

**Atriums** 

Atriums can be very complex in design, whether in a mall, education center or office building. With many design parameters and constraints such as:

- 3 story trigger for smoke analysis
- Open stairs within the atrium
- Ventilation requirements
- Atrium fire separations

## THE PROBLEM

The design of the new Gonzaga University center included a three story atrium with large assembly spaces on the third floor. Following the prescriptive code would have led to costly Computational Fluid Dynamic Modeling of how fast smoke filled the atrium and ultimately an intensive mechanical ventilation system.

## THE SOLUTION

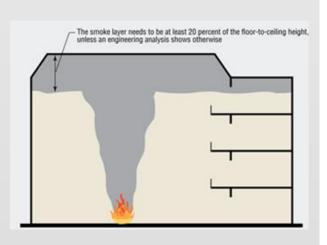
Code Unlimited performed a timed egress analysis and smoke filling by the calculation method to determine a range of solutions including a modest increase in atrium height, natural ventilation, and a significantly smaller mechanical ventilation system.

## CODE UNLIMITED

Code unlimited works with architects, engineers, developers and owners to craft custom solutions for complicated code problems in a clear and consistent manner. We work in all sectors and all states.

## **Code Unlimited, LLC**

can craft alternate solutions to the most complex of designs while satisfying the intent of the code, increasing life safety measures, lowering costs, increasing your freedom of design, and most importantly, increasing client satisfaction.



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