

Company: Company
Project: IE HECTOR MANUEL VIDES BALLESTEROS (MÓDULO 9)
File: C:\IE REGIDOR\MOD9.rcb

Engineer: Name
10:33:07 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
2	0.0019	0.0017	1.1143	NO	0.0020	0.0016	1.2429	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
2	0.796	0.714	1.114	1.000	0.812	0.654	1.243	1.073

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