

2006 International Fire Code Allows Alcohol Based Hand Rubs

In early October, at its 2005 Annual meeting in Detroit, MI., the International Code Council (ICC) created a new section to the *Flammable and Combustibles Liquids* chapter of the *International Fire Code* (IFC) to address the use of alcohol-based hand rubs. Adoption of this new section provides Authorities having Jurisdiction (AHJ) with clear code language required to allow the use of these hand rubs. By providing detailed criteria on the use and storage of alcohol-based hand rubs, the IFC provides guidance to minimize any potential fire risk while allowing handrub dispensers to be located in convenient locations to maximize access and use by healthcare workers. The IFC is adopted and enforced by 36 states and Washington, DC.

The adoption of this new section is the result of a two year effort by the ICC Ad-hoc Committee on the Use of Alcohol Hand Disinfectants in Health Care Occupancies, Chaired by Ed Berkel, Fire Marshal of the Mehlville Fire Protection District, St. Louis, Mo. The committee, comprised of fire marshals, fire chiefs, building officials, hospital engineers, and industry experts, was charged with investigating and providing recommendations regarding the safe usage of alcohol-based hand rubs. Earlier this year, the National Fire Protection Association (NFPA) adopted the 2006 Life Safety Code (LSC) with new language addressing the use of alcohol based hand rubs. This code revision following up on NFPA's 2004 Tentative Interim Amendment (TIA) allowing the use of alcohol based hand rubs under the 2000 and 2003 editions of the LSC. The LSC is adopted and enforced by Joint Commission (JCAHO), the Center for Medicare and Medicaid Services (CMS) and a number of states. This action by ICC effectively places national, state, and local fire agencies on the same page allowing the use alcohol-based hand rubs in healthcare facilities.

New Section 3405.5 of the 2006 IFC establishes the following rules for the use of wall-mounted alcohol-based hand rub¹ dispensers:

- The maximum capacity of each dispenser shall be 68 ounces (2.0 liters).
- The minimum separation between dispensers shall be 48 inches
- The dispensers shall not be installed directly adjacent to, directly above or below an electrical receptacle, switch, appliance, device or other ignition source. The wall space between the dispenser and the floor shall remain clear and unobstructed.
- Dispensers shall be mounted so that the bottom of the dispenser is a minimum of 42 inches and a maximum of 48 inches above finished floor.
- Dispensers shall not release their contents except when the dispenser is manually activated.
- Storage of alcohol-based hand rubs shall be in accordance with the applicable provisions of Section 3404 and 3405.

¹ For hand rubs classified as Class I or Class II liquids

- Dispensers installed in occupancies with carpeted floors shall only be allowed in smoke compartments or fire areas equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

In addition, new section 3405.5.1 of the 2006 IFC establishes the following rules where alcohol-based hand rub dispensers are installed in corridors:

- Aerosol containers shall not be allowed in corridors.
- The maximum capacity of each dispenser shall be 41 ounces (1.2 L).
- The maximum quantity allowed in a corridor within a control area shall be 10 gallons (37.85 L).
- The minimum corridor width shall be 72 inches.
- Projections into a corridor shall be in accordance with Section 1003.3.3.

Implementation and Enforcement

Until the 2006 editions of the NFPA Life Safety Code and 2006 ICC International Fire Code are published and adopted by jurisdictions, the only two documents that are in force are the NFPA TIA and the CMS Interim Final Rule. Until the two new codes are published, 2006 codes should be viewed as a “formal interpretation” of NFPA’s and ICC’s intent on this issue and may be used as the basis for a discussion with your local authority having jurisdiction (AHJ) regarding his/her expectations for safe use of alcohol-base hand rub products

Background

In July 2003 ASHE, ICC, NFPA, JCAHO, CMS, the American Hospital Association (AHA), the Centers for Disease Control (CDC), the Association for Professionals in Infection Control Inc., (APIC) the Society for Healthcare Epidemiology of America, Inc., (SHEA) and other members of the healthcare and fire safety communities met to address the 98,000 deaths per year attributed to Healthcare Associated Infections (HAI). While it was agreed upon that in theory, the use of alcohol-based hand rubs had an impact on infection rates, it was noted that current fire codes restricted the use and storage of flammable liquids. During the course of the meeting ASHE provided the results of a fire safety engineering study they had commissioned to determine how alcohol-based handrub dispensers could be safely installed and managed in corridors. The review and acceptance of the findings of the study was the impetus for the development of the code language adopted by ICC, NFPA, and CMS.