

2019  
Modular Aluminum  
Guardrail & Warning  
Line Systems

# KATTSAFE



# KATTSAFE modular aluminum guardrail systems provide permanent fall protection around various fall hazards.

## **Modular System**

KATTSAFE modular guardrail system components are fabricated in modular sections. This allows for construction of endless guardrail configurations to suit specific site requirements. Components are robotically welded for a precision perfect finish.

## **Minimum Lead Time**

KATTSAFE modular components are kept in stock, ready to ship. The components for your guardrail kits are packaged together, and can typically be dispatched within 1-2 days or as required.

## **Easy Delivery**

The lightweight components are delivered as a flatpack kit, which ensures easier handling and significant savings on freight costs. Depending on the size of the guardrail system, the components can be possibly man handled to the required location or crane lifted once at destination.

## **On Site Assembly**

Each guardrail system is provided with necessary hardware. Wall attachment hardware (if applicable) is also available on request. With the fact that the systems are aluminum, rails and posts can be easily cut on-site if required with basic tools to suit exact site requirements.

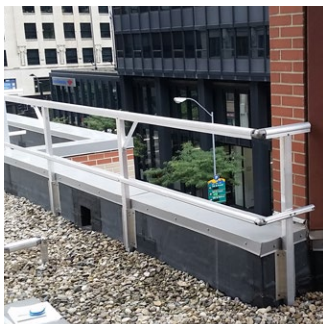
## **Appearance**

Continuous top and mid rail design results in clean aesthetics. KATTSAFE Guardrail Systems typically blend in with the building and can be custom colored if required.

## **OSHA Compliant**

KATTSAFE products and systems are designed and manufactured to meet and exceed OSHA and ANSI regulations as applicable.

## **KATTSAFE Guardrail Series**



**GR31**  
Internal Wall Mount  
Guardrail



**GR32**  
Metal Roof Mount Guardrail



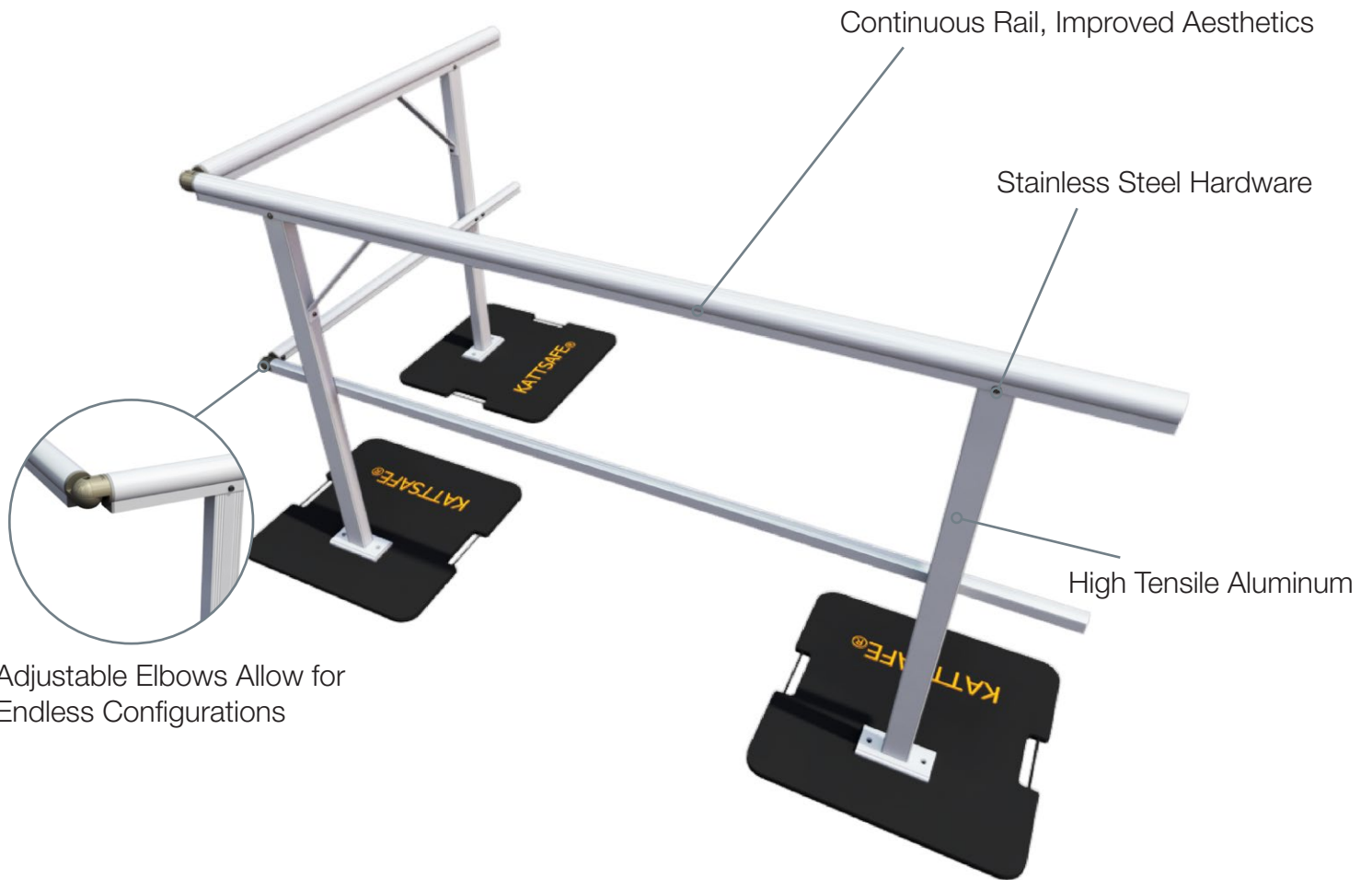
**GR33**  
External Wall Mount  
Guardrail



