



# Maximum safety in minimum space

Alternating tread stairs are the safest, most efficient option for applications with space restrictions



LAPEYRE  STAIR

 [www.lapeyrestair.com](http://www.lapeyrestair.com)

\* One of the best ways to prevent and control occupational injuries is to “design out” hazards and risks.

*NIOSH's Prevention Through Design Program*

# STAIRS

VS

# LADDERS



- ✓ Face-forward design allows users to see and avoid potential hazards
- ✓ Center-of-gravity over the user's feet provides optimal balance
- ✓ Use of leg muscles to climb reduces fatigue
- ✓ Neutral body posture reduces stress on back, arms, and joints
- ✓ Low risk of a fall from the device due to loss of handgrip



- ✗ Device-facing design requires users to back down
- ✗ Requires three-point contact to maintain balance
- ✗ Use of leg, hand, and arm muscles to climb increases fatigue
- ✗ Flexed body posture increases stress on back, arms, and joints
- ✗ High risk of fall from the device due to loss of handgrip

## STAIRS



## LADDERS

*Average number of annual injuries*

*Average number of annual fatalities*

*Average annual cost of worker's comp claims*

*Total musculoskeletal injuries (2011-2016)*

*Median lost workdays for musculoskeletal injury*

*% of body weight placed on handgrip alone*

11,361

22,594

25

149

\$490M

\$1.1B

740

12,700

8

12

5-10%

30-36%

SOURCE: Bureau of Labor Statistics

**OSHA**® specifies the use of stairs for regular and routine operational use §1910.25

### STANDARD STAIRS

Used to provide access for regular and routine travel between levels, including access to operating platforms for equipment

§1910.25(b)(7)

### NON-STANDARD STAIRS

Alternating tread stairs are classified as non-standard stairs and are permitted for use when it is not feasible to use standard stairs

§1910.25(b)(8)

### LADDERS

A leading cause of workplace injuries and not specified for use to provide access for regular and routine travel between levels

§1910.25 (Inferred)

**What about ship ladders?** *Ship ladders are also classified as non-standard stairs* §1910.25(b)(8)

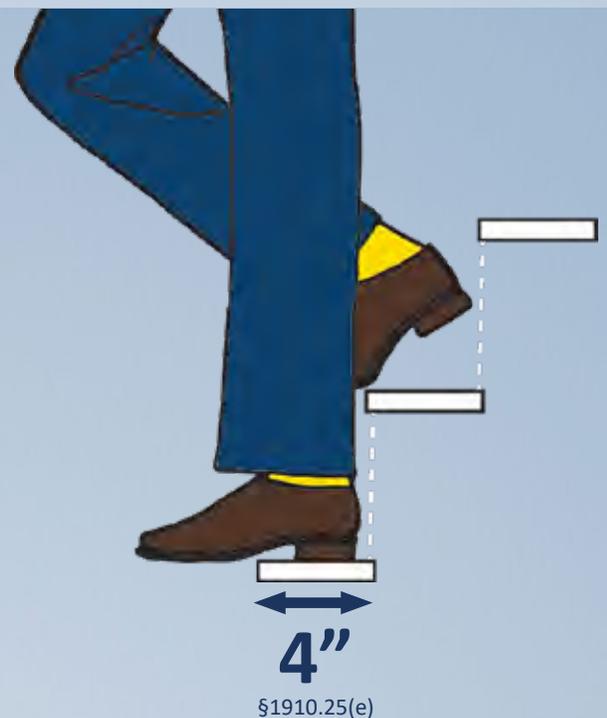
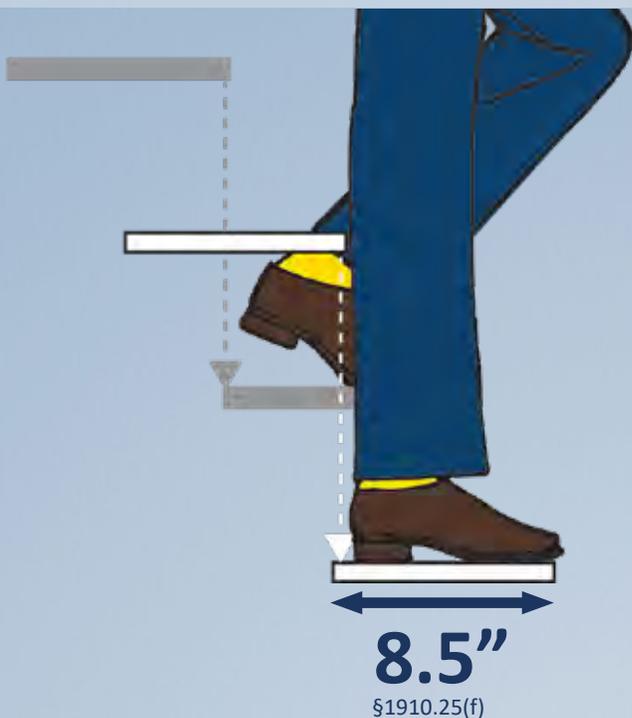
Unlike alternating tread stairs, the design of ship ladders causes the same safety and ergonomic issues as fixed ladders:

- ☒ Minimum tread depth of 4" is insufficient to safely support the foot
- ☒ Users should back down and maintain three-point contact (meaning hands are not free to carry items)

## ALTERNATING TREAD

VS

## SHIP LADDERS



- ✓ More tread depth allows for a safe, face-forward descent
- ✓ Provide a safer, direct path to adjacent treads
- ✓ Entire foot is stable

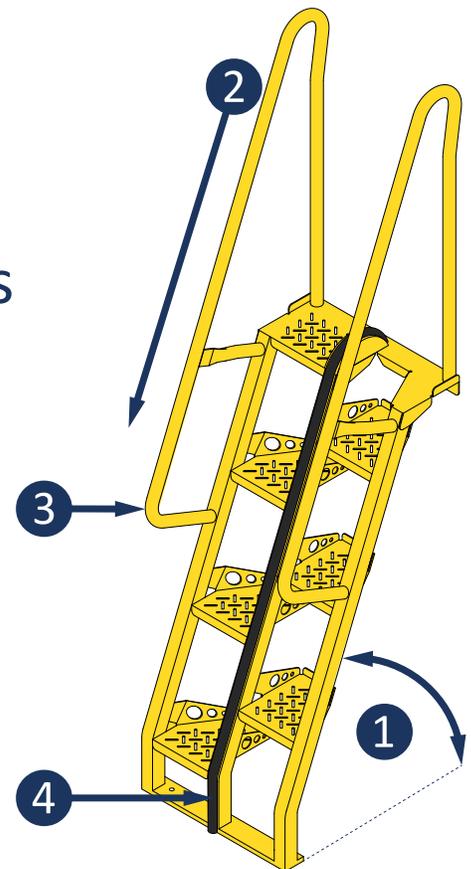
- ☒ Less tread depth makes face-forward descent less safe
- ☒ Full width treads reduce amount of useable tread depth
- ☒ Half of foot is unstable

Alternating tread stair tread depth is only 1" less than a standard stair the OSHA-specified minimum depth of 9.5"

# Alternating tread stairs are the safest, most efficient option for applications with space restrictions

## Benefits of the alternating tread stair design

- ❶ Smaller overall footprint than a standard stair
- ❷ Forward-facing travel allows users to carry objects
- ❸ Code-compliant handrails improve stability and ease of use
- ❹ Cushioned central stringer reduces the risk of trips and falls



	ALTERNATING TREAD STAIRS		STANDARD STAIRS
	68°	56°	
	<i>STAIR RUN (HORIZONTAL PROJECTION)</i>		
4'	2'2"	3'1"	4'3"
6'	2'11"	4'5"	5'10"
8'	3'9"	5'9"	8'2"
10'	4'7"	7'1"	9'9"
12'	5'4"	8'6"	12'2"
14'	6'2"	9'10"	13'9"
16'	7'	11'2"	16'1"
18'	7'10"	12'6"	17'8"
20'	8'7"	13'10"	20'1"

Chart is intended for illustrative purposes only; measurements are rounded up to the nearest inch.



