



Wood System Inspection

1. Inspect the firebox interior, chimney exterior and inside of flue liner
 2. Ensure clearances to combustibles
 3. Check for dangerous proximity of tree branches or combustible debris near chimney cap (pine needles on roof)
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Masonry Fireplace

INSIDE

1. **Damper** - Warped, Broken, Inoperable (House loses heat constantly)

SOLUTION: Top Damper operated with a handle in the firebox, saves energy, assists with starting fires. \$500-\$1000

2. **Firebox Gaps and Cracks in steel or bricks** (fire danger or structural and expensive issues in the future)

SOLUTION:

1. Inject mortar in gaps
2. Stainless radiant fireback \$200 - \$350

OUTSIDE

3. **Missing Chimney Cap** (Water enters and destroys flue tile and chimney structure - freeze/thaw cycle, Animal can enter and nest.

SOLUTION: Stainless Cap w/Spark arrester \$200-\$300



4. **Mortar GAPS** on outside

SOLUTION - Tuckpoint = Inject mortar or sealant into gaps (warning new mortar will have lighter color than old mortar) \$100 - \$500

5. **Efflorescence** - white powder on masonry - sign of water intrusion

SOLUTION: Salt scrubbed off and Water repellent

sprayed on Exterior chimney surface \$250 - \$500

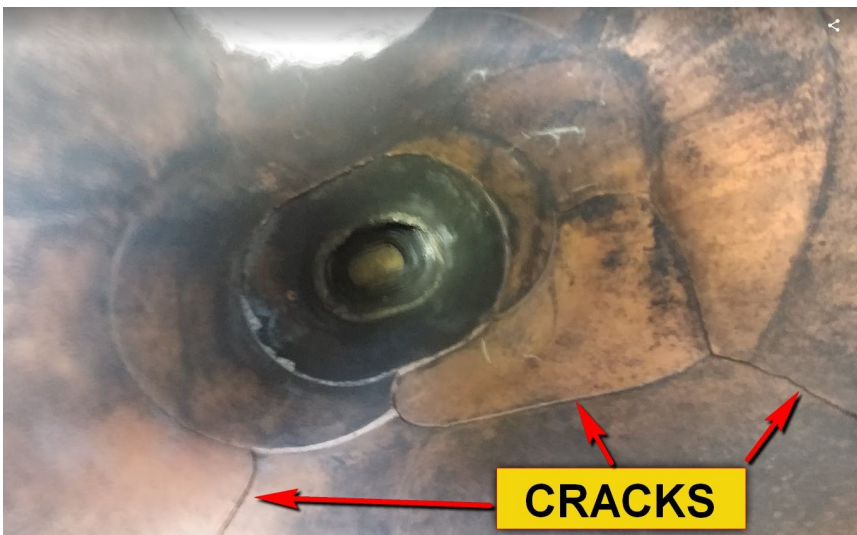
6. **Crown damage, cracks** (falling rock/brick can cause injury, future structural repairs expensive or even impossible)

SOLUTION: Stainless Steel Chase Cover \$500 - \$1200



7. **Firebox Screen** warped or missing - popping embers can land on carpet or floor

8. SOLUTION: New Curtain Screen \$150 - \$300



9. **Cracked Flue tiles** - Can cause house fire via breach (we don't repair these)
SOLUTION: Insert Installation
\$3500-\$5000

9. **Deteriorating shoulders** (can turn into structural or let water in and rust through firebox causing breach, house fire) Re-apply bricks, blocks, tuckpoint, inject mortar in gaps. \$100-\$500

10. **Lack of Hearth Extension** (add-on pad approx \$150-\$200 to meet the 20" clearances if opening is equal or more than 6 sq ft.)

11. **Unlined Insert - Lack of the liner makes it more prone to chimney fires and chimney damage.**

SOLUTION:

- If Insert is EPA-certified, insulated Stainless liner Cost approx \$1300-\$1700
- If the Insert is Non-Epa, new liner and new insert Cost approx \$3500-\$5000
- If the original fireplace is intact, the insert can also be removed.



Factory-built Fireplace

1. **Damper** - Warped, Broken, Inoperable, Missing (House loses heat constantly)
SOLUTION: Top Drop - In Damper operated with a handle in the firebox, saves energy, assists with starting fires. \$500-\$800

2. **Refractory Panel** heavy Cracks (larger than hairline)
SOLUTION: Panel Replacements cut to custom size \$350 - \$500



3. **Broken Chimney.** Warped, etc - Fire danger!

