

**TR 110:2022**  
(ICS 45.020)

TECHNICAL REFERENCE

**Mass rapid transit and light rail transit  
operations – Basic principles and requirements  
for access on or near tracks**

**TR 110:2022**  
(ICS ICS 45.020)

---

TECHNICAL REFERENCE

**Mass rapid transit and light rail transit operations –  
Basic principles and requirements for access on or  
near tracks**

---

Published by Enterprise Singapore

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilised in any form or by any means, electronic or mechanical, including photocopying and microfilming, without permission in writing from Enterprise Singapore. Request for permission can be sent to: [standards@enterprisesg.gov.sg](mailto:standards@enterprisesg.gov.sg).

© Enterprise Singapore 2022

ISBN 978-981-5118-01-8

## Contents

	<b>Page</b>
Foreword _____	3
1 Scope _____	4
2 Normative references _____	4
3 Terms and definitions _____	4
4 Basic principles for access on or near tracks _____	5
5 Operational considerations for access on or near tracks _____	6
6 Recommended safety measures for access on or near tracks _____	9

## Annexes

A Examples of on or near tracks _____	11
B Sample of a checklist for safety briefing _____	14
C Sample of tools/equipment and spares/material checklist for track work _____	17

## Foreword

This Technical Reference (TR) was prepared by the Working Group on Mass Rapid Transit and Light Rail Transit Operations – Basic Principles and Requirements for Access on or Near Tracks set up by the Technical Committee on Railway Systems under the purview of the Transportation Standards Committee.

This TR is a provisional standard made available for application over a period of three years. The aim is to use the experience gained to update the TR so that it can be adopted as a Singapore Standard. Users of the TR are invited to provide feedback on its technical content, clarity and ease of use. Feedback can be submitted using the form provided in the TR. At the end of the three years, the TR will be reviewed, taking into account any feedback or other considerations, to further its development into a Singapore Standard if found suitable.

Permission has also been sought from Singapore Mass Rapid Transit (SMRT) to reproduce materials from the Rule book 1 – General safety requirements for access to track and protection methods and Rule book annexes into this standard.

Acknowledgement is made for the use of information from the above publication.

Attention is drawn to the possibility that some of the elements of this TR may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

### NOTE

1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "mature standards". Mature standards will not be subject to further review unless there are requests to review such standards.*
2. *An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore and the Singapore Standards Council shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.*
3. *Compliance with a SS or TR does not exempt users from any legal obligations.*

# **Mass rapid transit and light rail transit operations – Basic principles and requirements for access on or near tracks**

## **1 Scope**

This Technical Reference covers basic principles and requirements for access on or near tracks for operations or maintenance work during passenger service hours and engineering hours. It does not cover the requirements during emergencies or the construction phase of the railway system.

## **2 Normative references**

There are no normative references in this document.