

# ‘Air Reflect’ Declaration of Performance

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|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Product                                              | Noise reducing fencing                                                                                                                         |
| 2. Unique Product Reference                             | ‘Air Reflect’ Environmental Barrier, 50mm                                                                                                      |
| 3. Intended use                                         | Acoustic cassettes- to reduce noise along highway, rail & other noise sensitive environments                                                   |
| 4. Manufacturer                                         | Genwork Ltd, Bromley Street, Lye, West Midlands, DY9 8HU, UK                                                                                   |
| 5. Assessment and verification of constancy performance | System 3, Annex V of EU Regulation 303/2011                                                                                                    |
| 6. Notified bodies                                      | MFPA Leipzig GmbH, Hans-Weigel-Straße 2b, 04319 Leipzig/Acoustic Testing Laboratory, The University of Salford, Greater Manchester, M5 4WT, UK |
| 7. Testing standards                                    | BS EN14388 (2005), BS EN 1793 (2012 & 2017), BS EN 1794 (2003)                                                                                 |
| 8. Quality Management System Scope                      | ISO9001 (2015) Quality Assurance, ISO14001 Environmental & 45001 Health & Safety                                                               |
| 9. Declared performance                                 | To comply with BS EN 14388 (2005)                                                                                                              |

Characteristic	Testing Laboratory	Test Report	Test Method	Achieved Performance
Risk of Fallen Debris	MFPA Leipzig GmbH	PB 2.1/23-049-1-1	EN 1974-2:2011, Annex B EN 1974-2:2003, Annex B	Class 2 Class 3
Self-weight	MFPA Leipzig GmbH	PB 2.1/23-049-1-2	EN 1974-1:2011, Annex B.2 EN 1974-1:2003, Annex B.2	Wet = 0.136kN Reduced Wet = 0.134kN Dry = 0.133kN
Resistance to Vertical Loads	MFPA Leipzig GmbH	PB 2.1/23-049-1-3	EN 1794-1:2003 & 2011, Annex B.3.2	3.37kN/m
Resistance to Wind Load	MFPA Leipzig GmbH	PB 2.1/23-049-1-4	EN 1974-1:2003 & 2011 Annex A	1.05kN/m <sup>2</sup> *
Resistance to Impact from Stones	MFPA Leipzig GmbH	PB 2.1/23-049-1-5	EN 1974-1:2003 & 2011, 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 & 2011, Annex E	15kN/(2m x 2m)
Reflectivity	MFPA Leipzig GmbH	PB 2.1/23-049-1-7	EN 1794-2:2011, Annex E EN 1794-2:2003, Annex E	Class 2 62.89
Resistance to Brush Fire	MFPA Leipzig GmbH	PB 3.1/23-365-1	EN 1794-2:2003 & 2011	Class 1
Sound Insulation	University of Salford Test Laboratory	Test Report No. 06569 SI/RI 03.04.2024	EN 1793-2:2012	28dB
Sound Absorption	University of Salford Test Laboratory	Test Report No. 06569 AC/R1 03.04.2024	EN1793-1:2017	8dB

\*Based on a minimum height of the noise barrier:3.0m

10. **Declaration**                      The performance of the products identified in Points 1 & 2 above is in conformity with the declared performance in Point 9

Signed on behalf of the manufacturer:

Position:

Date & place of issue

08.07.2024

Genwork Ltd, Bromley Street, Lye, West Mids. DY9 8HU

## 'Air Reflect' Declaration of Performance continued...

**Table 1:** Schedule of Posts & Capacities in accordance with:

Designed in Accordance with:

- Design: BS EN 1990: Basis of structural design
- Dead Loads: BS EN 1991-1-1 & NA: Actions on Structures: Densities, self weight & imposed Loads
- Acoustic Barriers: BS EN 1794-1: Road Traffic noise reducing devices – Non-acoustic performance

Height (m)	Post Size	Design Strength (kN/m ULS)	Working Strength (kN/m ULS)	Wind Loads (kN/m <sup>2</sup> )	Snow Loads (kN/m SLS)
1.5	127x76 UB 13	23.16	15.44	4.3	13
2.0	152x89 UB 16	33.83	22.55	3.6	16
2.5	178x102 UB 19	47.03	31.35	3.2	21
2.5	152x152 UC 23	50.05	33.37	3.4	22
3.0	203x102 UB 23	64.35	42.90	3.1	29
3.5	203x133 UB 25	70.95	47.30	2.5	
3.5	152x152 UC 37	84.98	56.65	2.4	
4.0	152x152 UC 30	68.20	45.47	1.4	25
4.5	203x133 UB 30	83.88	55.92	1.3	
5.0	254x102 UB 28	97.08	64.72	1.2	
5.5	254x146 UB 37	132.83	88.55	1.2	

*\*Based on 3.0m Post centres*