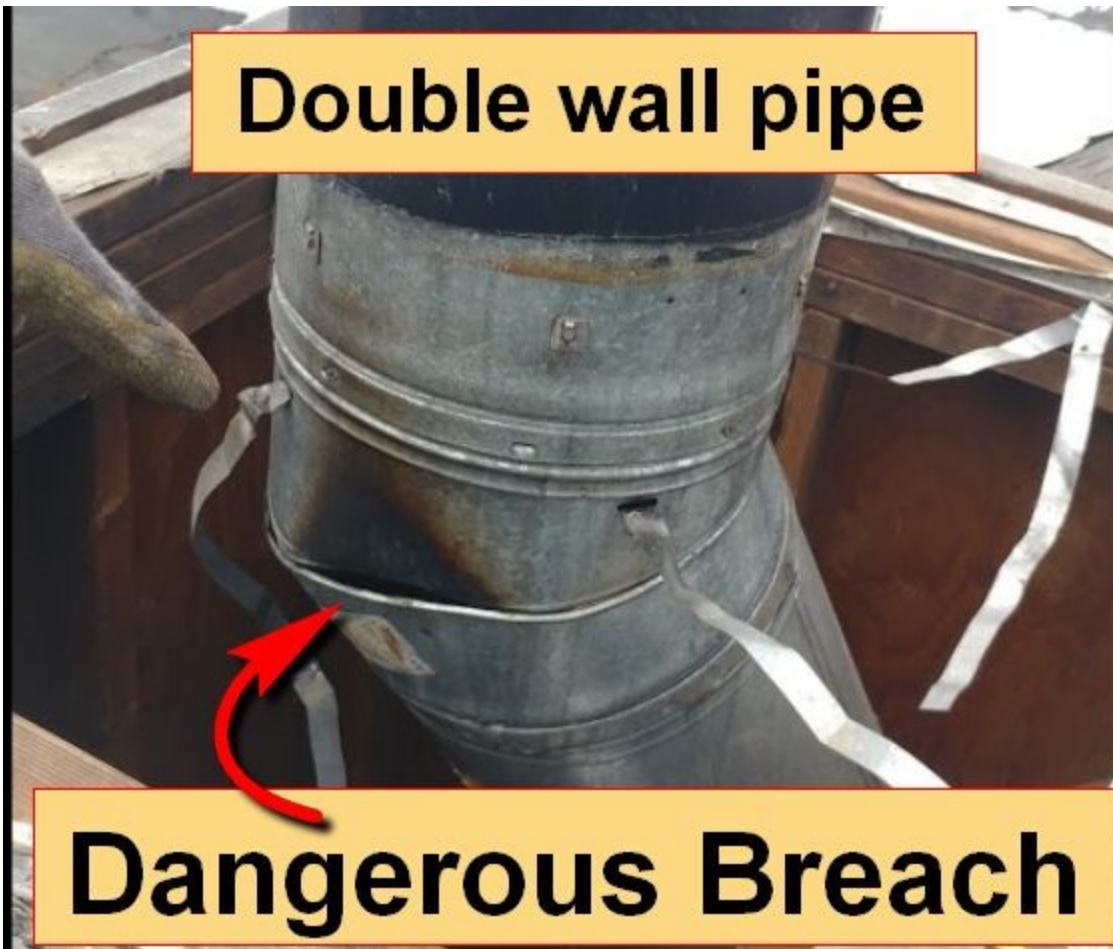
SOLUTION: Chimney Replacement - Make copy of ID TAG (the chimney brand may be no longer available), If so then INSERT ESTIMATE. \$4k-\$5k



