



The Soft Landing System - There when you need it.





Saves time... saves money...

Introducing The Soft Landing System from Forest Safety

Forest Group's Soft Landing System comprises a series of robust yet lightweight bags filled with an energy absorbent material. In circumstances where the risk of a fall cannot be eliminated, these bags provide a more yielding surface, hence reducing the possibility of serious injuries.

Manufactured using 75% recycled materials, the bags are available in various sizes, providing a flexible solution whatever the customer's needs.

The bags are quickly and easily installed using a simple clip method, providing a closely interlocked surface to completely fill the available space. They can be installed by on-site labour after minimal training by site management, requiring no complicated installation equipment and no electrical power.

The bags need no maintenance, have a long life span and are virtually unaffected by weather conditions. Both the outer casing and internal material are treated with fire retardants but are not totally fire proof. The products are extremely light, each weighing less than 7 kilograms and well within the limits of the current HSE guidelines on lifting.





Saves lives!

Where to use the Soft Landing System

The Soft Landing System was originally designed to protect carpenters and bricklayers working inside a building during construction, where the bags will be enclosed by walls or partitions. The bags can be installed at ground floor level as soon as the first lift scaffold is installed, ensuring protection against falls. On first or subsequent floors, the system can be installed on the covered joists, protecting workers bricklaying or installing trusses.

Outside the housebuilding industry too there is significant interest in this range of products which have proved adaptable enough to provide protection across a wide range of applications where falls from height may occur.

Correct Installation

The Soft Landing System is installed by site staff trained and certificated by the Forest Group or their appointed agents. The installation is then checked and approved

by a designated person employed by the main contractor or developer. Each bag must be visually inspected to ensure there is no damage to the outer casing. The overall appearance of the bag should also be assessed to check that the energy absorbent material has not been crushed and any build-up of mortar or mud should be removed. The clips must also be inspected for damage to ensure they are fully operational. Wherever the bags are to be used, the area should be cleared of all rubbish and sharp objects and swept thoroughly to provide a clear surface.

The bags are very strong, but should not be walked upon unless absolutely necessary. Continual walking on the bags will eventually compress the energy-absorbing fill and reduce effectiveness.



Summary of Benefits

- quick and easy installation
- saves time
- low cost per plot
- HSE compliant
- lightweight
- maintenance free
- durable
- flexible
- virtually unaffected by weather conditions
- proven track record in reducing injuries
- adaptable for a variety of uses
- manufactured using 75% recycled materials

Examples of use

Ground Floor

Working from one corner, the bags are clipped together to form a complete unit. As each bag is installed it must be pushed firmly into the previous bags to minimise gaps in the surface. All clips except those on the perimeter bags must be used. Where the area of floor to be covered by the final row of bags is smaller than their length or width, they can be curved up the perimeter wall, thereby directing any falling body onto the prepared surface. The outer edge of the Soft Landing System should be protected from falling mortar by strips of polythene or alternatives.

First Floor

Once first floor joists are fixed and brickwork has commenced, the bags can be used for protection on the first floor. They can either be passed up through the stairwell opening or externally to the scaffold area via a forklift truck fitted with appropriate stillage. If using the forklift method, the stillage should be raised so that the bags can be pulled on to the scaffold over the platform's handrail and extra care should be taken in high winds.

At first floor level, we recommend that the bags are laid on 'Weather Deck' or similar weatherproof flooring or on temporary boarding. Stairwells must be adequately boarded to ensure a firm base as the bags will not span a stairwell without support. Use scaffold boards or similar directly on the joists at right angles to provide a safe working platform. When using 'Weather Deck' flooring, one suggested method is to fit temporary joists across the stairwell and board over completely, cutting out the stairwell once the roof construction is complete.

Once a safe working platform has been provided, the installation is the same as at ground floor level.

Multi-storey buildings

Dependent on the construction method, installation of the bags in multi-storey buildings follows the same basic procedures as above. Where risk assessment deems it necessary, further layers of bags can be added and larger size bags are available to ensure maximum protection is provided.

Falls are the single most common cause of deaths in Britain's workplaces.

During 2004/2005 falls from height accounted for 53 fatalities and around 3,800 major injuries such as broken bones and fractured skulls.

It's easy to see why the Health and Safety Executive has made reducing these numbers a priority.

The HSE Work at Height Regulations 2005 provides guidelines as to what employers need to do to comply. They have a duty to safeguard their employees by undertaking risk assessment to ensure work at height is properly planned, appropriately supervised and carried out in a safe manner. This includes the provision of appropriate equipment to minimise the distance and the consequences of a fall should one occur.

Established in 2000, the Forest Group was set up to provide solutions to the health and safety issues facing the building industry, and today is the UK's leading manufacturer of passive fall arrest systems for use in domestic house construction. All of the top UK housebuilders use Forest Group's Soft Landing System, designed to help them comply with the latest HSE regulations.



Validation

The Soft Landing System has been rigorously tested by the National Engineering Laboratory in accordance with British Standards Institute specification PAS 59 for 'Filled Collective Fall Arrest Systems'.

In addition, the Health & Safety Laboratory undertakes regular fire testing of the products.

Copies of all certificates can be provided upon request.



