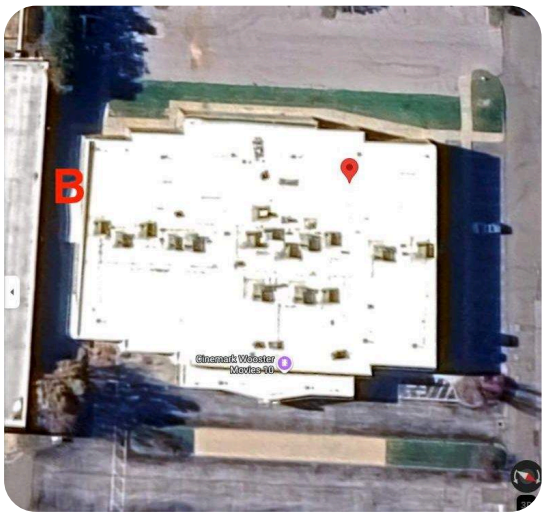
Pre-load Test Evaluation Report - 4108 Burbank Rd Wooster, Ohio 44691

Pre-Load Test Evaluation performed by **Fire Escape Engineers**

Inspector: Michael Hiles



Address: 4108 Burbank Rd Wooster, Ohio 44691

Building Description: Two-story **brick** structure with **one** system on the building.

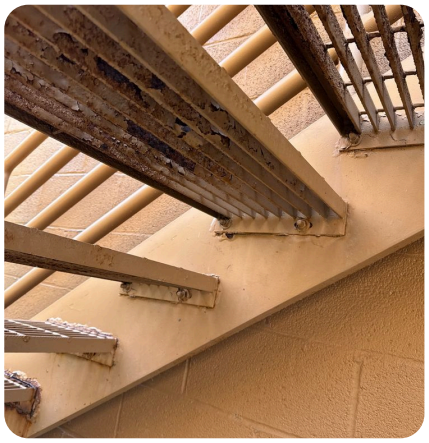
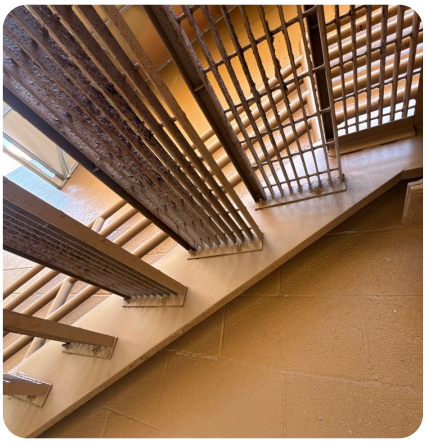
Inspector: Michael Hiles

Evaluation Date: 10/9/2025

Systems Overview (B)

System B: FAIL MINOR

System **(B)** is made of painted steel and consists of platform with stairs to platform and stairs to grade.

Components Overview: (B)

1. Structural Summary

Overall Condition

- Fail Minor due to suspect leg supports, tread conditions, component corrosion and paint deterioration.
- Remaining components are ready for load testing.

Paint & Corrosion

- Peeling and dulled paint observed in various areas.
- Requires full repainting for longevity.
- Surface rust present on several components.
- Some areas show bubbling and corrosion, particularly near base connections and posts.
- Evidence of internal rust at welded joints and leg plates.

Supports & Connections

- Support legs appear fair and functional, with isolated surface corrosion noted.
- Some internal rust observed between leg plates and connection plates.
- Welded joints appear intact and structurally sound.
- One or more base plates show corrosion likely due to water pooling.
- Further evaluation recommended for lower leg sections where corrosion is more severe.

Platforms

- Platform framing consists of C-channel type members, overall fair and functional.
- Some internal rust developing at angle shelf brackets and leg connections.
- Grating shows common wear and surface rust consistent with age and exposure.

Rails

- Rails are welded construction, mostly fair and functional.
- Minor paint loss and light corrosion noted at a few points.
- A slight opening observed at the base of one post, suggesting possible internal moisture buildup.

Stringers

- Stringers generally fair and functional throughout.
- The bottom of the initial stringer is heavily corroded and lacks anchorage to the ground.
- Some surface rust observed along exterior stringers requiring cleaning and paint.

Treads

- Majority of treads are structurally functional but show surface rust and paint failure.
- Some treads exhibit heavier internal corrosion than others and require repair.
- Rust concentrated near bolt connections and exposed edges.

2. Paint Summary

Overall the paint **Fail: Full paint** on system required before/after repairs. Recommend to power wash and seal all major joints to prevent water intrusion into structural connections.

Fire Escapes must be maintained/painted every 5–7 years as per manufacturer's recommendation.

