

---

<b>LADDERS</b>	<b>Manual</b>	<b>ESHQ</b>
	<b>Document</b>	<b>TFC-ESHQ-S-STD-01, REV E-4</b>
	<b>Page</b>	<b>1 of 31</b>
	<b>Issue Date</b>	<b>December 17, 2015</b>

---

**TABLE OF CONTENTS**

1.0 PURPOSE AND SCOPE ..... 2

2.0 IMPLEMENTATION ..... 2

3.0 STANDARD ..... 2

    3.1 General ..... 2

    3.2 Portable Ladders ..... 3

    3.3 Mobile Ladder Stands ..... 4

    3.4 Fixed Ladders ..... 4

    3.5 Portable Ladder Storage ..... 6

    3.6 Records ..... 6

4.0 DEFINITIONS ..... 7

5.0 SOURCES ..... 7

    5.1 Requirements ..... 7

    5.2 References ..... 8

**TABLE OF FIGURES**

Figure 1. Portable Ladder Inspection Checklist ..... 9

Figure 2. EXAMPLE: OSHA 1910.27 Dimensional Compliance Evaluation Tag. .... 10

Figure 3. EXAMPLE: Contact Facility Management Before Using This Ladder ..... 11

Figure 4. EXAMPLE: “Out of Service” Tag. .... 12

Figure 5. Fixed Ladder Condition Inspection Checklist. .... 13

Figure 6. Ladder Storage Sign. .... 14

**TABLE OF ATTACHMENTS**

ATTACHMENT A – PORTABLE LADDER USAGE ..... 15

ATTACHMENT B – FIXED LADDER OSHA 1910.27 DIMENSIONAL COMPLIANCE  
CHECKLIST ..... 18

ATTACHMENT C – FIXED LADDER DIMENSIONAL CRITERIA ..... 21

## **1.0 PURPOSE AND SCOPE**

This standard establishes requirements to ensure proper selection, inspection, and storage of portable and fixed ladders and mobile ladder stands. This standard does not apply to access ladders constructed as a component part of scaffolding.

Ladder use and working from ladders, is addressed in DOE-0346, the Hanford Site Wide Fall Protection Program (HSFPP).

This standard applies at all Washington River Protection Solutions, LLC (WRPS) managed facilities.

## **2.0 IMPLEMENTATION**

This standard is effective on the date shown in the header.

## **3.0 STANDARD**

### **3.1 General**

1. Managers and supervisors ensure employees who use ladders are trained in the following areas: (5.1.1, 5.1.6, 5.1.8)

- Proper method of conducting a pre-use inspection
- Selecting the proper ladder for the task assigned
- Recognition of hazards related to ladder use
- Fall hazards associated with ladder use
- Correct procedures for fall protection systems
- Proper construction, use, placement, handling and storage of portable ladders, and the maximum intended load-carrying capacities of ladders used.

2. Training Requirements for Individual ladder User – Ladder Safety Computer Based Training (CBT) course #044391 (or equivalent) will fulfill the training requirements.

Performing work activities on a ladder above four feet for general industry, above six feet for construction industry, or above a hazardous condition, requires an evaluation of the hazards in accordance with DOE-0346.

3. Training Requirements for Competent Person – Must complete form A-6005-806, in accordance with TFC-ESHQ-S-STD-29 to comply with the requirements for designating personnel as competent persons.

Subcontractors may designate their own competent persons for ladder inspections with approval of the WRPS Health and Safety Manager.

4. Personnel will perform a pre-use inspection on all ladders prior to each use. If structural defects are found, mark the ladder as defective and/or remove it from service. Defective

ladders shall be properly taken out of service or restored. Ladder repairs shall restore a ladder to a condition meeting its original design criteria before the ladder is returned to use. Workers shall not use ladders that have exceeded the regular inspection due dates. If structural defects are identified engineering should be notified to determine if it is a safety concern. Ladder repairs will be as directed by engineering and may or may not be the same as the original design. (5.1.1, 5.1.2, 5.1.3, 5.1.6, 5.1.7)

NOTE: Alternate methods of gaining access to the work should be evaluated. Examples, such as scaffolding, extension ladders, work platforms, roll-around ladders, should be evaluated and substituted for ladder use whenever practical. Workers should conduct an appropriate evaluation of alternative method/equipment prior to use.

5. Managers and supervisors shall reinforce ladder safe work practices (use Attachment A), as needed (e.g., pre-job briefings, safety meetings).
6. Managers and supervisors ensure employees comply with this document and use portable ladders in compliance with Attachment A. (5.1.1, 5.1.2, 5.1.3, 5.1.6)

### 3.2 Portable Ladders

1. Managers and supervisors will ensure portable ladders used for site activities meet the following requirements: (5.1.1, 5.1.2, 5.1.3, 5.1.6)

- a. Designed and constructed to meet the applicable standards for ladders.
- b. Are labeled on the ladder rail with one of the following classifications:

<u>Duty Rating</u>	<u>Ladder Type</u>	<u>Working Load (pounds)</u>
Special Duty	1AA	375
Extra Heavy-Duty	1A	300
Heavy-Duty	1	250
Medium-duty	2	225
Light-duty	3	200

2. Managers and supervisors ensure a competent person inspects portable ladders for visible defects on a periodic basis and after any occurrence that could affect their safe use. Frequency of scheduled periodic inspections is not to exceed twelve months, and is determined by factors such as:

- Type and rate of use
- Complexity of the work activity
- Associated hazards.

If a portable ladder is stored in an inaccessible area or hazards exist (e.g., high radiation, contamination), a special entry is not required just to perform the periodic inspection. In such a case, the ladder will be inspected by a competent person prior to use or when it becomes accessible outside the area of existing hazards, whichever is sooner.

3. The competent persons performing periodic inspections for portable ladders will place a dated (expiration date) and signed purple sticker (see Figure A-1) on the inspected ladders. The sticker will be placed on the ladder at the time of inspection. Subcontractors may use the WRPS sticker or their own sticker as long as the

information and color is the same. Inspection criteria are contained in Figure 1. This checklist should be used as a guide when performing the inspection but is not required to be maintained as a record.

NOTE: Step stools (32" or less) do not require the annual competent person inspection but do require a pre-use inspection.

