203, Elecon Chamber, Behind Sakinaka Tel. Exchange, Kurla - Andheri Road, Andheri (E), Mumbai - 400 072.

T:+91 - 22 - 28526926 F:+91 - 22 - 28526927



12<sup>th</sup> December 2018

# SELF DECLARATION FOR THE PURPOSE OF STRUCTURAL ENGINEER REGISTRATION

This is certify that I, Rahul Agarwal, started the civil & structural engineering company, Capstone Consultants Pvt Ltd in Mumbai, and I have been running this company since May 2008 as the Principal Structural Engineer & Managing Director. My Curriculum Vitae with the details of the projects worked on is also enclosed herewith.

Prior to starting this company, I have worked for three years (April 2005 to April 2008) as a structural engineer in M/s Sharad R. Shah Consultants located at Mumbai. The experience certificate for this employment is also enclosed.

I have done an integrated Civil & Structural Engineering Course from IIT Bombay, wherein I obtained a B. Tech in Civil Engineering and an M. Tech. in Structural Engineering in the year 2005. Degree certificates are enclosed herewith.

I also hold a Structural Engineer's license issued by Municipal Corporation of Greater Mumbai issued to me on 1<sup>st</sup> April 2009 and is valid for design of structures upto Ground + 18 floors.

I am also an Associate Member of the "The Institution of Engineers (India)" since May 2014.

Yours Sincerely,

For Capstone Consultants Pvt. Ltd

Managing Director

Rahul Agarwal B.Tech (Civil) IIT Bombay M.Tech (Struct) IIT Bombay

## SHARAD R. SHAH

B.E., M.S. (U.S.A.), F.I.E.
CONSULTING STRUCTURAL ENGINEER

202 ONYX II, 36 UNION PARK, SION TROMBAY ROAD, CHEMBUR, MUMBAI 400 071. TEL / FAX: 2520 2452 E-MAIL: ssharad@vsnl.net

#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Rahul Agarwal was working with us from April 2005 to April 2008 as a Structural Engineer. He originated and checked structural analysis and design calculations, in addition to preparing drawings on AutoCAD.

Since May 2008, he has been working independently and assisting us with the analysis and design of our ongoing projects.

Some of the projects he has worked on during his association with us are listed below:

- Casa Ultima, Residential Building, Thane (B+G+28)
- Casa Ignis, Residential Building, Thane (B+G+18)
- Casa Tierra, Residential Building, Thane (2B+G+28)
- Casa Cielo, Residential Building, Thane (2B+G+28)
- CDKD Hospital Building, Mumbai (G+17)
- Lodha Aurum, Residential Building, Kanjurmarg (G+24)
- Lodha Aurum, Grande Residential Buildings, Kanjurmarg (G+36)
- Lodha Supremus, Commercial Building, Kanjurmarg (B+G+14)
- iThink C, Office Building, Kanjurmarg (G+10)

I recommend his structural engineering license be upgraded to a higher number of floors.

Sharad R.Shah

B.E.(Civil) M.S.(USA) F.I.E. (F-14514)

Consulting Structural Engineer

BMC Regd. Lic. No. STR/S-36

# RAHUL AGARWAL

SUMMARY

Structural Engineer with more than 14 years of experience in residential, commercial, infrastructural and industrial projects.

**EMPLOYMENT** 

May 2008 - Present

Capstone Consultants Pvt. Ltd. Mumbai, India

Founder & Managing Director

April 2005 – April 2008

Sharad R. Shah Consultants Mumbai, India

Structural Designer

May 2003 - June 2003

Airports Authority of India Mumbai, India

Trainee

#### OTHER RESPONSIBILITIES TAKEN

- Provided training on design & erection of scaffolding to engineers of Reliance Industries Ltd and DCNS India Ltd.
- Jury member for CREDAI Bengal Realty Awards at Kolkata
- Overall Construction Inspector for greenfield project of Oerlikon Textile India Pvt Ltd at Vadodara

#### **EDUCATION**

2000 – 2005 IIT Bombay Mumbai, India

Bachelor of Technology in Civil Engineering Master of Technology in Structural Engineering

CPI: 9.17/10

2000 Delhi Public School, Mathura Road Delhi, India

AISSCE (Class XII): CBSE Board

Aggregate: 78%

1998 The Scindia School Gwalior, India

AISSE (Class X): CBSE Board

Aggregate: 85%

ETABS, SAFE, PCAColumn, EnerCalc, StaadPro, ANSYS, Risa Tower, AutoCAD, RebarCAD and MathCAD

#### ACADEMIC PROJECTS

#### Dual Degree Project (May 04 - April 05): Preprocessor in AUTOCAD

In this project an interface between AUTOCAD and ANSYS was created in the form of a software tool in VBA. This software tool automates the process of structural modeling and its use can considerably reduce the time and efforts in design of high rise structures.

