

Company: Company

Project: IE HECTOR MANUEL VIDES BALLESTEROS (MÓDULO 9)

File: C:\IE REGIDOR\MOD9.rcb

Engineer: Name

10:32:10 a. m. 27/06/2025

REDUNDANCY ANALYSIS

STORY-STRENGTH REDUCTION DUE TO REMOVAL OF CRITICAL ELEMENT

Story	E A R T H Q U A K E - X				E A R T H Q U A K E - Y			
	Vi	Vi/Vb	Crit.Element	Ve/Vi	Vi	Vi/Vb	Crit.Element	Ve/Vi
1	9.2	1.00	BEM:C(1-2)	0.19	9.2	1.00	BEM:3(A-B)	0.23
MAXIMA				0.19				0.23

NOTE: Shear values are divided by R

Removal of any critial element on any story supporting more than 35% Vb (Base Shear) would not reduce the story strength by more than 33%. Thus SEISMIC FORCE-RESISTING SYSTEM SEEMS REDUNDANT!!
It should be investigated if removal of critical element would induce Extreme Torsional Irregularity (1bP)

Proposed Reduction Factor for Lack of Redundancy: Ørx = 1 Øry = 1