

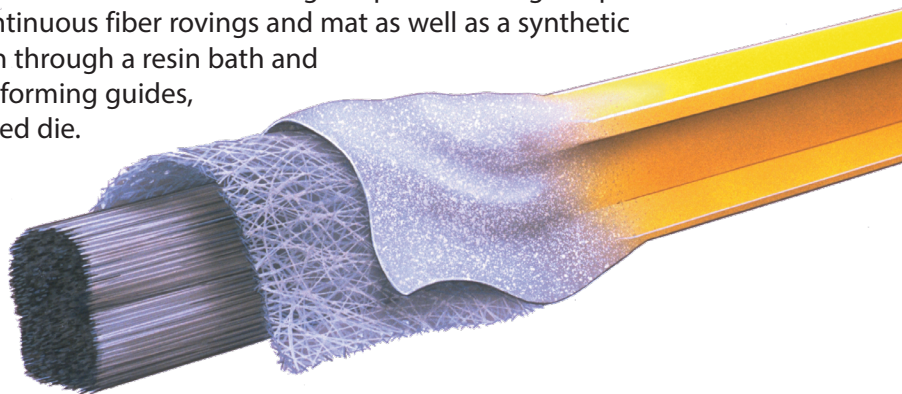
# Dynarail® FRP Safety Ladder

AVAILABLE THROUGH  
**TREMCO**  
 ROOFING & BUILDING MAINTENANCE



Combining corrosion resistance, long life and a low maintenance design, Dynarail® ladder systems are superior to conventional metallic systems. These advanced systems are designed and manufactured to be easily installed with no guesswork involved. Components are lightweight and easy to fabricate. Savings on labor and equipment often make the total installed cost of Dynarail ladders comparable to that of steel. Combining its low cost of installation with low maintenance and long life, Dynarail ladders offers a life cycle cost that is significantly lower than that of its counterparts.

Dynarail ladder components are manufactured using the proven Fibergrate pultrusion process. In this process, continuous fiber rovings and mat as well as a synthetic veil are mechanically drawn through a resin bath and shaped through a series of forming guides, then pulled through a heated die. All ladders used in outdoor applications also have a proprietary, secondarily applied UV Coating to ensure a long life even in the harshest UV environments.



## Dynarail Ladder Benefits



**Corrosion Resistant:** Dynarail® fiberglass ladder systems are known for their ability to provide corrosion resistance in the harshest environments and chemical exposures.



**Electrically & Thermally Non Conductive:** Fiberglass is electrically non conductive for safety and has low thermal conductivity which results in a more comfortable product when physical contact occurs.



**Low Install Cost:** Due to ease of fabrication and lightweight, FRP ladders eliminate the need for heavy lifting equipment. Components are also labeled with tags that correspond to engineering drawings to ensure time-efficient and accurate installation.



**Slip Resistant:** Ladder rungs include heavily serrated flutes for positive, slip resistant footholds; also ungritted rungs are easy on the hands, while still ensuring safety.



**Low Maintenance:** The corrosion resistant properties of Fibergrate's FRP products reduce or eliminate the need for sandblasting, scraping and painting. Products are also easily cleaned with a high pressure washer.



**UV Protection:** UV inhibitors in the resin matrix, along with a synthetic surfacing veil, provide optimum protection from the effects of UV weathering. (An optional UV coating is required for installations with intense UV exposure.)

## Specifications

### Safety Ratings

#### Meets OSHA Requirements:

- |             |                  |           |
|-------------|------------------|-----------|
| • 1926.1050 | • 1910.28(b)(1)  | Canada    |
| • 1926.1051 | • 1910.29(b)     | • 1910.27 |
| • 1926.1053 | USA              |           |
| • 1926.23   | • 1910.28(b) (9) |           |

#### ANSI

- A14.3-2008

#### Ontario Ministry of Labor

- Engineering Data Sheet 2-04

#### Ontario Occupational and Safety Act

- Reg 851 (18)

### Resin Systems

#### ISOFR

- Isophthalic polyester resin formulation
- Low flame spread rating of 25 or less
- Designed for applications where there is moderate exposure to corrosive elements

#### VEFR

- Vinyl ester resin system with a flame spread of 25 or less for dependable resistance to both acidic and alkaline environments

### Size

#### Available heights:

- 8'
- 10'
- 12'
- 14'
- 16'
- 18'
- 20'
- 24'

# Dynarail® FRP Safety Ladder

The innovative Dynarail® fiberglass reinforced plastic (FRP) safety ladder and cage system meets or exceeds OSHA requirements. Dynarail cage components are shipped in compact kit form - not large, bulky units prone to damage.

