

University of California San Diego

Subassemblage Testing Of CoreBrace Buckling-Restrained

Factor	Definition & Description	SEAOC/ AISC Standard	CoreBrace Results
$\Sigma\mu$	Cumulative <u>inelastic</u> axial force deformation capacity. This number is the sum of all the measured inelastic (excluding the elastic portion) deformations until fracture of the brace divided by the initial yield deformation.	200 Min	600 Min 1025+/- Avg 5000+ Max
β	Compression Strength adjustment factor. This is the ratio of the maximum compression force to the maximum tension force (Cmax/Tmax) of the brace for the range of brace deformations corresponding to 2.0 times the design story drift	1.3 Max	1.06 Max
$\Delta_{b,max}$	Maximum deformation of the brace corresponding to 2.0 times the design story drift from neutral position in both directions. SEAOC/AISC states the brace deformation does not need to exceed 10 x Δ_{by} . Where Δ_{by} is the initial yield length of the brace.	10 x Δ_{by} Max	22 x Δ_{by}
θ_{max}	Minimum rotation of the end connection of the brace from neutral position in both directions at 2.0 times the design story drift.	Per Analysis	.03 Rads