Superdome photos courtesy of Rob Liggio
end cap

M6-1.0 x 10mm FSHCS for saddle to handrail support attachment

TIG weld corner

stainless steel Ø 1.67”
Drill and tap for (2) M5 - 0.8 BHCS at each post attachment (typ.)

saddle

M5-0.8 x 12mm BHCS for rail attachment

straight handrail support, screw into post cap

rosette

bottom holder

use on all level guardrail

adjustable angle handrail support, screw into post cap (use on sloped guardrail only)

tube connector

typical rail assembly

pg. 12
S3 handrail introduction
www.ETI-S3.com
proudly made in the USA
Efficient-Tec International, LLC
Stainless Steel Systems

Efficient-Tec International LLC offers a complete handrail solution for your code compliant projects. ETI's S3 (stainless steel systems) handrail solutions can meet any requirement, either from our standard line of products or with modification from the in house engineering and fabricating staff.

Design: modular non-welded system or welded systems.

Your solutions are all here whether using our new LED illuminated handrail (LEDRail™), standard guardrail, stairway handrail or spiral staircase handrail. The choices for project compliments are expanded with our standard steel rod, cable or glass guardrail infills. Our product line gives architects, designer and specifiers multiple options in fittings, mountings and decorative elements that will deliver the quality product demanded by ETI clientele.

We look forward to assisting your next handrail solution

Sincerely
Efficient-Tec International, LLC
S3 Handrail Systems

THE PRODUCTS IN THIS CATALOG ARE TESTED AND HAVE BEEN FOUND TO CONFORM TO THE APPROPRIATE UL STANDARDS FOR SAFETY.

SOLAVANTI LIGHTING UTILIZES THE TESTING AND CERTIFICATION SERVICE OF ETL, A NATIONALLY RECOGNIZED TESTING LABORATORY.

www.ETI-S3.com
Handrail Code Compliance

S3 handrails are always built to ADA, IBC and IRC codes but can be specified according to any of the listed building standards.
Incorporating S3 handrail into your project:

When requesting a quotation or specifying our handrail products, please provide as much information as possible in order to insure a more accurate specification and quotation. Fully dimensioned plan view and elevation view drawings are requested in order to fully understand the scope of the project.

Upon acceptance of the order, we will prepare detailed approval drawings for field verification and acceptance by the customer. Once the drawings are verified for accuracy and approved with a customer signature, we will begin the manufacturing process.

Handrails and Guardrails

- handrails provide guidance
- guardrails prevent accidental falls

Handrails are located 34”- 38” above stair nosings or ramps.

Guardrails are generally required for ramps, stairs, or landings that are elevated more than 30” off the ground. The guardrail heights will vary depending upon local code, but typically are a minimum of 42” in height above the ramp, stair, or landing finished floor surface.
Efficient-Tec International, LLC
Stainless Steel Systems

Standard Wall Rail Design

Model Name: MYRIS

This is the Efficient-Tec torchbearer as our original design. It uses a simple yet elegant look to use in any wall mount handrail application. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs.

Application
Wall Mount

Handrail Material
stainless steel, aluminum, brass, bronze

Options
- illuminated LEDRail, curved or spiral, Non-Illuminated, standard bracket

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output - 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
adjustable bracket

Finish
#4, #6, #8 mirror polish, powder coat, anodize

www.ETI-S3.com
This popular free standing, one line rail design incorporates a sleek and contemporary look with no infill between posts. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs.

Application
Free Standing

Post Material
stainless steel, aluminum, brass, bronze

Handrail Material
stainless steel, aluminum, brass, bronze

Options
illuminated LEDRail, curved or spiral, Non-Illuminated,

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output - 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
embed, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize

www.ETI-S3.com
Horizontal Rod Design

Model Name: ALANE

This horizontal rail application is accented by multiple 3/8” to 9/16” thickness horizontal solid rods as the infill between posts. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs.

Application
Free Standing

Post Material
stainless steel, aluminum, brass, bronze

Handrail Material
stainless steel, aluminum, brass, bronze

Cap Rail Material
stainless steel, aluminum, brass, bronze, wood

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output - 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
adjustable bracket, inline cap, embed, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize
Glass Clamp Fitting Design

Model Name: FELLE

This is the classic standard of in line glass clamp design to hold the glass infill panels in .375” or .500” thickness. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs. Glass can be etched with a company logo as well.

