

Low Location Lighting

How safe is your stairway in an evacuation?

Risk assessments carried out on premises with more than one floor level have identified that designated escape routes are a high priority on the fire safety agenda for building managers, facility managers and designated fire personnel. These assessments have also identified that staircases used for evacuation purposes are an unfamiliar environment.

Recent International Standards and Legislation have also highlighted the need for consistent and repetitive information for evacuees to follow in an emergency situation.



Imagine what could happen if the lighting system failed or if smoke obscured the ceiling luminaires in these staircases.

Would it slow the speed of egress?

Could someone misplace their feet and fall, injuring themselves or others?

How would you evacuate a staircase that is filled with smoke or is in total darkness?

A simple solution to these scenarios is a photoluminescent staircase illumination system and JALITE can offer the best systems and associated products available.

Manufactured using the extraordinary JALITE AAA photoluminescent technology, the unique benefit of these systems are that no mains power supply is required.

The photoluminescence used in this system absorbs natural and ambient light and stores the energy. When the light source is terminated, the material illuminates!

JALITE LLL PVC System

This system is designed to be mechanically fitted to the wall and skirting surfaces. Strips of JALITE AAA photoluminescent material and appropriate signs are then clipped into place to complete the system.

To order the escape route profile system, simply quote the reference number illustrated.

Ref: LLLPVC-10



Profile system comprises of:

- 4 x 2.5m lengths white gloss pvc profile.
- 8 x 54mm high x 1.25m lengths of JALITE AAA photoluminescent Rigid PVC.
- 4 x pairs of endcaps.
- 1 x 10 pack decals (running man left or right).

JALITE LLL Aluminium System

This system is designed to be mechanically fitted to the wall and skirting surfaces. Strips of JALITE AAA photoluminescent material and appropriate signs are then slide into place to complete the system.

To order the escape route profile system, simply quote the reference number illustrated.

Ref: LLLAL-10



Profile system comprises of:

- 4 x 2.5m lengths Aluminium profile.
- 8 x 54mm high x 1.25m lengths of JALITE AAA photoluminescent Rigid PVC.
- 4 x pairs of endcaps.
- 1 x 10 pack decals (running man left or right).

Stairway evacuation solutions.

Manufactured from JALITE AAA photoluminescent material. Simply brilliant! A life may depend on it!

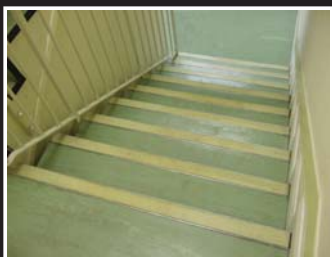
Stairnosing

Stairnosing is an extremely effective form of route guidance. JALITE has produced photoluminescent Stairnosing in order to provide a highly visible route guidance in the event of an evacuation. An evacuation staircase's purpose isn't to appear attractive nor decorative, but is solely intended to provide a means of escape to occupants in a building during an emergency. In practice the dedicated means of escape staircase isn't used on a frequent basis, and is likely to be an unfamiliar route when it is required in the situation of a fire drill, or an emergency procedure.

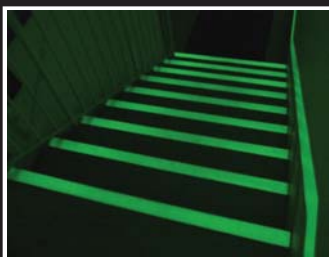
The Stairnosing system is a perfect solution for providing a clear, precise guidance system within these designated escape stairways. JALITE stairnosing is simple to fit and requires no specialist tools. Stairnosing is designed to be mechanically fitted into each individual stair using a general building adhesive, and screwed in to each stair by means of raw plugs and screws. Each pack contains sufficient coverage for 15 stairs and can be ordered using their individual product codes.

A view from:

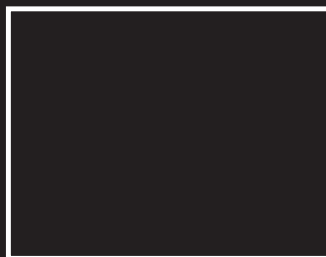
an illuminated escape staircase.



an escape staircase mid power loss installed with JALITE stairnosing.



