

ManSafe for Buildings



Applications:

Warehouses
Factories
Supermarkets
Metal Pitched Roofs
Flat Roofs
Walkways
Heritage Buildings
Prestige Buildings
Special Projects

Latchways

Latchways plc is the world leader in the design and manufacture of cable based fall arrest systems offering continuous protection to individuals working at height.

Our ManSafe® products are made using the highest quality components and meet or exceed all appropriate international standards. They are distributed and installed in many countries around the world including the USA, Canada, Australia and throughout Europe.

ManSafe for Buildings

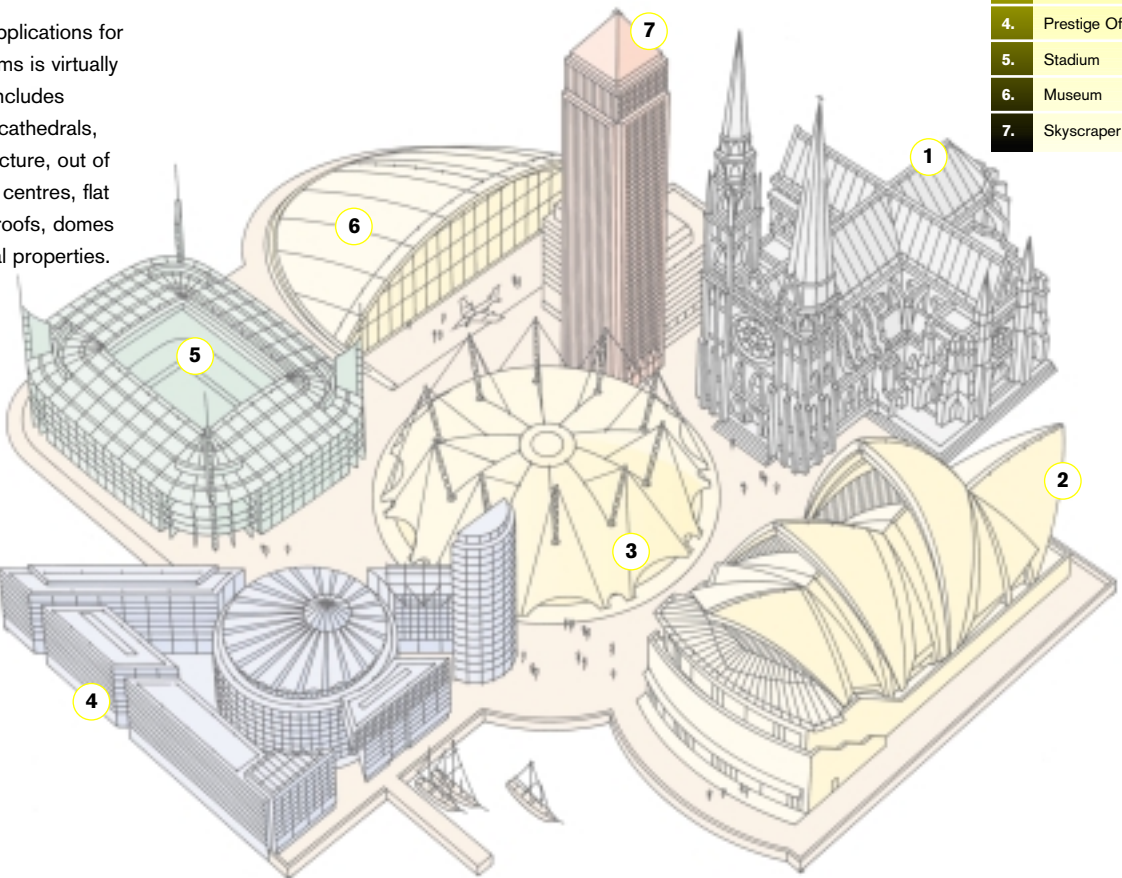
Latchways provides authoritative support to help architects and specifiers meet construction industry regulations making it mandatory for fall arrest systems to be considered in the design of new buildings.

We work closely with all our professional partners to assist in the specification of systems which provide safe access across building roofs, walkways and towers for needs as diverse as maintenance, window cleaning and security. Our systems are discreet so as not to affect the aesthetics of the project, and we can design individually tailored systems for innovative or unusual applications.

