

Michigan Department of Health and Human Services
Division of Environmental Health
Healthy Homes Section

EBL Environmental Investigation
In-Field Quick Reference
XRF Testing of Painted Surfaces

The purpose of this document is to serve as a guide to X-Ray Fluorescence testing for the lead inspection portion of an EBL Environmental Investigation. It is not an all-encompassing document, nor a legal guide. Consult the *HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Chapter 7*, for detailed information.

Interior

- Test **every** room or room equivalent, such as hallways, closets, etc.
- If a room is inaccessible (e.g. padlocked, occupant refusal), provide an explanation in the Limitations section (Section 3) of the EBL report.
- Painted surfaces include surfaces with a coating of paint, shellac, varnish, or any other coating including wallpaper that covers painted surfaces.
- Do not test components known to be installed after 1978. Document this omission in the EBL report.

Inside **every** room or room equivalent, you must test (# of shots):

- All 4 walls, separately (1 each)
- Ceiling and beams (1 each)
- Floor, unless carpeted (1)
- Baseboard or trim, with similar painting history (1)
- Chair rails (1)
- Crown molding (1)
- Built-in components such as book cases, vanities, cabinets, mirrors, etc.:
 - Doors, frames, shelves and shelf supports, and interiors (1 each)
- Fireplace mantel, painted brick, tile (1 each)
- Radiators/Registers (1)
- Electrical panel boxes and other painted electrical fixtures (1 each)
- Ceramic sinks, bathtubs, tile (1 each)
- Stair system:
 - Riser AND stringer AND tread (1 each of each color);
 - Newel Post (1);
 - Handrail (1);
 - Spindle (1);
 - Landing (1)
- Window system:
 - If the windows all have similar construction style, age, and painting history, you may test one representative window system per room
 - You should test:
 - Casing or inside stop or jamb or apron (1); AND
 - Sash or mullion interior (1); AND
 - Stool (1)
 - If accessible, test at least one painted storm/screen sash per room (1)
- Door system:
 - If the doors all have similar construction style, age, and painting history, you may test one representative door system per room
 - You should test:
 - Casings or jamb or stop or transom (1); AND
 - Stile or rails or panels or mullions (1)
 - Doors will be tested on BOTH sides, associated with different room identifiers on each side
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- Closets:
 - If the closets are of the same type, age and painting history, you may test one representative closet per room
 - Test the doors, shelves, rods, casing, baseboards, floor, and walls as you would in a room/room equivalent

Exterior

- Inaccessible components (e.g. fascia and soffit near the roof) shall be assumed positive for lead paint. Document these items in Section 3.0 Limitations of the EBL report.

You should test (# of shots):

- Similar siding on each of 4 sides (1 shot each of each color)
- Foundation on each of 4 sides, if painted (1 shot each of each color)
- Exterior trim components such as (1 each):
 - Fascia
 - Soffit
 - Frieze board
 - Drip board
 - Corner posts
- Exterior window system (1 per side)
 - Test at least one exterior window system per side, if they are of the same construction, age and paint history
 - You should test:
 - Casing or stop or apron or exterior sill (1); AND
 - Sash or mullion (1); AND
 - Jamb or trough (1)
 - Test 1 painted storm/screen separately per side with the same combinations
- Exterior door system
 - You should test all exterior doors
 - You should test:
 - Casings or jamb or stop or transom (1); AND
 - Stile or rails or panels or mullions (1)
 - Test all painted storm/screen doors separately with the same combinations
- Open porches
 - Enclosed porches should be tested as an interior room
 - Test the following, if painted (1 each):
 - Deck/floor
 - Column
 - Railing
 - Baluster
 - Newel post
 - Upper beam
 - Ceiling
 - Stair tread, riser, stringer (1 each)
 - Band joist
 - Skirting/lattice
 - Walls
- Other exterior items to test include:
 - Garages and sheds: treat exteriors like the house and treat interiors like a room equivalent
 - Painted fence (1 for each color)
 - Painted swing sets and other play equipment (1 for each color)
 - Clothesline posts (1)
 - Trellises (1)
 - Planter boxes (1)
 - Coal chute and milk box access doors (1 each)