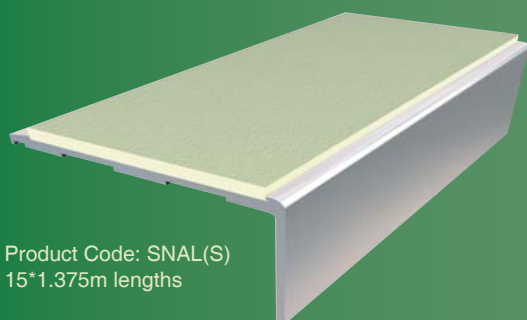
an escape staircase mid power loss with no stairnosing installed.



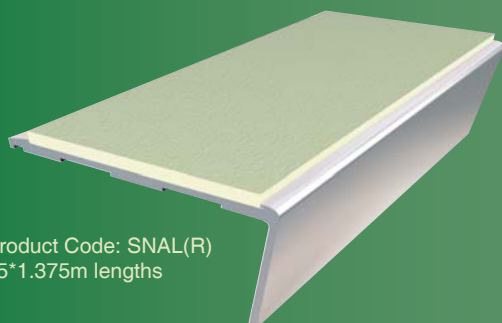
Given the choice, which would you rather be faced with in the event of an emergency?

Legislation dictates that 'Emergency routes and exits must be indicated by signs; and emergency routes and exits requiring illumination must be provided with emergency lighting of adequate intensity in the case of failure of their normal lighting'

Stairnosing is an extremely efficient tool to aid in navigating through an evacuation. It can be combined with various other JALITE products to provide wayguidance aid in the event of evacuating a premises.



Product Code: SNAL(S)
15*1.375m lengths



Product Code: SNAL(R)
15*1.375m lengths

Stairnosing is made from two main components, the Aluminum profile, which is designed to be stuck in place with a general adhesive, and then screwed into the specific stair and the JALITE photoluminescent insert which provides the brilliant illuminating effect in the event of power loss.

Stairnosing can be applied to either straight backed stairs, or raked back (angled) stairs - as shown in the illustrations.

For further information on stairnosing please call our sales team on: 01268 242300



Stairway Management

Under a formal risk assessment, it is important when planning a means of escape route system to take into account stairways that lead to other floors or transfer corridors giving access to separate buildings.

Multi-level and large complex buildings often contain more than one stairway and their use is often restricted for evacuation purposes only.

Evacuees using unfamiliar escape stairways need total confidence in their location and which floor they are on at any point of time during an evacuation. It is vitally important therefore, that these stairways are clearly identifiable and that each floor access is clearly numbered.

A concise, methodical system will ensure that evacuees are more confident during an evacuation process and the speed of egress will be improved. It will also assist key fire personnel with their evacuation plans, enabling them to quickly locate and identify any potential risk to staff and visitors contained within a particular area in an emergency evacuation.



Tips to installing a simple yet concise identification system to your stairways:

Stairway identification:

Using your evacuation plan, identify how many escape stairways you have in your building and allocate each one as follows;

Stairway A, Stairway B, Stairway C

...and so on until each one has been allocated a letter.