# B.Tech Seminar (Jan-Apr 03): Strategies for Controlling Vibrations of Structures

Advanced structural control mechanisms which use Active, Passive and Hybrid devices for earthquake and wind mitigation were studied. Their use and effectiveness in real life structures was also studied.

#### LIST OF PROJECTS

#### Residential / Commercial / Institutional

- o Lodha Aurum, Residential Building, Kanjurmarg (G+24)
- o Lodha Aurum, Grande Residential Buildings, Kanjurmarg (G+36)
- o Lodha Supremus, Commercial Building , Kanjurmarg (B+G+14)
- Lodha iThink C, Office Building, Kanjurmarg (G+10)
- o Elpro Housing, Residential Building, Pune (G+13)
- o Elpro Global International School, Chinchawad, Pune (B+G+5)
- o Lodha Casa Ignis, Residential Building, Thane (B+G+18)
- o Lodha Casa Ultima, Residential Building, Thane (B+G+28)
- o Nanotechnology Department, Mumbai University (G+3)
- o CDKD Hospital Building, Mumbai (G+17)
- o MTNL Telephone Exchange building, Vashi (G+5)
- o Form Work for Sans Souci Residential Building, Mumbai
- o Silver Skyline (G+18), Andheri (w)
- o Lotus Jai Neptune (G+18), Malad (w)

#### Industrial

- o Design of Site Assembly Shop for Nuclear Power project at Kalpakkam
- O Domestic Cargo Complex, Santacruz Airport, Mumbai (B+G+1)
- o Design of Power Equipment Manufacturing Plant, NBPPL, Chitoor (A.P.)
- Design of Fabrication plant for BHEL, Varanasi

- o Design of Retrofits for LPG plant, ONGC, Uran
- o Printing Press building, Times of India, Lucknow
- o Printing Press building, Times of India, Nagpur
- o Printing Press building, Times of India, Sahibabad
- o Factory for J.V. Roulements, Vadodara
- o Design of Steel Fabrication Facility for Bk Koks, Bhilai

#### Structural Asssessment

- O Structural assessment of R&D lab building for Godrej Sara Lee Ltd.
- O Structural assessment of Rolls Royce facility at Turbhe for blast vibrations
- O Structural assessment of DMS Plant for Rio Tinto at Chhatarpur (M.P.)
- o Seismic Assessment of Office Building, Goldman Sachs, Mumbai
- o Structural Assessment & Capacity Augmentation for John Deere plant at Pune
- O Structural assessment of Halliburton facility at Barmer (Raj.)
- o Seismic Assessment of Residential Buildings for Cipla Ltd. at Sikkim
- o Structural Assessment of Civil Structures for Tata Steel Plant at Jamshedpur
- o Structural Assessment of Cooling Towers at Haldia Energy Ltd., Haldia
- O Structural Assessment for fire affected SHCIL House at Mahape, Mumbai
- Structural Assessment of Community Structure for Jagadguru Narendracharya Maharaj Sansthan, ratnagiri
- o Non-Destructive Testing for Bombay Scottish School, Mahim

#### Infrastructural

- O Design of Telecom towers (4G deployment) for Reliance Industries Ltd.
- o Design of Telecom towers for VIOM Networks Ltd.
- O Design of Form work system for Mumbai Metro, Ghatkopar Station
- Conducted Scaffolding training program at manufacturing facilities of Reliance Industries Ltd (Vadodara & Jamnagar)
- Guyed Wind Masts and Latticed Towers, Shah Industries, Bangalore
- O Design of Wind Turbine Towers for ABS Ltd., Mumbai
- O Design of Solar Plant Structures for Ganges Internationale
- Preliminary Structural Design & Planning of Kurla Elevated Railway Line
   & Station

#### **Global Projects:**

- Broxbourne & Ware College Buildings, UK
- o Carol Johnson Residence, California, USA
- o Ramadoss Residence, Arizona, USA
- o Royal Terrace Apartments, Guernsey
- Woods Residence, Arizona, USA

- o Social Security Building, St. Kitts, West Indies
- o Gemini Apartment Building, Dubai
- o Pre-engineered Building, British Columbia, Canada
- O Virtual Project Management, New York, USA

#### DESCRIPTION OF SELECTED PROJECTS

#### • Commercial Towers, Lodha Group, Thane, India

- o Project consisted of two towers, each 12 stories tall. Total built-up area of project was 1,200,000 sf.
- o Analyzed the building using ETABS 9.1.6.
- o Designed lateral load resisting system consisting of shear walls and gravity load resisting system consiting of flat slabs and columns.
- O Designed spread and combined footings for the foundations.