### 3.3 Mobile Ladder Stands

(5.1.5)

1. Mobile ladder stands shall be designed to safely sustain the specified load and be capable of carrying the load under varying circumstances depending upon the conditions of use.
2. The maximum work level height shall not exceed four times the minimum base dimensions of any mobile ladder stand.
3. Ladder stands shall have a minimum step width of 16 inches and shall have slip resistant treads.
4. Units having more than five steps or 60 inches vertical height to the top step shall be equipped with handrails.
5. Mobile ladder stands have the same periodic inspection requirements as portable ladders.

### 3.4 Fixed Ladders

1. Fixed ladder OSHA 1910.27 dimensional compliance evaluations (see Attachment B) will be completed on all fixed ladders. The intent of this evaluation is to ensure that the fixed ladder will accommodate workers as well as allowing them proper access. If after this evaluation there are modifications to a fixed ladder the design authority will determine the need for another design evaluation.
2. The design authority will ultimately determine if the fixed ladder meets the OSHA standards. (5.1.4, 5.1.6)
3. If the fixed ladder passes the OSHA 1910.27 dimensional compliance evaluation the facility will be responsible for applying a permanent (i.e., metal) tag (see figure 2) to the ladder. The tag will have the OSHA 1910.27 dimensional compliance evaluation date, ladder I.D. and frequency of condition inspection.
4. If the fixed ladder has manageable dimensional deficiencies that have no direct or immediate relationship to safety or health, the deficiencies can be mitigated to an acceptable level by use of work planning and other administrative controls as determined by the design authority and safety professional. Ladders with manageable dimensional deficiencies will have signage posted on the ladder which reads "CONTACT FACILITY MANAGEMENT BEFORE USING THIS LADDER" (see Figure 3). The facility will then follow their established process outlined for use of the non-compliant fixed ladders and communicate this process prior to ladder use.
5. Prior to use, a fixed ladder with a manageable dimensional deficiency will have the "Fixed Ladder Use Justification" form (A-6006-510) completed with the scope of work

to be completed listed and justification for use of the ladder. The form will then be reviewed and signed by Engineering, Safety, and the Facility or Building Manager. Once complete, the form will be kept at the facility with a copy sent to Safety Program for record keeping in IDMS.

6. If a fixed ladder is found to be defective during the OSHA compliance evaluation it will be placed out of service by the design authority or facility by: (5.1.6)
  - Immediately tagging it with an “Out of Service” tag (see example in Figure 4)
  - Or
  - Marking it in a manner that identifies it as defective
  - Or
  - Blocking access to it (such as with a plywood attachment that spans several rungs).
7. Fixed ladder OSHA compliance evaluations will be performed in accordance to OSHA standards and turned into the facility manager and safety programs. The intent of these inspections is to ensure that the fixed ladder is in good repair and will facilitate a worker using it in the performance of their scope of work.
8. Fixed ladder condition inspections will be completed by a competent person at a frequency dependent on their accessibility and use. The fixed ladder condition inspection criteria are contained in Figure 5. The most recent condition inspection checklist shall be retained by the responsible project or facility as record of the regular inspection. (5.1.4, 5.1.6)
  - If a fixed ladder is in an inaccessible area or it is not being used, it will be inspected prior to use.
  - If a fixed ladder is accessible and used routinely, it will be inspected regularly.
  - The responsible project or facility shall provide identification for fixed ladders and enter the identification along with the condition inspection frequency due date into the CHAMPS system or equivalent.
9. If the ladder passes the condition inspection the competent person will then apply a metal tag at eye level on the ladder. The metal tag will have the ladder I.D., the inspection date and wording which reads “accepted.”
10. If the fixed ladder has manageable condition deficiencies that have no direct or immediate relationship to safety or health, the deficiencies can be mitigated to an acceptable level by use of work planning and other administrative controls as determined by a safety professional. Ladders with manageable deficiencies will have signage posted on the ladder which reads “CONTACT FACILITY MANAGEMENT BEFORE USING THIS LADDER” (see Figure 3). The facility will then follow the established process outlined for use of the non-compliant fixed ladders and communicate this process prior to ladder use.

11. Prior to use, a fixed ladder with a manageable condition deficiency will have the “Fixed Ladder Use Justification” form (A-6006-510) completed with the scope of work to be completed listed and justification for use of the ladder. The form will then be reviewed and signed by Engineering, Safety and the Facility or Building Manager. Once complete, the form will be kept at the facility with a copy sent to Safety Program for record keeping in IDMS.
12. If a fixed ladder is found to be defective during the condition inspection immediate notifications shall be made to the facility manager and it shall be placed out of service by: (5.1.6)
  - Immediately tagging it with an “Out of Service” tag (see example in Figure 4)  
Or
  - Marking it in a manner that identifies it as defective  
Or
  - Blocking access to it (such as with a plywood attachment that spans several rungs).
13. Fixed ladder condition inspections will be tracked by each project or facility in a centralized database maintained by Safety Programs.
14. Fixed ladders with current 2013 condition inspections are approved for use until; the current condition inspection due date expires, there is an occurrence that could affect safe usage, or visible defects are found.

### **3.5 Portable Ladder Storage**

1. When not in use, ladders should be stored on racks or stored in a manner that does not cause damage to the ladder or create additional hazards in the workplace.
2. Ladder racks should have sufficient supporting points to avoid excessive sagging.
3. Ladder racks are posted with a sign “NOTICE-LADDER STORAGE AREA,” (see Figure 6).
4. At no time should material be placed on the ladder while it is in storage.

NOTE: If uncertain about the location of ladder storage racks, your Manager or Supervisor can provide the locations.

### **3.6 Records**

Site form A-6006-510, “Fixed Ladder Use Justification,” may be generated as a result of this procedure

## 4.0 DEFINITIONS

Competent person. One who is capable of identifying existing and predictable hazards of ladders which could be injurious to employees, and who has authorization to take prompt corrective measures to eliminate them.

De minimis violation. An employer complies with the clear intent of the standard but deviates from its particular requirements in a manner that has no direct or immediate relationship to employee safety or health. These deviations may involve distance specifications, construction material requirements, use of incorrect color, minor variations from recordkeeping, testing, or inspection regulations, or the like.

Engineering evaluation. An evaluation by a qualified person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience has demonstrated the ability to evaluate fixed ladder design specifications.

Design authority. The organization(s) responsible for establishing the design requirements and ensuring that design output documents accurately reflect the design basis. The design authority is responsible for design control and ultimate technical adequacy of the design process. The design authority for fixed ladders

Extension ladder. A self-supporting portable ladder that is adjustable in length. An extension ladder consists of a trestle ladder base and has a vertically adjustable extension section, with a suitable means for locking the ladders together.

