



MvDad.com

Sustainable Stable Structural Solutions

Welcome



MvDad.com

Sustainable Stable Structural Solutions

Cloud Based RC Building Earthquake
Resistant Structural Design Software.



Motivators

MvDad.com MOTIVATORS WEBINARS INFO DATA MODELLING TUTORIAL CONTACT

Sustainable Stable Structural Solutions

Proj Name: Password:

Motivators



Sir M Visvesvaraya

My

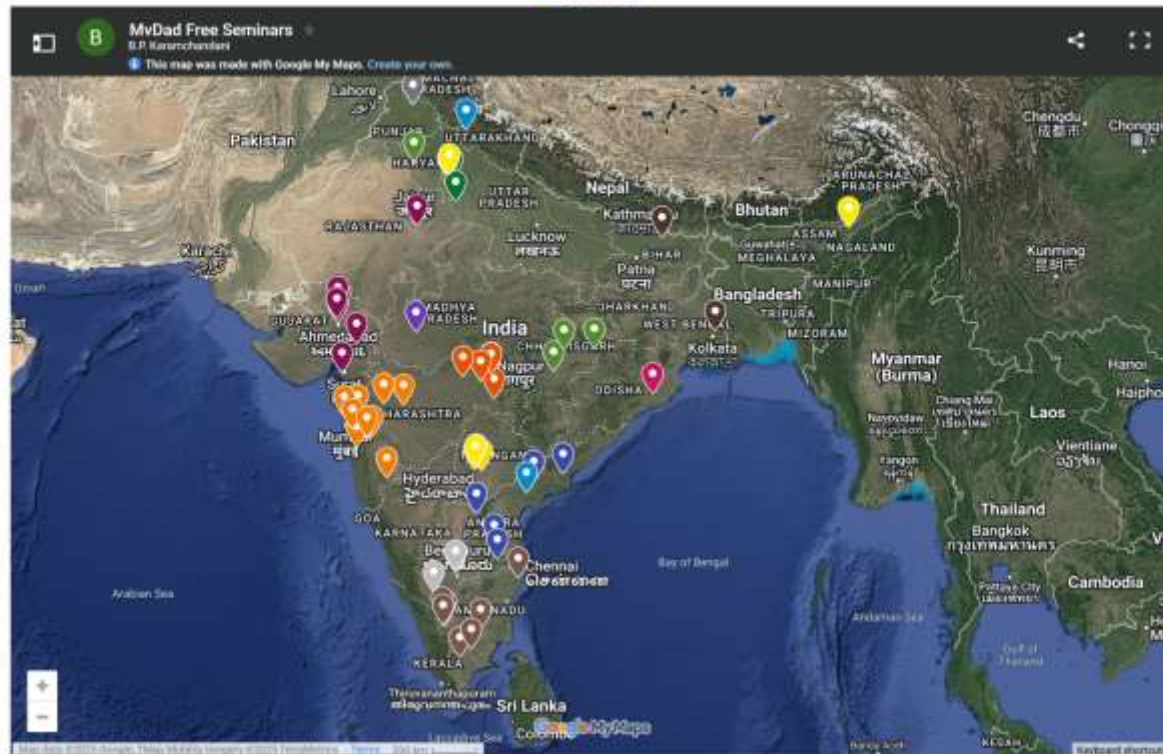
Prof. P.K Karamchandani

Dad



65+ Seminars / Webinars

60 MvDad Webinars/Seminars conducted & Free Exclusive Project Login Access shared with the Civil Engineering Colleges across India





MvDad.com

Why MvDad.com ?



Why MvDad.com ?

Features and Benefits



Features 5 in 1

Analysis



Features 5 in 1

Analysis Design



Features 5 in 1

Analysis

Design

Drawings



Features 5 in 1

Analysis

Design

Drawings

Calculations



Features 5 in 1

Analysis

Design

Drawings

Calculations

Bill of Quantities



Benefits



Benefits

Cloud Based



Benefits

Cloud Based

Mobile Friendly



Benefits

Cloud Based

Mobile Friendly

Multi Access



Benefits

Cloud Based

Mobile Friendly

Multi Access

Work from Anywhere



Benefits

Cloud Based

Mobile Friendly

Multi Access

Work from Anywhere

Require Nothing



Benefits

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Work from Anywhere

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No Software



Benefits

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Work from Anywhere

Require Nothing
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No Hardware



Benefits

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Work from Anywhere

Require Nothing
No Software
No Hardware

No Training



Benefits

Cloud Based
Mobile Friendly
Multi Access
Work from Anywhere

Require Nothing
No Software
No Hardware
No Training

Cost Minimum



Benefits

Cloud Based
Mobile Friendly
Multi Access
Work from Anywhere

Require Nothing
No Software
No Hardware
No Training
Cost Minimum

Availabilty 24/7



MvDad.com

How to Operate MvDad.com ?



Create New Project



Create New Project

Select 6 Data from the DropDown Box



Create New Project

Select 6 Data from the DropDown Box

1. Building Type



Create New Project

Select 6 Data from the DropDown Box

1. Building Type
2. Number of Floors



Create New Project

Select 6 Data from the DropDown Box

1. Building Type
2. Number of Floors
3. Floor Heights



Create New Project

Select 6 Data from the DropDown Box

1. Building Type
2. Number of Floors
3. Floor Heights
4. Project Location



Create New Project

Select 6 Data from the DropDown Box

1. Building Type
2. Number of Floors
3. Floor Heights
4. Project Location
5. Foundation Depth



Create New Project

Select 6 Data from the DropDown Box

1. Building Type
2. Number of Floors
3. Floor Heights
4. Project Location
5. Foundation Depth
6. Soil Type



Create New Project

Select 6 Data from the DropDown Box

1. Building Type
2. Number of Floors
3. Floor Heights
4. Project Location
5. Foundation Depth
6. Soil Type

1 Data to be Entered



Create New Project

Select 6 Data from the DropDown Box

1. Building Type
2. Number of Floors
3. Floor Heights
4. Project Location
5. Foundation Depth
6. Soil Type

1 Data to be Entered

Bearing Capacity of Soil



New Project Data Sheet

New Project Data marked in Yellow Colour				
	Data Required	Select or Enter Data	Data	Remarks
1	Building Type	Residential Commercial, School, Hospital, Hotel	Commercial	Select any One
2	Number of Floors		3	1 to 13 only
3	Floor Height			
3a	GF to 1		3.5	M
3b	Typical Floor Height		3	M
4	Project in City		Rasayani	
5	Foundation Depth below Ground Level		0.75	M
6	Soil Type	Hard, Rock, Medium Soft, Soft	Hard	Select any One
7	Bearing Capacity of Soil		300	kN/M ²
8	Centre Line Plan with Column Location			Attachment

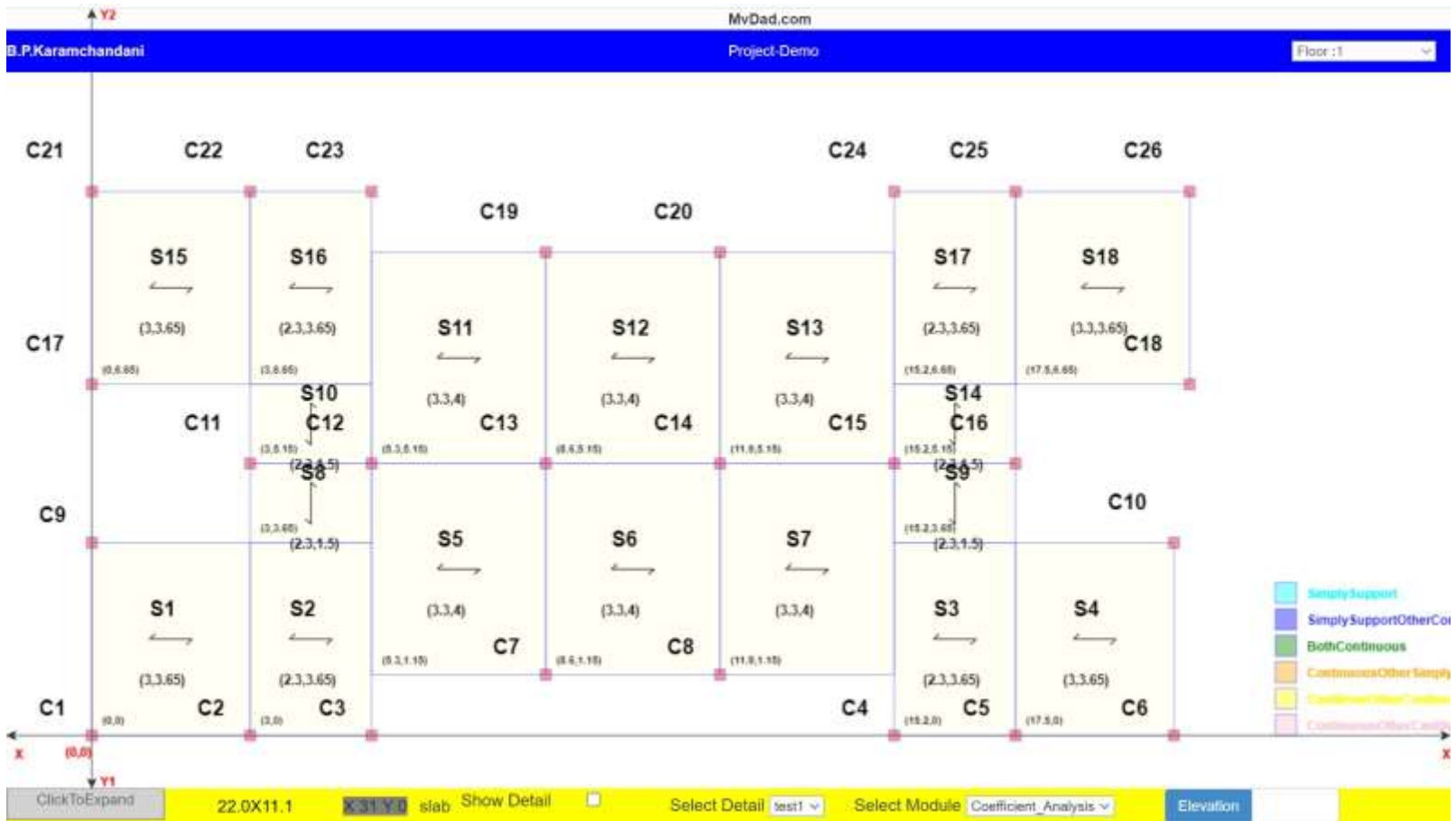


Create New Project

Upload the Center Line Plan along with
Column Locations



Center Line Plan with Column Locations





Or Upload Slab Data in Excel Format

	A	B	C	D	E
1	sno	xcor	ycor	xspn	yspn
2	S1	0	0	3	3.65
3	S2	3	0	2.3	3.65
4	S3	15.2	0	2.3	3.65
5	S4	17.5	0	3	3.65
6	S5	5.3	1.15	3.3	4
7	S6	8.6	1.15	3.3	4
8	S7	11.9	1.15	3.3	4
9	S8	3	3.65	2.3	1.5
10	S9	15.2	3.65	2.3	1.5
11	S10	3	5.15	2.3	1.5
12	S11	5.3	5.15	3.3	4
13	S12	8.6	5.15	3.3	4
14	S13	11.9	5.15	3.3	4
15	S14	15.2	5.15	2.3	1.5
16	S15	0	6.65	3	3.65
17	S16	3	6.65	2.3	3.65
18	S17	15.2	6.65	2.3	3.65
19	S18	17.5	6.65	3.3	3.65
20					
21					



