

MODULAR PLATFORMS AND STAIRS

Safety made Simple.







Designed for Work. Built for Safety.



CUSTOMIZED INDUSTRIAL STAIRS AND WORK PLATFORMS

Perfection made Perfect.



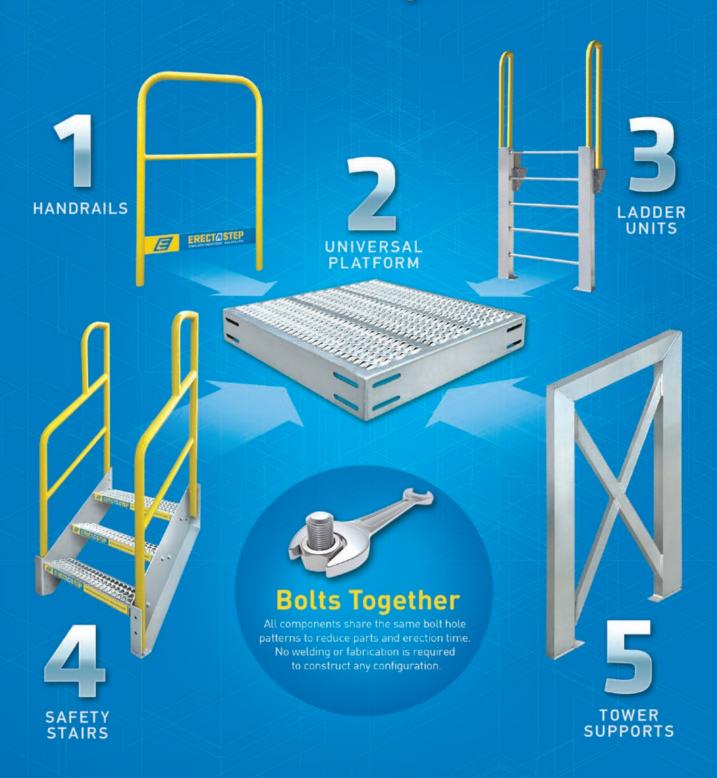




One Gate. Fits All. Stops Falls.

5 Main Components

Unlimited Configurations



ERECTASTEP

Why buy ErectaStep?

- 1. Completely Universal design for your custom needs allows for units to be repurposed later in different configurations.
- 2. Pre-engineered components you save custom engineering costs.
- 3. Safety compliance built into the product Lowers your risk of ownership and increases safety.
- 4. Costs less than custom fabrication.
- 5. In stock and ready to ship!

Safety made simple.

The ErectaStep system is ideal for crossovers which allow safe and easy access over pipes, dike walls and other obstructions. ErectaStep provides up to 9' (2743 mm) of horizontal clearance without tower supports (three platforms) or infinite horizontal clearance with tower supports. To design your crossover, measure your vertical and horizontal clearance and refer to the chart on the last page of this catalog to determine which stair model and how many modular platforms you will need. If you ever have any questions, please feel free to call one of our experienced customer service representatives or send us a picture of your work area so we can design the crossover that will best suit your needs.



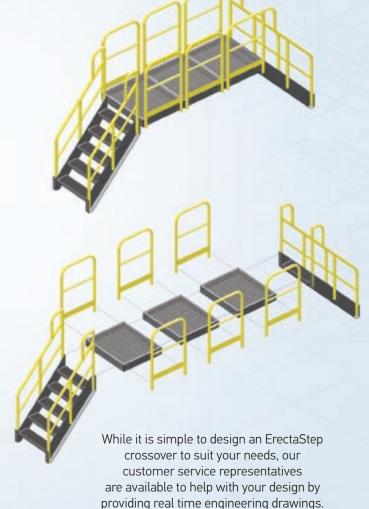
proudly crafted in our South Carolina facility.



Crossover Configuration Example 1

PARTS USED: 2 STAIR UNITS (11389), 2 HANDRAILS (11395), 1 PLATFORM (11394)

This configuration provides 3' (914 mm) horizontal and 39" (991 mm) vertical clearance.







