

# Midas Civil Self-Learning

**Modify Load Combination**

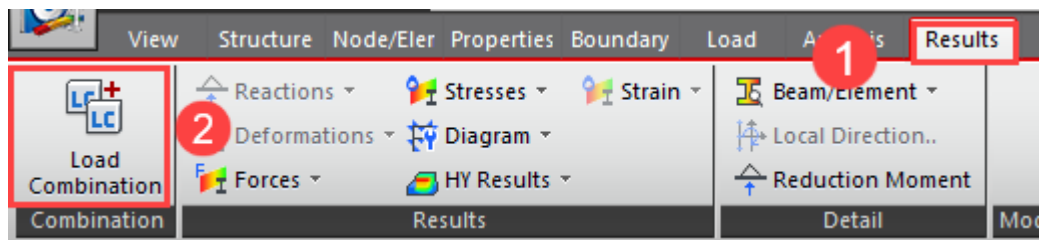


# midas Civil Learning – Load Combination



## Load Combination in midas Civil

midas Civil offers auto-generation of load combinations as per various design codes. However, numerous situations demand users to modify the load combinations manually. This tutorial explains various methods to modify the load combination in midas Civil.



Load Combination Dialog Box



## Ways to modify the load combination?

- Use excel to modify load combinations
- Using MCT Command Shell

# midas Civil Learning – Load Combination

Load Combinations

General | Steel Design | Concrete Design | SRC Design | Composite Steel Girder Design

Load Combination List

No	Name	Active	Type	E	Description
1	cLCB1	Strengt	Add	<input type="checkbox"/>	Strength-I:1.75M
2	cLCB2	Strengt	Add	<input type="checkbox"/>	Strength-I:1.75M
3	cLCB3	Strengt	Add	<input type="checkbox"/>	Strength-II:1.35M
4	cLCB4	Strengt	Add	<input type="checkbox"/>	Strength-II:1.35M
5	cLCB5	Strengt	Add	<input type="checkbox"/>	Strength-III:1.4V
6	cLCB6	Strengt	Add	<input type="checkbox"/>	Strength-III:1.4V
7	cLCB7	Strengt	Add	<input type="checkbox"/>	Strength-III:-1.4V
8	cLCB8	Strengt	Add	<input type="checkbox"/>	Strength-III:-1.4V
9	cLCB9	Strengt	Add	<input type="checkbox"/>	Strength-IV:0.50
10	cLCB10	Strengt	Add	<input type="checkbox"/>	Strength-IV:0.50
11	cLCB11	Strengt	Add	<input type="checkbox"/>	Strength-V:1.35

Load Cases and Factors

LoadCase	Factor
MVL 1(MV)	1.7500
Uniform Temp(+)(ST)	0.5000
SM(SM)	1.0000
Dead Load(CS)	1.2500
Erection Load 1(CS)	1.2500
Tendon Secondary(CS)	1.0000
Creep Secondary(CS)	0.5000
Shrinkage Secondary(CS)	0.5000
*	