New Project Data as Entered

Project Data			Project Name : DemoMhRR							
Building Type	Measuring Unit	No. of Stories	Floor to Floor Height							
Commercial	Mtr	3	Floor	F2FH	Label	Coeff				
			0	1.35	Below Plinth	1				
			1	3.5	0-1	0.7				
			2	3	1-2	0.8				
			3	3	2-3	0.9				
4	3	3-Terrace	1							
Slab Loads										
Loads (kN/M ²)	Terrace	Floor	WC	Loft	Slab_A	Balcony	Dining	Dining	Passage	Garage
Floor Finish:SIDL	2.5	2	5	1						
Live Load : SILL	1.5	4	2	1						
Wall Load On Beam										
Wall	External Wall		Internal Wall			Pardi	Pardi2	Parapet		
Width(M)	0.23		0.15			0.1	0.1	0.23		
Height(M)	F2FH		F2FH			F2FH	0.9	0.9		
Earthquake										
State	District	City		Siesmic Zone			Siesmic Factor			
Maharashtra	Raigarh	Rasayani		IV			0.24			
Foundation										
Plinth Height (M. Above GL)		Foundation Depth (M. Below GL)			Soil Type	Bearing Capacity of Soil (kN/M ²)				
0.6		0.75			Hard	300				
Project Constants										
Material	Grade	Density			Design Basis:					
Concrete	M20	25 kN/M ³			Limit State Method based on IS:456-2000					
Main Steel	Fe415	Dis Steel Fe250			IS Code: 1893 - 2002 / 2016					
Bricks Masonry		20 kN/M ³			Foundation As Per Working Stress Method					



Modelling



Modelling

Data Requirement

Element	Dimensions Required	
	Other Softwares	MvDad.com
Slabs	L x W x D	L x W
Beams	W x D	Auto
Columns	w x D	Auto
Earthquake	Various	Auto



Modelling

Modelling Requirement

Particulars	Requirement	
	Other Softwares	MvDad.com
Professional Experinced Staff	Yes	No
Time Consuming	Yes	Auto
Tedious	Yes	Auto
Repeatation if Model Fails	Yes	Auto



Modelling

Modelling Procedure for Other Softwares

Particulars	Requirement		
1. Create Project	Required Professional Experinced Structural Engineer		
2. Create Grid	Required Professional Experinced Draftsman		
3. Create Slabs	Assign Size	Width	Depth
		Length	
	Assign Loads	DL	LL
	Assign End Conditions	SS	SC
		BC	Cantilever
	Assign Way	1 Way	2 Way
		Corners Free	Corners Restrained
Assign Grade	Concrete	Steel	



Modelling

4. Create Beams	Assign Size	Width	Depth
	Assign Loads (Walls)	Internal	External
		Pardi	Parapet
	Assign End Conditions	SS	SC
		BC	Cantilever
	Assign Type	Singly	Doubly
		R Beam	L or T Flanged Beam
	Assign Grade	Concrete	Steel



Modelling

5. Create Columns	Assign Size	Width	Depth
		Column Size varies Floorwise	
	Assign Load Type	Axial	Uni-Axial
			Bi-Axial
	Assign End Conditions	Pin Joint	Fixed
	Assign Type	Short Column	Slender Column
Assign Grade	Concrete	Steel	
6. Copy	Data Floorwise		



Modelling

7. Earthquake	Assign Response Factor	
	Assign Importance Factor	
	Assign S_a/g	
	Assign Seismic Zone	II to V
	Assign Seismic Factor	0.10 to 0.46



Modelling

8. Run Analysis	Final Analysis Results	
	If Fails	Repeation form Point 3 to Point 7 till you succed
		Or
	25 Load Combinations	To Satisfy Stability
		To Check the Sway of the Particular Frame
		To make it Non Sway
To Provide Additional Steel		
Satisfied	Lucky if in 1st attempt you get the satisfactory results	



Modelling

9. Observation Elements are Oversized to avoid the Repetative Modelling Process

Modelling Full Process requires Time, Professional Experinced Structural Engineer, Concentration