Example Configurations

E-4

Limitless designs.

Configurations are endless and limited only by your imagination. Call us for any assistance.



Each component is proudly crafted in our South Carolina facility.



Example Configuration 1

PARTS USED: 2 STAIR UNITS (11388), 2 PLATFORMS (11394), 5 HANDRAILS (11395), 1 6/TOWER (11383), 1 3/TOWER (11380)

This work platform system allows specific access to parts such as valves or filters, that require repeated access.

< Example Configuration 2

PARTS USED: 2 STAIR UNITS (11388), 3 PLATFORMS (11394), 6 HANDRAILS (11395), 2 TOWERS (11380)

This "L" shaped crossover configuration allows for safe and easy travel over areas such as assembly lines.





MANUFACTURED USING PRECISION LASER TECHNOLOGY

Example Configuration 3 V

PARTS USED: 1 1-STEP STAIR UNIT (11386), 1 3-STEP STAIR UNIT (11388), 1 4-STEP STAIR UNIT (11389), 6 PLATFORMS (11394), 13 HANDRAILS (11395), 2 1/TOWERS (11378), 2 5/TOWERS (11382), 2 7/TOWERS (11384)

This platform provides safe access to upper levels within a confined space, such as the mezzanine level of a warehouse.

Example Configuration 4 >

PARTS USED: 1 STAIR UNIT (11388), 1 PLATFORM (11394), 3 HANDRAILS (11395), 1 TOWER (11380)

This small platform allows for easy, permanent access to elevated work areas – a safe replacement for wobbly ladders, work stands or footstools.





Example Configurations

E-6

Limitless designs.

Configurations are endless and limited only by your imagination. Call us for any assistance.







Example Configurations

E-8





Ladder Configurations

Built for strength.

Our ladder components are available in eleven sizes, from one to eleven steps and bolt to the bottom of any ErectaStep platform with no supplemental parts or engineering. Each ladder also functions as a support tower. ANSI yellow powder coating on handrails meet OSHA safety requirements and provide a durable finish.







PerfectAStep

E-10





Custom precision cut modular pieces to fit any project.



Custom width stairs for easy platform access.



Perfect fit modular designs to fit all projects large or small.



Custom pieces for easy access and employees' safety.



Universal Platform Design

E-12

Customization is king.

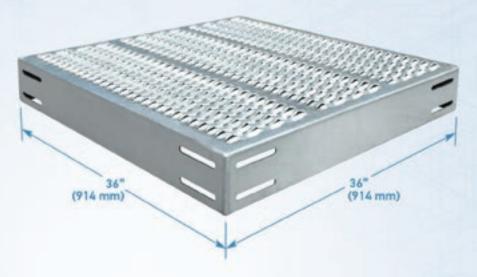
ErectaStep's universal 3' x 3' (914 mm x 914 mm) platform design is infinitely expandable through common bolt hole patterns found on each side of the platform. Attaching platforms, stairs or ladders is accomplished with only a ratchet and an open-ended wrench. No additional support is required for spans of 9' (2743 mm) (3 platforms). When joining more than 4 platforms tower supports are required and bolt easily to the bottom of one or multiple platforms, regardless of stair location. Platforms feature a stamped, slip resistant surface which provides solid traction. Each platform is manufactured with stamping technology to increase strength and lower costs by eliminating welds. Our use of robotic welding for the few remaining joints results in strong, precise welds on every platform shipped.



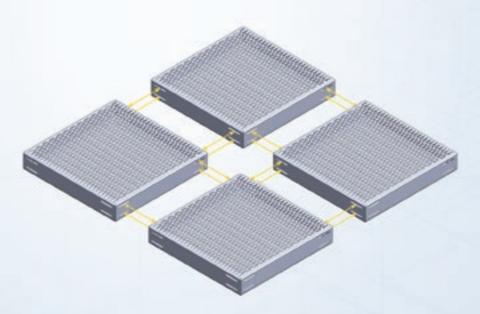
► DESIGN LOAD: 50 PSF (244 KGF/M2)

