

## **EARTHQUAKE EVALUATION**

### **Is our building safe for occupancy after an earthquake?**

City and County employees work in all kinds of buildings for all kinds of uses and in hundreds of jurisdictions across the state. The earthquake risk varies across Oregon. Furthermore, earthquakes come in many magnitudes, making it difficult to predict the amount of damage that may occur.

In a minor quake it may not be necessary to evacuate the building. On the other hand, if there is significant damage it is best to evacuate.

The EARTHQUAKE EVALUATION GUIDE can be used for two purposes:

- (1) After a quake the Site Emergency Coordinator (SEC), with input from top management and Evacuation Coordinators (ECs), must decide about evacuation. The SEC and ECs can use the guide to help decide whether it's safe or unsafe to remain in the building.
- (2) If evacuation takes place and there are no facilities personnel available to check for safe re-entry, employees must decide for themselves, just as they would in their own homes.

Occupancy is probably safe if . . .

- a. the quake leaves little evidence of damage outside the building or across the neighborhood and town, and
- b. the basic inspection finds little or no evidence of damage to the building and its interior components.

A quake that causes noticeable damage within the building and surrounding area calls for more care.

### **We used the EVALUATION GUIDE and still are unsure the building is safe. Shall we call in professionals to inspect it?**

Professionals understand structural damage issues. They include engineers, building inspectors, architects, contractors, or people with a construction background that are familiar with building construction. Those who have been trained and registered by the Building Codes Division of the State may also post a building as safe or unsafe to occupy. Registered inspectors work with the local building official who coordinates the review of buildings in their jurisdiction, based on priority rankings. Hospitals and care facilities, police and fire stations, emergency centers, water and sewer plants and schools are at the top of the list.

Since it may be some time before you can obtain a professional inspection, you may not be able to wait. If there are no facilities personnel available, make a judgment call based on the obvious circumstances. Consider such things as whether there are landslides, large fissures, or movement in the surrounding ground. Per the Evaluation Guide, what is the extent of damage to the building? What do local authorities on radio or TV say about damage to utilities, roads, and adjacent buildings in the area?

If your building appears to be unsafe, assume staying inside or re-entering as being dangerous. There may be hidden damage to the structure, gas lines, electrical, water, sewer, or other building components. If there is damage, it may be worsened by a sudden aftershock. If still unsure whether the building is safe to occupy, call in the professionals.

**Instructions:** Inspect your building for conditions listed below. Use the answers to help make your decision of whether the building is safe to occupy. **Conditions 1-12 are critical life safety issues.** If there is a fire, pull alarm and evacuate. If response to any other item is YES, STOP and go report to your SEC or top manager and evaluate at once.

<b>EARTHQUAKE EVALUATION GUIDE</b>	<b>YES</b>	<b>NO</b>	<b>MORE REVIEW NEEDED</b>
1. Fire? If yes, pull the fire alarm!	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Smell natural gas or overturned LPG tanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Building collapsed, partially collapsed, or moved off its foundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Roof or floor framing separated from vertical supports or broken open?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Arcing wires or equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Large diagonal or stepped cracking in unreinforced masonry walls?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Collapsed, out of plumb, or tilted floors or walls?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Collapsed suspended ceiling, lights or ducts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Significant cracks in beams or supports?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Dislodged or buckled columns, support posts, or roof trusses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Danger from falling hazards from adjacent buildings that are damaged?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Facades, windows, or parapets fallen from building or dislodged?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Page 2**

Continue inspection if answers to questions 1-12 are NO. Go through the rest of the checklist. No condition, listed below, individually may be critical, but added together may be important in your evaluation decision. If your answer is NO for all, it is unlikely that you need to evacuate.

<b>EARTHQUAKE EVALUATION GUIDE</b>	<b>YES</b>	<b>NO</b>	<b>MORE REVIEW NEEDED</b>
13. Water leaks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Chunks of fallen plaster or paint?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Other fallen debris in building?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Office furnishings have fallen or tipped over?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Light fixtures have come loose?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Office equipment damaged?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Windows or mirrors have cracked?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Wall cracks more than 1/4 of an inch wide?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Cracks that extend clear through wall?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. "X" shaped cracks in exterior wall?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Sudden loss of phone or power?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Sticking doors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>