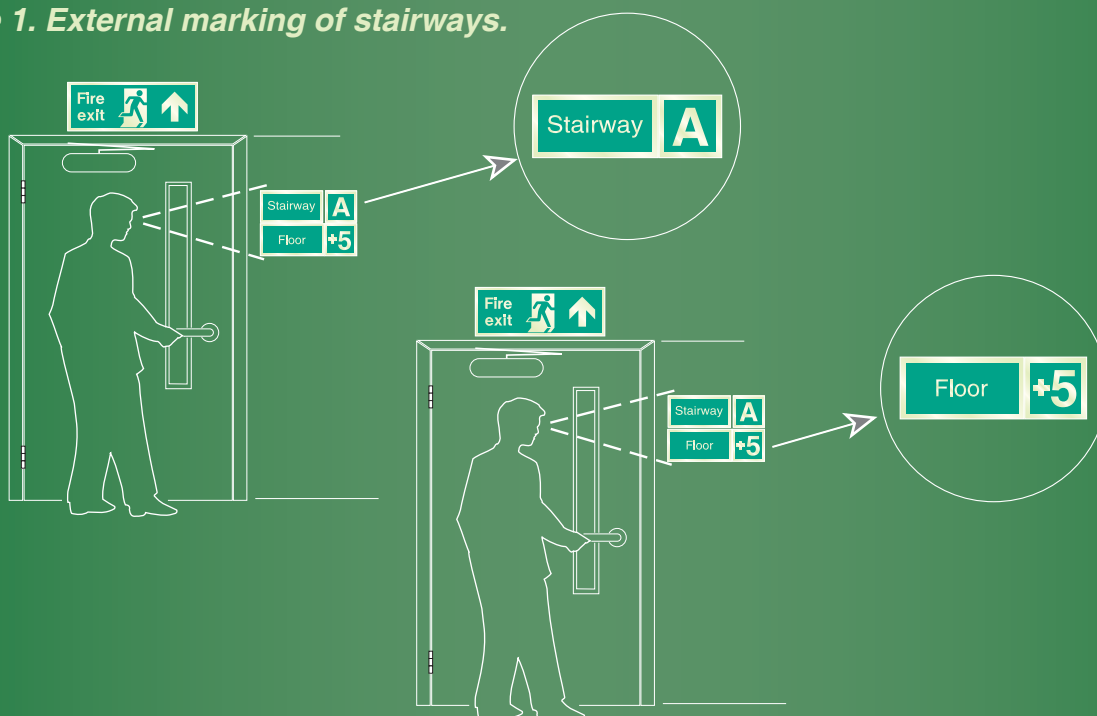
(It is advised that they are identified from both outside and inside the stairway - see example 2).

Floor identification:

Identify the number of floors in each stairway and allocate numbers accordingly.

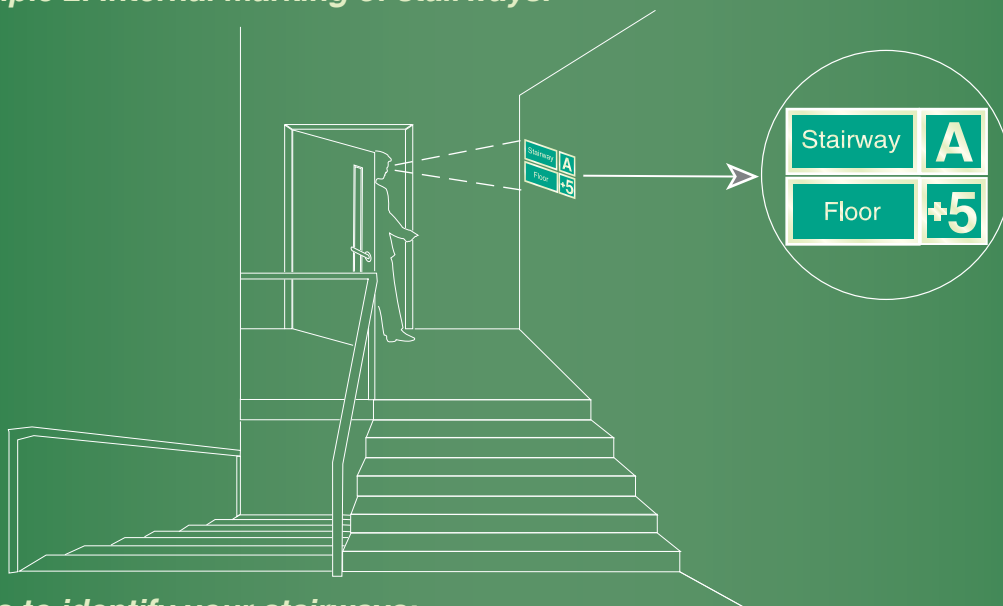
(It is advised that floor numbering is marked both outside and inside the stairway- see example 2).

Example 1. External marking of stairways.



Stairway Management

Example 2. Internal marking of stairways.



