

HP-35s Calculator Program –

EARTHQUAKE BASE SHEAR VCT SPECTRAL

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Line	Instruction	Process	User Instruction
Q001	LBL Q	Establishing the library (Q for Earthquake)	Key in using EQN, RCL E, RCL A, etc
Q002	EARTHQUAKE	Title	
Q003	PSE	Short Pause	
Q004	CLVARS	Clearing all variables	
Q005	CLSTK	Clear Stack	
Q006	CT AND X ASCE7	Prompt for variables	
Q007	PSE	Short Pause	
Q008	TBL 12.8-2	Prompt that ASCE-7 Table 12.8-2 data will be used	Have the ASCE-7 code available
Q009	INPUT C	Prompt to enter value Ct from table 12.8-2 of ASCE-7	
Q010	INPUT X	Prompt to enter value x from table 12.8-2 of ASCE-7	
Q011	HEIGHT FLOORS	Prompt that floor heights will be entered	
Q012	PSE	Short Pause	
Q013	INPUT H	Prompt to enter height of floors	
Q014	x<>y	Process	
Q015	y^x		
Q016	x		
Q017	STO T		
Q018	PERIOD	Prompt that a variable result will be indicated	
Q019	PSE	Short Pause	
Q020	VIEW T	Viewing "T"	
Q021	HEIGHT 1ST FLR	Prompt to enter height of 1 st floor	
Q022	PSE	Short Pause	
Q023	INPUT Y	Enter 1 st floor height	
Q024	HEIGHT PARAPET	Prompt to enter height of parapet	
Q025	PSE	Short Pause	
Q026	INPUT K	Enter height of parapet	
Q027	LENGTH	Prompt to enter length of building	
Q028	PSE	Short Pause	
Q029	INPUT L	Enter value for building length	
Q030	WIDTH	Prompt to enter width of building	
Q031	PSE	Short Pause	
Q032	INPUT W	Enter value for building width	
Q033	STO S	Process	
Q034	x		
Q035	STO A		
Q036	CLSTK		
Q037	STO W		
Q038	WALL WEIGHT	Prompt to enter value for weight of wall	
Q039	PSE	Short Pause	
Q040	INPUT W	Enter value	
Q041	2	Process	
Q042	x		
Q043	RCL H		
Q044	RCL Y		
Q045	2		
Q046	÷		
Q047	-		
Q048	RCL K		
Q049	+		
Q050	x		
Q051	RCL S		
Q052	RCL L		
Q053	+		
Q054	x		
Q055	TOT FLOOR LOAD	Prompt for input of total floor load	Short pause not used. User needs to
Q056	INPUT W	Enter value of total floor weight	hit R/S button to continue when ready
Q057	RCL A		to enter value
Q058	x		

Q059	+		
Q060	1000		
Q061	+		
Q062	STO W		
Q063	VIEW W		
Q064	IMPRTNCE FCTR	Prompt to enter importance factor	
Q065	PSE	Short Pause	
Q066	INPUT I	Enter value of importance factor per ASCE-7 or IBC	
Q067	SPCTR RES ACC		
Q068	PSE		
Q069	SHORT PER (SDS)	Prompt for values to be displayed	
Q070	INPUT S		
Q071	1 SEC (SD1)		
Q072	INPUT D		
Q073	RESP MOD COEFF		
Q074	PSE		
Q075	ASCE TBL12.2-1		
Q076	INPUT R		
Q077	RCL I		
Q078	÷		
Q079	1/x		
Q080	RCL S		
Q081	×		
Q082	RCL W		
Q083	×		
Q084	STO V		
Q085	BASE SHEAR		
Q086	PSE		
Q087	VIEW V		
Q088	RCL D		
Q089	RCL R		
Q090	RCL I		
Q091	÷		
Q092	RCL T		
Q093	×		
Q094	÷		
Q095	RCL W		
Q096	×		
Q097	STO M		
Q098	MAX BASE SHEAR		
Q099	PSE		
Q100	VIEW M		
Q101	0.044		
Q102	RCL I		
Q103	×		
Q104	RCL S		
Q105	×		
Q106	RCL W		
Q107	×		
Q108	STO N		
Q109	MIN BASE SHEAR		
Q110	PSE		
Q111	VIEW N		
Q112	STOP		
Q113	RTN		

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