

Alternating Tread Stairs

Safer, compliant space-saving access solutions





Alternating Tread Stairs

Benefits

Since 1981, Lapeyre Stair's patented alternating tread stair design has set the industry standard for safe, ergonomic, code-compliant industrial access. Built for facilities where vertical ladders and ship stairs put workers at risk every single day — and where a real solution has to fit the space that's actually available.

The Safe Alternative to Ladders, Ship Stairs & Temporary Access

Most facilities that install an alternating tread stair aren't replacing a conventional industrial stair. They're replacing something far more hazardous: a vertical caged ladder, a steep ship stair, or a temporary ladder that's become a permanent fixture.

That's the right comparison. And against those alternatives, the alternating tread stair isn't a compromise — it's a significant upgrade in safety, stability, and long-term value.

50%

Less floor space vs.
standard stairs

89%

Users prefer ATS tread
depth vs. ship stairs

1000lb

Rated load capacity
vs. *350 lb industry standard*

40+

Years engineering
industrial access

Not a replacement for your standard stair –
A replacement for something far more dangerous.

The alternating tread stair is often misread as a substitute for a conventional industrial stair — and many facility managers reject it on that basis. That's the wrong comparison.

The right comparison is this: what's there now? In most cases, it's a vertical caged ladder, a ship stair, or a temporary ladder that's become permanent. That's what the ATS is designed to replace.

Compared to those alternatives, the alternating tread stair isn't a compromise. It's an upgrade.



6 Reasons to Replace Your Ladder with a Lapeyre Alternating Tread Stair

01 Up to 50% Space Saving

A steeper 56° or 68° slope means a dramatically smaller footprint than a standard stair — fitting into spaces where a conventional stair won't. The right upgrade when a vertical ladder is your only current option.

04 1,000 lb Capacity

While the competitive standard sits at 350 lbs, Lapeyre Stair ATS are rated to 1,000 lbs. That's not just a spec — it's a statement about the heavy-duty construction, long-term stability, and durability you should expect from a permanent access solution.

02 Forward Facing Descent

Vertical ladders and ship stairs force workers to turn their back to the direction of travel and descend blind. Alternating tread stairs are designed for natural, forward-facing travel in both directions — the same intuitive motion people use on any stair.

05 OSHA & IBC Compliant

Every Lapeyre Stair ATS is engineered to meet OSHA general industry requirements and IBC standards out of the box. No field modifications. No compliance uncertainty. Fully compliant upon installation — and a direct path away from the ongoing compliance burden of fixed ladders.

03 Full Depth Treads

8½" tread depths give workers firm, full-footed support on every step — a world apart from the narrow rungs of a caged ladder or the shallow treads of a ship stair. Especially important when carrying tools, parts, or equipment.

06 Built-in Fall Protection

Code-compliant handrails on both sides meet OSHA fall protection requirements. No separate fall arrest system. No cage. No harness. Just a stair that's safe to use every day.

Built to a Higher Standard

Load capacity tells you a lot about how seriously a manufacturer builds their product. The competitive field sets the bar at 350 lbs. Lapeyre Stair clears it by nearly three times.

1000lb

Lapeyre Stair Rated
Load Capacity

vs.

Competitive
industry standard

350lb

Nearly 3x the capacity. Built for the real demands of industrial environments — not just to clear a spec.

That extra capacity isn't just for edge cases. It reflects the quality of steel, the precision of fabrication, and the structural integrity that makes our stairs a permanent, trusted part of your facility — not a product you'll be replacing in five years.

Alternating Tread Stairs

Advantage Over Ladders

The Data Is Clear: Ladders Are the Problem

Falls from ladders account for 20% of all fatal and lost work-day injuries in general industry. A VA Tech study comparing alternating tread stairs directly to ship stairs found:

89%

of participants preferred alternating tread stairs for safer tread depth

85%

preferred alternating tread stairs for more comfortable tread depth

Ship stairs produced

73%

more overall missteps

Ship stairs produced

129%

more missteps when descending with a load

OSHA has made its position clear as well: employers should provide stairs for regular or routine operational use, including access to equipment. Ladders are permitted only where stairs are not practical. If workers are accessing that area routinely — the ladder needs to go.

