

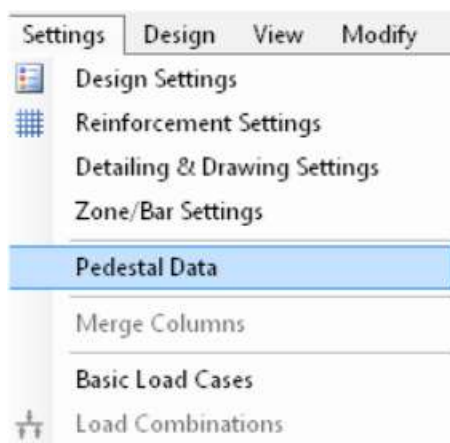
RCDC can design and detail pedestals and footings for steel columns of all the types. If structure contains steel columns and beam, then user can design pedestal in column design module and footings for pedestal in footing design module. After reading steel structure in column design module, user can define base plate size to define pedestal size. Software will itself provide minimum dimensions for pedestal as per steel column size. User can further provide / modify the offset dimensions as per requirements. As per the depth of foundation provided by user, software will convert the pedestal top node forces to the bottom nodes and it will be designed for both top and bottom forces, however, footing will be designed for bottom node forces.

Following basic information will be captured.

The image shows a software dialog box with two sections. The first section, 'Base Plate Settings', contains a field 'Offset from Steel Member' with a value of 50 and a unit of mm. The second section, 'Pedestal Settings', contains two fields: 'Founding Depth' with a value of 4 and a unit of m, and 'Offset from Base Plate' with a value of 50 and a unit of mm.

Offset from steel member	This defines minimum distance from steel section up to base plate edge. However, this distance should also satisfy the minimum edge / end distance criteria i.e. $1.5 \times \text{Bolt diameters}$ , user has to check that data.
Pedestal Settings	Provide required founding depth for pedestal. This will be used to transfer the forces to the base.
Offset from Base Plate	Provide minimum required offset from base plate to pedestal. Minimum value would be 50mm.

User can also set different values for individual columns as per below option:



This allows the user to set values for base plate, bolt diameter, number of bolts, and pedestal sizes for individual pedestals. User has to ensure fulfilment of the relevant criteria like minimum edge distance etc. Following basic information will be captured.

**Pedestal Data**

Column No	Steel Section	Steel Member [Outer] (mm)	Base Plate Size			Pedestal Size		Bolts		
			B (mm)	D (mm)	T (mm)	B (mm)	D (mm)	Dia	No. @B	No. @D
C13	ISLC350	100 X 350	200	450	20	300	550	10	2	2
C14	PIP269M	30 X 30	150	150	20	250	250	10	2	2
C15	ISA90X65X7	65 X 90	165	190	20	265	290	10	2	2
C16	PIP269M	30 X 30	150	150	20	250	250	10	2	2
C17	TUB122614.5	65 X 125	165	225	20	265	325	10	2	2
C18	PIP269M	30 X 30	150	150	20	250	250	10	2	2
C19	ISA150X90X15	90 X 150	190	250	20	290	350	10	2	2
C20	ISLC175	75 X 175	175	275	20	275	375	10	2	2
C21	ISMT100	100 X 100	200	200	20	300	300	10	2	2
C22	ISLC350	100 X 350	200	450	20	300	550	10	2	2

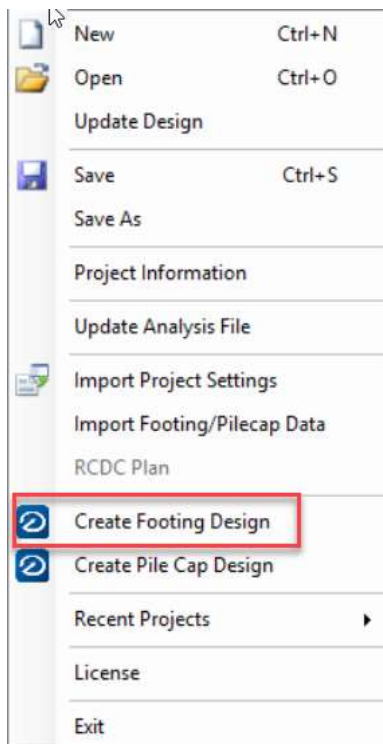
Base Plate Offset from Steel Member: 50 mm

