

STRUCTURAL SAFETY AND NATURAL HAZARD PROTECTION OF BUILDINGS
(उपविधि संख्या-13.1)

1. Requirements specified in the following Indian Standards, Codes and guidelines and other documents needs to be observed for structural safety and natural hazard protection of buildings etc:-

a) For General Structural Safety

1. IS : 1905 -1987 "Code of Practice for Structural use of unreinforced Masonry (third revision)" Indian Standards Institution, March 1981
2. IS : 1904 -1978 "Code of Practice for Structural Safety of Buildings : Foundations" Indian Standards Institution
3. IS : 456 -2000 "Code of Practice for Plain and Reinforced Concrete" Indian Standards Institution, September 2000
4. IS : 800 -1984 "Code of Practice for general Construction in Steel" Indian Standards Institution, February, 1985
5. IS : 883 -1966 "Code of Practice for Design of Structural Timber in Building", Indian Standards Institution, March, 1967
6. IS 875 (Part 2) : 1987 "Code of Practice for design loads (other than earthquake) for building and structures : Part 2 Imposed loads (Second revision)
7. IS 875 (Part 3) : 1988 "Code of Practice for design loads (other than earthquake) for building and structures : Part 3 Wind loads (Second revision)
8. IS 875 (Part 5) : 1987 "Code of Practice for design loads (other than earthquake) for building and structures : Part 5 Special loads and load combinations (Second-revision)

Besides, any other relevant Indian Standards will need to be referred to.

b) For Earthquake Protection

6. IS : 1893 (Part 1) "Criteria for Earthquake Resistant Design of Structures ; General Provisions and Buildings Part 1(fifth Revision)"
7. IS : 13920-1993 "Ductile Detailing of Reinforced Concrete Structures subjected to Seismic forces- Code of Practice" November 1993
8. IS : 4326-1993 "Code of Practice for Earthquake Resistant Design and Construction of Buildings (Second Revision)" October 1993
9. IS : 13828-1993 " Improving Earthquake Resistance of Low Strength Masonary Buildings - Guidelines " August 1993
10. IS : 13827-1993 " Improving Earthquake Resistance of Earthen Buildings - Guidelines " October 1993
11. IS : 13935-1993 " Repair and Seismic Strengthening of Buildings - Guidelines" November 1993

Chairman

Meerut Institute of Engg. & Technology
N.H.58, Bye Pass Road, Baghpat Road Crossing
Meerut. Pin-250005 (U.P.)



ARCHITECTURE
Meerut Development Authority
Off. : 243577, Res. : 242277



12. "Improving Earthquake Resistance of Buildings – Guidelines" by Expert Group, Government of India, Ministry of Urban Affairs & Employment, published by Building Materials and Technology Promotion Council, 1998
13. The National Building Code of India-2005
For location of the building in hazard prone area of earthquakes, cyclone or wind storms and floods, reference may be made to the following:
14. "Vulnerability Atlas of India", by Expert Group, Government of India, Ministry of Urban Affairs & Employment, published by Building Materials and Technology Promotion Council, 1997

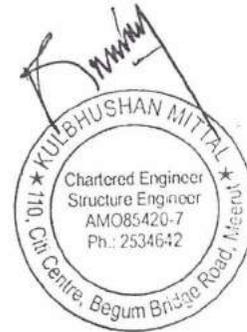
Note:

1. As and when anyone of the above referred standards and documents is revised, the design and construction of buildings thereafter must satisfy the latest version for approval of the building plans by the concerned local authority.

V. S. Jain
Chairman

Meerut Institute of Engg. & Technology
N.H.58, Bye Pass Road, Baghat Road Crossing,
Meerut. Pin-250005 (U.P.)

[Handwritten Signature]



MEERUT INSTITUTE
OF ENGINEERING & TECHNOLOGY
KNO - 307, 167, 168, 187, 178, 143,
145, 147, 150, 158, 160 & 161
BAGHPAT CROSSING
BYE PASS ROAD - MEERUT

परिशिष्ट-8
(पृष्ठ-1/2)

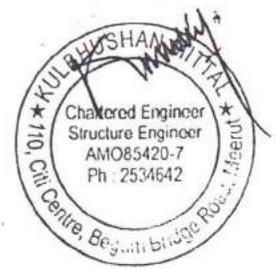
BUILDING INFORMATION SCHEDULE
(उपविधि संख्या-13.2)

