

## **Ultra-Light Aluminium Grave Shoring System**



# SAFE USE MANUAL

#### MEETS ALL THE SAFETY REQUIREMENTS OF AS 4744.1-2000

## **INCLUDES OTHER CEMETERY PRODUCT DETAILS**

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## LITE GUARD CEMETERY SHIELD

The Lite Guard cemetery shield meets the safety requirements of AS 4744.1-2000 (Australian Standard), BSEN 1331.142 (British European Standard) and 29CFR Part 1926 OSHA Sup Part P (USA Standard). The shields are made from aluminium extrusions, specially extruded to Lite Industries Pty Ltd requirements.

The Lite Guard cemetery shield has been made to be robust in everyday use but was not designed to be abused or lifted incorrectly with a machine.

A complete trench shield system is made up of:

2400mm long x 600mm high panels (or sizes to suit requirements) 4 Legs (if required) Acrow steel adjustable spreader bars. Extension joiners Pins and clips.

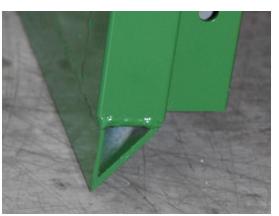
The Lite Guard panels weigh approximately 30 Kgs each. A fully assembled Lite Guard Grave Shoring unit 2400mm long x 2800mm high (3 high) including the spreader bars and without legs weighs 236Kg.

The base unit has built in cutting edges but there is also provision for legs in each corner, giving an additional working depth of 600mm below the base of the shield. The legs are for use in normal soil not prone to cave-ins. They are secured with pins and "R"clips. The pins are steel, 10 mm diameter x 90 mm long with mushroom heads, with a 5 mm dia. hole for the safety clip.

The additional panels, stack on top of the base unit using the extension joiners and secured with pins and clips. Stacking panels only require 2 spreader bars and panels can be stacked up to a depth of 3000mm.



Installation of the shields



**Cutting Edges** 

The standard spreader bars are steel, 600mm-900mm though there are different sizes to suit wider graves, up to 1800mm The spreader bars can be adjustable or a fixed length and are secured with pins and clips.



**Spreader Bar** 

If working in more stable ground where the grave depth can be achieved, you excavate to the depth required and then install the shield immediately after excavation. If stacking panels are used in this situation it may be possible to lower the panels already assembled into the grave.

**Assembly:** Install 2 legs (if required) in each of the base panels and secure with the pins & "R" clips supplied. Holding the panels approximately 600mm apart, install the 4 acrow spreader bars, again using the pins and clips supplied.







Once you've locked the spreader bars in place and selected the desired length, the G Pin comes up, drops into the hole. You wind the wind nut round until it reaches the G Pin and then you lock it into place.



Spreader bar showing the G Pin

Now fit 4 extension joiners one in each top corner of the base unit. Lift one panel onto the top of the base unit, guiding the panel onto the extension joiners. Repeat for the next panel, now install the 2 spreader bars, again securing with the pins & clips supplied, repeat for the next two panels if required. There needs to be 4 spreader bars on the Base Unit and 2 spreader bars on each set of stacking panels.

If working in stable ground where the grave depth can be achieved the complete unit can be installed into the excavation using a 4 leg lifting chain. Lift the unit with the excavator & lower into the grave excavation. There are lifting lugs on all the panels. Depending on the ground conditions, you can now enter the shield and wind up the spreader bars to put pressure on the walls of the excavation if required.

Alternatively, in unstable ground where the complete grave depth cannot be achieved, the units (2 panels) can be placed in the excavation one at a time with the excavator. Start the excavation and install the base unit 600mm in depth. Then excavate the soil within the shield and as the grave gets deeper push the shield down gently with the machine bucket and the cutting edges will slice the earth off the side of the grave.

When using this method it is recommended to use pushing plates on the corners of the panels. This prevents any damage to the panels.





#### **Pushing Plates**

Now add the first stacking unit and repeat the process of the excavation within the shield, pushing the unit down with the back of the excavator bucket, until the required depth is reached, adding extra panels if required.

To remove the shield release the acrow prop pressure on the walls and remove using the excavator. To dismantle reverse the assembly procedure.

There is a short video on our web site showing the assembly of the shields: <u>www.graveshoring.com.au</u>

## **COFFIN SHAPED SHORING**

Lite guard manufacture coffin shaped shoring on request. The panel sizes are made to individual requirements and are for use with our adjustable spreader bars. The assembly is the same as for the standard grave shoring.



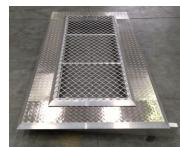


## **SAFETY LID**

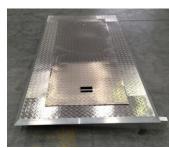
Safety Lids can be used with the tread plate decking or on their own over an open grave with the use of pegs.