Fixed Ladder. A fixed ladder is a ladder permanently attached to a structure, building, or equipment.

Mobile Ladder Stands and Platforms. A self-supporting ladder of fixed size with a platform provided at the working level. The size is determined by the distance along the front rail from the platform to the base of the ladder.

Straight ladder. A non-self-supporting portable ladder, non-adjustable in length and consisting of one section. Its size is designed by overall length of the side rail.

Stepladder. A self-supporting portable ladder, non-adjustable in length, and having flat steps and a hinged back.

Step stool (ladder type). A self-supporting, foldable, portable ladder, nonadjustable in length, 32 inches or less in overall size, with flat steps and without a pail shelf, designed to be climbed on the ladder top cap as well as all steps. The side rails may continue above the top cap.

## 5.0 SOURCES

### 5.1 Requirements

1. 10 CFR 851, "Worker Safety and Health Program."
2. 29 CFR 1910.25, "Portable Wood Ladders."
3. 29 CFR 1910.26, "Portable Metal Ladders."

4. 29 CFR 1910.27, “Fixed Ladders.”
5. 29 CFR 1910.29, “Manually Propelled Mobile Ladder Stands and Scaffolds (towers).”
6. 29 CFR 1926, Subpart X, “Stairways and Ladders.”
7. 29 CFR 1926, Subpart T, “Demolition,” 1926.851, “Stairs, Passageways and Ladders.”
8. DOE-0346, “Hanford Site Fall Protection Program (HSFPP).”

## **5.2 References**

1. ANSI A14.1, “Portable Wood Ladders.”
2. ANSI A14.2, “Portable Metal Ladders.”
3. ANSI 14.3, “Fixed-Safety Requirement.”
4. ANSI A14.4, “Job-Made Ladders.”
5. ANSI A14.5, “Portable Reinforced Plastic Ladders.”
6. TFC-ESHQ-S-STD-29, “Qualified/Competent Persons.”

**Figure 1. Portable Ladder Inspection Checklist.  
(1910.25 AND 1910.26)**

**Portable Ladders will be inspected for:**

Inspect rails for tightness, and condition.
Inspect all hardware, fittings, and moveable parts for free movement.
Inspect safety feet and auxiliary devices for proper function and condition.
Lubricate metal bearings, locks, wheels, and pulleys.
Ensure ropes are in good condition.
Ensure rungs are non-slip, and clean and free from all grease and oil.
Ensure ladders are free of splinters and sharp edges.
Storage: -Store wooden ladders out of the elements. -Store all ladders to allow for easy access. (for use, maintenance and inspection)  -Store ladders transported on vehicles on appropriate storage racks.
Remove all defective, broken or ladders exposed to corrosive material from use for repair or destruction.  Label all defective ladders, "Dangerous Do Not Use."

**Figure 2. EXAMPLE: OSHA 1910.27 Dimensional Compliance Evaluation Tag.**



**Figure 3. EXAMPLE: Contact Facility Management Before Using This Ladder  
Base Operations Sign Shop 373-3032 Recorder No. WRPS-6729.**



Figure 4. EXAMPLE: "Out of Service" Tag.



**Figure 5. Fixed Ladder Condition Inspection Checklist.**  
(Maintenance Sections of 1910.27 AND 1926 Subpart X)

Fixed Ladders will be inspected for:	SAT	UNSAT	N/A	Comments
No loose, worn, or damaged rungs or side rails.				
No loose screws, bolts, or other metal parts.				
No damaged or cracked welds on ladder cages, platforms, handrails, braces, rungs, fastenings, or joints in side rails.				
No broken or loose anchorages.				
No slippery surfaces from oil, grease, or slippery materials.				
Rungs, cleats, side rails, and steps are free of splinters, sharp edges, burrs, or projections.				
Ladder safety device is securely fastened to rungs and no deterioration is evident.				
Installed slide device moves easily in track and stops downward motion when sudden load applied.				
Ladder up safety device at top of ladder is easily tripped and is secured to ladder.				
Ladder cages are properly welded and are not bent to impair climbing envelope and have no physical protrusions through cage envelope.				
No damage to non-slip treads or coating on rungs that were installed by the manufacturer.				
Safety gates, safety chains, and hatch covers are properly secured and operational.				
No excessive rusting or deterioration on outside ladders.				
Splices and connections in side rails have smooth transitions.				
The area above and below ladder is free of clutter.				

Location of Fixed Ladder \_\_\_\_\_

Date of Inspection \_\_\_\_\_

Inspected By: \_\_\_\_\_

If there are any UNSAT conditions an entry shall be recorded in the comments section

Figure 6. Ladder Storage Sign.

***NOTICE***

**LADDER  
STORAGE AREA**

**ATTACHMENT A – PORTABLE LADDER USAGE**

1. Employees are required and responsible to observe the following ladder safety precautions:
  - **Do not** attempt to support a portable ladder on boxes, barrels, or similar makeshift devices, or fasten/tie two or more ladders together to achieve greater working heights.
  - **Do not** shift, reposition, or extend portable ladders when the ladder is occupied.
  - **Do not** use ladders without non-conductive side rails where an employee or a ladder could contact exposed energized parts.
  - **Do** avoid over-reaching beyond the side rails or exerting excess weight/force on the portable ladder steps/rungs.
  - **Do** use portable ladders within their established load carrying capacity classification, taking into consideration the stress which may be exerted while performing the task.
  - **Do** use portable ladders only for the purpose for which they are designed.
  - **Do** place the supporting legs of portable ladders on a substantial and level base and ensure the base section has secure footing.
  - **Do** use a portable ladder of sufficient length to avoid having to stand on the top two steps of a stepladder or top four rungs of a non-self-supporting ladder.
  - **Do** set up portable ladders away from unlocked or unguarded doors that may open toward the ladder, and away from moving vehicles/equipment.
  - **Do** maintain the base and top landing (as applicable) around all portable ladders in a clear and unobstructed manner.
  - **Do** use stepladders in the fully open position with the locking devices (braces) set, and using the steps provided.
  - **Do** ensure that shoes, hands, gloves, and the portable ladder steps/rungs are free of oil, grease, mud, or other substances that may pose a slipping hazard.
  - **Do** ensure rungs or steps are slip resistant by design, are coated with skid-resistant material, or treated to minimize slipping.
  - **Do** face the portable ladder and maintain three points of contact while ascending or descending, using both hands to grip the side rails.
  - **Do** check that inspection stickers are current and legible.

