

# Initial Type test Report

Report Number

30249272

Client

Genwork Limited  
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United Kingdom

Subject

Verification of test data relating to Road traffic noise reducing devices supplied as evidence of compliance to BS EN 14388:2005

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## **Introduction**

This report covers an evaluation of test data relating to the mechanical and acoustic requirements of Road traffic Noise Reducing Devices supplied by Genwork Limited. This is intended to enable Genwork Limited and/or their customers to make an appropriate declaration of performance in relation to a number of characteristics as defined in the ZA annex of BS EN 14388:2005, to support the UKCA marking of their road noise reducing barrier products under the Construction Products Regulation, Statutory Instrument 2020 No. 1359.

## **Assessment and Verification of Constancy of Performance**

Conformity system 3 as defined in BS EN 14388:2005 Annex ZA

Initial Type Testing (ITT) of the following characteristics detailed in Annex ZA.1 are the tasks for the notified body, as defined in table ZA.3

Resistance to loads  
Sound Insulation  
Sound Absorption  
Resistance to brush fire  
Risk of falling debris  
Durability  
Light reflectivity

As detailed in clauses 5.1, 5.3, Table 2 and 6.2.1

Note: the manufacturer is responsible for ITT relating to all other characteristics defined in Table ZA.1 where relevant for the intended use.

## **Product Description/Basic construction**

### AIR Reflective

UPVC noise reducing barrier, individual elements of 2970mm in length, 250mm in height and 50mm thickness fitted together by a tongue and groove system. The individual element consists of 5 chambers with an outer wall thickness of 4.3mm.

### AIR Absorption

UPVC noise reducing barrier, individual elements of 2970mm in length, 250mm in height and 50mm thickness fitted together by a tongue and groove system. The individual element consists of 5 chambers with an outer wall thickness of 4.3mm.

Note: The products defined in the test reports and calculations were declared by the client to be representative in all aspects by the client.

## **Data supplied**

Test data from MFPA Leipzig GmbH and The University of Salford has been evaluated for the purpose of this test report.

## AIR Reflective

Characteristic	Testing Laboratory	Test report	Test method	Achieved performance
Risk of fallen debris	MFPA Leipzig GmbH	PB 2.1/23-049-1-1	EN 1794-2:2011, Annex B	Class 2
			EN 1794-2:2003, Annex B	Class 3
Self-weight	MFPA Leipzig GmbH	PB 2.1/23-049-1-2	EN 1794-1:2011, Annex 8.2	Wet 0.136 kN
			EN 1794-1:2003, Annex 8.2	Reduced wet 0.134 kN
			Annex 8.2	Dry 0.133 kN
Resistance to vertical loads	MFPA Leipzig GmbH	PB 2.1/23-049-1-3	EN 1794-1:2003, Annex 8.3.2; EN 1794-1:2011, Annex 8.3.2;	2.28 kN/m
Resistance to wind load	MFPA Leipzig GmbH	PB 2.1/23-049-1-4	EN 1794-1:2003, Annex A EN 1794-1:2011, Annex A	1.05 kN/m <sup>2</sup> *
Resistance to impact from stones	MFPA Leipzig GmbH	2.1/23-049-1-5	EN 1794-1:2011, Annex C; EN 1794-1:2003, Annex C	Achieves required standard
Resistance to dynamic loads from snow clearance	MFPA Leipzig GmbH	PB 2.1/23-049-1-6	EN 1794-1:2003, Annex E; EN 1794-1:2011, Annex E	15 kN / (2 m x 2 m)
Reflectivity	MFPA Leipzig GmbH	PB 2.1/23-049-1-7	EN 1794-2:2011, Annex E	Class 2
			EN 1794-2:2003, Annex E	62.89
Resistance to brush fire	MFPA Leipzig GmbH	PB 3.1/23-365-1	EN 1794-2:2011, Annex A; EN 1794-2:2003, Annex A	Class 1
Resistance to dynamic loads from snow clearance	MFPA Leipzig GmbH	PB 2.1/23-049-1-6	EN 1794-1:2003, Annex E; EN 1794-1:2011, Annex E	15 kN / (2 m x 2 m)
Reflectivity	MFPA Leipzig GmbH	PB 2.1/23-049-1-7	EN 1794-2:2011, Annex E	Class 2
			EN 1794-2:2003, Annex E	62.89

## AIR Reflective

Characteristic	Testing Laboratory	Test report	Test method	Achieved performance
Resistance to brush fire	MFPA Leipzig GmbH	PB 3.1/23-365-1	EN 1794-2:2011, Annex A; EN 1794-2:2003, Annex A	Class 1
Sound insulation	University of Salford Test Laboratory	06569 SI/	EN 1793-2:2012	28 dB
Sound Absorption	University of Salford Test Laboratory	06569 AC/R1	EN 1793-1:2017	8 dB

## AIR Absorptive

Characteristic	Testing Laboratory	Test report	Test method	Achieved performance
Risk of fallen debris	MFPA Leipzig GmbH	PB 2.1/23-049-2-1	EN 1794-2:2011, Annex B	Class 2
			EN 1794-2:2003, Annex B	Class 3
Self-weight	MFPA Leipzig GmbH	PB 2.1/23-049-2-2	EN 1794-1:2011, Annex 8.2	Wet 0.206 kN
			EN 1794-1:2003,	Reduced wet 0.193 kN
			Annex 8.2	Dry 0.139 kN
Resistance to vertical loads	MFPA Leipzig GmbH	PB 2.1/23-049-2-3	EN 1794-1:2003, Annex 8.3.2; EN 1794-1:2011, Annex 8.3.2;	2.28 kN/m
Resistance to wind load	MFPA Leipzig GmbH	PB 2.1/23-049-2-4	EN 1794-1:2003, Annex A EN 1794-1:2011, Annex A	1.1 kN/m <sup>2*</sup>
Resistance to impact from stones	MFPA Leipzig GmbH	PB 2.1/23-049-2-5	EN 1794-1:2011, Annex C; EN 1794-1:2003, Annex C	Achieves required standard
Resistance to dynamic loads from snow clearance	MFPA Leipzig GmbH	PB 2.1/23-049-2-6	EN 1794-1:2003, Annex E; EN 1794-1:2011, Annex E	15 kN / (2 m x 2 m)
Reflectivity	MFPA Leipzig GmbH	PB 2.1/23-049-2-7	EN 1794-2:2011, Annex E	Class 2
			EN 1794-2:2003, Annex E	60.20
Resistance to brush fire	MFPA Leipzig GmbH	PB 3.1/23-365-1	EN 1794-2:2011, Annex A; EN 1794-2:2003, Annex A	Class 1

## AIR Absorptive

Characteristic	Testing Laboratory	Test report	Test method	Achieved performance
Sound insulation	University of Salford Test Laboratory	Test Report No. 06569 SI/R1 dated April 03, 2024	EN 1793-2:2012	29 dB
Sound Absorption	University of Salford Test Laboratory	Test Report No. 06569 AC/R1 dated April 03, 2024	EN 1793-1:2017	8 dB

### Evaluation of competence

The test data provided by Salford University, accredited by UKAS (accreditation ref 1262), and MFPA Leipzig GmbH, accredited by DAkkS (accreditation reference D-PL-11021-01-00).

### Conclusion

Test data was generated by competent resource in order to produce results compliant to BS EN 14388:2005.

In our capacity as an Approved Body No.0086 we have checked the basis on which the determination of the acoustic and mechanical properties for the above product range has been made. The data may therefore be used to support UKCA marking for barriers detailed in the 'product description' above incorporating structural elements detailed in the appropriate design charts.