## BSW Timber Group



Group Management Manual						
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## **Declaration of Performance**

- 1. Product Road traffic noise reducing device accoding to EN14388:2005
- 2. **Product description** See table annex 1.
- 3. Intended use Acoustic element of noise reducing device along traffic routes
- 4. **Manufacture**r BSW Timber Ltd Group Headquarters Earlston Berwickshire TD4 6JA
- 5. Authorised representative Alexander G. Brownlie (Group Commercial Director)
- 6. System for the evaluation and verification of constancy of performance System 3
- 7. Name and identification number of notified body See table annex 1
- 8. Declared Performance See table annex 1
- The performance of the product identified in points 1 and 2 is in conformace with the declared performance in point 8
   The declaration of performance is issued under the sole responsibility of the manufacturer identified at point 4
   Signed on behalf of the manufacture by;

Alexander & Brounlie

Alexander G Brownlie (Group Commercial Director) Earlston Date 8<sup>th</sup> March 2017

## **BSW Timber Group**

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Annex 1

Product type		Harmonised technical specification and notified body				
Product description	Absorptive panel	Single-sided reflective Type A	Single-sided reflective Type B	Double-sided reflective		
Dry and reduced wet self weight of an accoustic element						
Dry weight	0.349 kN/m2	0.212 kN/m2	0.239 kN/m2	0.434 kN/m2		
Reduced wet weight	0.659 kN/m2	0.225 kN/m2	0.252 kN/m2	0.450 kN/m2	-	
Resistance to loads					EN 14388:2005	
Maximum vertical load an element can withstand	3.50 kN/m2	1.19 kN/m2	1.34 kN/m2	2.39 kN/m2	MFPA Leipzig GmbH NB 0800	
Normal (90°) load an accoustic element can withstand (due to wind and static)	2.30 kN/m2	0.74 kN/m2	1.66 kN/m2	2.08 kN/m2		
Normal (90°) load an accoustic element can withstand (due to snow clearance)	15 kN/(2mx2m)	5.77 kN/(2mx2m)	5.6 kN/(2mx2m)	15 kN/(2mx2m)		
Sound Absorption DL <sub>a</sub>	10dB	NPD	NPD	NPD	EN 14388:2005	
Airborne sound insulation $DL_{R}$	32dB	27dB	27dB	32dB	University of Salford NB 1262	
Light reflectivity	NPD	NPD	NPD	NPD	EN14388:2005	
Resistance to brush fire	Class 1	Class 1	Class 1	Class 1	EN14388:2005 MFPA Leipzig GmbH NB 0800	
Risk of falling debris	NPD	NPD	NPD	NPD	EN14388:2005	
Expected durability of acoustic characteristics						
Expected change in sound relection index DL <sub>RI</sub>	-2dB, ≤ 40 years	-2dB, ≤ 40 years	-2dB, ≤ 40 years	-2dB, ≤ 40 years	EN 14388:2005 MFPA Leipzig GmbH NB 0800	
Expected change in airborne sound insualtion index DL <sub>si</sub>	-2dB, ≤ 40 years	NPD	NPD	NPD		
Expected durability of non-acoustic characteristics service life	30 years	30 years	30 years	30 years	EN 14388:2005	
Impact of stones	Achieves required standard	Achieves required standard	Achieves required standard	Achieves required standard	EN14388:2005 MFPA Leipzig GmbH NB 0800	
Dangerous substances	NPD	NPD	NPD	NPD		
Environmental protection	BS EN 60/21 classifies groups of environmental parameters and their severities to which building products are subjected when mounted for stationary use at locations which are non-weather protected. This standard shows that the following environmental conditions can be distinguished: 1) Climatic conditions 2) Biological Conditions 3) Chemically active substances 4) Mechanically active substances 5) Mechanical Conditions. Based on the 5 environmental impacts that are listed only the reaction of water or the chemically active substances; Sea salts and road salts, Sulphur dioxide, Hydrogen sulphide, Chlorine, Hydrogen Chloride, Hydrogen fluoride, Ammonia, Ozone, Nitrogen oxides with the chemical ingredients; coniferous wood containing; 2-aminoethanol, Copper(II) carbonate-copper(ii) hydroxide (1:1); organic acid, N,N-Didecyl-N,N - dimethylammoniumkarbonate and N, N-Didecyl-N, N dimethylammoniumkarbonate, Didecyldimethylammoniumchloride, Propiconazole, Dipropylene glycol methol ether,Tebuconazole. Ribbed nails of stainless steel. In the area of the noise barriers the environment can also be affected by unchanged chemically active substances listed above. Where present the mineral wool insulation ingredients include; Basalt,Dolomitic limestone, Recovered metallurgical slags, organic resin, Additives, Binders. The Geotex membrane ingredients include Polypropylene, UV Carbon black, Calcium. In addition to the environmental influences listed in 1-5), the noise reducing elements can also be exposed to fire. During combustion, water and carbon dioxide is being generated. Carbon monoxide, nitric oxides and unburned hydrocarbons (aromatic and nonaromatic hydrocarbons) can evolve.					