HOME ENVIRONMENT BINDER / REFERENCE

Air Pathways & Pressure Dynamics Checklist

A walkthrough for airflow, pressure patterns, and the gaps where air moves room to room.

> One page at a time. Add this sheet to your home environment binder and compare observations as you go.

01 How air moves through a home

A home is not a sealed container. Air moves continuously through pressure differences, temperature gradients, and structural gaps. The stack effect draws warm air upward and out, pulling replacement air in from the ground - carrying whatever is in the soil below: radon, methane, sewer gas, or VOCs. Exhaust fans and HVAC imbalances intensify this movement.

02 Drafts, doors that move, and symptoms tied to systems

Doors that swing open or shut on their own, drafts felt near electrical outlets or floor gaps, and air movement near foundation penetrations are observable signs of pressure imbalance. Symptoms that worsen when exhaust fans run, when the furnace cycles, or when storm doors are sealed are worth noting alongside physical observations.

03 Pressure and airflow are invisible

Without instruments, it is not possible to see whether a home is running under negative pressure or where air is entering. No single professional assesses the whole picture - inspectors, HVAC contractors, and environmental consultants each look at a different part. As a result, the pathway that delivers contaminants often goes unidentified.

04 Which systems change how you feel

Pay attention to whether symptoms shift when exhaust fans, the dryer, or the range hood run. Note whether opening a window in one room changes air movement elsewhere. A smoke pencil or lit incense held near suspected gaps will show whether air is entering or exiting - a simple, low-cost observation.

HOME ENVIRONMENT BINDER / OBSERVATION SHEET

Air Pathways & Pressure Dynamics Checklist

Date checked: _____ Areas covered: _____

Check anything you notice. This is a record of observations, not conclusions - there are no wrong answers.

Airflow observations

- ☐ Doors that swing open or shut without being touched - especially interior doors

  Example: Bathroom door swings closed whenever the range hood runs - more pronounced in winter.

- ☐ Drafts felt near floor outlets, baseboards, pipe penetrations, or foundation gaps
- ☐ Air movement visible with a lit incense stick or tissue near suspected entry points

Mechanical systems

- ☐ Bathroom exhaust fans, clothes dryer, or range hood present - note whether they vent outdoors
- ☐ Radon test completed - note result and whether mitigation is in place

Symptom patterns

- ☐ Symptoms that worsen when exhaust fans, the dryer, or the heat runs
- ☐ Symptoms that ease when a window is opened or when pressure conditions change
- ☐ Changes in how symptoms feel between sealed winter conditions and open-window spring or fall

ROOMS OR AREAS OF HIGHEST CONCERN

WHEN SYMPTOMS FEEL STRONGEST / WEATHER, TIME, ROOM, ACTIVITY

NOTES

A checklist is a snapshot. The patterns that matter most tend to appear when you compare one across weeks, seasons, and rooms.