

# Surprise Fire Department Emergency Access Detail Book





**Surprise Fire Department**  
14250 W. Statler Plaza, Suite 101  
623.222.5100



## INSTRUCTIONS FOR THIS DETAIL BOOK

Book is in Adobe Acrobat 7.0 software making it easy to move from one chapter to another.

1. Click on the ***Introduction*** tab for
  - a. Guidelines
  - b. Fire Prevention staff phone numbers
2. Click on the ***Table of Contents*** tab to find a detail
  - a. The Table of Contents is listed by chapter
  - b. The numbering system, i.e., 2.1, identifies the *chapter*, then *detail*
3. Simply click on the ***Chapter*** tab number you want to go to
  - a. Scroll through the pages of that chapter to find a ***Detail*** you want.
  - b. Click on the *detail* to find that page
4. You may print by page or by listing pages.
5. The book is secured to ***print only***.

*Look for detail updates at [www.surpriseaz.com](http://www.surpriseaz.com).*



**Surprise Fire Department**  
14250 W. Statler Plaza, Suite101  
623.222.5100



## **FIRE DEPARTMENT EMERGENCY ACCESS GUIDELINES**

It is essential that emergency response personnel have unimpeded access to fires and medical incidents. In the event of a fire or life threatening medical emergency, fire personnel must be able to reach the scene as quickly as possible. In a true emergency, a few second can literally mean the difference between life and death. How quickly crews can begin fighting a fire will often determine how successful they are in stopping the fire and preventing further damage. Fire Code requirements pertaining to emergency access were written to facilitate the Fire Department's ability to quickly and safely respond to all occupancies in the City. Your compliance with these requirements will help us to better help you in the event of an emergency.

The Surprise Fire Department has put this information together to assist you in complying with Fire Department emergency access requirements. The enclosed diagrams and drawings provide the approved details for parking and access of fire apparatus. The Fire Department hopes that this information will help you to understand Fire Code requirements and our emergency access needs.

If you have any questions or need help with access requirements, please contact the Surprise Fire Department, Fire Prevention Division, at 623.222.5100.



**Surprise Fire Department**  
14250 W. Statler Plaza, Suite101  
623.222.5100



## ACKNOWLEDGEMENTS

This book has been developed to make it easy for commercial and residential property owners, architects, builders, gate companies, sign companies and others to fully understand the emergency access gate and other access requirements of the Surprise Fire Department and Fire Code. These new measures will make properties safer for the occupants.

These requirements are reviewed and updated regularly so that those who need and use them have the latest information available. In addition, it has been placed on a CD-ROM for those who find it more convenient to use electronically. Check the City web site for changes and latest information available [www.surpriseaz.com](http://www.surpriseaz.com).

Many people in the Fire Service have helped with the development and continued improvement of this information. Five people stand out for their exceptional work and continued support. They are:

- **Alan Brunicini**, Chief of the Phoenix Fire Department, known as one of the premier Fire Chiefs in the nation for sharing innovative procedures, training, Incident Command, Automatic Aid, and community involvement.
- **Richard Tritch**, Emergency Access Officer, Phoenix Fire Department, was the visionary behind this project. Richard developed the plan and initiated necessary Fire Code changes, and became the Phoenix Fire Department liaison for all of the companies and agencies involved.
- **Michael White**, Chief of the Surprise Fire Department, brings dedication and strong work ethics to one of the fastest growing communities in the Southwest. Rising from the position of Fire Dispatcher to Chief in his 30 plus year career, Michael has a wide range of knowledge skills and the ability to help move the City of Surprise Fire Department to its highest potential.
- **Clint Mills**, Assistant Chief Fire Administration Division. Chief Mills is a visionary. During his remarkable history with the Surprise Fire Department he has demonstrated to others to be diligent and persistent, and encourages them to think outside the box as they consider professional goals. Chief Mills has risen from a Volunteer Fire Fighter to Assistant Fire Chief over the past 21 years and now oversees Fire Administration, Prevention and Community Service Divisions.



**Surprise Fire Department**  
14250 W. Statler Plaza, Suite101  
623.222.5100



#### **Acknowledgements Continued**

- **Douglas Helbig** has a banner history of 38 years in the fire service and serves as Fire Marshal for the City of Surprise Fire Department. Doug has developed a full service Fire Prevention Division, and oversees the day-to-day operation of activities. The Division includes; plan review, permitting & licensing, new construction inspections, annual compliance inspections, Fire Code development & implementation, code enforcement, and arson investigation.
- **Teresa RaShay**, Fire Prevention Permit Specialist. Teresa has been an asset with her creativity and skills in designing some of the technical details. Helped in updating detail book to IFC 2006 Fire Code, local amendments and edits to the contents.
- **Dale Banot**, Fire Prevention Plans Examiner, has 32 years of fire service experience. He has been influential in his knowledge of Fire codes ensuring the quality of this product.
- **Rita Clark**, Fire Prevention Secretary, coordinated the production of this product.
- **Eddie Rios**, Fire Inspector, has 35 years of fire service experience. Eddie was the chair-person of the group, which updated the Emergency Access Detail Book.
- **Gail Kuhn**, Fire Inspector, has 7 years of fire service experience. Gail was instrumental in updating this detail book to IFC 2006 Fire Code, local amendments and edits to the contents.
- **Marvin Rose**, Fire Inspector with 7 years with the City of Surprise as a Building Inspector and Med Gas Inspector. Helped in updating this detail book to IFC 2006 Fire Code, local amendments and edits to the contents.
- **Lloyd Abrams**, GIS Administrator, was instrumental in converting the CAD technical details to our format.
- **Warren Bert**, GIS Specialist, helped in converting the CAD technical details to our format.



