

Why is this CMU Stair Tower here?

The answer is very simple; Concrete Masonry Unit Wall Systems **will not burn**. They never have, and never will, burn. Non-combustible CMU stair towers provide building occupants shelter and safety as they egress buildings in fire events.

As you can see, the balance of this structure is being built with combustible materials, and lots of it. Combustible materials rely upon active fire detection and active fire suppression systems to keep them from burning in the event of a fire. And because they burn, they offer little to no shelter or safety to building occupants.

CMU walls offer passive fire resistance and are 100% "activated" the moment the mortar cures. CMU walls **do not rely upon electricity nor water to make them function** as designed. CMU walls stand alone. This begs the question as to why anyone would want to build a building that can easily catch fire and potentially burn down.

CMU walls are an important function in providing a Balanced Fire Safety Design in buildings.

Stairwells Rely on Masonry for Strength

When constructing high-rise and even mid-rise buildings it is very important to build stairways as early in the construction process as possible. Constructing stairwells first helps to create a safe access for workers, and you won't have to use ladders to move workers and light materials from floor to floor.

The use of traditional 'stick-built' steel stairway is being replaced by prefabricated components that are made up of steel channels surface mounted (bolted) to the concrete masonry unit (CMU) walls to form risers and supports for landings and platforms. Risers and landings may serve as poured concrete forms. Another faster approach is to use finished steel treads which attach directly to the support channels, eliminating the need to pour and finish concrete in stairwells.

When using a prefabricated steel stair in a concrete masonry stairwell, C-shaped steel channels are bolted to the wall at the landings and the prefabricated stringers span between support channels. This type of system installs quickly, economically, and provides a safe and attractive stairwell.

A CMU stair tower in this building could save lives.



3 CMU Towers are built early in the construction phase.



CMU Towers aid workers as they build.



If you have questions about this or other masonry construction concerns contact [ASK MAC](#) for FREE Masonry Advice. The Masonry Advisory Council is a non-profit organization that provides technical support and promotes the use of masonry for the construction of commercial and residential buildings.

For more information call 847-297-6704 or visit our website at masonryadvisorycouncil.org