PATENT PENDING



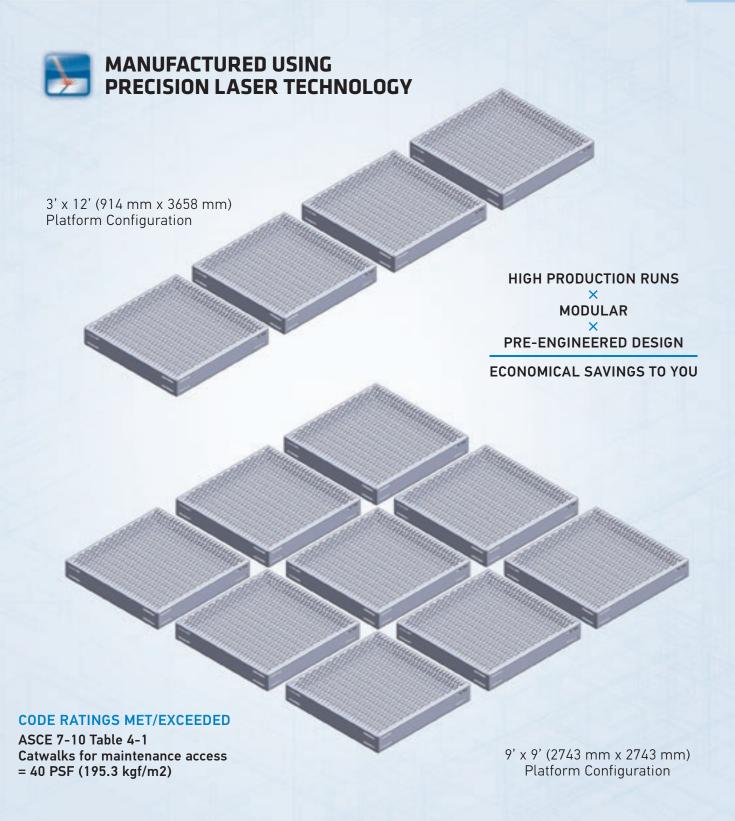


PLATFORM IS IDENTICAL ON ALL 4 SIDES



PLATFORMS EASILY BOLT TOGETHER
TO MAKE A LARGER PLATFORM





Safety Handrails

E-14

Ease of use.

ErectaStep Safety Handrails come in one standardized size and share a bolt hole pattern with the universal platform, allowing the handrails to attach to any side of the platform. Constructed of round pipes with outer diameters of slightly less than 2" (51 mm) and powder coated ANSI safety yellow, these handrails are robust in strength as well as appearance.

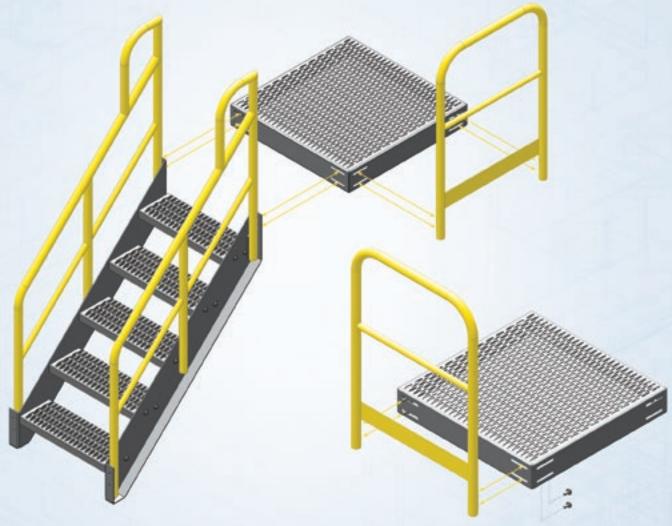


PATENT PENDING





HANDRAILS AND STAIRS SHARE THE SAME BOLT HOLE PATTERN



► DESIGN LOAD: 200 LBS. (91 KG) IN ANY DIRECTION

Safety Stairs

E-16

A step up in quality.