**ATTACHMENT A – PORTABLE LADDER USAGE (cont.)****Figure A-1. Sample Portable Ladder Inspection Sticker.**

The image shows a sample of a portable ladder inspection sticker. It is a rectangular sticker with a white top half and a purple bottom half. The top half contains the text "LADDER INSPECTION RECORD" in large, bold, black capital letters. The bottom half contains the text "EXPIRATION DATE 8/31/13" in bold, black capital letters, followed by a horizontal line and the text "INSPECTORS NAME" in bold, black capital letters.

- When working from a portable ladder, ensure that both the top and bottom of the ladder are secure to prevent the ladder from slipping from side to side.

NOTE: Securing the ladder at the bottom can consist of ensuring the feet are stable and will not slip by means of rubber feet, spikes, or cleats nailed to the floor surface. Securing the ladder at the top can consist of tying the ladder to prevent the ladder slipping side to side. Securing the top of a step ladder is not required but may be done as determined by the user.

- **Do** support both rails at the top, unless the ladder has a single support attachment.
- **Do** maintain stability and prevent overload by positioning only one person at a time on portable ladder steps/rungs.
- **Do** position single and extension portable ladders as follows:
  - With the weight equally distributed between the two side rails
  - At a pitch so that the horizontal distance from the top support to the foot of the ladder will be approximately one-fourth the vertical distance between these points
  - To prevent slipping or accidental displacement of the unit
  - Against structures or equipment determined to be stable and rigid enough to provide the necessary support.

**ATTACHMENT A – PORTABLE LADDER USAGE (cont.)**

2. Non self-supporting portable ladders being used for temporary access must extend a minimum of three feet past the intended landing, unless a secured grasping device (e.g., grab rail) is provided.
3. When preparing a portable extension ladder for use, ensure that the upper section overlaps the bottom section as follows and the locking clips (stops) are securely in place.

<u>Length of Ladder</u>	<u>Overlap</u>
Up to and including 36 feet	3 feet
Over 36 feet up to and including 48 feet	4 feet
Over 48 feet up to 60 feet	5 feet

4. Store and transport portable ladders in a manner that provides stability, prevents damage and permits easy access for inspection and safe withdrawal for use.
  - When not in use, ladders should be stored on racks or stored in a manner that does not cause damage to the ladder or create additional hazards in the workplace.
  - Ladder racks shall have sufficient supporting points to avoid sagging.
  - Materials shall not be placed on the ladder while it is in storage.
  - Ladders transported in a truck rack shall be positively supported and secured in a fixed position that prevents chafing or abrasion.
5. Work shall not be performed by anyone standing on a ladder with their feet over fifteen feet from the floor (or ground) that requires the use of both hands to perform the work, while wearing a respirator, or when using pressure equipment.

## ATTACHMENT B – FIXED LADDER OSHA 1910.27 DIMENSIONAL COMPLIANCE CHECKLIST

**NOTE: Answering YES to all questions signifies the ladder complies with dimensional OSHA Standards 1910.27(b) through 1910.27(d). When answering NO, specify in the COMMENT section the nature of the deficiency or noncompliance.**

#	Question	Yes	No	N/A	Comment	Figure Ref.	OSHA Ref.
							1910.27 (b)(1)(i)
<b>Specific Features: Rungs and Cleats</b>							
1.	Are metal rungs 3/4" diameter or greater?					Figure C-2	1910.27 (b)(1)(i)
2.	Are wood rungs 1 1/8" diameter or greater?					N/A	1910.27 (b)(1)(i)
3.	Is distance between rungs 12" or less?					Figure C-2	1910.27 (b)(1)(ii)
4.	Is distance between rungs uniform?					Figure C-2	1910.27 (b)(1)(ii)
5.	Is clear length of rungs 16" or more?					Figure C-2	1910.27 (b)(1)(iii)
<b>Specific Features: Side Rails</b>							
6.	Do side rails have adequate gripping surface?					N/A	1910.27 (b)(2)
<b>Specific Features: Protection from Deterioration</b>							
7.	For metal ladders embedded in concrete, are the rungs at least 1" diameter or greater, or painted or otherwise treated to resist corrosion?					Figure C-1	1910.27 (b)(7)(i)
<b>Clearance: Climbing Side</b>							
8.	For 90 degree pitch ladder, is perpendicular distance from center of rungs to permanent obstruction 30" or more?					Figure C-2	1910.27 (c)(1)
9.	For 75 degree pitch ladder, is perpendicular distance from center of rungs to permanent obstruction 36" or more?					N/A	1910.27 (c)(1)
<b>Clearance: Ladders without cages or wells</b>							
10.	Is clear distance from centerline ladder to permanent obstruction 15" or more?					Figure C-2	1910.27 (c)(2)
<b>Clearance: Clearance in back of ladder</b>							
11.	Is distance from centerline rungs to permanent obstruction at rear 7" or more?					Figure C-1, 2	1910.27 (c)(4)
12.	Is clearance for unavoidable permanent obstruction at rear per Figure D-3?					Figure C-3	1910.27 (c)(4)
<b>Clearance: Clearance in back of grab bar</b>							
13.	Is distance from centerline of grab bar to permanent obstruction at rear 4" or more?					N/A	1910.27 (c)(5)

