



Window Shutter Escape Ladder

Novel escape ladder for use in multi-story buildings

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Inventor

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Field

Emergency escape (egress)
device

Technology

Window shutter escape ladder

Stage of Development

Prototype developed

Status

Seeking licensing partners

Patent Issued

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Technology

Escape ladders for use in multi-story buildings typically are constructed of rope, cables, telescoping sections, wires, or a combination of these materials. When not in use, these ladders are stored near a window or door, in a box or container, or are bolted/hinged to a wall. Escape ladders for use from the upper floors of multi-story buildings are larger than those used for egress from lower floors, and as a result, are larger requiring more storage space which can block the egress route and are often not aesthetically pleasing. Often, as a result of the size of these upper floor escape ladders, people may tamper with or remove them, and as a result, they may not be available when needed in an emergency. There have been several attempts to design an aesthetically pleasing, tamper-proof, functional escape ladder for use from the upper floors of multi-story buildings. Development of such an improved system has not been adopted to date for general commercial use for a variety of reasons including; cost, the ability of people to tamper with them making them non-functional when needed, and they are not pleasing to the eye.

Mark Mettler, an inventor and entrepreneur with a background in product development and construction technology, has developed a new escape device for use from the upper floors of multi-story buildings. The *Window Shutter Escape Ladder* system is designed to look like a typical window shutter and blend in with the building, making it less likely to be tampered with, and from a design perspective more aesthetically appealing. The system is comprised of two vertical hollow side rails and horizontal reinforced slats used for steps. It is stored in a collapsed configuration and is mounted directly to the outside of a building, or attached to the building with hinges adjacent to a window or door. When not in use, it appears to be a window shutter. The ladder can be used for escape from a single floor of a building (e.g., second floor), or a series of such devices can be mounted in a vertical fashion, each one connecting to the other one for use in a multi-story building.

Competitive Advantages

- The system looks like a window shutter mounted to a building and is always available for use in the event of an emergency.
- Escape ladder does not interfere with the normal use of doors and windows, takes up minimal space, and is aesthetically pleasing from a design perspective.
- As a result of its segmented construction, the system can be used from a single floor, or multiple sections of the device can be connected, allowing it to provide an escape from the upper floors of a multi-story building.

Opportunity

The technology has broad applicability in a variety of residential, commercial, and industrial building construction markets across the globe. The escape ladder can be integrated into the design of new buildings or can be easily deployed on existing buildings. The system can easily comply with local building codes. The global construction market is estimated to be \$7.6 trillion US by 2023.

The inventor is seeking a partner for further development and commercialization of this technology through a license. The inventor is available to collaborate with interested companies.