Signs to identify your stairways:

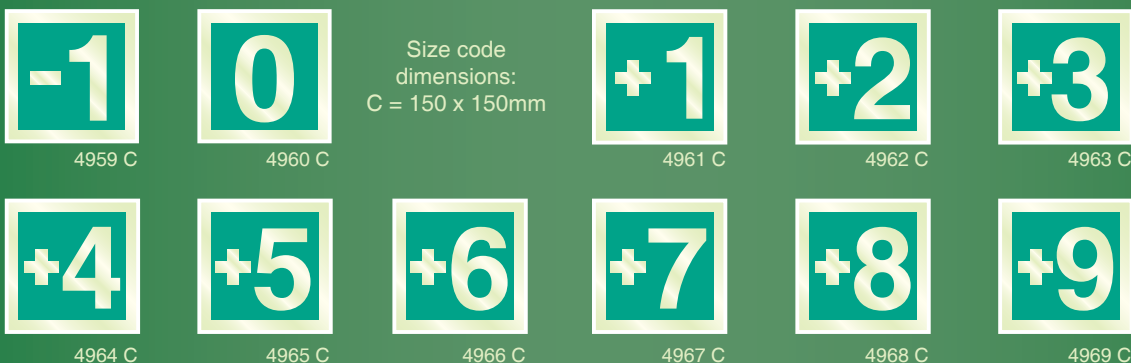


Signs for floor numbering:



Size code dimensions: L = 100 x 200mm A = 100 x 100mm

If you wish to use numbers only, we recommend that you use larger signs:

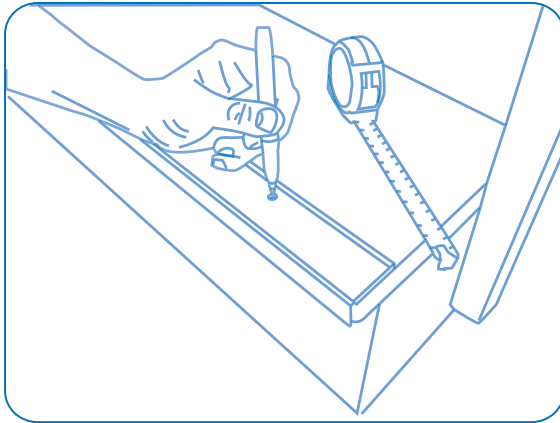


If your building has more than 9 floors, simply request a copy of our additional floor numbers leaflet!

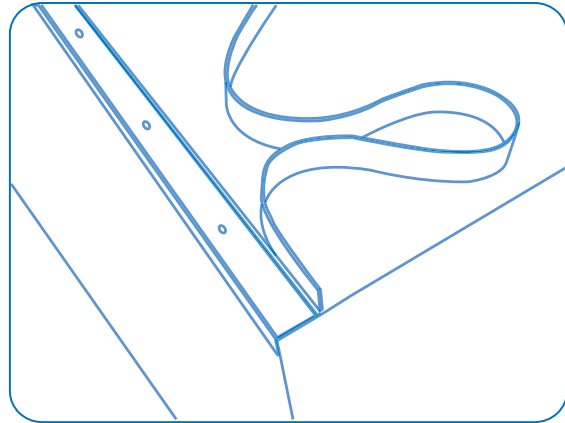
JALITE Stairnosing application guide

Prior to installing JALITE stairnosing, it is essential that some preparation takes place to ensure that the surface the stairnosing is being applied to is clean and ready for the installation process to occur.

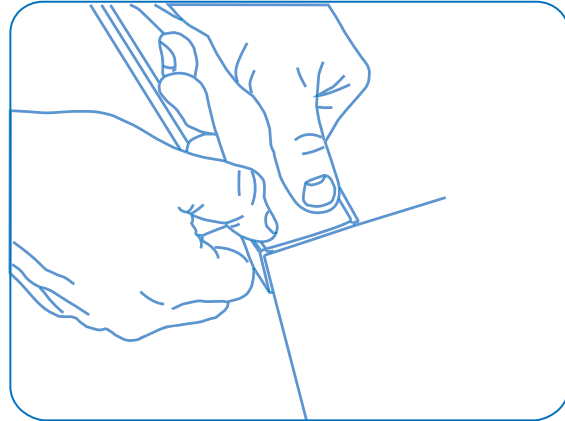
All steps to be fitted should be well constructed, flat and free of paint, dirt and grease and, in the case of wooden stairs, sanded and dust-free. Worn steps should be repaired, small imperfections filled with a gap filling adhesive, and large defects need structural repair before installing stairnosing.



