

CHARLES RANSFORD & SON
TIMBERSPECIALISTS SINCE 1876



UPDATED
MAY 2024

Soundwall Tongued & Grooved Panels on Timber Posts

For use in

Highways • Railways • Industrial • Residential • Schools/sports venues

Technical data

- Category = B3
- Laboratory tested Sound Reduction up to 28dB
- Category Rating according to BS EN 1793-2: 1998
- Approximate weight 27kg/m²
- Standard superficial mass 16.96 kg/m²

Accurate measurement of superficial mass is key: always challenge any calculations provided

Superficial mass is one of the key considerations when specifying noise barriers. It is essential to check how this is measured in any manufacturer's data. Superficial mass represents the mass per unit area of its surface based on its density and thickness.

The correct and most relevant method to sound reduction is taking the measurement from the thickness of the boards only (the thinnest section of the sound barrier) then multiplying this by the density of timber used. In our case using Douglas Fir the process for this system results in the following: 32mm x 0.530 = 16.96kg/m²

Data specifying density and/or superficial mass of all the fencing components should not be compared against this data as these methods produce higher results **which are completely irrelevant.**

The Ransford range of acoustic fencing panels are:

- independently tested to recognised standards
- value engineered using advanced sawmill technology
- available with CE marking for prefabricated panels on request
- proven in use near roads, railways and manufacturing and distribution facilities
- extremely durable with an expected service life of 30+ years
- available in both reflective and absorbent variants with timber or steel posts
- aesthetically pleasing
- fully compliant with Highways Agency Standards
- made in the UK from sustainable British material
- manufactured by a rural-based enterprise providing important employment and other opportunities both in the forest and in the sawmill.

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STGTP1/3

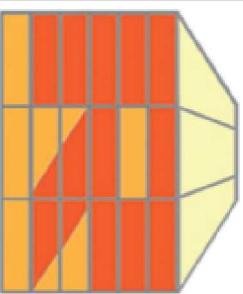
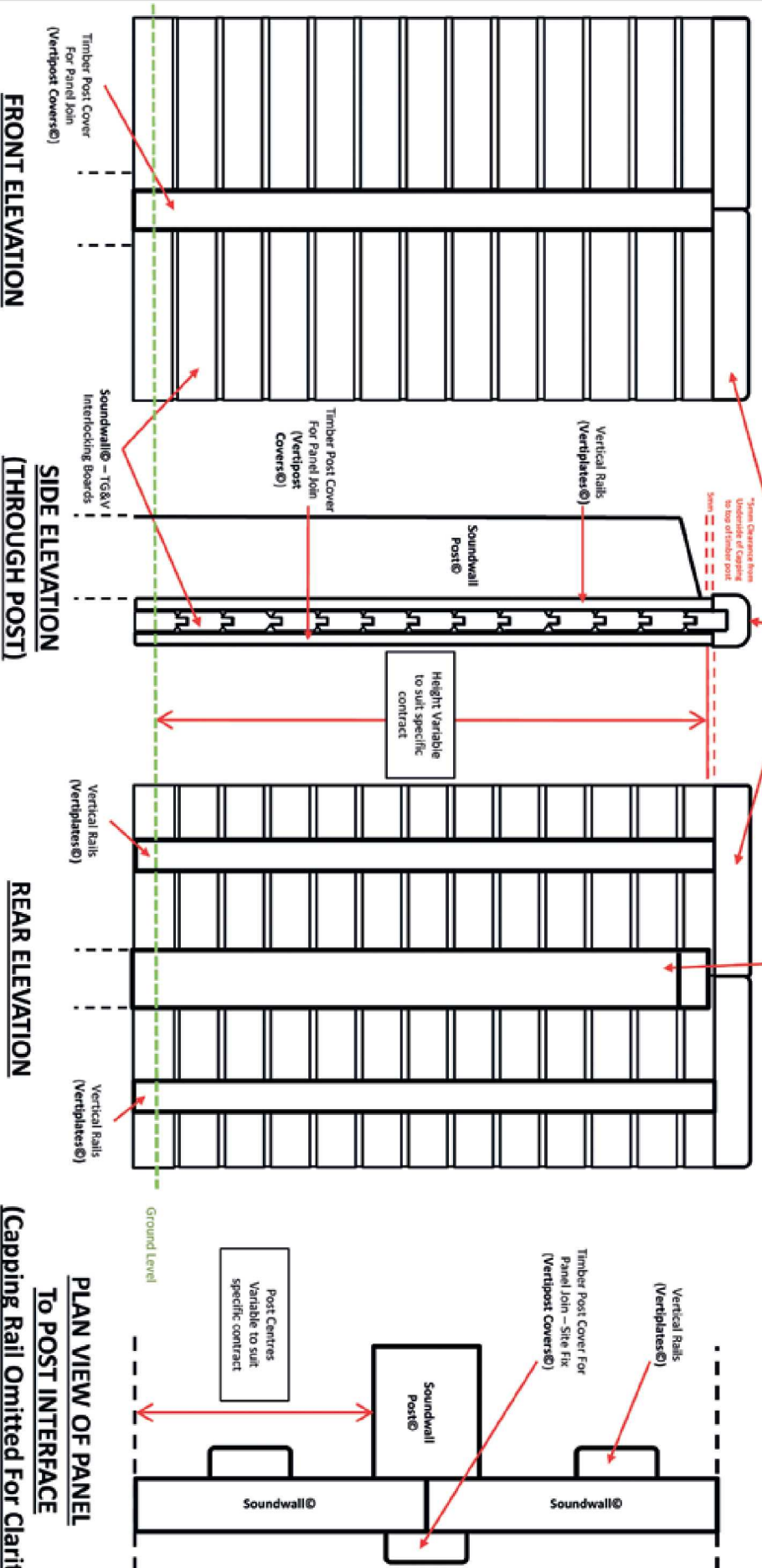
NOTES