Application
Free Standing

Post Material
stainless steel, aluminum, brass, bronze

Handrail Material
stainless steel, aluminum, brass, bronze

Cap Rail Material
stainless steel, aluminum, brass, bronze, wood

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output – 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
adjustable bracket, inline cap, tempered glass, laminated glass, etching, embed, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize
Inline Retainer Design

Model Name: SANIA

This inline retainer design is used with glass infill panels .375" or .500 thickness. The button mounts are attached to the center of the posts, creating an offset glass infill. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs.

Application
Free Standing

Post Material
stainless steel, aluminum, brass, bronze

Handrail Material
stainless steel, aluminum, brass, bronze

Cap Rail Material
stainless steel, aluminum, brass, bronze, wood

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output – 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
adjustable bracket, inline cap, tempered glass, laminated glass, etching, embed, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize
Dual Glass Panel Retainer Design

Model Name: STRIA

This dual retainer design is used with in line glass infill panels .375” or .500 thickness. The button mounts are attached to the center of the posts and offset, creating a center mounted glass infill. It is available for illuminated, additional edge illumination, and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs. Glass can be etched with a company logo as well.

Application
Free Standing

Post Material
stainless steel, aluminum, brass, bronze

Handrail Material
stainless steel, aluminum, brass, bronze

Caprail Material
stainless steel, aluminum, brass, bronze, wood

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output - 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
adjustable bracket, inline cap, tempered glass, laminated glass, etching, embed, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize
Perforated Panel Design

Model Name: ZARIA

This design uses metal infill panels between posts. Hundreds of panel designs are available, from perforated metals to metal meshes and weaves. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs.

Application
Free Standing

Post Material
stainless steel, aluminum, brass, bronze

Handrail Material
stainless steel, aluminum, brass, bronze

Cap Rail Material
stainless steel, aluminum, brass, bronze, wood

Options
- illuminated LEDRail, non-illuminated handrail
- Available LED Colors: Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB
- Lighting Levels: Medium Output – 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request
- Mounting Options: adjustable bracket, inline cap, embed, fascia mount
- Finish: #4, #6, #8 mirror polish, powder coat, anodize

www.ETI-S3.com
Efficient-Tec International, LLC
Stainless Steel Systems

Cable Through Post Design

Model Name: HELIA

This is the classic standard of a through-the-post cabling system incorporating a discreetly located cable tensioner inside the end posts. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs.

Application
Free Standing

Post Material
stainless steel, aluminum

Handrail Material
stainless steel, aluminum, brass, bronze

Cap Rail Material
stainless steel, aluminum, brass, bronze, wood

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output – 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
adjustable bracket, inline cap, embed, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize

www.ETI-S3.com
Offset Cable Design

Model Name: ENCIA

This popular model puts a twist on the standard cabling system by offsetting the cable to the posts by using individual holders at each post for each cable. This is a very modern and technical design with surface mounted machined hardware. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs.

Application
Free Standing

Post Material
stainless steel, aluminum

Handrail Material
stainless steel, aluminum, brass, bronze

Cap Rail Material
stainless steel, aluminum, brass, bronze, wood

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output – 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
adjustable bracket, inline cap, embed, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize

www.ETI-S3.com
Vertical Inline Picket Design

Model Name: MARIDA

This design incorporates multiple vertical rods as the infill between posts, creating the classic picket appearance. Infill is available in 3/8” to 9/16” thickness, and in solid or hollow material. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs.

Application
Free Standing

Post Material
stainless steel, aluminum, brass, bronze

Handrail Material
stainless steel, aluminum, brass, bronze

Cap Rail Material
stainless steel, aluminum, brass, bronze, wood

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output – 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
adjustable bracket, inline cap, embed, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize

www.ETI-S3.com
Continuous Rod Glass Retainer Design

Model Name: **YOSHI**

This extremely unique design incorporates the standard dual glass retainer with dual continuous horizontal rods the length of a span. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs. Glass can be etched with a company logo as well.

