

# **SOUNDLAG NL-QGW**

# acoustic pipe lagging - fire retardant noise barrier with quilted glass wool backing

Soundlag™ NL-QGW is a high-performance composite acoustic lagging product consisting of an aluminium foil faced, mass-loaded, flexible vinyl noise barrier laminated to a quilted glass- wool decoupling layer. The product was developed to reduce noise break-out from pipes, valves, fan housings and ductwork in commercial, industrial and domestic buildings.

The unique construction of Soundlag™ NL-QGW combines the superior transmission loss performance of the noise barrier, Wavebar®, with the high absorption properties of the decoupling glass-wool layer Sorberglass.

The decoupling layer breaks the vibrational path between the decoupled mass barrier and the substrate to which it is bonded. This allows the vinyl external wrap to remain flexible at all times, thereby optimising its performance. The tough external aluminium foil facing provides good mechanical protection from dirt, oil and dust and offers a fire resistant covering.

The external barrier wrap, Nonlite (NL), is highly fire retardant with enhanced self-extinguishing properties and low smoke and toxicity characteristics. The decoupling layer is a lightweight 25 mm thick, noncombustible, glass-wool that is quilted (QGW) with a fabric covering to prevent it from shedding irritating fibres and make it easier to handle.

Soundlag™ products are easily cut to size with a knife or scissors and installed in 3 easy steps: cut, wrap and tape; making it the most cost effective acoustic lagging product on the market.

### **VOC STATEMENT**

Soundlag products contain no ozone-depleting substances and comply with European and Australian standards for Volatile Organic Compound emissions.

### **SPECIFICATIONS**

Colour	Silver, Yellow (Glass-Wool)	
	Roll Size: 1350 x 5000 mm	
Packaging (Standard)	Custom depending on MOQ	



## applications

- Hydraulic and waste pipes in all locations
- Air-conditioning ducting and shrouds
- Compressor wraps
- Spa motor wraps
- Factory custom cut sizes available or can be cut to size easily with a knife on site
- Working with acoustic consultants and test facilities, Pyrotek has
  designed and tested systems that achieve a high level of noise reduction
  for all plumbing and hydraulic situations

## features

- · Heat and light reflective facing
- Ignition retardant barrier layer
- · Low cost and long-lasting
- This product is classed as low VOC emitting material
- · Free from odour-producing oils and bitumen
- Reduces the noise in hydraulic and waste pipes by up to 20.5dB(A)
- Broad operating temperature range
- Tested to international standards for fire properties
- Low spread of flame surface
- Easiest and quickest product in the market to install, therefore the most cost effective
- Accredited to ISO 9001 Quality Control Standard
- Endorsed and tested by leading acoustic consultants and engineers combined with independent lab and field testing
- Easy to bond onto other substrates using matching Tape ALR adhesive or equivalent









## **PRODUCT SPECIFICATIONS**

Product name	Standard thickness (mm)	Roll size (mm)	Roll weight (kg)	Barrier weight (kg/m²)	Thermal conductivity (w/mk)	Operating temperature range °C
Soundlag NL-QGW	25	1350 x 5000	36	4.5	-	- 40 to 100 (continuous) - 40 to 120 (intermittent)

Tolerances: Length: - 0/+50mm; Width: - 0/+5mm; Thickness: +/- 3mm; Weight: +/- 5%

## **MATERIAL PROPERTIES**

Test method	Index	Report No.	Description	Results
BS476 Part 6: 1989 + A1:2009	6: 1989 + A1:2009 Fire Propagation index, I 3280		Fire Propagation test method	7.9
BS476 Part 7: 1997	Class1/Class2/Class3	328096	Classification of the surface spread of flame	Class 1
Class "0" - Summary Report	UK Building Regulations	-	Class "0" being the highest fire standard required by the British building code	"Class 0"
ASTM E84*	IBC S.803 / NFPA 5000 Ch.10.3 Class A (FSI 0-25); Class B (26-75); Class C (76- 200); SDI (0-450)	01.17786.01.063a	Flame spread and smoke development tested in Steiner tunnel apparatus	Class A

<sup>\*</sup>Barrier layer (Quadzero NL) test result

## **ACOUSTIC PERFORMANCE - INSERTION LOSS**

	Product	Weighted	Insertion Loss	
	Soundlag NL-QGW	Linear	17.3 dB	
		A Weighted	20.5 dB	



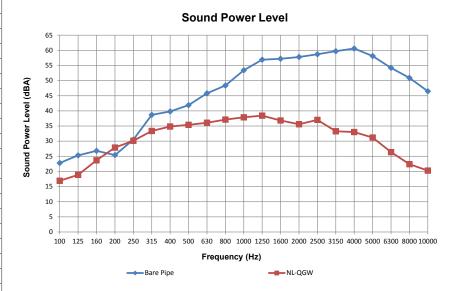


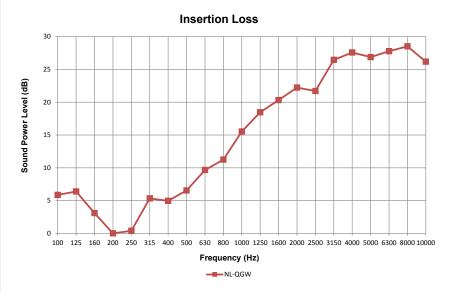
## **ACOUSTIC PERFORMANCE**

Sound Power Level		
Frequency (Hz)	Bare Pipe (dBA)	NL-QGW (dBA)
100	22.8	16.9
125	25.3	18.9
160	26.8	23.7
200	25.4	27.9
250	30.5	30.1
315	38.7	33.4
400	39.8	34.8
500	41.9	35.4
630	45.8	36.1
800	48.4	37.1
1000	53.4	37.9
1250	56.9	38.4
1600	57.2	36.8
2000	57.8	35.6
2500	58.7	37.0
3150	59.7	33.3
4000	60.6	33.0
5000	58.1	31.2
6300	54.2	26.4
8000	50.9	22.4
10000	46.5	20.3
Sum	67.7	47.2



Insertion Loss		
Frequency (Hz)	NL-QGW (dB)	
100	5.9	
125	6.4	
160	3.1	
200	0.0	
250	0.4	
315	5.3	
400	5.0	
500	6.6	
630	9.7	
800	11.3	
1000	15.5	
1250	18.5	
1600	20.3	
2000	22.2	
2500	21.7	
3150	26.5	
4000	27.6	
5000	26.9	
6300	27.8	
8000	28.5	
10000	26.2	
Insertion Loss	20.5	





For further information and contact details, please visit our website pyroteknc.com Caveats: Specifications are subject to change without notice. The data in this document is typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility of betermine the suitability of the product for their project needs. Always seek the opinion of your acoustic or mechanical engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek NC is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for dramages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this information Page refers will not infringe any third party's patents or rights.

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