1. Measure the length of each stair to which stairnosing will be applied, and cut down to size the profile and insert to the desired length. Mark out the drill hole positions prior to bonding the stairnosing in place. Apply an even spread of adhesive to the stairnosing, and secure into place with the aid of self-tapping screws, and raw plugs leaving to set before applying the photoluminescent insert.

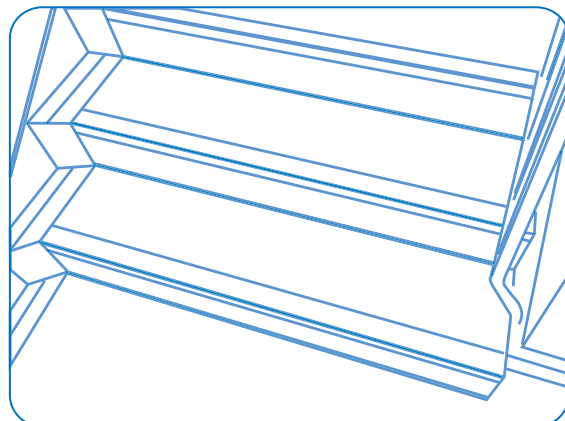
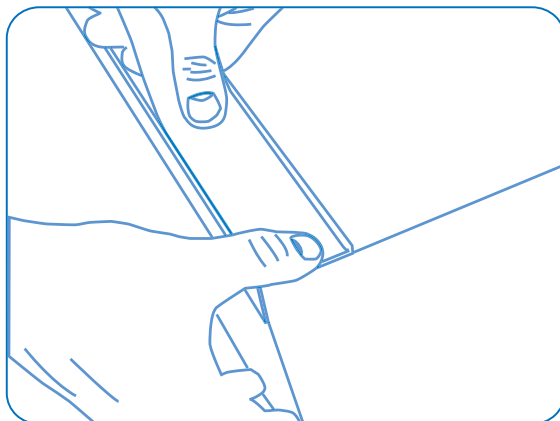


2. Having secured the aluminum profile into place, remove the adhesive cover in order to adhere the insert into the aluminum profile. Although the photoluminescent profile may appear distorted and warped, this will have no bearing on its performance. The best way to undergo the application procedure is to follow this guide in method of application.



3. The most effective method to apply the photoluminescent strip into the profile is to roll it into a coil, in order to compact it. The insert is supplied with a pre-applied layer of adhesive bonding agent, which will provide a strong, lasting hold between the aluminium and the photoluminescent insert.

4. Starting at the end of the profile, slowly press the photoluminescent insert into place, working inch by inch into position, uncoiling the roll slowly as you apply it to the profile.



5. The insert will naturally form a flat layer upon contact with the adhesive, as pressure is applied whilst it is worked into position.

6. When the procedure is complete, allow 24 hours for the adhesive to set. JALITE Stairnosing will provide you with an extremely effective wayguidance system, which requires no electrical connection and virtually no maintenance. The only requirement in any upkeep may be an occasional clean with a mild detergent solution, and a soft cloth.

The best method for fixing the LLL profile will depend upon the structure of the wall. On a masonry wall generally screws driven into wall plugs are used. For cavity walls screws can be driven into the wooden stud work but cavity fixing must be used elsewhere. Alternatively for a more permanent fixture a general construction adhesive can be used for both masonry and cavity walls.

Screw driver(s) to suit heads of screws used, bradawl, mitre saw / mitre power saw, tape measure, protractor (digital equivalents now available) /combination set with angular attachment, scissors, craft/Stanley knife, steel rule, spirit level with an adjustable angular sight glass, hammer, wooden block. Other tools and workshop facilities may be required for specific installations.