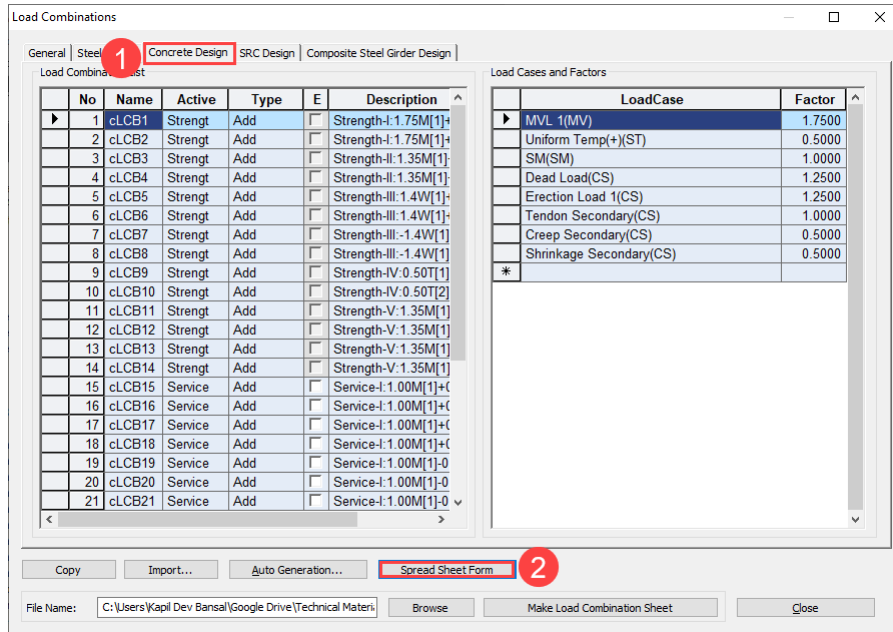
**Load Combinations Dialog Box**



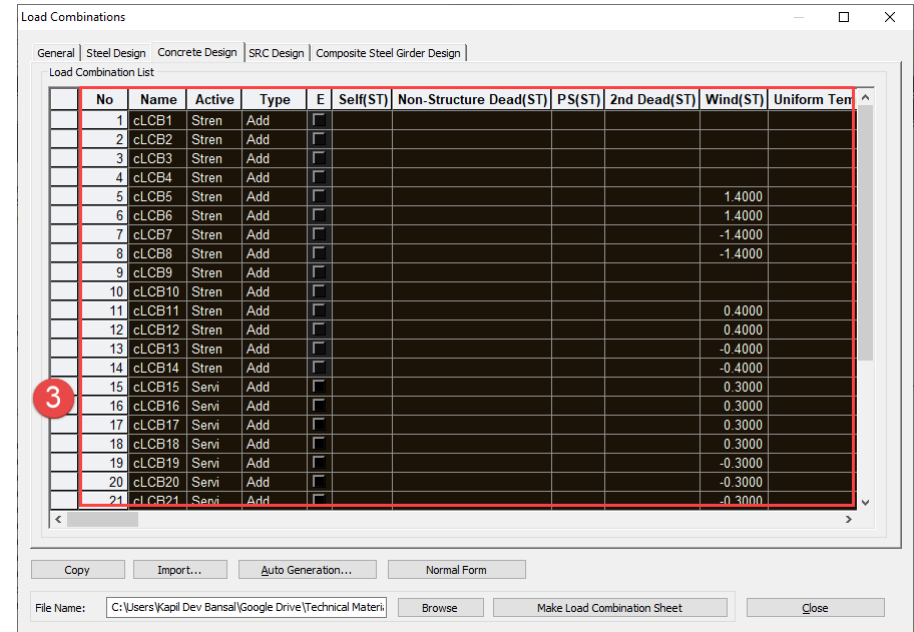
## Terminology & Normal Form

- **cLCB1** represents **Concrete Load Combinations**; c stands for Concrete; LCB stands for Load Combinations
- gLCB1 represents General Load Combinations; g stands for General
- Edit the factors in the right-side **Load Cases** and **Factors** section

# midas Civil Learning – Load Combination



Load Combination Dialog – Switch to Spread Sheet Form



Load Combination Dialog – Copy data



## Editing the load combinations using excel file

- Open **Concrete Design** tab in Load Combinations Dialog box
- Change to **Spread Sheet Form**
- Select all the rows using mouse/trackpad and use Ctrl +C to copy the load combination data
- Use Ctrl + V to paste the load combination data in an Excel File

# midas Civil Learning – Load Combination

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	cLCB1	Strength/S Add		0						0.5			
2	cLCB2	Strength/S Add		0							0.5		
3	cLCB3	Strength/S Add		0						0.5			
4	cLCB4	Strength/S Add		0							0.5		
5	cLCB5	Strength/S Add		0					1.4	0.5			
6	cLCB6	Strength/S Add		0					1.4		0.5		
7	cLCB7	Strength/S Add		0					-1.4	0.5			
8	cLCB8	Strength/S Add		0					-1.4		0.5		
9	cLCB9	Strength/S Add		0						0.5			
10	cLCB10	Strength/S Add		0							0.5		
11	cLCB11	Strength/S Add		0					0.4	0.5			
12	cLCB12	Strength/S Add		0					0.4		0.5		
13	cLCB13	Strength/S Add		0					-0.4	0.5			
14	cLCB14	Strength/S Add		0					-0.4		0.5		
15	cLCB15	Serviceabi Add		0					0.3	1		0.5	
16	cLCB16	Serviceabi Add		0					0.3	1			0.5
17	cLCB17	Serviceabi Add		0					0.3		1	0.5	
18	cLCB18	Serviceabi Add		0					0.3		1		0.5
19	cLCB19	Serviceabi Add		0					-0.3	1		0.5	
20	cLCB20	Serviceabi Add		0					-0.3	1			0.5
21	cLCB21	Serviceabi Add		0					-0.3		1	0.5	
22	cLCB22	Serviceabi Add		0					-0.3		1		0.5
23	cLCB23	Serviceabi Add		0						1			
24	cLCB24	Serviceabi Add		0							1		

