

## CONCRETE MIX DESIGN SUBMISSION REPORT

Serial No. \*\*\*\*\*

CONTRACTOR : \*\*\*\*\*

GRADE OF CONCRETE : **40 OPC**  
 SPECIFIED STRENGTH : **40** N/mm<sup>2</sup> @ **28** DAYS  
 PROPORTION DEFECTIVES : **1.64** : ( **5** %) STD  
 TYPE OF CEMENT : **OPC/SRPC/RHPC** : **TYPE I**  
 TYPE OF FINE AGGREGATE : **WASHED SAND**  
 S/G OF F. AGG (SSD) : **2.60** ABSORTION  
 TYPE OF COARSE AGGREGATE : **IMPORTED STONE**  
 S/G OF C. AGG (SSD) : **2.64** ABSORPTION  
 TYPE OF ADMIXTURE : **P 300R + R 800**  
 SLUMP REQUIRE : **100 ± 20** mm  
 ESTIMATED WATER/ CEMENT RATIO REQUIRE TO  
 ESTIMATED FINE AGGREGATE TO TOTAL

PROJECT : \*\*\*\*\*

TYPE OF STRUCTURE : **STRUCTURAL CONCRETE**  
 DESIGN STRENGTH : **48** N/mm<sup>2</sup> @ : **28** DAYS  
 DEVIATION : **5** N/mm<sup>2</sup> MARGIN : **8** N/mm<sup>2</sup>  
 SOURCE : **BHC** S/G : **3.15**  
 ZONE : **MEDIUM** F.M. :  
 - % SOURCE : **SG. PAKU**  
 CRUSHED/ UNCRUSHED MAX SIZE : **20mm**  
 - % SOURCE : \*\*\*\*\*  
 DOSAGE : **300cc/100kg + 400cc/100kg** (WT/VOL)  
 ESTIMATED WATER REQUIRE : **150** kg/m<sup>3</sup>  
 ACHIEVE DESIGN STRENGTH : **40** %  
 AGGREGATE (S/A) : **30** %

MATERIALS	WEIGHT Kg/m <sup>3</sup>	CONVERSION FROM WEIGHT TO VOLUME	SOLID VOLUME PER 1000 LITRES
WATER	150	150 + 1	150.00
WATER CEMENT : ----- W/C	370	370 + 3.15	117.46
ESTIMATED ENTRAPPED AIR <b>1.5</b> %	-	0.015 × 1000	15.00
MORTAR CONTENT	520		282.46 (A)
TOTAL AGG : 1000-A			717.54
F. AGG: B × S/G	559	TOTAL AGG × S/A	215.26 (B)
C. AGG: C × S/G	1326	1000 - (A + B)	502.28 (C)
TOTAL	2405		1000.00

**MIX PROPORTION PER CUBIC METER (\*TO THE NEAREST 5KG)**

W/C %	S/A %	CEMENT	WATER	F. AGGREGATE	C. AGGREGATE	ADMIXTURE
40	30	370kg	150 lit	560kg	1330kg	P300R – 1100ml R800 – 1480 ml

MIX PROPORTIONS: 1:1.51:3.59 AGGREGATE/ CEMENT RATIO: 5.11:1  
 REMARKS: \_\_\_\_\_

NOTE: 1 N/mm<sup>2</sup> = 1MN/m<sup>2</sup> = 1 MPA  
 1 INCH = 2.54 cm



*Naim*

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