


<b>TECHNICAL BULLETIN</b> <b>CITY OF RALEIGH, N.C.</b> <a href="http://www.raleighnc.gov">www.raleighnc.gov</a>				<b>OFFICE OF THE FIRE MARSHAL</b>	
Subject <b>Window decal for smoke removal</b>		Bulletin # TB-18		SECTION NCFPC, NCBC	PAGE 1 of 3
		PREPARED BY Office of the Fire Marshal			EFFECTIVE DATE 06/01/2019  Revision Date 06/01/2019

## 1.0 **Purpose**

The purpose of this bulletin is to identify windows or panels that can facilitate smoke removal in post-fire salvage and overhaul operations for high-rise buildings. These windows will be identified with a window decal.

## 2.0 **Organization(s) Effected**

Raleigh Fire Department, Office of the Fire Marshal; City of Raleigh Development Services; General Contractors; Architects

## 3.0 **Definitions**

High-rise building – A building with an occupied floor more than 75 feet above the lowest level of fire department vehicle access.

Smoke removal system – Mechanical air-handling equipment providing one exhaust air change every 15 minutes for the area involved. Return and exhaust air shall be moved directly to the outside without recirculation to other portions of the building.

Manual smoke removal – Where manually operated panels or windows are used or when windows are designed to be broken out for smoke removal.

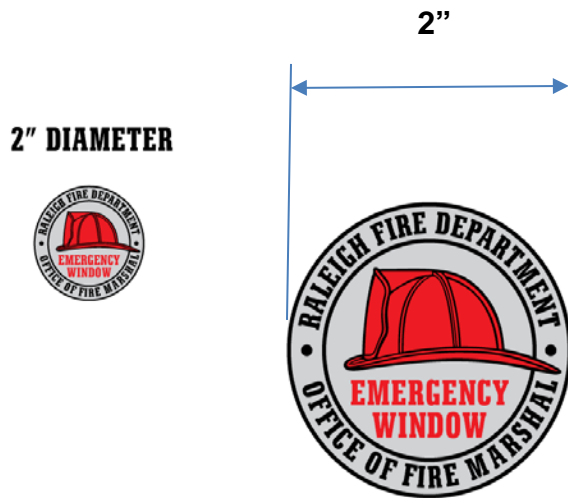
## 4.0 **References**

North Carolina Fire Protection Code (NCFPC), North Carolina Building Code (NCBC)

## 5.0 **Requirements**

Window decals, when used as prescribed by the NCFPC and NCBC, shall meet the following criteria:

- Easily identifiable, fixed glass windows and manually operated windows or panels shall be distributed around the perimeter of each floor at not more than 50 linear feet.
- The area of windows shall not be less than 40 square feet per 50 linear feet of perimeter.
- Decals shall be located at bottom right corner and the upper right corner of each window.
- Windows that are fixed glazing shall be tempered glass and made to be easily cleared by fire fighters.
- Decals need to have adhesive on the back and installed facing inside the building.



### Color coding for decal

Gray color – translucent

Black color- reflective white

Red color - reflective red



Location of decal  
(2) decals per window:  
1 at bottom right corner  
1 at top right corner

Example of operable window