

Incident Summary II-684356-2018 (# 7090) FINAL

SUPPORTING INFORMATION	Incident Date		May 2, 2018	
	Location		Surrey	
	Regulated industry sector		Elevator	
	Impact	Injury	Qty injuries	1
			Injury description	Head injury, cut that required stitches, possible concussion.
			Injury rating	Moderate
	Damage		Damage description	Emergency Exit ceiling panel fell from drop ceiling.
			Damage rating	Insignificant
	Incident rating		Moderate	
Incident overview		While the elevator was in use, with an individual inside, the emergency exit drop ceiling panel became loose and fell from the ceiling injuring the occupant.		
INVESTIGATION CONCLUSIONS	Site, system and components		The metal emergency exit ceiling panels in an elevator are held in place by two means of suspension. First the primary means of suspension is four screws that slide into a slot on the panel. Second is a bracket system, which consists of a metal bracket on either side attached to the panel with two bolts this keeps the panels from falling, If the Primary means of suspension fails the secondary would catch the panel and keep it from falling more than approximately 12 inches.	
	Failure scenario(s)		Due to the primary means of suspension becoming loose from regular vibrations in the elevator and the secondary means of suspension never being attached to the panel, it was able to vibrate itself loose and fall out of place.	
	Facts and evidence		<p>During investigation, it was found that :</p> <ul style="list-style-type: none"> • The secondary means of suspension was found in the elevator attached to the panel bars. The secondary suspension was observed to be not attached to emergency exit ceiling panel. • The emergency exit ceiling panel was placed back in the position it would have been before the incident, the drop ceiling was then lightly shaken to imitate the vibration of the elevator. Upon shaking of the drop ceiling the panel then fell out and crashed to the floor confirming the incident. 	
	Causes and contributing factors		<p>The cause for the emergency exit drop ceiling falling was most likely due to the secondary means of suspension not being installed during initial installation. It is very likely the natural vibration of the elevator over time was a contributing factor to the panel shifting and falling.</p> <ol style="list-style-type: none"> 1. Primary suspension loosened due to the vibration over time. 2. Secondary suspension was never installed to hold the panels in place. 	



Missing metal emergency exit ceiling panel



Secondary Suspension not being used to hold panel in place.

Primary means of suspension is loose.