

BIRKDALE[®]

SOUND SHIELD

PRO[®]

45mm TONGUE & GROOVE

DESCRIPTION

The Sound Shield Pro[®] 45mm tongue and groove acoustic timber fencing system offers a sound reduction of up to 28dB, as tested and compliant with the BS EN 1793-2:2018 and BS EN 16272-2 : 2012 standards. This solution is well-suited for both commercial and residential applications that demand effective noise reduction capabilities. This fence system is built using 'Commercial' DuraPosts[®] and tongue and groove reflective acoustic timber boards. Rubber acoustic seals combine with the patented DuraPost[®] technology to provide a sealed acoustic barrier.

MATERIALS

Manufactured from high-quality Scandinavian Redwood (G4-2 grade), the boards offer a warm reddish hue with a natural grain character. The timber is kiln-dried, precision-sawn to 45mm finished thickness, and then pressure-treated with Tanalith[®] E after machining to ensure full preservative absorption. This treatment significantly extends service life and makes the system highly suitable for long-term external use.

TESTING

COMMERCIAL DURAPOST [®] TESTING	DATA
Static Load Testing	1447kg / 14.2kN
Commercial DuraPost testing was carried out on 3.4m posts, with 2.4m above ground at 2.4m centres	
ACOUSTIC TIMBER TESTING	DATA
Acoustic Rating	up to 28dB Reduction
Mass/M ² (Timber Boards)	23.7kg/M ²



Tested and accredited by Acoustics Research Center, University of Salford, Manchester.

EPDM RUBBER SEAL TESTING	DATA
Temperature Range	-40°C to +80°C

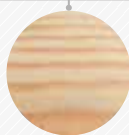
PERFORMANCE & COMPLIANCE

- Preservative treatment standard: WPA Benchmark approved process.
- Use class suitability (BS EN 335): Class 3 (external, above ground, exposed to weather).
- Expected service life: 15–30 years depending on exposure, installation, and maintenance.
- Moisture content (at dispatch): Typically 16–20% (kiln dried prior to treatment).

Compliance references:

- SS-EN 1611-1 (Appearance grading of softwoods).
- SS-EN 1313-1 / SS-EN 336 (Dimensional tolerances).
- BS EN 335 (Durability of wood and wood-based products).
- WPA Commodity Codes for preservative treatment.

FINISH

Galvanised (Powder Coating Available)	Slow-Grown Redwood	Black EPDM Seal
		

TIMBER	
Species	Scandinavian Redwood (softwood, kiln-dried)
Grade	G4-2 (Fifths), SS-EN 1611-1 (4-sided visual grading)
Appearance	Knotty structure; limited allowance for bark-encased scars, pitch wood, decayed knots, blue stain, firm rot, wavy grain, and top rupture
Colour	Creamy-white to yellow sapwood; pale yellowish-brown to reddish-brown heartwood; warm reddish hue
Density (at ~12% Moisture Content)	500-550 kg/m ³ (before treatment); up to 600 kg/m ³ (after pressure treatment)
Nominal Mass (per bay)	27.8kg/m ²
Length Range	1,800-5,400mm (multiples of 300mm) Stocked
Dimensional Tolerances	≤100 mm: ±1.0 mm; >100 mm: ±1.5 mm
Treatment	High-pressure preservative treatment with Tanalith® E
Treatment Timing	Applied after sawing/profiling to ensure full penetration and absorption
WPA commodity codes	C3 – Fencing

COMPONENTS		No. Per 2.4 x 2.4m Bay
Boards	225 × 45mm x 2400mm	12
Capping	90 x 40 x 2400mm	1
Rubber Seal	43 x 22 x 2400mm	2

FIXINGS	
Flat Head Timber Screw 7.0 x 50mm (T30)	Exterior Silver/ Exterior Green
Flanged Hex Head Timber Screw 6.7 x 50mm (8mm Hex)	Exterior Green
Countersunk Timber Screws 5.0 x 30mm (PZ2)	ZYPY

COMPATIBILITY	
DuraPost® Classic Post	Yes
DuraPost® Commercial Post	Yes
DuraPost® HD Commercial Post	Yes
RSJ	Yes

TYP: Typical measurements may vary with cut, treated product.