Design of Screen is dependant on individual specifications and the drawing shown is for illustrative purposes only. The exact design criteria for special Posts are of timber construction – The design criteria for special structures should be specified by a professional designer and qualified for intended purpose by a structural engineer. Stress graded timber is available on request.



IMPORTANT NOTE

Charles Ransford & Son Ltd are not attempting to pass off as designers and therefore do not take responsibility for any persons adopting this design as a structure without seeking professional advice first. Charles Ransford & Son Ltd are manufacturers and operate on the principle of supply what is ordered. It remains the clients responsibility to ensure the ordered materials are adequate and fit for purpose for the intended application



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Soundwall® Tongue, Groove & V Jointed
Reflective Timber Sound Screen On Timber Posts
(for illustration purposes only)

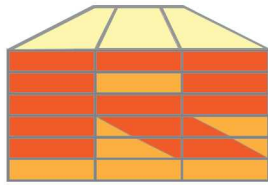
This Drawing is the Property of Charles Ransford & Son Ltd And May Not Be Copied Or Reproduced In Any Way Without Prior Written Permission.

Scale: Not Applicable

Drawn: AE Date: 010713

Checked: CL Date: 010713

Drawing No: RANS/Soundwall®/Timberpost/001



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Issued by University of Salford (Acoustics Test Laboratory)

UKAS ACCREDITED TEST LABORATORY NO. 1262

BS EN 1793-2 : 1998

Acoustics - Road traffic noise reducing devices

Test method for determining the acoustic performance

Client: Charles Ransfords & Son Ltd
Station St
Bishop's Castle
Shropshire SY9 5AQ

Object: Soundwall® - Interlocking Tongue, Groove & V Jointed Reflective Barrier

Source room:

Volume: 136m³

Condition: clean

Type: small reverberation room

Location: acoustic transmission suite

Receiving room:

Volume: 220m³

Condition: clean

Type: large reverberation room

Location: acoustic transmission suite

Temperature (°C): 21.5

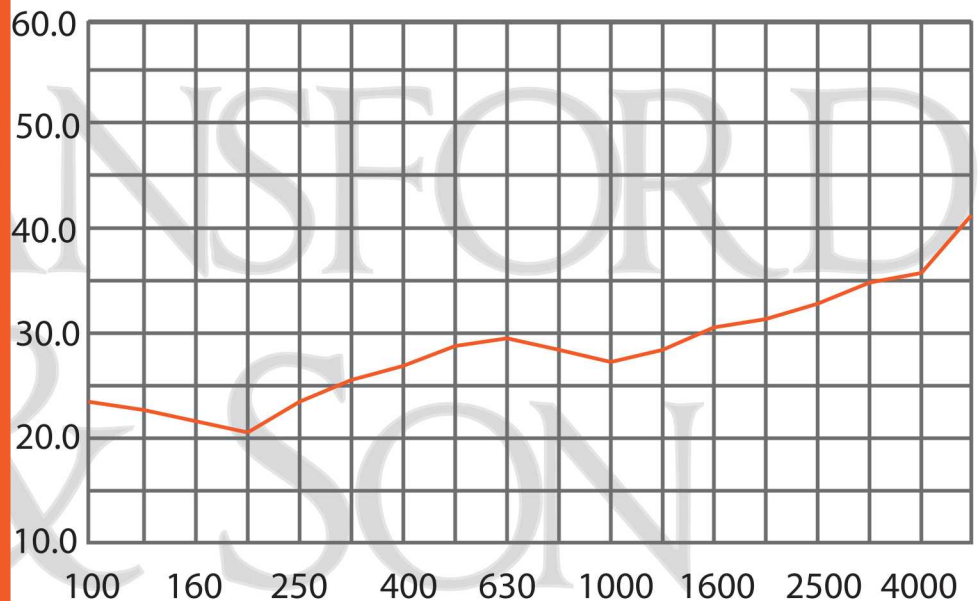
Humidity (%): 53.4

$DL_R = 28$

Category: B3

Frequency Hz	R
100	24.2
125	23.1
160	20.7
200	23.2
250	23.9
315	25.5
400	27.0
500	28.1
630	28.5
800	27.9
1000	27.3
1250	28.3
1600	30.9
2000	31.3
2500	32.3
3150	34.0
4000	36.2
5000	36.6

Sound reduction index, R (dB)



frequency, F (Hz)

Test reference number: 501-373

Date: 09/11/11