Fire Escape Repairs Nationwide

Fire Escape Repairs:

Rust weakens structural integrity – removal of interior and exterior rust is an important maintenance of a fire escape's structural integrity.

If a connection shows rust then the connection must be "Safely separated by a professional" and rust removed from interior and exterior surfaces by wire brushing the metal until smooth. The area is then spot primed and when connection is reassembled, it is then sealed with sealant -50 year silicone.

The entire fire escape shall be spot primed before a full coat of paint is applied to meet the maintenance requirement of the Fire Escape Code. For better results the Fire Escape can be fully primed and have 2 top coats applied.



The EPA has as of 2010 presumed that all Fire Escape Systems older than 2007 have LEAD Paint. Unless you have evidence from a Lead Inspector that there is NO LEAD or Low LEAD, anyone scraping and painting the fire escape system must be a Licensed Renovator and the Firm must be registered with the EPA.

Lead Paint – EPA guidelines: All workers wear white cover alls and lead safety equipment. All work done by hand (no power tools) and chips are collected on plastic tarp. The entire fire escape system is painted by hand with rollers and paint brushes.

Some property owners want the fire escape fully wire brushed or sand blasted down to white metal before priming and painting. This can be done but the cost associated with the EPA Lead Guidelines enforced on most fire escapes, it is usually cheaper to replace the entire fire escape system.

To achieve a "Ten Year Warranty" all rust must be removed from fire escape and then sealed by encapsulation method.

TYPICAL REPAIR GUIDELINES AND PROCEDURES

1) Ladder to roof: All original hardware (Bolts/Rivets/Welds), identified or not on any report, at major critical connections (top, bottom) will be repaired, reinforced and or replaced, scraped/wire brushed, spot primed and sealed w/50yr silicone as per contract and or Industry Standard. Ladder construction, strength and materials will

be repaired, reinforced, replaced and or verified/documented by vendor as certifiable to accept a Level 3 Live Load Test if required by the Fire Dept. and or Code Official.

- 2) Platform Rail(s): All original hardware (Bolts/Rivets/Welds), identified or not on any report, at major critical connections (posts, tie backs) will be repaired, reinforced and or replaced, scraped/wire brushed, spot primed and sealed w/50 silicone as per contract and or Industry Standard. Rail construction, strength and materials will be repaired, reinforced, replaced and or verified/documented by vendor as certifiable to accept a Level 3 Live Load Test if required by the Fire Dept. and or Code Official.
- 3) Platform Supports: All original hardware (Bolts/Rivets/Welds), identified or not on any report, at major external critical connections (gussets, connections) will be repaired, reinforced and or replaced, scraped/wire brushed, spot primed and sealed w/50yr silicone as per contract and or Industry Standard. All Internal Masonry Connections and or Thru-Bolts w/plates will be verified/documented (photo) and or Duplicated with a new 3/4" Epoxy Bolt (8-12") at each and every support connection and or supporting bracket systems. (ladders assemblies, etc.) Support construction, strength and materials will be repaired, reinforced, replaced and or verified/documented by vendor as certifiable to accept a Level 3 Live Load Test if required by the Fire Dept. and or Code Official.
- 4) Staircase(s): All original hardware (Bolts/Rivets/Welds), identified or not on any report, at major critical connections (top hanger, lower shoe, rails) will be repaired, reinforced and or replaced, scraped/wire brushed, spot primed and sealed w/50yr silicone as per contract and or Industry Standard. Stringer and Rail construction, strength and materials will be repaired, reinforced, replaced and or verified/documented by vendor as certifiable to accept a Level 3 Live Load Test if required by the Fire Dept. and or Code Official.
- 5) Treads: All original hardware (Bolts/Rivets/Welds), identified or not on any report, at major critical connections (nosing, angle clips etc.) will be repaired, reinforced and or replaced, scraped/wire brushed, spot primed and sealed w/50 silicone as per contract and or Industry Standard. Tread construction, strength and materials will be repaired, reinforced, replaced and or verified/documented by vendor as certifiable to accept a Level 3 Live Load Test if required by the Fire Dept. and or Code Official.
- 6) Fixed Ladders: All original hardware (Bolts/Rivets/Welds), identified or not on any report, at major critical connections (rungs, wall brackets, etc) will be repaired, reinforced and or replaced, scraped/wire brushed, spot primed and sealed w/50yr silicone as per contract and or Industry Standard. Tread construction, strength and materials will be repaired, reinforced, replaced and or verified/documented by vendor as certifiable to accept a Level 3 Live Load Test if required by the Fire Dept. and or Code Official.
- 7) Weight Balanced Cantilever(s) and or Ladder(s): All original hardware (Bolts/Rivets/Welds), identified or not on any report, at major critical connections (pulleys,rungs, wall brackets, etc) will be repaired, reinforced and or replaced, scraped/wire brushed, spot primed and sealed w/50yr silicone as per contract and or Industry Standard. 4 New Ladder systems with weights and lock system will be designed and engineered for submittal to Code Official during Permit Review Process for Plan Review with a final approved drawing to Fire Escape Engineers for our records. 2 original Weighted Ladders will be re-cabled, new lock system, new pin wheel assemblies (pulleys), sealed weight boxes and stabilizers at grade for ladders. Cantilever/Ladder construction, strength and materials will be repaired, reinforced, replaced and or verified/documented by vendor as certifiable to accept a Level 3 Live Load Test if required by the Fire Dept. and or Code Official.
- 8) Mortar Connections and Footings: All steel Implements (major critical connections) into masonry buildings, identified or not in any report, will be verified and photo documented or duplicated which ever is less expensive to the client as explained in section 3. All railing tie backs will be repaired, reinforced and or replaced, scraped/wire brushed, spot primed and sealed masonry silicone as per contract and or Industry Standard. All footings will be field verified and or modified to meet code. (48" below grade) All footing connections of steel to concrete will be with angle clip and sleeve anchor. All imbedded steel will be modified with new anchor clip. Removal of steel in concrete not required but must be sealed with TAR to avoid future splitting/spauling of footings. Mortar Connections and Footings construction, cement strength and surrounding materials (brick, dirt,

- etc.) will be repaired, reinforced, replaced and or verified/documented by vendor as certifiable to accept a Level 3 Live Load Test if required by the Fire Dept. and or Code Official.
- 9) EPA paint guidelines apply to all fire escape systems older than 1978, presumed to have lead paint. EPA renovators license is required by all vendors. All repairs must be spot primed and sealed with silicone. Approval or verification of repairs by official or engineer may be required prior to final paint and subsequent live load test or certified refurbishment in lieu of live load test. All vendors bidding this project must have licenses, workman's compensation & liability insurance, as well as fire escape references.