ErectaStep stair units come in 9" (229 mm) vertical increments with 26" (660 mm) of walk surface and slip resistant tread. To meet OSHA regulations, handrails are powder coated ANSI safety yellow. Stairs bolt to any side of the universal platform, allowing for easy customization. Stair units ship broken down for low shipping costs and are easy to assemble. Please see the spec sheet on page E-30 for dimensions on all stair sizes.

PATENT PENDING



1-Step Safety Stair Part No. 11386



2-Step Safety Stair Part No. 11387



3-Step Safety Stair Part No. 11388



4-Step Safety Stair Part No. 11389



5-Step Safety Stair Part No. 11390



6-Step Safety Stair Part No. 11391



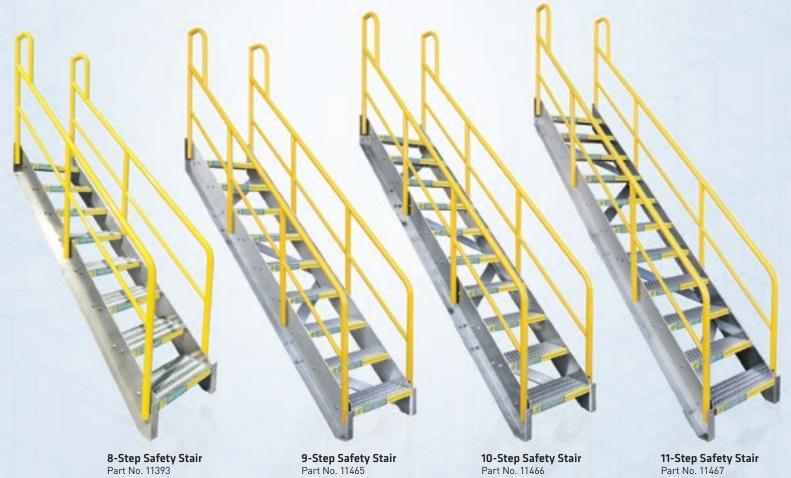
7-Step Safety Stair Part No. 11392



► DESIGN LOAD: 1000 LBS. (454 KG) MOVING LOAD

STAIR BOLTS TO ANY OF THE 4 SIDES OF THE UNIVERSAL PLATFORM





Tower Supports

E-18

Built for strength.

ErectaStep support towers use an anchor bolt hole design that match up with the bolt-hole pattern on the bottom of the universal platform, allowing for three bolt-up scenarios: 1) a single tower bolting to a single platform; 2) bolting two platforms on either side of a support tower; and 3) bolting support towers on multiple sides of the same platform. Support towers are necessary when using more than 3 platforms in succession. Each leg of support must be supported to grade adequately.



Tower Support 1 Part No. 11378



Tower Support 2 Part No. 11379



Tower Support 5 Part No. 11382

PATENT PENDING



Tower Support 3 Part No. 11380



Tower Support 6 Part No. 11383



Each component is proudly crafted in our South Carolina facility.



Tower Support 7 Part No. 11384

Tower Support 4

Part No. 11381

MANUFACTURED USING PRECISION LASER TECHNOLOGY



Ladder Units

E-50

Versatility defined.

Our ladder components are available in eleven sizes, from one to eleven steps and bolt to the bottom of any ErectaStep platform with no supplemental parts or engineering. Each ladder also functions as a support tower, including D-shaped rungs for added traction and ergonomics. ANSI yellow powder coating on handrails meet OSHA safety requirements and provide a durable finish.

