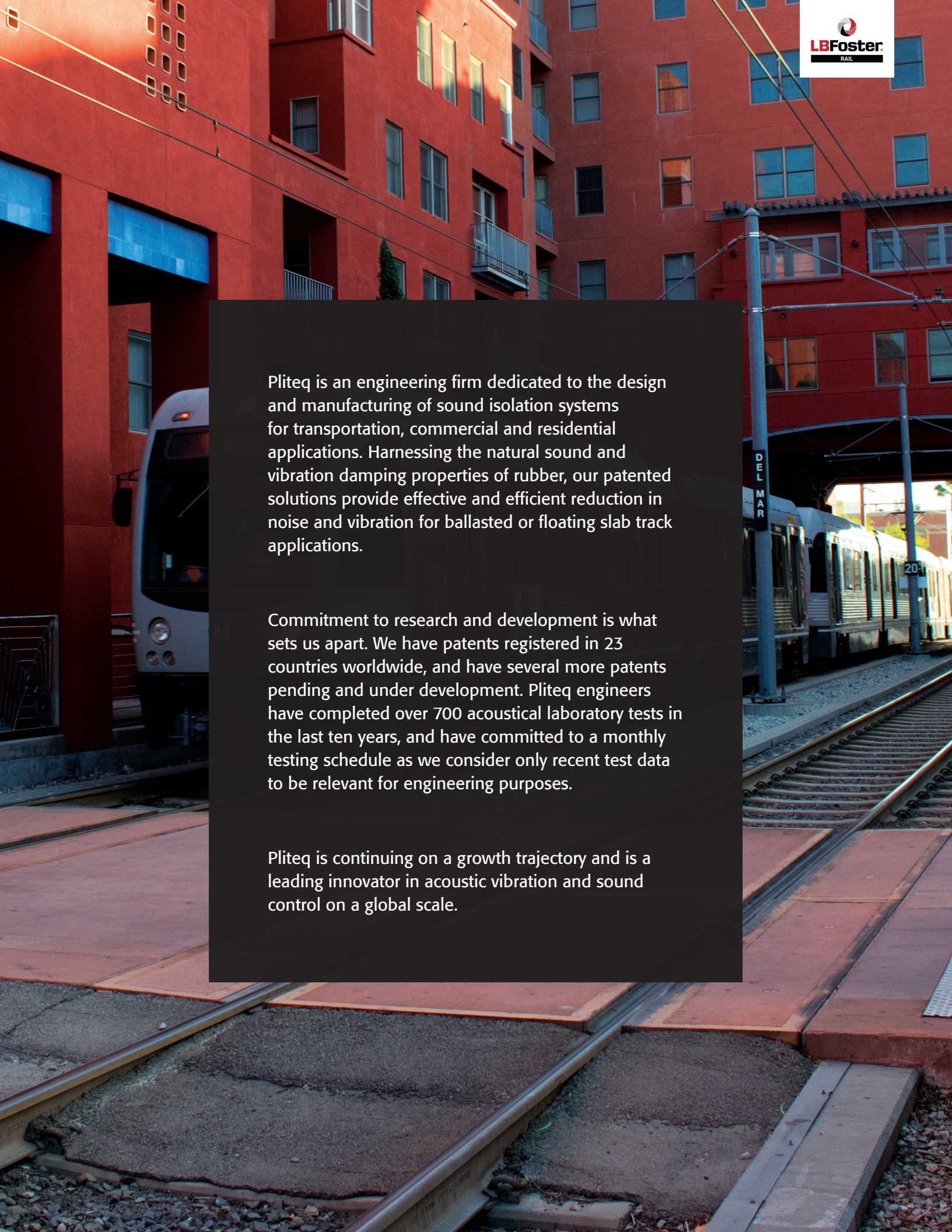


GENIEMat® RAIL BST

ENGINEERED SUB-BALLAST MATS FOR BALLAST
PRESERVATION AND VIBRATION ISOLATION





Pliteq is an engineering firm dedicated to the design and manufacturing of sound isolation systems for transportation, commercial and residential applications. Harnessing the natural sound and vibration damping properties of rubber, our patented solutions provide effective and efficient reduction in noise and vibration for ballasted or floating slab track applications.

