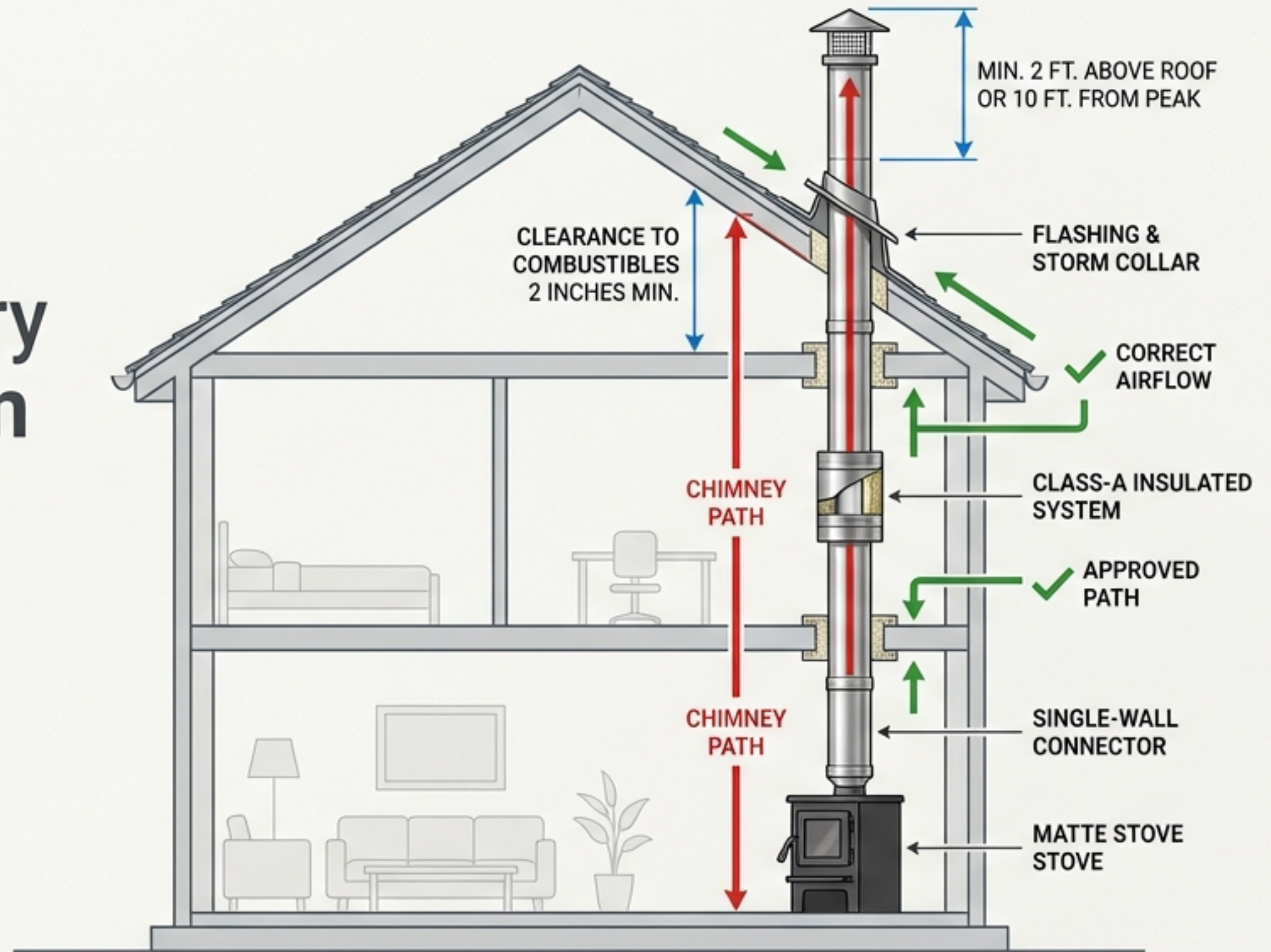


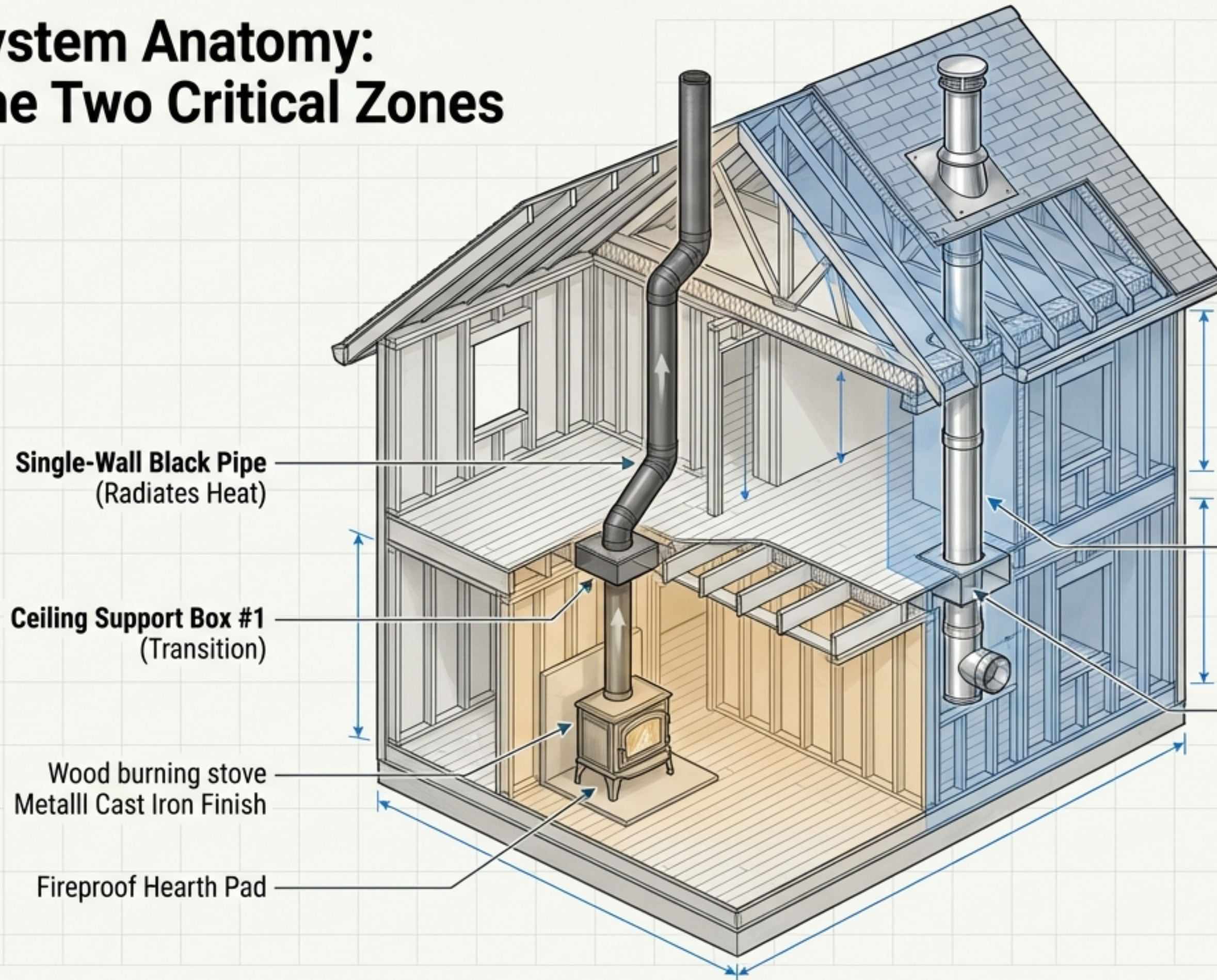
Vertical Warmth: A Guide to Multi-Story Chimney Installation DIN Next LT Pro

From Stove to Sky:
Installing a Class-A System in
a Two-Story Home



Based on US Standard Installation | Single-Wall Connector + UL-103HT Class-A System

System Anatomy: The Two Critical Zones



Why Switch Pipes?



Single-wall pipe heats the room but is not safe for walls or ceilings.



Class-A pipe uses 1-inch high-heat insulation to keep exhaust hot (for draft) while keeping the outer metal cool enough to touch building materials.