**Surprise Fire Department**  
14250 W. Statler Plaza, Suite101  
623.222.5100



## **FIRE PREVENTION STAFF**

<b>Fire Marshal .....</b>	<b>623-222-5100</b>
<b>Division Secretary .....</b>	<b>623-222-5121</b>
<b>Plans Examiner .....</b>	<b>623-222-5125</b>
<b>Permit Specialist.....</b>	<b>623 222-5130</b>
<b>Request Fire Inspection .....</b>	<b>623-222-5111</b>
<b>Fire Inspectors .....</b>	<b>623-222-5100</b>



INDEX.....BY CHAPTER.....PAGE

Instructions for Emergency Access Detail Book..... A-1
Fire Department Emergency Access Guidelines..... A-2
Acknowledgements..... A-3
Acknowledgements..... A-4
Fire Prevention Staff..... A-5
Table of Contents..... A-6
Table of Contents..... A-7
Table of Contents..... A-8
Table of Contents..... A-9

CHAPTER ONE – FIRE LANES

Access Requirements for New Construction Sites..... 1-1
Temporary Fire Department Construction Access Sign..... 1-2
Fire Access & Signage Requirements..... 1-3
Fire Lane Signs..... 1-4
Alternative Application Fire Lane Signs..... 1-5
Fire Lane Sign and Post Installation Specifications..... 1-6
Approved Fire Lane Sign Posts..... 1-7
Wall Mount Bracket Fire Lane Sign “Flag-Mount Style”..... 1-8
Approved Wall Mount Bracket Fire Lane Sign “Flag-Mount Style” ..... 1-9
Fire Lane Striping Stenciling & Sign Installation..... 1-10
Designer Fire Lane Sign Post & Installation..... 1-11
Designer Fire Lane Sign Post & Installation..... 1-12
Alternative Fire Lane Marking System..... 1-13
Alternative Fire Lane Marking System..... 1-14
Removable Fire Lane Sign..... 1-15
Folding Fire Lane Sign..... 1-16
Alternative Surface Fire Lane Marking Soft Surface..... 1-17
Parking Lot Access & Aisle Detail..... 1-18
Standard Aerial Fire Apparatus Access Roads for Buildings Greater than 30’
in Height..... 1-19

CHAPTER TWO – ADDRESS DIRECTORIES

Address Directory Guidelines.....2-1
Address Directory Guidelines Continues..... 2-2
Entrance Island Details to Residential Community with Automatic Gates.....2-3
Internal Illuminated Site Directory Detail.....2-4
Address Directory.....2-5
Apartment Monument Address Directories.....2-6
Apartment Monument Address Directories.....2-7
Apartment Monument Address Directories.....2-8



INDEX.....BY CHAPTER.....PAGE

CHAPTER THREE - ADDRESSING

Address Guide for All Properties..... 3-1
Address Guide for All Properties Continued..... 3-2
Apartment Monument Addressing Directories..... 3-3
Apartment Monument Addressing Directories..... 3-4
Building Address Monument..... 3-5
Temporary Fire Department Construction Access Sign..... 3-6
Fire Access & Signage Requirements..... 3-7
Commercial Building Address..... 3-8
Suite Number Details..... 3-9
Corridor Spread Plate Sample..... 3-10
Building Number Unit Spread..... 3-11
Multi-Family Numbering Detail..... 3-12
Multi-Family Numbering Detail..... 3-13
Building Number Unit Spread..... 3-14
Building Number Unit Spread..... 3-15
Stairwell Marking Detail..... 3-16
Stairwell Floor Sign Detail..... 3-17
Stairwell Floor Sign Detail..... 3-18

CHAPTER FOUR – DIRECTIONAL SIGNS

FD Access Directional Sign for Street Location..... 4-1
Building Number Unit Spread..... 4-2
Residential Address Plate..... 4-3
Elevator Lobby FD Access Identification Sign..... 4-4

CHAPTER FIVE – KNOX BOXES/KEY SWITCHES

Knox Box Guide for Commercial Properties..... 5-1
Knox Box Guide for Commercial Properties Continued..... 5-2
Knox Box 3200 Series Recessed Mount Hinge Door..... 5-3
Knox Box 3200 Series Mounting Instructions..... 5-4
Knox Box 3200 Series Mounting Kit..... 5-5
Knox Vault 4400 Series Recessed Mount Hinge Door..... 5-6
Knox Vault 4400 Series Mounting Kit..... 5-7
Knox Padlocks..... 5-8
Knox Box Location - Big Box Retail Buildings..... 5-9
Knox Box Location - Shopping Strip Centers..... 5-10
Knox Box Location - Small Commercial Buildings..... 5-11
Knox Box Location – High Rise Buildings..... 5-12
Knox Box Placement for Pedestrian Gates..... 5-13



