



THE STRUCTURAL AUDIT OF EXISTING SCHOOL BUILDING

FOR

RYAN INTERNATIONAL ACADEMY WAGHOLI PUNE

1					
RG	15.12.2025		RSH	PRG	PRG
Rev. No.	Date	Description	Prepared By	Checked By	Approved By

Distec
(final content)

STRUCTURAL AUDIT REPORT

1. INTRODUCTION

The structural audit of EXISTING SCHOOL BUILDING RYAN INTERNATIONAL ACADEMY WAGHOLIPUNE was conducted on 18th Dec 2023 to assess the structure. The structure was assessed based on the visual inspection. Structural Audit is an important tool for assessing the structural health of the buildings. The Audit should highlight & investigate all the risk zones, critical areas and whether the building needs immediate attention. If the change of use is observed from residential to commercial or industrial, this should bring out the impact of such change if any.

The purpose of Structural Audit is:

1. To assess Life & Property.
2. To know the health of building structure and to estimate the residual life.
3. To assess the extent of distress occurred due to corrosion or any other reason, the residual strength of the structure and its fitness for rehabilitation.
4. Highlight the critical areas that need to be attended with immediate effect.
5. To advise the residents/users/owner about the seriousness of the problems and the urgency required to attend the same if any.
6. To comply with Municipal or any other statutory requirements.
7. To detect and plan the effective remedy.

2. GENERAL INFORMATION

Name & Address	Ryan International Academy Wagholi, Pune
Date of Structural Audit	18th Dec 2023
Type of Structure	RCC Framed Structure
No. of Storeys	Ground + 4 upper Floor
Shape of Plan	Rectangular

3. TECHNICAL INFORMATION

Birth level	+1.1' above external road level
Internal walls	8"
External walls	6"
Floor height (Clear height)	Ground + 2.2'
Roofing/Decking	Brick Bat Gable
Temporary Shoring services	Not provided



4. INFORMATION PROVIDED BY THE REPRESENTATIVE

Purpose of the structure	School building
	Current usage is same as originally planned
Availability of drawings	Yes, only architectural drawing
Year of Construction	2024
Age of building	1 years approx.
Effect of monsoon	No dampness
Effect of earthquake	-
Past main work details	-
History of water seepage	- No

5. INFORMATION OF SURROUNDINGS

Adjoining construction activity	No
Proximity to sea	N/A
Proximity to industries	N/A

6. EXECUTION OF STRUCTURAL AUDIT

On-site execution of structural audit will be carried out by following 2 means.

a) Visual Inspection

Visual examination of structure was the most effective and qualitative approach to evaluate the structural soundness and to identify the typical distress symptoms together with the associated problems. With experience in condition assessment, Structural Audit and Rehabilitation Engineering, the symptoms of distress allowed a reasonably sufficient understanding of the cause of distress, as these are usually related with the age and maintenance of the structure. Visual inspection provided valuable information to report to its workmanship, structural serviceability and material deterioration and suggest a quick view of the structure to assess its structural general health.

b) Non-Destructive & Core test

Non-Destructive Testing (NDT) & Core test is the process of inspecting, testing or examining materials, for surface or internal flaws or components or assemblies for discontinuities or differences in characteristics without destroying the serviceability of the part or system. Following are the various NDTs & Core test conducted.

- Rebound Hammer Test
- Ultrasonic Pulse Velocity Test
- Carbonation Test
- Half Cell Potential/Current Test
- Concrete Core Compressive Strength Test
- Chemical Test (pH, Cl & SO₃)

Areas inspected: Complete internal Premises, Staircases, Terrace & External portahouse



7. VISUAL INSPECTION

Structural inspection for various structural distresses. All the visual observations carried out in detail are depicted clearly in the plans of each floor as per provided legends & their levels. It was observed that no repair work was recently done to the beams & slabs. Also, renovations/ alterations were in progress for construction of light concrete material wall. Other observations/defects/ distresses are described as following

a. Columns

- No Moderate to major corrosion cracks, air pockets, hollows & reinforcement exposed in columns in internal premises & external periphery at various places.
- No separation crack at the junction of columns & walls in any places.

b. Beams

- No Moderate to major corrosion cracks, air pockets, hollows & reinforcement exposed in beams in internal premises & external periphery at various places.
- No separation crack at the junction of beams & walls.

c. Slabs

- No Moderate to major air pockets, hollows & reinforcement exposed in slabs in internal premises are observed.

d. Lintel

- No Major and Minor corrosion cracks, air pockets & hollows in lintels are observed.

e. Chajjas

- No Corrosion crack in chajjas are observed.

f. Walls

- Separation crack at the junction of walls & columns, beams, lintels & walls in few places.
- No plaster deterioration are observed.
- Crack in few walls.

g. Staircase

- Separation crack at the junction of walls & columns, beams, lintels & walls at various places.

h. Terrace

- No Water accumulation on terrace.