**Application**
Free Standing

**Post Material**
stainless steel, aluminum, brass, bronze

**Handrail Material**
stainless steel, aluminum, brass, bronze

**Cap Rail Material**
stainless steel, aluminum, brass, bronze, wood

**Options**
- Illuminated LEDRail, curved or spiral, non-illuminated handrail
- Available LED Colors
  - Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB
- Lighting Levels
  - Medium Output – 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request
- Mounting Options
  - adjustable bracket, inline cap, tempered glass, laminated glass, etching, embed, fascia mount
- Finish
  - #4, #6, #8 mirror polish, powder coat, anodize

![Diagram of Continuous Rod Glass Retainer Design](https://via.placeholder.com/150)

[www.ETI-S3.com](http://www.ETI-S3.com)
### Glass Clamp Two Line Rod Design

**Model Name:** MIYOKO

As one of Efficient-Tec’s most unique designs, this combines the classic glass clamp along with a double horizontal rod top infill. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs. Glass can be etched with a company logo as well.

**Application**
- Free Standing

**Post Material**
- stainless steel, aluminum, brass, bronze

**Handrail Material**
- stainless steel, aluminum, brass, bronze

**Cap Rail Material**
- stainless steel, aluminum, brass, bronze, wood

**Options**
- illuminated LEDRail, curved or spiral, non-illuminated handrail

**Available LED Colors**
- Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

**Lighting Levels**
- Medium Output – 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

**Mounting Options**
- adjustable bracket, inline cap, tempered glass, laminated glass, etching, embed, fascia mount

**Finish**
- #4, #6, #8 mirror polish, powder coat, anodize

---

**Diagram:**

- [Diagram of glass clamp two line rod design]

---

**Website:** [www.ETI-S3.com](http://www.ETI-S3.com)

**Page:** pg. 39
Double Flat Bar Button Design

Model Name: AYAKI

This unique design employs a double flat bar post and button mounts for the glass infill panels in .375" or .500" thickness. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs. Glass can be etched with a company logo as well.

Application
Free Standing

Post Material
stainless steel, aluminum

Handrail Material
stainless steel, aluminum, brass, bronze

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output – 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
inline cap, Angle Cap, Offset Cap, tempered glass, laminated glass, etching, embed, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize

www.ETI-S3.com
Double Flat Bar Glass Clamp Design

Model Name: ANGELITA

This model uses the classic glass clamp system along with the hi-tech look of a double flat bar design to hold the glass infill panels in .375” or .500” thickness. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs.

Application
Free Standing

Post Material
stainless steel, aluminum

Handrail Material
stainless steel, aluminum, brass, bronze

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output - 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
inline cap, angle cap, offset cap, tempered glass, laminated glass, etching, embed, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize
This double flat bar horizontal rail application is accented by multiple horizontal solid rods as the infill between posts. It is available for illuminated and non-illuminated applications. Handrail can be offset horizontally or at an angle. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs.

Application
Free Standing.

Post Material
stainless steel, aluminum

Handrail Material
stainless steel, aluminum, brass, bronze

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output - 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
inline cap, angle cap, offset cap, tempered glass, embed, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize
Double Flat bar Inline Retainer Design

www.ETI-S3.com

proudly made in the USA
Double Flat bar Inline Retainer Design

Model Name: CARIENNE

This model uses the inline retainer glass button system along with the hi-tech look of a double flat bar design to hold the glass infill panels in .375" or .500" thickness. It also comes with the option of an offset handrail, top or side mount, and either horizontally or at an angle. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs. Glass can be etched with a company logo as well.

Application
Free Standing

Post Material
stainless steel, aluminum

Handrail Material
stainless steel, aluminum, brass, bronze

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output - 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
inline cap, angle cap, offset cap, tempered glass, laminated glass, etching, embed, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize
Efficient-Tec International, LLC
Stainless Steel Systems

Structural Glass Rail Design

Model Name: SOPHELLE

Structural glass is all the rage, and this system is the most unique on the market. It is available for illuminated and non-illuminated applications. Fascia, surface, and embed are available for mounting options. Optional handrail can be used. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs. Glass can be etched with a company logo as well. When incorporating etched glass logos and bottom lighting, nothing is as spectacular to the eye as this system.

Application
Free Standing

Post Material
stainless steel, aluminum, brass, bronze

Handrail Material
stainless steel, aluminum, brass, bronze

Cap Rail Material
stainless steel, aluminum, brass, bronze, wood

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output – 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
adjustable bracket, tempered glass, laminated glass, etching, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize
Single Flat Bar Inline Retainer Design

www.ETI-S3.com

proudly made in the USA
Single Flat Bar Inline Retainer Design

Model Name: CELIA

This model uses the inline retainer glass button system along with the slim look of a single flat bar design to hold the glass infill panels in .375” or .500” thickness. It also comes with the option of an offset handrail, top or side mount, and either horizontally or at an angle. It is available for illuminated and non-illuminated applications. A variety of mounting options can be used, including embed, fascia, and base plates. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs. Glass can be etched with a company logo as well.

