

Installation guide and sitework details

For 5000, 7500, 3500, 2500, 5 Bar and HSE 75 series

Typical floor finishes

These details are intended as a general guide to correct installation - it is appreciated that site practice can vary depending on the design of slab, type of finish etc.

Further advice is always available from our technical department who can be contacted between the hours of 9 am and 5.30 pm on 01920 463230, or alternatively you can email them at info@howegreen.co.uk.

Preparation

Covers are supplied ready for installation internally without further preparation. In external locations, or those that may be permanently wet, all aluminium surfaces in contact with concrete should receive two coats of bituminous paint.

Single covers

- 1 The cover should be placed into the outer frame and securing bolts screwed in loosely if applicable.
- 2 The whole assembly should be bedded down to the correct level. Haunch mortar up on outside of outer frame, to prevent any possible distortion of outer frame when surrounding floor finish is laid.
- 3 Leave the bedding mortar to cure, then complete the surrounding floor finish.
- 4 The cover should now be filled (with the exception of the 5 Bar series) without removing it from the outer frame. (Note that the design loading and if applicable, fire resistance can only be achieved if the infill is equivalent to the 28 day cube strength of OPC concrete of 40 MPa.)
- 5 When properly set remove cover and clean taking care not to damage any seals. Make good pointing to the underside of the outer frame. Replace cover.

Duct covers

- 1 The outer frame will be either of one piece construction if size permits or sectional if large. If it is sectional several covers will have been screwed into the outer frame sections (these should now be loosened) to pre-space to the correct span dimensions if possible. If the unit incorporates steel beams, the beam receiving pockets (if not already attached to the outer frame) should be fitted using the screws provided. Fix stop ends to the end of the outer frame section with connecting spigots supplied. These are only for the purpose of locating one length of outer with the next and are not intended to provide a full strength joint.
- 2 Fix anchor lugs to the outside edge of the outer frame by crimping with pliers at approx. 600 mm centres.
- 3 Place all of the removable cross members into position, (if fitted) then bed frame down to correct line and level, (if the frame is sectional working away from the stop end) making sure that the frame remains straight and is not distorted in any way. If universal beams are incorporated they require levelling by placing packing mortar between base of beam pocket and loose beam seating plates supplied.
- 4 As work proceeds place loose covers into duct frame to check that the gap between the outer frames is correct making sure that spacers supplied are used between cover and frame to maintain a 1mm joint.
- 5 When outer frame is properly set remove any "spacer" covers that have been screwed into the outer frame and place in correct position in the duct frame along with all of the loose covers making sure that spacers are used to maintain a 1mm joint between the cover and frame, and bolts if fitted are screwed in loosely. The covers may now be filled (with the exception of the 5 Bar series) and the floor finish to the outside of the outer frame completed. Again taking care not to distort either the cover or the outer frame sections. Larger span covers may require propping from below to prevent distortion caused by the weight of the wet concrete infill. (Note that the design loading and if applicable, fire resistance can only be achieved if the infill is equivalent to the 28 day cube strength of OPC concrete of 40 MPa.)
- 6 When properly set the covers should be removed, and cleaned taking care not to damage any seals, the joint between the cross members, (if fitted) and outer frame should be sealed with mastic.

HSE 75 series

- 1 Remove the hinge securing bolts, then lift out the cover from the outer frame. Assemble the lower gas spring fixing brackets with the outer frame using the bolts supplied.
- 2 Bed the outer frame on mortar to the correct line and level ensuring that the lower gas spring brackets are in contact with the vertical concrete face of the pit wall.
- 3 Mark and drill the 8 fixing holes through the lower gas spring brackets into the vertical concrete face of the pit wall, and then bolt to the concrete using suitable fasteners.
- 4 At this stage the cover should be positioned within the outer frame and the hinges bolted to outer frame, the safety stay should also be attached using the bolts provided. The hinges should now be adjusted to provide a 1mm gap between the cover and frame (stainless version only), the spacers provided should be used to maintain the 1mm gap. Haunch mortar up on outside of outer frame, to prevent any possible distortion of outer frame when surrounding floor finish is laid.
- 5 Leave the bedding mortar to cure, then complete the surrounding floor finish.
- 6 The cover should now be filled without removing it from the outer frame. (Note that the design loading and if applicable, fire resistance can only be achieved if the infill is equivalent to the 28 day cube strength of OPC concrete of 40 MPa.)
- 7 When properly cured the cover should be lifted with care using the keys provided making sure the safety stay engages. The cover and frame should be thoroughly cleaned taking care not to damage any seals or intumescent strip fitted. Make good pointing to the underside of the outer frame.
- 8 The gas springs should now be screwed into position, then the cover can be gently lowered and locked into the closed position.