3. Code Summary

Our inspector found no code issues related to AHJ (Authority Having Jurisdiction) or PENC (pre-existing non-conforming) requirements for this Fire Escape system:

- Egress Lighting is Present

Code	Pass / Fail
IFC 1104.16.7 Maintenance. (PAINT REQUIRED)	**Paint** - **Fail**, **Full** paint required.
IFC 1104.16.5.1 Examination. **IFC 1104.16.5 Materials and strength.** **(LOAD TESTING, OTHER EVIDENCE**	**Structural** - **Fail Minor**: The system is rusted externally throughout various components and is suspect with internal rust at leg supports and treads. Requires further evaluation in the form of load testing with deficiencies report.
IFC: Means of *egress illumination*. **(CODE)**	**Code** - **Pass**
NFPA Life Safety Code 101 7.2.8.6.2	AHJ shall approve certification by Load Test or Other Evidence of Strength
January 2010 Standard Specification: Miscellaneous & Ornamental Metals — Fire Escapes (Section 5A.10, Paragraph E)	**NO FIELD WELDING is permitted in the repair of fire escapes. All repairs must be bolted or shop welded (then field bolted).**

IFC 1104.16.5 Materials and strength.

Components of fire escape stairways shall be constructed of noncombustible materials. Fire escape stairways and balconies shall support the dead load plus a live load of not less than 100 pounds per square foot (4.78 kN/m^2). Fire escape stairways and balconies shall be provided with a top and intermediate handrail on each side.

IFC 1104.16.5.1 Examination.

Fire escape stairways and balconies shall be examined for structural adequacy and safety in accordance with Section 1104.16.5 **by a registered design professional or others acceptable to the fire code official** every 5 years, or as required by the fire code official. An inspection report shall be submitted to the fire code official after such examination.

IFC 1104.16.7 Maintenance.

Fire escape stairways shall be kept clear and unobstructed at all times and shall be

maintained in good working order.

IFC - Illumination required.

The means of egress serving a room or space shall be illuminated at all times that the room or space is occupied.

NFPA Life Safety Code 101 7.2.8.6.2

The Authority Having Jurisdiction (AHJ) shall approve any fire escape by Load Test or Certification (other evidence of strength).

Pre-Load Test Evaluation

IFC 1104.16.5.1 Examination: *Fire escape* stairways and balconies shall be examined..... **An inspection report shall be submitted to the *fire code official* after such examination.**

Thank you for allowing us to perform an initial evaluation of your fire escape system. At this stage, our assessment was conducted either entirely from the ground or during a brief, complimentary visual walk through. In such cases, our inspection is *limited in scope* and relies heavily on binoculars, zoom lenses, and visual clues from accessible vantage points.

Because most structural issues—especially corrosion—occur at the *top of connections* or behind face-mounted hardware, ground-level evaluations often cannot confirm the condition of these critical areas. **This type of assessment is classified as a "Pre-Load Test Evaluation,"** which means it's designed to identify potential issues, but not to determine precise quantities, exact locations, or whether specific components can be certified for a load test at this time.

When we do gain physical access—either by ladder, stair, or platform—we can supplement our visual findings with a short video walkthrough (typically 5–10 minutes) that includes finger-pointed commentary highlighting which elements appear ready for load testing and which require further investigation or immediate repair. Still, even these faster, free-access walk-throughs remain preliminary in nature and do not substitute for a **full, paid evaluation** where every connection is systematically examined, documented, and photographed from all angles.

If you would like a more complete report suitable for vendor pricing, budgeting, or certification purposes, one of the following will be required:

1. **Hire Our Team for a Full Evaluation** – This includes time on the system, detailed photography, mapping, and formal reporting.

2. **Use One of Our Network Repair Vendors** – We'll contact our list of qualified vendors who can physically access the system and relay critical information back to us for final review and report completion.
3. **Coordinate Access with Your Own Trusted Repair Mechanic** – They must be capable of documenting on-system conditions so we can issue a load test certification, repair scope, or engineering findings.

We appreciate the opportunity to support your compliance journey and will guide you through the next steps needed to bring your fire escape system into full certification.

Conclusion & Next Steps

Please let us know whether you intend to proceed as a **Do-It-Yourself (DIY)** client or if you would like to engage our team under the **Vendor Management Oversight (VMO)** program. Both options require coordination with your local authority (AHJ – Authority Having Jurisdiction) and thorough documentation to ensure your fire escape system meets certification standards.

Option 1: DIY Path – You Manage the Process

If you plan to manage your own vendors and documentation, you are responsible for complying with all applicable **fire, building, and EPA regulations**. The following steps must be followed:

DIY Compliance Steps

1. Notify the City Official

Contact your local **Fire Marshal or Building Department** and:

- Inform them you've engaged a **design professional** (engineer, architect, or other acceptable party) to inspect and evaluate the fire escape.
- Request clarification on:
  - Whether they treat missing lights as a **pre-existing, nonconforming condition**, or if full **egress illumination** is required.
  - Whether **permits** are needed for restoration/repairs based on the findings.
  - Whether they wish to **witness the inspection**.

