## Plain Suntile Installation instructions







As long as you follow our simple instructions, fitting a Suntile is simple and straight forward. The instructions might look lengthy and daunting, don't be put off, it's just plenty of detail with explanatory photos to make sure you know what we're talking about.

Firstly - decide the position of your Suntile on the roof, making sure that the lens area falls between any roof rafters etc. Note or mark the **seven** tiles that are going to be replaced by the Suntile.

1 Remove all the marked tiles and any that overlap with them.







2 After removing the marked and overlapping tiles, return the Suntile to it's proposed position. You will notice that the Suntile's square box flange sits on top of three tiles along the base.







3 Mark the three tiles around the bottom and sides of the Suntile flange. Then remove the Suntile.









## 4 Remove the three marked tiles for cutting.







**5** Cut along the marked lines. Two of the three tiles will need their corners removed.







**6** The third tile will need a straight cut to reduce its length.







7 Return the cut tiles to their original positions.









8 Return the Suntile to its proposed position to check the newly cut tiles allow the square box flange to sit perfectly. Adjust if necessary. When acceptable, remove the Suntile and mark the two lowest battens that will need cutting by marking around the newly cut tiles. Then remove the three cut tiles.







9 Cut through the two battens along the marks and remove the centre sections. Now assemble the ducting.







## **Suntile Mirrored Ducting Assembly**

**10** To assemble the mirrored ducting lay it down flat on a smooth surface with the mirror side facing up. Bend the sides up along the creases into a box tube shape - you can 'over bend' each crease to make assembly easier. Bring the two jigsaw type ends together, fitting them as you would a jigsaw making sure they fit flush with each other and do not overlap.

Please note: the mirror has a clear protective film that we recommend you leave in place until final stages of assembly.







11 Cut the Silver Tape to the length of the joint, remove the backing tape and stick over the jigsaw joint. Smooth the tape down on the top surface and then flip the duct over and push firmly down from the inside along the jigsaw edge to make sure the edges are all in firm contact with the tape.









12 Take the mirrored ducting and position it perpendicular to the tiles, 10mm up from the top of the bottom tile and equally spaced left and right. Hold in position and draw around the square ducting on the felt. Then remove the ducting.







13 Using a sharp bladed knife cut diagonally from corner to corner in an x shape through the felt, creating four triangles. Return the ducting and push it down through the cut felt to rest on the plasterboard ceiling below. Make sure that the ducting is square and perpendicular to the tiles.

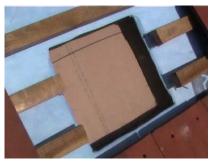






**14** Hold the ducting in place and carefully mark the plasterboard around the inside of the ducting, Remove ducting, take a bradawl and push a hole through the plasterboard ceiling in the top right hand corner.







15 Return to the inside of the property. Take the ceiling template provided and push the bradawl though the top left hand corner at the mark "Suntile Basic Kit Ceiling Holes". Push the bradawl through the hole made in the plasterboard earlier and pivot the template until perpendicular. Hold the ceiling template firmly in position and draw around the template's outside edges.







16 With a sharp knife or grip blade cut along your drawn lines and remove the plasterboard square.









17 Return to the Suntile. Remove the black, under tile gasket from the box and separate the "u" shaped item from the gasket. Put this item to one side for later use making sure that there are three retaining clips attached to it.







**18** Connect the gasket to the Suntile's square box flange by sliding into the three slots on the flange as shown. Push the gasket firmly down towards the Suntile's top surface, until it should come to a stop about 20mm from the underside of the Suntile. Make sure the gasket runs perpendicular to the surface of the Suntile.







19 Push the mirrored duct inside the Suntile's square box flange, make sure the ducting slides down to touch the clear surface. Use the silver tape to cover the joint between the ducting and the flange in one continuous length, smoothing the tape firmly into the joint and the corners, finally cutting the tape to allow an overlapping joint. We recommend that a second and third wrap of silver tape should be carried out overlapping the first taping top and bottom.

Please note: do not cover the four small air holes in the crease of the flange where it meets the clear Suntile surface.









20 Return the Suntile assembly to the roof. Push the ducting through the felt and the hole in the plasterboard. You will need to lift the top tiles up and over as the Suntile comes down to the roof level. You will need to ease some of the tiles up and down, left and right to achieve a perfect 'inline' fit.







21 Replace the three bottom tiles you cut earlier by carefully sliding them under the bottom edge of the Suntile and over the black, under tile gasket.







22 Detach the three tile retaining clips from the "u" shaped component taken from the black under tile gasket.







23 The tile retaining clips are designed in a similar way to cable ties i.e. allowing the clips to slide up the ties but not down. Make sure the long flat side is facing the bottom edge of the tiles and push up & under and ensure that the tile is sitting in the required position.









24 Secure the Suntile by screwing through the two holes provided into the batten below.







25 Start replacing the remaining tiles by sliding up underneath and locating them onto the battens.







26 Continue to replace all the remaining tiles, checking that they're all sited properly before leaving the roof.







27 Back inside the ducting now needs to be trimmed to take the ceiling diffuser assembly. Use a 6mm thick piece of flat material as a spacer to mark a 6mm offset line around the outside of the ducting parallel to the ceiling. We used a small piece of 6mm thick cardboard.







28 Cut all around the ducting using a sharp blade along the offset line and remove the waste.









29 Extra security can be achieved by fixing a screw through the ducting from the inside into the bottom tile batten.







**30** Assemble the ceiling diffuser frame and retaining clips. First, 'over bend' each of the clips to pre-stress them before fitting to the ceiling. Push firmly down into the clips with the long leg vertical and curved outwards.







31 Remove the ducting's protective film, exposing the highly reflective mirrored surface.







32 Fit the ceiling diffuser frame. It is fitted in the same way as a standard ceiling light fitting. Position the long legs of each retaining clip between the ducting and the square hole cut in the ceiling. Make sure the short legs do not go into the same gap. As you push the ceiling diffuser frame toward the ceiling, the clips will rotate with the short legs sliding across the ceiling surface before snapping into final position. As you push the frame into position make sure that the leading edge of the ducting fits into the channel on the back of the frame.

To remove the frame, simply reverse the procedure pulling the frame away from the ceiling. It is not recommended that you repeatedly take the frame in and out as the cut surface of the plasterboard will start to break up. Once the frame is in position, line up the lens with the four lugs and push fit it together.





33 Sit back and enjoy your new light filled space before clearing away your tools and putting the kettle on.