**GR34**  
Non-Penetrating Guardrail



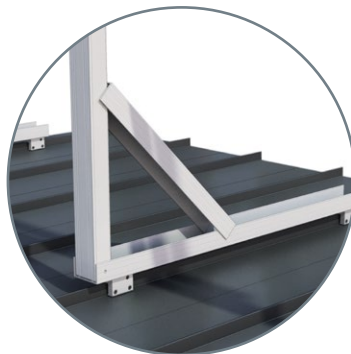
# KATTSAFE Principle



## Base Option



GR31/33



GR32



GR34

## Internal Wall Mount Guardrail

# KATTSAFE GR31



The **KATTSAFE GR31** Internal Wall Mount Guardrail provides the highest level of passive safety for internal wall mounted applications. **KATTSAFE GR31** posts are positioned a maximum of 8ft on center. This system is sold in kit form to ensure all components are included for a seamless installation. Roof guardrail systems can be purchased by simply selecting the kit length(s) required, the number of corner kits, wall termination kits and ladder connection hardware kits. **KATTSAFE GR31** guardrail is simple and quick to install. This system can be easily customized on-site to suit specific site requirements.

## Applications

- Fall protection around roof perimeter
- Protection around rooftop equipment and machinery, and other unprotected fall edges

## Features

- Manufactured of high tensile aluminum
- Modular system facilitates infinite configurations
- Can be easily customized on site to suit application
- Lightweight for easy handling
- OSHA compliant
- Supplied in mill finish as standard. Custom colors available. Increased price and lead time for custom colors

MILL

YELLOW

BRONZE

BLACK

ALMOND

— IN STOCK —

# Metal Roof Mount Guardrail

## KATTSAFE GR32



➤ The **KATTSAFE GR32** Metal Roof Mount Guardrail is designed for metal roofs including R panel and standing seam systems. The **KATTSAFE GR32** system can either be fastened down with self-sealing rivets to the metal deck or with non-penetrating clamps to suit the standing seam profile.

