# **ERECTAISTEP**®



# COMMON OSHA REQUIREMENTS 1910 SUBPART D



NOTE: MARINE TERMINALS AND GANGWAYS GOVERNED BY 1917 SUBPART F



# **DEFINITIONS/EXAMPLES**

# STAIR RAIL/STAIR RAIL SYSTEMS

used on stairs, can include screens or other protections, top rail ≥42" H, w/ midrail, ≥ 200lb load

## **GUARDRAILS**

used on platforms and runways, ≥42" H ± 3", w/ midrail

## **HANDRAILS**

used only on stairs > 44" W, must be 30-38" H, 2.25" clearance, ≥ 200lb load

### **STANDARD STAIRS**

fixed or permanently installed stairs, excluding ship, spiral or alternating tread-type stairs

MOBILE LADDER STANDS (MAUI) and MOBILE LADDER STAND PLATFORMS (Rollastep/Aerostep)

# PERSONAL FALL ARREST SYSTEM ("PFAS")

body harness, anchorage and connector to arrest an employee's fall

# **LADDER SAFETY SYSTEM ("LSS")**

attached to a fixed ladder usually consisting of a carrier, safety sleeve, lanyard, connectors and body harness to eliminate or reduce falls from ladders. Excludes cages or wells.

# **STAIRS**

# **GENERAL**

stairs ≥ 4' H or w/3 treads and 4 risers require a stair rail/stair rail system

#### **TREADS**

must support ≥ 1,000 lb, minimum depth ≥ 9.5"

#### RISERS

must be uniform between landings, 30-50 deg, ≤ 9.5" H

#### WIDTH

≥ 22" between railings

## RAILINGS

open-sided stairs < 44" require 1 stair rail/side; open-sided stairs > 44" require 1 stair rail and 1 separate handrail/side

# **HEIGHT CLEARANCE**

minimum 6'6" clearance from nose of tread to overhead obstruction

## **SHIP STAIRS**

only usable where standard stairs are impractical, 50-70 deg, rise 6.5"-11", tread ≥ 4", width ≥ 18"

# PLATFORMS AND RUNWAYS (CATWALKS)

# **GENERAL**

a platform or runway higher than 4' requires guardrails, no substitution (i.e., no chains or other barriers)

# **PLATFORMS**

must be ≥ width of stairs and ≥ 30" deep

# **RUNWAYS** (Catwalks)

must be ≥ 18" W

# DOOR CLEARANCE

≥ 22" from edge of open door to edge of platform

# **LADDERS**

## **GENERAL**

new or replacement ladders ≥ 24' H require PFAS or LSS

## **RUNGS**

must be uniform and between 10" – 14" apart;  $\geq$  16" wide

## **CLEARANCES**

 $\geq$  30" on climbing side or 24" w/ deflector plate,  $\geq$  7" on back side, 15" from centerline

## **GRAB BARS**

must extend 42" above landing

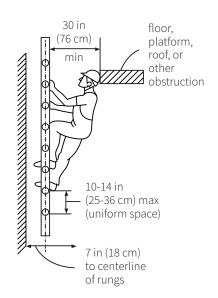
# **SAFETY GATE**

must have a self-closing gate that swings away from ladder, w/top rail and midrail

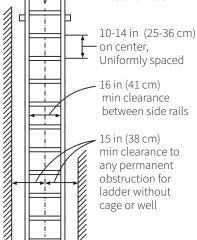


# **OSHA REQUIREMENTS LADDERS**

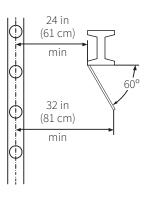
# **Normal Clearance**



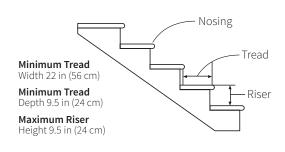
# Fixed ladder dimensions and side clearances



# **Reduced clearance Deflector plate for head** hazards



# **OSHA REQUIREMENTS STAIRS**





Door 22 in Platform	Sta	airs			
Door Swing					

	Angle	Туре		
Ì	$\leq 30^{o}$	Ramps		
	30° – 50°	Standard Stairs		
	50° – 70°	Ship Stairs		
	50° – 70°	Alternating Tread-Type Stairs		
Ì	60° – 90°	Ladders		

Stair width	Enclosed	One open side	Two open sides	
Less than 44 inches (1.1 m)	At least one handrail	One stair rail system with handrail on open side.	One stair rail system each open side.	
44 inches (1.1 m) to 88 inches (2.2 m)	One handrail on each enclosed side	One Stair rail system with handrail on open side and one handrail on enclosed side.	One stair rail system with handrail on each open side.	
Greater than 88 inches (2.2 m)	One handrail on each enclosed side and one intermediate handrail located in the middle of the stair	One stair rail system with handrail on open side, one handrail on enclosed side, and one intermediate handrail located in the middle of the stair.	One stair rail system with handrail on each open side and one intermediate handrail located in the middle of the stair.	

# **OSHA REQUIREMENTS GUARD/HAND RAILS**