Ladders are stocked in standard heights of 8', 10', 12', 14', 16', 18', 20' and 24' and are available in taller heights using splice kits. Ladders can be ordered in a LADDER ONLY format or as a KIT that includes the ladder as well as the appropriate number of wall mounts.

Safety features are built-in from the ground up. Special clip angles have been developed to securely anchor the ladder. Intermediate stand-off brackets laterally stabilize the ladder to the supporting structure on 6' centers. Ladder rungs include heavily serrated flutes for slip resistant footholds.

## Technical Data (Except where noted, all materials are yellow vinyl ester, fire retardant - VEFR)

### LADDER:

Maximum length without splice	24'-0"	Outside Diameter of rung	1-1/4"
Clear inside width (inside rail to rail)	18"	Inside Diameter of rung	3/4"
Outside width (outside rail to rail)	21-1/2"	Rail - outside width	1-3/4"
Rung Spacing (center to center)	12"	Rail - wall thickness	1/4"
		Weight per foot (approximately)	3.0 lbs.

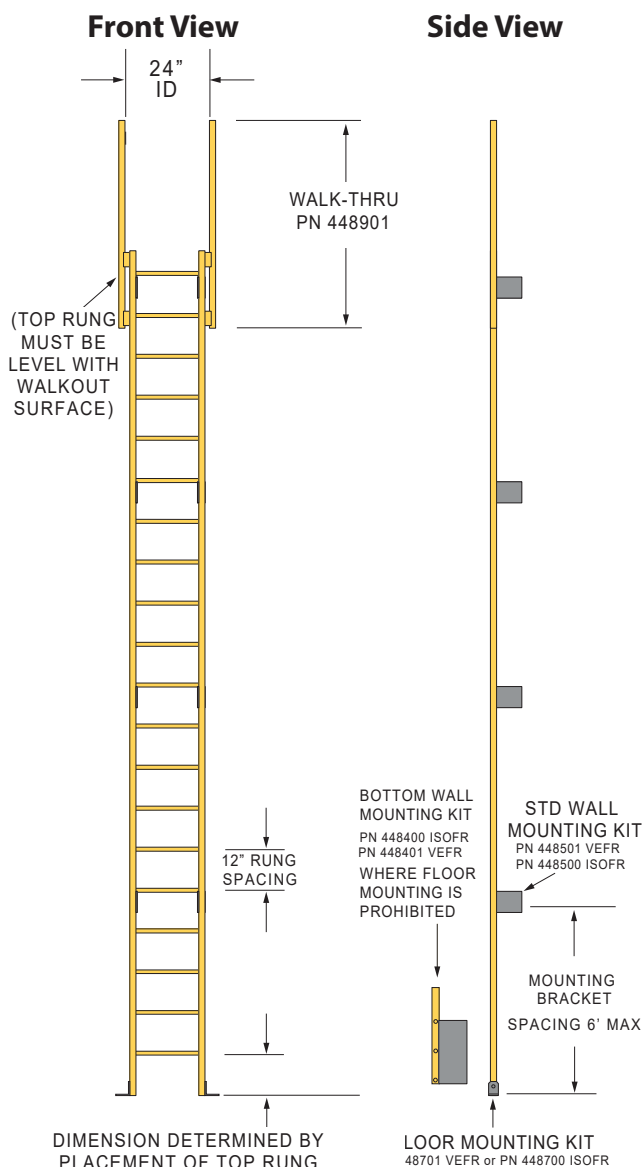
Product	Description
<b>Bottom Wall Mount Bracket Kit*</b> (FG 448400 ISOFR Dk Gray) <i>Required when ladder cannot be floor mounted</i>	2-3/16" x 8" x 3/8" angle, 18" long Two per set <i>(with necessary bolt assemblies)</i>
<b>Wall Mount Bracket Kit*</b> (FG 448500 ISOFR Dk Gray)	2-3/16" x 8" x 3/8" angle, 6" long 7" from wall to center of rung Two per set <i>(with necessary bolt assemblies)</i>
<b>Floor Mount Clip Kit*</b> (FG448700 ISOFR Dk Gray)	4" x 4" x 3/8" angle, 2-3/4" long Two per set <i>(with necessary bolt assemblies)</i>
<b>Ladder Rail Splice Kit</b> (FG448600)	1-1/4" Square bar splice 1-3/4" x 1/4" Square tube rail
<b>24" Wide Walk-thru Kit</b> (FG448901.1 VEFR Yellow)	24" Walk thru post Walk thru spacer 1.5" x 1.5" End Cap

