

HP-35s Calculator Program –

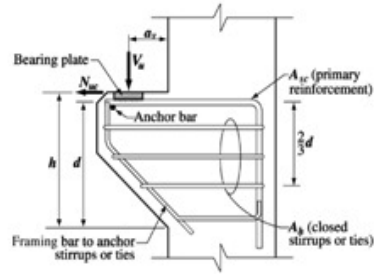
RC CORBEL DESIGN

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Line	Instruction	Process	User Instruction
K001	LBL K	Establishing the library	
K002	RC CORBEL		
K003	PSE		
K004	CLVARS	Clearing all variables	
K005	1.4		
K006	STO M		
K007	CLSTACK	Clearing all stack values	
K008	V LOAD (SHEAR)		
K009	PSE		
K010	INPUT V	Input the value of shear	
K011	CONC KSI		
K012	PSE		
K013	INPUT C	Input value of f_c (concrete strength) in kips per sq. inch	
K014	BASE WIDTH		
K015	PSE		
K016	INPUT B	Input the value of the base width in inches	
K017	DEPTH (IN)		
K018	PSE		
K019	INPUT D	Input the depth of the corbel in inches	
K020	0.15		
K021	x		
K022	x		
K023	x		
K024	STO U		
K025	0.6		
K026	RCL B		
K027	x		
K028	RCL D		
K029	x		
K030	$x \leq y?$		
K031	STO U		
K032	ACI 11-9-3-2-1	Verify value	
K033	PSE		
K034	VIEW U		
K035	CLSTK	Clear stack values	
K036	RCL V		
K037	RCL U		
K038	$x \geq y?$		
K039	GTO K043		
K040	NOT SATISFIED		
K041	PSE		
K042	GTO K154		
K043	SATISFIED		
K044	PSE		
K045	GTO K047		
K046	0.15		
K047	STEEL FY		
K048	PSE		
K049	INPUT Y	Input the steel capacity f_y	
K050	COEFF FRICTION		
K051	PSE		
K052	ACI R11-7-4-3		
K053	INPUT M		
K054	$1/x$		
K055	RCL V		
K056	x		
K057	0.75		
K058	÷		
K059	RCL Y		
K060	÷		
K061	STO A		



K062	STO F	
K063	SHEAR FR REINF	
K064	PSE	
K065	ACI R11-7-4-1	
K066	PSE	
K067	VIEW A	
K068	HORIZ TENSION	
K069	PSE	
K070	INPUT N	
K071	RCL V	
K072	0.2	
K073	x	
K074	x>y?	
K075	STO N	
K076	CLSTACK	
K077	RCL N	
K078	0.75	
K079	÷	
K080	RCL Y	
K081	÷	
K082	STO T	
K083	STO A	
K084	TENS REINF AREA	
K085	PSE	
K086	VIEW A	
K087	LOAD DIST A	
K088	PSE	
K089	INPUT E	
K090	RCL V	
K091	x	
K092	TOT DEPTH H	
K093	PSE	
K094	INPUT H	Input depth h
K095	RCL D	
K096	-	
K097	RCL N	
K098	x	
K099	+	
K100	STO M	
K101	MOMENT MU	
K102	PSE	
K103	VIEW M	
K104	0.319	
K105	÷	
K106	RCL B	
K107	÷	
K108	RCL D	
K109	x^2	
K110	÷	
K111	RCL C	
K112	÷	
K113	+/-	
K114	1	
K115	+	
K116	√x	
K117	+/-	
K118	1	
K119	+	
K120	0.85	
K121	x	
K122	RCL B	
K123	x	
K124	RCL D	
K125	x	
K126	RCL C	
K127	x	
K128	RCL Y	
K129	÷	
K130	STO X	

K131	REQ FLEX REINF		
K132	PSE		
K133	VIEW X		
K134	PRIM REINF		
K135	RCL T		
K136	+		
K137	STO S		
K138	RCL F		
K139	0.66666		
K140	x		
K141	RCL T		
K142	+		
K143	x>y?		
K144	STO S		
K145	VIEW S		
K146	REQ A STIRRUP	Stirrup required area	
K147	RCL S		
K148	RCL T		
K149	-		
K150	2		
K151	÷		
K152	STO Z		
K153	VIEW Z		
K154	STOP		