PATENT PENDING



1-Step Ladder Unit Part No. 11457



2-Step Ladder Unit Part No. 11458



3-Step Ladder Unit



4-Step Ladder Unit Part No. 11460



5-Step Ladder Unit Part No. 11461



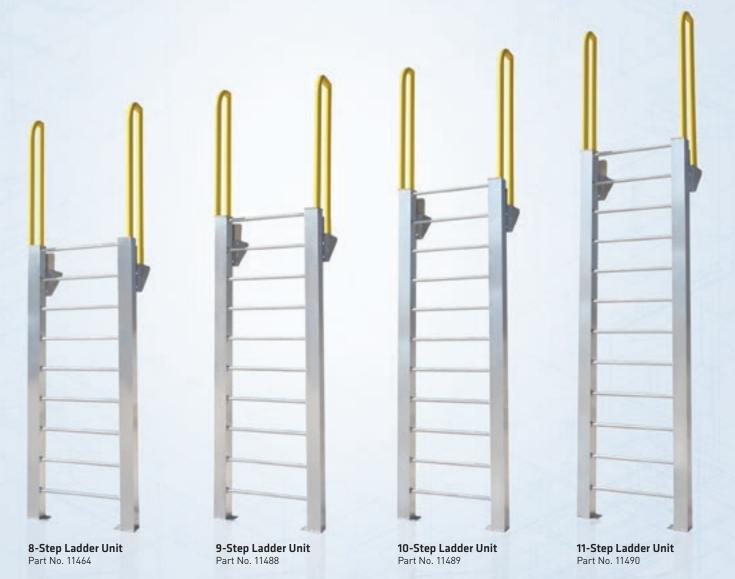
6-Step Ladder Unit Part No. 11462



7-Step Ladder Unit Part No. 11463







Application Examples

E-55

ErectaStep is ideal for creating crossovers, raised walkways, equipment access and service platforms.



Safe valve access.



Changing these industrial filters has never been safer.



Safely cross containment walls.



Safely cross numerous different size piping at this gas compressor station.



Easily access these valves from all sides.

Application Examples

E-24

ErectaStep is ideal for creating crossovers, raised walkways, equipment access and service platforms.



Work safely on all four sides of this conveyor motor at this power generation station.



Large oil pipeline cross over.



Crossing rooftop HVAC ductwork safely without damage to the lines.



Aluminum crossover withstands the toughest climates.



Avoid slips, trips and falls on busy rooftops.



Brand new flagship distribution center crosses over 5000 ft (1524 m) of coveyor with all standard components.

Application Examples

E-58

ErectaStep is ideal for creating crossovers, raised walkways, equipment access and service platforms.



Containment wall cross over.



Safely and efficiently access multiple valves.



Propane gas lines no longer a safety issue.



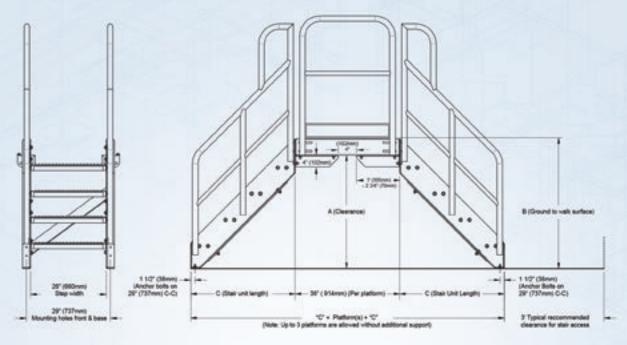
Access over and across multiple obstructions safely.



Safely access storage tanks in all weather conditions.

Specifications

E-30



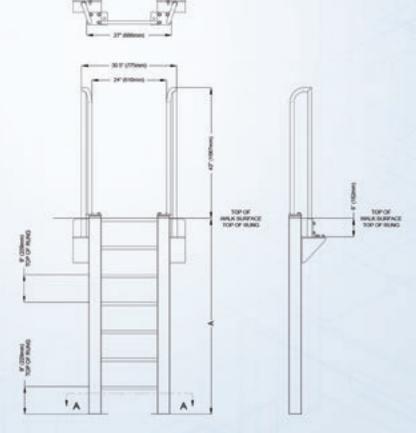
Cross-Over Clearance Table

	A (in) [mm]		B (in) [mm]		C (in) [mm]	
1-Step	12	[305]	18	[457]	9	[229]
2-Step	21	[533]	27	[686]	18	[457]
3-Step	30	[762]	36	[914]	27	[686]
4-Step	39	[990]	45	[1143]	36	[914]
5-Step	48	[1219]	54	[1372]	45	[1143]
6-Step	57	[1447]	63	[1600]	54	[1372]
7-Step	66	[1676]	72	[1829]	63	[1600]
8-Step	75	[1905]	81	[2057]	72	[1829]
9-Step	84	[2134]	90	[2286]	81	[2057]
10-Step	93	[2362]	99	[2515]	90	[2286]
11-Step	102	[2591]	108	[2743]	99	[2515]

Please refer to nominal dimensions provided here. If any existing obstructions are critically close to the designed limit stated, please contact us for any clarifications to insure proper fit.