Solution

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Auto Modelling



Modelling

Auto Modelling

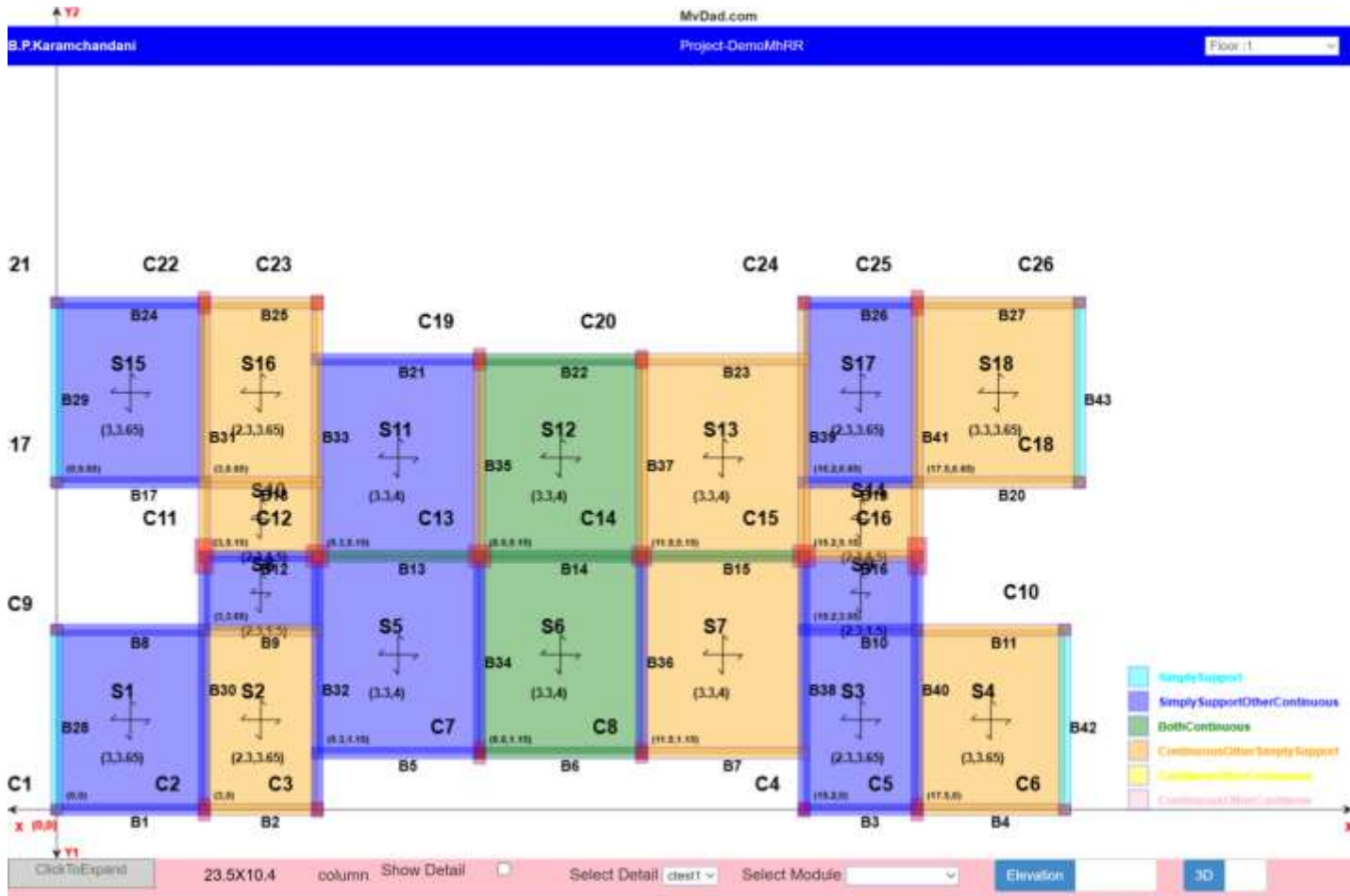


Modelling

Optimise Steel Design

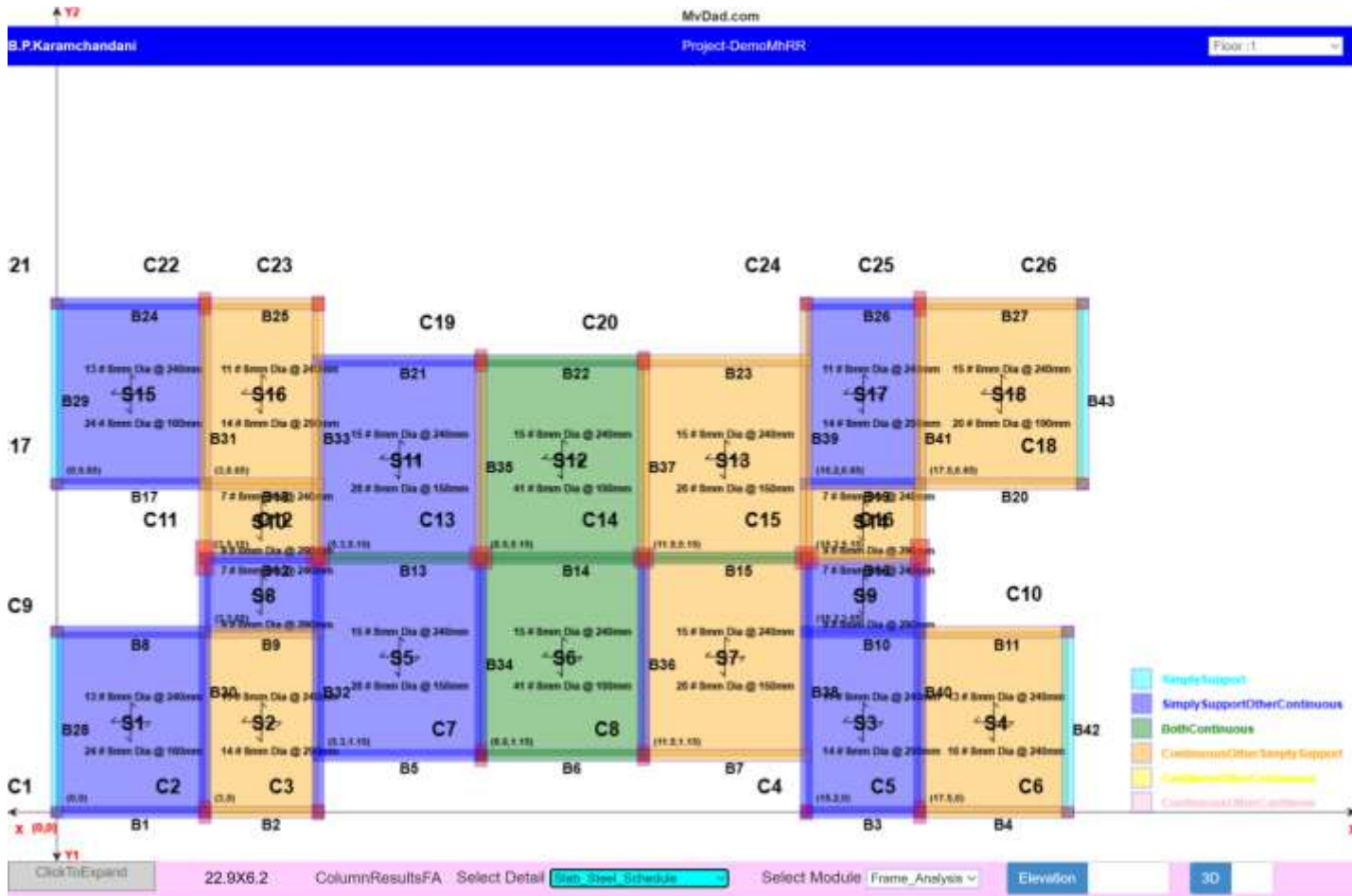


Plan



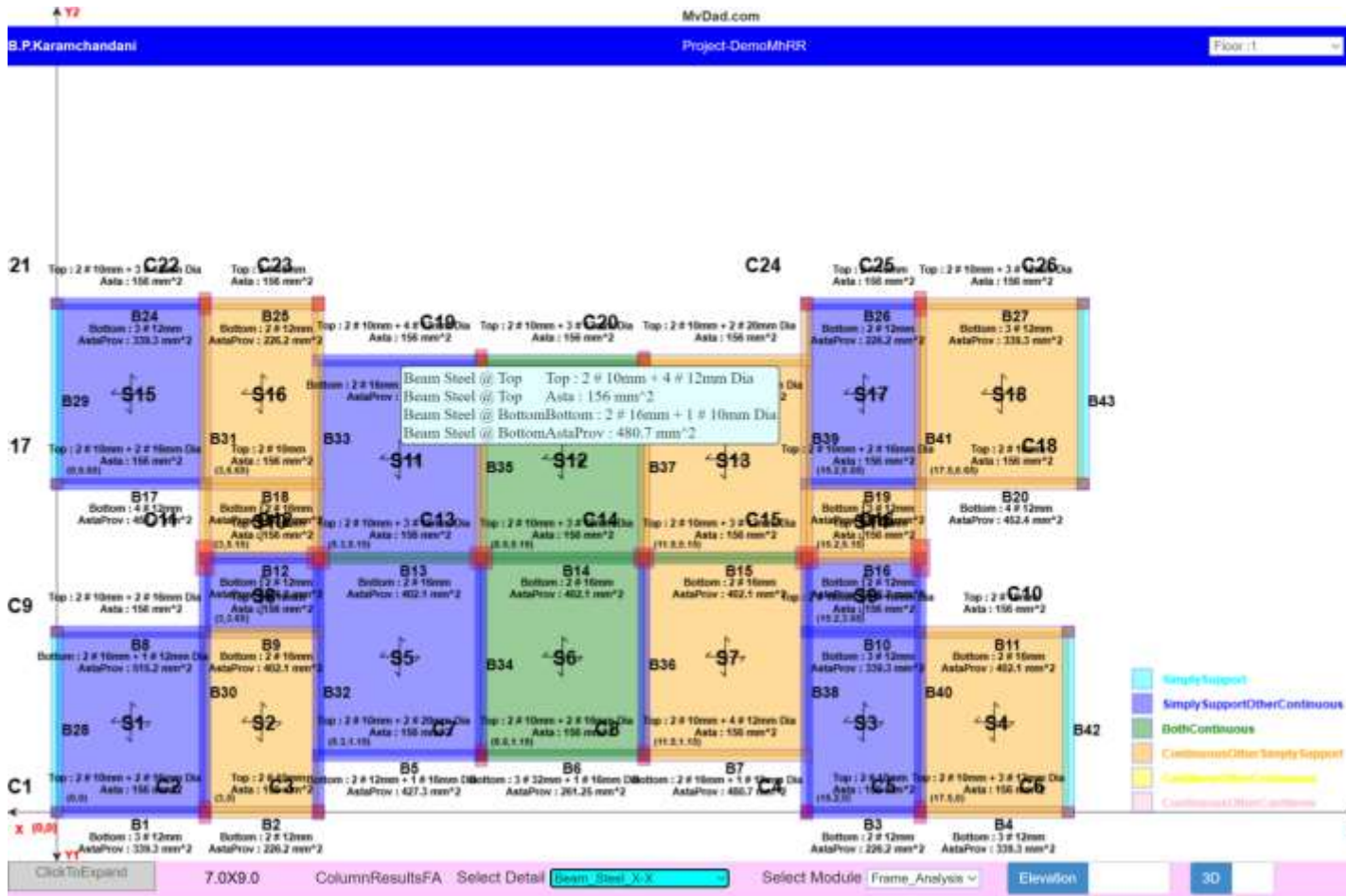


Slab Steel Design



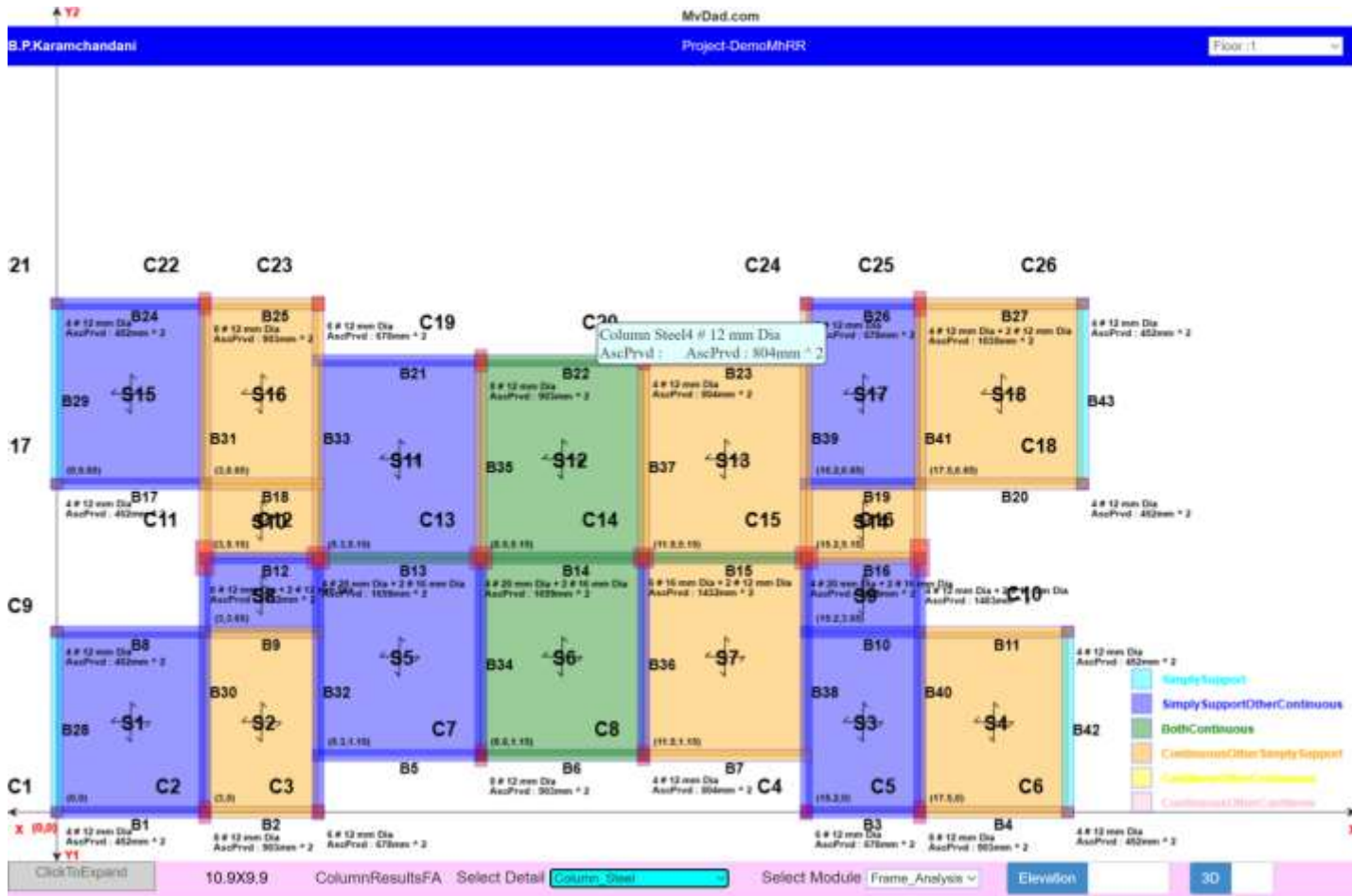


Beam Steel Design





Column Steel Design

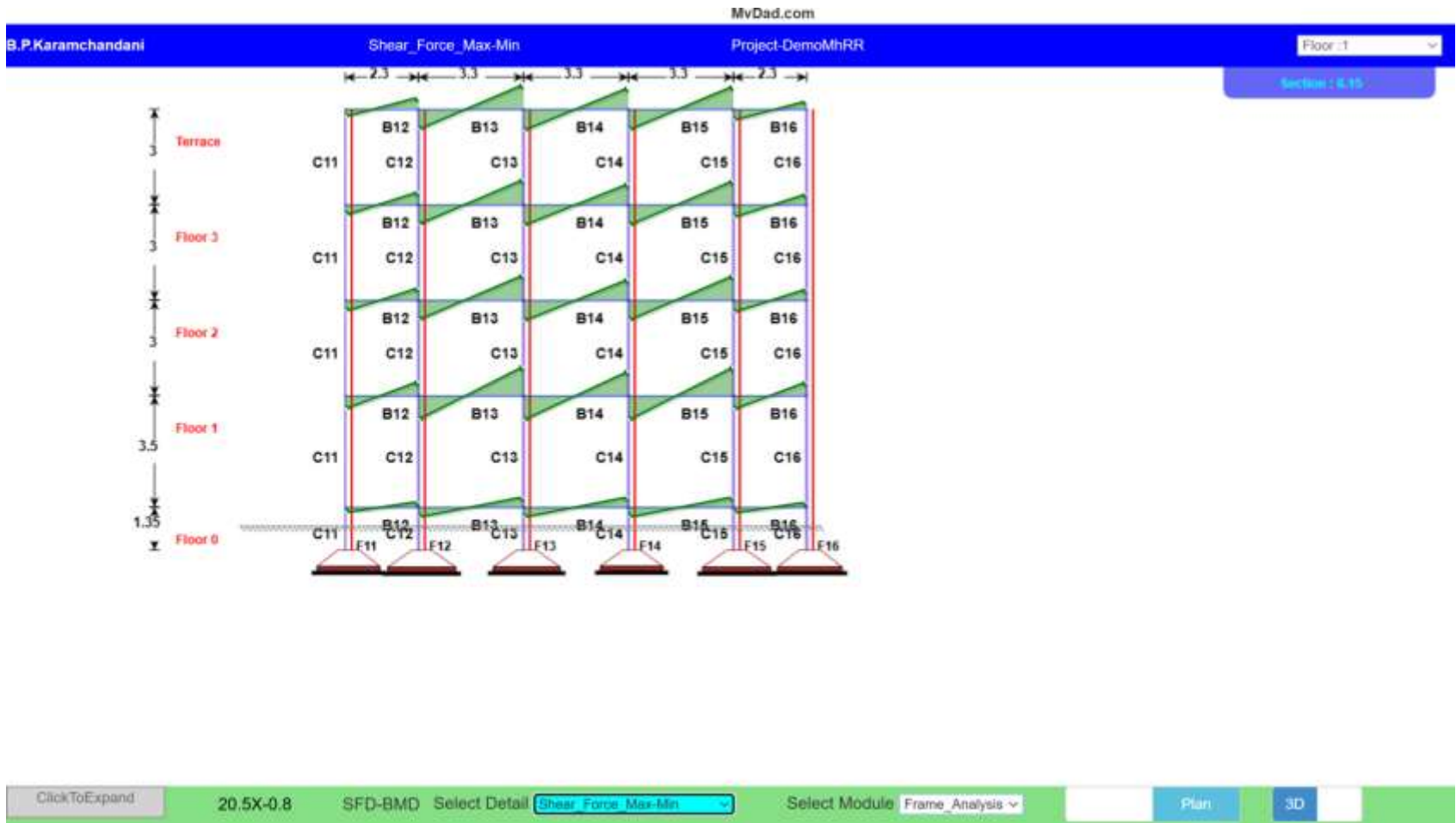




Drawings