Lifting and maintenance procedures

- 1 Remove all bolts from the lifting points using key provided except the 5 Bar series where the bolts should be loosened.
- 2 Screw in by at least 12 mm a lifting key into each lifting point except the 5 Bar series where the key should be positioned under the bolt head. A lifting device should be used where the weight to be lifted exceeds the Manual Handling Operations Regulations 1992.
- 3 Lift out cover without dragging across outer frame to avoid damage.
- 4 Clean thoroughly both the seating and cover checking the condition of the double base seal and intumescent seal if fitted, also checking the top edge dirt seal. Then re-treat the underside of the cover with waxoyl or similar inhibitor if required.
- 5 Check condition of gas springs on HSE 75 series.
- 6 Replace cover carefully and insert all securing/plug bolts taking care not to over tighten.

Should any of the seals, bolts or other removable components be damaged or missing they are available for replacement.

Installation guide and sitework details

For Visedge series, Visedge DS and Visedge VR

Typical floor finishes

These details are intended as a general guide to correct installation - it is appreciated that site practice can vary depending on the style of flooring, type of finish etc.

Further advice is always available from our technical department who can be contacted between the hours of 9 am and 5.30 pm on 01920 463230, or alternatively you can email them at info@howegreen.co.uk.

Preparation

Covers are supplied ready for installation internally without further preparation. In external locations, or those that may be permanently wet, all aluminium surfaces in contact with concrete should receive two coats of bituminous paint.

Visedge series access covers – Single covers

Set the cover in the outer frame, fitting the securing or blanking bolts supplied. Maintain a 1 mm gap between the cover and the frame sections.

Lay the screed up to the outer frame, ensuring that the PVC extrusion is kept clean.

When the screed has cured and the installation of the sheet flooring is about to commence, remove the protective tape from the PVC extrusion on both the cover frame and the outer frame. Cut the flooring material up to the upstand of the PVC extrusion on the outer frame and lay into position, using adhesive as necessary. In similar manner cut the flooring material within the cover frame up to the upstand of the PVC extrusion and under the clamping ferrules around the lifting/locking bolts, and bond with adhesive. The floor finish should then be welded, in accordance with the manufacturer's instructions, to the top edge of the PVC extrusions, on both the cover frame and the outer frame. Screw down the clamping ferrules until they are flush with the floor finish.

Finally lift out and clean the cover. Point the underside of the frame with 1:3 cement/sand mortar, if necessary. Replace the cover and tighten the securing bolts.

Remember to leave the lifting/locking keys with the building owner.

Visedge series access covers – Duct covers

These are installed in a similar way to the duct covers for the 5000 and 7500 series. See the installation guide on other side.

Visedge DS edge trim

When the flexible flooring has been fixed, cut the lengths of Visedge DS to suit the floor layout. Starting from one end, place a length of trim in position and mark the floor through the countersunk holes in the trim, then drill and plug the floor. When ready to fix the trim, apply some epoxy adhesive to the underside of the trim, then carefully position the trim and screw down.

Visedge VR edge trim

Mark out the floor to define the junction between the hard paving and the sheet flooring, i.e. the extremity of the aluminium upstand of the Visedge VR trim. Cut lengths of trim to suit and place in position. Mark the floor through the countersunk holes in the trim, then drill and plug the floor where applicable. The Visedge VR trim should now be screwed into position taking care to keep the correct line and level. The hard paving, e.g. ceramic tiling, and the vinyl floor screeding can now be laid as necessary. It is important that the pvc insert is kept clean and that the protective tape remains intact and is not removed until the floor finish is ready for bonding. Cut and fit the vinyl sheet flooring to the Visedge upstand, bond and weld.

If in doubt, contact the Howe Green Technical Department, who will be pleased to assist.

Product Key

This easy to use key indicates all of the various different specifications our products are available in.

The icons appear on the top corner of each product page enabling you to instantly identify what product you require.

	Stainless Steel
	Aluminium
	Brass
	ColourEdge
	Pedestrian/Trolley load
	Wheel load >3tonnes
	Wheel load >5tonnes
	Single cover
	Duct covers
	Multipart covers