Application
Free Standing

Post Material
stainless steel, aluminum

Handrail Material
stainless steel, aluminum, brass, bronze

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output - 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
inline cap, angle cap, offset cap, tempered glass, laminated glass, etching, embed, fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize
Efficient-Tec International, LLC
Stainless Steel Systems

Boss Mount Rail Design

Model Name: BOSS RAIL

The most effective way to mount structural glass to a stair stringer is the BOSS Rail system. Mounting buttons come in a variety of sizes for any thickness of glass. Optional glass mount handrail is available for this model. It is available for illuminated and non-illuminated applications for the optional handrail. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. A number of finishes can be accommodated to fit the style of your needs. Glass can be etched with a company logo as well.

Application

Boss Mount

Handrail Material

stainless steel, aluminum, brass, bronze

Cap Rail Material

stainless steel, aluminum, brass, bronze, wood

Options

illuminated LEDRail, curved or spiral, non-illuminated handrail

Available LED Colors

Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels

Medium Output - 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options

adjustable bracket, inline cap, tempered glass, laminated glass, etching, fascia mount

Finish

#4, #6, #8 mirror polish, powder coat, anodize

www.ETI-S3.com
Heavy Duty Double Flat Bar Design

Model Name: HERCULES

Specifically designed for heavy duty applications, the Hercules is a marvel. Incorporating 2.5” x .500” thick double flat bars, along with all welded joints, and oversized cap rail, make this the absolute titan of the industry. Infill is .250”-.500” braided stainless steel cabling with swaged tensioning ends. It is available for illuminated and non-illuminated applications. Embed mounting is advised. This design comes in stainless steel alloys 304 and 316 with a #4 or #6 finish.

Application
Wall Mount, Free Standing.

Post Material
stainless steel

Handrail Material
stainless steel, aluminum, brass, bronze

Cap Rail Material
stainless steel, aluminum, brass, bronze, wood

Options
illuminated LEDRail, curved or spiral, non-illuminated handrail, standard bracket

Available LED Colors
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

Lighting Levels
Medium Output - 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

Mounting Options
inline cap, embed

Finish
#4, #6, #8 mirror polish, powder coat
Efficient-Tec International, LLC
Stainless Steel Systems

Custom Length Illuminated Closet Rails

Model Name: WARDROBE RADIANCE

This latest trend in architectural and interior design is the perfect answer for the distinguished wardrobe. Control can be done by a jamb switch on any closet door, a touchpad, or occupancy sensor. This aluminum rail design features both up-lighting and down-lighting to illuminate the entire closet. A choice of finishes and details can be accommodated to fit the style of choice. High output LEDs emit over 300 lumens per foot at only 4.4 watts. 24V power supply and wall-mounting hardware are included.

Application
Wall Mount

Options

LED Illumination
Up-lighting, down-lighting, or both
Warm white 3100°K, daylight 4100°K, red, blue, green, yellow and RGB
High and medium output

Finish
Powder coat or anodize

Accents
Wood grain or color inserts

Specifications
24VDC
dimmable
329 lumens per foot (warm white)
4.4 watt per/ft consumption
color: white

www.ETI-S3.com
Custom Glass Canopies

Model Name:  GLASS CANOPIES

Efficient-Tec International is a leader in design, engineering, and manufacturing of glass canopy systems. They are available in stainless steel alloys 304 and 316, as well as aluminum, brass, and bronze. A number of finishes can be accommodated to fit the style of your needs. Glass is available in a number of sizes and can be etched as requested. Send us your specification, and we will design a custom application for you.

Application
Wall Mount

Options

Mounting Options
fascia mount

Finish
#4, #6, #8 mirror polish, powder coat, anodize
New to the marketplace is Custom Post Lighting by Efficient-Tec. These posts are a perfect way to illuminate any walkway with a guard rail or hand rail. The posts come in many designs, including vertical and horizontal louvers. Illumination is available in any color. This design comes in stainless steel alloy 316 standard, as well as aluminum, brass, bronze and stainless steel alloy 304. Custom styles and configurations available.

