



Ideal

What is the

Fire Training Facility?

The answer is that there is no universally correct answer. The perfect facility design for one department may be totally inappropriate for another. *Why?* Because to be truly ideal, the facility must be designed to encompass the duties and techniques applicable to the department.

However, there are some common, although not universal, training needs amongst fire departments. The most frequently desired feature is a live fire burn room. Second to the burn room are devices that allow for training in rappelling and lifting exercises.

Ventilation props that allow for roof and ceiling penetration are also incorporated into many training facilities. Some departments choose to include standpipe systems, confined space rescue props, and complex room and corridor layouts. More specialized designs include features such as rock climbing walls, helicopter deployment props, shipboard layouts, and elevator simulators.

The initial size of a training facility may be a reflection of the size of the department (i.e.



how many firefighters will be trained at one time and how many simultaneous scenarios are performed) and the height of structures in the community. The size of a tower could range from an 800 square foot, single story building to a high-rise tower depend-

ing on the department's needs. Your department's areas of responsibility will dictate your ideal design.

A training tower design that meets all of your needs is not so abstract. There are certain tower requirements that should be met in your tower design for maximum training effectiveness. Simple tasks like laddering and rappelling should be realistic. The walls should be flat, as you would find in the real world. Roof, floor, and attic working decks should all be flat and designed to withstand at least 100 pounds per square foot of live load.

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All wall panels should be galvanized and painted inside and out, since the interior will probably be subjected to as much moisture, if not more, than the outside. Window sills should be beveled for safe entry during hose maneuvering and rope work. The doors and window shutters must be designed to withstand the severe treatment from

your firefighters and be manufactured of galvanized steel to prevent premature rusting. Standard commercial doors simply cannot perform under this kind of pressure.

One of the most overlooked elements of an ideal tower's design is its ability to be expanded in the future. As a fire department changes or grows, additional features will need to be



added to meet new training needs. The tower may need to increase in width, length, or height to accommodate the growth. A facility that is designed with a structural steel skeleton will easily allow for expansion and prove to be a cost effective choice for your budget.

The size and shape of the ideal training structure for your department will depend on your training needs, but the qualities and features of the construction itself must be realistic, durable, and capable of expanding to meet your future needs. ■



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