Scan to view the alternating tread stair playlist on our YouTube channel

- ✓ Customer feedback
- ✓ Design benefits and correct use
- ✓ Applications and case studies

## Types of alternating tread stairs

### Carbon steel with powder coat finish

- ✓ Ideal for indoor applications
- ✓ Standard colors: safety yellow, iron gray, primer gray
- ✓ Custom RAL colors are also available
- ✓ **NEW!** Optional non-slip finish
- ✓ Choice of three handrail options
- ✓ Choice of 56 or 68 degree angle

### Carbon steel with galvanized finish

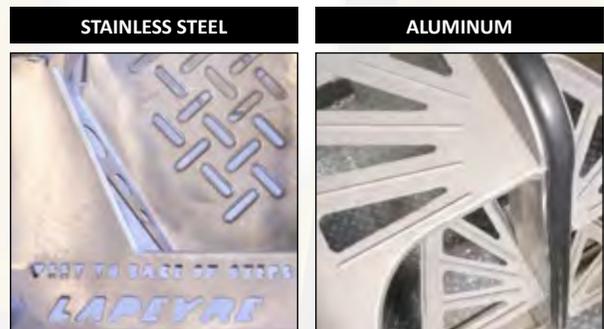
- ✓ Ideal for outdoor applications
- ✓ Hot-dipped galvanized finish
- ✓ Choice of three handrail options
- ✓ Choice of 56 or 68 degree angle

### Stainless steel with natural finish

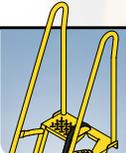
- ✓ Easy-to-clean finish
- ✓ Grade 304 stainless steel
- ✓ Choice of three handrail options
- ✓ Choice of 56 or 68 degree angle

### Aluminum with natural finish

- ✓ Lightweight
- ✓ Resists corrosion
- ✓ Choice of two handrail options
- ✓ 68 degree angle only



