



Fire Protection Training

Procedures Handbook 4300

FORCIBLE ENTRY

TOPIC: Opening Walls

TIME FRAME: 30 Minutes

LEVEL OF INSTRUCTION:

BEHAVIORAL OBJECTIVE:

Condition: A written quiz

Behavior: The student will be able to list and describe methods used to open various types of walls.

Standard: With a minimum of 70% accuracy

MATERIALS NEEDED:

- Appropriate visual aids
- Audio visual equipment
- Forcible entry tools

REFERENCES:

- IFSTA, Essentials of Fire Fighting, 2nd Edition, Chapter 6
- IFSTA, Forcible Entry, 7th Edition

PREPARATION: As a firefighter you may be called upon to open various types of walls. To prevent fire loss, you will need to be able to do this quickly. It is important that you have a basic understanding of how to accomplish this task.



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OPENING WALLS

PRESENTATION	APPLICATION
<p>I. OPENING MASONRY WALLS</p> <p>A. Composition</p> <ol style="list-style-type: none">1. Types<ol style="list-style-type: none">a. Brickb. Stonec. Concrete blocksd. Glass blocks2. Walls generally 8" - 12"3. Steel reinforcing bar spaced 4" - 16" apart<ol style="list-style-type: none">a. Verticalb. Horizontal <p>B. General Considerations</p> <ol style="list-style-type: none">1. Make opening where it will not significantly weaken the wall<ol style="list-style-type: none">a. Especially where wall is a bearing wall2. Avoid electrical wires and plumbing3. Hole should be diamond shaped4. Hole should be large enough to:<ol style="list-style-type: none">a. Allow access to door locks/latches	<p>Point out local examples of each type of wall</p> <p>What is a bearing wall?</p>



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<ul style="list-style-type: none"><ul style="list-style-type: none">b. Allow personnel with tools and SCBA to pass throughC. Power Breaching Tools<ul style="list-style-type: none">1. Fastest means of opening wall2. Requires fewer personnel3. Power tools<ul style="list-style-type: none">a. Heavy duty circular saw with masonry bladesb. Impact hammersc. Drillsd. Air chiselse. Hydraulic spreadersD. Hand Tools<ul style="list-style-type: none">1. Generally slow and labor intensive2. Types of tools<ul style="list-style-type: none">a. Sledge hammersb. Battering ram<ul style="list-style-type: none">(1) Jagged end to pierce masonry wall(2) Rounded end for doors	
<h2>II. OPENING MASONRY VENEER WALLS</h2> <ul style="list-style-type: none">A. Opening a Veneer Masonry Wall Requires that the Veneer be Removed Before Breaching is Started	



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<ol style="list-style-type: none">1. Masonry veneer walls are such that the supporting members are wood with one layer of brick or stone on the exterior to give the appearance of a solid brick or stone wall2. The interior wall consists of upright wood supporting members which are called "studs"<ol style="list-style-type: none">a. The studs are usually 2" x 4" or 2" x 6", spaced at 16" - 24" intervalsb. The presence of these studs creates a hollow space in the wall through which fire can spread3. Knock off the veneer with a sledge hammer, battering ram or power equipment before starting to breach the main wall4. Open main wall the same as other masonry walls	
<p>III. OPENING METAL WALLS</p> <p>A. Metal Walls are Generally Found In</p> <ol style="list-style-type: none">1. Storage buildings2. Service station3. Store fronts4. Commercial structures <p>B. Metal Skin Attached To</p> <ol style="list-style-type: none">1. Wood studs2. Metal studs <p>C. Guidelines</p> <ol style="list-style-type: none">1. Breach metal wall as last resort	



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<ul style="list-style-type: none">a. Preferable to gain entry through<ul style="list-style-type: none">(1) Glass(2) Doorb. Use triangular cut near locking mechanism with base intact2. Anticipate and avoid<ul style="list-style-type: none">a. Electrical wiresb. Plumbing3. Do not cut through wall support members4. Cut adjacent to studs to minimize vibration5. Power tools<ul style="list-style-type: none">a. Power saw with aluminum oxide or similar metal cutting bladeb. Air chiselc. Hydraulic spreadersd. Cutting torch6. Hand tools<ul style="list-style-type: none">a. Slower and cumbersome<ul style="list-style-type: none">(1) Prying tools(2) Cutting tools7. Metal covered with porcelain, when cut, can create flying chips<ul style="list-style-type: none">a. Wear eye protection and keep unnecessary personnel out of the cutting area	

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<ul style="list-style-type: none">1. This process of building over existing walls is called "wrapping" H. Interior Partition Walls, While Usually Easier to Breach, Still Have Electrical and Other Hazards in Them<ul style="list-style-type: none">1. Before opening the wall check for heat or fire. (look, listen, feel or use heat sensor/detector)<ul style="list-style-type: none">a. Breaching could extend fire into your compartmentb. Have hoselines in place2. If possible, place a salvage cover on the floor	



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SUMMARY:

Opening walls is a difficult task. Breaching of a wall should be a last resort after doors, windows, or other openings are considered. If you must breach a wall it is important that you understand the various construction materials, breaching techniques, and that you be familiar with the tools available.

EVALUATION:

A written quiz.

ASSIGNMENT:

To be determined by instructor(s).