Head-to-Head: ATS vs. What's There Now

Lapeyre Alternating Tread Stair

VS.

Vertical Ladders, Ship Stairs & Temporary Ladders

✓ Forward-facing ascent and descent

✓ Full 8½" tread — entire foot supported

✓ Compliant handrails on both sides — included

✓ Fully compliant upon installation

✓ No separate training requirements

✓ 1,000 lb rated capacity

✓ Permanent, stable, heavy-duty construction

✓ OSHA: stairs preferred for routine equipment access

✗ Backwards descent — no forward visibility

✗ Rungs support only the ball of the foot

✗ Personal fall arrest or cage system required

✗ Ongoing compliance requirements apply

✗ Worker training requirements apply (\$1910.30)

✗ 350 lb industry standard

✗ Often improvised, temporary, or deteriorated

✗ Ladders permitted only where stairs are not practical



Standard Dimensions

Every Lapeyre Stair ATS is custom-built to your exact floor-to-floor height. Standard configurations in 56° steel, 68° steel, and 68° aluminum — all rated to 1,000 lbs.

	STEEL, 56°	STEEL, 68°	ALUMINUM, 56°
MINIMUM HEIGHT, FLOOR TO FLOOR	36"	42"	24"
MAXIMUM HEIGHT, FLOOR TO FLOOR*	240"	240"	216"
OVERALL HEIGHT, STANDARD HANDRAILS	Height + 42"	Height + 42"	Height + 42"
OVERALL HEIGHT, OPTIONAL HANDRAILS	Height + 6.75"	Height + 6.75"	Height + 6.75"
RECOMMENDED MINIMUM FLOOR OPENING, WIDTH	35"	35"	35"
MINIMUM RISER HEIGHT	6.417"	7.517"	7.175"
MAXIMUM RISER HEIGHT	7.7"	9.02"	9.566"
RATED LOAD CAPACITY	1,000 lb	1,000 lb	1,000 lb

Space Savings at a Glance: Horizontal Projection by Stair Type

VERTICAL RISE	HORIZONTAL RUN				
FEET	68° ATS	56° ATS	STANDARD STAIR	STD HANDRAIL	OPT HANDRAIL
4'	2' 2"	3' 1"	4' 2"	7' 6"	4' 5 ³ / ₄ "
6'	2' 11"	4' 5"	5' 10"	9' 6"	6' 5 ³ / ₄ "
8'	3' 9"	5' 9"	8' 2"	11' 6"	8' 5 ³ / ₄ "
10'	4' 7"	7' 1"	9' 9"	13' 6"	10' 5 ³ / ₄ "
12'	5' 4"	8' 6"	12' 2"	15' 6"	12' 5 ³ / ₄ "
14'	6' 2"	9' 10"	13' 9"	17' 6"	14' 5 ³ / ₄ "
16'	7'	11' 2"	16' 1"	19' 6"	16' 5 ³ / ₄ "
18'	7' 10"	12' 6"	17' 8"	21' 6"	18' 5 ³ / ₄ "
20'	8' 7"	13' 10"	20' 1"	23' 6"	20' 5 ³ / ₄ "

