

INTERIOR DESIGN: SERVING ON THE NEW "FRONT LINES" OF FIRE SAFETY

For many years, interior designers have mounted an often frustrating battle in defense of their role as key advocates of public health, safety and welfare. But now, seemingly overnight, they find themselves undisputedly serving on the "front lines" the battle against fire. This paper explains the phenomenon and proposes strategies by which interior design educators can better prepare their students, practitioners and themselves to wage battle against this adversary.

Although building fire detection, alarm and suppression features have reduced the frequency of fires and fire deaths by close to 20% in the past ten years, fire injuries and dollar loss during the same period have remained relatively constant [1]. Several negative changes in the fire behavior of interiors provide one probable explanation for this paradox. This presentation summarizes evidence supporting this contention [2] and poses an explanation of the phenomenon based on detailed analysis of two U.S. government fire incident reports, undertaken as part of the present project.

One of this project's key objectives was refinement of methods by which designers might more independently transform sound research findings (targeted primarily for a technical and scientific audience) into a sound foundation for design application. So, this report will conclude with a presentation of strategies developed by the research team to bridge the gap between investigation and application. Most notably, it will explain the translation of technical fire safety literature into concise, illustrated fire-safe interior design principles inspired by the "pattern language" methods of Christopher Alexander and Edward Allen [3].

- 1. U.S. Fire Administration (2012). Residential building fire trends (2003-2012). Retrieved from http://www.usfa.fema.gov/downloads/pdf/statistics/res_bldg_fire_estimates.pdf; U.S. Fire Administration (2012). Non-residential building fire trends, (2003-2012). Retrieved from http://www.usfa.fema.gov/downloads/pdf/statistics/nonres_bldg_fire_estimates.pdf.
- 2. Kerber, S. (2010). *Impact of Ventilation on Fire Behavior in Legacy and Contemporary Residential Construction*. Northbrook, IL: Underwriters Laboratories.
- 2. Alexander, C., Ishikawa, S., & Silverstein, M. (1977). A Pattern Language: Towns, buildings, construction. New York, NY: Oxford University Press; Allen, E. (1993); Allen, E. (1993). Architectural detailing: Function, Constructability, Aesthetics. New York, NY: John Wiley & Sons.