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## LIST OF ABBREVIATIONS

Ae	= Effective section area
As	= section area of steel
D	= diameter
DL	= Dead load
E	= Earthquake
Ec	= Elastic modulus of concrete
EL	= Earthquake load
EL	= East latitude
Es	= Elastic modulus of steel
ET	= Temperature effect
fc	= Yield stress
FS	= Safety factor
fy	= Tensile strength
H	= Height
I	= Moment of inertia
Ix	= Inertia moment x-direction
L	= Length
LL	= Live load
MA	= Superimpose dead load
$M_{max}$	= Maximum moment
Mn	= Nominal moment
MSL	= Mean sea level
Mu	= Ultimate moment
NL	= North latitude
No.	= Number
$P_{max}$	= Maximum axial force
Pn	= Nominal axial force
Pu	= Ultimate axial force
RSP	= Response spectrum

S = Section modulus  
SAP = Structure analysis program  
SDL = Superimpose load  
SF = Safety factor  
SL = South latitude  
TEW = Wind load  
tf = Thickness of flange  
tp = plate thickness  
tw = Thickness of web  
UL = Uniform load  
WL = Wind load