

# Rehmke Residential Inclined Elevators

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The Rehmke safety hook has been deemed unsafe by the department.

## **How did we come to that decision?**

*By personally witnessing what happens during a safety test:*

- The cross bars on the elevator have bent when the hooks engage the cross bar.
- The device did not work at all.
- Sometimes the hook would set but not on the first cross bar, causing hard sets.
- When the safety does set, the speed exceeds safe operating parameters.

*By reviewing a video that shows what happens during an actual hook safety set. Note: These tests were done with less than 125 % of weight in car. 125% of rated load is required for safety test when the conveyance is new and is done every five years for testing purposes.*

- Video shows that a person would be thrown from the elevator, or thrown against the car enclosure.
- Video shows damage to cross bars.
- Video shows damage to cars.

*By Installers reporting that the conditions of many of these are in disrepair and not being maintained or tested regularly.*

- Many elevators never had final inspections; some that did were given variances.

## **Will the department allow the variances to stand as written?**

*Not necessarily. Many variances were given without meeting the RCW requirement for alternative method.*

- **WHY?** We don't totally know the answer to this but we can conclude that at that time variances were given, the department did annual inspection of private residential elevators. So the department would be on site annually and could address issues annually.

## **Are there other items besides the safety that will be required to comply?**

*Yes, many of the elevators never went through a complete inspection and many had inspections in 1997 but never completed items from the inspection reports. You must meet a minimum standard. The elevator section can help you with determining these standards, but the installer needs to be the one*

*that you rely on to determine if the elevator meets the code or not. Per RCW, installers must know what is required by code to have an elevator license. Installers must get permission to remove red tags to do evaluation and then reinstall the red tag.*

## **What rules will apply to your conveyance?**

- **WAC 296-96-07021. What are the requirements for existing inclined private residence elevators?** Inclined private residence elevators must comply with the rules adopted by the department that were in effect at the time the elevator was permitted, regardless of whether the rule(s) has been repealed, unless any new rule specifically states that it applies to all conveyances, regardless of when the conveyance was permitted. Copies of previous rules adopted by the department are available upon request.

If the department determines that an inclined private residence elevator was installed without a permit and/or without an inspection the conveyance will be required to comply with the current rules adopted by the department unless you are able to provide documentation determining the date the conveyance was installed (e.g., sales receipts, building permits, or other appropriate documentation).

The department will accept documentation per WAC rules to show when the elevator was installed.

## **What code applies to your elevator?**

*Throughout the departments history there are six different adoptions of WAC rules. They will be available on our web site in a short while. Note: This may take a few weeks but you can ask for copies from the department in the meantime.*

## **What types of safety devices meet code?**

*Only type A safeties meet the current code adopted by the department. Alteration permits will need to be pulled to replace the hook safety set device.*

- **Identification and Classification of Types of Safeties.** Car safety devices (safeties) are identified and classified on the basis of performance characteristics after the safety begins to apply pressure on the guide rails. On this basis, there are three types of safeties. ASME A 17.1 Elevator codes define what is a Type A safety not L&I.

## **What is a Type A safety?**

*Definition of a Type A Safety.*

- **2.17.5.1 Type A Safeties.** Safeties that develop a rapidly increasing pressure on the guide rails during the stopping interval, the stopping distance being very short due to the inherent design of the safety. The operating force is derived entirely from the mass

and the motion of the car or the counterweight being stopped. These safeties apply pressure on the guide rails through eccentrics, rollers, or similar devices, without any flexible medium purposely introduced to limit the retarding force and increase the stopping distance.

A Type A safety engages the rails. The intent is if the ropes brake the safety is on the car and the car will stop safely.

### **What about cable grippers?**

*Cable grippers are not Type A safeties. They were approved for overhead cable inclined elevators and a few inclined elevators. The energy developed is taken up by the sway of the car. Land elevators have different requirements and issues.*

### **What issues do grippers have on inclined elevators?**

*Grippers are not specifically designed for persons riding on elevators.*

### **Will grippers work on elevators with different elevation changes and how many safety sets are they designed for?**

*Many are dependent on the ropes being maintained taught.*

### **Are the older cars designed to take that kind of torque and how do we determine that?**

*To approve this type of safety it will take much discussion and involve many different parties. If you choose to go this route then your elevator may be red tagged for a longer period of time.*

### **Why are we red tagging the Rehmke residential inclined elevators?**

*For many years these elevators have been an issue. In 2008 we wrote letters to all known owners of the Rehmke style elevators. We talked with owners and stakeholders and agreed to give Rehmke owners time to address these known issues. There were approximately 39 Rehmke elevators installed and of that group, only 7 are known to have code compliant upgrades and 1 is now undergoing an alteration.*

*It is apparent that without action by the department these safeties and other code compliant issues are not being addressed. The elevators can and will injure someone if the safeties are needed in a system failure.*

*There was mention that our 2008 letter to Rehmke owners did not say we had to fix it "now". The letter was written in 2008 and did state that the department would be taking further steps to bring these elevators into compliance.*

*Now that we are in 2013, the department has deemed that there has been more than adequate time for elevator owners to have addressed the safety concerns as stated in our 2008 letter.*

*We did not mail out additional letters before red tagging as the department had previously written letters in 1997 and again in 2008 and the letters were mostly ignored. Unfortunately, compliance was not being achieved voluntarily.*