		ANGLE OPTIONS		HANDRAIL OPTIONS		
		56°	68°	STANDARD	OPTIONAL	FLUSH
STEEL		✓	✓	✓	✓	✓
ALUMINUM			✓	✓	✓	

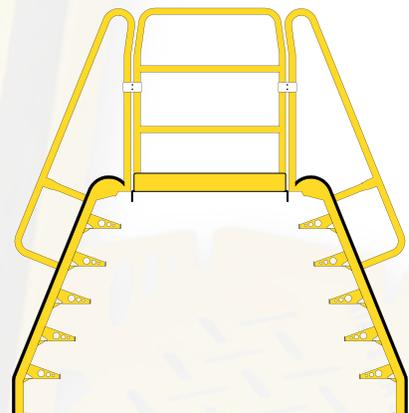




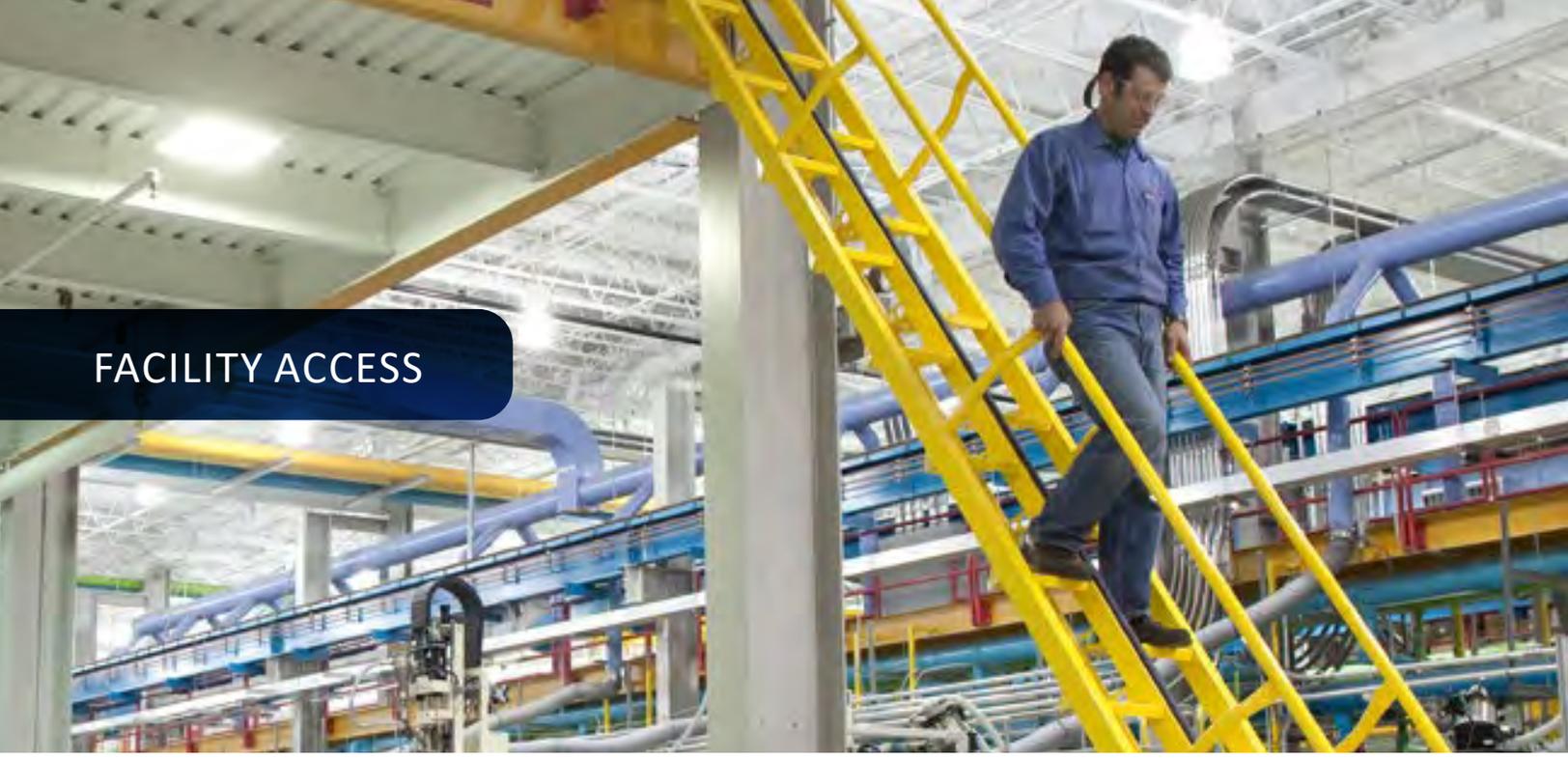
## Platforms and supports

Create a complete custom access solution with platforms, legs, and safety gates designed to intergrate with alternating tread stairs

