



Roadside Fencing Guide



Timber fencing has long been used as a safe, adaptable and economical material for creating effective barriers and enclosures.

For roadside applications in particular it provides an attractive, long lasting and easy to install solution.

Benefits of Timber Fencing

Timber roadside fencing has the following key benefits:

- Aesthetically pleasing - pressure treated timber is less visually intrusive than other materials.
- Durability - timber treated in accordance with I.S. 435: Part 1:2005 has an anticipated service life of 30 years.
- Safety - timber, despite its low weight, has excellent tensile strength.
- Easy to erect and maintain - timber is extremely versatile from an end-user perspective.
- Environmentally sound - manufactured from a renewable resource, timber, which is carbon neutral, is increasingly sourced from managed forests which are independently assessed for sustainability.
- Timber treated with the new generation wood preservatives is classified as non-hazardous for disposal under current Irish waste legislation.

Products referred to in 'Assessment of file on classification of treated timber waste' En0500029a Enviros Consulting Ltd, report for the EPA 2006.



The aim of this document is to inform the specifier, supplier and end-user about the benefits of using timber for roadside fencing and to point you in the right direction in terms of the current Irish Standards relating to timber post and rail fencing. It is the responsibility of the specifier/supplier/end-user to familiarise themselves with the I.S. Standards referred to in this guidance note.



Irish Standards

The National Standards Authority of Ireland (NSAI) develops and publishes Standards to meet international demands for quality, design, performance, safety and environmental impact of products and services. Consultative committees have been established between NSAI and the main business sectors to facilitate the participation of industry, consumers and other stakeholders in the work of standardisation and extend public awareness of the scope and significance of Standards.

Disclaimer: Whilst every attempt has been made to ensure the accuracy and reliability of the information contained in this document, the Wood Marketing Federation gives no undertaking to that effect and no responsibility can be accepted for reliance on this information.

The Wood Marketing Federation updates its literature as and when necessary. Please ensure you have an up to date copy.

Timber Roadside Fencing

Timber Post and Rails Roadside fencing destined for use as roadside fencing, where a 30 year anticipated service life is required, should comply with the requirements of I.S.435 : 2005.

I.S.435: 2005 consists of three parts:

- **Part 1: Materials**
- **Part 2 : Erection of fencing by excavation for posts**
- **Part 3 : Erection of fencing by driving posts**

Part 1 covers the following technical attributes of timber roadside fencing:

- Permitted timber species
- Timber grading
- Timber size - posts 2.1m - 150mm x 75mm, rails 4.2m - 100mm x 44mm
- Timber preservatives - the new generation preservatives which have replaced traditional CCA preservatives.
- Treatment Standards – in accordance with the new EN Standard – I.S.EN 599.
- Testing of materials – in accordance with the new EN Standard – I.S.EN 351.

Part 2 specifies the method of erection of the fencing, by excavation for posts

Part 3 addresses the method of erection of the fencing, by driving the posts

Table 1 : Treatment recommendations for motorway fencing timbers in accordance with IS 435 30 years anticipated service life

Use/Hazard Class	Permeability class of wood species			
	Permeable		Resistant	
	Penetration	Retention	Penetration	Retention
3	P8	CV x 1.25	P4	CV x 1.25
4	P8	CV x 1.5 10 year field data	P6	CV x 1.5 10 year field data

Treatment Standards for New Generation Preservatives 30 Years Anticipated Service Life

The contents of Table 1 (above) are a summary of the treatment requirements contained in Appendix B IS 435-2005. The Critical Values (biological tests carried out in accordance with EN 399-1) and 10 year independent field data (benchmark field performance of new generation preservatives against traditional CCA in ground contact situations) for each new generation product is submitted by preservative formulator to the NSAI for approval and verification purposes.

Quality Control On-site

Good quality workmanship and a satisfactory quality control scheme are essential to ensure that the timber posts and rails meet the requirements of this Standard.

An on-site quality control scheme is operated by NSAI, for further information contact Mr. Michael McCourt 01 807 3800
Mobile no: 087 6886 909



Reference Material

I.S. 435: 2005. Timber post and rail roadside fencing – Part 1: Materials. Part 2: Erection of fencing by excavation for posts. Part 3: Erection of fencing by driving of posts.

BS 8417:2003 Preservation of timber – Recommendations

I.S. EN 599-1:1997 Durability of wood and wood-based products – Performance of preservative as determined by biological tests –Part 1 Specification according to Hazard Class.

I.S. EN 351-1:1995 Durability of wood and wood-based products – Preservative-treated solid wood - Classification of preservative penetration and retention.

Contact Details

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Acknowledgments

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