**\*NOTE:** Wall mount brackets and floor mount clips are predrilled with 9/16" diameter holes for 1/2" diameter anchor bolts only. **Anchor bolts not included.**



# Dynarail® FRP Safety Ladders

## Dynarail® Ladder System Data

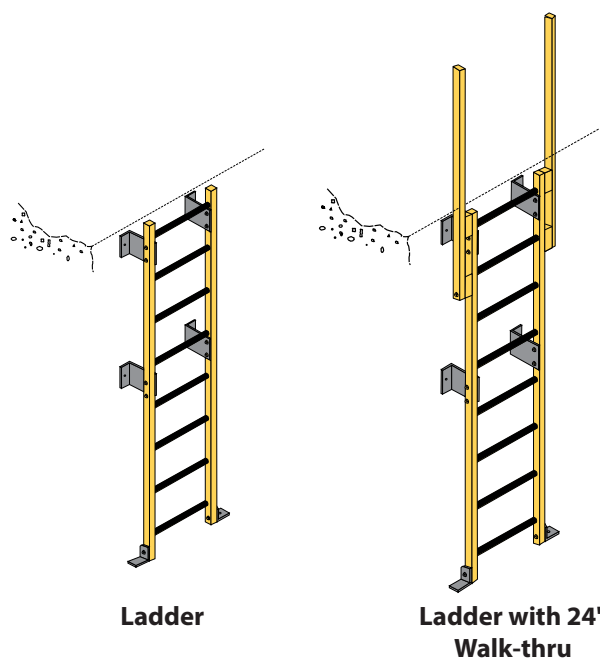


## Component Selection Guide

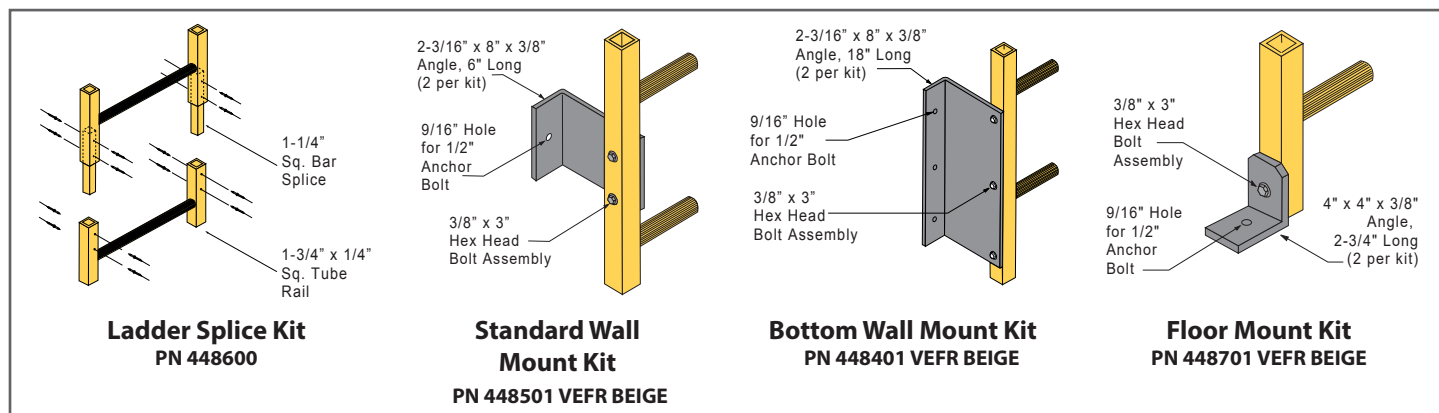
### Ladder Mounting Accessories

Ladder Height	Floor Mount Kits Required PN 448700 ISOFR PN 448701 VEFR	Bottom Wall Mount Kits PN 448400 ISOFR PN 448401 VEFR	Wall Mount Kits Required PN 448500 ISOFR PN 448501 VEFR
0" to 6"	1	1	1
6' 6" to 12' 0"	1	1	2
12' 6" to 18' 0"	1	1	3
18' 6" to 24' 0"	1	1	4
24' 6" to 30' 0"	1	1	5
30' 6" to 36' 0"	1	1	6

**Note:** Top rung step-off must be even with upper walking surface



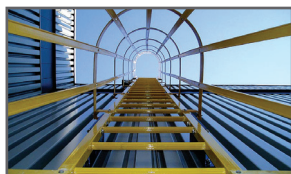
## Assembly & Mounting Details





# ADDITIONAL SAFETY SOLUTIONS

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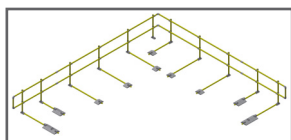
## FRP DYNARAIL® SAFETY LADDERS