### Applications

- Fall protection around roof perimeter
- Protection around rooftop equipment and machinery, and other unprotected fall edges

### Features

- Manufactured of high tensile aluminum
- Modular system facilitates infinite configurations
- Toe-board option available
- Can be easily customized on site to suit application
- Lightweight for easy handling
- OSHA compliant
- Supplied in mill finish as standard. Custom colors available. Increased price and lead time for custom colors

MILL

YELLOW

BRONZE

BLACK

ALMOND

— IN STOCK —

## External Wall Mount Guardrail

# KATTSAFE GR33



➤ The **KATTSAFE GR33** External Wall Mount Guardrail provides the highest level of passive safety for external wall mounted applications. **KATTSAFE GR33** posts are positioned a maximum of 8ft on center. This system is sold in kit form to ensure all components are included for a seamless installation. Roof guardrail systems can be purchased by simply selecting the kit length(s) required, number of corner kits, wall termination kits, and ladder connection hardware kits. **KATTSAFE GR33** guardrail is simple and quick to install. This system can be easily customized on-site to suit specific site requirements.

### Applications

- Fall protection around roof perimeter
- Protection around rooftop equipment and machinery, and other unprotected fall edges

### Features

- Manufactured of high tensile aluminum
- Modular system facilitates infinite configurations
- Toe-board option available
- Can be easily customized on site to suit application
- Lightweight for easy handling
- OSHA compliant
- Supplied in mill finish as standard. Custom colors available. Increased price and lead time for custom colors

MILL

YELLOW

BRONZE

BLACK


ALMOND

IN STOCK

# Non-Penetrating Guardrail

## KATTSAFE GR34



 The **KATTSAFE GR34** Non-Penetrating Guardrail system provides the highest level of passive safety for membrane and built up roof systems. The **KATTSAFE GR34** guardrail features a plastic coated steel weighted base that sits on top of the roofing membrane resulting in a completely freestanding system that is OSHA compliant. **KATTSAFE GR34** bases and posts are positioned a maximum 10 ft on center. This system is sold in kit form to ensure all components are included for seamless installation. Roof guardrail systems can be purchased by simply selecting the kit length(s) required, the number of corner kits, return kits, wall termination kits and ladder connection hardware kits. **KATTSAFE GR34** guardrail is simple and quick to install. This system can be easily customized on-site to suit specific site requirements.

### Applications

- Fall protection around roof perimeter
- Protection around rooftop equipment and machinery, and other unprotected fall edges

### Features

- Manufactured of high tensile aluminum (except weighted base)
- Modular system facilitates infinite configurations
- Toe-board option available
- Can be easily customized on site to suit application
- Lightweight for easy handling
- OSHA compliant
- Supplied in mill finish as standard. Custom colors available. Increased price and lead time for custom colors

MILL

YELLOW

BRONZE

BLACK

ALMOND

— IN STOCK

## Metal Roof Warning Line

# KATTSAFE WL31



■ The **KATTSAFE WL31** Metal Roof Warning Line provides high visual warning of a fall hazard on metal roof systems. The aluminum posts are positioned every 25 to 30 feet and connected with plastic coated galvanized aircraft cable with aluminum danger pennants every 6 feet. For r-panel and standing seam roofs, we offer an aluminum base that spans multiple roof profiles and can either be fastened down with self-sealing rivets, or clamped with non-penetrating seam clamps. Both mounting types offer the same OSHA compliance and high visual awareness to ensure people are kept a safe distance from fall hazards.

### Applications

- Visual warning line around roof perimeter
- Visual warning line around rooftop equipment, machinery and other unprotected fall edges


### Features

- Can be customized on-site to meet the required application
- Can be combined with KATTSAFE guardrail systems to create an OSHA compliant roof
- OSHA compliant
- Posts supplied yellow as standard for increased visibility



# Non-Penetrating Warning Line KATTSAFE WL32



 The **KATTSAFE WL32** Non-Penetrating Warning Line provides high visual warning of a fall hazard on membrane and built-up roofs. The aluminum posts are positioned every 25 to 30 feet and connected with plastic coated galvanized aircraft cable with aluminum danger pennants every 6 feet. Our **KATTSAFE WL32** Non-Penetrating Warning Line for membrane and built-up roofs, features a plastic coated steel weighted base that is completely non-penetrating and sits on top of the roofing membrane. **KATTSAFE WL32** provides OSHA compliance and high visual awareness to ensure people are kept a safe distance from fall hazards.