Class-A Insulated Pipe
(Structural/External)

Ceiling Support Box #2
(Pass-through)

Ceiling Support Box #1
(Transition)

Wood burning stove
Metall Cast Iron Finish

Fireproof Hearth Pad

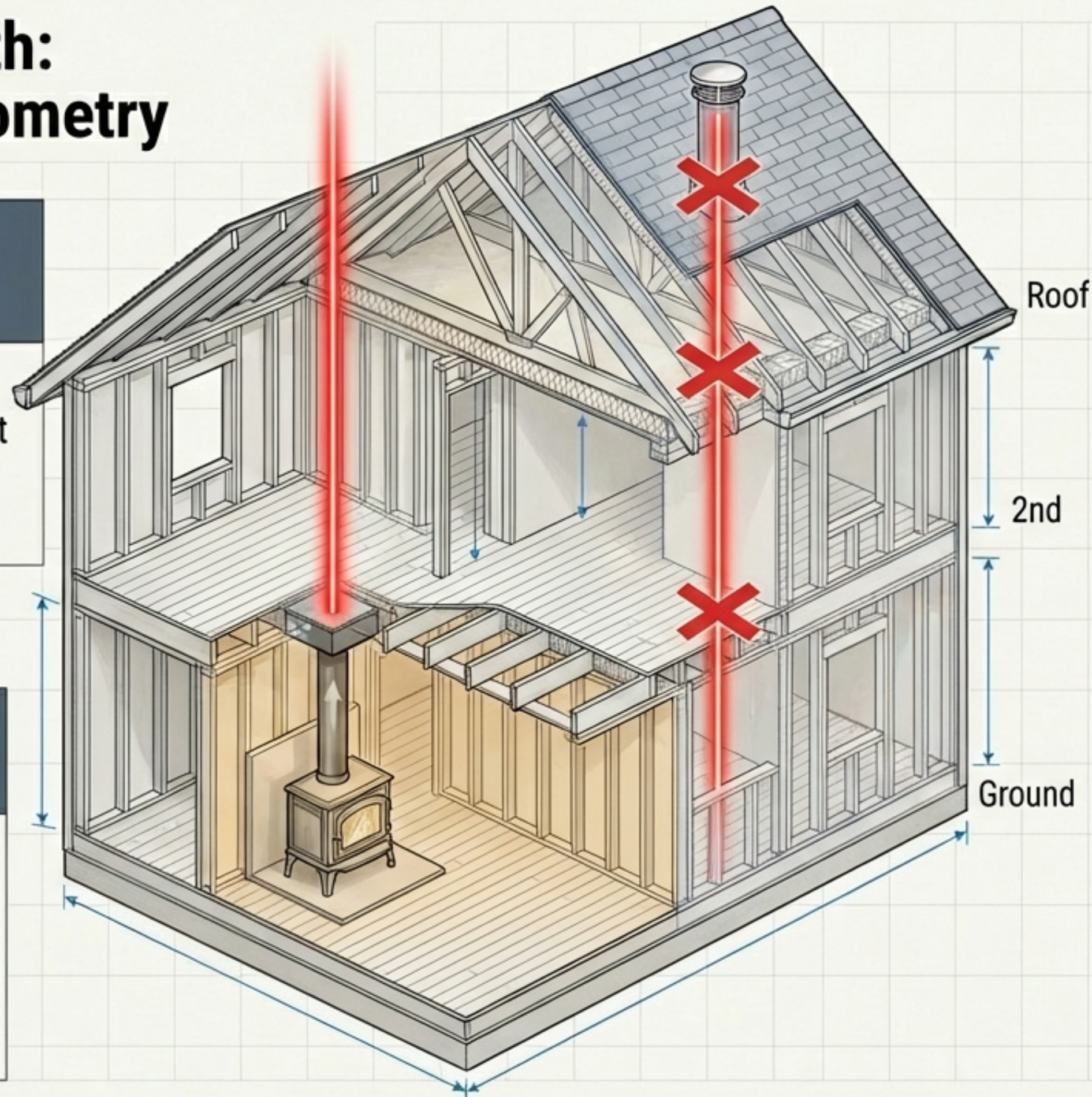
The Critical Path: Gravity and Geometry

Rule #1: Perfectly Vertical

Avoid offsets. Straight vertical runs maximize draft and minimize creosote buildup.

Action Step: The Laser Line

Use a plumb bob or laser level to mark the center point on all three surfaces simultaneously before cutting.



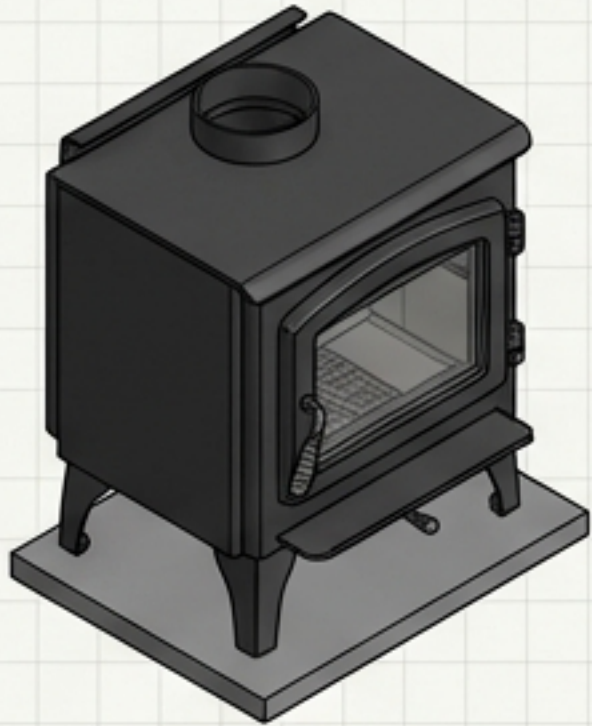
Planning Tip: Check Your Joists

Verify the path avoids floor joists and roof rafters. Framing a box around the pipe is easier than cutting a structural beam.

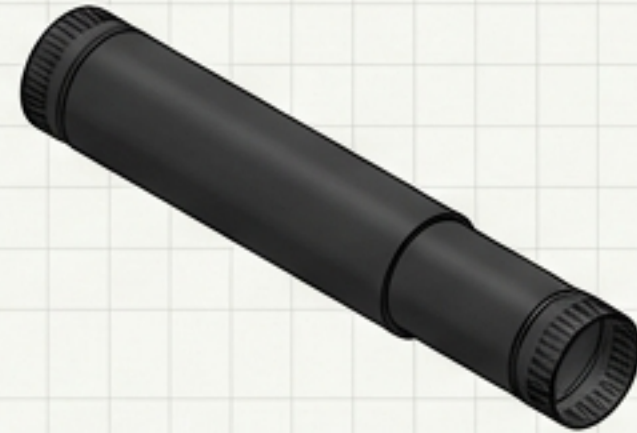
The Gear List

Column A: The Living Area

Wood Stove (UL Listed)



Single-Wall Black Pipe
(Telescoping recommended)



Stove Thermometer



Stove Pipe Screws (Black)

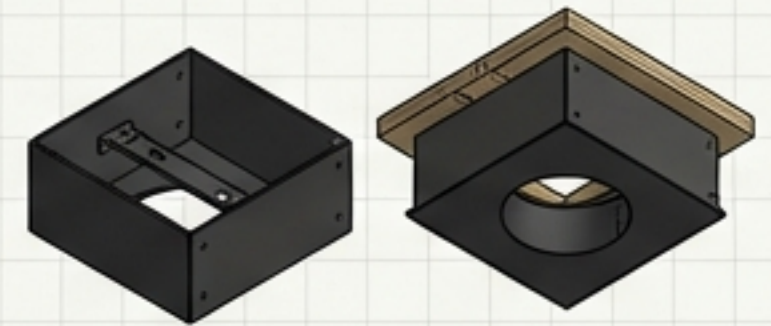


Column B: The Structure & Roof

Stove-to-Class-A Adapter



Ceiling Support Boxes (x2)

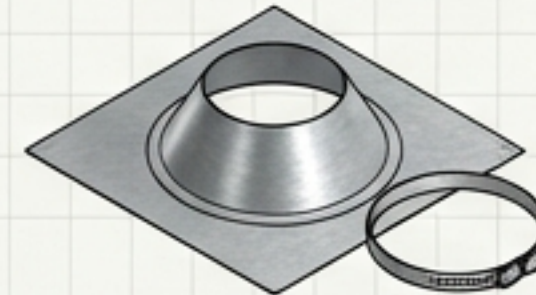


Class-A Pipe Sections
(UL-103HT)

