SAFETY
IN MOTION

The Safety Playbook for Escalator Owners



Building and Construction Authority

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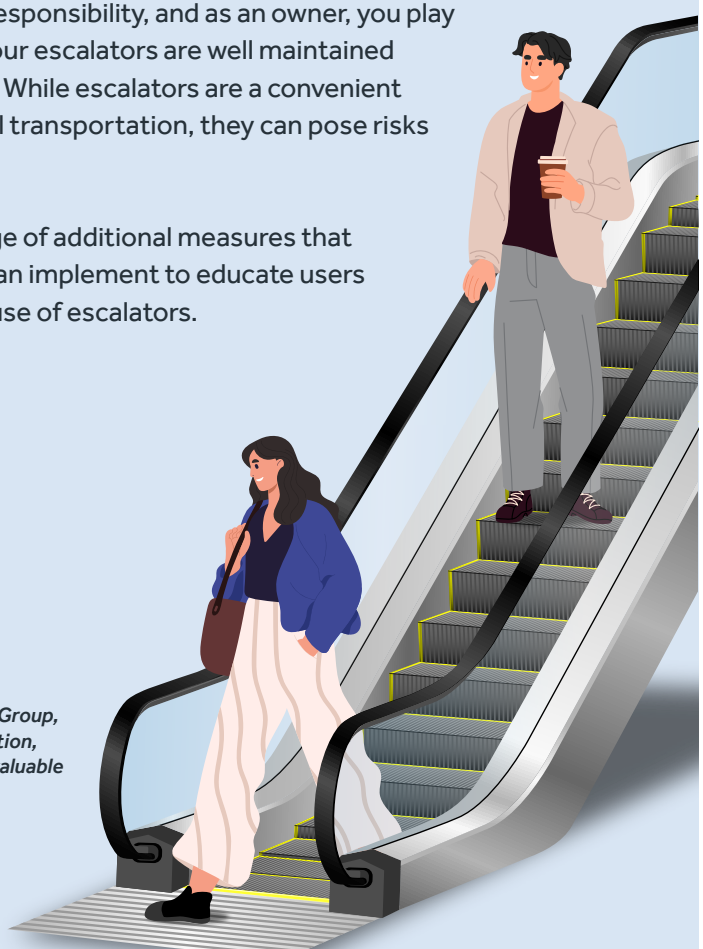
INTRODUCTION

Singapore's extensive network of escalators plays an important role in the daily movement of people across transport hubs, commercial buildings, and community facilities. With millions of trips made on escalators each day, ensuring their safe and reliable operation is a responsibility that falls significantly on the owners and operators who manage them.

The Building and Construction Authority (BCA) and industry partners establish regulations and best practices for safe escalator operation. Many owners also adopt extra safety measures tailored to their specific premises and users.

Escalator safety is a shared responsibility, and as an owner, you play a vital role in ensuring that your escalators are well maintained and comply with regulations. While escalators are a convenient and efficient mode of vertical transportation, they can pose risks if not used properly.

This playbook outlines a range of additional measures that you, as an escalator owner, can implement to educate users on the safe and responsible use of escalators.



With thanks to REDAS, Changi Airport Group, Jewel Gateway Pte Ltd, SMRT Corporation, SBS Transit and our partners for their valuable inputs and the use of photographs.

PRACTICAL GUIDE TO SAFETY

Escalator safety depends on more than good engineering alone. It requires clear communication, proactive management, and an environment that naturally guides users towards safe behaviour.

This playbook organises good practices around five key areas that work together to create a safer escalator experience: visual cues, audio cues, physical barriers, escalator features and operational controls.

OVERVIEW OF THE 5-KEY AREAS



Visual Cues –
What Users See



Audio –
What Users Hear



Operational Controls –
How It Should Be Run



Physical Barriers –
What Guides Them



Escalator Features –
Built In Mechanism
And How It Helps

VISUAL CUES

Visual cues are a primary form of safety communication in escalator environments, designed to guide user behaviour instinctively through signage, visuals, and environmental prompts.

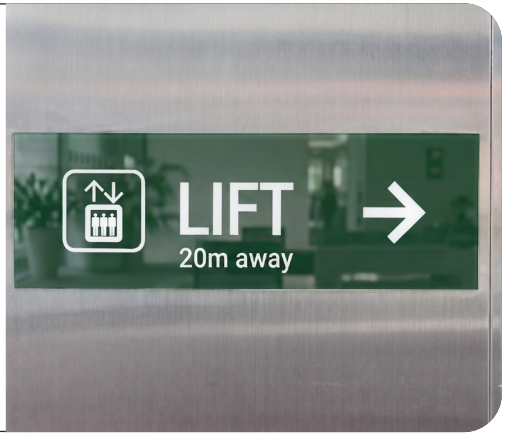
SAFETY POSTERS

Display posters showing escalator safety tips at strategic locations of the escalator.



