

➤ **Information on UL 864 Ninth Edition –**

On December 31, 2008, the Ninth Edition of UL (Underwriters Laboratories) 864 will take effect, having an enormous impact on the worldwide fire alarm industry. For fire alarm equipment manufacturers, it will serve as a de facto test of financial, engineering, and manufacturing strength. In fact, it already has. Since 1948, UL 864 has been the Standard for Control Units and Accessories for Fire Alarm Systems. Since that time, minor changes have been made to each edition of the standard. But to fully appreciate the scope of the revisions to UL 864 Ninth Edition, consider this fact: the Eighth Edition of UL 864, which took effect in November 1996, was 108 pages long. The Ninth Edition is 230 pages. It is, by any measure, an extensive revision of the standard. The first step in understanding the extent of these revisions is to have a more in-depth look at UL 864 itself. With the exception of Europe, UL 864 is generally the standard that governs the worldwide fire protection industry. There are other standards that individual countries have adopted, but UL 864 is, by far, the most significant and widely followed. Essentially, UL 864 attempts to follow changes in the life safety codes, most notably NFPA (National Fire Protection association) 72. There are unique chapters in NFPA 72 that cover all aspects of life safety. Each chapter is managed and updated on a regular cycle by a committee of industry and subject matter experts. These experts represent manufacturers of smoke detectors, sprinkler systems, and fire alarms, as well as engineering firms and fire alarm installation companies. The most recent edition of NFPA 72 was adopted in 2002. UL undertook the rewrite of 864 Eighth Edition to keep pace with the most current edition of NFPA 72. UL 864 Ninth Edition originally incorporated an implementation schedule that required all fire alarm control equipment manufactured after October 2005 to comply with the new standard to receive the UL mark. Although adopted in September 2003, companies producing equipment covered by the standard were given two years to affect changes to existing control equipment and to test it against the new standard's requirements. However, after meeting with the National Electrical Manufacturers Association (NEMA) in the summer of 2005, UL changed the effective date to June 30, 2007. In May of 2007, the deadline was extended again to December 31, 2008. Few changes are significant when taken individually, but the cumulative impact has forced fire alarm manufacturers to redesign or update a significant portion of their entire product lines to comply with the new standard. And the amount of equipment that most manufacturers have submitted to UL for testing and approval – and will continue to submit - is substantial. The time and effort to properly follow the submission procedures is similarly significant. Just the amount of equipment requiring testing makes the Ninth edition a major change. UL 864 Ninth Edition encompasses at least four “classes” of change:

- Changes that make the standard consistent with the current edition of NFPA 72
- Changes that make the standard consistent with UL's practice in testing products
- Changes to bring UL 864 into agreement with other related UL safety standards
- Changes in the scope of the standard itself

The expanded scope of the standard now covers the following: NFPA 13 (sprinklers), NFPA 15 (water spray systems), NFPA 16 (foam water systems), NFPA 17 (dry chemical extinguishing), NFPA 17A (wet chemical extinguishing), NFPA 92A (smoke control), NFPA 92B (smoke management in malls, etc.), and NFPA 2001 (clean agent extinguishing systems). These are in addition to the standards already covered in the Eighth Edition (NFPA 12, 12A, 12B, and 72). Firms that design fire alarm systems will feel little impact from UL 864 Ninth Edition because system design is driven by NFPA 72 and other local or federal building codes. Whereas, UL 864 Ninth Edition applies solely to the actual fire alarm equipment; it has no affect on how systems are installed. For example, NFPA 72 requires the response time for an alarm to be ten seconds or fewer for at least two code cycles; the Ninth Edition of UL 864 puts this into the equipment standard. Other key changes are as follows: enhanced resistance to RF interference, better synchronization of Notification Appliances, greater software integrity, broader programming requirements, and updates in supervision, monitoring, compatibility, and power transmission. In short, fire alarm products listed in accordance with the Ninth Edition of UL 864 carry with them the confidence and assurance of meeting, or exceeding, the latest industry safety standards. For the public, UL 864 Ninth Edition will be a springboard to better, safer fire alarm products. And for building owners, architects, and engineers specifying UL 864 Ninth Edition listed products, they can be confident that their fire alarm system is equipped for the demands of the 21st century.