**ATTACHMENT B – FIXED LADDER OSHA 1910.27 DIMENSIONAL COMPLIANCE CHECKLIST  
(cont.)**

#	Question	Yes	No	N/A	Comment	Figure Ref.	OSHA Ref.
<b>Clearance: Step-across distance</b>							
14.	Is step-across distance from the nearest edge of ladder to the nearest edge of equipment or structure at least 2 1/2" and no more than 12"?					Figure C-4	1910.27 (c)(6)
<b>Clearance: Hatch Cover</b>							
15.	When present, are hatch covers per Figure C-5 and C-6?					Figure C-5, -6	1910.27 (c)(7)
<b>Specific Requirements: Cages or Wells</b>							
16.	Do cages or wells satisfy Figure C-7, C-8, and C-9 applicable requirements?					Figure C-7, 8, 9	1910.27 (d)(1)(i)
17.	Are cages or wells provided on ladders longer than 20 ft?					Figure C-7, 8, 9	1910.27 (d)(1)(ii)
18.	Do cages extend 42" or more above the top of landing?					Figure C-8	1910.27 (d)(1)(iii)
19.	Do cages extend down to 7 to 8 ft above base of ladder?					Figure C-8	1910.27 (d)(1)(iv)
20.	Do wells other details satisfy Figure C-8 and C-9 requirements?					Figure C-8, 9	1910.27 (d)(1)(v)
21.	Do wells other details satisfy Figure C-7 requirements?					Figure D-7	1910.27 (d)(1)(vi)
<b>Special Requirements: Landing Platforms</b>							
22.	Are landing platforms provided for ascend heights exceeding 20 feet?					N/A	1910.27 (d)(2)
23.	Are landing platforms provided every 20 feet for ladders without cages, wells or ladder safety devices?					Figure C-10	1910.27 (d)(2)
24.	Are landing platforms provided every 30 feet for ladders with cages, wells or ladder safety devices?					Figure C-10	1910.27 (d)(2)
25.	When multiple ladders sections are present, is each ladders section offset from adjacent sections?					Figure C-10	1910.27 (d)(2)
26.	When multiple ladders sections are offset from adjacent sections, are landing platforms provided at each offset?					Figure C-10	1910.27 (d)(2)
27.	Are landing platforms provided for stepping gaps of 12" or more?					Figure C-10	1910.27 (d)(2)(i)
28.	Are landing platforms equipped with standard railing?					Figure C-10	1910.27 (d)(2)(ii)
29.	Are landing platforms equipped with standard toeboards?					N/A	1910.27 (d)(2)(ii)
30.	Are landing platforms 24" or more in width?					N/A	1910.27 (d)(2)(ii)
31.	Are landing platforms 30" or more in length?					N/A	1910.27 (d)(2)(ii)
32.	Is one ladder rung located at the level of landing platform?					Figure C-10	1910.27 (d)(2)(iii)
33.	For step-through ladders, is the spacing from landing platform to the first rung below platform, equivalent to ladder rung spacing?					N/A	1910.27 (d)(2)(iii)

**ATTACHMENT B – FIXED LADDER OSHA 1910.27 DIMENSIONAL COMPLIANCE CHECKLIST  
(cont.)**

#	Question	Yes	No	N/A	Comment	Figure Ref.	OSHA Ref.
<b>Clearance: Ladder Extensions</b>							
34.	For Through or Side-Step Ladders, do Side Rails extend 3 1/2 feet or more above Parapets and Landings?					Figure C-10	1910.27 (d)(3)
35.	For Through Ladders Extensions, are rungs omitted from the extension?					N/A	1910.27 (d)(3)
36.	For Through Ladders Extensions, do the Side Rails have not less than 18 nor more than 24 inches clearance between rails?					N/A	1910.27 (d)(3)
37.	For Side-Step or Offset Fixed Ladder Sections, at Landings, are the Side Rails and Rungs carried to the next regular rung beyond or above the 3 1/2 feet minimum?					Figure C-10	1910.27 (d)(3)
<b>Special Requirements: Grab Bars</b>							
38.	Does Horizontal Grab Bar Spacing equal Ladder Rung Spacing?					N/A	1910.27 (d)(4)
39.	Does Vertical Grab Bar Spacing equal Ladder Side Rails Spacing?					N/A	1910.27 (d)(4)
40.	Does Grab Bar Diameter equal Ladder Rung Diameter?					N/A	1910.27 (d)(4)