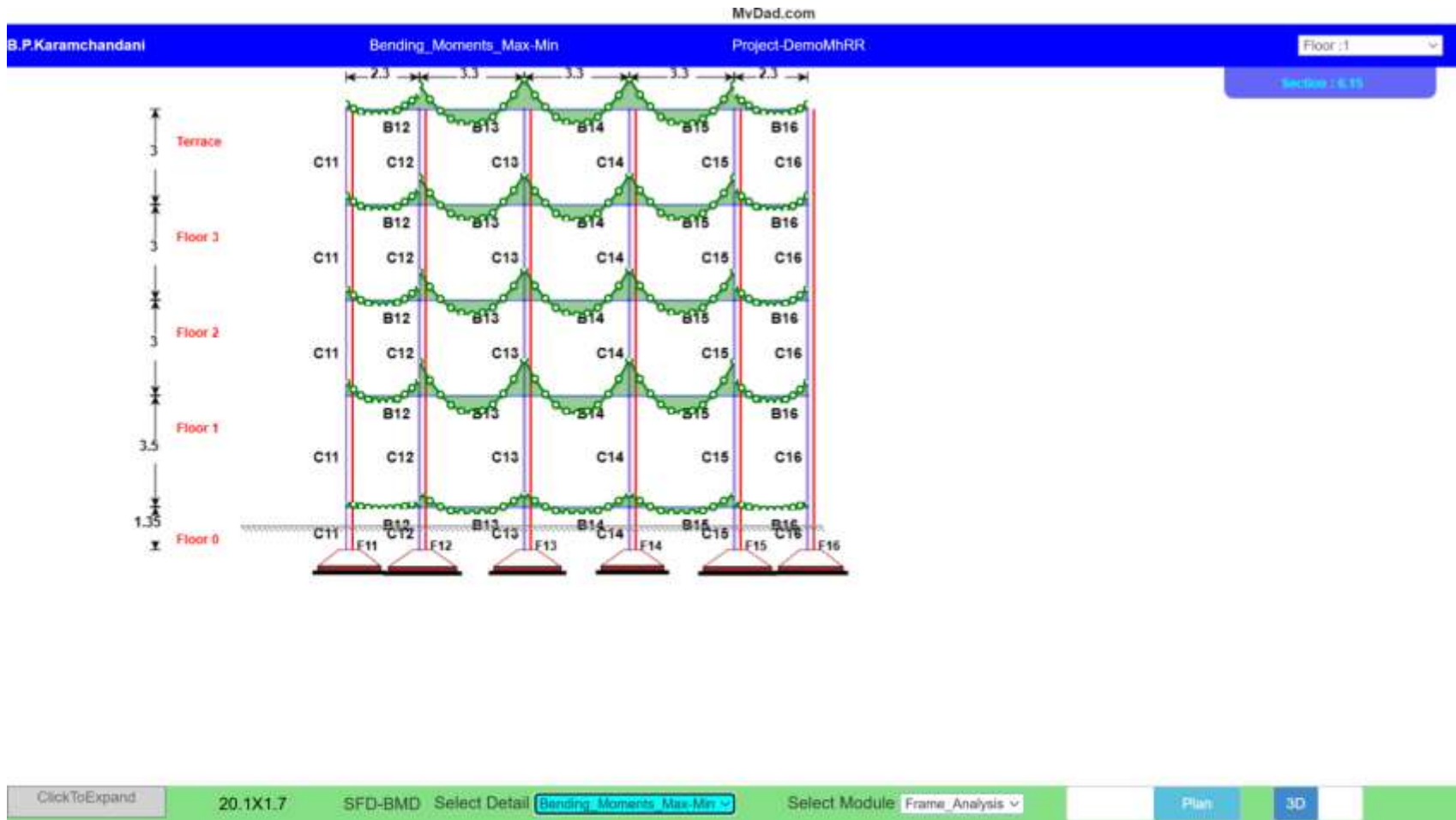


Shear Force Diagram





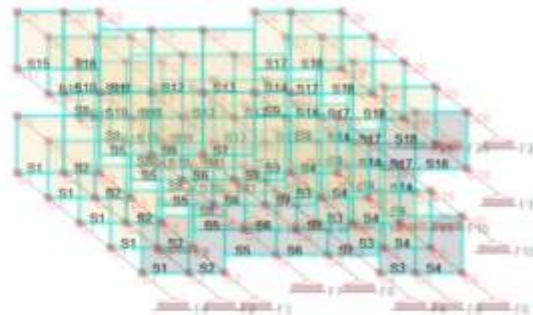
Bending Moment Diagram





3 D

MvDad.com
B.P.Karamchandani Project-DemoMhRR Terrace

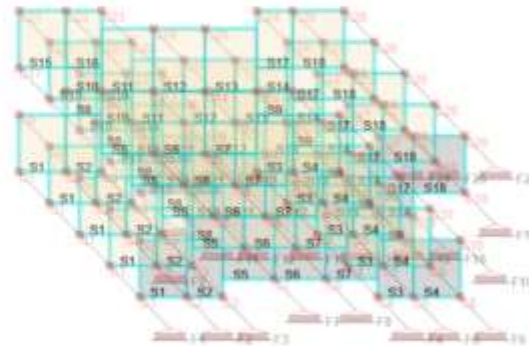


Click To Expand 62.3X-0.8 ColumnResultsFA Select Detail All 20



3 D

MvDad.com
B.P.Karamchandani Project-DemoMhRR Terrace



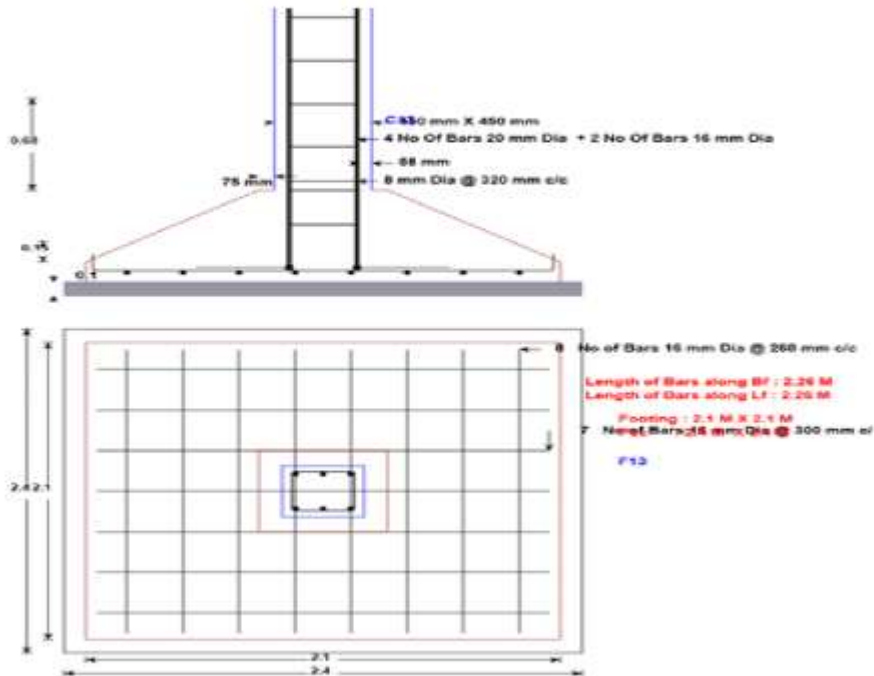
Click To Expand 74.1X13.3 ColumnResultsFA Select Detail All 20