2. Inspection & Documentation

- Hire a **licensed engineer, architect, or other AHJ-approved fire escape inspector**.
- Vendors must conduct a **full-system walkthrough**, accessing every platform, tread, and connection.
- All deficiencies must be **documented** and a **repair scope** submitted to the owner and AHJ.

3. Scope Review & Permitting

- A **design professional** must review the repair scope and determine whether permits are required by the AHJ.

4. Designate a Responsible Party

- Notify the city who will **supervise the repair process**, ensuring work is performed in accordance with the approved scope (with or without permits).

5. Repair Restrictions (Lead Paint & EPA Compliance)

- **Welding is strictly prohibited** on fire escapes built before 1978.
- **No field welding** is permitted under any circumstances.
- Repairs must be **bolted** or **shop welded and field-bolted**.
- Violations may result in **EPA fines exceeding $37,500**.

Option 2: VMO Path – We Manage the Process for You

If you prefer a fully managed solution, our **Vendor Management Oversight (VMO)** program provides professional oversight, technical guidance, and final certification support.

What's Included in VMO:

- **Initial Evaluation Report & Photo-Video-Technical Repair Report**
  - One-page summary indicating **Pass**, **Fail**, or **Imminent Danger**
  - Includes ground or physical findings, photos, and optional video
- **AHJ Communication & Coordination**
  - We notify the city and clarify inspection witness needs, lighting requirements, and permit conditions
- **Daily Vendor Oversight**
  - We review daily photos/videos from your vendor

  - Ensure repairs follow approved methods and meet IFC and IBC codes
  - Prevents illegal welding; ensures proper bolting and documentation
- **Inspection Video Summary**
  - Narrated walkthrough highlighting deficiencies and identifying components ready for load testing
- **Final Report & Certification**
  - 25-point confidence checklist with repair recommendations/requirements
  - Photographs and final walkthrough video by our inspector
  - Certification issued via **Load Test** or **Other Evidence of Strength**
- **Password-Protected Webpage**
  - Central hub for documentation such as: inspection report, inspection video(s), inspection photos
  - Easily shareable with AHJ, owner, property managers, and agents

Request for Proposal (RFP) Options. (Fees to be paid by owner/agent or vendor)

Following this initial inspection, the property owner has the option to either proceed as a **Do-It-Yourself (DIY) client**—managing their own outreach to local vendors—or enroll in our **Vendor Management Oversight (VMO)** or **Project Management Oversight (PMO)** programs, where we coordinate the process on your behalf. Regardless of your selection, all projects remain eligible for RFP distribution.

- **For DIY clients**, it's your responsibility to invite vendors to the property and provide access so they can walk through the fire escape system and prepare their own scope and quote. (We can provide additional information to your repair vendor at additional cost.)
  - **Most vendors only provide 1 year warranty on work performed.**
- **For clients utilizing our VMO/PMO service**, we simplify this process by issuing a detailed RFP package to our pre-screened vendor network. These vendors review our inspection photos, summary findings, and any available site data—allowing them to submit accurate preliminary bids **without needing to visit the site**, unless shortlisted. This minimizes disruptions and ensures that only cost-aligned, code-qualified bids

move forward.

- **We provide a 15-25 year warranty on all work performed.**
- **25 year warranty provided with Corrosion Protection Plan.**
- **Network partners / repair mechanics: 5-15 year warranties under VMO/PMO.**

Load Testing Considerations

- If recent **structural bolting** has been completed, a **partial/integrated load test** may apply.
- Otherwise, a **full load test** is required unless waived by other evidence of strength (as determined by a design professional or others acceptable to the AHJ).

Temporary Certifications (If Applicable)

- If the fire escape is scheduled for **removal or replacement within 5 years**, a **temporary 5-year certification** may be available, but **still requires load testing**

Why Load Testing Your Fire Escape Is the Smartest Choice Right Now

Load testing is the **only way to fully remove liability** from you, your insurance carrier, and the city. Here's why:
• **Opinion affidavits come with disclaimers** that cities often won't sign off on — and insurance companies won't want you to sign either, because it puts all the legal risk on them (and you).
• **Load testing is definitive**: it proves your 75–125+ year-old fire escape can handle emergency use — no guesswork, no disclaimers.
• It's **100% code-compliant**, **certified**, and good for up to 5–25 years depending on the city and scope.
• It also protects your tenants and your building's value — like testing a sprinkler system or elevator.