They can be solid aluminium or mesh and lockable if required. The lid can be made to sit flush with the decking or with a sloping edge. They can be lockable and attach to the shoring or decking.

In the event of digging graves for children there is an option for a tread plate safety lid with a small opening which has a collar. This is both for aesthetic purposes as well as for safety.



Mesh Lid with Decking



#### Solid Lid with Decking



Baby Coffin Safety Lid

Different sizes of lid available made to suit the grave size.

## **ALUMINIUM CHECKER PLATE DECKING**

The non-slip checker plate decking ensures that the grave surrounds are stable and safe. The standard width is 400mm and is made up of 4 panels which bolt together and once assembled can be left in one piece. It has a sloping edge to prevent a tripping hazard.

We can supply a bar which enables only 3 sides of the decking to be used for use in monument areas or when space is restricted.

The decking can be made with a separate collar approx. 300mm deep which ensures that the soil at the top of the grave remains stable.

The decking can attach to the shoring system and also the Safety Lid and allows for the installation of handrails.

The decking also gives a stable platform area for the lowering device.

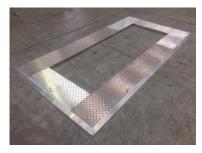


**Removable Collar & Decking** 

Decking









**Punch Plate Decking** 



We also make the decking in punch plate which is is lighter in weight and extremely non-slip.

## **END CLOSURE PANELS**

End Closure Panels are for use with the standard shoring panels when in sandy or unstable soil to prevent a cave-in at each end of the grave.

Each panel is made up of 3 sections, each with a handle. They are adjustable to fit the ends of the grave. The standard section is 300mm wide and 2400mm long but for wider graves extra panels can be used and the length can be made to requirements.





**3** End Panels to shore the end of a grave

A single section with handle

For cemeteries that dig different grave depths we can supply sections which bolt together.

## **BOX SECTION SHORING**

Box Section Shoring has been developed for use in sandy soil or for cemeteries that dig graves the same size.

It comprises of a 4 sided base section and a 4 sided stacking section. The sizes are determined by the individual requirements of the cemetery. The two sections can be assembled and then installed in the grave with an excavator or the base section can be installed first and the stacking section put in place. It is safe to enter the excavation once the base section is installed in order to attach the stacking section to the base. There are lifting lugs in each corner. As with the standard shoring, the Box Shoring is built to your dimensions and requirements.



with Safety Lid

with flange

There is an option of having the Box Section Shoring made in sections which bolt together so that it can be freighted as a flat pack.

## **MULTI-CULTURAL SHORING**

LITE guard have developed a shoring system to suit multi-cultural graves which solves the issue of relatives entering the grave to place the deceased. A smaller version has been developed to suit multi-cultural graves for children.

The system is made with reinforced aluminium sheet, in 2 halves, adjustable, 700 to 900mm and can be removed by hand by two people. Each panel weighs around 22kgs. It has unique spreader bars that lock into place with downward pressure on installation. For removal by 2 people the spreader bars are pulled vertically by hand and this releases any ground pressure to allow for easy removal. For removal in one piece by an excavator leave the spreader bars in place until after removal.

The system is only for multi-cultural graves and only for up to 1.8m deep.

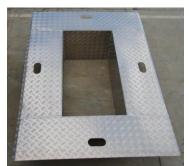
The system shores the grave to the top of the table in the grave, creating a safe area for family members to place the deceased.



Multi- Cultural shoring in use



**Multi-Cultural shoring** 



Small Multi-Cultural Shoring



Showing spreader bars



Showing shoring in 2 halves



**Spreader Bars** 

## **MONUMENT STABILISER**

The Monument Stabiliser consists of a safety staff with channel, tubing and clamp to secure unstable monuments. The 3 part system is easy to use and comes in 3 different channel sizes to cater for different gravestones and monuments.



## **GANTRY**

The Gantry comes in a bag ready to assemble, which takes only 5 minutes and is lightweight aluminium rated at 2.5kN.

It can be used as a rescue gantry and is ideal for exhumations where the casket is intact.



## **CEMETERY TRAILER**

We manufacture a trailer for use in the cemetery to transport products around the cemetery or from one cemetery to another. It has doors front and back for easy access to house grave shoring, planks, safety lid, decking and tools. The shoring can be left assembled on top of the trailer.

Our trailer has a double deck, lightweight aluminium construction with tie down rails. Single axle with override brakes, 1400gvm.

The trailer weighs approx. 290kgs and can carry up to 1110kgs. It is good for on the road and within the cemetery.