**Model Name:** Post Lighting

**Application**
Free Standing

**Post Material**
stainless steel, aluminum, brass, bronze

**Options**

**Available LED Colors**
Warm White 2700K, Warm White 3100K, Natural White 4100K, Cool White 6300K, Amber, Red, Blue, Green, Yellow and RGB

**Lighting Levels**
Medium Output - 120 lumens per foot, High Output – 200 lumens per foot and special output levels available on request

**Mounting Options**
embed, fascia

**Finish**
#4, #6, #8 mirror polish, powder coat, anodize

---

**www.ETI-S3.com**
ETI manufactures its handrail in its Dallas TX facility. Our operation can facilitate all of customers needs. Project management, engineers, cad designers, electrical techs, welders and finishers are all on hand to ensure the quality of the product. Our handrail systems are shipped as complete as possible assuring the easiest possible installation. The possibilities for our handrail solutions are almost limitless, we strive to exceed the expectations of our demanding clientele.
Flow Drilling and Flow Tapping

When the flow drill comes into contact with the material using high axial pressure and rotational speed, the heat generated by friction makes the material malleable enough to be formed and perforated.

The flow drill pushes into the heated surface wall. The displaced material forms a collar around the surface of the tubing exterior. The remaining material forms a cone inside the tubing. The flow drill process takes no longer to drill than a normal hole.

The resulting collar and cone can be up to three times the original material thickness. The diameter of the cone is precisely determined by the diameter of the flow drill tool. The process does not weaken the tubings internal structure.

The resulting cone is uncommonly strong and when flow tapped can provide high torque threaded surfaces with extremely high pull out strength characteristics. Once tubing is locked into place, it can be flowed and tapped without extra setup.

Flow drilling creates a bushing in thin walled materials that can serve as a bearing sleeve for inserted parts. The cone shaped bushing can be tapped immediately after the bush is created with our post repositioning clamp. This process called flow tapping produces a tapped surface up to three times thicker than the original tubing wall.

S3 flow drilling can provide thin walled handrail tubing with a secure threaded anchoring point. This is ideal for posts and handrail when attaching handrail supports, glass clamps, rod and cable holders.
Offer and Acceptance: Purchaser has offered to purchase from Efficient-Tec International, LLC, (“Seller”) certain lighting products (“Goods”). Seller’s acceptance of this offer is expressly conditioned upon Purchaser’s consent to the terms and conditions set forth herein. If terms are submitted in response to a purchase order or other written or oral offer of the Purchaser to purchase the Goods, to the extent that there are any material differences or additions in the terms contained in the Purchaser’s offer, the terms listed herein shall be considered a counteroffer to sell the Goods to Purchaser under the terms and conditions herein contained. This Acknowledgment supersedes all previous quotations and agreements relating to the Goods. Purchaser’s offer, Seller’s counteroffer (if any), and any acceptance thereof shall be governed by the laws of the State of Texas. Any action, suit, or other legal proceeding which is commenced to resolve any matter arising under or relating to any provision of this agreement shall be commenced and prosecuted only in a court located in Dallas County, Texas, and Buyer consents to the jurisdiction of such a court.

Delivery and Title: Except as may be otherwise specified by Seller, delivery will be FOB point of shipment. All shipping dates are estimated and under no circumstances does Seller guarantee date of shipment. Seller shall not be liable for any delay resulting from force majeure, delays occasioned by any subcontractors, acts of God, acts of governmental or military authorities, labor difficulties or any other circumstances beyond Seller’s control which shall prevent Seller from performing in the normal and usual course of its business.

Risk of loss and title to all goods furnished by Seller shall pass directly to Buyer at the FOB point of shipment.

Warranties: There are no express warranties hereunder, except that all goods shall be furnished in accordance with the description and specifications furnished by Seller subject to the standard manufacturing variations and practices of Seller. All implied warranties (including, but not by way of limitation, implied warranties of merchantability and fitness) are hereby excluded. Any outstanding invoice balances beyond the company’s payment terms will void all warranties. Any warranty shall expire twelve (12) months following the date of shipment of such products or parts to the purchaser. All warranty rights are valid to the original purchaser of the products or parts. All warranties are nontransferable to a third party.

CERTIFICATION OF INSTALLATION: After site installation of Efficient-Tec International Stainless Steel Systems is completed by the installation contractor, an authorized factory representative is required to certify the installation prior to the warranty becoming effective. The certification process includes inspection of the completed installation for the quality of mounting points, field splices, electrical connections, and overall appearance. Efficient-Tec International reserves the right to require additional work be performed by the installation contractor if the installation is deemed to be less than the quality needed for certification. In the event the quality of the installation is not brought up to the necessary standard for certification, the warranty shall be declared null and void.

