

ULS Load Combinations

ID	TYPE	NAME
1	ULS	1.5xDEAD+1.5xSELF+1.5xPURLIN+1.5xSHEETING+1.5xSNOW1
105	ULS	1.5xDEAD+1.5xSELF+1.5xPURLIN+1.5xSHEETING+1.5xWindRight(Cpi+)
119	ULS	1.5xDEAD+1.5xSELF+1.5xPURLIN+1.5xSHEETING+1.5xWindLeft(Cpi+)
115	ULS	1.5xDEAD+1.5xSELF+1.5xPURLIN+1.5xSHEETING+1.5xWindBack(Cpi+)
106	ULS	1.5xDEAD+1.5xSELF+1.5xPURLIN+1.5xSHEETING+1.5xWindFront(Cpi+)
107	ULS	1.5xDEAD+1.5xSELF+1.5xPURLIN+1.5xSHEETING
108	ULS	1.2xDEAD+1.2xSELF+1.2xPURLIN+1.2xSHEETING+1.2xSNOW1+0.6xWindRight(Cpi+)
109	ULS	1.2xDEAD+1.2xSELF+1.2xPURLIN+1.2xSHEETING+1.2xSNOW1+0.6xWindLeft(Cpi+)
110	ULS	1.2xDEAD+1.2xSELF+1.2xPURLIN+1.2xSHEETING+1.2xSNOW1+0.6xWindBack(Cpi+)
111	ULS	1.2xDEAD+1.2xSELF+1.2xPURLIN+1.2xSHEETING+1.2xSNOW1+0.6xWindFront(Cpi+)
103	ULS	1.2xDEAD+1.2xSELF+1.2xPURLIN+1.2xSHEETING+1.5xSNOW1+0.6xWindRight(Cpi+)
17	ULS	1.2xDEAD+1.2xSELF+1.2xPURLIN+1.2xSHEETING+1.5xSNOW1+0.6xWindLeft(Cpi+)
18	ULS	1.2xDEAD+1.2xSELF+1.2xPURLIN+1.2xSHEETING+1.5xSNOW1+0.6xWindBack(Cpi+)
19	ULS	1.2xDEAD+1.2xSELF+1.2xPURLIN+1.2xSHEETING+1.5xSNOW1+0.6xWindFront(Cpi+)
20	ULS	1.2xDEAD+1.2xSELF+1.2xPURLIN+1.2xSHEETING+1.2xSNOW1
104	ULS	1.2xDEAD+1.2xSELF+1.2xPURLIN+1.2xSHEETING+1.5xSNOW1

Design of members according to IS-800:2007

						Slenderness ratio about		Capacity ratio							
Frame ID	Section Name	Load Combo	Loc	N (kN)	M33 (kN.m)	Major	Minor	Tension	Compression	Shear	Lateral torsional buckling 8.2.2	Combined axial force and bending moment - 9.3.1		Combined axial compression and bending moment - 9.3.2	
												Section Strength	Member Strength	Member Strength Ratio1	Member Strength Ratio2
0	IPE300-H=488	1	0.9	-107.7	-209.2	0.05	0.05	-	0.08	0.15	0.87	1.33	-	1.33	0.82
1	IPE300	1	0.0	-105.4	-143.8	0.08	0.08	-	0.10	0.20	-	1.01	-	1.06	0.67
2	IPE300	1	1.7	-96.2	38.9	0.08	0.08	-	0.09	0.10	-	0.33	-	0.35	0.23
3	IPE300	1	1.7	-91.6	82.8	0.08	0.08	-	0.08	0.05	-	0.61	-	0.64	0.41
4	IPE300	1	1.7	-87.1	95.2	0.08	0.08	-	0.08	0.01	-	0.69	-	0.72	0.45
5	IPE300-H=350	1	0.0	-87.1	95.2	0.07	0.07	-	0.07	-	-	0.64	-	0.67	0.42
6	IPE300-H=350	1	1.3	-87.1	95.2	0.07	0.07	-	0.07	-	-	0.64	-	0.67	0.42
5	IPE300	1	0.0	-87.1	95.2	0.08	0.08	-	0.08	0.01	-	0.69	-	0.72	0.45
6	IPE300	1	0.0	-91.6	82.8	0.08	0.08	-	0.08	0.05	-	0.61	-	0.64	0.41
7	IPE300	1	0.0	-96.2	38.9	0.08	0.08	-	0.09	0.10	-	0.33	-	0.35	0.23
8	IPE300	1	1.7	-105.4	-143.8	0.08	0.08	-	0.10	0.20	-	1.01	-	1.06	0.67
11	IPE300-H=487	1	0.4	-107.7	-209.2	0.05	0.05	-	0.08	0.15	0.87	1.33	-	1.33	0.82
9	HEA300	1	6.0	-114.2	-282.6	0.07	0.07	-	0.05	0.17	-	0.96	-	0.99	0.60
10	HEA300	1	6.0	-114.2	282.6	0.07	0.07	-	0.05	0.17	-	0.96	-	0.99	0.60