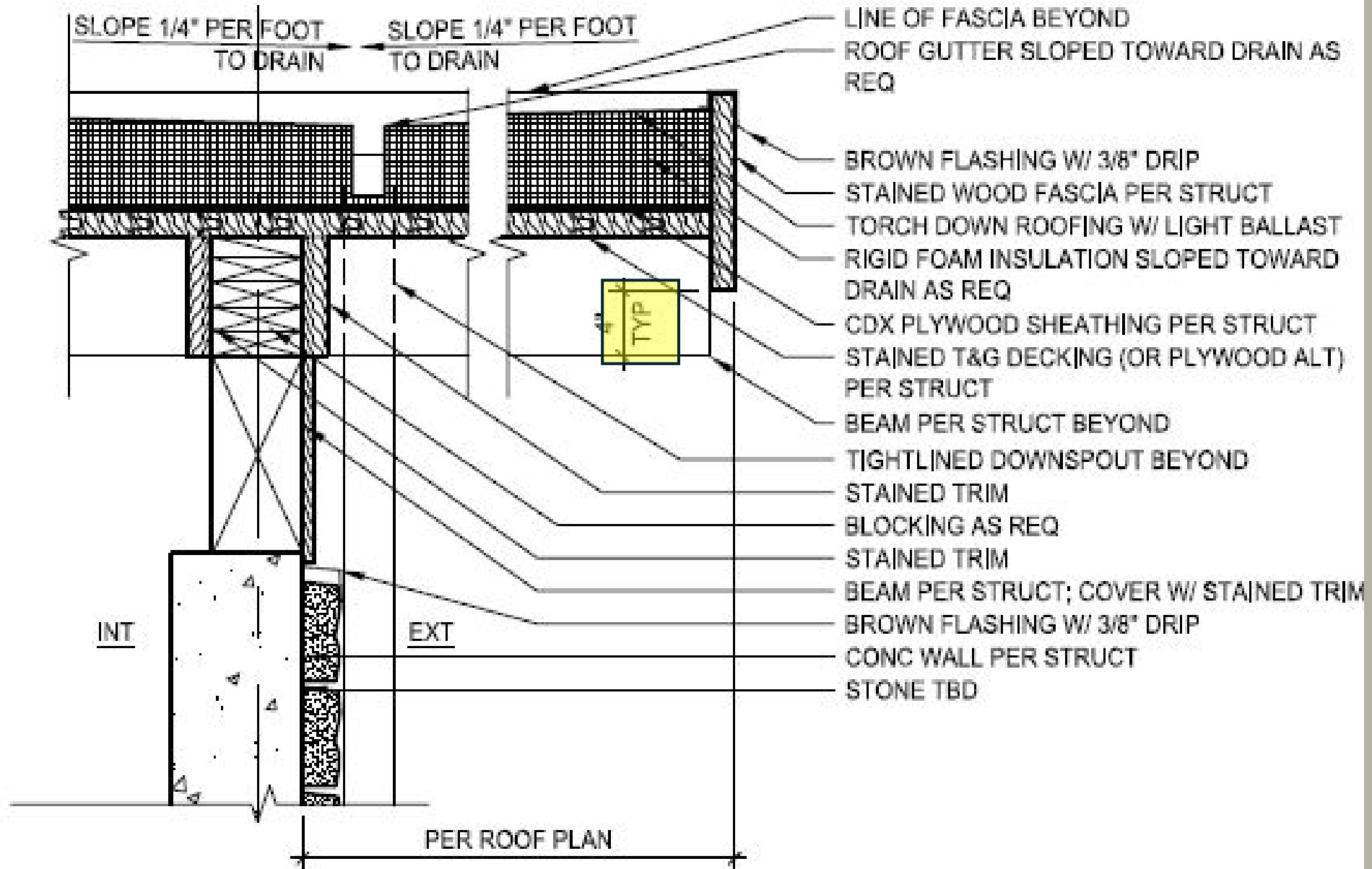
See venting table 5 for maximum venting lengths with this arrangement.

* Use wall support every 24" (610 mm). Use two wall supports if extension is greater than 24" (610 mm) but less than 48" (1219 mm).

NOTE - One wall support must be within 6" (152 mm) from top of each pipe (intake and exhaust) to prevent movement in any direction.



