

NEW EQUIPMENT & SYSTEM APPROVAL PROFORMA		Ref: 10/3011
<p>Note: the prompts given below are only a guide to the information required for approval. Dependent on the type of equipment or system that requires approval delete any section that is not applicable or include additional information if necessary. Mandatory fields are marked with an asterisk (*).</p>		
1	<p>Equipment or System to be approved * Strail Premium 1200mm wide fibre reinforced inner panels for level crossings – Revised Jan 2010</p>	
2	<p>Originator * Name: Jeffrey Roseman Company: Phoenix AG (Australia) Pty Ltd</p>	
3	<p>Introduction * Phoenix AG (Australia) are seeking approval of STRAIL Premium 1200mm fibre reinforced inner panel level crossings. Strail Rubber level crossing for road vehicles with a 600mm inner panel are already approved.</p>	
4	<p>Determination of Need * This new panel size doubles the area that can be put down during an installation which saves time and reduces labour costs. Position stability is improved due to the expanded size of the surface. As a smaller number of panels are required for a given area so the number of joints is reduces. Slanted edges protect the panel joints, particularly under high loads, as caused by turning traffic. The new 1200mm panel has a reinforced top and underside which gives higher stability and stiffness and results in an improved load distribution as well as a wider load transfer into the foundation. This is evident by the lower deflection under load than the already approved 600mm panel – see the Attachments. An optimal road connection with a T-Curbstone improves load capacity and reduces the strain on the track system. This product is also compatible with other existing Strail products.</p>	
5	<p>Significant Change or Not * This change in equipment or system is assessed as MINOR</p>	
6	<p>Review Panel *</p> <ul style="list-style-type: none"> • John Furness - Manager Standards • Tim Calver – Civil Standards and Technical Services Engineer • Abbie Thomas – Track and Civil Standards Engineer 	
7	<p>Safety The design of the panels ensures optimal safety. The panels are connected by a lock-tight system which ensures a smooth fit to the rail and are assembled together to make one length rubber (beam) with the tie rods and each tie rod is interlocked together. Hence the possibility of any one panel coming loose is not possible; there have been cases where a track has washed out and all of the panels remained intact. The wear-resistant surface made from patent high-tech rubber mixes and vulcanized corundum is a guarantee for excellent durability and anti-skid properties that are comparable with the already approved 600mm panel. A pyramid profile optimised for wet conditions quickly drains off rain water. The SRT value (a standardised value for wet slip resistance measurement) is on an equal level with that of asphalt. This allows permanent compliance with the BAST guidelines for road grip and traffic safety in wet conditions.</p>	
8	<p>Performance and Suitability</p>	
	<p>(i) Use in other rail networks The 1200mm panels are currently in use in DB (Germany) and Network Rail (UK).</p>	
	<p>(ii) Changes required to infrastructure or systems for use of the equipment No changes are required.</p>	
9	<p>Maintainability The compact panels units allow simple and cost-effective track maintenance due to short installation and removal. Removal of the Strail system for tamping or other track maintenance is done in reverse sequence from the installation procedure. Extra time will need to be allowed for in maintenance plans for the removal / replacement of the panels.</p>	

10	Approval *							
	Approved for use across the ARTC Network.							
11	Conditions of Approval *							
	1. Installation as per manufacturer's instructions. 2. The road speed over the panels is limited to 110 km/hr.							
12	Does the Originator accept the additional Conditions of Approval as set by the Review Panel:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Yes</td> <td style="width: 15%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 15%;">No</td> <td style="width: 15%; text-align: center;"><input type="checkbox"/></td> <td style="width: 15%;">N/A</td> <td style="width: 15%; text-align: center;"><input type="checkbox"/></td> </tr> </table>	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>			

13	Sign off	ARTC office use only
	Review Panel:	
	John Furness	Date: 29/1/2010
	Tim Calver	Date: 29/01/2010
	Abbie Thomas	Date: 29/01/2010

Attachments

- Letter from Robert Kaser, STRAIL Export manager RE. STRAIL Products and Certificate of Acceptance