Steel Drawings

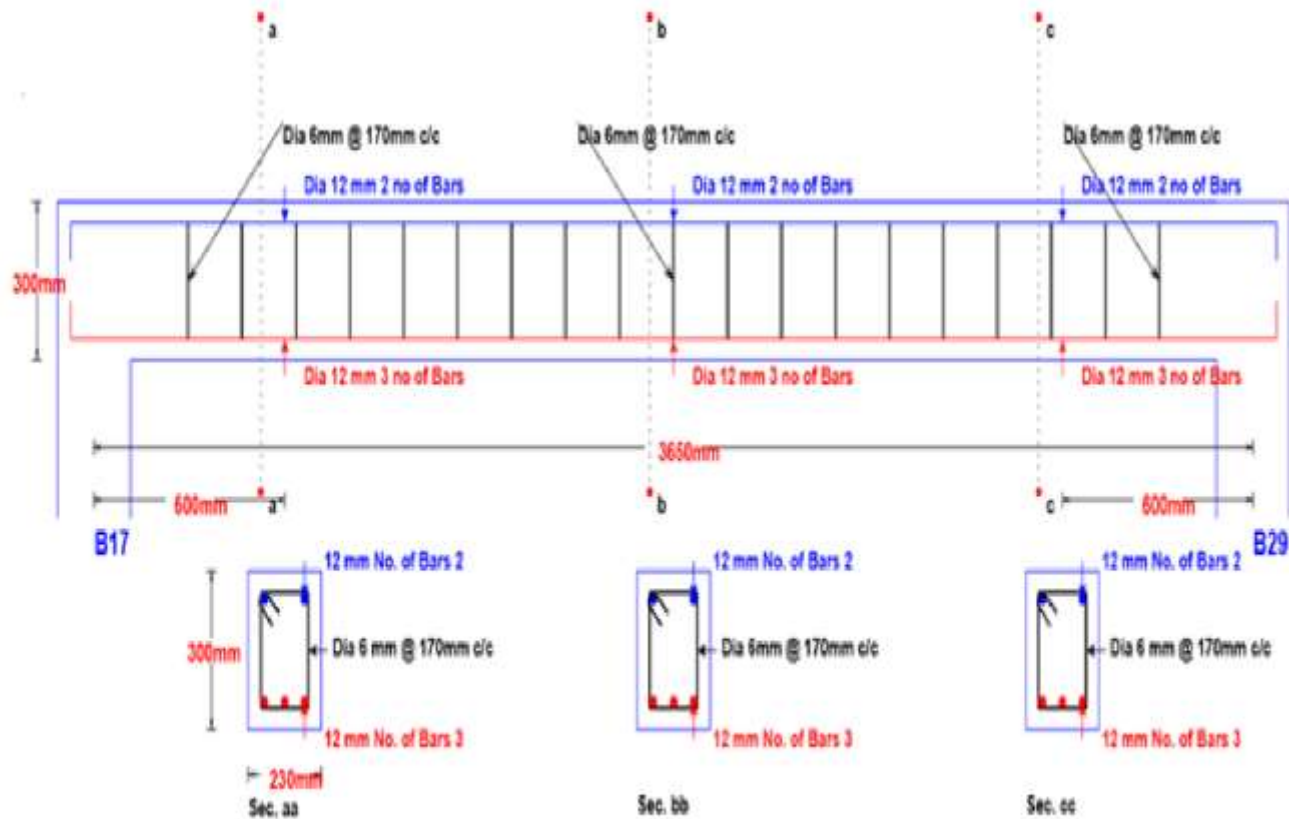


Footing





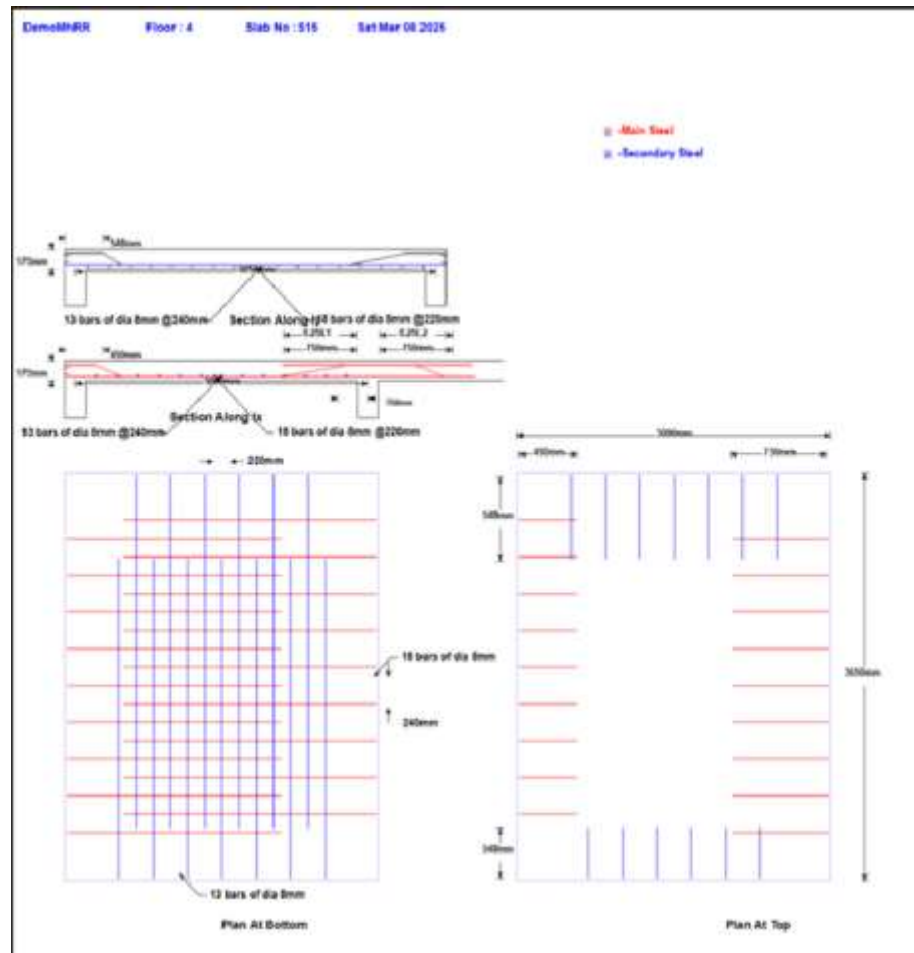
Beam



all dimensions are in mm



Slab

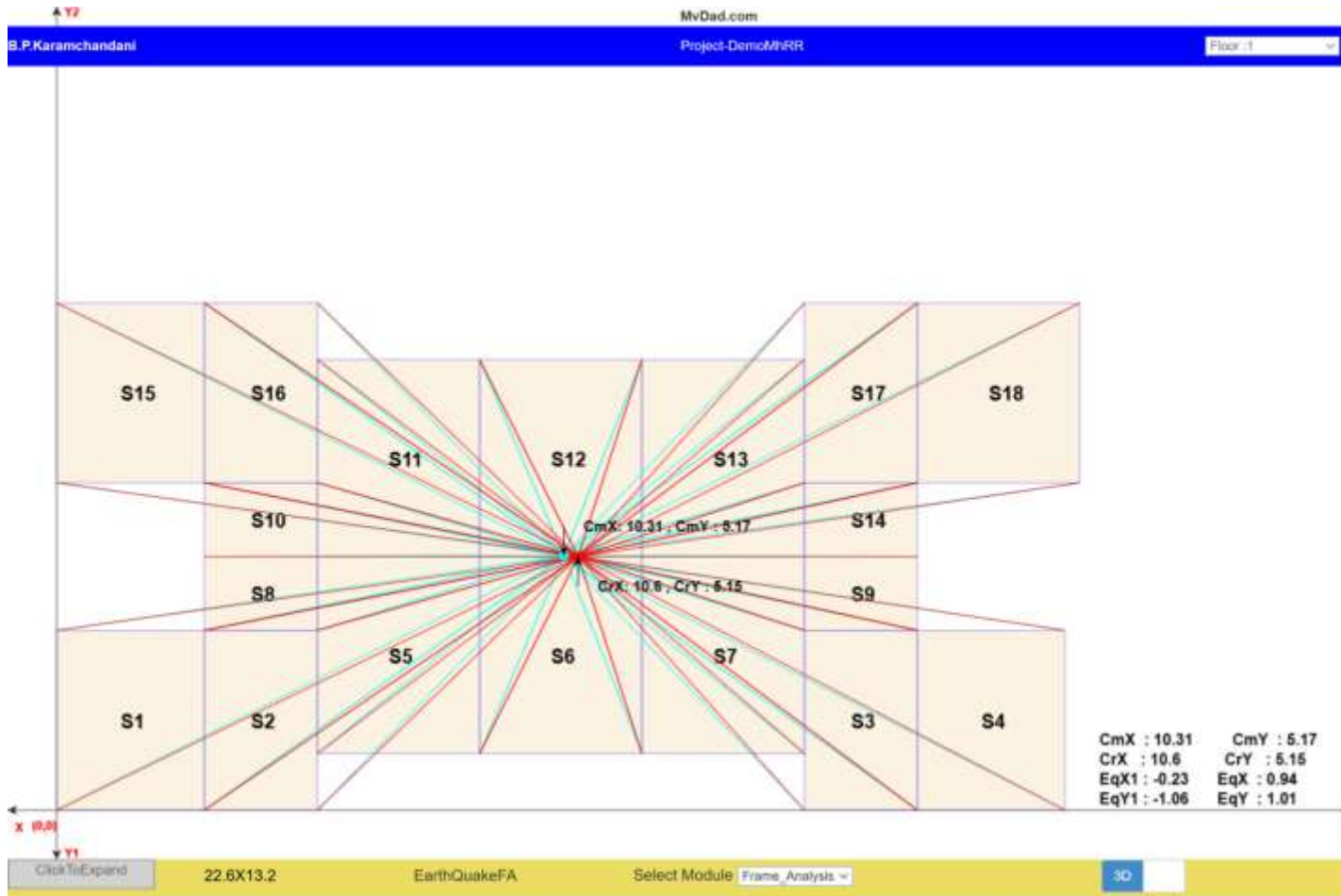




Earthquake Drawings

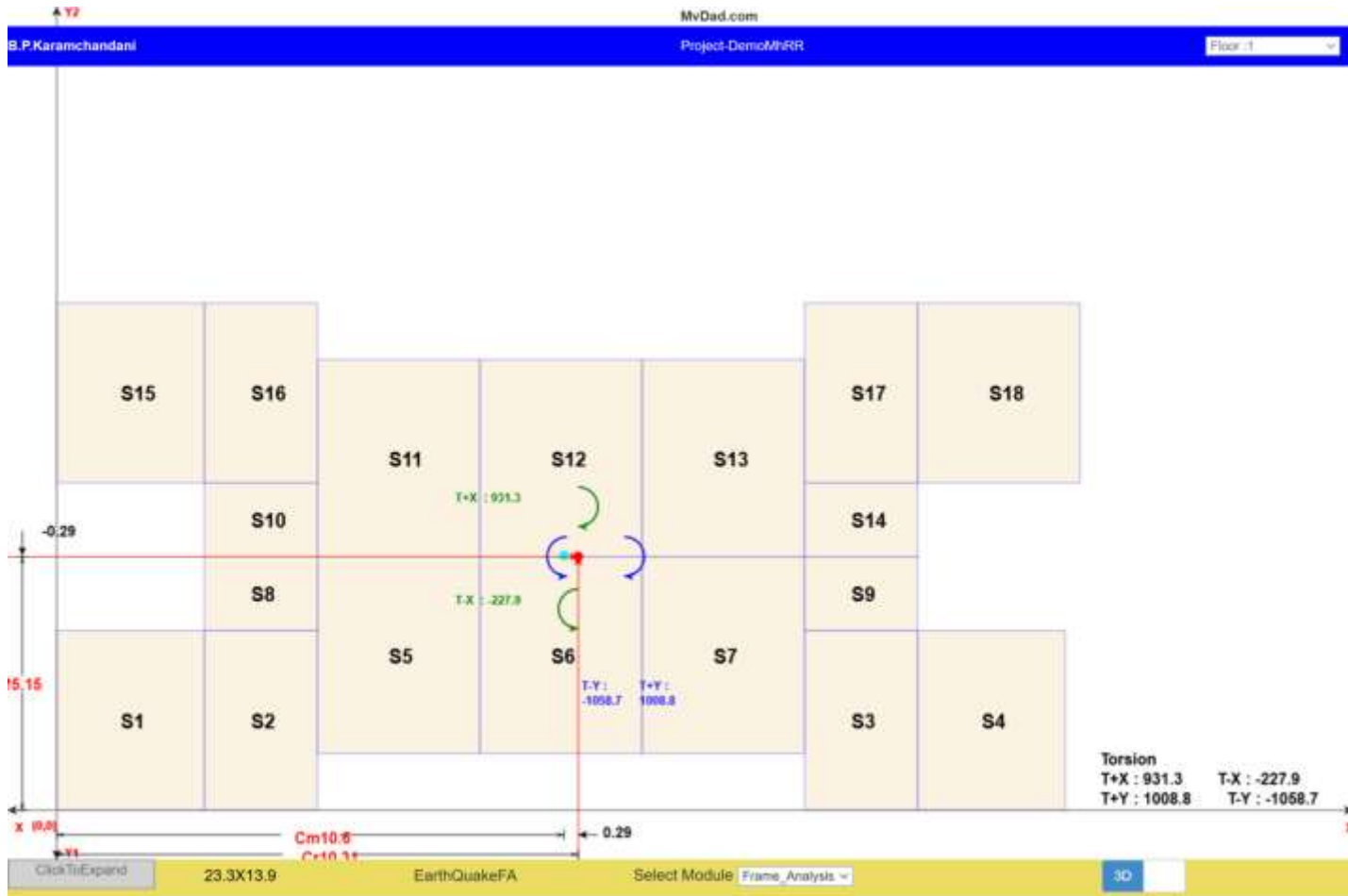


Center of Mass and Center of Stiffness (Rigidity)



