TECHNIAL DATA SHEET

Raised Rumble Bars

Overview

The Raised Thermoplastic Rumble Bar System is a preformed traffic calming and hazard awareness treatment designed to provide a clear **audible and tactile warning** to path and roadway users. The system is suitable for installation on **asphalt and concrete surfaces**, particularly in shared environments where interaction between pedestrians, cyclists, and micromobility users requires controlled speed and increased awareness.

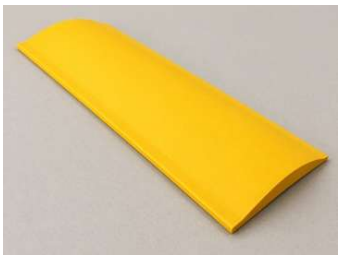
Each unit consists of a **preformed thermoplastic strip incorporating multiple raised bars**, engineered to deliver a consistent vibration profile under wheel while maintaining a smooth and predictable surface for foot traffic.

Key Features

Tactile and Audible Warning Provides clear vibration and sound feedback to improve user awareness.

Preformed, Consistent Profile Eliminates variability associated with layered or site-built systems.

Durable Construction Resistant to wear, impact, UV exposure, fuels, and environmental conditions.



User-Appropriate Geometry Designed to balance effectiveness with comfort for pedestrians, cyclists, and vehicles.

Rapid Installation Installed using standard Australian methods with minimal disruption.

Immediate Trafficability Can be opened to traffic shortly after installation.

Typical Applications

- Shared pedestrian and cyclist paths
- Approaches to crossings and intersections
- Traffic calming zones
- Transition areas (e.g. road to shared path)
- E-micromobility environments (e-bikes, scooters)

Material Specifications

Design

Rumble strips shall be raised to provide a distinct audible and vibratory cue to motorists & good visibility in both dry & wet-night conditions. Rumble strips shall be solid with no hollow areas that can crush or lamination layers that can separate, constructed of a UV-stabilized impact resistant thermoplastic alloy impervious to the detrimental effects of motor fuels, lubricants, hydraulic fluids, etc. and conforming to the following properties:

Property	Test Method (ASTM)	Result
Specific Gravity (minimum)	D 792	1.19
Hardness – Rockwell M (minimum)	D 785	20
Gardner Impact Strength	—	120 in·lb
Tensile Strength @ Yield (minimum)	D 638	2,500 psi
Flexural Strength @ Yield (minimum)	D 790	5,500 psi
Flexural Modulus	D 790	275,000 psi

The bottom of each of the rumble strips shall have a minimum of 75% grooved surface to increase the adhesion to the roadway by 25%.

Physical Dimensions

Product	Width	Height	Length
Rumble Bar	100mm	15mm	305mm

Colors

Rumble strips shall be constructed of a 100 % thermoplastic blended alloy of polymers and colors to ensure quality & performance. The color shall be solid throughout and match the color of the lane line adjacent to which they will be placed. Stocked colours include White and Safety Yellow.

Installation

Rumble strips shall be capable of being affixed to asphalt or concrete roadways by the use of an approved bitumen adhesive similar to RPM's.

Rayolite Pty Ltd

Address: 237-239 Berkeley Rd, Unanderra, NSW 2526
Postal: PO Box 1156, Unanderra, NSW 2526
Phone: (02) 4271 5056
Mobile: 0407 473 889 Greg
Mobile: 0468 871 319 Leesa
Email: sales@rayolite.com.au

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