



Correct Installation and Safe Use of Slating and Tiling Battens

1. INTRODUCTION

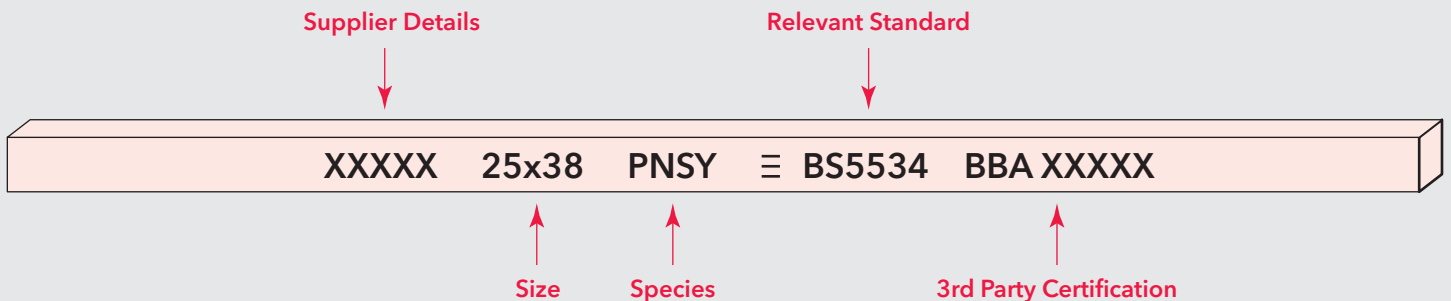
This guidance sheet covers how to select, fix and use battens as secure footholds as an alternative to roof ladders on rafters set at a maximum spacing of 600 mm centres during the process of slating and/or tiling a pitched roof and to assist with compliance of the following guidance:

- HSG 33 Health and Safety in Roof work.
- NHBC Chapter 7.2
- BS 8000 Part 6: Code of Practice for Slating and Tiling of Roofs and Claddings.

2. SELECTING THE CORRECT BATTENS

There is now no longer a need to grade battens on site as all battens that conform to BS 5534 will be delivered to site pre-graded, which can be physically checked prior to use as each and every batten will be stamped with the following information:

- a. Supplier Details
- b. Size
- c. Origin (*imported or British grown, and/or species code*)
- d. Graded BS 5534
- e. Independent third-party accreditation



Permitted timber species

Timber battens and counter battens should be of the following species:

1. BRITISH-GROWN:

- Larch [WLAD]
- British pine [WPNN]
- British spruce [WPCS]

2. IMPORTED:

- Redwood [PNSY]
- Whitewood [WPCA]
- Spruce-pine-fir (USA, Canada) [WPCE]
- Southern pine (USA) [WPNE]

Please note:

Counter battens do not need to be graded provided that they are fully supported and are fit for their intended use.

3. CHECKS DURING THE FIXING PROCESS

Prior to fixing any battens, check carefully for any damage that may have occurred during packing, transportation, or handling.

Care should be taken when fixing the battens to the rafters to ensure the nail strikes the rafter consistently in the middle of the batten and the middle of the rafter to minimise the risk of splitting either section of timber. Any missed fixings must be addressed to ensure that all battens are securely fixed throughout the whole roof.

Roof battens correctly fixed form a structural and load-bearing element of the roof as they support the dead load of the roof coverings and also the imposed loads caused by wind uplift. Battens should be fixed with 3.35 mm diameter nails which are typically 65 mm long. However, it is important to ensure that a fixing calculation is undertaken prior to works commencing as the type and size of the nail used may need to change depending on the wind loading requirements at the location of the project.

Batten joints should be square sawn neatly and butted up onto the centre of the rafter to ensure maximum support and to provide a secure fixing point for the nails. The nails should be angled slightly towards the centre of the rafter to minimise the risk of splitting the rafters. Care must be taken to ensure the batten joint is properly formed and secure and that no splits have occurred during the nailing process. Where splits are detected, the relevant section of batten should be changed immediately.

Cut ends at verges should be treated with preservative where they are likely to come into contact with bedded mortar or ideally, the batten turned to ensure a treated non-cut end is exposed to bedded mortar.

For roofs with truss rafters where the batten gauge is more than 200 mm, there should be no more than one batten joint on the same support in any four consecutive courses. Where the batten gauge is less than 200 mm, do not have more than three batten joints together on the same support in any twelve consecutive courses.

Where possible, no section of batten should be less than 1.2 m in length and be fixed in at least three points to the rafters. In some areas, battens will need to be smaller than 1.2 m, and there may be only two fixing points (*such as at the top of hips, the bottom of valleys, between dormers*). Where this situation occurs, it is advisable to double-check the section of batten to ensure it is knot-free mid-span, securely fixed, and there is no splitting to the ends when nailing.

SAFE SYSTEMS OF WORK

Roof work is a high-risk activity because it involves working at height and the use of substandard or incorrectly-fixed battens could cause roof failures and accidents. This risk of accidents increases when the roof battens are being used as an alternative to a roof ladder and are therefore taking the additional live load of the operative installing the roof coverings.

When using battens as footholds, the weight of the roofer must always be on or as close as possible to the rafter/batten junction where the fixings are. The roofer's foot should be above the batten wherever possible, rather than on the batten and under no circumstance should the roofer deliberately walk mid-span on battens with open rafters. When walking on the roof, in particular with a load, the roofer should take care where he/she is standing and move about the roof in a responsible manner.

Non-compliant battens should not be installed. Ungraded battens may prove weak and vulnerable to failure should the roofer inadvertently walk in these areas whilst covering the roof.

Please note:

The HSE only approve BS5534 graded battens as a secure foothold when installing a tiled or slated roof.

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