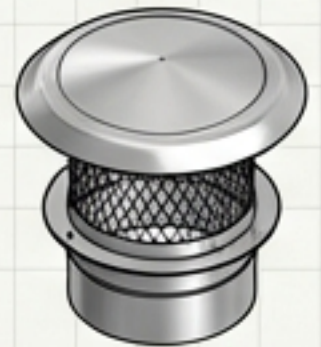


Attic Insulation Shield

Roof Flashing &
Storm Collar



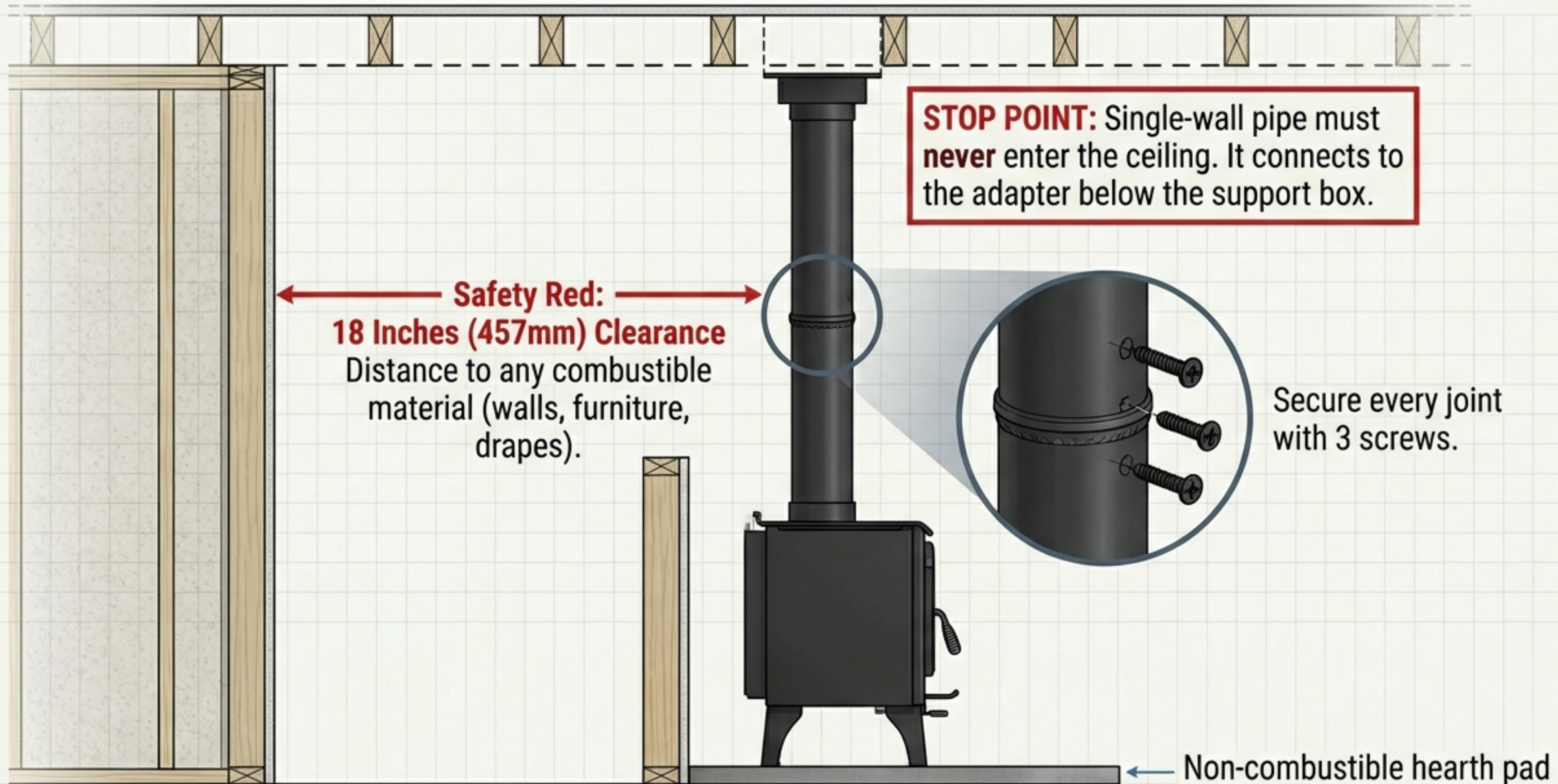
Rain Cap



Pro Tip: Don't Mix Brands.

Manufacturing tolerances vary. Stick to one manufacturer for the entire Class-A run to ensure twist-locks fit securely.

Ground Level: The Stove & Connector



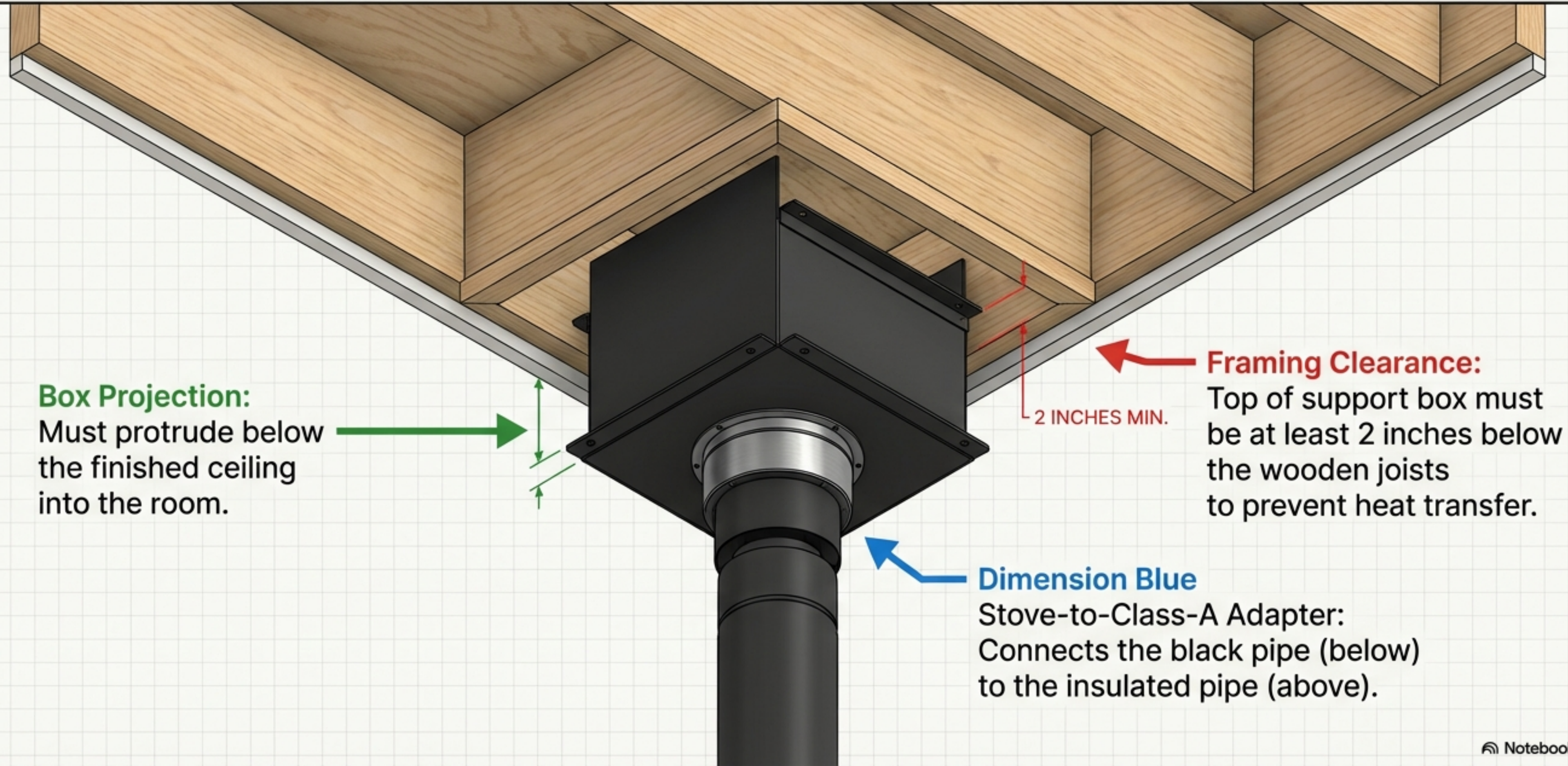
STOP POINT: Single-wall pipe must **never** enter the ceiling. It connects to the adapter below the support box.

Safety Red:
18 Inches (457mm) Clearance
Distance to any combustible material (walls, furniture, drapes).

Secure every joint with 3 screws.

Non-combustible hearth pad

The Transition: Ceiling Support Box #1



Box Projection:

Must protrude below the finished ceiling into the room.

Framing Clearance:

Top of support box must be at least 2 inches below the wooden joists to prevent heat transfer.

2 INCHES MIN.

Dimension Blue

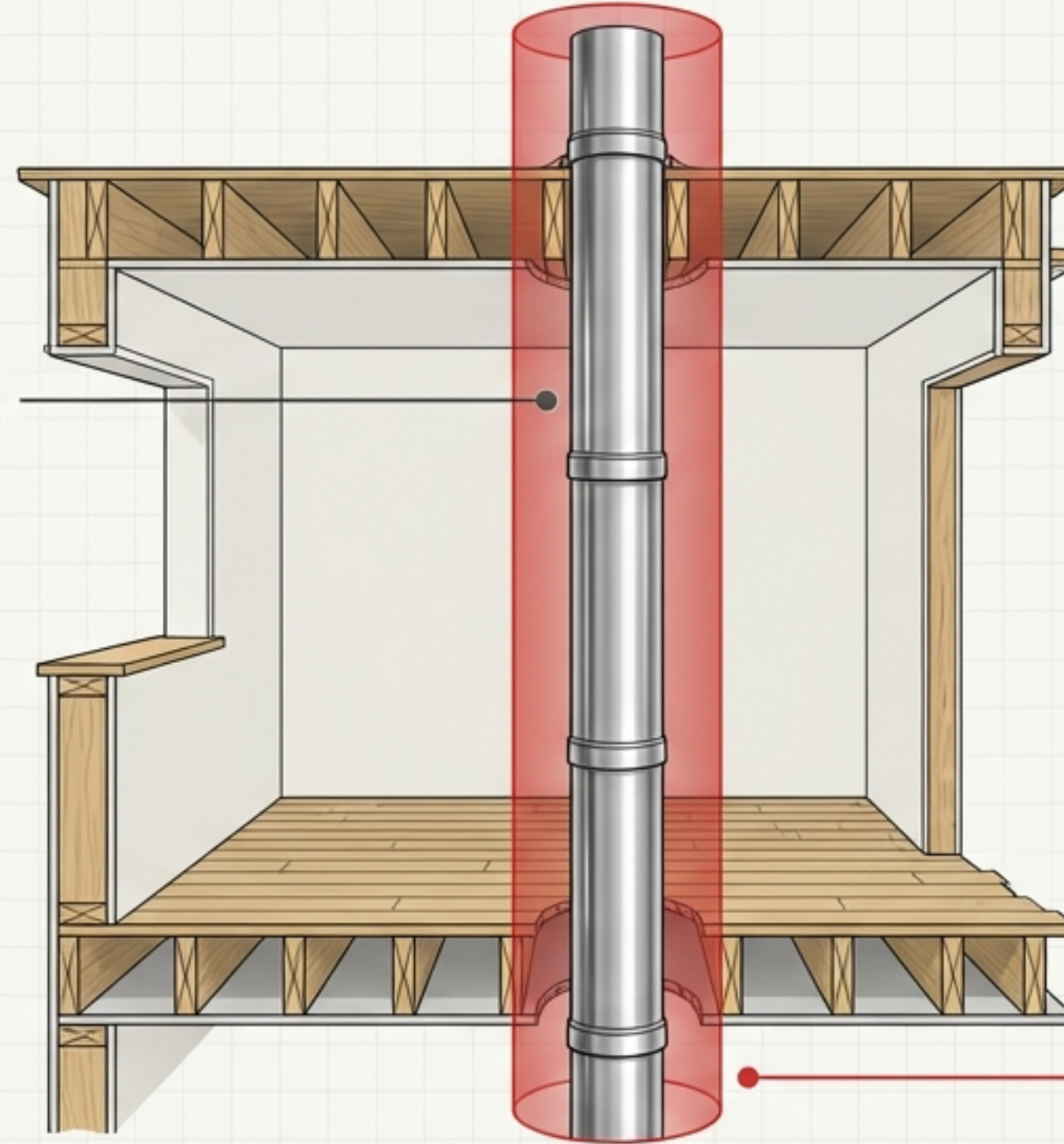
Stove-to-Class-A Adapter:
Connects the black pipe (below) to the insulated pipe (above).