\_\_\_\_\_  
Location of fixed ladder

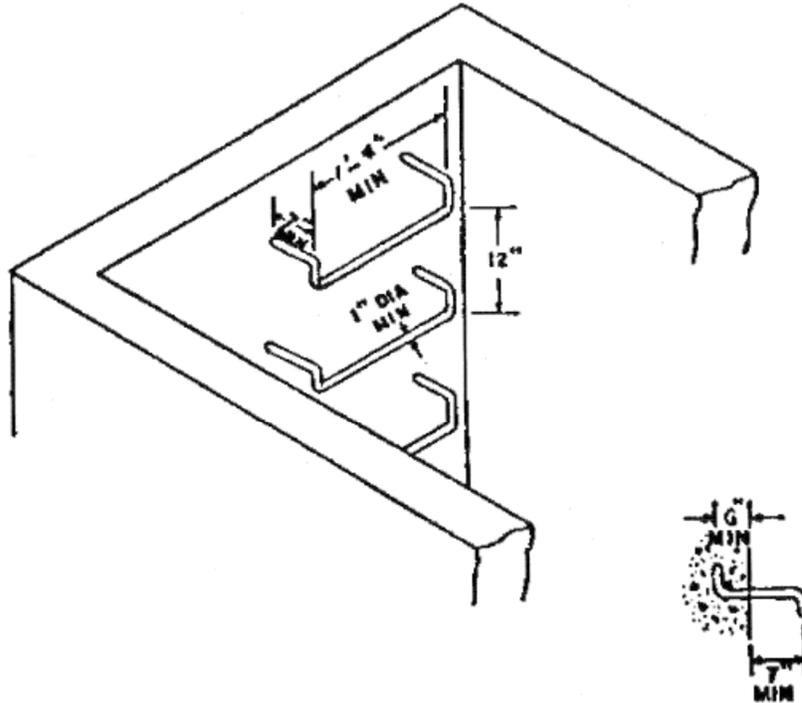
\_\_\_\_\_  
Date of evaluation

\_\_\_\_\_  
Evaluator name

\_\_\_\_\_  
Evaluator signature

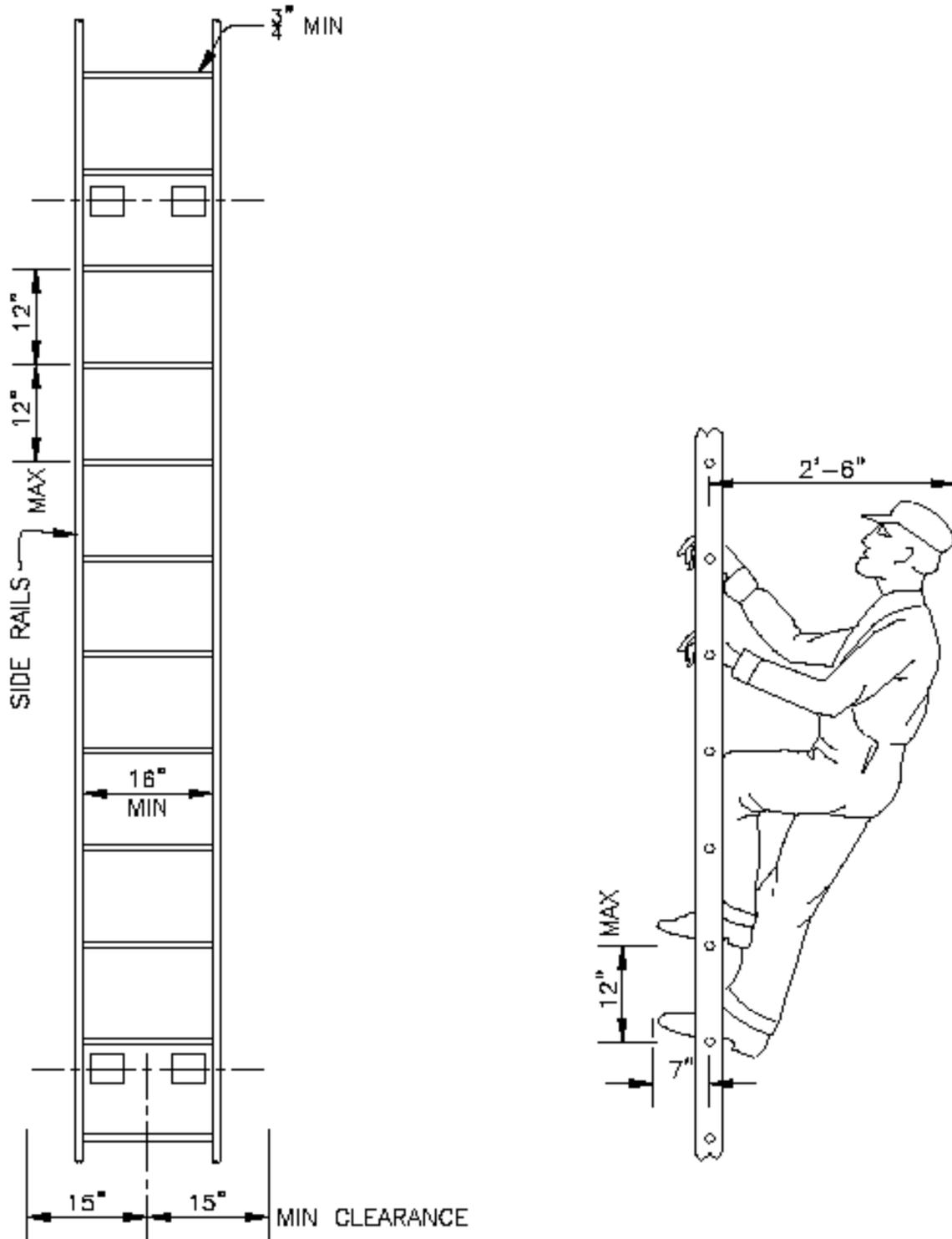
ATTACHMENT C – FIXED LADDER DIMENSIONAL CRITERIA

Figure C-1. Suggested Design for Rungs on Individual-Rung Ladders.



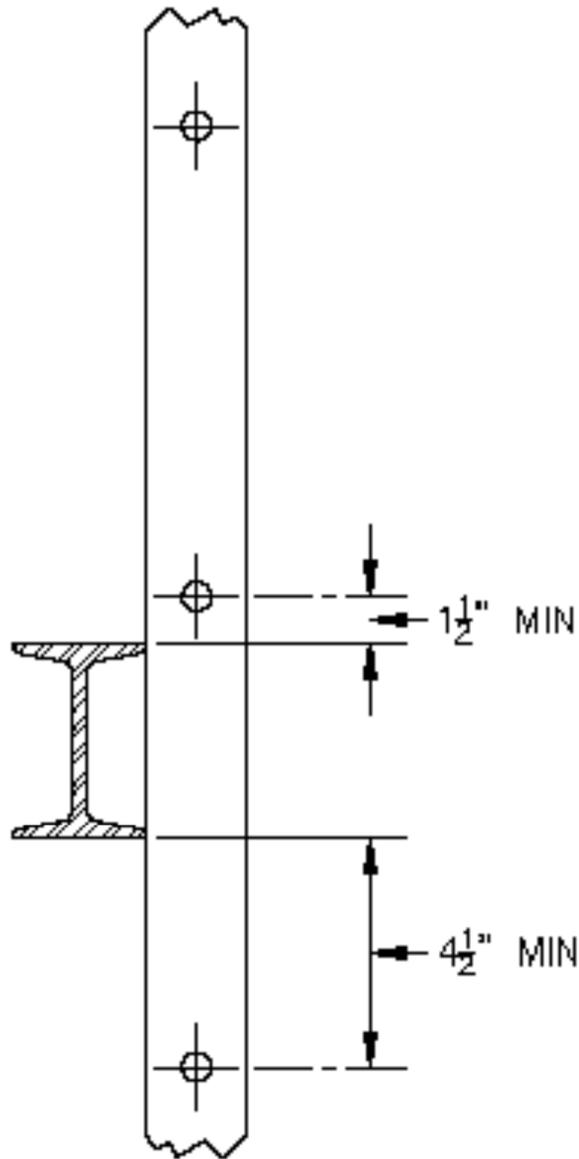
ATTACHMENT C – FIXED LADDER DIMENSIONAL CRITERIA (cont.)

Figure C-2. Rail Ladder with Bar Steel Rails and Round Steel Rungs.



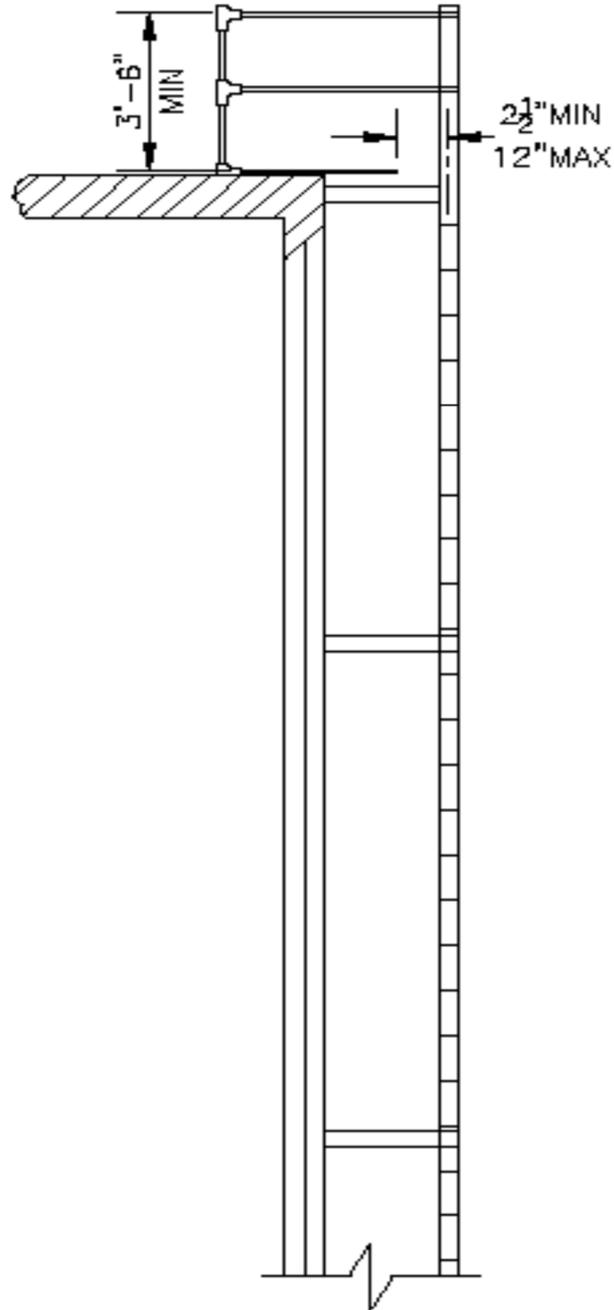
ATTACHMENT C – FIXED LADDER DIMENSIONAL CRITERIA (cont.)

