

ERADIQUAKE Isolation Bearings

Design Questionnaire

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Project

Name/Contract No.:

Owner:

Consultant:

Contact Information:

Name:

Telephone:

E-mail:

Contract Drawing Reference:

Prepared by:

EradiQuake Bearing Quantity:

Estimated Project Bid Date:

Structure	Superstructure Information:							
	Type (Steel or Concrete):							
	Strength (Yield or Compressive (f'c)):							
	No. of Girders & Span Length(s):							
	Slope at Bearing Locations:							
	Substructure Information:							
	Type (Steel or Concrete):							
	Strength (Yield or Compressive (f'c)):							
	Bearing Pedestal Dimensions:							
Design	Design Goal:							
	Retrofit or New Design:							
	Design Method - ASD, LFD, or LRFD:							
	Seismic Design Data:							
	AASHTO Acceleration Coefficient (S_1):							
	AASHTO Site Class Coefficient (F _v):							
	Site Specific Response Spectrum (if applicable):							
	Design Temperature Range:							
	Units - English or Metric:							
	Specifications (including dates/editions):							
	AASHTO:							
	State Standard:							
	AASHTO Guide Specification:							
	Bearing Materials:							
	Type of Steel:							
	Coating (paint, galvanize, metalize):							
Testing	Specifications (including dates/editions):							
	AASHTO:							
	State Standard:							
	AASHTO Guide Specification:							

Design Requirements

<u>LRFD Design</u>

Units Load:			Sub-	Sub-	Sub-	Sub-
Displacement:			structure	structure	structure	structure
Rotation:			Location	Location	Location	Location
Bearing Qua	ntity					
Service Limit State (max)	Vertical Load per bearing	Dead				
		Live				
		Total				
	Horizontal Load <i>per bearing</i>	Longitudinal				
		Transverse				
Strength Limit State (max factored)	Vertical Load <i>per bearing</i>	Dead				
		Live				
		Total				
	Horizontal Load <i>per bearing</i>	Longitudinal				
		Transverse				
	Rotation	Due to all				
	(+/-)	applicable				
		loads				
		Due to fab &				
		const tol.				
		Total				
	Movement	Longitudinal				
	(+/-)	Transverse				
<i>Extreme</i> <i>Event</i> Limit State (<i>Seismic</i> , max factored)	Horizontal Force Goal <i>per bearing</i>	Longitudinal				
		Transverse				
	Maximum	Longitudinal				
	Displacement					
	across bearing	Transverse				
Type of attachment to super structure						
Type of attachment to sub structure						

If any of the above information is not known at this time, some assumptions can be used for an estimate. For example, a typical design rotation is +/-0.02 radians.

Design Requirements

ASD or LFD Design

<u>Units</u> Load:			Sub-	Sub-	Sub-	Sub-
Rotation	nent.		Location	Location	Location	Location
Bearing Quantity			Locution	Location	Location	Locution
Load	Vertical	Dead				
per bearing		Live				
(Denote: unfactored or factored)		Total				
Rotation	Due to all applicable					
(+/-)	loads					
	Due to fab & const tol.					
	Total					
Service Forces	Wind (W)					
per bearing	Wind on Live (WL)					
(Denote: unfactored or factored)	Centrifugal (CF)					
	Longitudinal Force (LF)					
Max Seismic	Longitudinal					
Force Goal <i>per bearing</i>	Transverse					
Max Seismic Displacement	Longitudinal					
Goal	Transverse					
across bearing						
Movement	Longitudinal	RST				
(+/-)	Transverse	RST				
Type of attachment to super structure						
Type of attachme	ent to sub struc	ture				

If any of the above information is not known at this time, some assumptions can be used for an estimate. For example, a typical design rotation is +/-0.02 radians.