



Mob.: +91-9717924616



O.B. Developers

(Structure Audit Agency)

F 14, Kalkaji Main Road
New Delhi-110019

E-mail: structureauditagency@gmail.com
www.structureauditagency.com



STRUCTURAL STABILITY CERTIFICATE

S NO. 2021/SN/ND/41 Dt: 02/09/2021

We hereby certify that the structure of building on **GD GOENKA PUBLIC SCHOOL DASHINESWAR, KOLKATA** has been audited by us using non destructive technology.

Client Name	GD GOENKA PUBLIC SCHOOL
Site Address	GD GOENKA PUBLIC SCHOOL DASHINESWAR, KOLKATA
Structure Type	RCC Building, G+5 Floors

I Mr. **RAKESH KUMAR** (Chartered Civil Engineer) hereby undertakes as follows:-

Site Audit was carried out on 01/08/2021.

In order to assess the structural stability of the building, following tests were conducted at site

1. Rebound Hammer Test as per IS: 13311 (Part-2)-1992 for determining the estimated compressive strength and uniformity of concrete in terms of surface hardness test
2. Cover Meter Test as per IS 456:2000 to measure the clear cover of structure members.
3. Structural section detailing: Preparation of structural drawings by using proof-meter, Profometer for measuring the cover depth and existing protecting layer of steel rebar, and number of rebar for beam column frame system only.

Profometer test to ascertain the location & spacing of the rebars and cover of concrete provided to the rebars as per code BS1881; 204. We have done independent cross check of steel rebar and section details of RCC sections. In addition to above, the concrete covers of the RCC members were removed to expose the rebars to physically verify. Our results obtained from proof-meter test are tallying with the results available at exposed RCC sections.

4. Estimated strength is based rebound hammer values. Statistical data shows that dominating percentage of quality of concrete is in the range of M18 for all types of RCC sections. Concrete surfaces are not suffering from surface

hardness problem and there are no indications of blistering of concrete surface as per IS 13311 (Part-2)-1992. Structure has variable pattern of concrete quality in terms of surface hardness

Based on site investigation, test reports and the observations regarding structural deterioration of building following conclusion are drawn below :

1. There is no durability problem related with strength of concrete materials.
2. Present steel percentage in RCC sections is taken as steel percentage in structural stability analysis of building because there is no possibility of de-rating of steel tensile strength due to weathering effect.
3. The structural adequacy of RCC sections is possible because existing concrete grade is more than minimum required concrete grade. Detailed analysis report of structural stability is attached as an annexure.
4. At certain places seepage and cracks was present and these defects repair methodology as present in the report attached
5. Summary for structural adequacy analysis

This is to certified that the structural part of the building on the plot belonging to **GD GOENKA PUBLIC SCHOOL DASHINESWAR, KOLKATA** have been audit on the basis of calculation in accordance with the permissible stress and slenderness ratio as per NBC prevailing BIS code for structural safety for working loads. The above mentioned existing structure satisfied the requirement of structural safety for **natural hazards including earthquake** seismic impact.

In my view the above structure is safe and sound at present case for working loads.


MR. RAKESH KUMAR
STRUCTURE ENGINEER/STRUCTURE AUDITOR
DIP., B.TECH, M.TECH (STRUCTURE & FOUNDATION)
CHARTERED ENGINEER (INDIA) AM-1781675
MUNICIPAL CORPORATION OF DELHI NO. SE/044E

Authorized Signature
Mr. Rakesh Kumar
Chartered Engineer
Civil/Structures
AM-1781675
MCD Structure No SE-0445