Figure C-3. Clearance for Unavoidable Obstruction at Rear of Fixed Ladder.



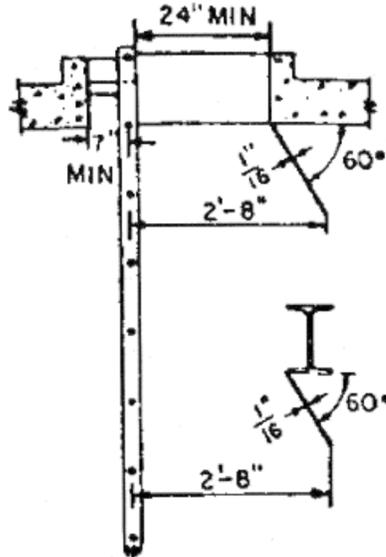
ATTACHMENT C – FIXED LADDER DIMENSIONAL CRITERIA (cont.)

Figure C-4. Ladder Far From Wall.



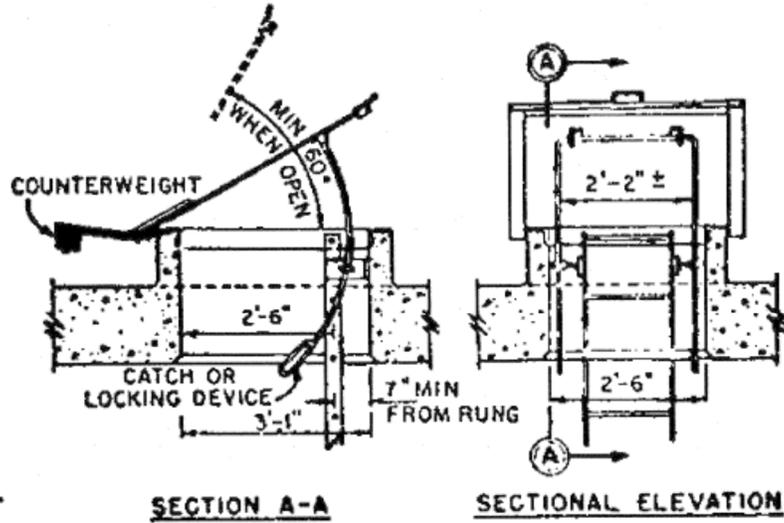
ATTACHMENT C – FIXED LADDER DIMENSIONAL CRITERIA (cont.)

Figure C-5. Deflector Plates for Head Hazards.



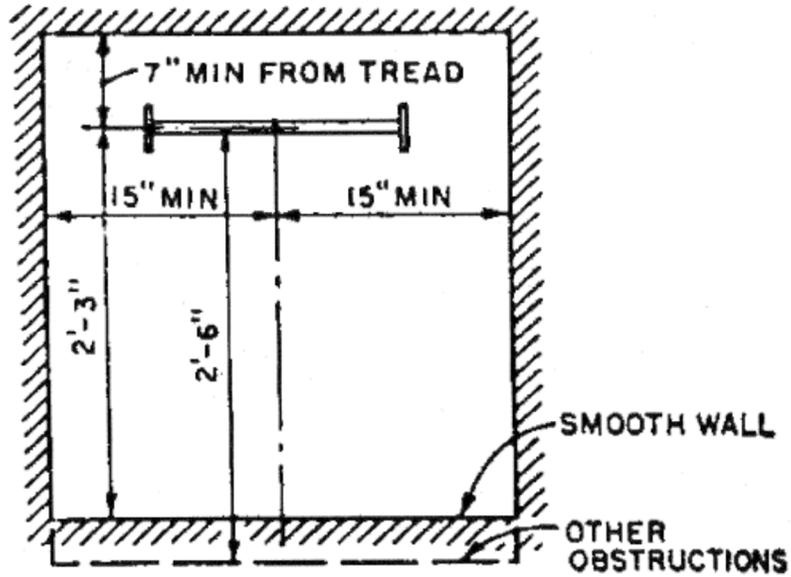
ATTACHMENT C – FIXED LADDER DIMENSIONAL CRITERIA (cont.)

Figure C-6. Relationship of Fixed Ladder to a Safe Access Hatch.