1.	Building Address	Plot No.	Scheme/Colony	Town	District
2.	Building function & Locations				
2.1	Use	Institutional ✓	Commercial	Industrial	*
2.2	Importance	Ordinary ✓	Important	Hazardous	* IS:1893
2.3	Seismic Zone (Design Intensity Used)	V(IX)	IV(VIII) ✓	III(VII)	II(VI) IS:1893
3.	Design EQ Factor	$\alpha_0 = 0.05$	$I = 1.0$	$\beta = 1.0$	$\alpha_h = 0.05$ IS:1893
4.	Foundation				
4.1	Soil type at site (Note 2)	Rock/stiff Medium ✓	Soft	Liquefiable	Expensive (B.C.) IS:1904
4.2	Type of Foundation	Strip ✓	Indiv.Col.	Fottings/Raft Bearing Piles	Friction Piles IS:1893
5.	Load Bearing Wall Buildings				
5.1	Building Category	A($\alpha h < 0.05$) B($\alpha h = .05$ to $.06$) C($\alpha h .06$ to $<.08$) D($\alpha h .08$ to $<.12$) E($\alpha h > 0.12$)			IS:4326
5.2	Bearing Walls	Brick	Stone	Solid Block	Hollow Block Adobe
5.3	Mortar (note 4)	C : S = 1 : ...	C : L : S = 1 : ...	L : S = 1 : ...	Clay Mud *
5.4	Floors	R.C.slabs	Stone slabs on joists	Prefab flooring elements	* *
5.5	Roof structure	Flat like floors/ pitched	Trussed/ Raftered / A Frame/ Slopping	R.C. Slab	
5.6	Roof covering	CGI Sheeting	AC sheeting	Clay tiles/Slate	Wood shingle *
5.7	Opening in walls	Control used on size? ✓	Control used on location? ✓	Strengthening around? ✓	IS:4326
		Yes/No/NA	Yes/No/NA	Yes/No/NA	IS:13828
5.8	Bands Provided	Plinth Band	Lintel Band	Roof/Eave Band	Gable Band Ridge Band -do-
5.9	Vertical Bars	At corners of rooms		At jambs of openings	-do-
5.10	Stiffening of Prefab Floors/Roofs	R.C. screed & Band	Peripheral band and connectors	Diagonal planks and around band	IS:4326

K. S. Chauhan
Chairman

Meerut Institute of Engg. & Technology
1.58, Bye Pass Road, Baghpat Road Crossing,
Meerut. Pin-250005 (U.P.)

AR. RAJAT B...
ARCHITECTURE



6.	Steel / R.C. frame buildings				
6.1	Building Shape	Both axes near symmetrical ✓	One axis near symmetrical	/ Unsymmetrical (Torsion considered)	
6.2	Infills / partitions	Out of plane stability check? Yes/ No ✓	In Plane stiffness considered? Yes/ No ✓	IS:1893,IS:4326	
6.3	Ductile Detailing of RC Frames	Beams ? YES / NO ✓	Columns ? YES / NO ✓	Beam column Joint ? YES / NO ✓	Sheer Walls? IS:13920 YES / NO ✓
6.4	Ductile Detailing of Steel Frames	Beams ? YES / NO	N.A. Columns ? YES / NO	Beam Column Joint ? YES / NO	SP6(6)

Notes:-

1. Encircle the applicable Data point or insert information.
2. Stiff. N>30:Medium. N=10.3:Soft.N<10:Liquefiable,poorly graded Sands with N<15 under Water Table (see Note 5 of Table 1 in IS:1893) Where N=Standard Penetration (IS:2131-1981).
3. * Means any other, specify.
4. C= Cement, S= Sand, L= Lime

The above information is factually correct.

Vishnu Saran
02-02-2017
(VISHNU SARAN)
Signature of Owner with date
Chairman

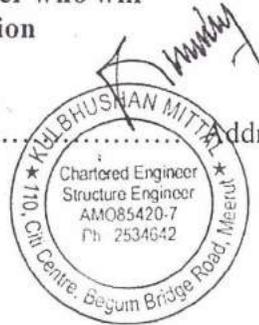
Meerut Institute of Engg. & Technology
N.H.58, Bye Pass Road, Baghpat Road Crossing,
Meerut, Pin-250005 (U.P.)
Name (Block).....

A.R. Rajat Bhatnagar
A.R. RAJAT BHATTAR
B. ARCH., A.I.A., C.O.A.
COUNCIL OF ARCHITECTURE
Architect & Interior Designer
Meerut Development Authority
Signature of the Architect who had Supervised the construction

Name (Block).....
COA Registration No. CA/94/12794
Legible Seal :
(with address)

Signature of the Engineer who will Supervise the construction

Name (Block).....
Legible Seal:
(with address)



CERTIFICATE
(उपविधि संख्या-13.2)

(The certificate to be submitted with the application for building permission along with the building drawings and Building Information Schedule).

1. Certified that the building plans submitted for approval also satisfy the safety requirements as stipulated in the Indian Standard, Codes, guidelines and documents specified in the Annexure-I of the Building Bye-Laws regarding earthquake safety awareness and the information given in the attached Building Information Schedule, is factually correct to the best of my knowledge and understanding.
2. It is also certified that the structural design including safety from natural hazards including Earth Quake has been prepared by duly qualified graduate Civil Engineer along with Post Graduate Diploma or Degree in Structural Engineering from a recognized University.

