



**BLOCK 2 - LEVEL 1
SLAB REINFORCEMENT**
SCALE 1:50

- GENERAL**
- ALL DIMENSIONS ARE GIVEN IN m UNLESS OTHERWISE NOTED.
 - REINFORCEMENT SPACING IS GIVEN IN cm UNLESS OTHERWISE NOTED.
 - LEVELS SHOWN ON THE PLAN ARE STRUCTURAL FLOOR LEVELS IN METERS (MSL). FOR FINISHED FLOOR LEVELS REFER TO ARCHITECTURAL DRAWINGS.
 - THE SEISMIC JOINT BETWEEN BUILDING B1 & B2 & B3 IS 5 cm WIDE.
 - ALL STRUCTURAL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE ARCHITECTURAL AND E&M DRAWINGS AND THE GENERAL TECHNICAL SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
 - SEE REINFORCEMENT DETAIL DRAWINGS FOR BALANCE OF INFORMATION.

- CONCRETE**
- CONCRETE CLASS: C30/37
 - WHERE NEEDED, EDGES OF COLUMNS, BEAMS, SLABS AND WALLS SHALL BE SHAPED WITH THE USE OF 25x25 mm TRIANGULAR PLASTIC FILLETS.

- COVER**
- FOUNDATION: 65 mm
 - BASEMENT WALL - OUTER SURFACE: 65 mm
 - BASEMENT WALL - INNER SURFACE: 45 mm
 - BEAMS AND COLUMNS: 45 mm
 - SLABS: 40 mm

- REINFORCEMENT**
- STRENGTH CLASS: B500C, $f_y=500$ MPa
 - ALL STIRRUPS IN BEAMS, COLUMNS AND WALLS MUST BE CLOSED.
 - TRANSVERSE REINFORCEMENT SPECIFIED AS 1S Ø10/15 DENOTES 1 NO. SHEAR LINK AT THE BEAM CROSS-SECTION COMPRISING 2 NO. LEGS DIAMETER 10 mm AND SPACED AT 15 cm CENTERS.
 - BAR LENGTHS SHOWN REFER TO THE EXACT LENGTH OF THE BAR (INCLUDING THE BENT PART OF BAR)
 - TOP DISTRIBUTION REINFORCEMENT IN SLABS IS Ø10/15 TOP.
 - LAPPING OF REINFORCEMENT SHOULD BE DONE AT THE POSITIONS AND THE LENGTHS SHOWN ON THE DRAWINGS. IF LAPPING IS REQUIRED ELSEWHERE THE LAPPING LENGTH SHOULD BE:
VERTICAL BARS: 54Ø
HORIZONTAL BARS IN SLABS: 54Ø
HORIZONTAL BARS GENERAL: 77Ø

DESIGN PARAMETERS

Design life	: 50 years
Concrete Strength Class	: C30/37
Reinforcement Steel	: B500C
Design standards	: EN 1990, EN 1991, EN 1992, EN 1997, EN 1998
PERMANENT (g_p) AND IMPOSED (g_i) LOADS	
Reinforced concrete	: 25.00 kN/m ²
Brick wall 28 cm	: 3.80 kN/m ²
Brick wall 10 cm	: 2.10 kN/m ²
Basement (Block 1)	: g _p = 5.0 kPa q _i = 2.5 kPa
Ground Floor (Block 1)	: g _p = 5.0 kPa q _i = 10 kPa
Roof (Block 1)	: g _p = 2.0 kPa q _i = 0.5 kPa
Basement (Block 2)	: g _p = 5.0 kPa q _i = 2.5 kPa
Ground Floor (Block 2)	: g _p = 5.0 kPa q _i = 5.0 kPa
Mezzanine (Block 2)	: g _p = 5.0 kPa q _i = 5.0 kPa
Roof (Block 2)	: g _p = 2.0 kPa q _i = 0.5 kPa
SEISMIC ACTION	
Ductility Class	: Medium
Seismic Zone	: Z3 (a ₁ = 0.25g)
Importance Class	: II
Importance Factor	: γ _i = 1.00
Ground Type	: C (SPT = 25)
Soil factor	: S = 1.25
Response Spect. Type	: Type 1
Behavior Factor-Block 1	: q ₁ = 3.45 q ₂ = 3.30
Behavior Factor-Block 2	: q ₁ = 3.00 q ₂ = 3.00
FOUNDATION	
Subgrade reaction coeff.	: k _s = 30000 kN/m ³ m
Allow. Bearing Pressure	: 150 kPa

FOR MORE INFORMATION REFER TO DESIGN REPORT

Project: SAMPLE PROJECT		
Drawing Title: BLOCK 2 - LEVEL 1 SLAB REINFORCEMENT		
Designed: GD	Checked: AT	Approved: CA
Date: 01 FEB 2013	Drawing No: S020	