SIGNAGE TO GUIDE USERS TO LIFT

Provide prominent directional signage and floor map to inform users such as people with physical disabilities or carrying bulky items.



LOCATING EMERGENCY STOP BUTTONS

Provide signage to clearly indicate the location of the emergency stop buttons.



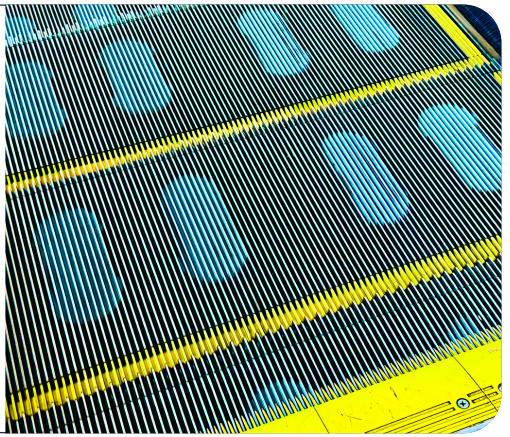
SIGNAGE/ WARNING LABELS

Display safety messages or warning/caution signs at strategic locations of the escalator.



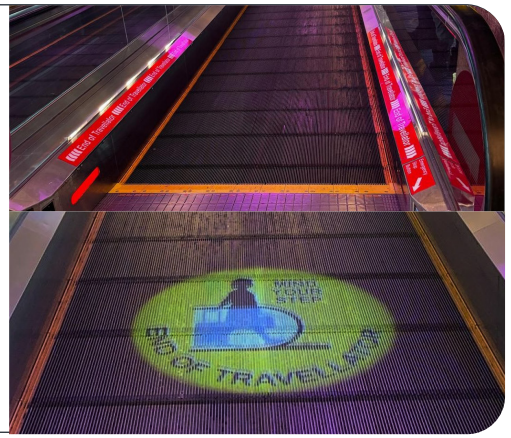
FOOTPRINT MARKINGS ON STEPS

Provide footprint markings on escalator steps to encourage users to stand away from the edges and skirt panels.



SAFETY INTERVENTION

Install projection or blinking lights at strategic locations of the escalator to educate users on its safe use.



SAFETY VIDEOS

Broadcast safety videos of safe use of escalators on display monitors in the premises.



AUDIO & PHYSICAL

While visual cues form the first layer of safety communication, audio and physical measures provide essential reinforcement. Audio reminders engage users directly through sound, reaching those who may miss visual prompts, while physical barriers guide movement and discourage unsafe behaviour.

SPEAKERS

Install speakers at strategic locations of the escalator to broadcast safety messages in different languages and dialects, ensuring safety messages reach a diverse range of users.



PHYSICAL BARRIERS

Install magnetic bollards at escalator landings to deter people with bulky items, strollers, or trolleys from using them.



ESCALATOR FEATURES

Additional features may be incorporated into escalator systems to improve safety. It is advisable to engage your escalator manufacturer when planning the implementation of such features.

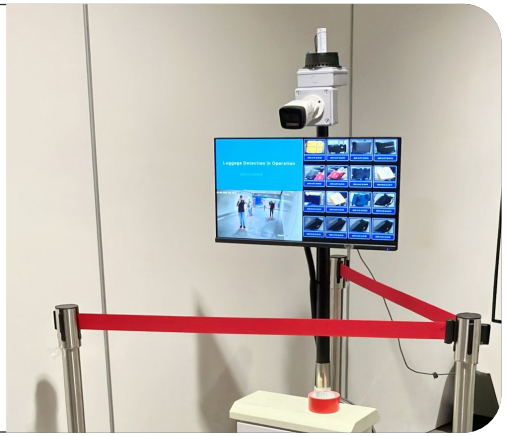
HANDRAIL SPEED MONITORING

Install a handrail speed monitoring device to stop the escalator if handrail stoppage or handrail slippage is detected, preventing users from losing balance due to speed inconsistency between the handrail and steps.



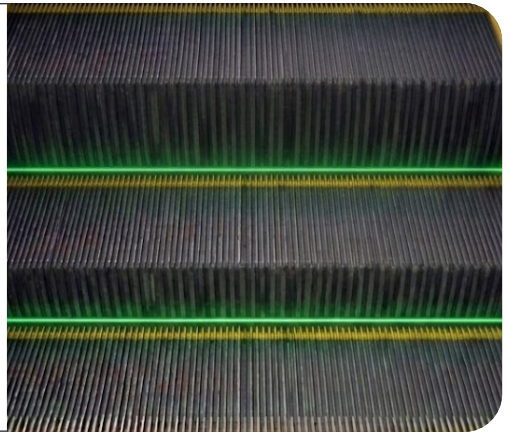
AI & SENSORS

Work with your escalator manufacturer to implement AI-enabled sensors that detect high-risk situations, such as users with prams, bulky items, or foreign objects, and trigger alerts for early intervention.