The Second Floor: Passing Through

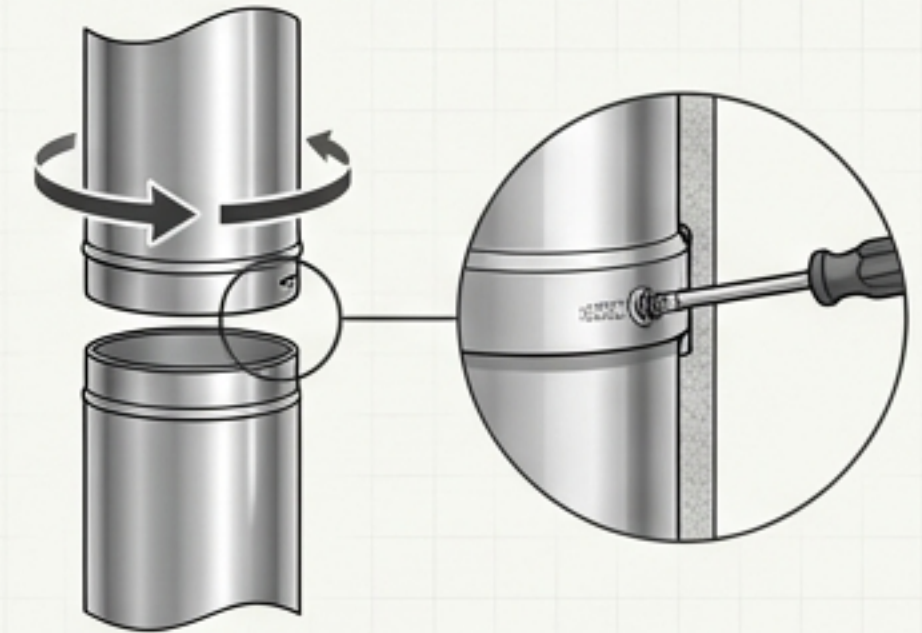


Material: UL-103HT Class-A

Stainless steel inner, 1-inch insulation, stainless outer. 8-inch outer diameter.



Twist & Lock + Screw



Expert Tip: Even with twist-locks, drive a stainless screw through the joint to prevent untwisting.

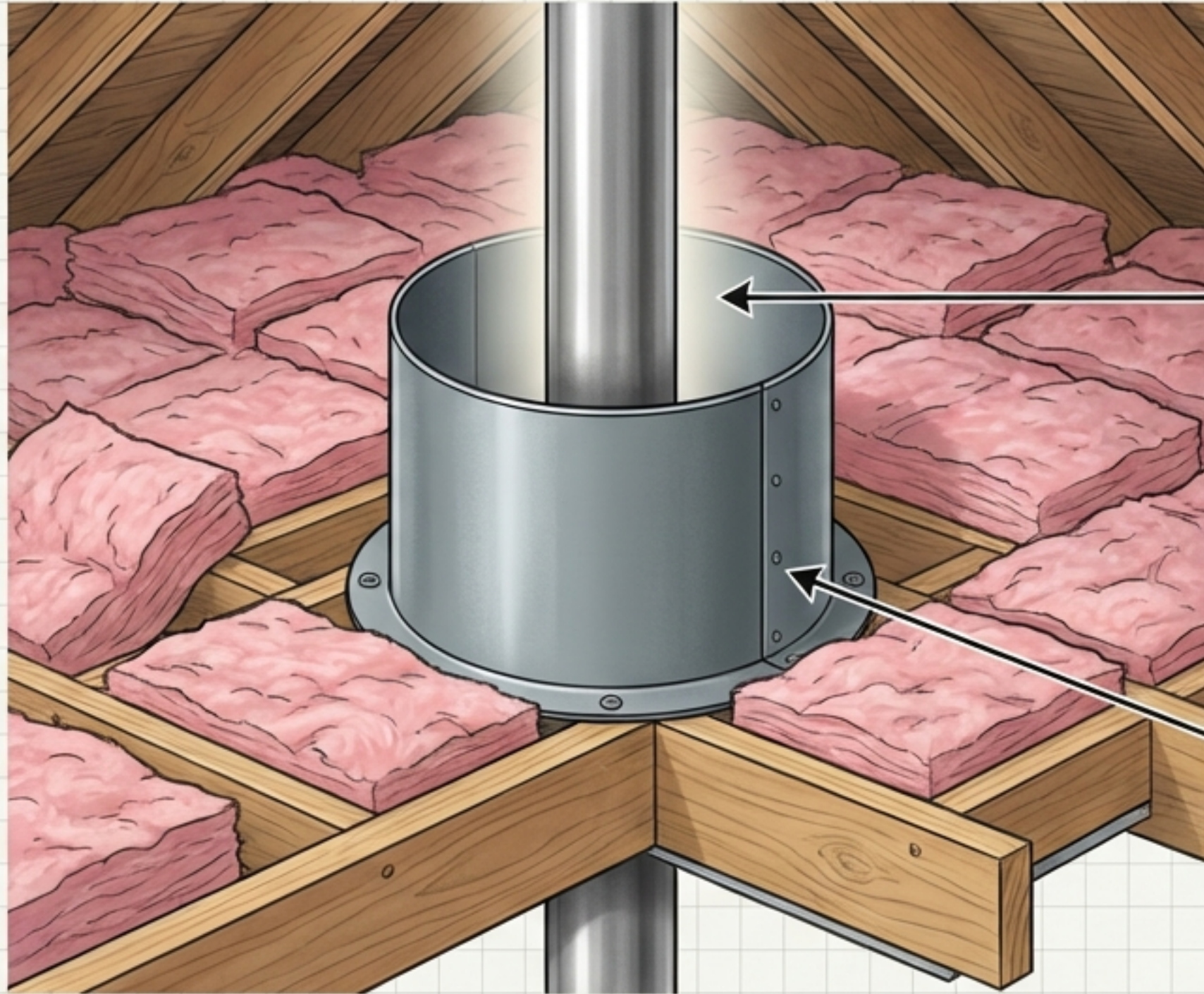
2-Inch Safety Zone

No furniture, framing, or drywall can touch the pipe.

The Attic: The Exclusion Zone



Danger: Loose insulation is combustible. The shield ensures the mandatory 2-inch clearance is maintained even if insulation shifts.

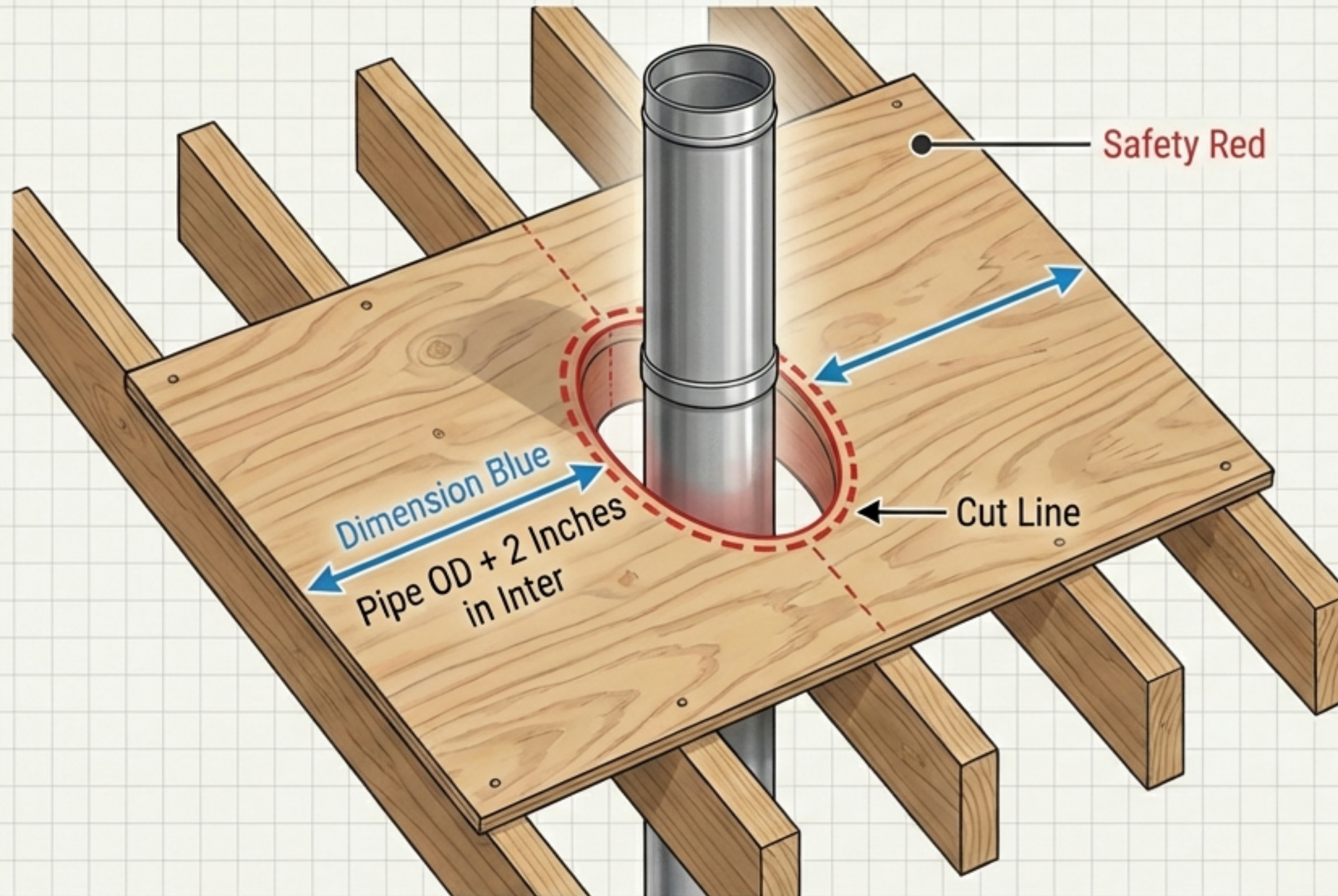


Air Cooling Zone:
This space must remain empty.

