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## **Otis Elevator Company**

### **Comments in Support of Senate Bill No. 309 An Act Concerning Residential Elevator Safety**

**March 2, 2010**

Good afternoon. My name is Peggy Webbe, and I am an in-house counsel for Otis Elevator Company in Farmington, CT. I also am a member of the Government Affairs Committee of the National Elevator Industry, Inc. (also known as NEII). NEII is a national trade association consisting of firms and individuals that install, maintain and/or manufacture elevators, escalators, moving walks and other building transportation products. NEII's charter is to formulate codes and standards that will enhance the safety of the riding public and encourage introduction of newer and safer technologies.

First, I would like to thank the Public Safety and Security Committee for their sponsorship of this important bill. On behalf of Otis Elevator and NEII, I am here in support of Senate Bill No. 309. Although Connecticut currently requires elevators to be inspected by the CT Department of Public Safety ("DPS") when newly-installed in a home, there are no required inspections thereafter. This Bill calls for a private residential elevator to be inspected by the DPS at the time of each sale of the residence. The Bill also requires that the date and findings of the inspection be disclosed as part of the overall home report that is provided to a prospective buyer.

This is an important public safety initiative. While the elevator unit itself is manufactured to the pertinent safety codes by the elevator manufacturer, the design and construction of the home, its hallway, and the hallway door (or "hoistway door", as known in the industry) may be performed by architects, general contractors, and carpenters. While some are experienced in the complexities of installing and operating residential elevators, many are not. This is especially true in the case of remodeling contractors, where an elevator that once was safe may not remain so after a home renovation that involves reconfiguring a hallway and other areas.

Swing doors are the most common configuration of private residence elevators. When the swing door is installed flush with the hallway (as is standard), a gap of 6 or more inches<sup>1</sup> may exist between this door and the elevator gate. This is enough room for a child or small adult to occupy the space between the swing door and the elevator, and be injured or killed if the elevator moves when called to another floor. The problem can be entirely prevented during new construction by proper installation of the swing door, using what is known as a "subframe" that moves the hoistway door closer to the elevator car. If an excessive gap exists in a previously installed unit, the problem can be corrected by the installation of a "space guard", a box-like baffle that fills the space.

However, hallways and hoistway doors are designed and installed by homebuilders who may not be familiar with elevator codes that specify the size of the allowable space between the hoistway door and car gate. While a homeowner is likely to call an elevator expert to address issues with the actual elevator car, the hallway door configuration is not normally recognized as being integral to the elevator. Many home inspectors know little about elevator codes; therefore, it is important that inspections be performed by a DPS elevator expert.

A lack of experience in this area can have tragic consequences. Over the years, there have been numerous accidents involving individuals trapped in the excessive space. After a tragic accident in Maine in 2001, we launched a coordinated campaign to modify elevators to reduce this excessive space, and we have installed over 3,000 space guards in Otis and non-Otis elevators.

Inspections can also highlight potential problems with a large portion of residential elevators that once were units installed for commercial application. In earlier days, commercial units were designed for operation by a human elevator operator, who could ensure that no one was in the space between the hoistway and car doors before moving the elevator. Hazards resulted when these old elevators were modernized for automatic operation. These days, swing doors are seldom, if ever, used in commercial applications, and with the decommissioning of old

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<sup>1</sup> Current standards -- ASME A17.1 Sec. 5.3.1.7.2 -- 2004 and A17.3 10.1.4.2 -- 2002 -- specify that that the space between the hoistway door and elevator car gate be no more than 5 inches and that the clearance between the hoistway doors and hoistway edge of the landing sill be no more than 3 inches (the "3 and 5 rule").

units or their retrofit with space guards, the risk to the public from commercial elevators has diminished substantially.

For these reasons, Otis Elevator Company and NEII are pleased to lend their support to Senate Bill No. 309.