Ladder Unit Specifications

	A (in)) [mm]	Est. Weight [kg]		
1-Step	18	[457]	44 lbs.	[20]	
2-Step	27	[686]	50 lbs.	[23]	
3-Step	36	[914]	55 lbs.	[25]	
4-Step	45	[1143]	60 lbs.	[27]	
5-Step	54	[1372]	66 lbs.	[30]	
6-Step	63	[1600]	71 lbs.	[32]	
7-Step	72	[1829]	77 lbs.	[35]	
8-Step	81	[2057]	82 lbs.	[37]	
9-Step	90	[2286]	87 lbs.	[39]	
10-Step	99	[2515]	93 lbs.	[42]	
11-Step	108	[2743]	98 lbs.	[44]	





APPLICABLE OSHA REGULATIONS DESIGNED TO:

OSHA 1910.23(e)(1) A standard railing shall consist of top rail, intermediate rail, and posts, and shall have a vertical height of 42 inches [1067 mm] nominal from upper surface of top rail to floor, platform, runway, or ramp level. The top rail shall be smooth-surfaced throughout the length of the railing. The intermediate rail shall be approximately halfway between the top rail and the floor, platform, runway, or ramp. The ends of the rails shall not overhang the terminal posts except where such overhang does not constitute a projection hazard.

OSHA 1910.23(e)(5)(iv) The mounting of handrails shall be such that the completed structure is capable of withstanding a load of at least 200 lb [91kg] applied in any direction at any point on the rail.

OSHA 1910.23(e)(6) All handrails and railings shall be provided with a clearance of not less than 3 inches [76mm] between the handrail or railing and any other object.

OSHA 1910.23(e)(3)(ii) For pipe railings, posts and top and intermediate railings shall be at least 1-1/2 [38mm] inches nominal diameter with posts spaced not more than 8 ft [2438 mm] on centers

OSHA 1910.23(e)(2) A stair railing shall be of construction similar to a standard railing but the vertical height shall be not more than 34 inches [864 mm] nor less than 30 inches [762 mm] from upper surface of top rail to surface of tread in line with face of riser at forward edge of tread.

OSHA 1910.24(c) "Stair strength." Fixed stairways shall be designed and constructed to carry a load of five times the normal live load anticipated but never of less strength than to carry safely a moving concentrated

OSHA 1910.24(d) "Stair width." Fixed stairways shall have a minimum width of 22 inches [559 mm].

OSHA 1910.24(e) "Angle of stairway rise." Fixed stairs shall be installed at angles to the horizontal of between 30 deg. and 50 deg. Any uniform combination of rise/tread dimensions may be used that will result in a stairway at an angle to the horizontal within the permissible range. Table D-1 gives rise/tread dimensions which will produce a stairway within the permissible range, stating the angle to the horizontal produced by each combination. However, the rise/tread combinations are not limited to those given in Table D-1