Attic Shield: Keeps insulation from drifting against the hot pipe.

Roof Penetration: The Geometry of Safety

in DIN Next LT Pro



Technical Slate

Safety Red

The 3D Problem:

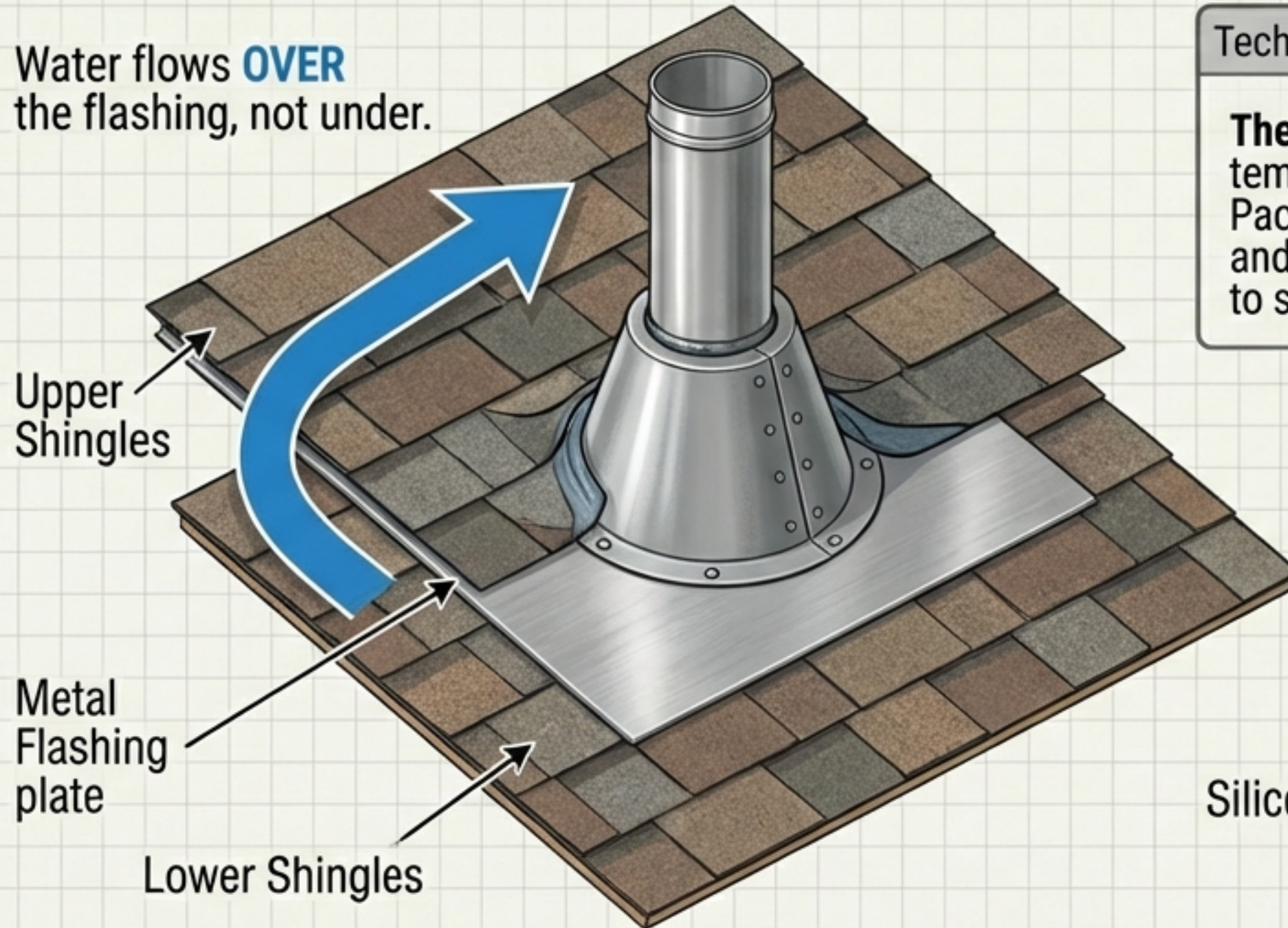
A circular pipe passing through a sloped roof requires an **OVAL** hole to maintain a consistent 2-inch air gap all around.

1. Transfer center mark from attic.
2. Mark the oval.
3. Cut decking.
4. Verify no roofing felt or wood protrudes into the 2-inch air gap.

Weatherproofing: Flashing & Collar



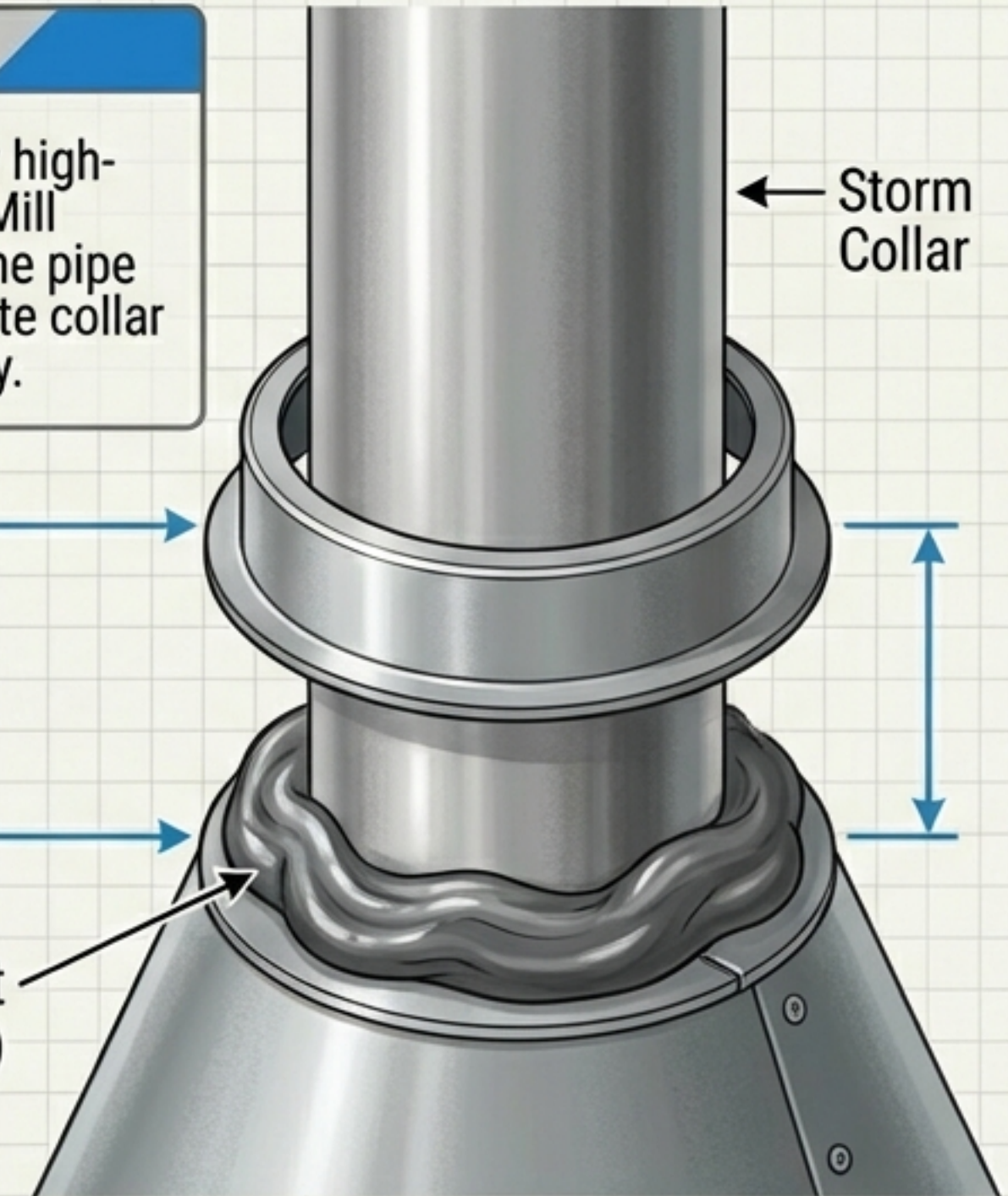
Water flows **OVER**
the flashing, not under.