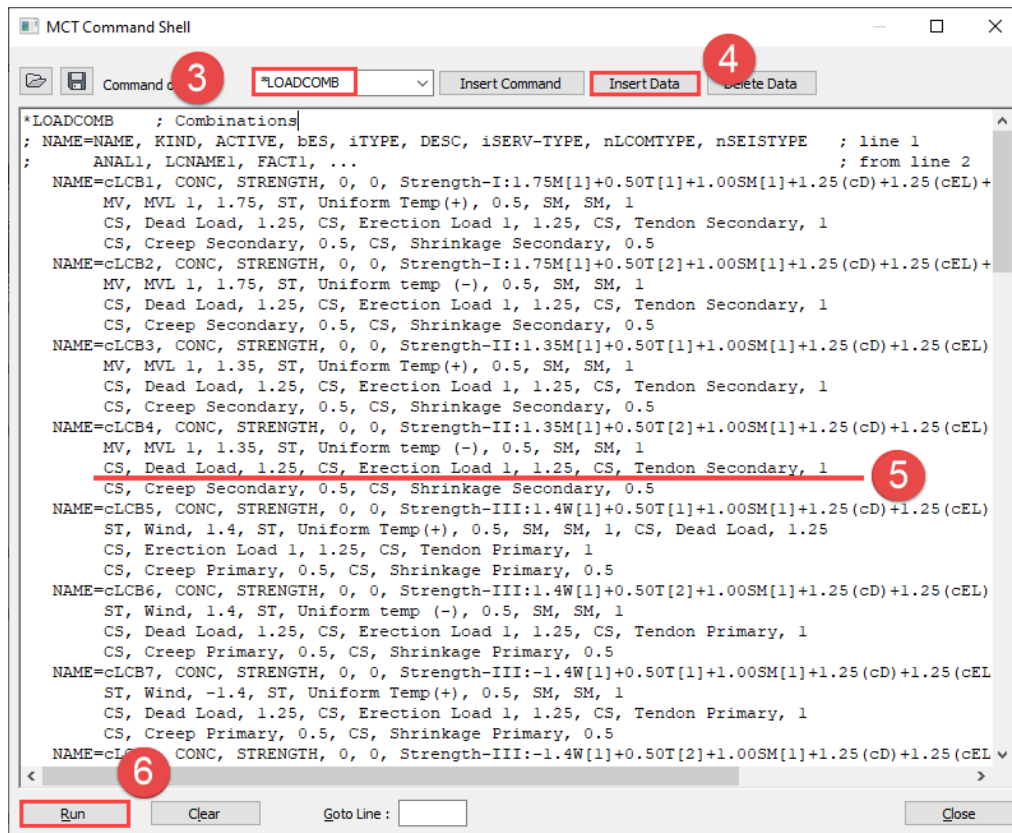
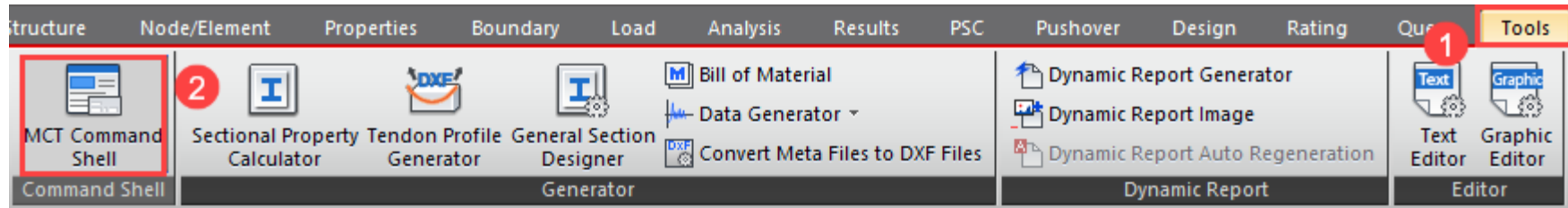
Load Combination Data in MS Excel



## Editing the load combinations using excel file

- Edit the load combinations in Excel file
- Copy the exact range of cells in the excel sheet
- Use Ctrl + V to paste the load combination data back in Load Combination Dialog box in midas Civil

# midas Civil Learning – Load Combination



## Edit the data in MCT Command Shell

- Tools > MCT Command Shell...
- Type **\*LOADCOMB**
- Click on **Insert Data**
- Edit the data in the MCT Command Shell
- Click **Run**