Bottom line: Load testing clears your liability, satisfies the city, and keeps your insurance coverage secure.

🔥 Fire Escape Financing - Powered by Fire Escape Services Network

Need critical fire escape repairs, inspections, or certifications—but want to spread out the cost? Our **Fire Escape Financing** program offers flexible, interest-free payment plans that make safety upgrades more accessible than ever.

✔️ **What We Offer:**
- **0% Interest Financing** (3–6 months standard)
- **12-Month Interest-Free Extension** for qualifying projects over $50,000
- **No credit check required**
- Available for **inspections, repairs, drawings, load testing, and full project oversight**
- Financing is available across all **FESN brands and services**

🏡 **Who Qualifies:**
- Property owner must sign the agreement
- Project must be directly managed by FESN **or an approved vendor from our network**
- In special cases, even **client-selected vendors** can participate—if they agree to our financing terms

💡 **Extended Financing:** Need longer than 12 months?
We also offer **1–15 year financing options (with interest)** through an **affiliated third-party loan provider** for **residential properties only**.

⚠️ **Important Notes:**
- **No warranties or certifications** will be released until full payment is received
- All financing agreements include lien protections and binding arbitration clauses
- Legal homeowner signature is required to proceed

🔎 **Ready to Get Started?**
Whether you're working with our team or a vendor you trust, we can help finance your fire escape project—with transparency, flexibility, and legal protection for everyone involved.

More information available upon request.
Just ask your project coordinator or contact us directly to activate **Fire Escape Financing** today.

WELDING PROHIBITED FOR RESTORATION/REPAIRS ON FIRE ESCAPES

Fire Escape Repair & Lead-Hazard Compliance Policy

1. Structural Repair Policy: No Field Welding on Bolted or Riveted Fire Escapes

🛠️ **Key Code Provision — January 2010 Standard Specification: Miscellaneous & Ornamental Metals — Fire Escapes (Section 5A.10, Paragraph E):**

"NO FIELD WELDING is permitted in the repair of fire escapes. All repairs must be bolted or shop welded (then field bolted)."

• **"Field welding"** refers to any welding performed on-site, as opposed to factory or shop welding.
• **Shop welding** (completed off-site under controlled conditions) is permitted **only if original design or prefabrication allows for welding**.
• **Bolt or rivet-type fasteners** must be replaced in kind—matching original hardware type and method.

2. EPA Lead-Based Paint Compliance (Pre-1978 Structures)

Under the **EPA Renovation, Repair and Painting (RRP) Rule**, work on residential or child-occupied buildings built **before 1978** often involves lead-based paint. Welding that disturbs painted surfaces is subject to strict regulation.
• **Welding is effectively prohibited** on such components unless:
• An **EPA-certified renovator or firm** oversees the work, and
• **Lead-safe work practices** are fully implemented (containment, HEPA vacuums, disposable protective gear, etc.).
• **Violations** can result in civil penalties up to **$37,500 per violation, per day** for non-compliance with EPA RRP Rule provisions regarding lead hazard disturbance.

3. Combined Table: Welding & Lead-Hazard Prohibition

Condition	Field Welding Allowed?	EPA RRP-Compliant on Pre-1978 Structure?

Fire escape originally fastened with bolts or rivets	No — prohibited by 2010 code	No — welding disturbs lead paint
Shop welding precise fittings or new prefabricated parts	Yes — If performed off-site under control	Only if conducted under EPA certified RRP
Bolt or rivet replacement / mechanical fasteners	Yes — required repair method	Yes — with lead-safe protocols

4. Recommended Compliance Actions

1. **Confirm the era** of the structure—pre-1978 implies high likelihood of lead-based paint.
2. **Avoid any field welding** on fire escapes originally assembled with bolts or rivets.
3. **Use mechanical fastening** (bolts/rivets) and ensure replacement matches original methodology.
4. If welding is necessary for prefabricated components:
• Ensure welding is done in a **shop setting**, not on-site.
• For pre-1978 buildings, all surface-prep and welding work must follow **EPA RRP certified protocols**.
5. Engage a **licensed structural engineer** and a **certified RRP renovator or firm** before undertaking repairs.

5. Legal Reference Summary

• **"No field welding is permitted in the repair of fire escapes. All repairs must be bolted or shop welded (then field bolted)."** — Standard Specification 5A.10 (Miscellaneous & Ornamental Metals), January 2010
• **EPA RRP Rule enforcement** (1978-era structures): fines up to **$37,500/day per violation** for unauthorized disturbance of lead-based painted surfaces.

Whether you choose to manage the process independently or allow us to guide you through it, we ensure you have the tools and documentation to solicit and compare bids confidently—or, if you prefer, you can bypass the bid process entirely and engage our certified team based on trust, warranty, and proven experience.