

# DECIDAMP® RTD - AS60-8500

# noise reducing extensional rail damper

Decidamp RTD is a rail track damper designed to effectively reduce noise generated by track resonance. The high performance polymer composite provides significant damping via a tuned mass system. Along with noise reduction, it can also assist in reducing rail metal fatigue or corrugation growth, lowering maintenance cost.

Decidamp RTD can be designed and tuned to meet customer noise reduction requirements.

By using our internal research and development team, together with leading acoustic engineers, extensive product development was performed to create an optimised solution. On-site field testing also ensures dampers are optimised to deliver maximum effectiveness on any track configuration.

Decidamp RTD can be easily fitted to existing and new rail track as a method of complying with noise legislation and environmental planning regulations. Decidamp RTD dampers are easily attached to either side of the rail using specially designed brackets.

Decidamp RTD can be supplied with a metal face plate to provide UV and fire protection for increased product durability. Decidamp RTD is a cost-effective option to reduce radiating noise from railway rolling track.

#### **VOC, ODP, HEALTH AND SAFETY**

Decidamp RTD is non-toxic and safe to handle by methods prescribed in Safety Data Sheet. No Ozone depleting substances are used during the manufacture of Decidamp RTD.

#### **SPECIFICATIONS**

Colour	Black			
	Track profile: AS60			
	Length (mm): 400			
Available	Weight (kg): 8.5			
Available	Noise reduction: Up to 6.5 dB(A)*			
	Other track profiles available on MOQ			

\*Refer to acoustic performance tables



## features

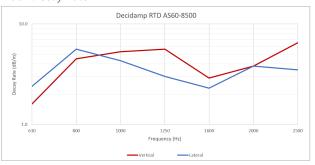
- · Decidamp RTD can effectively reduce rail-radiated noise
- Highly optimized performance to weight ratio minimized weight for ease of installation
- Can reduce rail fatigue/corrugation
- Minimise track maintenance
- · Prolong track lifespan
- Easily installed, reducing down time during commissioning of new rail tracks or during maintenance
- Dampers can be made available for various track profiles
- Damping performance is tuned to be effective across the typical frequency range of track vibration
- Minimal maintenance requirement after installation, long life once fitted
- Does not interfere with other elements of the rail assembly
- No interference with other track maintenance e.g. rail grinding
- Reduces the reliance on noise barriers
- Metal face plate can be included for increased durability
- Glue point locations to reduce lateral movement

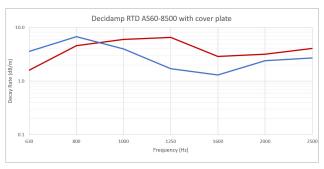




#### **ACOUSTICS PERFORMANCE**

#### Track Decay Rate





	Direction	Decay Rate (dB/m) at One Third Octave Band Centre Frequency (Hz)							
Product		630	800	1000	1250	1600	2000	2500	Arithmetic average of 1/3 ocative bands (630-2500hz)
Desidence DTD ACCO 0500 *	Vertical	1.6	4.5	5.3	5.6	2.9	3.8	6.5	4.3
Decidamp RTD AS60-8500 *	Lateral	2.4	5.6	4.3	3.0	2.3	3.8	3.5	3.6
Decidamp RTD AS60-8500 **	Vertical	1.6	4.6	6.0	6.6	2.9	3.2	4.1	4.1
with cover plate	Lateral	3.6	6.8	4.0	1.7	1.3	2.4	2.7	3.2

Report number: \*610.19202-L18-v1.0-20230131 \*\*610.19202-L11-v1.0-20220330

Nominal measurement of track decay rate (TDR) of 6 m length track with 0.7 m spacing between Decidamp RTD dampers.

Correct installation is required to achieve best results, variation in measured TDR is expected for variation in track length, spacing or end test condition.

#### **PRODUCT SPECIFICATIONS**

Product Name	Colour	Nominal weight (kg)	Length (mm)	Operating Temperature	Installation method
Decidamp RTD AS60-8500	Black polymer with		400	Optimal: 10 to 40 °C Continuous: -40 to 80 °C Maximum Intermittent 130 °C	2x stainless steel clips per Decidamp RTD damping block.

Enquire for alternate method of installation.

### MATERIAL PROPERTIES

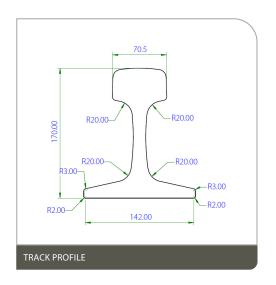
Test method	Property	Report no.	Results		
AS1530.3 Tested with cover plate			Ignitability	0	
	Method for fire tests on building	21-000883	Spread of flame	0	
	materials, components and structures		Heat evolved	0	
			Smoke developed	3	
ASTM D5116	TVOC specific area emission rate	V2010039		ss than the Green Star hold of 0.5 mg/m2/hr	
EN 17084, NF X 70-100 (EN 455545-2) Tested without cover plate	(EN 455545-2) effluents produced by thermal		C.I.T = 0.28 Complies with strictest implementation of HL3 criteria, a maximum permissible value of 0.75		
Design life and maintenance	Service life assessment   RAS/70/101/109/9		35 years with proper use, installation and maintenance		
	Typical noise mitigation STARDAMP modelled scenario	TK490-07F03	Up to 6.5 dB(A) reduction in noise from rail track source.		
STARDAMP calculation	Sound pressure levels at 7.5 m dB(A)	TK490-04F01	With cover plate: Up to 5.6 dB(A) reduction in noise from rail track source.		
EN 15461:2008/A1:2010	5461:2008/A1:2010 50m Track Decay Rate (TDR)		Up to 15.1dB/m @1Khz		

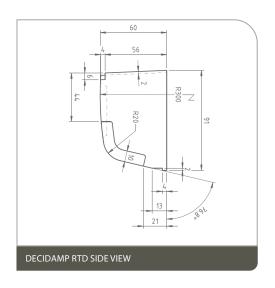
 $STARDAMP\ calculations\ are\ system\ dependent\ and\ assessment\ should\ be\ done\ on\ track\ forms\ specific\ to\ end-use$ 

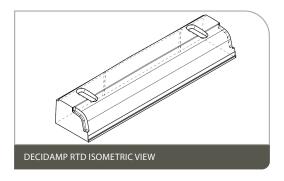




#### TRACK AND PRODUCT DRAWINGS







#### OPTIONAL ACCESSORY FOR FIRE, UV, MECHANICAL WEAR RESISTANCE



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 to determine the suitability of the product for their project needs. Always seek the opinion of your acoust mechanical and file reginieer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages 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 or large refers will not infininge any third party's patents or rights.

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