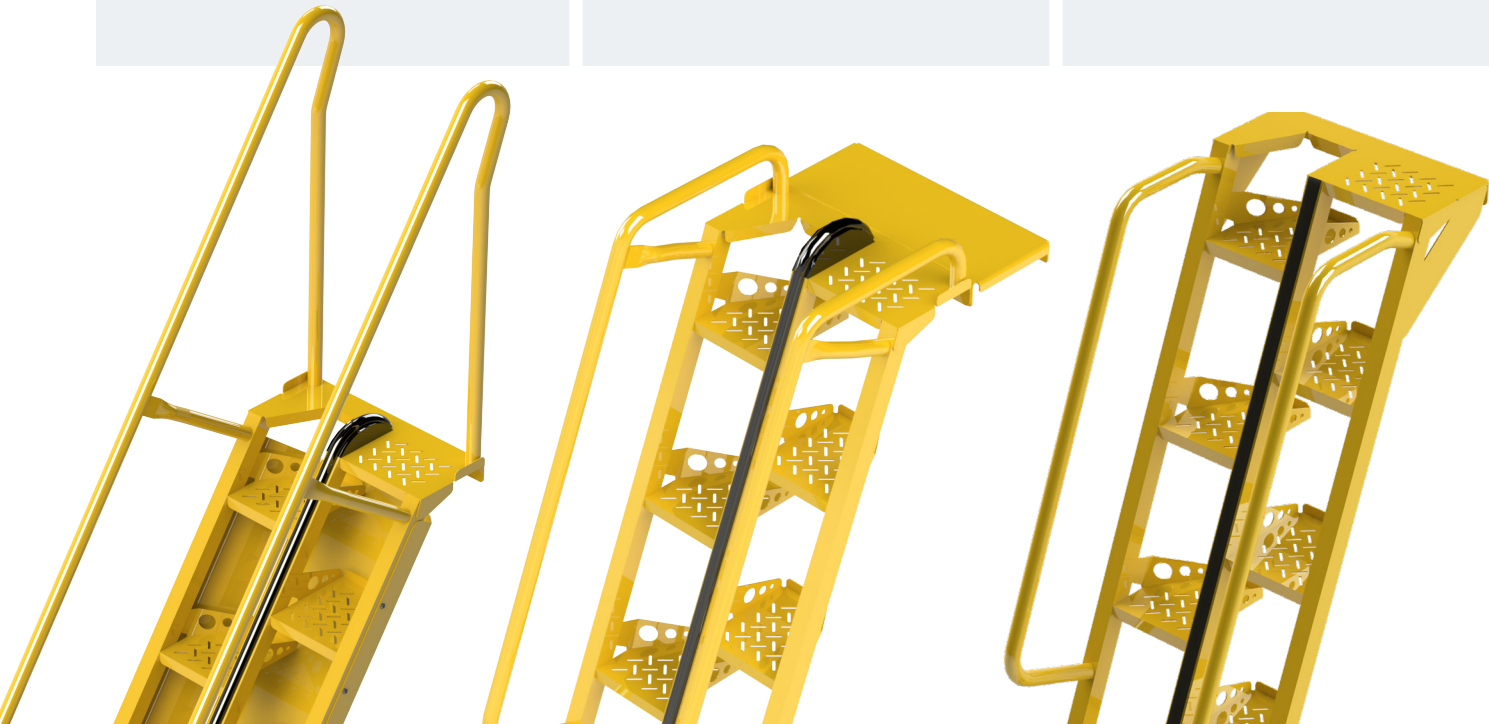
Finishes and Options

Materials and Finishes

			
SAFETY YELLOW	GALVANIZED	ALUMINUM	STAINLESS STEEL
Powder-coated carbon steel. High-visibility finish standard for most industrial applications.	Hot-dip galvanized carbon steel. Ideal for outdoor, rooftop, and corrosive environments.	Lightweight, corrosion-resistant. Available in 68°. Great for weight-sensitive applications.	Lightweight, corrosion-resistant. Available in 68°. Great for weight-sensitive applications.

Handrail Options

STANDARD	LOW PROFILE	FLUSH
36" minimum height 240" maximum height Adds 42" to stair height <i>Best for: Standard interior access, mezzanines, equipment platforms</i>	42" minimum height 240" maximum height Adds 6.75" to stair height <i>Best for: Roof hatch access, inside-access ladder replacement</i>	46" min (56°), 47" min (68°) 240" maximum height Flush with top stair tread <i>Best for: Clean top-landing transitions, tight floor openings</i>



Optional Components & Accessories



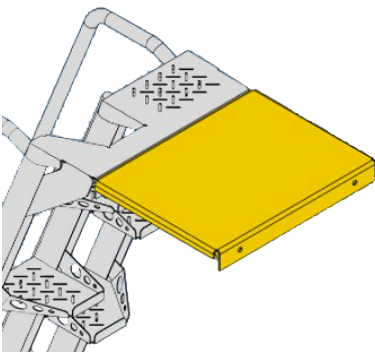
SAFETY GATES

Swing-open gates at the top landing prevent accidental falls through the floor opening when the stair is not in use. Code-required in many applications.



