

1. Record Nr.	UNINA9911006506403321
Titolo	AASHTO guide specifications for LRFD seismic bridge design
Pubbl/distr/stampa	: American Association of State Highway and Transportation Officials (AASHTO)
Soggetti	Bridges - Design and construction - Specifications - United States Bridges - Earthquake effects Earthquake resistant design Structural analysis (Engineering) Earthquake hazard analysis Strains and stresses Elastic analysis (Engineering) Load factor design Soil-structure interaction Soil mechanics Shear strength of soils Shear flow Seismic waves - Damping Energy dissipation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	section 1. Introduction -- section 2. Definitions and notation -- section 3. General requirements -- section 4. Analysis and design requirements -- section 5. Analytical models and procedures -- section 6. Foundation and abutment design -- section 7. Structural steel components -- section 8. Reinforced concrete components -- References -- Appendix A: Foundation-rocking analysis -- Appendix B: Design flowcharts.
Sommario/riassunto	Covers seismic design for typical bridge types and applies to non-critical and non-essential bridges. Approved as an alternate to the

seismic provisions in the AASHTO LRFD Bridge Design Specifications. Differs from the current procedures in the LRFD Specifications in the use of displacement-based design procedures, instead of the traditional force-based R-Factor method. Includes detailed guidance and commentary on earthquake-resisting elements and systems, global design strategies, demand modeling, capacity calculation, and liquefaction effects. Capacity design procedures underpin the Guide Specifications' methodology; includes prescriptive detailing for plastic hinging regions and design requirements for capacity protection of those elements that should not experience damage.--