## Applications

- Visual warning line around roof perimeter
- Visual warning line around rooftop equipment, machinery and other unprotected fall edges

## Features

- Can be customized on-site to meet the required application
- Can be combined with KATTSAFE guardrail systems to create an OSHA compliant roof
- OSHA compliant
- Posts supplied yellow as standard for increased visibility

GRKIT

# Guardrail Installation Kit



## Installation Kit Includes

- Installation Manual
- 5/16" Nutsetter
- File
- GW386 Mid-Rail Installation Bracket Pair
- Base Handles (For Guardrail with GR34 Base)
- Spare Parts

# Leading Edge Safety



## Risk Area 1 - Red Zone

Risk area 1 accounts for the 6 feet closest to the leading edge and therefore the most dangerous area on a rooftop. When a person is working in this area, OSHA requires conventional fall protection. Depending on the application, KATTSAFE Guardrail Systems provide passive protection.

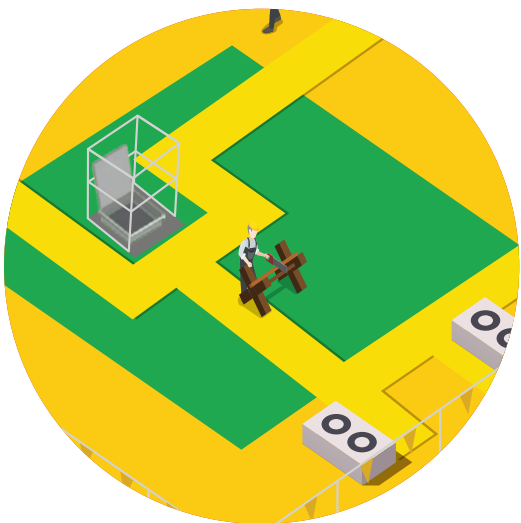
## Orange Zone - Risk Area 2

Risk area 2 covers the area 6 feet to 15 feet from the leading edge. Danger remains high due to the proximity to the roof edge. If the work is “infrequent and temporary,” OSHA compliance can be achieved by creating a designated area using KATTSAFE Warning Line Systems.



## Risk Area 3 - Green Zone

Risk area 3 is the least dangerous, but still requires safety measures to ensure worker safety. Starting 15 feet or more from the leading edge, clear work rules need to be set for all persons who will access the roof. If the work is “infrequent and temporary,” fall protection isn’t required. Otherwise, similar options to Risk Area 2 would be sufficient.



# KATTSAFE Specifications

## MATERIAL

*Post assembly and rails* - Profiled high tensile 6106-T6 aluminum. Mill finish as standard.

*End caps and elbows* - Die cast aluminum.

*Weighted base* - Steel plate with plastic coating. Weight 96lbs.

*Hardware* - All hardware is stainless steel.

*Warning Line Flags* - Aluminum, stamped with 'DANGER'.

## DIMENSIONS

*Top rail* - Aluminum 6106-T6 2" round handrail mounted in accordance with standards. Optimum is 42in above the walking surface.

*Mid rail* - Aluminum 6106-T6 1-5/8" round kneerail tube mounted in accordance with standards. Distance between top rail/mid rail and mid rail/walking surface cannot exceed 19".

*Post* - Aluminum 6106-T6 2-1/4" x 1-1/2" x 1/8" tube.

*Toe-Board* - Aluminum 6005-T5 4.25" x 1" x 3/32" channel.

*Weighted Base* - 23" x 23" x 5/8" plastic coated steel base.

## COMPLIANCE

The KATTSAFE modular guardrails and warning line systems are designed and manufactured to meet and exceed OSHA and ANSI regulations.

## LAYOUT AND INSTALLATION

A 90 degree return kit is required at the start and stop of any GR34 freestanding guardrail system regardless of length. This is typically 5ft in length. This geometry ensures the system meets the loads required. With warning line systems, Fixfast recommend an additional post/base approximately 15' from any start, stop or corner. Spacing can then be increased accordingly whilst ensuring compliance is maintained.

