



American Railway Engineering and Maintenance-of-Way Association

CHAPTER 9

SEISMIC DESIGN FOR RAILWAY

STRUCTURES¹

TABLE OF CONTENTS

Part/Section	Description	Page
1	Seismic Design for Railway Structures	9-1-1
1.1	Introduction (2004) R(2012)	9-1-3
1.2	Post-Seismic Event Operation Guidelines	9-1-3
1.3	General Requirements	9-1-8
1.4	New Bridges	9-1-32
1.5	Existing Bridges	9-1-48
1.6	Other Facilities and Infrastructure	9-1-50
1.7	Construction by Others (2016)	9-1-54
1.8	Retired Facilities (2007) R(2016)	9-1-54
2	Commentary to Seismic Design for Railway Structures	9-2-1
C-	Section 1.2 Post-Seismic Event Operation Guidelines	9-2-2
C-	Section 1.3 General Requirements	9-2-4
C-	Section 1.4 New Bridges	9-2-12
C-	Section 1.5 Existing Bridges	9-2-26
C-	Section 1.6 Other Facilities and Infrastructure	9-2-26
Chapter 9 Glossary		9-G-1
Notations		9-N-1
References		9-R-1

¹ The material in this and other chapters in the AREMA Manual for Railway Engineering is published as recommended practice to railroads and others concerned with the engineering, design and construction of railroad fixed properties (except signals and communications), and allied services and facilities. For the purpose of this Manual, RECOMMENDED PRACTICE is defined as a material, device, design, plan, specification, principle or practice recommended to the railways for use as required, either exactly as presented or with such modifications as may be necessary or desirable to meet the needs of individual railways, but in either event, with a view to promoting efficiency and economy in the location, construction, operation or maintenance of railways. It is not intended to imply that other practices may not be equally acceptable.