# Aditya Balasaheb Deshmukh

N1002, Laburnum Park, Magarpatta city, Pune - 411028

### ABOUT

Structural Engineer with experience in the design of *Concrete, Steel and Composite* structures. Worked through various design stages of a project, from concept phase to production of construction drawings. Skilled in analysis and design software tools like *ETABS, SAFE, SAP, RAM*. Worked with *IS, ACI,* and *ASCE* codes. Experienced in the design of *Mid-Rise, High Rise, Commercial* and *Residential* buildings. *Licensed engineer* in Mumbai.

#### EDUCATION

Program	Institution	%/CGPA	Year
<b>M.S.</b> in Structural Engineering	Indian Institute of Technology Madras	8.41	2015-2017
<b>B.Tech.</b> in Civil Engineering	College of Engineering Pune	6.77	2010-2014

#### WORK EXPERIENCE

### • Senior Engineer at LERA Consulting Structural Engineers, Mumbai (Sept 2017-Present)

- Role
  - Assisting project manager in planning structural systems for building structures.
  - Analyzing performance of structural system using computer aided analysis software.
  - Design and detailing of structural components using relevant design codes.
  - Produce calculations, analysis models and reports for review.
  - Develop the details for key connections between steel elements and between steel and supporting concrete elements.
  - Visit construction sites to ensure correct implementation design drawings. Prepare visit reports and provide alternate solution to original design based on site constraints.
  - Resolve construction related queries from contractor and provide retrofitting schemes when required.
  - Review contractor's design documents.
  - Coordinate with client and architect to assist them in planning the structure.
  - Assist graduate engineers when encountering problems in analysis and design.
  - Prepared office standard spreadsheet for design of steel shear connection and steel beam moment splice.

#### \* Key Projects

- One Lodha Place, Mumbai, India
  - G+40 storey commercial building with around 13,00,000 sq ft built up area including two basements and 8 podium levels for parking, two retail floors and 30 floors for office spaces.
  - Designed steel-concrete composite framing for gravity loads and RC shear walls for lateral loads along with other structural key elements like raft foundation, retaining walls, flat slabs, link beams and water tanks. Also worked on development of retrofit schemes for changes in design based on client requirement.
- Princeton University, New Jersey, USA
  - *G*+2 storey steel gymnasium building with mass timber green roof.

- Designed various structural components including tension only steel rod bracing system to carry heavy earthquake forces due to green roof. Also, worked on strengthening of 96 ft long existing steel truss for increased floor loads.
- Lodha Dattatraya, Mumbai, India
  - G+40 RCC building with over total 2,50,000 sq ft residential spaces.
  - Worked on schematic design of the building to develop overall structural framing taking into account client and architectural requirement.
- Sumner House, Brooklyn, New York, USA
  - The G+11 story residential building features 1.30,000 sq ft of affordable senior housing.
  - The outer walls of the building fold at certain points, requiring the perimeter columns to slope along building height. The slabs were designed to carry drag forces from sloping columns.
- Oberoi Garden City 3, Mumbai, India
  - Design of G+5 RCC podium structure with connection to main building and surrounding podiums.
- Oberoi Worli Mixed Use Tower, Mumbai, India
  - Devised various retrofit schemes for existing structure based on tenant modifications.

# PUBLICATIONS

- Aditya Deshmukh and Rupen Goswami, 'Unified Strain-Based Procedure to Obtain Design *P-M* Interaction Curves of Slender RC Wall Sections', presented at 16<sup>th</sup> World Conference on Earthquake Engineering, Santiago, Chile, 2017.
- Aditya Deshmukh and Rupen Goswami, 'Use of RC Walls in Controlling Detrimental Effects of Stiffness Irregularity in RC Buildings on Hill Slopes', *Indian Concrete Journal*, Mumbai, India, 2018.

### SOFTWARE SKILLS

- ETABS
- RAM
- PERFORM 3D

- SAFE
- SAP 2000
- CSiCol

# SCHOLASTIC ACHIEVEMENTS

- Awarded with Government of Maharashtra Scholarship for meritorious academic performance in 12<sup>th</sup> grade.
- Selected for 'Dhirubhai Ambani SSC Merit Reward Scheme' for outstanding academic performance in 10<sup>th</sup> grade.
- Awarded with 'Consolation Prize' for meritorious performance in Maharashtra Talent Search Examination (MTSE) for 8<sup>th</sup> grade.

# **EXTRA-CURRICULAR ACTIVITIES**

- Second position in divisional level Table Tennis tournament (June, 2003).
- Participated in National Ranking Table Tennis Championship (August, 2003).

### LICENSES

• Structural Engineer License (Municipal Corporation of Greater Mumbai)