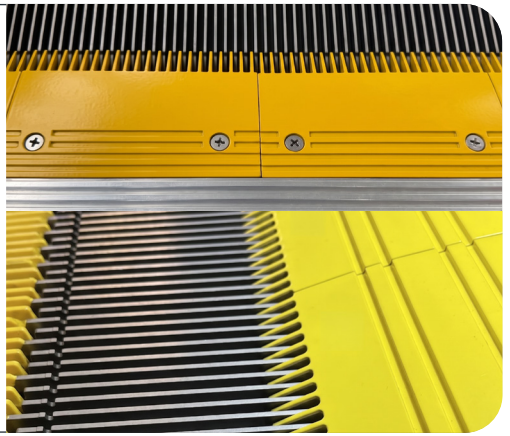
IMPROVED VISIBILITY OF THE ESCALATOR STEPS

Install under-step lighting to highlight the step/ landing interface, helping users judge their footing when boarding and alighting.



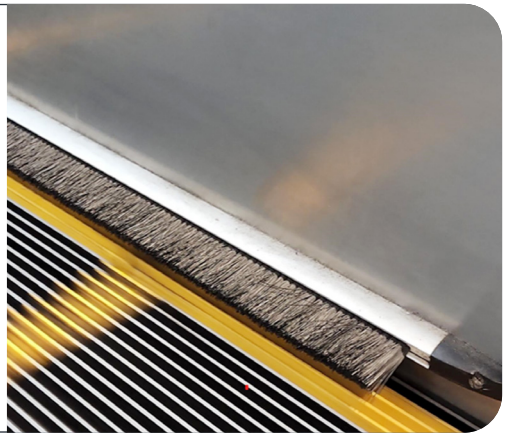
IMPROVED VISIBILITY OF THE ENTRY/EXIT OF THE ESCALATOR

Install comb plates of contrasting colour at the entry and exit points to draw users' attention to the step/landing interface, reducing risk of entrapment.



SKIRT DEFLECTOR

Install brush deflectors along the skirt panels to guide the users away from the edges of the steps, reducing the risk of entrapment.



OPERATIONAL CONTROLS

Operational controls are proactive measures that rely on procedures and human checks to ensure escalators remain safe and functional at all times. They help prevent incidents before escalators are used by identifying faults, restricting unsafe access, and reinforcing correct behaviour through staff intervention and reporting systems.

BARRICADE ESCALATORS DURING MAINTENANCE

Immediately place adequate barriers with warning signs at the upper/lower landings of the escalators during maintenance, to prevent unauthorised access.



SAFETY AMBASSADORS

Deploy safety ambassadors at escalator landings during peak period to remind users of the safe use of escalators.



COMMUNICATION CHANNEL FOR REPORTING

Provide a communication channel (e.g. hotline) for users to report escalator faults or irregularities to the facilities management team.



DAILY PRE-OPERATION CHECKS

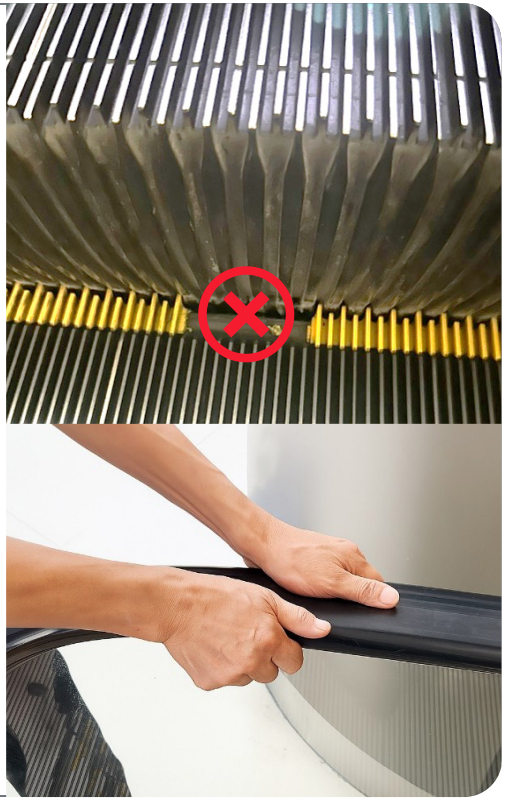
Prior to operating the escalators for normal use, carry out daily checks to ensure the following:

i. Protection devices around the escalators are in place and in good condition.

ii. Combs and escalator steps are free of debris and in good condition.

iii. Sides of the escalators are free from any sharp protrusions that could potentially cause injury to the users.

iv. Handrail belts are properly driven and free of slippage.





For feedback and enquiries, please submit your queries via BCA online feedback form.