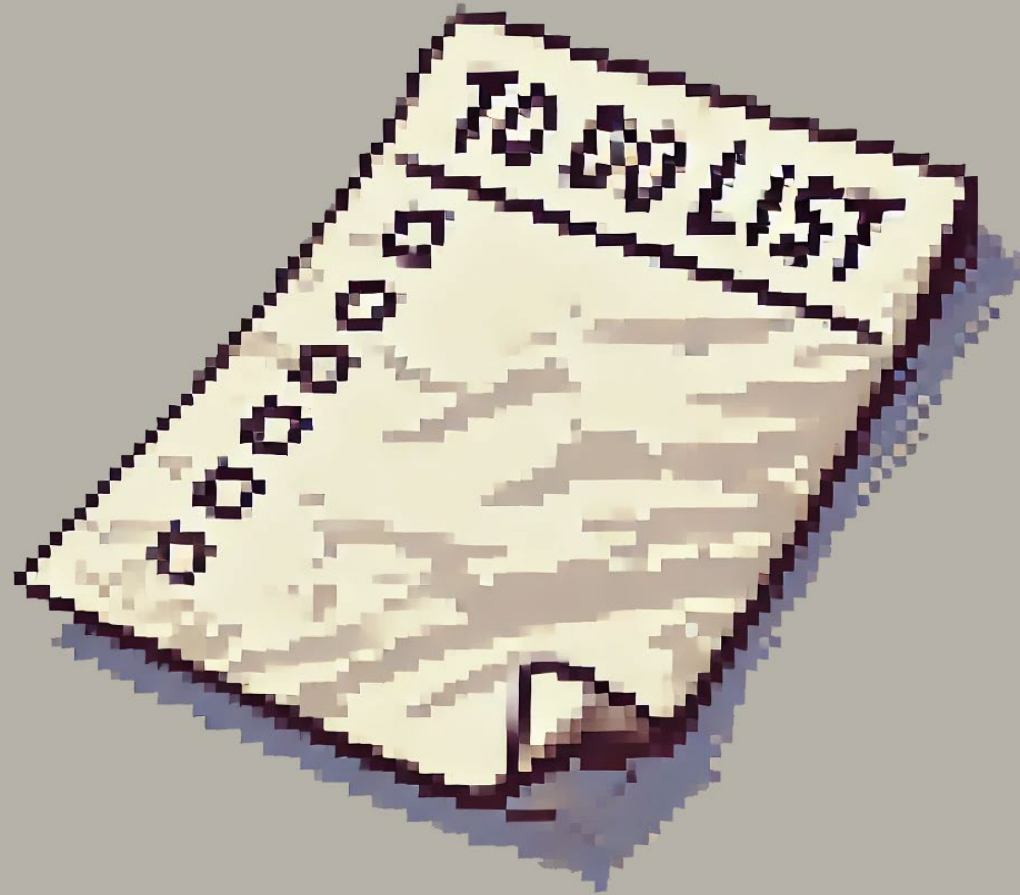
**QUICK
TIP**



Typical

- Means the specific element occurs in multiple locations on the drawing in the same way.
- Many modern plans no longer use 'TYP' and instead will call out the number of times the feature is called for: 2x, 8x, etc.
- Wikipedia has a very helpful article on engineering abbreviations: [Click Here](#)

LEGEND			
	CONTOUR		WATER MAIN & VALVE WITH BOX
	ELEVATION		FIRE HYDRANT
	TOP CURB ELEVATION GUTTER/EDGE PAVEMENT		SANITARY SEWER
	MATCH GRADE		SANITARY FORCE MAIN
	POWER POLE		MANHOLE (TYPE IS AS NOTED)
	TELEPHONE POLE		CLEANOUT (TYPE IS AS NOTED)
	POLE WITH LIGHT		STORM STRUCTURE (TYPE IS AS NOTED)
	TREE WITH SIZE		ELECTRIC LINE (O.H. = OVERHEAD, U.G. = UNDERGROUND)
	WOODS/BRUSH		TELEPHONE (O.H. OR U.G.)
	FENCE		PAVEMENT TO BE REMOVED
	BUILDING		TREE OR BRUSH TO BE REMOVED
	CONCRETE CURB		UTILITIES TO BE ABANDONED OR REMOVED
	BITUMINOUS PAVEMENT		LIMIT OF CONSTRUCTION
	CONCRETE PAVEMENT & WALK		POINT OF CONNECTION TO EXISTING UTILITY
	DITCH OR SWALE		S-1 SOIL BORING, MECHANICALLY MADE
	STORM SEWER		C-14 SOIL BORING, HAND AUGER
	HEADWALLS		



Job 5: DIY Remodel

I think you're going to be
blown away by the quality of
my work.











GAME OVER