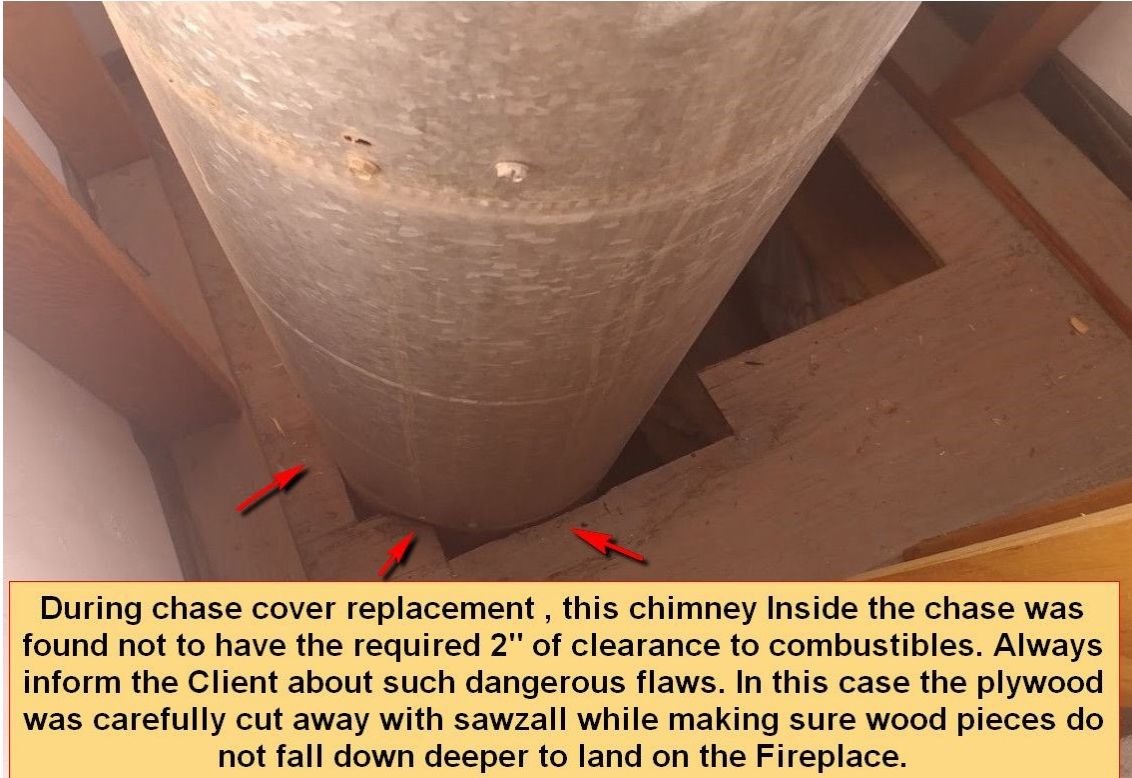
Elbow joint of outer pipe split - soot marks mean breach



