Method for installation of Surespan type SRH/SRHE roof hatches.

General.

Surespan hatches are manufactured with an integral insulated upstand incorporating an external fixing flange. The flange is intended to be sealed to the roof slab/upstand and screwed or bolted to retain the unit in place.
The integral upstand is insulated and the foot of the fixing flange should be insulated after fixing the unit and prior to the roof weathering membrane being dressed up the sides of the unit upstand and sealed under the weathering lip.

Fixing the roof hatch unit.

1. Locate the unit to the roof or area to which it is to be installed, checking on the documentation /labels to ensure that the correct unit has been chosen for the location.
2. Check the documentation/unit drawings for the dimensions of the unit clear opening (internal frame) and physically measure/check the dimensions of the structural opening/upstand in the roof, and ensure that they match.
3. Remove all packaging from the unit.
4. If the dimensions are correct place the unit over the aperture in the roof or deck, making sure that the lid will open in the correct direction. Nb. If there is an access ladder beneath the hatch it is usual for the hinged side of the hatch to be on one side of, or opposite the side to which the ladder is fixed. The hinged edge should not be on the same side as the ladder is fixed.
5. With the hatch in the correct position over the aperture, mark the fixing points through the holes in the flange onto the roof/deck/upstand.
6. Remove the hatch and drill the required holes for the fixings to be used. You should consult your local fixings supplier for the correct type and method of fixing for the material being fixed to, (concrete, wood, metal etc.). Surespan cannot specify the fixings to be used as we have no knowledge of the material being fixed to. Surespan recommend Hilti for selection advice and the supply of fixings.
7. Clean away all drilling debris and ensure that the area is clean, dry and dust free.
8. Apply a suitable mastic sealant to the perimeter of the aperture such that when the hatch is in place the mastic seal will be compressed between the unit flange and the roof/deck/upstand.
9. Re-position the hatch into its original position over the aperture.
10. Apply fixings and loosely tighten the fixings to secure the unit.
11. Check the alignment of the unit upstand and ensure that the unit sits squarely onto the roof/deck/upstand and is not twisted and is fully supported. Use packing shims if necessary.
12. When satisfied that the unit is sited correctly, finally tighten the fixings fully.

Securing the gas spring/ Actuator bracket plate.

In order for the unit to operate correctly and safely it is necessary to solidly fix the bottom support bracket for the gas spring/electric actuator to the fabric of the roof/deck. Where the units have two

top lids there will be a gas spring/actuator to open each lid and the operations listed below should be repeated for each/all gas springs/actuators**.**
On Standard SRH hatches this may not apply as the gas spring brackets do not protrude lower than the unit upstand.

Please consult the unit drawings for specific details.

1. The main actuator support bracket is required to be solidly fixed to the fabric and in alignment with the upstand face. If there is any gap between the back face of the bracket and the fabric this should be solidly filled or packed.
2. The fixing holes for the bracket are indicated on the drawings. Using the bracket as a template for the hole positions, drill the required holes for the fixings to be used.
   You should consult your local fixings supplier for the correct type and method of fixing for the material being fixed to, (concrete, wood, metal etc.). Surespan cannot specify the fixings to be used as we have no knowledge of the material being fixed to. Surespan recommend Hilti for selection advice and the supply of fixings. Clean away all drilling debris and ensure that the area is clean, dry and dust free.
3. Insert the selected fixings and ensuring that the bracket plate is correctly aligned, tighten the fixings.

Sealing and weathering the hatch exterior.

1. The hatch should be fully weather sealed externally.
2. Ensure that the insulation provided on the sides of the unit upstand is securely in place on all four sides.
3. Ensure that the foot of the fixing flange is insulated as detailed on the unit drawings.
4. Extend the roof weathering membrane/material over the fixing flange and up the sides of the unit. Tuck the weathering membrane/material up and under the weathering lip on the unit upstand (see unit drawing) and secure in place.

Electrical connection of the Actuator.

The electrically operated actuators are supplied with a control box which when connected to mains electrical supply will provide the 24v operation supply to the actuator.

1. The control box should be located and supported such that it cannot be damaged or fall.
2. The control box should be connected to the mains supply with the cable supplied. The supply should be a permanent 220/240-1ph-50hz. This cable should be connected to the control box as indicated on the wiring connection instructions.
3. The actuator motor cable should be connected to the control box by inserting the “phono” type jack plug into the appropriate socket, as indicated on the wiring connections diagram. If necessary, and dependent on the required location of the control box, it is possible and permissible to extend the actuator cable by cutting the cable and splicing a suitable cable between two junction boxes. See the electrical connections details/diagram for the correct cable colours.
4. When fully bolted down and electrically connected the operation of the hatch can be tested. Insert the din plug type connecter of the handset in the correct socket on the control box, as indicated on the wiring connections diagram.
5. When fully connected and ensuring that the hatch is clear of any obstruction and/or personnel operate the hatch by depressing the up/down buttons on the hand held keypad.