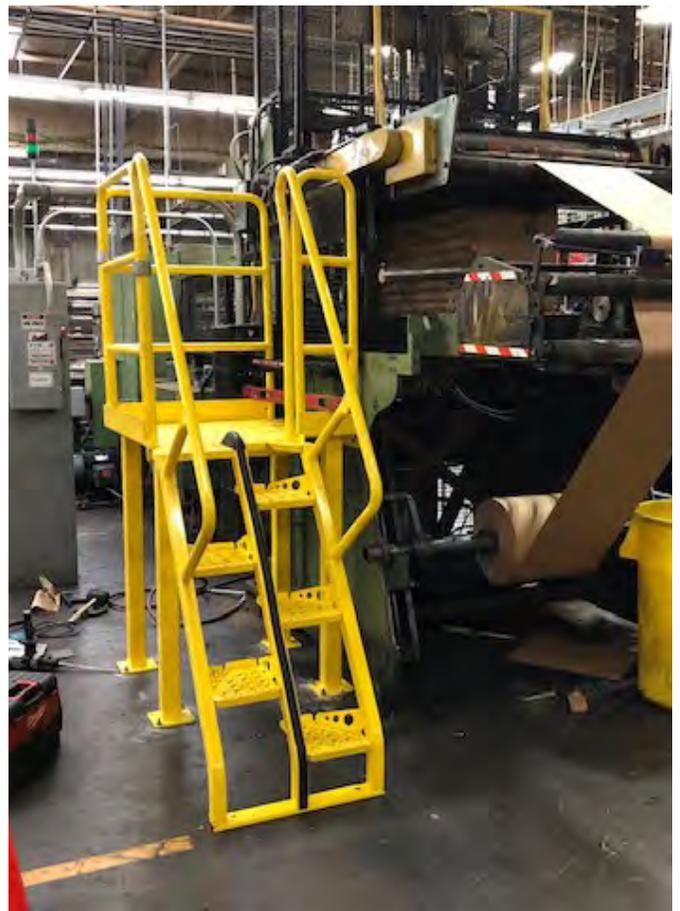
- ✓ Crossover systems
- ✓ Equipment access
- ✓ Intermediate landings
- ✓ Exit landings
- ✓ Work platforms



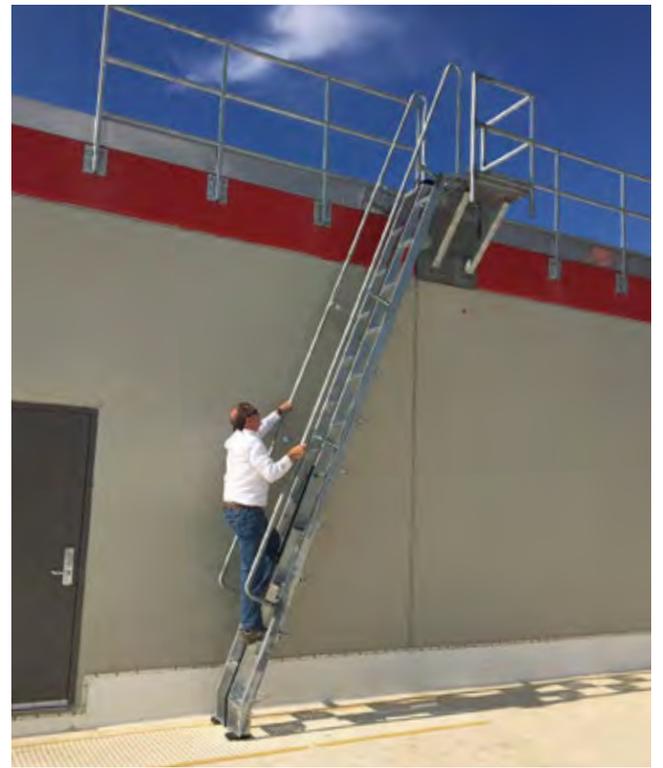
# FACILITY ACCESS



EQUIPMENT ACCESS



# ROOF ACCESS



# More products from the stair experts



Free-standing stair towers



Crossover platforms with standard stairs



Mezzanine stairs



Bolted access stairs



Loading dock stairs



Commercial steel stairs

## Precision-built access solutions for virtually every industry and application

- ✓ Pre-engineered products designed for customization
- ✓ Cost-effective, scalable solutions
- ✓ Easy integration across all product lines
- ✓ Modular components for quick, on-site assembly
- ✓ Commitment to zero-defect manufacturing
- ✓ Dedicated in-house resources

Ready to take the next step?

✉ [Ls.sales@lapeyrestair.com](mailto:Ls.sales@lapeyrestair.com)

☎ 800-535-7631  
504-733-6009

🌐 [www.lapeyrestair.com](http://www.lapeyrestair.com)



SCAN FOR PRICING