DynaRail® Safety Ladder Systems combine a corrosion resistant, low maintenance design to ensure a long life cycle. Ladder rungs include heavily serrated flutes for slip resistant footholds that are easy on the hands while ensuring safety. Our system is designed and manufactured to be easily installed with no guesswork involved. Components are lightweight and easy to fabricate, which saves you on labor and equipment. UV inhibitors in the resin along with a secondary UV coating maximize protection from the effects of UV weathering. The Dynarail safety ladder system meets or exceeds all OSHA requirements.



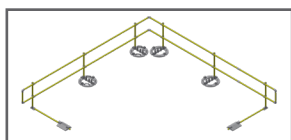
## DYNAROUND HATCH GUARD

DynaRound Hatch Guard provides a non-penetrating guard solution for safe entry and exit through roof access hatches. The adjustable self-closing gate prevents accidental entrance when hatch is open. The DynaRound Hatch Guard mounts directly to the roof hatch with a compression fit design so no drilling is necessary, which means the rooftop waterproofing system is not compromised.



## DYNAROUND RG™ (ROOF GUARD)

DynaRound RG™ Roof Guard ballasted rooftop guardrail system is designed for safety and fall protection on rooftop applications. Each system is made of durable, corrosion-resistant fiberglass reinforced plastic (FRP) composite uprights and non-FRP counterbalance weights and connector components. DynaRound RG provides the utmost in safety by protecting against injuries or death from accidental falls from the roof. This system meets all applicable safety standards in the U.S. and Canada to protect individuals on rooftop surfaces.



## DYNAROUND RG SLIMLINE™ (ROOF GUARD)

Fibergrate's ballasted rooftop guardrail system, DynaRound RG Slimline™, provides safety and fall protection on rooftop applications with fewer counterbalance bases than DynaRound RG. Similar to our DynaRound RG system, each Slimline system is made of durable, weather-resistant fiberglass reinforced plastic (FRP) composite uprights and rails, galvanized steel base weights, and galvanized connector components. This system meets applicable safety standards in the U.S. and Canada to protect people working at heights.



## DYNAWEIGHT FALL PROTECTION SYSTEM

DynaWeight Fall Protection System is the perfect solution for fall protection when circumstances require non-penetrating versatility. This system is tested and approved for use on flat rooftop surfaces (single ply, BUR, concrete, modified bitumen membranes, AlphaGuard™ BIO, AlphaGuard™ MT/MTS, and AlphaGuard™ PUMA), with a maximum incline of 5 degrees. It provides tie off options for two people if used for fall restraint or one person for fall arrest; sets up quickly and is easy to move. The DynaWeight Fall Protection System is corrosion resistant and meets all applicable safety standards in the U.S. and Canada to protect individuals on rooftop surfaces.



## DYNAROUND WARNING LINES

DynaRound Warning Lines available in a heavy and light duty design. Our heavy-duty warning line systems can be used as a permanent warning system with heavy-duty galvanized base plates, plastic coated steel cable, and plastic pennants. The heavy-duty stanchions and bases are designed to withstand years of use. The standard system includes three stanchions, three bases, and 100' feet of plastic coated steel cable with flags. Our light duty warning line system can be used as a temporary warning system. This system includes three folding stanchions, 100' of nylon flagged line. Both systems meet all applicable safety standards in the U.S. and Canada to protect individuals on rooftop surfaces.



## CORVEX® MOLDED GRATING WITH RUBBER FEET

Molded Walkway Grating is made with a unique Corvex resin system that outperforms many competitive fiberglass and metal products. Our molded grating is corrosion resistant, lightweight, slip resistant, and easy to install. Specially designed rubber feet can be added to molded grating, elevating it 1/2" above the surface, offering an economical raised walkway solution for use around maintenance equipment, machines, wet areas, and rooftop walkway areas.



## CROSSOVERS

Our FRP Crossovers are pre-engineered and both corrosion- and slip-resistant. Available in a variety of heights that address most standard clearances, these Crossovers provide a cost-effective, safe solution over many rooftop obstructions. Crossover systems create a safe working environment, are lightweight, easy to install and designed to meet all applicable safety standards in the U.S. and Canada.

All Fibergrate Roof Top Safety Solutions are available through Tremco Roofing and Building Maintenance



Phone: 800-852-6013



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