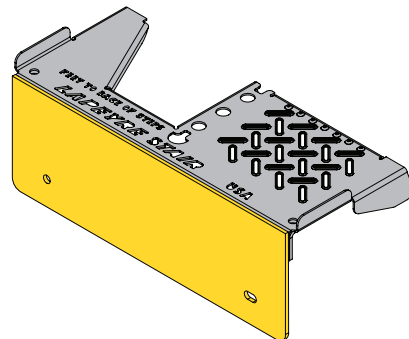
BACK PANS

Solid back panels that close the rear of the stair frame — creating a cleaner aesthetic and reducing pinch-point and entrapment hazards between steps.



MICRO PLATFORMS

Small intermediate platforms that provide a level resting point within the stair run — useful for tall rises or applications where workers pause while carrying loads.



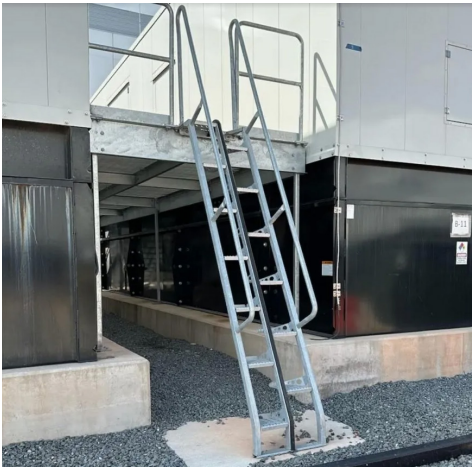
EXTENDED MOUNTING PLATES

Larger base plates for installations on irregular surfaces, uneven floors, or elevated platforms where standard mounting won't achieve a secure, level connection.

Alternating Tread Stairs

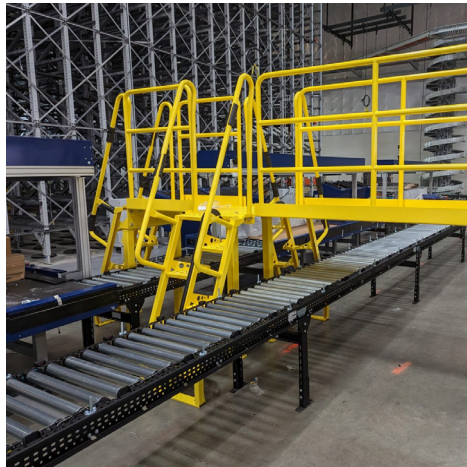
Applications

Wherever a vertical ladder, ship stair, or temporary access solution is putting workers at risk, a Lapeyre Stair ATS is the answer.



**LADDER REPLACEMENT —
EQUIPMENT ACCESS**

Vertical caged ladders are the most common access method for elevated equipment — and the most dangerous. Alternating tread stairs provide stable, forward-facing access to machinery, electrical panels, and process equipment in the same footprint. No harness. No cage. No compliance headache.