Angle to norizontal [mm]	rise (in inches) [mm]	rread r	un (in inches) [mm]
30 deg. 35' [10668mm]	6-1/2	[165mm]	11	[279mm]
32 deg. 08' [2438mm]	6-3/4	[171mm]	10-3/4	[273mm]
33 deg. 41' [12497mm]	7	[178mm]	10-1/2	[267mm]
35 deg. 16' [4877mm]	7-1/4	[184mm]	10-1/4	[260mm]
36 deg. 52' [15850mm]	7-1/2	[191mm]	10	[254mm]
38 deg. 29' [8839mm]	7-3/4	[197mm]	9-3/4	[248mm]
40 deg. 08' [2438mm]	8	[203mm]	9-1/2	[241mm]
41 deg. 44' [13411mm]	8-1/4	[210mm]	9-1/4	[235mm]
43 deg. 22' [6706mm]	8-1/2	[216mm]	9	[229mm]
45 deg. 00' [0mm]	8-3/4	[222mm]	8-3/4	[222mm]
46 deg. 38' [11582mm]	9	[229mm]	8-1/2	[216mm]
48 deg. 16' [4877mm]	9-1/4	[235mm]	8-1/4	[210mm]
49 deg. 54' [16459mm]	9-1/2	[241mm]	8	[203mm]

OSHA 1910.24(f) "Stair treads." All treads shall be reasonably slip-resistant and the nosings shall be of nonslip finish. Welded bar grating treads without nosings are acceptable providing the leading edge can be readily identified by personnel descending the stairway and provided the tread is serrated or is of definite nonslip design. Rise height and tread width shall be uniform throughout any flight of stairs including any foundation structure used as one or more treads of the stairs.

OSHA 1910.144(a)(3) Yellow. Yellow shall be the basic color for designating caution and for marking physical hazards such as: Striking against, stumbling, falling, tripping, and "caught in between."

OSHA 1926.451(f)(16) Platforms shall not deflect more than 1/60 of the span when loaded.

OSHA 1910.26(c)(3)(iii) The ladder base section must be placed with a secure footing.

OSHA 1910.26(c)(3)(iv) The top of the ladder must be placed with the two rails supported, unless equipped with a single support attachment

OSHA 1910.27 Fixed ladders.

OSHA 1910.27(a) Design requirements-(1) Design considerations. All ladders, appurtenances, and fastenings shall be designed to meet the following load requirements:

OSHA 1910.27(a)(1)(i) The minimum design live load shall be a single concentrated load of 200 lb [91 kg].

OSHA 1910.27(a)(1)(ii) The number and position of additional concentrated live load units of 200 lb [91 kg] each as determined from anticipated usage of the ladder shall be considered in the design

OSHA 1910.27(a)(1)(iii) The live loads imposed by persons occupying the ladder shall be considered to be concentrated at such points as will cause the maximum stress in the structural member being considered.

OSHA 1910.27(a)(1)(iv) The weight of the ladder and attached appurtenances together with the live load shall be considered in the design of rails and fastenings.

OSHA 1910.27(b) Specific features-(1) Rungs and cleats. (i) All rungs shall have a minimum diameter of three-fourths inch for metal ladders, except as covered in paragraph (b)(7)(i) of this section and a minimum diameter of 1 1/8 inches [29 mm] for wood ladders.

OSHA 1910.27(b)(1)(ii) The distance between rungs, cleats, and steps shall not exceed 12 inches [305 mm] and shall be uniform throughout the length of the ladder.

OSHA 1910.27(b)(1)(iii) The minimum clear length of rungs or cleats shall be 16 inches [406 mm]

OSHA 1910.27(b)(2) Side rails. Side rails which might be used as a climbing aid shall be of such cross sections as to afford adequate gripping surface without sharp edges, splinters, or burrs

OSHA 1910.27(b)(6) Welding. All welding shall be in accordance with the "Code for Welding in Building Construction" (AWSD1 0-1966)

OSHA 1910.27(c)(5) Clearance in back of grab bar. ClearThe distance from the centerline of the grab bar to the nearest permanent object at the back of the grab bars shall be not less than 4 inches [102 mm]. Grab bars shall not protrude on the climbing side beyond the rungs of the ladder which they serve.

OSHA 1910.27(d)(2)(iii) One rung of any section of ladder shall be located at the level of the landing laterally served by the ladder. Where access to the landing is through the ladder, the same rung spacing as used on the ladder shall be used from the landing platform to the first rung below the landing.