Buyer’s Remedies: Claims respecting the condition of Goods or their non-compliance with specifications must be made by Buyer promptly after receipt of such Goods, and Seller must be given reasonable opportunity to investigate. Buyer shall set aside and hold such Goods, without further processing or installation, until Seller advises Buyer regarding the disposition to be made of it, which advice Seller hereby agrees to furnish within a reasonable time. Any transportation charges involved in such disposition shall be borne by Buyer. Seller’s liability for any breach of warranty with respect to goods shall be limited to replacement or repair of non-conforming goods, or, at Seller’s option, credit of the purchase price thereof. In no event shall Seller be liable for any consequential damages or claims for labor, processing or installation by reason of any such breach or warranty. Buyer shall have no right to “cover” by procuring substitute goods at the cost or expense of Seller. Purchaser further agrees to indemnify and hold Seller harmless from and against all losses, damages, obligations, liabilities, suits and causes of action arising from any breach of warranty under this section.

Any action for breach of this agreement arising out of the sale of Goods must be commenced within one year after the cause of action has accrued, or shall thereafter be forever barred.

Prices: Prices are those in effect at the time of shipment. In the event of a published increase or reduction in prices by Seller, the new price will become effective immediately on the unshipped portion of the order at the time of change. In no event, however, will a reduction in price be retroactive to shipments made prior to the date of the price change. Upon acceptance by Seller, Purchaser’s order will not therefor be subject to cancellation nor to deferral of deliveries without Seller’s written consent.

Taxes: Purchaser shall reimburse Seller for any sales, use, occupation, excise, or other tax arising out of sales of products or services to the purchaser upon receipt of Seller’s invoice for the amount of the tax. At the option of the Company, Purchaser shall provide Seller with a tax exemption certificate acceptable to the appropriate taxing authorities.

Terms of Payment: Payment terms are 30% payment due immediately with the seller’s submission of approval drawings. Another 30% will be due to seller immediately upon the purchase of material for the job. A final 30% will be due prior to delivery of material to the job site. The last 10% will be due within 15 days of final delivery. In the event of late payments or Seller’s insecurity with respect to Buyer’s credit standing, Seller in its sole discretion, may change its credit terms, terminate its obligations hereunder and/or requirement in advance of delivery. Pro rata payments shall be due as invoiced.

Technical Advice: It is expressly understood that any technical advice furnished by Seller with respect to the use of its goods or services is given without charge and that Seller assumes no obligation or liability for advice given or results obtained, all such advice being given and accepted at Buyer’s risk.

Cancellation or Revisions: Any order may be canceled or revised by Buyer only upon written approval of Seller in its sole discretion, and upon payment of cancellation or revision charges specified in said approval which shall take into account expenses previously incurred, commitments made by or in reliance upon such order, whether or not such commitments are legally binding on Seller and any other factors considered relevant by Seller.

Limitation on Liabilities: The sole and exclusive remedies of the Purchaser shall be those specifically set forth above. Seller’s maximum liability for any and all claims arising directly or indirectly from the performance of its obligations hereunder, whether resulting from Seller’s negligence or otherwise, shall not in the aggregate exceed the purchase price of the Goods. Under no circumstances shall Seller be liable to the purchaser or any third party for loss of business or profit or any other economic loss, or any incidental, special, consequential damages.

Litigation: If Seller prevails in a lawsuit or other action arising out of or related to this sale, the purchased products or services, this agreement, or breach of this agreement, Seller will be entitled to recover its reasonable attorney’s fees and costs of suit. Costs include fees for consultations and testimony from experts such as appraisers and engineers. If Seller is required to initiate or defend against litigation with a third party because of the violation by Purchaser of any term or provision of this agreement, or obligation of Purchaser, Seller will be entitled to recover reasonable attorneys fees and costs from Purchaser. Attorney’s fees will include those incurred on appeal.

Non-waiver by Seller: Waiver by Seller of a breach of any of the terms and conditions of any contract shall not be construed as a waiver of any other breach.

standard terms and conditions of sale for Stainless Steel Systems

pg. 66
Terms and Conditions
www.ETI-S3.com
proudly made in the USA