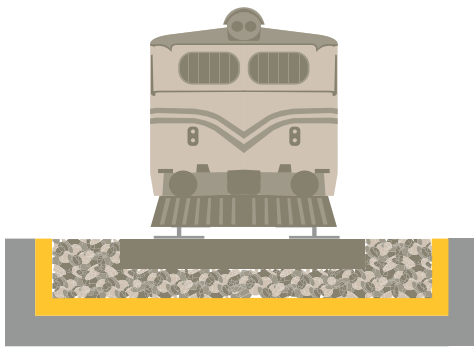
Commitment to research and development is what sets us apart. We have patents registered in 23 countries worldwide, and have several more patents pending and under development. Pliteq engineers have completed over 700 acoustical laboratory tests in the last ten years, and have committed to a monthly testing schedule as we consider only recent test data to be relevant for engineering purposes.

Pliteq is continuing on a growth trajectory and is a leading innovator in acoustic vibration and sound control on a global scale.

GENIEMAT[®] RAIL

Patented Isolation Technology for Rail Systems

FROM THE INVENTOR OF THE PATENTED TECHNOLOGY
(US 8240430, US 8556029, CA 2500956, CA 2503420)

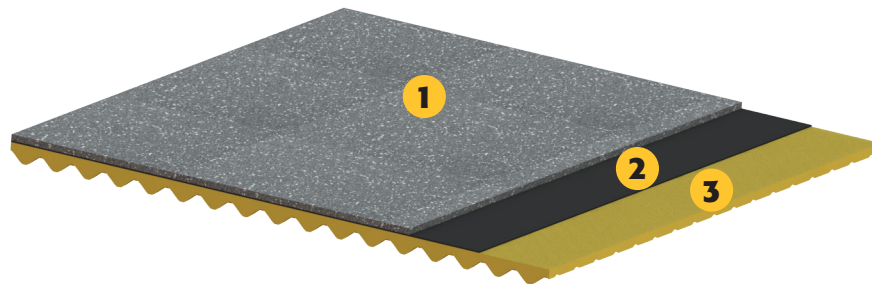


GENIEMAT RAIL BST - BALLAST MAT

- Engineered for transit and freight rail lines
- Proven to be most effective method of reducing ballast degradation
- Provides high-performance ground-borne vibration isolation in critical locations
- Water permeable for drainage
- Rubber or polyurethane foam

1 | Impregnable protection surface extends the contact area of the ballast to provide greater stability.

2 | Structural mesh provides monolithic reinforcement.

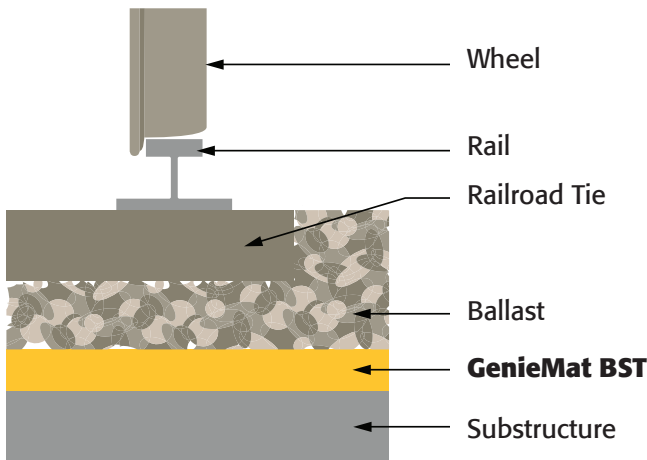
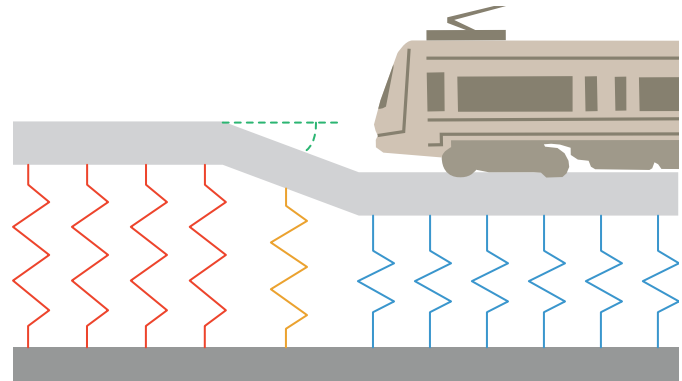


3 | The resilient elastomer is engineered dependent on project conditions.