Double wall pipe



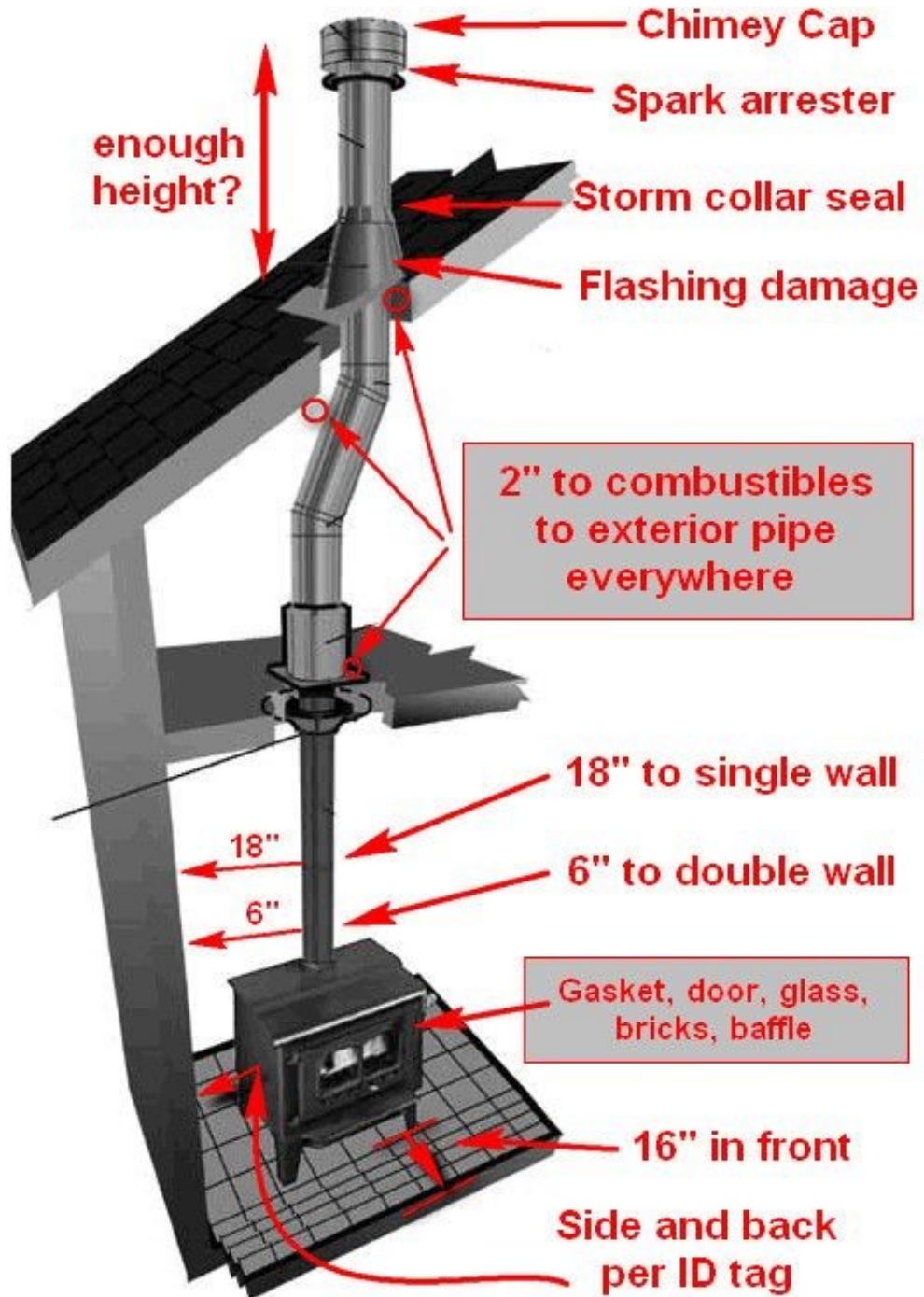
Dangerous Breach



During chase cover replacement , this chimney Inside the chase was found not to have the required 2" of clearance to combustibles. Always inform the Client about such dangerous flaws. In this case the plywood was carefully cut away with sawzall while making sure wood pieces do not fall down deeper to land on the Fireplace.

Freestanding Stove

Inspection Points



1. Clearances must meet **minimums of the manufacturer's requirements** - consult ID tag on back of stove (take photo), or look-up manual PDF online
2. 16" minimum of **NON-Combustible surface in front of the door opening**
3. 2" minimum clearance to **exterior pipe** at all times
4. 6" minimum clearance to **Double wall interior pipe**
5. 18" minimum clearance to **Single wall interior pipe**
6. **Firebox (cracks)**
 - Bricks (broken, missing)



- Baffle assembly (rusty, warped)
- Glass (cracked)
- Gasketing (worn, torn, missing)
- Door (does it close tight?)