3. **Location/Address of Building**

MEERUT INSTITUTE OF ENGINEERING & TECHNOLOGY
Plot No. KH.No. 307, 167, 168, 187, 178, 143, 145, 147, 150, 158, 160 & 161
Scheme/Colony.. Village. RAJPLUR, PAWKE
Town..... M.E.E.R.U.T., N.H.-58, BAGHPAT CROSSING, BYEPASS ROAD
District..... M.E.E.R.U.T.....

4. **Particulars of Building**

1. Ground Coverage (sq mt) 20189.25 M²
2. Total covered area (sq mt) 85941.96 M²
3. Maximum Numbers of Floors above ground. G + 6 (Basement)

Signature of Owner with date

date 02-02-2017

Name (Block)..... (VISHNU SARAN)
(Block).....

Address : **Chairman**
..... Meerut Institute of Engg. & Technology
..... N.H.58, Bye Pass Road, Baghpat Road Crossing,
..... Meerut, Pin-250005 (U.P.)

Signature of the Structural Engineer
who had prepared the design with

Name

Legible Seal: (with address)



Signature of the Architect who had
Prepared the design with date

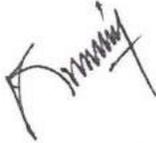
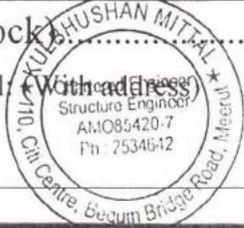
02-02-2017

Name (Block).....
COA Registration No. CA/94/17294

Legible Seal (with address)

(Certificate to be given in each building plan to be submitted for sanction)
(उपविधि संख्या-13.2)

It is hereby certified that the structural and foundation design of the building for which map and plans are submitted for approval satisfy the safety requirements as stipulated in the relevant India Standard Codes, National Building Code, guide lines and documents specified in Annexure-I Building Bye-Laws.

Signature of Ower with date 	Signature of the Structural Engineer who had prepared the Design with date 	Signature of the Architect who had Prepared the design with date 
Name(Block) <u>VISHNU SARAN</u> Address: Chairman	Name Block <u>HUSHAN MITTAL</u> Legible Seal (With address) 	Name (Block) <u>A.C. RAJAT MITTAL</u> B. ARCH. A.I.A. C.O.A. COUNCIL OF ARCHITECTURE COA Registration Architect & Interior Designer No. <u>C.A./99/2239</u> Meerut Development Authority Ph: 2643577, Resi.: 242277 Legible Sell (with address)

Meerut Institute of Engg. & Technology
N.H.58, Bye Pass Road, Baghat Road Crossing,
Meerut. Pin-250005 (U.P.)

CERTIFICATE
(उपविधि संख्या-13.4)

(To be submitted with the application for obtaining completion certificate)

1. Certified that the Building for which completion plan has been submitted for approval, conforms to the requirements of relevant Indian Standard Codes and National Building Code as referred in Annexure-1 of Building Bye-Laws in respect of Structural Safety in general and National hazards including earthquake in particular.

2. It is also certified that the Building has been constructed as per approved foundation and structural designs provided by the Structural Engineer which are certified to be based on relevant Indian Standard Code and National Building Code as referred above and the building is safe for occupancy.

3. **Location/Address of Building**

Plot No.. MEERUT INSTITUTE OF ENGINEERING & TECHNOLOGY
Scheme/Colony K.H.No.: 397, 167, 168, 187, 178, 143, 145, 197, 150, 158, 160 & 161
Town.. Village.. RAMPUR PAKKI,
District.. MEERUT, N.H.-58, BAGHPAT CROSSING, BYEPASS ROAD
MEERUT

4. **Particulars of Building**

1. Ground Coverage (sq mt) 20189.25 M²
2. Total covered area (sq mt) 85941.96 M²
3. Maximum Numbers of Floors above ground. G+6

Signature of Owner with date 02-02-2017

Signature of the Engineer who had Supervised the construction

Name (Block) VISHNU SARAN....

Address:

.....Chairman.....

Meerut Institute of Engg. & Technology
N.H.58, Bye Pass Road, Baghpat Road Crossing,
Meerut. Pin-230005 (U.P.)

Signature of the Architect who had Supervised the construction

Name (Block)

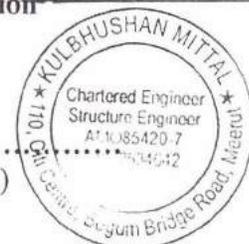
AR. RAJAT BH. MITAL
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Architect & Interior Designer
Meerut Development Authority

COA Registration No.

Legible Seal

(with address)

Name (Block).....
Legible Seal: (with address)



2643577 Resi.: 242277
2A/94/117794