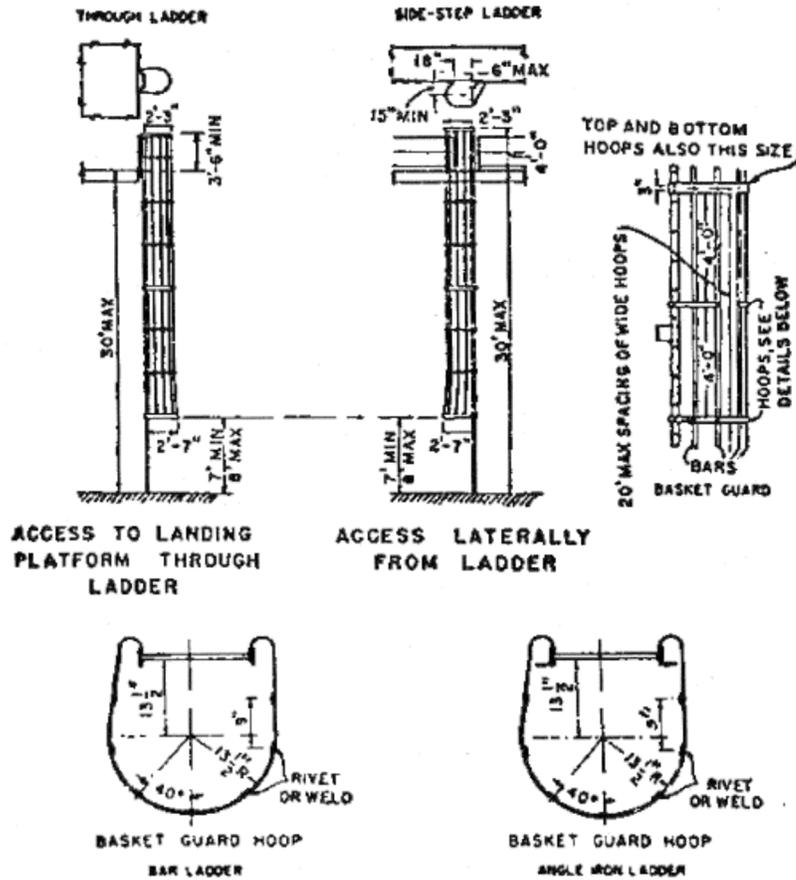
ATTACHMENT C – FIXED LADDER DIMENSIONAL CRITERIA (cont.)

Figure C-7. Clearance Diagram for Fixed Ladder in Well.



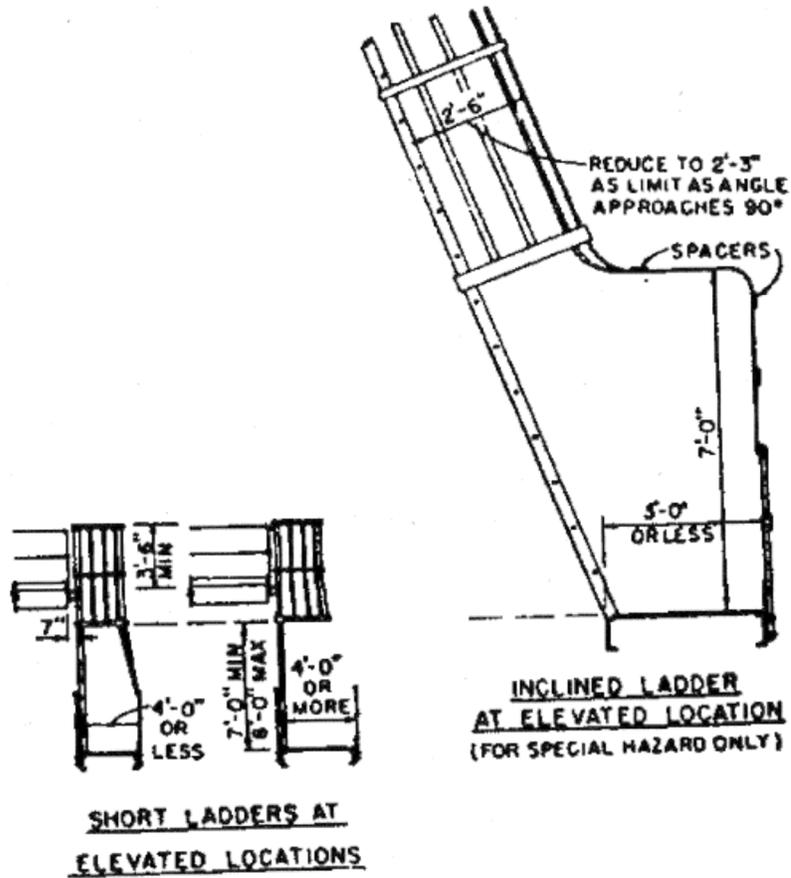
ATTACHMENT C – FIXED LADDER DIMENSIONAL CRITERIA (cont.)

Figure C-8. Cages for Ladders More Than 20 Feet High.



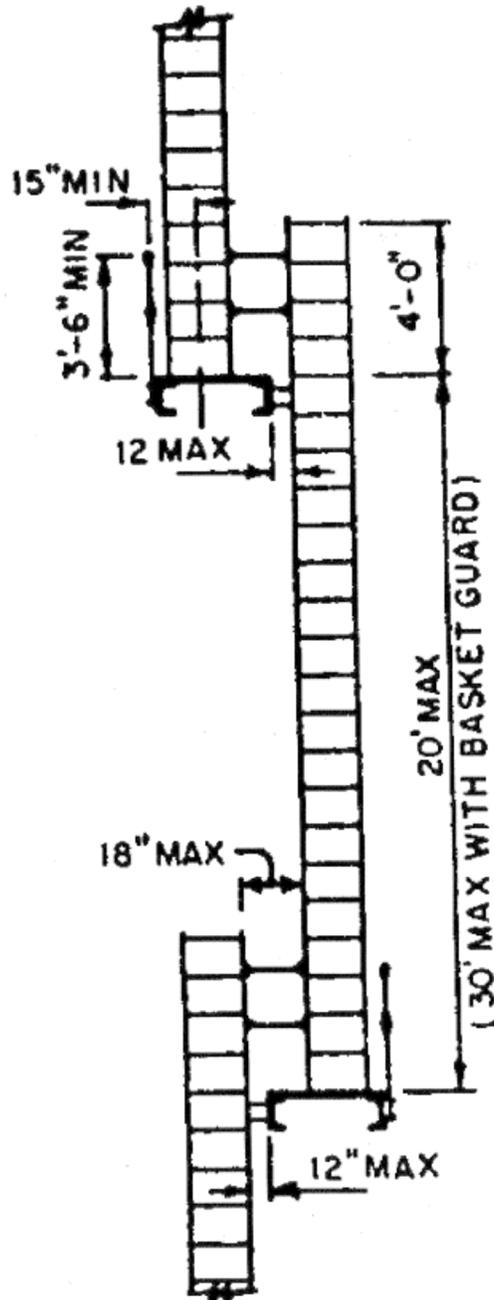
ATTACHMENT C – FIXED LADDER DIMENSIONAL CRITERIA (cont.)

Figure C-9. Cages-Special Applications.



ATTACHMENT C – FIXED LADDER DIMENSIONAL CRITERIA (cont.)

Figure C-10. Offset Fixed Ladder Sections.



ATTACHMENT C – FIXED LADDER DIMENSIONAL CRITERIA (cont.)

Figure C-11. Ladder Far From Wall.

