

SPECIFICATIONS

PROJECT	:	Renovation of Duplex Three Storey Building
LOCATION	:	Maligaya Village, Subic Zambales
OWNER(S)	:	Mr. Andy Cos

I. THE PROJECT SITE

The proposed site is located at Maligaya Village, Subic Zambales

II. MATERIAL SPECIFICATIONS

A. Backfilling Materials

Backfilling materials should be borrow (mountain soil or any) for all areas to be backfilled within the lot of the proposed residential. The backfilling materials should be free from garbage and other materials that can be tampered and already hardened before putting reinforcements and concrete on slabs.

B. Concrete Masonry Units (CMU)

Concrete hollow blocks to be use shall be 4" x 8" x 16" and 5" x 8" x 16" using 1:3 cement and sand ratio proportion to the exterior walls of the proposed renovation. The walls should be strong and reinforced by 10mm rebars, horizontal and vertical reinforcements so to that can repel calamities like earthquakes a strong water current if floods occur in the near future.

For interior walls, the concrete hollow blocks to be used shall be 4" thk using the same cement and sand ratio for mortar filler. And 5" for Exterior Walls.

C. Concrete Works

Cement to be used shall be Portland cement or any approved type of cement. It should be in good quality and stored at a room temperature free from moisture so it will not be hard.

Lahar sand can also be used for rough surfaces for the proposed residential while black river sand should be used for plastering of wall surfaces ¾" gravel aggregates can be used for concrete pouring. Check accurately if the gravel can be poured at beams and columns. It will be used also for gravel base course of concrete slabs and wall footings before putting steel reinforcements with thickness of 7.5 cm. All footings shall rest on undisturb soil.

D. Reinforcing Steel Bars

- i. Unless otherwise specified on plans, all reinforcing steel bars shall be deformed with a minimum yield strength ;

$F_y = 275$ Mpa less than 16mm bar

$F_y = 414$ Mpa more than 16mm bar

All reinforcing bars must be clean from rust, grease and other materials which tends to impair bond.

- ii. All reinforcing steel bars shall be accurately and securely placed before pouring concrete or applying mortar or grout.
- iii. Concrete slab thickness shall be 4" spaced 300mm on center bothways

III. FINISHES

A. Floor and Wall Tiles

Floor tiles shall be 60 x 60 Arte Floor tiles will be used for living, bedroom, dining, bathroom and except for kitchen counter top. At all toilets and bath floor used 60 cm x 60 cm (Arte Tiles) non-skid homogeneous floor tiles and

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