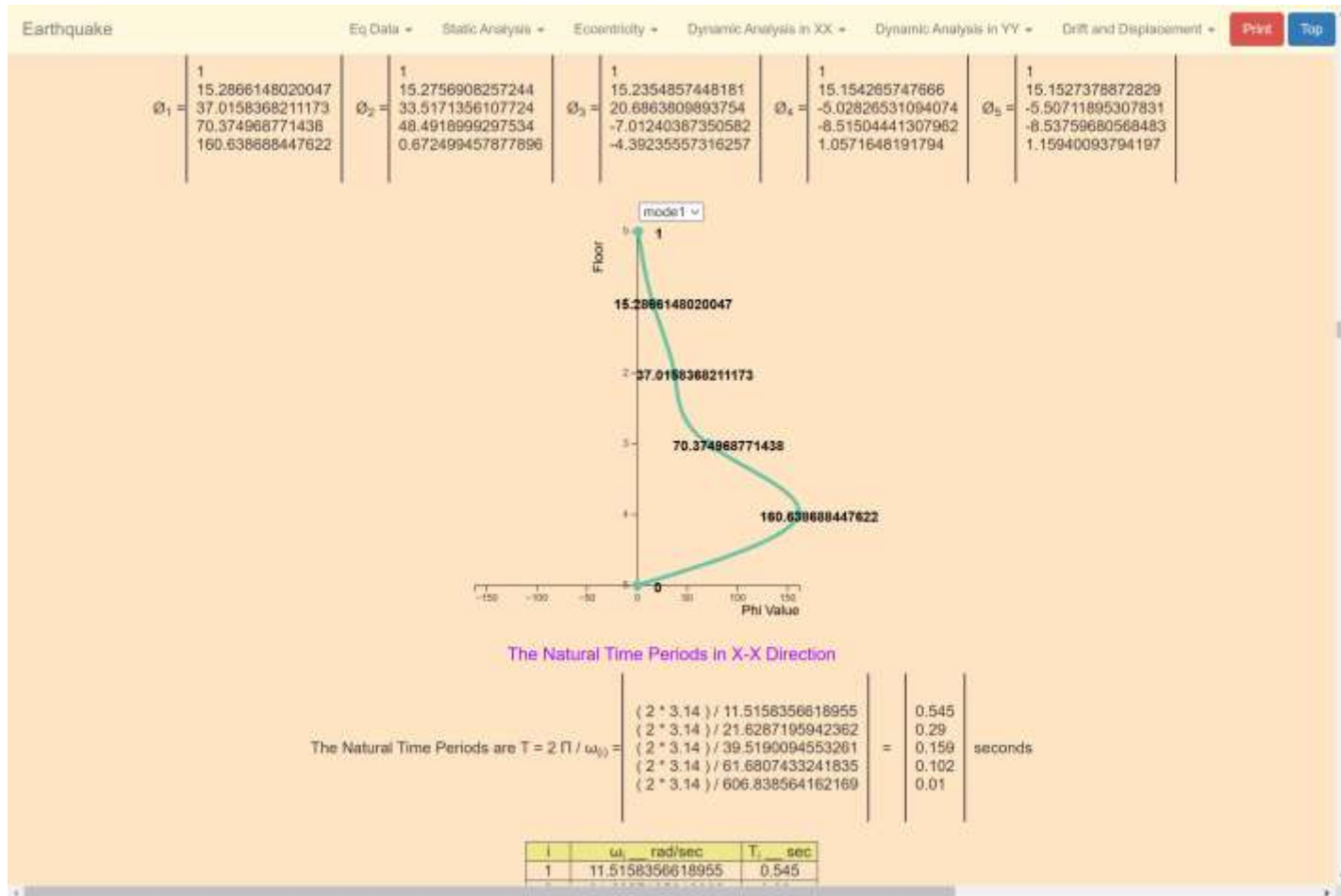


Torsion



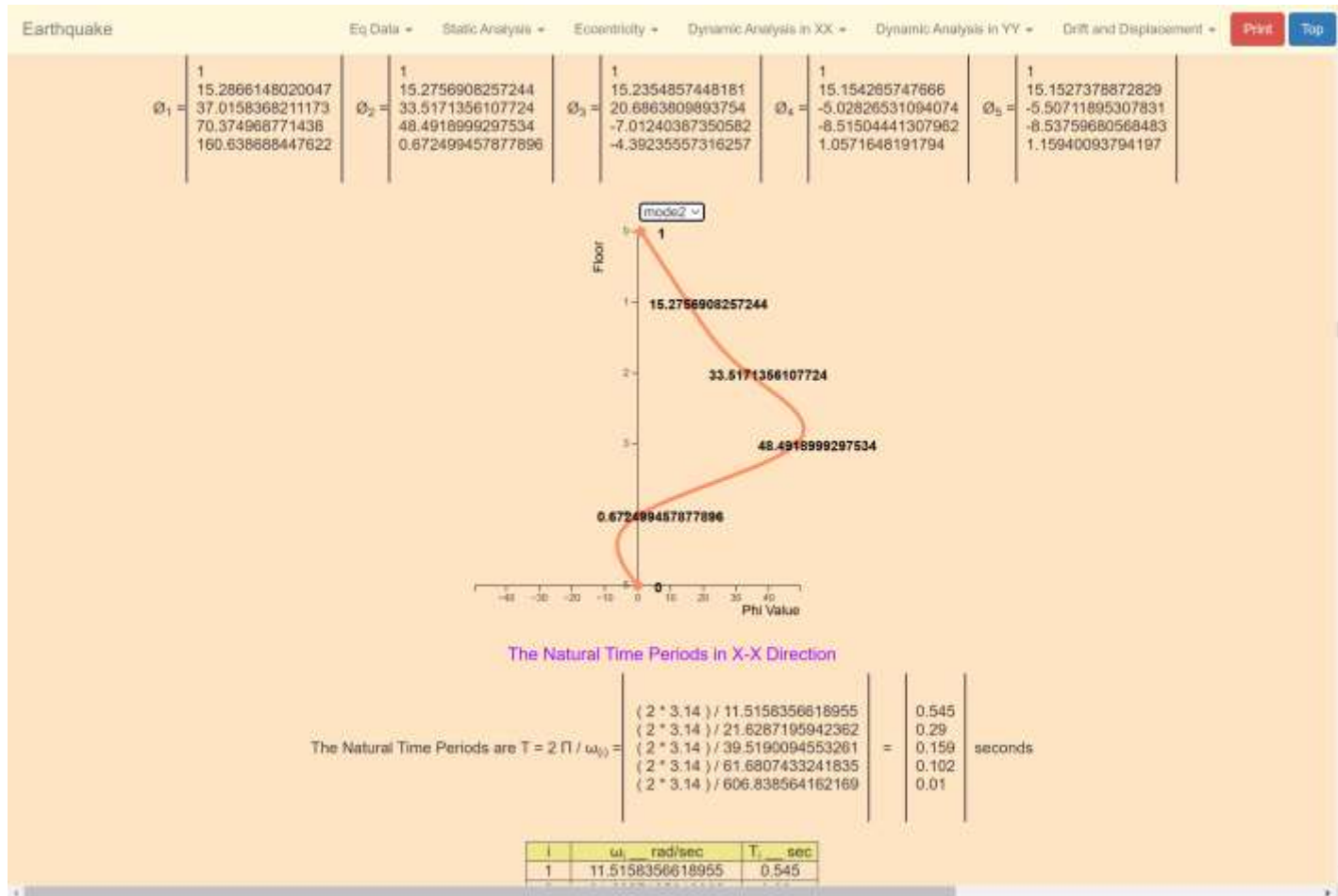


Mode 1



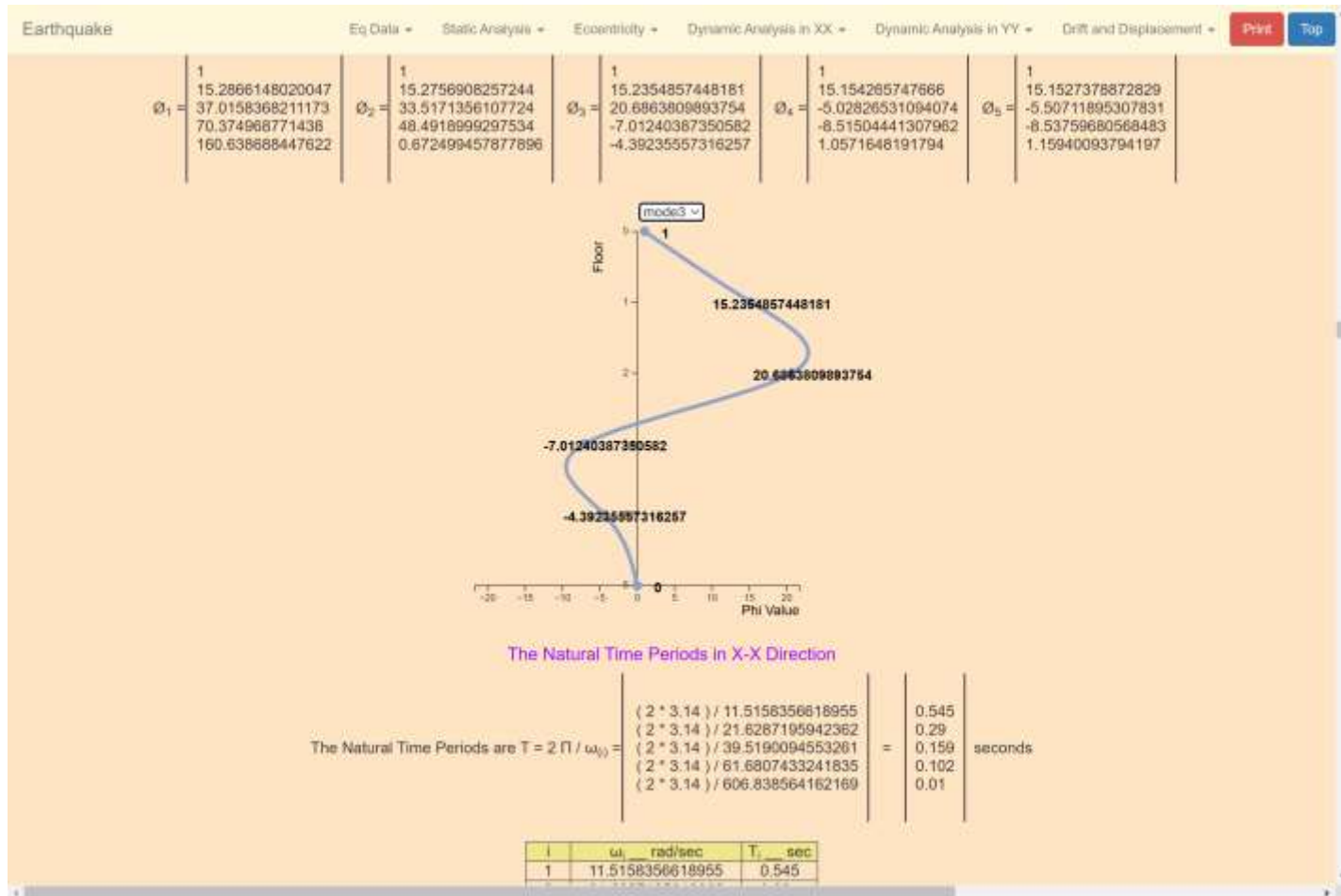


Mode 2



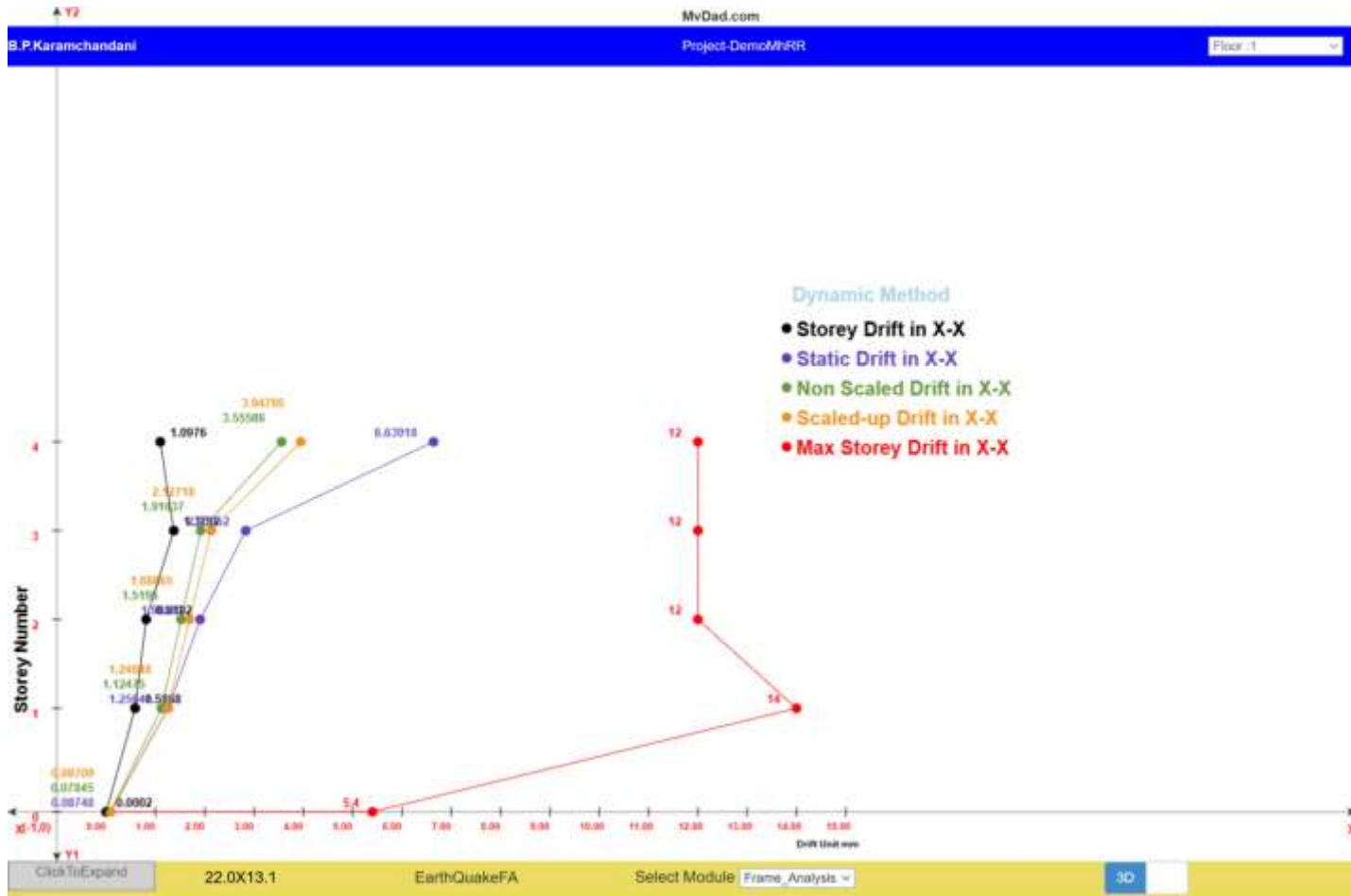


Mode 3





Drift



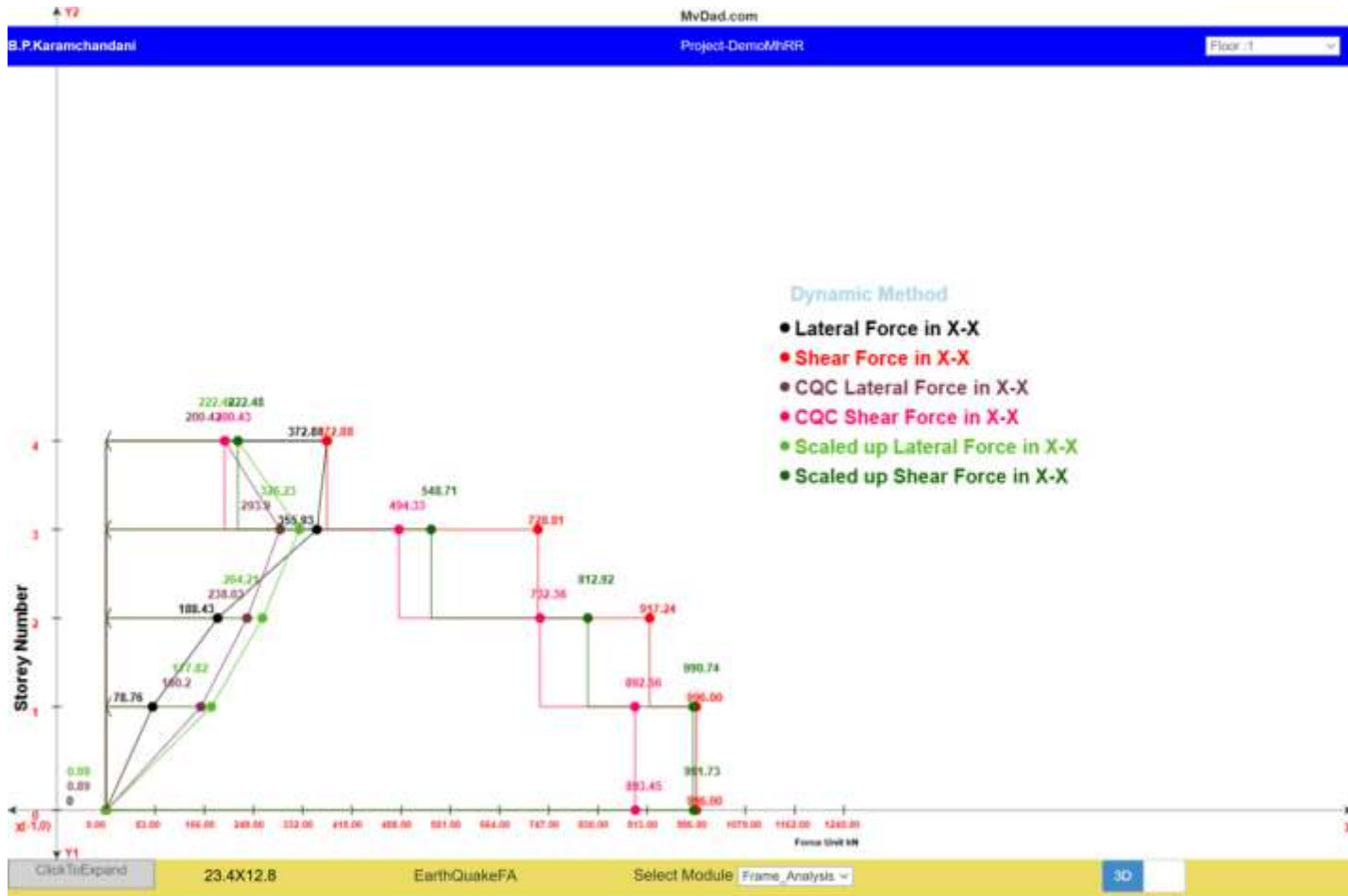


Displacement



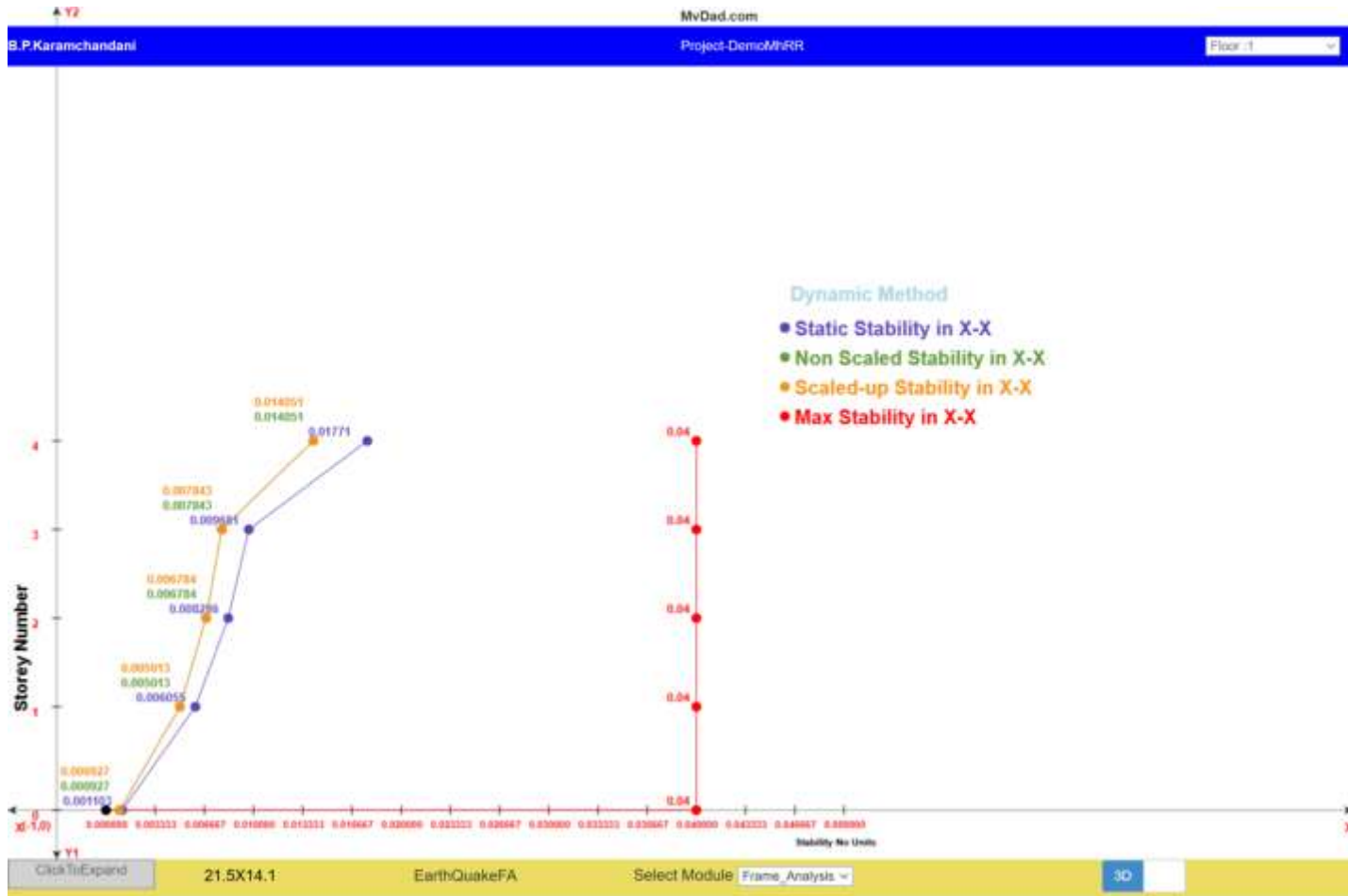


Lateral Force and Shear Force





Stability





Bill of Quantity



Cement BOQ Modulewise

Proj : DemoMhRR Cement Qty F A 08/03/2025

SLAB Cement Qty							
Floor	Quantity: M^3	M15	M20	M25	M30	M35	M40
0	0	0	0	0	0	0	0
1	30.01	0	30.01	0	0	0	0
2	30.01	0	30.01	0	0	0	0
3	30.01	0	30.01	0	0	0	0
4	30.01	0	30.01	0	0	0	0
Total	120.03	0	120.03	0	0	0	0