Technical Slate

The Seal: Apply high-temp silicone (Mill Pac) between the pipe and collar. Rotate collar to spread evenly.

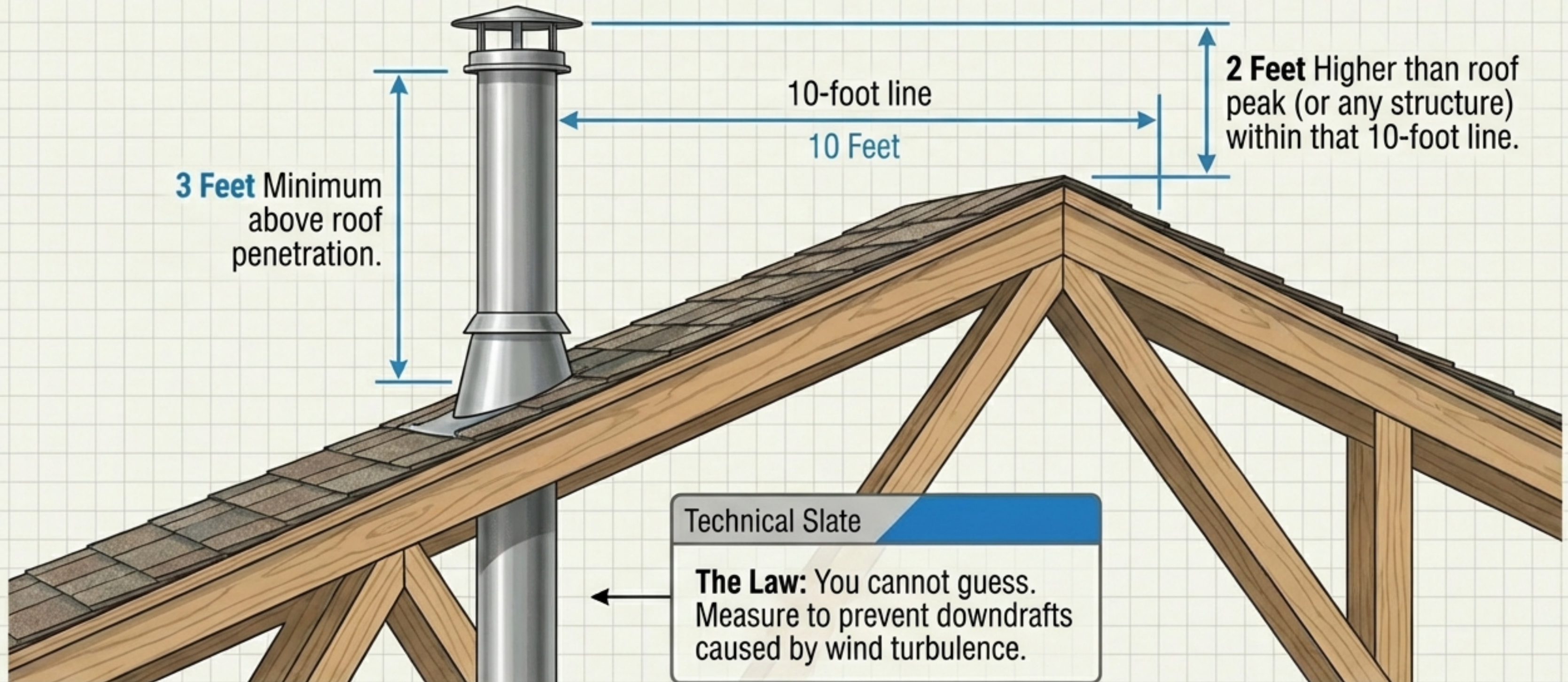
Silicone Sealant
(Mill Pac)



“A little more silicone around that connection to seal everything from the elements.” — This Old House

The Summit: The 3-2-10 Termination Rule

in DIN Next LT Pro

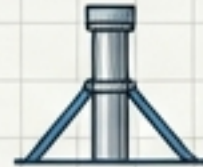
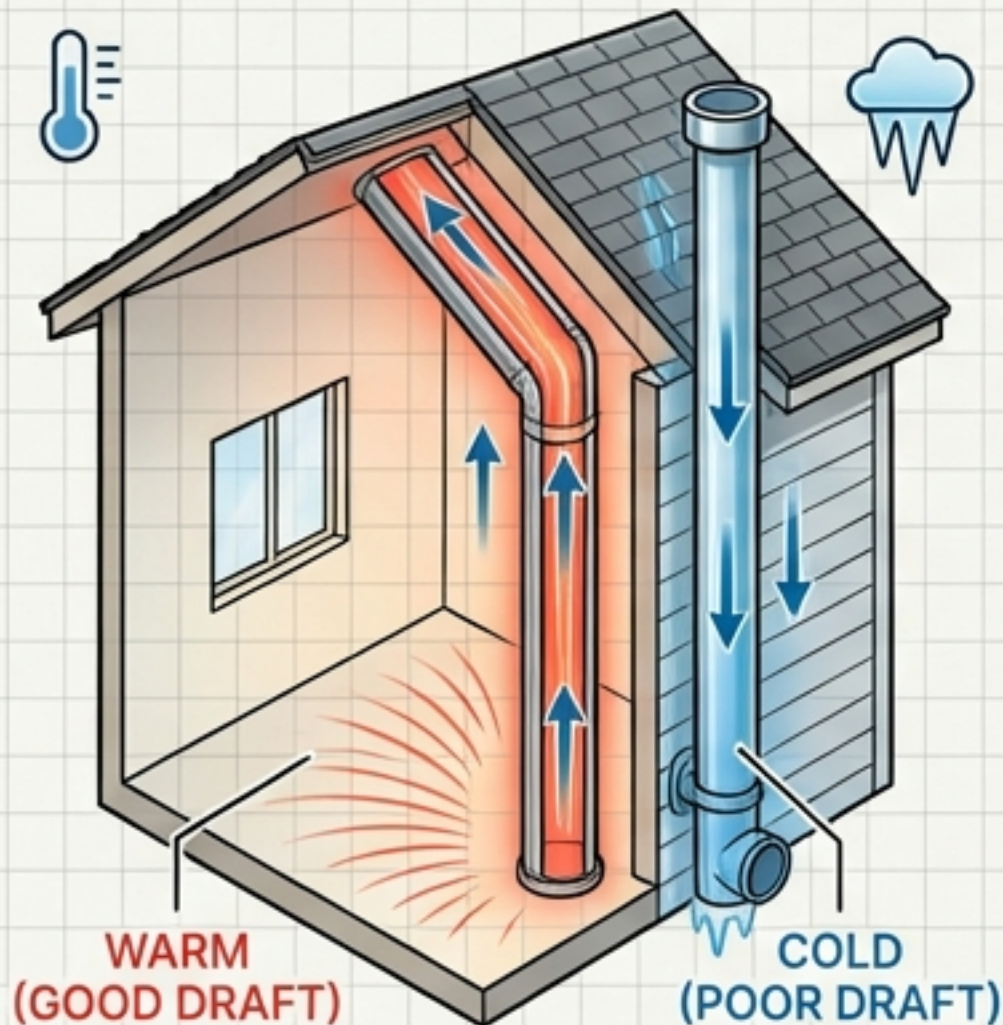


Expert Wisdom: Practical 'Gotchas'



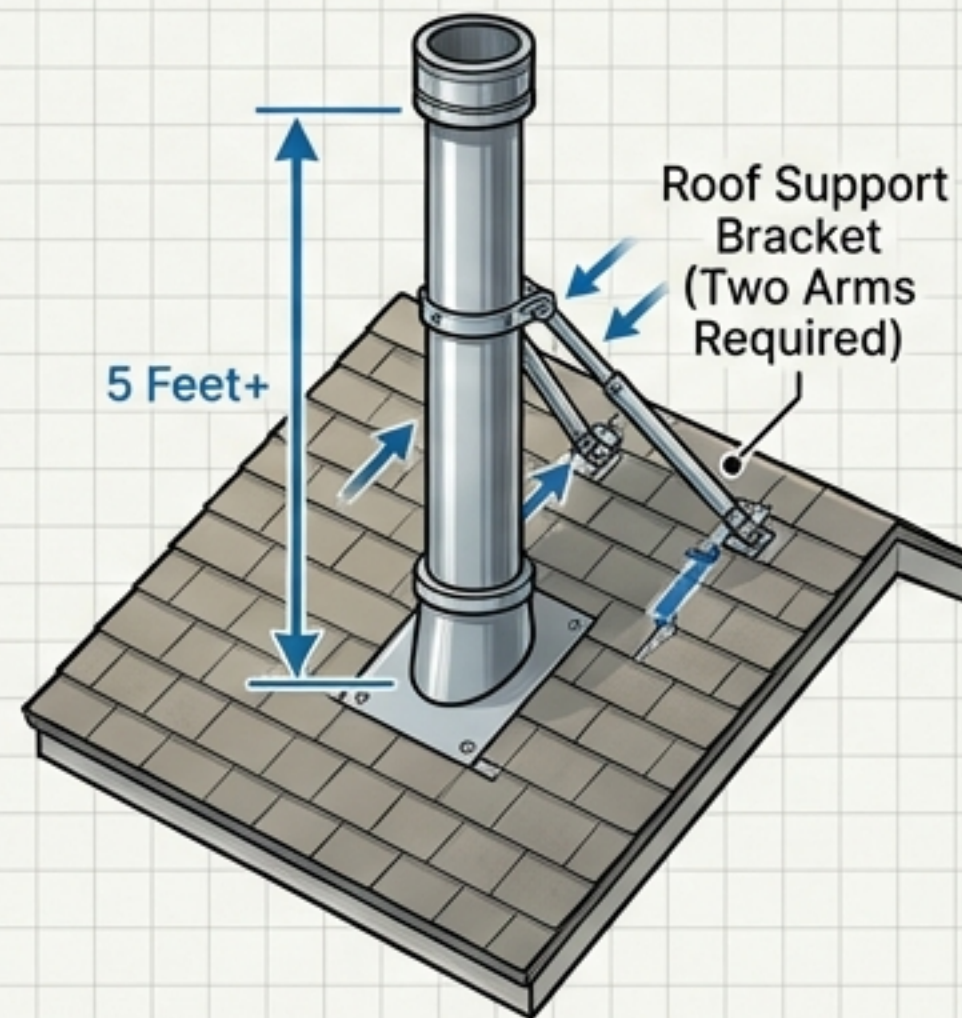
Draft Matters

Run pipe indoors. Keeping the pipe warm inside the house envelope maximizes draft. External chimneys stay cold and draft poorly.