A. DRAIN CANK

- No cracks found acrossing RCC DRAIN tank
- Nonstructural cracks are observed between brick work and RCC beam.

B. Internal Plaster

- External plaster cracks at few places on terrace floor.

C. External Periphery

- No moderate to major corrosion crack in columns, beams & chajja.
- Separation crack at the junction of columns, beams & walls at few places.
- External plaster cracks at few places.

D. Plinth

- No settlement of plinth.

E. DISTRESS MAPPING PLANS

- During the visual inspection, no major structural distress was observed in the building. Therefore, Non Destructive Testing (NDT) is not required at this stage, and no repair work is required necessary.



9. PHOTO GALLERY

Front side of building



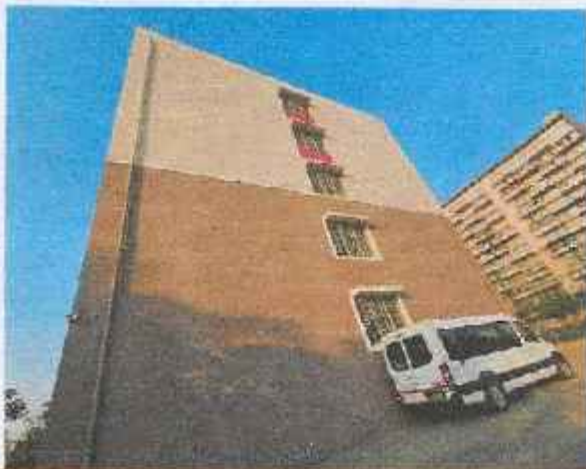
Left side of building



Right side of building



Back side of building



Handwritten signature





Toilet block



Classroom



1st Floor lobby



4th floor lobby



1st floor classroom



2nd floor girls block



2nd Floor Passage



Music Room



Dance Hall



Library



Terrace floor



Conclusion

Based on the detailed visual inspection, the structural condition of the Ryan International Academy building at Wagholi Pune is found to be satisfactory. All primary structural components are in sound condition, with no signs of distress or damage. The observed minor non-structural issues are superficial in nature and do not pose any threat to the structural safety of the building. It is recommended to carry out routine maintenance and timely repair of these minor defects to preserve the durability and aesthetics of the structure.

Disclaimer

Our responsibility is limited to technical advice only on technical matter referred in this report. Condition of below plinth columns, foundation (reinforcement corrosion & concrete quality) & soil strata not checked. Due to unavailability of design basis data & as built R.C.C. detailed drawings, the resistance of structure for earthquake/wind forces could not be assessed.



(PRAVIN T. V. GIRIBAWA)

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**PG STRUCTURAL
CONSULTANTS**
"Ensuring Stability, Shaping the Future"

DATE: 19.12.2025

To
The
Ryan International Academy Wagholi

Structural Stability Certificate

Subject: Structural Assessment of existing "Ryan International Academy" Building
At Near Ayaz Society, Sai Satyam Park, Wagholi, Pune, Maharashtra 412207

Date of Visit: 18.12.2025

Building Details:

- Proposed Name: Ryan International Academy
- Construction Year: 2024
- Structure: Ground + 4 Upper floor

Site Visit Observations:

- The building was observed to be in a generally stable condition.
- Visual inspection revealed no significant cracking or distress in structural members, including columns, beams and slabs.
- Given the building's age (approximately 1 years), a Non-Destructive Testing (NDT) assessment was not recommended to evaluate the concrete strength.

Conclusions and Recommendations:

The building is structurally stable and safe for its intended use and continued occupancy. No immediate repair work or structural intervention is necessary at this stage.


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PAC/16/NO. 731A