## POST SPACING

- *KATTSAFE GR31* - 8ft o.c. maximum
- *KATTSAFE GR32* - 8ft o.c. maximum
- *KATTSAFE GR33* - 8 ft oc. maximum
- *KATTSAFE GR34* - 10ft o.c. maximum
- *KATTSAFE WL31* - 25 - 30ft o.c. maximum\*
- *KATTSAFE WL32* - 25 - 30ft o.c. maximum\*

## PRODUCT WARRANTY

10 years from date of installation, subject to correct installation, use and maintenance in accordance with manufacturer's specifications and recommendations with the exception of the weighted bases which have a warranty of 2 years.

\*Post spacing can be adjusted as required, however the cable must not sag less than 34inches as per OSHA 1910.29



## Guardrail Systems

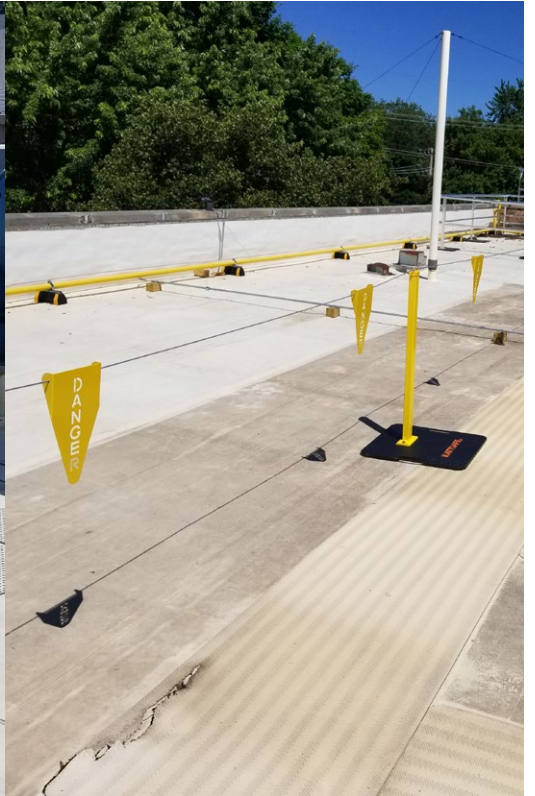
## OSHA Compliance Checklist

Guardrail Loads	Height	Max Opening Distance
<p><b>OSHA 1910.29(b)(3)</b> Guardrail systems are capable of withstanding, without failure, a force of at least 200 lbs (890N) applied in a downward direction within 2 inches (5 cm) of the top edge, at any point along the top rail.</p> <p><b>OSHA 1910.29(b)(4)</b> When the 200 lb test load is applied in a downward direction, the top rail of the guardrail system must not deflect to a height of less than 39 inches (99 cm) above the walking-working surface.</p> <p><b>OSHA 1910.29(b)(5)</b> Midrails, screens, mesh, intermediate vertical members, solid panels, and other equivalent intermediate members are capable of withstanding, without failure, a force of at least 150 lbs (667N) applied in any downward or outward direction at any point along the intermediate member.</p>	<p><b>OSHA 1910.29(b)(1)</b> The top edge height of top rails, or equivalent guardrail system members, are 42 inches (107 cm), plus or minus 3 inches (8 cm), above the walking-working surface.</p>	<p><b>OSHA 1910.29(b)(2)(iv)</b> Other equivalent intermediate members (such as additional midrails and architectural panels) are installed so that the openings are not more than 19 inches (48 cm) wide.</p>

## Warning Line Systems

Loads	Height	Visibility
<p><b>OSHA 1910.29(d)(2)(i)</b> Has a minimum breaking strength or 200 lbs (0.89 kN).</p>	<p><b>OSHA 1910.29(d)(2)(ii)</b> Is installed so its lowest point, including sag, is not less than 34 inches (86 cm) and not more than 39 inches (99 cm) above the walking-working surface.</p>	<p><b>OSHA 1910.29(d)(2)(iv)</b> Is clearly visible from a distance of 25 feet (7.6 m) away, and anywhere within the designated area.</p>







## **KATTSAFE Enquiry**

Please contact us on the toll free number below to discuss your KATTSAFE requirements.

You can also visit our website to...

- View further information
- View and download brochures
- Request a quote

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