

Off -: "Vedant" 22, Old Subhedar Lay Out Nagpur - 440024 Maharashtra (India)
Email : shivalayadesigns1@gmail.com Cell. 9923131215

STRUCTURAL CERTIFICATE

I Liladhar B. Kukde of Shivalaya consulting Structural engineer certify that I had inspected Existing commercial building plan belonging to Designo Group of Education Society, on at Plot no.- 37, Kh. no – 49/A 1,2, Mouza- Vihirgaon , Tah. & Dist. Nagpur.

All the floor plan (G+1) school of building & (G) commercial of this buildings has been input in STAAD PRO and space frames are generated. The Dead Load considered are self weight of column and beams, slabs, brick masonry having external wall 230mm and internal wall 115mm thick are considered in analysis. The unit weight of RCC 25KN/cu.m , unit weight of brick masonry is considered as 20KN/cu.m. The live load is assumed as 2KN/sq.m, on floor and 3KN/sq.m, at balcony on floor area with permissible reduction as per IS 875.

The Building has been analyzed by space frame analysis for vertical load and seismic analysis has been made by lateral force and base shear method as specified in Indian code. The seismic zone considered is (Zone II) in analysis to calculate seismic force. The input and output files of this analysis has been sent for your reference the design has been done for the forces obtained in this output file for the column and beams the ductile detailing has been done as per provisions of IS 13920. The principal structural drawings showing design of Foundation, Ground level beams, 1st, Terrace floor beams, slabs and roof level beams, slabs are being submitted. The design and drawings of the buildings will be made by structural engineer on the basis of forces obtained in analysis. As per partial safety factor for the dead load and live loads 1.5, and the structural will be design as per the provisions of IS 456-2000, IS 875-1987, IS 1893-2002, IS 13920-1993.

So, this existing building (G+1) school of building will be safe & stable against Vertical load and also this certificate is valid upto 2years.

SHIVALAYA STRUCTURAL DESIGNING
AND ENGINEERING SERVICES CONSULTANCY



PROPRIETOR

Shivalaya Consulting Structural Engineer

Place -Nagpur

Date-