HP-35s Calculator Program –

Shear on Rigid Diaphragm

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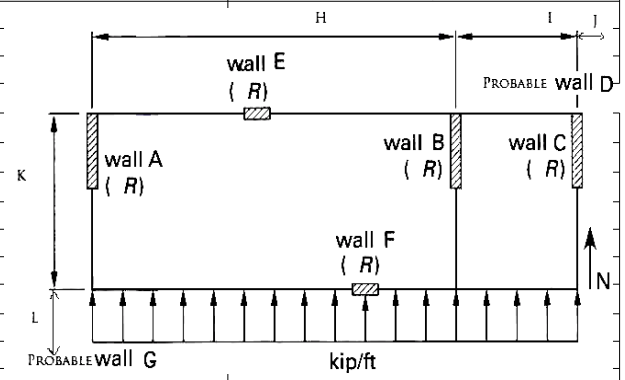
Line	Instruction	Process	User Instruction
G001	LBL G	Establishing the library	The program takes up to 4 walls on x
G002	RIGIDITY FACTR		axis and up to 3 on y axis
G003	PSE		
G004	X AXIS WALLS		
G005	PSE		
G006	INPUT A	Input the Rigidity value of wall A	
G007	INPUT B	Input the Rigidity value of wall B	
G008	INPUT C	Input the Rigidity value of wall C	
G009	INPUT D	Input the Rigidity value of wall D	
G010	+		
G011	+		
G012	+		
G013	STO Q	Storing the sum in variable Q	
G014	Y AXIS WALLS		
G015	PSE		
G016	INPUT E		
G017	INPUT F		
G018	INPUT G		
G019	+		
G020	+		
G021	STO R	Storing the sum in variable R	
G022	DISTANCE A-B		
G023	PSE		
G024	INPUT H	Input the distance between walls A & B	
G025	DISTANCE B-C		
G026	PSE		
G027	INPUT I	Input the distance between walls B & C	
G028	DISTANCE C-D		
G029	PSE		
G030	INPUT J	Input the distance between walls C & D	
G031	DISTANCE E-F		
G032	PSE		
G033	INPUT K	Input the distance between walls E & F	
G034	DISTANCE F-G		
G035	PSE		
G036	INPUT L	Input the distance between walls F & G	
G037	LOAD ON X AXIS		
G038	PSE		
G039	INPUT W	Input the uniformly distributed load on the x axis	
G040	LOAD ON Y AXIS		
G041	PSE		
G042	INPUT Z	Input the uniformly distributed load on the y axis	
G043	GRAVITY CTR ON X	Solving for the gravity center	
G044	PSE		
G045	RCL H		
G046	RCL I		
G047	+		
G048	RCL J		
G049	+		÷
G050	RCL D		×
G051	×		
G052	RCL H		
G053	RCL I		
G054	+		
G055	RCL C		
G056	×		
G057	+		
G058	RCL H		
G059	RCL B		
G060	×		



G061	+		
G062	RCL Q		
G063	÷		
G064	STO X		
G065	VIEW X	Viewing gravity center on x axis	
G066	GRAVITY CTR ON Y		
G067	PSE		
G068	RCL K		
G069	RCL F		
G070	×		
G071	RCL K		
G072	RCL L		
G073	+		
G074	RCL G		
G075	×		
G076	+		
G077	RCL R		÷
G078	÷		×
G079	STO Y		
G080	VIEW Y	Viewing gravity center on y axis	
G081	POLAR MOMNT INRT	Solving for polar moment of inertia	
G082	PSE		
G083	RCL X		
G084	x^2		
G085	RCL A		
G086	×		
G087	RCL H		
G088	RCL X		
G089	-		
G090	x^2		
G091	RCL B		
G092	×		
G093	+		
G094	RCL H		
G095	RCL I		
G096	+		
G097	RCL X		
G098	-		
G099	x^2		
G100	RCL C		
G101	×		
G102	+		
G103	RCL H		
G104	RCL I		
G105	+		
G106	RCL K		
G107	+		
G108	RCL X		
G109	-		
G110	x^2		
G111	RCL D		
G112	×		
G113	+		
G114	RCL Y		
G115	x^2		
G116	RCL E		
G117	×		
G118	+		
G119	RCL K		
G120	RCL Y		
G121	-		
G122	x^2		
G123	RCL F		
G124	×		
G125	+		
G126	RCL K		
G127	RCL L		
G128	+		

G129	RCL Y		
G130	-		
G131	x^2		
G132	RCL G		
G133	×		
G134	+		
G135	STO P		
G136	VIEW P	Viewing Polar Moment of Inertia	
G137	RCL H		
G138	RCL I		
G139	RCL J		
G140	+		
G141	+		
G142	STO N		
G143	RCL W		
G144	×		
G145	STO V		
G146	RCL N		
G147	2		
G148	÷		
G149	+/-		
G150	RCL X		
G151	+		
G152	RCL V		
G153	×		
G154	STO M		
G155	SHEAR ON WALLS		
G156	PSE		
G157	RCL A		
G158	×		
G159	RCL X		
G160	×		
G161	RCL P		
G162	÷		
G163	RCL A		
G164	RCL Q		
G165	÷		
G166	RCL V		
G167	×		
G168	+		
G169	STO A		
G170	VIEW A	Viewing shear on wall A	
G171	RCL B		
G172	RCL V		
G173	×		
G174	RCL Q		
G175	÷		
G176	RCL M		
G177	RCL X		
G178	×		
G179	RCL B		
G180	×		
G181	RCL P		
G182	÷		
G183	+		
G184	STO B		
G185	VIEW B	Viewing shear on wall B	
G186	RCL C		
G187	RCL V		
G188	×		
G189	RCL Q		
G190	÷		
G191	RCL M		
G192	RCL C		
G193	×		
G194	RCL X		
G195	×		
G196	RCL P		

G197	÷		
G198	+		
G199	STO C		
G200	VIEW C		
G201	RCL D		
G202	RCL Q		
G203	÷		
G204	RCL V		
G205	×		
G206	RCL M		
G207	RCL D		
G208	×		
G209	RCL X		
G210	×		
G211	RCL P		
G212	÷		
G213	+		
G214	×		
G215	STO D		
G216	VIEW D	Viewing shear on wall D	
G217	RCL K		
G218	RCL L		
G219	+		
G220	RCL Z		
G221	×		
G222	STO V		
G223	RCL K		
G224	RCL L		
G225	+		
G226	2		
G227	÷		
G228	+/-		
G229	RCL Y		
G230	+		
G231	RCL V		
G232	×		
G233	STO M		
G234	RCL E		
G235	×		
G236	RCL Y		
G237	×		
G238	RCL P		
G239	÷		
G240	RCL V		
G241	RCL E		
G242	×		
G243	RCL R		
G244	÷		
G245	+		
G246	STO E		
G247	VIEW E	Viewing shear on wall E	
G248	RCL F		
G249	RCL V		
G250	×		
G251	RCL R		
G252	÷		
G253	RCL M		
G254	RCL Y		
G255	×		
G256	RCL F		
G257	×		
G258	RCL P		
G259	÷		
G260	+		
G261	STO F		
G262	VIEW F		
G263	RCL G		
G264	RCL V		

G265	×		
G266	RCL R		
G267	÷		
G268	RCL M		
G269	RCL Y		
G270	×		
G271	RCL G		
G272	×		
G273	RCL P		
G274	÷		
G275	+		
G276	STO G		
G277	VIEW G	Viewing Shear on wall G	
G278	STOP		
G279	RTN