INDEX.....BY CHAPTER.....PAGE

CHAPTER 6 – FIRE PROTECTION SYSTEMS SIGNAGE

Remote FDC Sprinkler Sign Detail (Exception)..... 6-1
Remote FDC with Strobe Detail Installation (Exception)..... 6-2
FDC Signage..... 6-3
FDC Wall Mount Sign..... 6-4
FDC Sprinkler Signs..... 6-5
Special Master FDC Sign..... 6-6
Fire Department Sprinkler Riser Room Sign..... 6-7
F.A.C.P./Riser Room Identification Sign..... 6-8
F.A.C.P. Identification Sign..... 6-9
Fire Protection Signage..... 6-10
Wet Standpipe Sign Detail..... 6-11
Fire Hydrant Location Sign..... 6-12
Wall Sign Bracket “Flag-Mount”..... 6-13
Sprinkler Control Valve Sign for Zone Applications..... 6-14
Special Detail for Access Cut Out Panel..... 6-15
Post Indicator Valve Sign..... 6-16
Fire Department Command Room Sign..... 6-17
Bollard Crash Protection for Fire Department Equipment..... 6-18

CHAPTER SEVEN – AUTOMATIC GATES

Manual Gate General Notes..... 7-1
Automatic Gate General Notes..... 7-2
Vehicle Access Gate Plan Submittal Guidelines..... 7-3
Vehicle Access Gate Plan Submittal Guidelines Continued..... 7-4
Approved Access Requirement for Preemption Devices..... 7-5
Vehicle Access Gate Plan Guidelines..... 7-6
Items needed to be Coordinated with Gate Company..... 7-7
Electrical Requirements for New Gated Communities..... 7-8
Multi Family Preempted Automatic Gate..... 7-9
Typical Entrance to Multiple Residential Communities with Automatic Gates..... 7-10
Automatic Gate Entrance with 3-Strobe Detectors..... 7-11
Tomar Preemption Detector Model 1790-1014..... 7-12
3 Tomar Preemption Detector Model 2795-3..... 7-13
Automatic Gate Strobe Detail..... 7-14
Approved Automatic FD Access Gate Preemption Detector with
Knox Key Switches..... 7-15
Special Application for Retro Fitting with Preemption..... 7-16
Retro fitting Existing Property with Auto Gate & Guest Pullout Lane Plus
Preemption Detector..... 7-17
Automatic Gate without Battery Backup (Exception)..... 7-18
Entrance Island Details to Residential Community with Automatic Gates..... 7-19



INDEX.....BY CHAPTER.....PAGE

Special Fire Department Access Sign..... 7-20
Special Fire Department Access Sign..... 7-21
Special Fire Department Access Sign..... 7-22
FD Access Sign for Manual Pump Release (Exception)..... 7-23
Dual Strobeswitch Detector Model 2795-2 Surprise Application..... 7-24
Approved Strobeswitch Information Gate Access System.....7-25

CHAPTER EIGHT – MANUAL VEHICLE GATES & PEDESTRIAN GATES

Manual Swing Gate Notes..... 8-1
Vehicle Access Gate Plan Submittal Guidelines..... 8-2
Vehicle Access Gate Plan Submittal Guidelines Continued..... 8-3
Vehicle Access Gate Guidelines..... 8-4
Knox Padlock Locking Swing Gate Detail.....8-5
Knox Padlock Locking Rolling Gate Detail..... 8-6
Manual Chain Link Security Gate Details.....8-7
Single Swing Manual Security Gate Installation Details..... 8-8
Fire Lane Striping Details for Manual Gate Installations..... 8-9
Fire Department Access Sign Detail for Manual Gate Power Failure..... 8-10
Approved Fire Department Gated Access Sign..... 8-11
Knox Box Placement for Pedestrians Gates..... 8-12
Approved Pedestrian Gate Requirements..... 8-13
Fire Lane Striping Detail for Along Walls, Fences & Buildings..... 8-14
Manual Rolling Gate Details.....8-15

CHAPTER NINE – HAZ MAT IDENTIFICATION

Hazardous Materials Identification 18x18 Inch (704 Fire Diamond)..... 9-1
FD Special Application Haz Mat Sign..... 9-2
Special Fire Department Fire Pump Test Header Sign.....9-3



# Surprise Fire Department Emergency Access Detail Book

## **Chapter Details**

Chapter 1 - Fire Lanes

Chapter 2 - Address Directories

Chapter 3 - Addressing

Chapter 4 - Directional Signs

Chapter 5 - Knox Boxes/Key Switches

Chapter 6 - Fire Protection Systems Signage

Chapter 7 - Automatic Gates

Chapter 8 - Manual Vehicle Gates Pedestrian Gates

Chapter 9 - Haz Mat Identification