

Fiberglass Handrail Systems

SAFRAIL™ Industrial Fiberglass Handrails



SAFRAIL™ industrial fiberglass handrails are commercial railing systems for stair rails, platform/walkway handrails and guardrails. SAFRAIL™ systems are fabricated from pultruded fiberglass components produced by Strongwell and molded thermoplastic connectors. The railing systems are particularly well-suited to corrosive environments like those found in industrial, chemical and wastewater treatment plants as well as commercial structures with urban and salt air corrosion. SAFRAIL™ fiberglass handrail systems are corrosion resistant, easy to field fabricate, structurally strong, low in thermal conductivity, impact resistant, have low electrical conductivity and are lightweight. SAFRAIL™ systems are the result of more than 40 years of experience in the manufacture, design and fabrication of fiberglass handrail systems. The systems offer the following advantages:

- Ease of Assembly — SAFRAIL™ systems are produced in lightweight standard sections that include both post and rail. Systems can be prefabricated in large sections and shipped to the site or they can also be fabricated and installed on site with simple carpenter tools.
- Internal Connection System — All connections fit flush, resulting in a pleasing, streamlined appearance. The internal connections allow the construction of continuous handrail systems around circular tanks without special fittings.
- Safety Features — SAFRAIL™ systems come in a “safety yellow colour”, feature low electrical conductivity for worker safety and exhibit high strength. Systems meet US federal OSHA standards with a 2:1 factor of safety with a 6-foot (1830mm) maximum post spacing. SAFRAIL™ systems also comply with international standard AFNOR NF E 85-101.
- Low Maintenance — Corrosion resistant fiberglass with molded-in colour will outlast aluminum or steel systems with virtually no maintenance.
- Cost Effective — Fiberglass components and easy-to-assemble design provide savings on labor and maintenance, resulting in long- term savings and elimination of the cost and inconvenience of “downtime for repairs” in plant operations.

SAFRAIL™ industrial systems can be used in guardrail applications where railing is needed to protect the open side of an elevated walkway. SAFRAIL™ systems meet OSHA requirements for a height of 42” (1067mm) from the top of walkway to the top of the guardrail. The OSHA loading requirement for both guardrail and handrail is a 200 pound (890 N) concentrated load at any point or direction on the top rail. Other building codes may require different loading conditions. Moulded-in color plus an optional tough polyurethane coating will outlast aluminum or steel systems and requires virtually no maintenance.

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Custom Fiberglass Handrail Systems

Handrail may be ordered in custom colors and/or resins and may also be pre-fabricated. Prices and ship dates for custom fabricated handrail may be obtained by calling Customer Service.

NOTE: UV Coating is recommended for exterior applications and is available at an additional cost.

Square Handrail System Components

COMPONENT	WEIGHT (LBS.)
2" x 2" x .156" Square Tube, Yellow Polyester Fire Retardant UV Inhibited @ 240"	0.95 / ft.
2-3/8" x 2-3/8" x 3/16" Square Tube, Yellow Polyester Fire Retardant UV Inhibited @ 240"	1.36 / ft.
4" Kickplate Yellow Polyester Fire Retardant UV Inhibited @ 240"	0.65 / ft.
6" Kickplate Yellow Polyester Fire Retardant UV Inhibited @ 240" (1,200 ft. mill run)	0.73 / ft.
Black End Caps	0.03 ea.
Adjustable Corner Assembly (Total Assembly)	0.36 ea.
90° Corner Plug	0.35 ea.
Kickplate Splice	0.11 ea.
Kickplate 90° Splice	0.15 ea.
Split Tube 8" Length (for square handrail)	0.35 ea.
Split Tube 4" Length (for square handrail)	0.18 ea.
Split Tube 144" Length (for square handrail)	6.12 ea.
6" Square Plug	0.76 ea.
Square Plug 144" Length	18.24 ea.
1/8" x 1-1/2" Tension Pins	.04 / 10 pcs.
Epoxy Kits - 1 Pint Clear	1.64 ea.
FRP Base Plate with Post - Total Height 40" (Polyester)	5.50 ea.
Alternate Handrail Post, 2-3/8" x 2-3/8" x 50", Routed Out, No Bottom Plugs	5.70 ea.
90° Corner Sample	1.30 ea.
Tee Sample	0.90 ea.

Round Handrail System Components

COMPONENT	WEIGHT (LBS.)
1.9" OD x 1.5" ID Yellow Polyester Fire Retardant UV Inhibited	0.88 / ft.
4" Kickplate Yellow Polyester Fire Retardant UV Inhibited @ 240"	0.65 / ft.
Black End Caps	0.05 ea.
Adjustable Corner Assembly (Total Assembly)	0.36 ea.
90o Corner Assembly	0.35 ea.
Intermediate Connectors	0.05 ea.
Kickplate Splice	0.11 ea.
Kickplate 90o Splice	0.15 ea.
Split Tube, 1.5 x 4" (for round handrail)	0.15 ea.
Split Tube, 1.5 x 8" (for round handrail)	0.30 ea.
Round Connector, 1.5 x 8"	0.53 ea.
1/8" x 1-1/2" Tension Pins	0.04 / 10 pcs.
FRP Base Plate with Post, Total Height 39-9/16" (YFRPE)	5.50 / pc.
Stainless Steel Kickplate Bracket	0.12 ea.
1/4" x 1" Stainless Steel Bolt Assembly	.05 ea.



Channel Top Handrail System Components

COMPONENT
1" Diameter Mid Rail, Yellow Polyester Fire Retardant, UV Coated (5,000 linear feet min. run)
Channel Top Handrail, Yellow Polyester Fire Retardant, UV Coated (5,000 linear feet min. run)
2" x 2" x .156" Tube (for post), Yellow Polyester Fire Retardant, UV Coated
4" Kick Plate, Yellow Polyester Fire Retardant, UV Coated

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