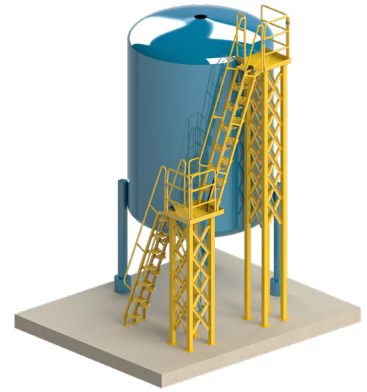
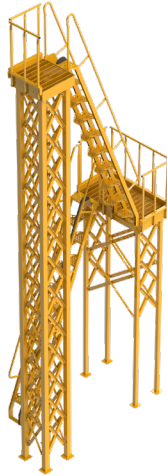
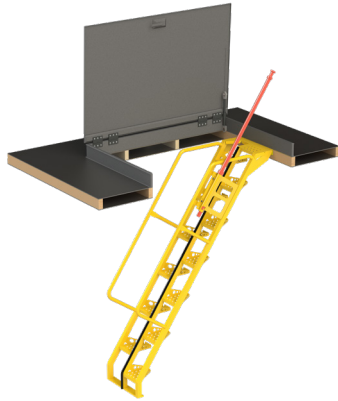
**SHIP STAIR &
CONVEYOR CROSSOVER
REPLACEMENT**

Ship stairs and improvised crossovers are common in plants and warehouses where space is tight. Our alternating tread crossover systems replace them with a permanent, code-compliant solution — with 15-day lead times on powder-coated carbon steel systems.



**MEZZANINE &
SECONDARY EGRESS**

Alternating tread stairs can serve as primary IBC egress for small mezzanines or secondary egress for larger structures — a space-saving alternative where a full-depth stair isn't practical.



**ROOF HATCH &
ROOFTOP ACCESS**

The OSHA and IBC-compliant replacement for vertical roof access ladders. Arrives fully assembled and ready to install — no field fabrication, no cage, no ladder safety system required.

- OSHA, IBC-Industrial, and IBC-Commercial compliant
- Arrives fully assembled — ready to install
- Heavy-gauge carbon steel, stainless steel, and aluminum options
- Powder-coated or galvanized finish
- Crossover configurations available for parapet and piping crossovers



**STAIR TOWERS —
HIGH-RISE ACCESS**

Free-standing modular stair towers for applications over 25 feet where a vertical ladder creates unacceptable fall risk. Pre-engineered modules bolt together without welding. Configurable with alternating tread or standard industrial stairs.



TANK & SILO ACCESS

Over 40 years of experience replacing temporary and improvised access on industrial tanks and silos with permanent, code-compliant modular stair systems. No welding required for assembly or installation.

Alternating Tread Stairs

Industries We Serve

Aerospace, Defense



Automotive, Tire



Beverage, Bottling



Canning



Chemical Manufacturing



Data Centers



Distribution, Packaging



Food Processing



Marine, Maritime



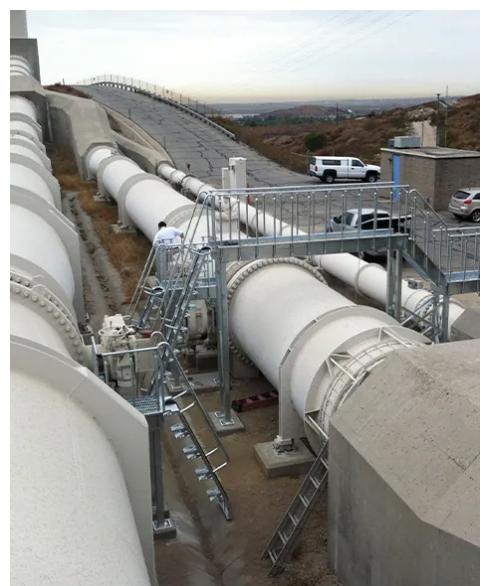
Petrochemical



Plastics, Injection Molding



Waste Water



Tested and Proven Solutions by Lapeyre Stair

EGRESS STAIRS



EQUIPMENT ACCESS



CONVEYOR CROSSOVERS



TANK AND SILO ACCESS



WORK PLATFORMS



LOADING DOCK ACCESS



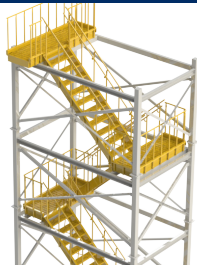
MEZZANINES



ROOF ACCESS/ROOF TOP APPLICATIONS



STAIR TOWERS



GENERATOR PLATFORMS



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