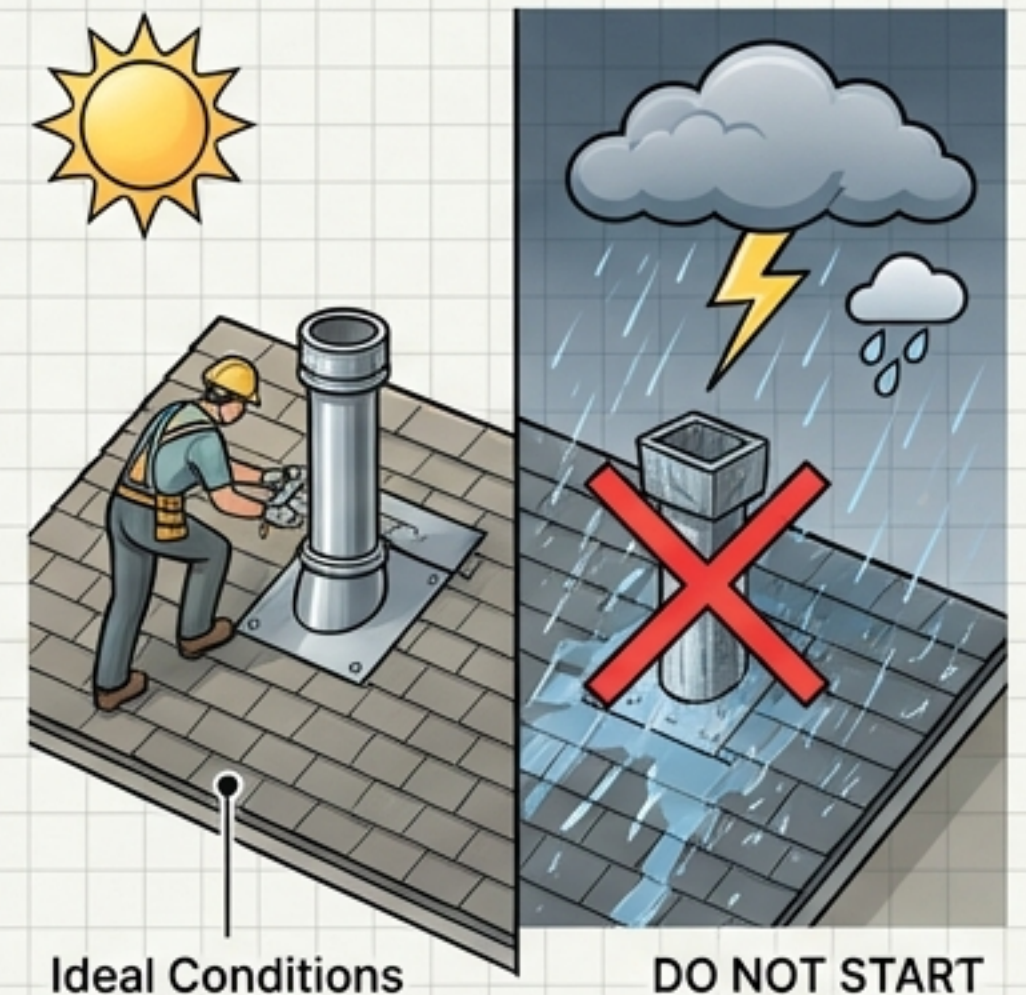
Roof Supports

If the pipe extends more than 5 feet above the roof, install a Roof Support Bracket with exactly two arms to resist wind load.



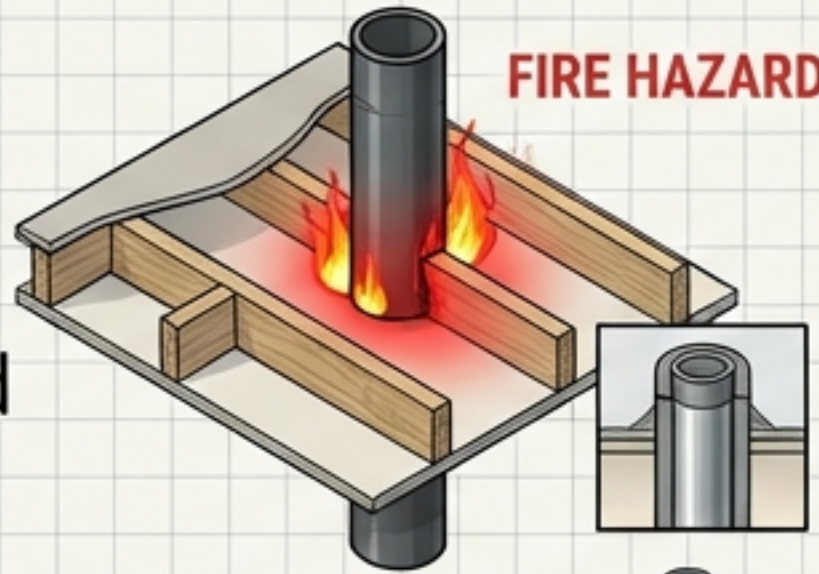
Weather Check

"Perfect day to be on a hot roof." — Check the forecast. Do not start the roof penetration if rain is imminent.



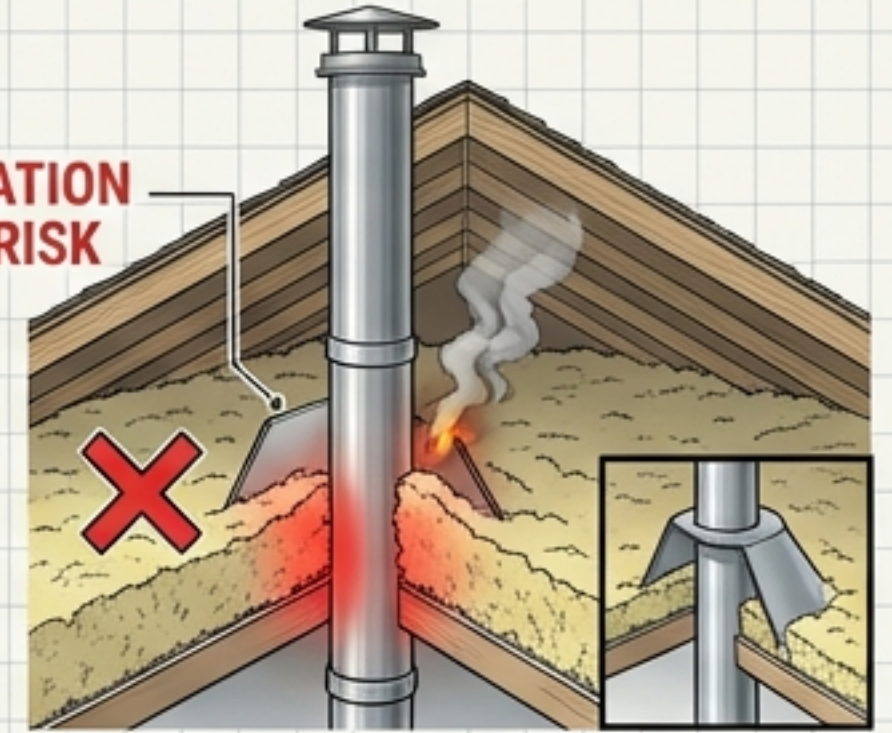
The 'Don't Do It' List in Technical Slate

❌ Passing single-wall black pipe through a ceiling (Fire Hazard).

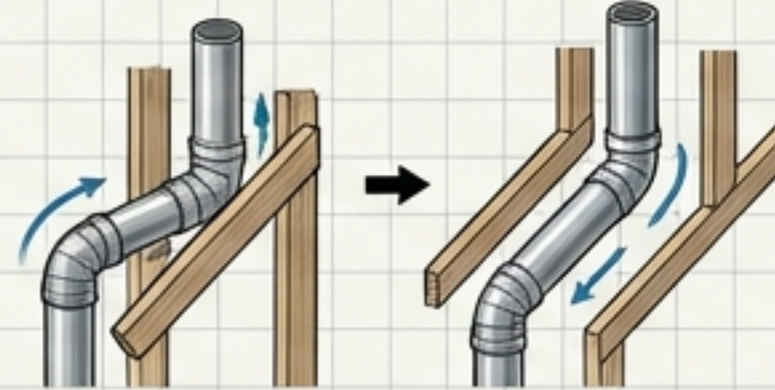


❌ Missing the attic insulation shield (Insulation fire risk).

