



Stockproof (cattle and horses)	Stockproof (sheep)	Visual Appearance	Installation Cost	Ease of Installation	Suitability for use alongside Public Paths
✓ <sup>1</sup>	✗	☺	££	☺	☺

<sup>1</sup> Stockproof for cattle and horses, but cattle may put their heads through the fence and pull off the rails.



• **Notes**

Post and rail fencing is more versatile and flexible than post and wire fencing in that it can more readily accommodate changes in direction and slope. It is also visually attractive and robust and can often be easily and cheaply repaired. It is therefore especially suitable for use on countryside recreation sites and alongside footpaths.

Post and three rail fence is not suitable for small livestock (e.g. lambs, sheep or calves) since the gaps between the rails are too wide to provide an effective barrier. It may be suitable for horses and cattle, although the latter tend to pull the rails off with their heads when stretching through the fence. If there are livestock on one side of the fence and people on the other, it is normal practice to erect the fence so that the rails are on the side towards the livestock.

The main function of a three rail fence is often to provide a visual boundary to guide and/or control public access.

Land managers may request that a barbed wire is added to the top of the fence, especially if cattle are present. If barbed wire is used, it should be stapled to the posts (just above the top rail) on the side away from the public; care should, however, be taken to ensure that it is not hidden behind the top rail, leading to possible accidental injury if the top rail is grasped by the hand. Mild steel, twin strand barbed wire is recommended in preference to single or twin strand, high tensile barbed wire (see 5.1).

If horses are present, a single plain wire may need to be stapled to the top of the top rail to prevent it being gnawed.

• **Construction and Installation Details**

Posts : pointed 1675 x 127 x 64 sawn posts at 1800 centres are recommended. Pointed 1675 x 127 x 75 posts are also suitable and, whilst they are more substantial and give a better result, they are more expensive and, in many situations, this size of timber is probably unnecessary. Pointed 1675 x 100 x 75 posts can also be used (c.f. 5.2 & 5.4) but they provide less overlap on the posts where the rails are butt jointed, making the rail ends more likely to split when they are nailed.

Round timber is unsuitable for the posts because rails cannot be satisfactorily fixed.

Post centres need to be exact to ensure that the top rails can be butt jointed correctly.

The use of pointed posts makes it easy to ensure that all posts are installed to exactly the same height. By excavating a post hole to slightly less than the required depth and tapping the post in the last few centimetres with a mell, the desired final height can be accurately achieved. This is more difficult with unpointed posts.

Rails : 3600 x 88 x 38 sawn rails are recommended. Butt joint at every second post. Metric versions of old imperial 12' 0" long rails include lengths of 3660mm, 3650mm and 3600mm. Since rail length determines post separation, ensure that all the rails used on a single run of fencing are the same length.

Rails are also available in other sections including 75 x 25, 88 x 31, and 100 x 38. For most situations the recommended section of 88 x 38 is adequate but other sizes can be used to give different 'weights' of fence, which may be preferable depending upon the available budget, the purpose of the fence and its location.

Half round rails (usually machine rounded) can also be used.

At significant changes in direction, use two posts and mitre the rails ends rather than nailing all rails onto a single post.

• **User Notes : Design Modifications and Reference Information**