Screws (various pending on wall type), raw plugs for masonry walls, plasterboard fixing plugs (various available - medium weight) for cavity walls, general purpose construction adhesive.

STEP 1: Measure basic linear dimensions taking into account distances for different height levels, angular dimensions will need to be measured for the following: any sudden changes in height i.e. disability ramps, stairs etc, also if profile is required to follow any wall or door geometry i.e. right angles, internal/external mitres etc. Recommended distances for height level of profile shown below in Figure 1.0

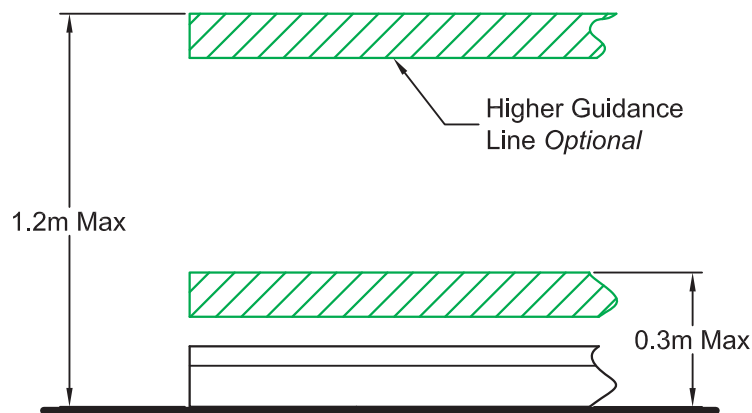


Figure 1.0 Recommended Positioning Heights

STEP 2: From notes made in **STEP 1** cut profile to the corresponding dimensions with appropriate saw. (Photoluminescent strips can be cut either with a blade or scissors.)

STEP 3: Remove any dust, dirt, excess material etc from the profile with a soft brush.

STEP 4: Mark out centre holes at the recommended spacing with bradawl or equivalent. Drill through profile using an appropriate 2mm twist drill-bit to mark centres on wall. Shown in below in Figure 1.4

Length of Profile (mm)	Recommended Number of Screws
<500	3 Screws Equidistantly Placed.
600 - 999	4 - 5 Screws Equidistantly Spaced.
1000 - 1499	6 - 7 Screws Equidistantly Spaced.
1500 - 1999	8 - 9 Screws Equidistantly Spaced.
2000 - 2500	11 - 12 Screws Equidistantly Spaced.

TABLE 1.0 - NOTE: Uneven walls should be made straight, screw quantities can be increased to accommodate for discrepancies in wall straightness.

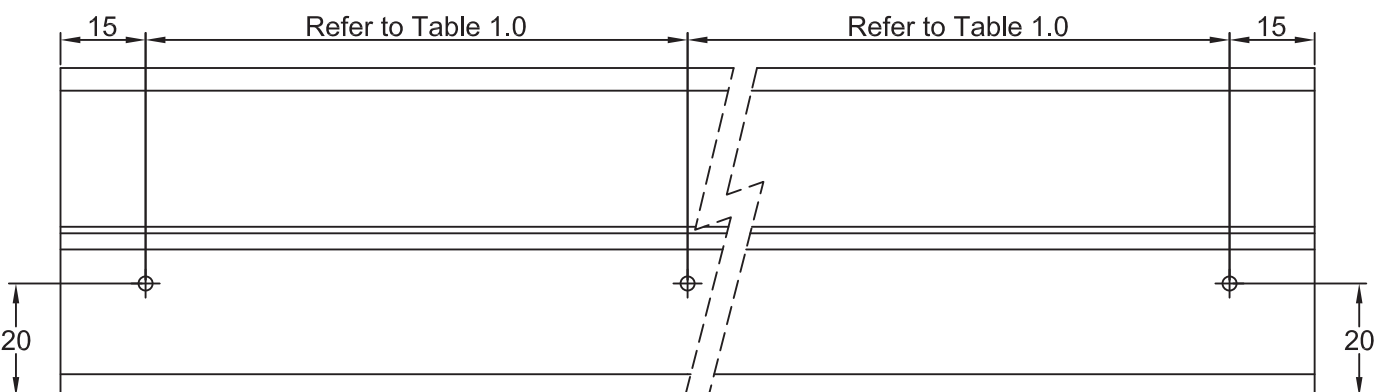


Figure 1.4 Recommended Screw Positions (dimensions in mm)

SOLID WALLS

STEP 5: Remove profile, using the centre marks as guides drill holes to size and depth to accommodate raw plugs (using a masonry drill bit), and insert raw plugs flush into wall.