Pedestal Offset from Base Plate: 50 mm

OK Cancel

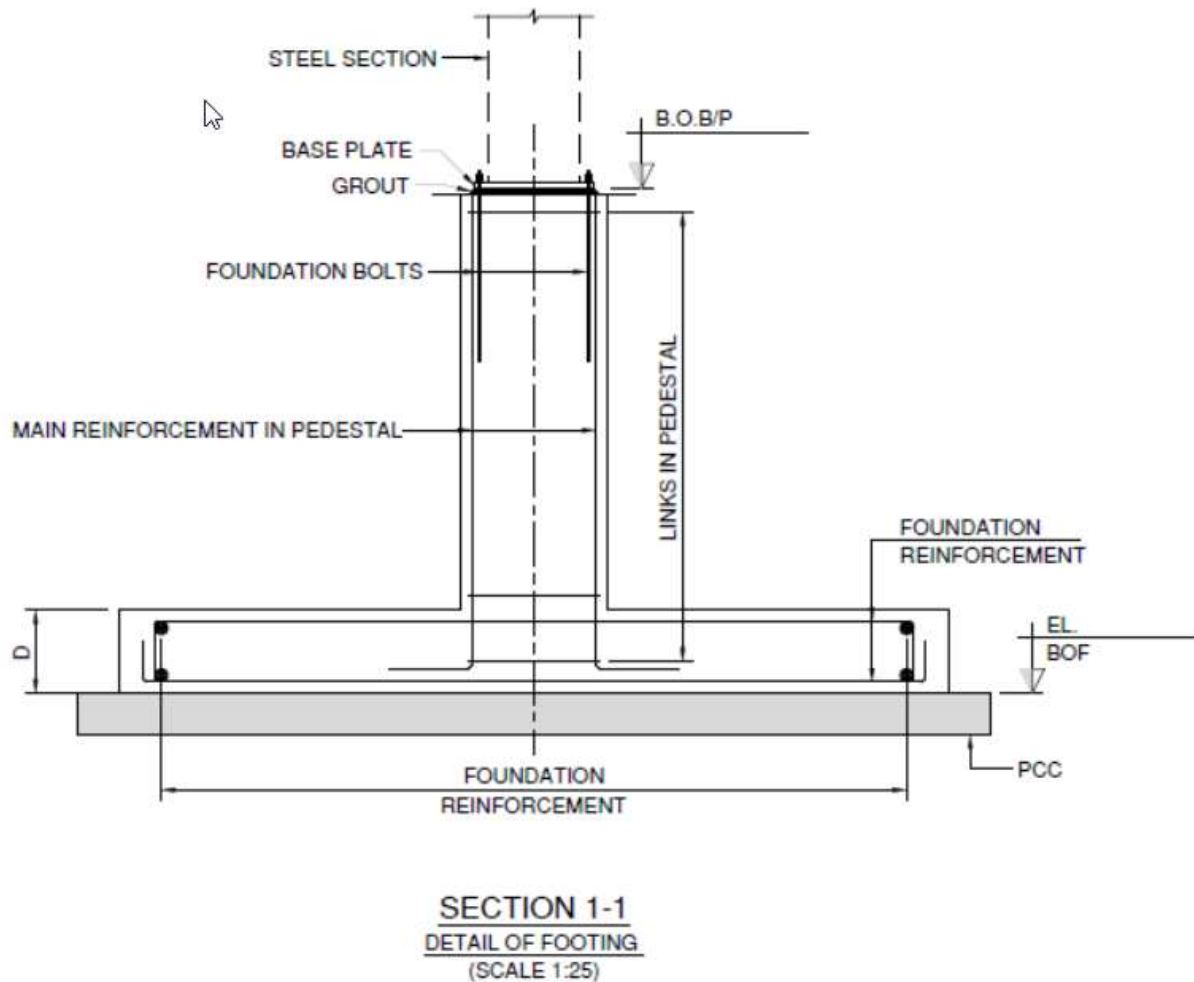
**\*\* RCDC also allows eccentric column-pedestal design.**

After designing pedestal in column module, user has to directly create the footing / pile cap design file for pedestal forces and geometrical information from file menu [refer snap shot below]. As foundation depth is given in column design settings, user will be allowed to change the same in footing/pile-cap design file.



**\*\*Note that footing file for steel structures cannot be directly created in footing module, user has to create column file for pedestal first and then export the same file further for footing design / pile cap design; as from column file the forces will be considered for footing / pile cap design.**

Detailed Output Drawing for Footing:



Note: If structure contain RC and steel columns at base level then RDC will show an error reading data.