

Company: Company

Project: IE HECTOR MANUEL VIDES BALLESTEROS (MÓDULO 6)

File: C:\IE REGIDOR\MOD6.rcb

Engineer: Name

9:47:15 a. m. 27/06/2025

PLAN TORSIONAL IRREGULARITY CHECK - NSR-10

Level	E A R T H Q U A K E - X				E A R T H Q U A K E - Y			
	Δ/h max	Δ/h avg	max/avg Δ/h	Irregular	Δ/h max	Δ/h avg	max/avg Δ/h	Irregular
3	0.0042	0.0038	1.0930	NO	0.0007	0.0007	1.0000	NO
2	0.0029	0.0024	1.1988	NO	0.0012	0.0009	1.3417	YES

Torsional irregularity is considered to exist if Δ/h max > 1.2 Δ/h ave
 EXtreme torsional irregularity is considered to exist if Δ/h max > 1.4 Δ/h ave

TORSIONAL IRREGULARITIES (1aP) EXIST !!!

Notes:

The determination of torsional irregularities (plan structural irregularity type 1) and computation of amplification factors for accidental torsion A_x , is conducted according to FEMA's NEHRP Recommended Provisions for Seismic Regulations for New Buildings and other Structures, Provisions and Commentary ed. 1994, 1997, 2000, 2003, 2009, which is applicable to the following building codes derived from the above documents: (USA) IBC-03/06, ASCE 7-05/10, CBC-01/07, UBC-97, (COLOMBIA) NSR-10, and (PAN) REP-2004/2014/2021 (Dom) R-001, (GUA) NSE10.

AMPLIFICATION FACTORS ACCIDENTAL TORSION, A_x

Level	E A R T H Q U A K E - X				E A R T H Q U A K E - Y			
	δ_{max}	δ_{avg}	$\delta_{max}/\delta_{avg}$	A_x	δ_{max}	δ_{avg}	$\delta_{max}/\delta_{avg}$	A_x
3	2.596	2.258	1.150	1.000	0.824	0.824	1.000	1.000
2	1.451	1.210	1.199	1.000	0.618	0.461	1.342	1.250

Displacement units: cm
 $A_x = [\delta_{max} / 1.2 \delta_{ave}]^2 < 3.0$