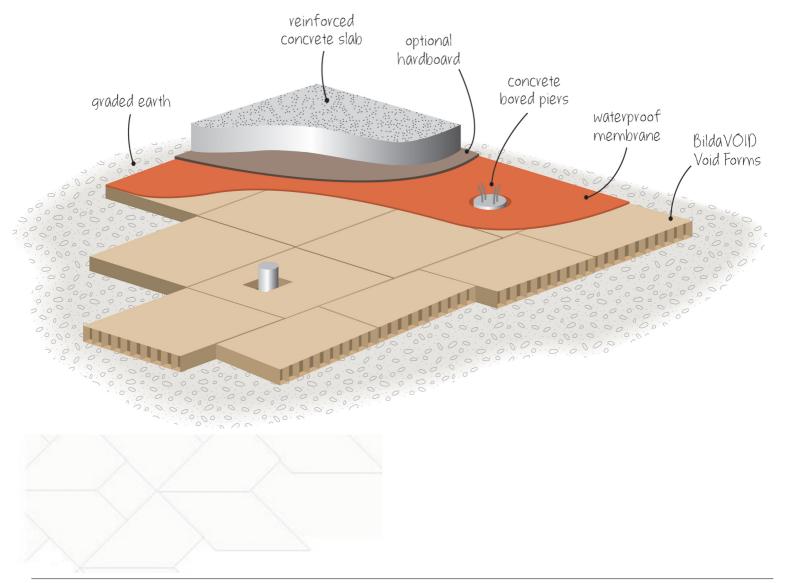
## BildaVoid Concrete Void forming Systems



## Typical Application of BildaVoid System

- 1. Grade the area where the void forms are to be used to an even plane
- 2. Lay out void forms leaving no gaps between panels. Cross cut forms with a hand saw to fit into any area too small to palace a full size panel.
- 3. If using a poly moisture barrier, place on top of the forms under the optional hardboard (Masonite or MDF) cover sheet.





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## **Installation Instructions for Fibreboard Void Form**

These are suggested general instructions for use with the BildaVoid Concrete Voidforming System.

Always follow the structural drawings and details.

Moisture destroys the strength of void forms to ensure the void space. All panels must be kept dry until the concrete is placed.

Best results will be obtained by installing the product according to the following procedures:

- 1. Void forms have great strength to support vertically imposed loads but cannot bridge uneven areas. Grade the area where the void forms are to be used to an even plane. Remove rocks and other obstructions that may puncture the form or cause point loading. A capillary break should not exist between the earth and the forms. If a poly moisture barrier is required this should be placed on top of the forms under the optional hardboard (Masonite or MDF) cover sheet. If a bedding layer is required to level the area, fine grained material that will not create a capillary break should be utilised.
- 2. Starting at the perimeter, place the BildaVOID panels not leaving any gaps between the forms. Continue to place the full panels wherever possible. Crosscut forms with a handsaw to fit into any area too small to place a full-size panel. Plan the cuts so that the enclosed edges face any exposure to liquid concrete. Tape the cut edges from top to bottom at intervals along cut face to ensure interior partition section remain in place.
- 3. If a number of panels are to be used to make up a require depth, It is recommended the panels are staggered in alternative directions e.g.; first layer north to south length ways, next level east to west. Large nails can also be used to hold the panels in place on chamfered edges under beams and at the ends.
- 4. Cover with waterproof membrane lapping 150mm at joins taping seams and corners to prevent ingress of moisture. It is recommended that on particularly wet sites, the voids for the trenches & beams be totally encased in waterproof membrane and punctured prior to pouring of the concrete.
- 5. We recommend an increase of approx 50% in the bar chair quantities to counter act live loading eg: trade traffic.
- 6. Other trades shall co-operate by protecting forms by providing necessary walkways to prevent point loading. If concrete is to be wheeled into place, proper runways shall be provided.
- 7. Care should be taken when pouring concrete so that concrete is placed evenly over boxes and not dropped or heaped in one spot to minimise excess loads. Concrete should not be poured from heights greater than 400-450mm.

## Additional notes:

Extract from BildaVoid's Patented Control System; "As an option, the void forming element may be inserted in a water impervious envelope, made for example, of polythene sheeting or sheeting lined with bitumen. The envelope should be able to admit water, for example, through an opening therein, so that the degradation of the element can occur over time after installation. The purpose of the envelope is to retard premature degradation of the element during storage on site and on initial installations.

**Alternatively**, to allow for greater control over the useful life of the void forming element, a water induction pipe can be included so that the element can be destroyed by water saturation once it is determined that the concrete has set and become load bearing."

The first section refers to a method (usually for beams & footings on water saturated sites) where the void form is totally enclosed in a waterproof membrane. (Refer our Installation Instructions in booklet). We suggest piercing the waterproof membrane for the full depth of the void form with a steel spike (Flat blade) prior to placement of the concrete to allow water penetration.

The alternative method (used under slab on water saturated sites) is used when waterproof membrane is placed on the underside and top of the void form with laps taped and sealed. Two water induction pipes/hoses are inserted at each end of the slab areas to be poured (on top of the void form and underneath the membrane). Once the concrete is determined to have set and cured (say 7 days), water is inducted through one end until it escapes through the other end, thus ensuring that the water has penetrated the full area under the slab.

Our suggestion is to follow the attached installation sheet, whereby the void form is place on a level even plane, with no waterproof membrane on the underside. The void form is then covered with 400um plastic on the top, taping the seams and edges to prevent ingress of moisture, ensure no gaps.

We feel that if the method of "flooding" may increase the reactivity of the sub soil.

It has been recommended that when laying out the void forms, using the loose panels to make up the depths, we suggest you place them staggered in alternative directions eg; first layer north to south length ways, next level east to west. Large nails can also be used to hold the panels in place on chamfered edges under beams and at the ends.

- It must always be kept in mind that BilaVoid units are made of recycled cardboard and they should be handled with care and not be subject to rough treatment.
- Moisture either induced or natural is the key to degradation and the panels should be kept in a dry place until required on the actual site. If known inclement weather conditions are imminent, do not place the void form until the conditions are clear. Do not place more boxes than required for current pour. Delivery of the boxes should be arranged so that the contractor can set up the void formers, lay the reinforcement and pour the concrete in the minimum time possible.
- The concentrated loading from bar chairs must be spread to avoid puncturing the face sheet. Flat based bar chairs such as the combination bar chair can probably be used straight onto the surface.
- Wire leg type bar chairs will require 22gge/0.8mm gal metal discs under them to prevent puncturing the surface sheets (*these have been known to slip or move*).
- Alternatively lay hardboard sheeting over the whole area to protect the void formers from bar chairs and other construction loadings or place hardboard only over the trafficked areas.
- Care should be taken when pouring concrete so that concrete is placed evenly over boxes and not dropped or heaped in one spot to minimise excess loads. Concrete should not be poured from heights greater than 400-450mm.