OSHA 1910.27(d)(3) Ladder extensions. The side rails of through or side-step ladder extensions shall extend 3 ½ feet [1067mm] above parapets and landings. For through ladder extensions, the rungs shall be omitted from the extension and shall have not less than 18 [457 mm] nor more than 24 inches [610 mm] clearance between rails. For side-step or offset fixed ladder sections, at landings, the side rails and rungs shall be carried to the next regular rung beyond or above the 3 ½ feet [1067 mm] minimum. (fig. D-10).

OSHA 1910.27(d)(4) Grab bars. Grab bars shall be spaced by a continuation of the rung spacing when they are located in the horizontal position. Vertical grab bars shall have the same spacing as the ladder side rails. Grab-bar diameters shall be the equivalent of the round-rung diameters.

TERMS AND CONDITIONS

1. Without a written acceptance of these conditions by the Buyer, placement of an order for any of the goods covered by this quotation will constitute acceptance of these terms and conditions. The failure to object to provisions con tained in a Buyer's order or other forms of communication will not be deemed a waiver of the terms and conditions.

- 2. ErectaStep is not responsible for delays in satisfying this order caused by circumstances which are unavoidable or
- 3. Typographical errors are subject to correction.
- 4. All information supplied to the Buyer by ErectaStep may contain proprietary design information that belongs to and shall remain property of ErectaStep. They may not be copied without the expressed written consent of an officer of ErectaStep. All information must be returned immediately upon demand.
- 5. ErectaStep sale of goods covered by this quotation does not grant the Buyer any license or right of any kind under any patent owned or controlled by ErectaStep or under which the company is licensee.
- 6. 2 Year Limited Warranty See below
- 7. Returns: Returns must be in sellable condition and authorization in writing from our office and subject to a restocking fee. Unauthorized returns will be refused. The buyer is responsible for any freight charges.
- 8. Liens: ErectaStep provides final lien waivers when payment is received in full.
- 9. The field measurements utilized in formulating the prices for the equipment supplied by the Buyer or their representative. Any failure of the equipment to operate satisfactorily that is caused by incorrect data and/or field measurements being supplied to the Seller by the Buyer's personnel would be at the buyer's expense. This includes any changes in operating procedures, types of vehicle being serviced, or any changes to the physical surroundings which cause conditions to be outside the original field measurements that were taken. All costs associated with those changes would be at the Buyer's expense

- 10. Buyer assumes liability for patent and copyright infringement when goods are made to Buyer's specifications.
- 11. If the Buyer cancels an order prior to its completion; the Buyer agrees to pay to Seller the percentage of the selling price based on the percentage of the completion, plus any costs for the disposal of used material. The Seller would determine the percentage of completion
- 12. Indemnity: Buyer shall indemnify and hold harmless ErectaStep, its affiliated companies, owners, employees, agents, and successors from and against any and all claims, expenses, liability, and loss arising from claims for injury, death, or damage to, or destruction of property arising from unauthorized repair or modifications to the products provided under this purchase order/quotation, as well as failure to properly maintain said products, improper use of said products, use of said products for anything other than their intended purpose, and/or the equipment not working or functioning properly caused by a change in working parameters that were unknown by ErectaStep.

ErectaStep prides itself on it's workmanship and quality. We strive for perfection in each and every part that we manufacture. All ErectaStep parts are warrantied for 2 years against defects. Abuse, extraordinary corrosion, improper installation and other things out of control of ErectaStep are not covered under warranty. Warranty is limited to repair or replacement parts shipped ground to destination as determined by ErectaStep. No additional costs incurred due to warranty related parts are covered i.e. labor., loss of use.

INTENDED USE

All ErectaStep parts are pre-engineered with specific purpose for safe access and egress. It is very important to follow configuration guidelines as well as installation instructions provided with order. Design limitations can exist with respect to required supports, adequate footings and prescribed application. Applied loads beyond the stated design loads and use not as advertised are also not covered under the warranty. Any alteration in design or intended use or purpose beyond ErectaStep's recommendations or knowledge voids our warranty and liability against all claims. ErectaStep offers free design assistance to insure a safe, successful outcome to your project.







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