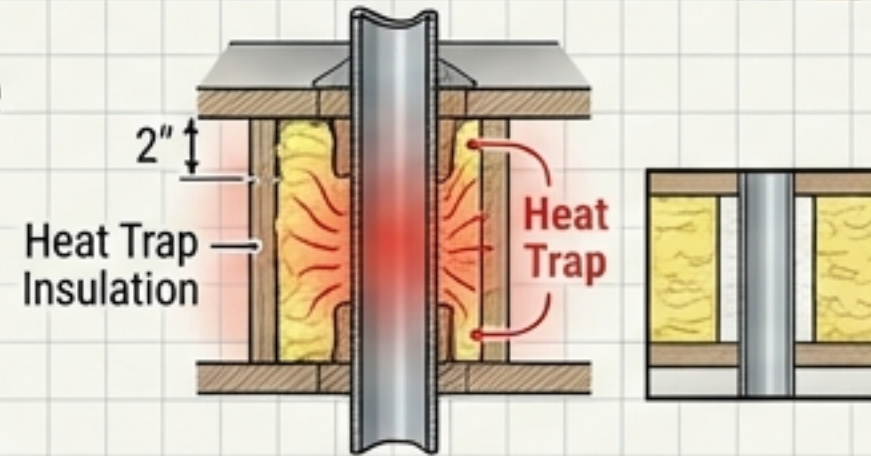
Correct Path
(Optimal Draft)



❌ Using elbows to route around framing instead of moving the framing (Kills draft).



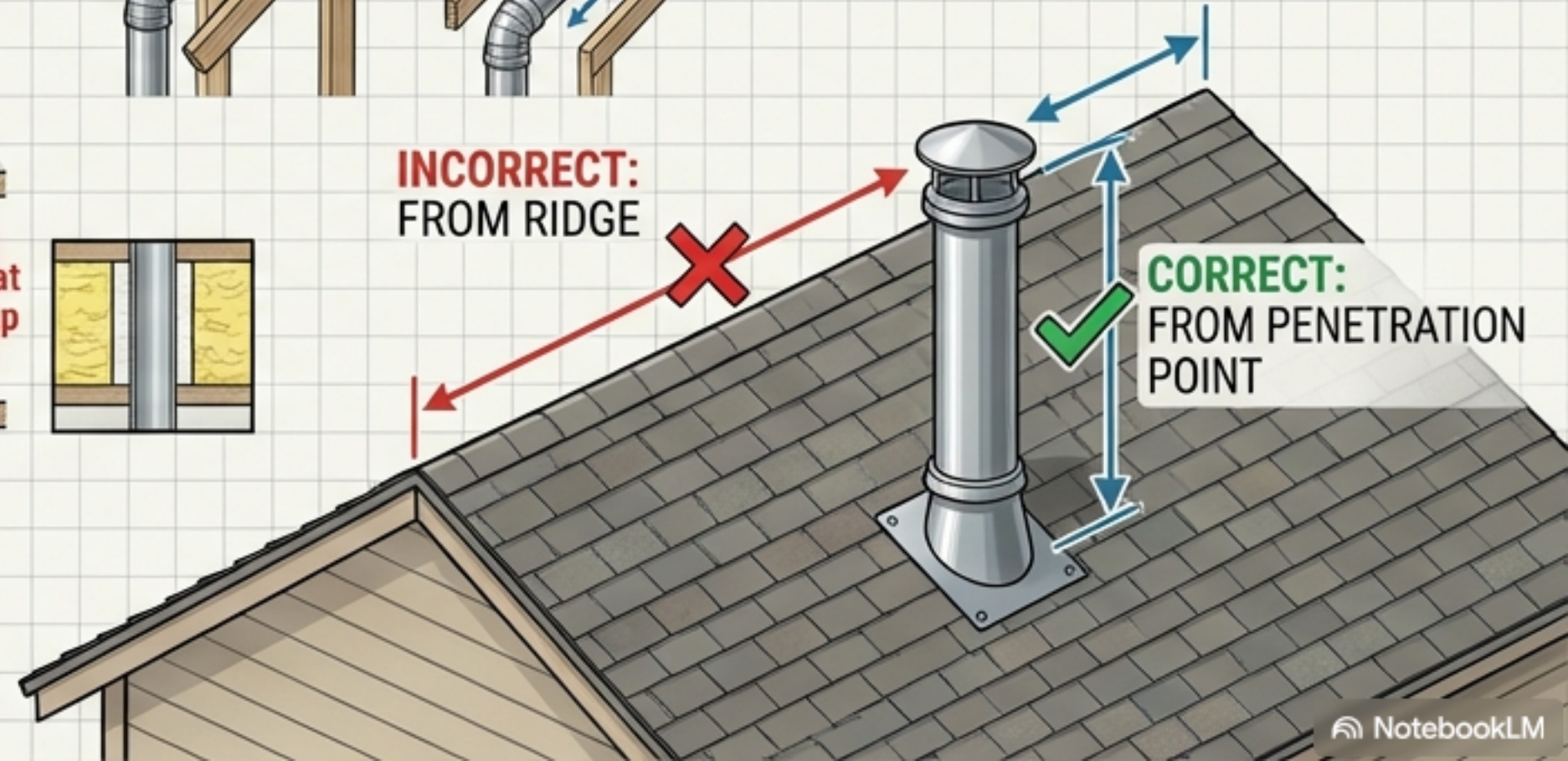
❌ Packing insulation into the 2-inch clearance gap (Heat trap).



❌ Measuring chimney height from the ridge instead of the penetration point.

INCORRECT:
FROM RIDGE

CORRECT:
FROM PENETRATION
POINT



Final Inspection & Compliance

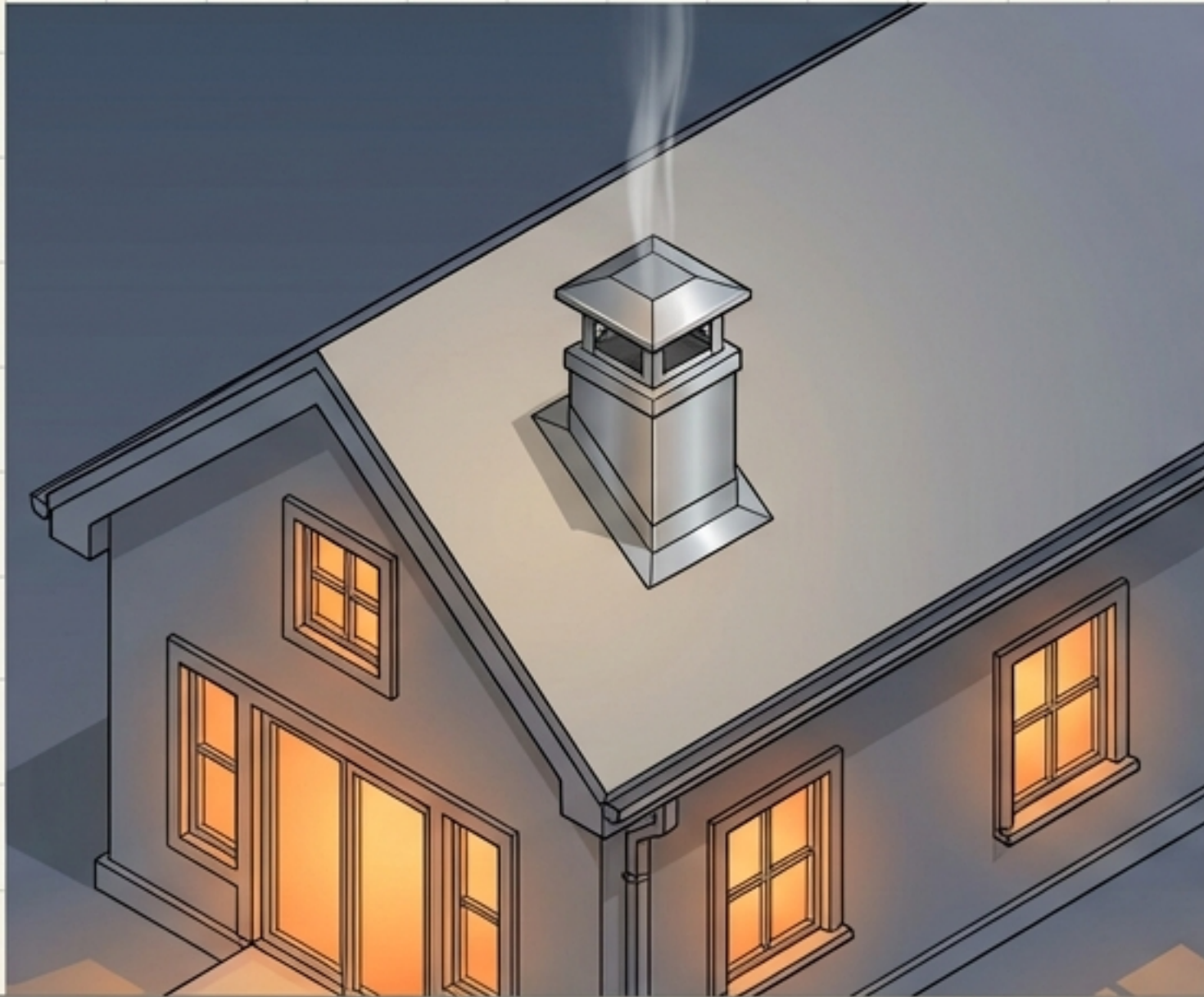


The Paperwork:

Most US jurisdictions require a building permit and a physical inspection.

Ensure UL labels are facing outward for the inspector.

Ready for Winter



No smoke leakage, no creosote smell—just warmth.

A properly installed vertical system is safer, cleaner, and more efficient.

Can't wait to light a nice fire in the winter.