At the heart of a Latchways system lies the ManSafe range of fall arrest products. The range is inherently flexible and can be specified as a single cable system across a roof or, at the other extreme, a multi-faceted system following the contours of a major building complex. Key features of the ManSafe range include:

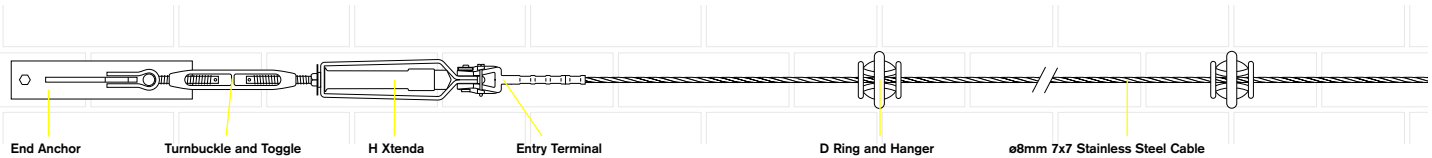
- Discreet and unobtrusive design and installation.
- Systems can go around corners, up inclines and accommodate horizontal and vertical sections.
- Can be retrofitted or included as part of a new build programme.
- Components are made from marine grade 316 stainless steel for durability.
- Choice of components for fixing to different types of roofs and structures.
- Unique Latchways Transfastener™ with patented starwheel design rotates freely through intermediate cable supports to enable hands free operation.
- Top fixing brackets available for built-up on site, standing seam and composite roofs.
- Patented shock absorber to limit end loads.
- Latchways purpose written, Windows™ based modelling software simplifies and verifies system design, loads and deflections.

The range of applications for ManSafe systems is virtually unlimited and includes supermarkets, cathedrals, modern architecture, out of town shopping centres, flat roofs, pitched roofs, domes and commercial properties.

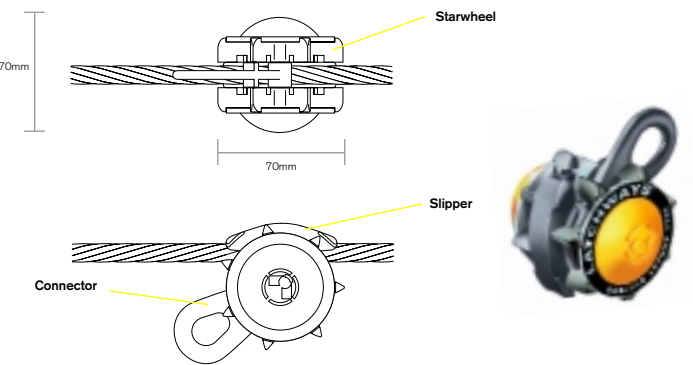


1.	Cathedral
2.	Opera House
3.	Entertainment Arena
4.	Prestige Offices
5.	Stadium
6.	Museum
7.	Skyscraper

End Anchor Configuration



Components



The Transfastener incorporates the patented Latchways starwheel design which rotates freely through the intermediate wire guides.

	Heavy Duty D Ring Used as an end anchor for systems fitted onto structural steel and concrete.		H Xtenda Shock absorber which limits end loads in the event of a fall.
	Turnbuckle and Toggle Provides method of tensioning the cable. Indicator disc shows when correct pre-tension is achieved.		Entry Terminal Used to provide entry onto and exit from the system when using a standard Transfastener.
	D Ring and Hanger Provides support for the cable. The Transfastener rotates freely over the hanger to ensure continuous protection.		Transfasteners Provides continuous attachment onto the system. Different Transfasteners are available depending on system application.

Configuration

ManSafe® systems are individually assembled from components especially designed to suit different types of buildings. As a result, each system retains the inherent Latchways qualities of simplicity of installation and ease of use whilst also having additional functionality to meet specific application and environmental criteria.

Horizontal and Inclined Systems

A wide range of components is available for fixing ManSafe systems to a variety of structures and building materials.