Beam Cement Qty							
Floor	Quantity: M^3	M15	M20	M25	M30	M35	M40
0	9.52	0	9.52	0	0	0	0
1	10.93	0	10.93	0	0	0	0
2	12.71	0	12.71	0	0	0	0
3	11.64	0	11.64	0	0	0	0
4	9.52	0	9.52	0	0	0	0
Total	54.33	0	54.33	0	0	0	0

Column Cement Qty							
Floor	Quantity: M^3	M15	M20	M25	M30	M35	M40
0	3.5	0	3.5	0	0	0	0
1	7.45	0	7.45	0	0	0	0
2	4.44	0	4.44	0	0	0	0
3	3.64	0	3.64	0	0	0	0
4	3.58	0	3.58	0	0	0	0
Total	22.61	0	22.61	0	0	0	0



Cement BOQ Floorwise

Proj : DemoMhRR		Cement Qty					F A 08/03/2025
Floor	Section/ConcGrd	M15	M20	M25	M30	M35	M40
Footing		0	34.71	0	0	0	0
0	Slab	0	0	0	0	0	0
0	Beam	0	9.52	0	0	0	0
0	Column	0	3.5	0	0	0	0
Total		0	13.02	0	0	0	0
1	Slab	0	30.01	0	0	0	0
1	Beam	0	10.93	0	0	0	0
1	Column	0	7.45	0	0	0	0
Total		0	48.39	0	0	0	0
2	Slab	0	30.01	0	0	0	0
2	Beam	0	12.71	0	0	0	0
2	Column	0	4.44	0	0	0	0
Total		0	47.16	0	0	0	0
3	Slab	0	30.01	0	0	0	0
3	Beam	0	11.64	0	0	0	0
3	Column	0	3.64	0	0	0	0
Total		0	45.29	0	0	0	0
4	Slab	0	30.01	0	0	0	0
4	Beam	0	9.52	0	0	0	0
4	Column	0	3.58	0	0	0	0
Total		0	43.12	0	0	0	0
Grand Total		0	231.7	0	0	0	0

Proj : DemoMhRR		Cement Bags					F A 08/03/2025
Cement Bags / M^3 : Nos		M15	M20	M25	M30	M35	M40
		6.4	8.2	10	12	14	16
TOTAL Cement Bags : Nos		0	1899.94	0	0	0	0
Grand TOTAL Cement		1900 Bags					



Steel BOQ Modulewise

Proj : DemoMhRR				Steel Weight													F A 08/03/2025					
Slab Steel Weight																						
Floor	AgPrvd	WoMs	WoSs	Fe-250								Fe-415				Fe-500						
				6mm	8mm	10mm	12mm	16mm	20mm	25mm	32mm	8mm	10mm	12mm	16mm	20mm	25mm	32mm				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1	171.4	544.9	486.3	0	1031.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
2	171.4	544.2	485.7	0	1029.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
3	171.4	544.2	485.7	0	1029.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4	171.4	440.9	432.6	0	873.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	685.6 M²	2074.2	1890.3																			
SLAB Total	7380 Ft²	3964.5																3964.5 Kg				
Beam Steel Weight																						
Floor	WoMs1	WoMs2	WoMs	wB	wS	WoAs	WoSs	Fe-250				Fe-415				Fe-500						
								6mm	8mm	10mm	12mm	16mm	20mm	25mm	32mm	8mm	10mm	12mm	16mm	20mm	25mm	32mm
0	273.6	0	273.6	229.9	0	229.9	177.3	113.8	63.5	99.1	404.4	0	0	0	0	0	0	0	0			
1	654.5	102.4	756.9	235.4	577	812.4	409.9	172.7	237.2	182.9	405.3	371.2	222.2	250.6	137.1	0	0	0	0			
2	836.5	91.6	728.2	235.3	571.7	807	451.4	187.4	264.1	178.7	475.3	194.2	210.5	364.1	112.4	0	0	0	0			
3	720.9	79.2	800.1	235.4	591.7	827.2	419.8	181.7	238.2	179.1	405.1	512.1	105	313.6	112.4	0	0	0	0			
4	576.2	34.4	610.5	234.4	392.2	626.6	201.4	131.6	69.8	202.9	408.9	338.9	51.8	40.4	194.2	0	0	0	0			
Total	3169.4		3303.2		1659.8																	
BEAM Total			8132.3																	8132.3 Kg		
Column Steel Weight																						
Floor	WoMs1	WoMs2	WoMs	WoSs	Fe-250				Fe-415				Fe-500									
					6mm	8mm	10mm	12mm	16mm	20mm	25mm	32mm	8mm	10mm	12mm	16mm	20mm	25mm	32mm			
0	223.7	24.8	248.4	74.5					74.5	0	141.4	25.6	39.9	41.6	0	0	0	0	0			
1	503.1	58	561.1	182.5					182.5	0	391.2	66.2	103.5	0	0	0	0	0	0			
2	379.8	10.6	390.5	166.1					166.1	0	276.8	113.6	0	0	0	0	0	0	0			
3	312.4	0	312.4	167.7					167.7	0	255.6	56.8	0	0	0	0	0	0	0			
4	276.9	0	276.9	172.4					172.4	0	276.9	0	0	0	0	0	0	0	0			
Total	1789.2		763.2																			
Column Total			2552.5																	2552.5 Kg		
Footing Steel Weight																						
Floor	WoMs	WoSs	Fe-250				Fe-415				Fe-500											
			6mm	8mm	10mm	12mm	16mm	20mm	25mm	32mm	8mm	10mm	12mm	16mm	20mm	25mm	32mm					
Total	314.2	269.4																				
Footing Total	583.7																	583.7 Kg				
Slab + Beam + COLUMN + Footing Total																			15233	2.1 Kg/Ft²		



Steel BOQ Floorwise

DemoMhRR		Steel Summary											F A				08/03/2025
Floor	Type/SteelGrid	Fe-250				Fe-415				Fe-500							
		6mm	8mm	10mm	12mm	16mm	20mm	25mm	32mm	8mm	10mm	12mm	16mm	20mm	25mm	32mm	
Footing		0	0	77.56	218.13	287.83	0	0	0	0	0	0	0	0	0	0	0
0	Slab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	Beam	113.8	63.5	99.1	404.4	0	0	0	0	0	0	0	0	0	0	0	
0	Column	N/A	74.5	0	141.4	25.6	39.9	41.6	0	0	0	0	0	0	0	0	
Total		113.8	138	177	763.9	313.4	39.9	41.6	0	0	0	0	0	0	0	0	
1	Slab	0	1031.2	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	Beam	172.7	237.2	642.5	418.8	213.5	157.3	0	137.1	0	0	0	0	0	0	0	
1	Column	N/A	182.5	0	391.2	66.2	103.5	0	0	0	0	0	0	0	0	0	
Total		172.7	1450.9	642	810.1	279.7	260.8	0	137.1	0	0	0	0	0	0	0	
2	Slab	0	1029.9	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	Beam	187.4	264.1	626	478.4	94.6	158.3	65.5	112.4	0	0	0	0	0	0	0	
2	Column	N/A	166.1	0	276.8	113.6	0	0	0	0	0	0	0	0	0	0	
Total		187.4	1460.1	626	755.2	208.2	158.3	65.5	112.4	0	0	0	0	0	0	0	
3	Slab	0	1029.9	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	Beam	181.7	238.2	623.6	453	227.9	52.8	157.5	112.4	0	0	0	0	0	0	0	
3	Column	N/A	167.7	0	255.6	56.8	0	0	0	0	0	0	0	0	0	0	
Total		181.7	1435.8	624	708.6	284.7	52.8	157.5	112.4	0	0	0	0	0	0	0	
4	Slab	0	873.5	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	Beam	131.6	69.8	506.1	378.8	158	0	0	194.2	0	0	0	0	0	0	0	
4	Column	N/A	172.4	0	276.9	0	0	0	0	0	0	0	0	0	0	0	
Total		131.6	1115.7	506	655.6	158	0	0	194.2	0	0	0	0	0	0	0	
Grand Total		787	5600.5	2575	3693.5	1244	511.8	264.6	556.1	0	0	0	0	0	0	0	
Grade Wise Total		787 Kg	14445.4 Kg				0 Kg										
Over All Total						15232.4 Kg				2.1 Kg/Ft ²							



Estimation

Estimation Qty / Sqft			
Item	Qty	Qty / Sqft	Unit
Project Area	7380		Sqft
Cement	1900	0.3	Bags
Steel	15233	2.1	Kg



Estimation

Estimation Qty / Sqft			
Item	Qty	Qty / Sqft	Unit
Project Area	7380		Sqft
Cement	1900	0.3	Bags
Steel	15233	2.1	Kg

Estimation Rs / Sqft					
Item	Qty	Unit	Rate	Amount	Rs / Sqft
Project Area	7380	Sqft			
Cement	1900	Nos	450	855000	116
Steel	15233	Kg	70	1066310	144



Case Study

Data as per						
Heading	Client	MvDad	Saving	Unit	Rate	Amount
Area	2368	2368		Ft ²		2368
Cement	1170	896	274	Bags	450	123300
			23	%		
Steel	8098	5663.9	2434	Kg	70	170373
			30	%		
Savings						₹ 2,93,673
Savings	3.42	2.39	1.03	Kg/Ft ²		₹ 124



Conclusion

1. Anyone can Create New Project within 10 Minutes from anywhere
2. Most Optimise Design to provide Sustainable Stable Structural Solution



We are open to Collaborate



We are open to Collaborate

A. With Colleges

Offering FREE Login Access of Exclusive Project for Students
Education Purposes.

65 + Seminars / Webinars Conducted across Bharat

B. With Professionals



MvDad.com

Sustainable Stable Structural Solutions

Cloud Based RC Building Earthquake Resistant
Structural Design Software.

Thank You

Tutorial 



Feedback