STEP 6: Remove double sided adhesive tape from back face of the profile, align profile with corresponding holes, secure with the appropriate fixing screws, shown below in Figure 1.5

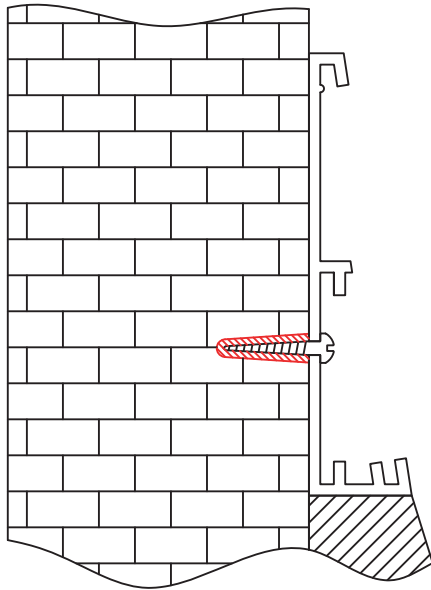
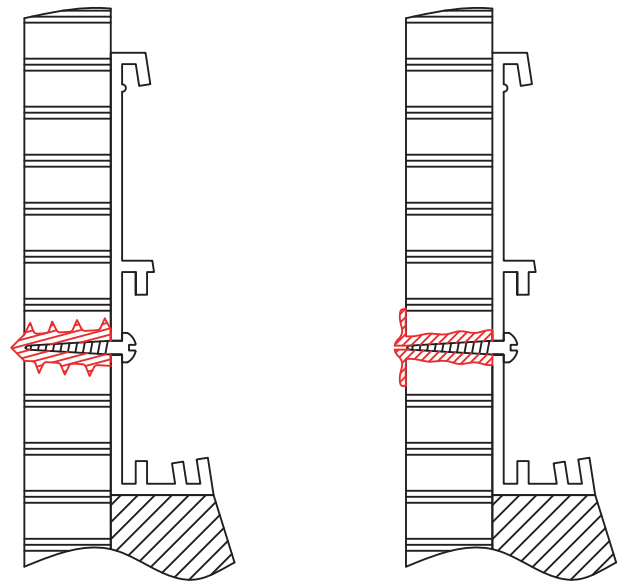


Figure 1.5 Solid Wall Installations

CAVITY WALLS

STEP 5: Remove profile, using the centre marks as guides, insert the desired number of medium-weight plaster board fixing plugs by the appropriate method, making sure that the plugs are flush with plaster board

STEP 6: Remove double sided adhesive tape from back face of the profile, align profile with corresponding holes, secure with the appropriate fixing screws, shown below in Figure 1.6



Self-Drive Type

Anchor Type

Figure 1.6 Cavity Wall Installations

STEP 7: If Endcap(s) are required to conceal any profile termination points, simply push the endcap in to the desired location, shown below in Figure 1.2



Figure 1.2 Endcap Installation Procedure

STEP 8: Remove any dust, dirt, excess material etc from the profile with a soft brush.

STEP 9: In order to assemble the profile with the photoluminescent strips, firstly insert the top edge of the photoluminescent strip into the profile, then with an upward motion 'snap' the strip into position shown below in Figure 1.7

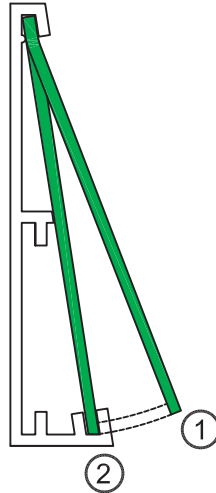


Figure 1.7 Insertion of Photoluminescent Strip - 'Snap' Method