













Surface Characteristic Property	Remedial Action	
	AutoStore	AMR
Gloss	 No Action Required	 Action Required
	<p>No gloss requirements need to be considered for AutoStore.</p>	<p>The gloss or reflectivity of the floor must be tested and considered for AMRs to ensure it doesn't cause issues with the AMR sensors.</p> <p>Light grinding of the surface is required to reduce the gloss of a slab.</p> <p>However, this could have adverse effects on the floor's durability.</p>
Roughness	 No Action Required	 Action Required
	<p>No roughness requirements are needed for AutoStore systems.</p>	<p>The roughness of the floor must be tested and considered for AMR systems to ensure the robot wheels have sufficient grip when starting and stopping, especially in fast-moving areas.</p> <p>Light grinding of the surface is required to increase roughness, but again, this may have adverse effects on its durability.</p>



Surface Characteristic Property	Remedial Action	
	AutoStore	AMR
Friction	 No Action Required	 Action Required
	<p>No friction requirements are needed for AutoStore systems.</p>	<p>The friction of the floor must be tested and considered for AMR systems to ensure the robot wheels have sufficient grip when starting and stopping, especially in fast-moving areas.</p> <p>Light grinding of the surface is required to increase the friction of a slab. This may have adverse effects on the durability.</p>
Durability	 No Action Required	 Action Required
	<p>AutoStore has no traffic on the slab surface, so the durability of the floor under the system doesn't need to be considered.</p>	<p>The durability of a floor needs to be tested and considered for AMRs as the robots are trafficking the floor surface.</p> <p>If the floor surface degrades under the AMR wheel paths, it can cause issues with the operation.</p>









Surface Characteristic Property	Remedial Action	
	AutoStore	AMR
Small Surface Damage	 No Action Required	 Action Required
	<p>AutoStore has no traffic on the slab surface, so any small areas of damage to the floor surface under the system don't need to be repaired.</p>	<p>Any small areas of damage on a floor need to be considered and repaired for AMRs as the robots are trafficking the floor surface.</p> <p>If the floor surface degrades under the AMR wheel paths, it can cause issues with the operation.</p>
Bolts	 No Action Required	 Action Required
	<p>AutoStore has no floor traffic, so bolts can simply be cut flush or knocked down level with the floor surface.</p>	<p>Any bolts which are in the slab under the AMR system will need to be fully removed by coring and filling the holes in the bolt locations.</p> <p>If the bolts are only cut down to the slab surface it can introduce a weak area of the slab which could be damaged once subjected to AMR traffic.</p>





Surface Characteristic Property	Remedial Action	
	AutoStore	AMR
Wide Joints	 No Action Required	 Action Required
	<p>AutoStore has no floor traffic, so joints can be left in their wide state with no risk of further deterioration.</p>	<p>Wide joints need to be filled or repaired for AMR systems.</p> <p>As the AMR is trafficking the joints, any wide openings will increase the likelihood of impact damage to both slab joint arrisses and robot wheels.</p> <p>If joints need replacing, this could become a costly repair.</p>
Cracking	 No Action Required	 Action Required
	<p>AutoStore has no floor traffic, so cracks can be left with no risk of further deterioration.</p>	<p>Cracks generally wider than 0.5-0.8mm need to be filled or repaired for AMR systems.</p> <p>As the AMR is travelling over the cracks, there is a likelihood of impact damage to both the slab and the robot wheels.</p>