REDUCES IMPACTS AND MAXIMIZE TRACK COMPONENT LIFESPAN

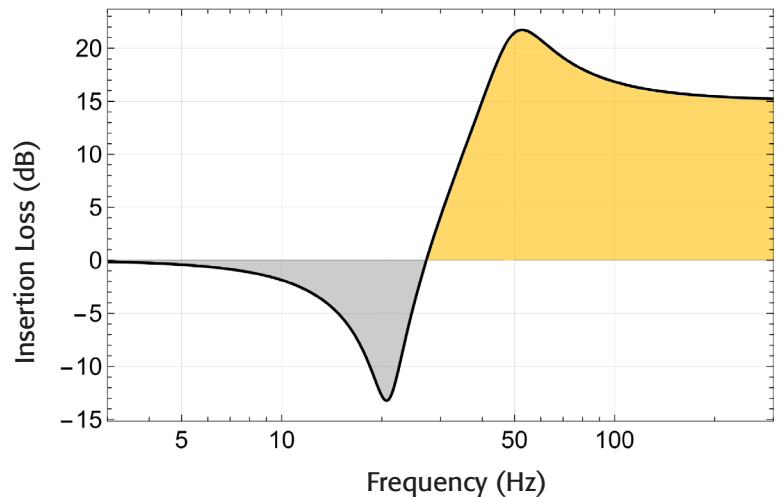
Due to the change in substructure stiffness, track components in bridge transition zones are subject to higher impacts and vibrations magnitudes.

If these areas are left untreated, the track, ballast, and sleepers will suffer a shortened lifespan and increased operating costs.



To reduce impacts in bridge transition zones, engineers use FEA to specify **GenieMat BST** products that will moderate the stiffer portions of track and equalize deflection throughout.

When acoustical isolation is necessary, **Pliteq** offers insertion loss calculations based on the use of **GenieMat BST** under the specific project conditions.



GENIEMAT® RAIL BST - BALLAST MAT

VIBRATION ISOLATION SYSTEM FOR RAIL

PRODUCT SPECIFICATION

PRODUCT NAME: GenieMat RAIL BST

PATENTS: US 8240430, US 8556029, CA 2500956, CA 2503420

DESCRIPTION: GenieMat RAIL BST ballast mats are engineered according to project requirements to provide vibration isolation and reduce ballast stress.

PROPERTY	GenieMat RAIL BST25	GenieMat RAIL BST16	GenieMat RAIL BST12
TYPICAL AXLE LOAD:	12 Tons*	33 Tons*	40 Tons*
DIMENSIONS:	1219 mm width, 30 mm thickness (48" width, 1 3/16" thickness), length to spec	1219 mm width, 22 mm thickness (48" width, 7/8" thickness), length to spec	1219 mm width, 19 mm thickness (48" width, 3/4" thickness), length to spec
STRUCTURE:	Protective top layer, structural mesh, and resilient elastomer 75 mm (3") protection layer overlap for seam reinforcement	Protective top layer, structural mesh, and resilient elastomer 75 mm (3") protection layer overlap for seam reinforcement	Protective top layer, structural mesh, and resilient elastomer 75 mm (3") protection layer overlap for seam reinforcement
WEIGHT:	15 kg/m ² (~28 lb/yd ²)	14 kg/m ² (~26 lb/yd ²)	13 kg/m ² (~24 lb/yd ²)
FABRIC:	Type: Fiberglass coated PVC Tensile: 105 N/mm (600 lb/in) Elongation at break: ≥10%		
ELASTOMER:	Rubber		
TEMPERATURE RANGE:	Suitable for service where GenieMat RAIL BST temperatures range between -40°C and +110°C (-40°F and 230°F).		

*Complete specification guides and submittal package available upon request.



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