



# UNISPAN/V-SPAN

## CLIENT INFORMATION

### SELECTING A SUSPENDED FLOOR SYSTEM

When selecting a flooring system, consider using concrete as it creates a home that has low sound transmission floor to floor. TiltUp Unispan/V-span Flooring is fast and easy to erect and construct, and also uses minimal labour and materials.

### ACCESS TO YOUR SITE

Before you choose to use TiltUp Unispan/V-span Flooring, please assess if your building site has suitable access for a crane to lift the Unispan/V-span floor slabs into place. Contact TiltUp for advice if you are in doubt. Look out for overhead wires such as power cables; special arrangements may be required to work around these. Normally a crane cannot work within 4m of power wires.

### QUOTATION AND PRELIMINARY DESIGN

TiltUp will give a free quote and preliminary design. All you need to do is provide your house/building plans. TiltUp will design the Unispan/V-span Floor Slabs for floor loadings only. Other loads such as roof loads should be transferred directly over support beams; an engineer can help with this. It is best for an engineer to design cantilever reinforcing as this can help save time and design costs.

### QUOTATION ACCEPTANCE

Before TiltUp can start preparing the final design and the drawings of the Unispan/V-span layout you are required to sign a copy of the quote and return it to TiltUp, showing your acceptance of the order. You will then be required to provide a full set of 'for construction' building plans and any design notes from an engineer showing design loads that the floor is to be designed for and a time when the floor will be required, along with site contact details.

### SHOP DRAWINGS

Two copies of the shop drawings (layout drawing and slab size details) will be supplied to you for checking on-site. Construction Details Drawing "TiltUp - TU01" will form part of the construction drawings for the floor. Please ensure you have read and understood all the requirements shown on this drawing. If you have any questions, please contact TiltUp.

When site checking pay attention to the following:

1. Check all critical measurements and note any changes on the layout drawing.
2. Take care when checking measurements that relate to the Unispan/V-span seating. Errors here are difficult to correct later.
3. Check all floor starters are placed correctly in the block work. All protruding reinforcing must be located correctly to allow the Unispan/V-span slabs to sit on the walls for the required seating length.
4. Check that the number of temporary prop lines and the pre-camber is clearly understood. Props are required to be in place before the Unispan/V-span slabs are erected. Details of prop

lines and pre-cambers are shown on TiltUp drawings. Pre-camber can taper off at the ends of prop lines to meet with wall levels.

5. Check that all cut outs and openings in the Unispan/V-span slabs are correct. Large openings such as for laundry chutes are best cast into the Unispan/V-span. Smaller diameter holes for electrical and plumbing services are best core drilled on site when the floor slabs are in place. Small holes are best drilled from the underside to prevent spalling.
6. After your site check, sign and return the drawing to TiltUp to allow manufacture to begin and agree a date for delivery (and erection if applicable).

### **PLACING UNISPAN/V-SPAN**

TiltUp can undertake the erection by supplying a crane, staff and equipment. You will need an “in-place” quotation for this. This should be discussed with TiltUp prior to finalizing your order. If you choose to erect the floor units you will require the appropriate tools: pinch bars, cold chisel, cutting saw a measuring tape, mortar for seating (if required) and staff to assist during the unloading and placing of the slabs.

### **SITE CHECK PRIOR TO PLACEMENT**

Prior to placing the Unispan/V-span, before the crane arrives check that:

1. Props are in place and pre-camber is set up. Provide good load spread to props on firm sub-soil to prevent prop pre-camber settlement due to the construction loads of Unispan/V-span slabs. Plus topping and any other construction dead or live loads.
2. Tools are available.
3. The slabs have been ordered in the sequence required to make the placing easy.
4. Access is available for trucks and crane.
5. Note the position of any overhead power and telephone cables. These may have been overlooked when assessing the site earlier for crane suitability.
6. Check the top of the block work; if this is uneven, plastic mortar seating will be required.
7. Slabs that have the same identification mark are interchangeable. If they are the same size and have a different mark they may not be interchangeable. To check, count the number of prestressing strands showing at the ends of the slab. A different number means that they are not interchangeable.

### **TOPPING AND REINFORCING**

Pay attention to the Construction Details Drawing “TiltUp - TU01”. Prior to pouring the concrete topping check:

1. Cover to reinforcing especially for cantilever bars- as per an engineer’s details
2. Bar number and size
3. Mesh size as shown on the project engineering drawings
4. Top cover to the mesh shown on Construction Details Drawing “TiltUp - TU01”
5. The concrete ordered is the correct strength. This will be a minimum of 25Mpa at 28 days unless otherwise noted on the drawings

### **CURING THE TOPPING**

To ensure a durable floor wet cure the topping concrete for a minimum of 7 days or use other approved curing methods. It is best to follow your concrete supplier’s recommendations.

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### **FURTHER TECHNICAL INFORMATION**

TiltUp has qualified, experienced staff available to discuss design details with you.

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