



IMC 509.4 is the “do not mix” rule. If the International Fire Code (IFC) says two materials are incompatible, they cannot share a hazardous-exhaust system. Hazardous exhaust cannot share a common shaft with other duct systems — toilet, relief, return, kitchen — except when the shared shaft contains only hazardous exhaust originating in the same fire area. Lab manifolding is an exception with a checklist. Perchloric-acid hoods are not manifolded. Period.

Original Masterbuild PE packet from Daily Code Talk on 2024 IMC 509.4. Confirm the adopted edition. Distinct from 509 overview and 607.5.5 shaft dampers. This is not a lab-exhaust design.

☐ **Incompatible materials cannot share a system. IFC incompatibility is the test — not “we put a filter on it.”**
No common shafts with other duct systems. Only allowed when the shared shaft contains hazardous exhaust originating in the same fire area.

☐ **Lab exception — all of these: (1) negative pressure on all lab exhaust ductwork in occupied space and shaft while operating**
On the set: M-001 “incompatible materials separated, no shared shafts, NO PERCHLORIC ACID MANIFOLDING.”

The fail we see first

One header for everything. Or a perchloric hood on a lab manifold. Or a toilet riser in the same shaft as fume-hood exhaust. Those are first-cycle comments and IFC conflicts — not a coordination note.

What to send: the one-line (or a sketch of which hoods share a header or shaft), whether any perchloric / radioisotope / BSC is on that manifold, and the redundant-fan sequence if one exists.

Send the comments. Not the County guideline.

Folio (does it start with 30?), process or UP number, and the comments PDF. Masterbuild will say which row is actually open.

masterbuildconsulting.com/send/

+1 (786) 398-6940 · Calendly: 30-minute scoping call

Masterbuild provides engineering services under a written scope. Not a lab-exhaust design. Confirm adopted 509.4. This is not legal advice.