

Lead-Safe Window Installation

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Window Replacement Requires Lead Testing and RRP Practices

The EPA has put window replacement on the list of the most dangerous sources of lead dust along side belt sanders and heat guns. Under RRP's 6 sqft rule, which allows ignoring of lead safe practices in a target house, the lone exception is window replacement. Even the press targets lead painted windows, evidenced by the powerful article in USA Today (go to

http://www.usatoday.com/news/health/2007-10-28-lead-cover_N.htm).

Program money for lead removal is earmarked far more for window replacement than for siding, roofing, or other supposed lead paint "hotspots". Part of the lead dust study conducted by the EPA shows far greater dust creation than all the other projects except high power heat gun and power planning:

Dust lead levels (in g/ft2):

- Cut-outs--422.
- Kitchen cabinet removal--958.
- Low temperature heat gun--2,080.
- Dry scraping--2,686.
- Window replacement--3,993.
- High temperature heat gun--7,737.
- Power planing--32,644.

When the jobs were done, the residual lead dust followed the same order with window replacement only surpassed by heat gun use (which is banned) and power planning (which is restricted). Why are windows so much trouble? There are three primary reasons:

- **1. More sources of lead paint are on windows.** Due to the durability of lead paint and its weatherability, approximately three-quarters of the homes built before 1978 contain some lead-based paint most commonly found on exterior-painted surfaces, doors, and windows- almost 2 to 1 over interior lead paint sources. And, because windows bridge outside to inside, lead based paint coated windows bring the lead paint to the inside surfaces.
- **2. Moisture absorbed bubbles the paint, creating chips.** Lead paint has never been the culprit. Lead chips (which kids eat) and lead dust (which everyone breathes) are the culprit. Years of rain, moisture and weathering have allowed old wood windows and trim to absorb moisture. And just as lead paint kept out the moisture, it also traps the moisture in the wood. This causes eventual breaking of the bond, paint bubbles, eventual paint cracking as it dries, and the creation of lead paint chips.
- **3. Opening and Closing of Windows is like a pepper grinder.** Repeated opening and closing of sliding windows (vertical or horizontal) will grind the paint chips into dust, day after day. One only needs to look into the trough of a window to see the result. So it is not hard to imagine disturbing even the smallest amount of surface area on an old window can create the very dust and debris that the Toxic Substances Control Act (TSCA) of the early 1990's labeled as poisoning children and threatening the health of the workers doing window replacement.



If a Packet of Sweet 'n' Low were Lead Dust, it could contaminate 10 homes.



Kids Love Lead Dust.



Opening and Closing Constantly Grinds Lead Dust



Old Paint makes Lead Chips

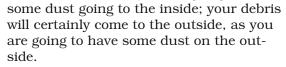
Dealing with Dust and Debris on Both Sides of the Wall

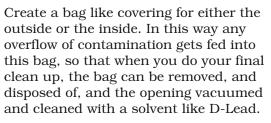
Window and door replacement is the biggest offender when it comes to having to contain inside and outside. We will show you how you might deal with windows and you can apply the concepts, principles and thought processes to other renovations that may pose a similar problem of dual containment.

Tear out a window and debris falls in and falls out. Do you set up containment, collection, disposal and cleanup on both sides? That would cost double. You have got a couple of options. You can choose do all your work from the inside or the outside. You may choose the outside, and therefore containment and clean up is easier, faster, and cheaper. Why? RRP recognizes that outside is less a danger to the living area and has lessened some of the stricter rules that apply to inside.

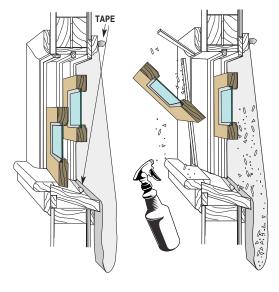


In order to the work outside, you must eliminate dust and debris from falling inside. AWDI recommends a concept that's EPA accepted. When you are removing a window from the outside, as you see in the first picture on the left, you are going to create the possibility of dust, and (remember the Sweet'N Low packet) it doesn't take a lot to contaminate, you are going to create

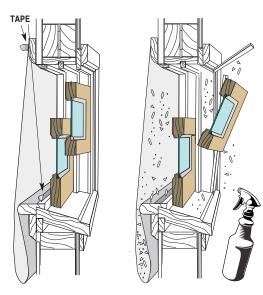




If you decide that doing the work from the inside is better (elevated rooms, close quarters outside are a couple of possibilities) seal off the outside. Either way limiting to one side of the wall saves time, and money.



INSIDE-OUT INSTALL





CHOOSE WHICH SIDE TO CONTAIN Seal Off the Other Side