The system will provide continuous protection around bends, up inclines and can even accommodate vertical sections. The simplicity of the fixings allows unobtrusive installation on brick, masonry, steel, aluminium and wood.

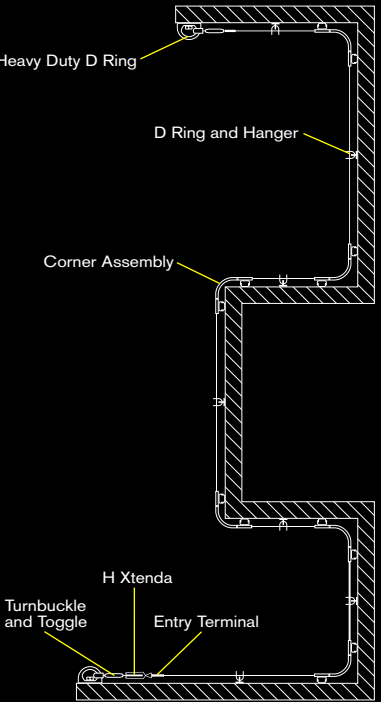
Tailored Solutions

Latchways has the expertise and flexibility to respond to individual project needs and design bespoke componentry to meet special requirements. In such situations one of our project managers will work with you to create a tailored fall arrest solution which satisfies your technical, safety and aesthetic criteria.

Transfastener

At the heart of the ManSafe system is the Latchways Transfastener™ which is based on a unique patented starwheel design. The Transfastener rotates freely through intermediate supports and cable guides to allow permanent attachment to the system. There are different Latchways Transfasteners available for specific applications:

- Standard or Removable Transfastener for horizontal applications.
- ClimbLatch™ Transfastener for inclined and vertical applications.
- HiLatch™ Transfastener to eliminate lateral swing on long lanyard systems such as in aircraft hangars and lorry or rail loading bays.
- Load carrying Transfastener can be used with fall arrest blocks up to 6kg.



Load Control

Load control is an essential element to consider in the design and installation of any horizontal cable based fall arrest system.

The capacity of a system depends of the strength of the structure, supports, components and cable, and how they all work together under stress.

The following steps must be taken before beginning the design process:

- Conduct a site survey to identify fixings, support materials and positions.
- Review work patterns to determine the number of users required to be on the system at any one time.
- Measure free fall distances to ensure worker safety on the system.

These parameters can then be entered into the Latchways modelling software which will calculate the loadings and verify the system design.

Cable pre-tension also plays a large part in system design because fall loads add to the tension. Latchways ManSafe systems include a tension indicator disk to ensure that the correct pre-tension is always achieved.

Latchways horizontal systems utilise $\varnothing 8\text{mm}$ 7x7 316 stainless steel cable because it assists in the control of end anchor loads. This is in addition to system shock absorbers which limit peak loadings in the event of a fall.



ManSafe is a registered trademark of Latchways plc.
Transfaster, HiLatch and ClimbLatch are trademarks of Latchways plc.
Windows is a trademark of the Microsoft Corporation.

Materials and Testing

During development, all products are subject to a range of tests to define their performance characteristics. These tests include static strength, corrosion, locking, conditioning and dynamic performance.

All system components undergo rigorous quality assurance procedures before leaving the factory:

- All critical cast components are made from 17/4 PH grade stainless steel, carry a unique serial number and are subject to 100% x-ray inspection and dye penetrant or magnetic particle analysis.
- All system bracketry and anchors are made from 316 marine grade stainless steel. All items are subject to 100% visual inspection and carry unique numbering to provide complete traceability.
- All bracketry, anchors and cast components are subject to batch conformance testing.

Latchways plc is a BS EN ISO 9002 certified company and a US Department of Defence approved contractor.

Latchways ManSafe systems are CE certified and meet all international safety standards including:

European Standard EN 795 1996
European Standard EN 353-1:1992
Australian Standard AS/NZS 1891.2
Canadian Standard CSA Z259.2
OSHA Standards including 1926.502 and 1915.159

Installation

ManSafe systems are professionally designed and installed by one of our international network of approved installers.

Ongoing advice and support is available from your local installer or from Latchways on +44 (0)1380 732700.