*At the November 2012 advisory meeting we notified stakeholders that this action was going forward. This was not an agenda item because of the deadline to get items on the written agenda. One of the reasons we chose to do this now is that we have an inspector on light duty currently and he has the available time to perform these inspections.*

## **What gives the department the authority to red tag the elevators?**

- **RCW 70.87.040 Privately and publicly owned conveyances are subject to chapter.** All privately owned and publicly owned conveyances are subject to the provisions of this chapter except as specifically excluded by this chapter. [1983 c 123 § 4; 1963 c 26 § 4.] (The exclusions are for maintenance only.)
- **RCW 70.87.145 Order to discontinue operation--Notice--Conditions--Contents of order--Recision of order--Violation--Penalty--Random inspections.**

(1) An authorized representative of the department may order the owner or person operating a conveyance to discontinue the operation of a conveyance, and may place a notice that states that the conveyance may not be operated on a conspicuous place in the conveyance, if:

(a) The conveyance work has not been permitted and performed in accordance with this chapter; or

**(b) The conveyance has otherwise become unsafe.**

The order is effective immediately, and shall not be stayed by a request for a hearing.

(2) The department shall prescribe a form for the order to discontinue operation. The order shall specify why the conveyance violates this chapter or is otherwise unsafe, and shall inform the owner or operator that he or she may request a hearing pursuant to RCW 70.87.170. A request for a hearing does not stay the effect of the order.

(3) The department shall rescind the order to discontinue operation if the conveyance is fixed or modified to bring it into compliance with this chapter.

(4) An owner or a person that knowingly operates or allows the operation of a conveyance in contravention of an order to discontinue operation, or removes a notice not to operate, is:

(a) Guilty of a misdemeanor; and

(b) Subject to a civil penalty under RCW 70.87.185.

(5) The department may conduct random on-site inspections and tests on existing installations, witnessing periodic inspections and testing in order to ensure satisfactory conveyance work by persons, firms, or companies performing conveyance work, and assist in development of public awareness programs. [2003 c 143 § 17; 2002 c 98 § 7; 1983 c 123 § 15.]

### **What action has the department recently taken?**

*An inspector is being sent to each known Rehmke elevator location. If the owner or occupant is home, the inspector will give them a paper that describes why we are there and will put a red tag on the conveyance. The red tag is an order to discontinue use. It is a generic form and fits most situations for red tagging.*

*The inspector forms include codes that are for internal use such as A030 & A030A. This code is used so that our computer system will print out correct language for red tags.*

*If no one is home, the inspector will leave information on whom to contact at the department for further information and to make an appointment to come back to red tag the elevator.*

*If the owner does not contact the department, we will take further action to access the property and red tag the conveyance. Additionally, the department has the right to subpoena per RCW 70.87.034*

### **What if this is the only access to your home or you need the elevator?**

*Elevators used for recreational access will remain in red tag status. There are currently 8 owners that have signed forms that give them timelines to come up with a plan. The timeline is approximately a 60 day grace period to keep using the elevator. Lifting the red tags will be based on individual needs and on clear communication. We will not lift all red tags.*

*The timeline will be documented on the inspectors report. This timeline is for the owner to develop and communicate a plan to the department to bring the elevator into code compliance. If at the end of the agreed upon timeline a clear plan has not been determined and a future timeline has not been agreed upon by the department, the elevator will be put in red tag status. The first timeline is to develop a plan. Once you have a plan, the department, along with the company you choose to do the work, will negotiate future timelines. There are two companies actively working on this. We will work with them and any other company to evaluate timelines.*

## What are your appeal rights?

- **RCW 70.87.170 Review of department action in accordance with administrative procedure act.** (1) Any person aggrieved by an order or action of the department denying, suspending, revoking, or refusing to renew a permit or license; assessing a penalty for a violation of this chapter; or ordering the operation of a conveyance to be discontinued, may request a hearing within fifteen days after notice of the department's order or action is received. The date the hearing was requested shall be the date the request for hearing was postmarked. The party requesting the hearing must accompany the request with a certified or cashier's check for two hundred dollars payable to the department. The department shall refund the two hundred dollars if the party requesting the hearing prevails at the hearing; otherwise, the department shall retain the two hundred dollars.

If the department does not receive a timely request for hearing, the department's order or action is final and may not be appealed.

(2) If the aggrieved party requests a hearing, the department shall ask an administrative law judge to preside over the hearing. The hearing shall be conducted in accordance with chapter 34.05 RCW. [2003 c 143 § 18; 2002 c 98 § 8; 1983 c 123 § 16; 1963 c 26 § 17.]

## How long do you have to appeal?

*Per RCW 70.87.170 you have 15 days to appeal from the date you receive the notice. Our notices are sent by certified mail. Your appeal, along with the \$200 appeal fee must be postmarked by the 15<sup>th</sup> day.*

## What will the appeal do for you?

*The department has the authority to determine if elevators are safe. The administrative law judge at the appeal hearing will enforce the rules and laws adopted by the department. At this time we encourage dialogue between owners and the department as the administrative law judge will not remove the red tag just because you file an appeal. Note: The department has no control over how long it takes to have your appeal heard.*

- Copies of current RCW and WAC rules are published on our web site at <http://www.lni.wa.gov/tradeslicensing/> then click on "Elevators".
- Rules are listed under "Rules, Laws and Policies" on the right hand side of our home page.