

Metro Manila Subway Project Phase 1												
Package CP107: Rolling Stock												
ITEM NO.	REFERENCE/CLAUSE/SECTION	CLARIFICATION REQUEST	RESPONSE									
<i>Volume II, Part 2 – Employer’s Requirements</i>												
1	Technical Requirements Page ERT-38 Sub-Clause 6.4 FLOORING	<p>It is required in the Technical Requirement Sub-Clause 6.4 that the floor covering material shall meet the following performance requirements:</p> <ol style="list-style-type: none"> 1) Slip resistance of 0.75 dry and 0.62 wet in accordance with JRIS J0745; 2) Hardness of Shore A Hardness 85-90; 3) Resistance to chemicals in accordance with JIS A 1454 with noticeable variation; <p>and</p> <ol style="list-style-type: none"> 4) Tensile strength in accordance with JIS K 6251 - 7.3 MPa. <p>The baseline design adopted for the proposed rolling stock uses PVC (Poly Vinyl Chloride) for the floor covering which has been used for over 3,000 rolling stocks in Metropolitan Tokyo area since year 2000.</p> <p>Then, Bidder compared the above characteristics with the PVC floor covering material as summarized below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Requirements</th> <th style="width: 33%;">TS Requirements</th> <th style="width: 33%;">PVC</th> </tr> </thead> <tbody> <tr> <td>Slip resistance (C.S.R. value)</td> <td>Dry: 0.75, Wet 0.62</td> <td>Dry: 0.83, Wet: 0.54</td> </tr> <tr> <td>Hardness measured by Durometer:</td> <td>85 – 90</td> <td>97 (considered equivalent with Shore</td> </tr> </tbody> </table>	Requirements	TS Requirements	PVC	Slip resistance (C.S.R. value)	Dry: 0.75, Wet 0.62	Dry: 0.83, Wet: 0.54	Hardness measured by Durometer:	85 – 90	97 (considered equivalent with Shore	<p>Bidder’s request is accepted.</p> <p>The service proven record shall include the number and years in operation in a similar railway supplied by the Bidder for the Engineer review.</p>
Requirements	TS Requirements	PVC										
Slip resistance (C.S.R. value)	Dry: 0.75, Wet 0.62	Dry: 0.83, Wet: 0.54										
Hardness measured by Durometer:	85 – 90	97 (considered equivalent with Shore										

		<table border="1"> <tr> <td></td> <td></td> <td>A Hardness) per ASTM D2240</td> </tr> <tr> <td>Resistance of chemicals:</td> <td>Per JIS A 1454</td> <td>Superior to JIS A1454</td> </tr> <tr> <td>Tensile strength per JIS K 6251:</td> <td>7.3 MPa</td> <td>8.0 MPa</td> </tr> </table> <p>As shown in the above chart,, coefficient of friction value of the PVC has a little wider range between dry and wet as compared with the specified value; however, overall property of PVC has better material characteristics than the typical rubber type floor covering; therefore, Bidder would like Employer to accept the alternative floor covering material as above.</p>			A Hardness) per ASTM D2240	Resistance of chemicals:	Per JIS A 1454	Superior to JIS A1454	Tensile strength per JIS K 6251:	7.3 MPa	8.0 MPa	
		A Hardness) per ASTM D2240										
Resistance of chemicals:	Per JIS A 1454	Superior to JIS A1454										
Tensile strength per JIS K 6251:	7.3 MPa	8.0 MPa										
2	<p>Technical Requirements Page ERT-46 Sub-Clause 6.17 VEHICLE FIRE SAFETY AND PROTECTION</p>	<p>It is Bidder' understanding that the requirement of Vehicle Fire Safety and Protection is fully satisfied if the Contractor fully meets Japanese Ministerial Ordinance, MLIT Chapter 8, Section 5, Article 83 (Countermeasures for Fire of Rolling Stock). Please confirm if Bidder's understanding is correct.</p>	<p>Bidder's understanding is correct. Application shall be for subway train category.</p>									
3	<p>Technical Requirements Page ERT-61 Sub-Clause 10.4 WHEEL SLIDE CONTROL SYSTEM</p>	<p>ERT sub-clause 10.4, Item 1) requires that digital wheel slide protection with gradual slide correction shall be provided in all braking modes.</p> <p>It is Bidder's understanding that "all modes" in the above sentence means service brake, emergency brake and security brake only and it is not necessary to apply wheel slide control system for parking brake,</p>	<p>Bidder's understanding is correct. Not to be included in the Parking Brake.</p> <p>Note the following; Whether this function is applied in security brake shall depend on the</p>									

		Please confirm if Bidder's understanding is correct.	security brake mode sequence and condition. Proposal shall be reviewed and accepted in the detail design stage.
4	<p>Technical Requirements Page ERT-117 Sub-Clause 22.3 DESIGN QUALIFICATION TESTING</p>	<p>It is Bidder's understanding that the purpose of parking brake test is to verify its ability on the specified gradient in accordance with TS clause 1.8.5. Accordingly, the Bidder opines that the actual force measurement will not be required, and therefore asks Employer to remove the below requirement in ERT sub-clause 22.3, Item 8).</p> <p>"The test shall record the actual force required to overcome the parking brake in a failure recovery situation on both level track and a 3.5% gradient."</p> <p>If this requirement is not be removed, Bidder is concerned that the aforementioned test required in ERT sub-clause 22.3, Item 8) may cause many wheel flats when the pulling/pushing force is applied on the train set until such force exceeds the parking brake force. In that case, it is Bidder's understanding that Contractor has no responsibility to that wheel flat. Please confirm if Bidder's understanding is correct.</p>	<p>Bidder's understanding is correct, and request is accepted.</p> <p>The Parking brake performance including brake effort and mechanical release function shall be submitted to be reviewed by the Engineer, the limit of parking brake performance is to be confirmed by the document, and the test then item mentioned here by the Bidder can be omitted.</p>