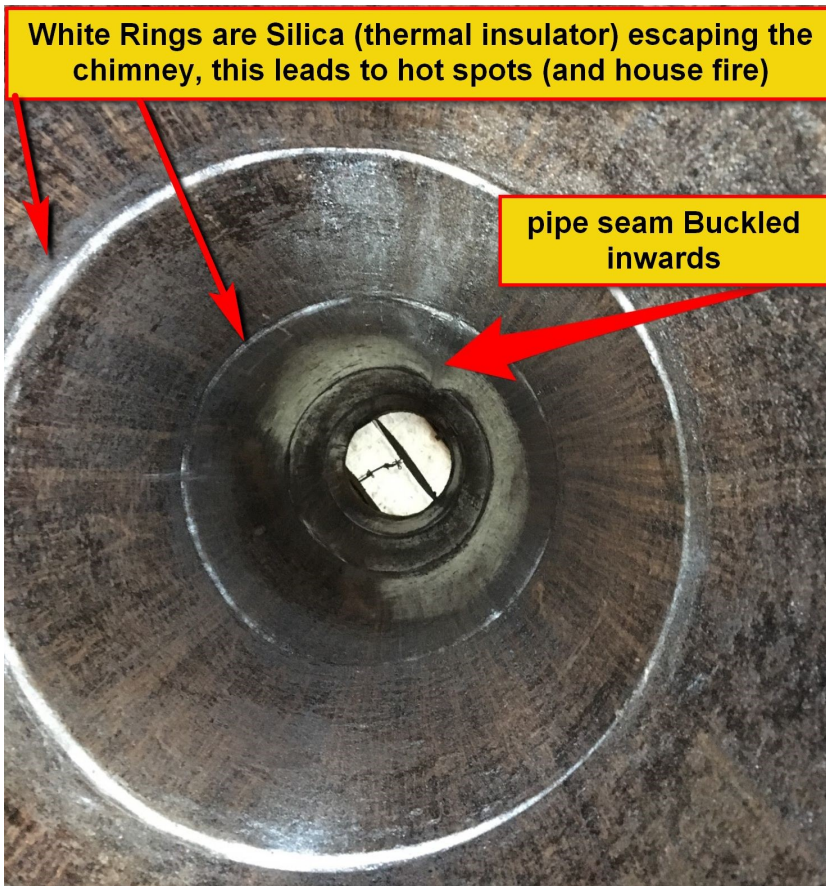


7. Note **improper 8" to 6"** flue decrease.

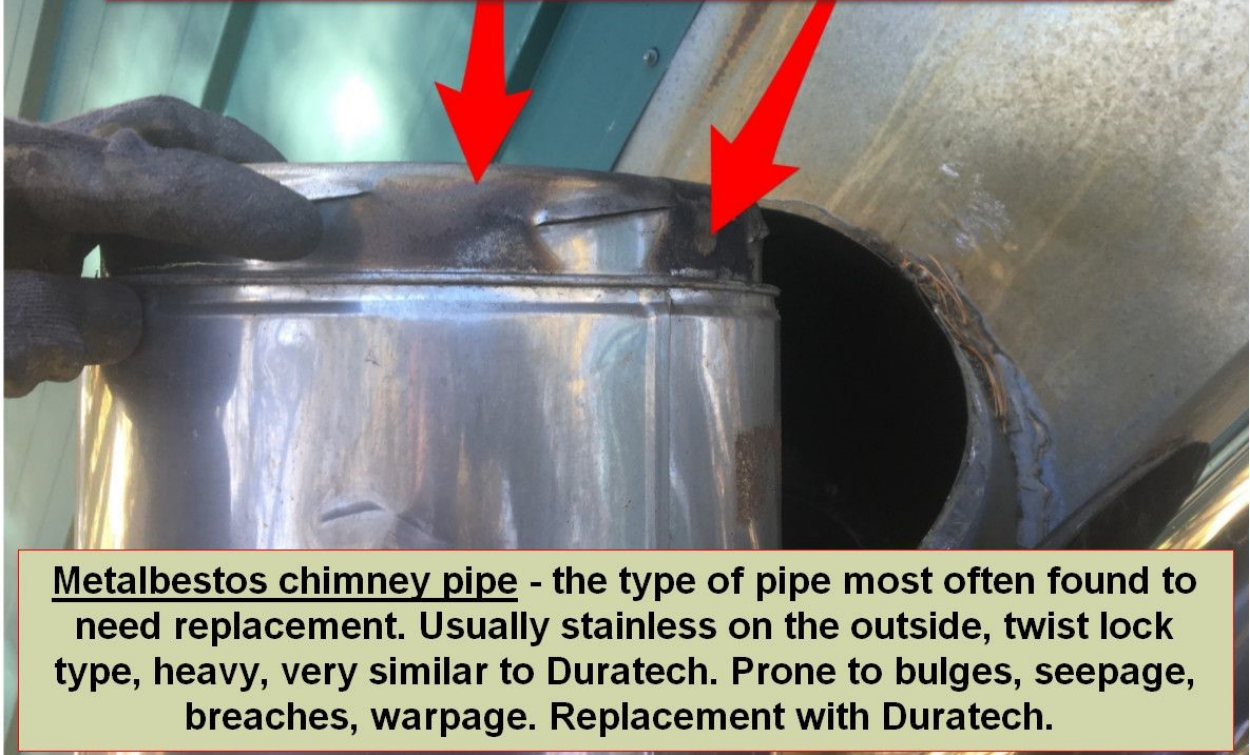
8. Flashing - any damage? Leaking risk? Sealed? rust?

9. Chimney

- **Is it secured. Wobbly, unstable?**
- **3-2-10 Rule:** Chimney must extend 3 feet above the roof penetration on the shortest side, and the top of the chimney must be 2 feet higher than any portion of the building structure within 10 feet
- Internal damage endangering combustibles?



Signs of BREACH!!



Metalbestos chimney pipe - the type of pipe most often found to need replacement. Usually stainless on the outside, twist lock type, heavy, very similar to Duratech. Prone to bulges, seepage, breaches, warpage. Replacement with Duratech.

10. **Spark arrester** (make sure screen is not smaller than ½" or it will clog too easily)

11. **Chimney Cap** - Is it secured safely? Will it collapse easily under snow weight?

12. **Snow splitter**

- Is it Large enough?
- Weaved under roofing, not nailed over it?
- Enough screws?
- Is it caving in? Damaged?
- Is Flue strapped to splitter?

13. **Support brackets** - failing? bent? Well fastened?

14. **Blower** - trigger or bypass the sensor disc to test the blower. Listen for grinding noise (sign of worn out bearings). Check for damaged wiring if no power.