#### • Printing press building, Times of India, Lucknow, India

- o Project included a four story structure housing the printing machines, newspaper godowns and offices.
- o Analyzed the building using Staad-Pro.
- o Designed the structural elements including steel beams/girders, steel columns and concrete slabs.

#### ■ Domestic cargo Complex, Santacruz Airport, Mumbai, India

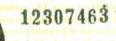
- o Three storey structure including a basement with a built up area of approx. 1 lakh sqft.
- o Composite structure consisting of steel beam & columns, RCC retaining walls and RCC slabs was designed.
- o The structure was analysed using Staad-Pro and designed in accordance with IS-456, IS-800, IS-1893 & IS-875.

#### Nanotechnology Department, Mumbai University, Mumbai, India

- o Project was a four story structure consisting of moment frames
- o Analyzed the building using ETABS 9.1.6.
- o Designed foundation system consisting of concrete piles.
- o Designed all structural elements using IS-456 & IS-1893.

### ■ Structural Assessment of Tata Steel Buildings, Jamshedpur

- o Set up a team for non-destrutive testing and structural audit for over 1000 structures within the Tata Steel Plant.
- Overviewed the structural audit reports and work progress
- o Devised repair methodologies which can be implemented with plant in running condition.



The Institution of Engineers (India)

AM153168-1



# This Institution is pleased to elect RAHUL AGARWAL

as

# **Associate Member**

on the Thirty First day of May 2014

In witness whereof the said Institution has caused its Common Seal to be

affixed this Thirty First day of May 2014



itation of Falis A (India) The Engineers (India) The Institution of Engineers (India) The Institution of

Member of Council

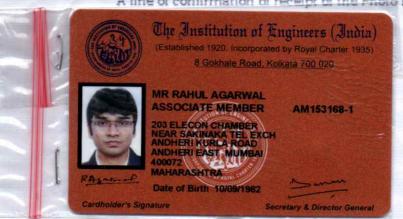
- mon

Secretary and Director General

Colour Zerox

kindly quote your 7 digit membership number(including check digit) for all correspondence.

A line of confirmation of receipt of the Photo Identity Card will be appreciated.



Yours faithf

Srikumar Ba
Director (Memi

Note: This is a computer generated letter and is valid without a Signature.



# बृहन्मुंबई महानगरपालिका

नगर अभियंता यांचे कार्यालय

# STRUCTURL LICENCE

संरचना अभियंता सल्लागार, नोंदणी प्रमाणपत्र

(M. C.'s sanction No. MCP-555 of 30-11-1976)

upper floors vide EEBP 18000 1-11 dt. 4.1.14

१ एप्रिल १६/२ ते ३१ मार्च १६/६ पर्यंतच्या कालावधीर्कारता संरचना अभियंता सल्लागारांच्या नोंदणी प्रमाणपत्राचे नृतनीकरण केले आहे.

पावती क्रमांक : 100/3 950/5

दिनांक: 26 - 03 - 2013

रुपये : 3375/

chapter.

नगर अभियंता बृहन्मुंबई महानगरप्रात्नका.

## नूतनीकरण

१ एप्रिल २०१६ ते ३१ मार्च २०१० पर्यंतच्या कालावधीकरिता संरचना अभियंता सल्लागारांच्या नोंदणी प्रमाणपत्राचे नूतनीकरण केले आहे.

पावती क्रमांक : १००२७ ८६६ ५२

दिनांक : २६ - १२ - २०१६

रुपये : २६२५/-

मुख्य लिपिक

नगर अभियंता बृहन्मुंबई महान्गरपालिका.

## नूतनीकरण

१ एप्रिल १९ ते ३१ मार्च १९ पर्यंतच्या कालावधीकरिता संरचना अभियंता सल्लागारांच्या नोंदणी प्रमाणपत्राचे नूतनीकरण केले आहे.

पावती क्रमांक :

दिनांक: - - १९

रुपये :

मुख्य लिपिक

नगर अभियंता बृहन्मुंबई महानगरपालिका.

## नूतनीकरण

१ एप्रिल १९ ते ३१ मार्च १९ पर्यंतच्या कालावधीकरिता संरचना अभियंता सल्लागारांच्या नोंदणी प्रमाणपत्राचे नूतनीकरण केले आहे.

पावती क्रमांक :

दिनांक:

- 88

रुपये :

मुख्य लिपिक

नगर अभियंता बृहन्मुंबई महानगरपालिका. ता हे.