Training

The Forest Group insists that customer representatives attend a training course covering installation of the products. Attendees receive a certificate proving their competence, ensuring the products are used appropriately. On site, once the installation is complete, a designated person employed by the user should approve it. The Forest Group can provide relevant approval forms if required.



Delivery and availability

The Forest Group uses outside hauliers and can arrange delivery by either rigid or articulated vehicles depending on site access. The company manufactures a Soft Landing System stillage which holds 20 bags and is designed to fit a standard rough terrain forklift truck. Up to two stillages can be delivered with a full load of bags.

Soft Landing System products can be purchased direct or are available via reputable hire companies.



Here to help

The Forest Group welcomes feedback on its products. We encourage users to notify us with the details of any falls involving the Soft Landing System. We analyse this information and incorporate the findings into improving the design of future products to ensure we continue to meet the needs of our customers.

Contact details

For enquiries about the Soft Landing System and its applications please contact:



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Installation Guide



1) Clear debris from work area.



2) Load bags into work area and place in position.



3) Check clips are free of debris



4) Ensure bags are secured tightly together



5) Continue to assemble until the floor area is covered.



6) If "Foot Test" fails, add more bags



7) Completed installation should be checked by competent person

Method Statement

Where to use the Soft Landing System

The purpose of the system is to mitigate the effect of falls from height during construction by reducing the potential fall height and by providing an energy absorbing landing area. The Soft Landing System has been designed for use principally inside a building, where the bags will be enclosed by walls or partitions.

Checking Bags

Each bag must be visually inspected to ensure that there is no damage to the outer casing. The clips must be inspected for damage to ensure that they are fully operational. Any build-up of mortar or mud should be removed with a stiff hand brush. The overall appearance of the bag should be assessed to check if the energy absorbent material has not been crushed. The ID tag sewn into the seam of bags must be checked to ensure the "Inspection Due By" date has not been exceeded.

Installation at Ground Floor

The floor area should be cleared of all rubbish and sharp objects and swept out to provide a clear surface on which to install the bags. Working from one corner, clip the "Soft Bags" together to form a complete unit. As each bag is installed it must be pushed hard into the previous bags to ensure that a continuous mat is assembled. Ensure all clips except those on the perimeter are used. Where the area of floor to be covered by the final row of bags is smaller than the length or width of bag, simply allow the bag to curve up the perimeter wall. (This should direct a falling body onto the "Soft Landing System"). It is advisable to protect the perimeter of the SLS from falling mortar by means of strips of polythene, etc.

Checking Installation

Once the bags are installed the "Foot Test" should be carried out. This is a simple way to check that the bags have been correctly installed. If the bags have been correctly installed, you will be unable to push your foot in between the bags. (See installation guide). If the foot test fails, additional bags should be installed.

Installation at First Floor Joists.

Once first floor joists/flooring are fixed and brickwork has commenced, the bags can be used for protection on the first floor by passing them up through the stairwell opening. Alternatively a forklift truck fitted with our special stillage can be used to offer up the bags to the operatives standing on the scaffold. The stillage should be raised so that each layer of the bags can be pulled on to the scaffold over the handrail on to the scaffold platform. (Note:- The bags weigh under 7kg and are easily handled by one man, however extra care should be taken in strong winds.) At first floor, it is recommended that the bags are laid on "Weather Deck" or similar weatherproof flooring or on temporary boarding. However, if engineered "I beams" are used then weatherproof boarding should **always** be installed before using the bags. Particular care should be taken at stairwells which must be adequately boarded over to ensure that a firm base is in place for the bags. The bags will not span a stairwell without support. Use scaffold boards or similar, directly on the joists at right angles to the joists, to provide an adequate safe working platform for operatives to install the bags. An example of a suitable method when using weather deck flooring is to fit temporary joists across the stairwell and board over completely, cutting out the stairwell once the roof construction is complete. Once a safe working platform has been established the installation is the same as at ground floor.

Installation in Multi-Storey Buildings

Dependent on the construction method, installation of the bags follows the same basic procedures as above and is applicable where the fall potential is below 2.5 metres. If the fall potential exceeds 2.5 metres a further layer of bags will be required. (In addition to the Standard size bag, a Timber Frame bag is available where higher ceiling heights are encountered). **In all cases the fall potential must be assessed in line with current legislation.** It is essential that a safe working platform is in place for the operatives passing the bags from one floor to another. **The bags are extremely strong but like all equipment should be treated with care to ensure a long life.**

Storage / Handling

The Soft Landing System bags are very strong but should only be walked on where absolutely necessary. Continued compression will affect the efficiency of the energy-absorbing fill and thus reduce the active life expectancy of the bags. Bags can be stored outdoors, preferably raised above ground level.

The outer skin, inner bag and polystyrene fill are treated with flame retardant chemicals. However, the materials are not fireproof and will burn if exposed to sufficient heat and flame. It is, therefore, essential that bags are not exposed to these risks and kept secure from vandalism.

Installation Supervision

We recommend that only competent personnel should carry out installation of the Soft Landing System. Once the installation is complete a designated person employed by the main contractor/developer should approve it in accordance with their own Risk Assessment. Each company will have its own system for signing off the installation.

Reporting System

Where someone has fallen into the Soft Landing System the details of the fall should be reported to Forest Safety Products. This is so that we may analyse the data. This information may also be useful to improve the design of our system.

Disclaimer

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