Subject: Standard Operating procedure and minutes of meeting

Keywords: QC SOP, Minutes.

Guidelines for QC standard operating procedure have been discussed and given under:

- 1. Upload following drafts on M-codex under drafts:
 - a. All QC reports of villas and apartments.
 - b. Cube test report.
 - c. ATR format for customers + construction.
 - d. QC quarterly report of missed QCs.
- 2. Internal memo 917/2 stand cancelled. Cement blocks may be tested for compressive strength. The strength should be between 20 to 25 kgs/Sqcm.
- 3. Internal memo 917/1 stands cancelled. ATR on customer complaint must be sent within 2 weeks of complaint. ATR on construction must be sent within one week of QC report.
- 4. Internal memo 917/3 stands cancelled.
- 5. Internal memo 917/5 stands cancelled. The SOP mentioned herein shall be followed as under. These reports to be scanned and uploaded in the audit module of M-codex (when functional and till such time to be sent to audit team by email) and also email to Ashaiya for printing.
 - a. Concrete testing report as per format given for the preceding month for all sites by 7th of each month. Mark remarks with X if strength is below specified strength and XX in case of gross error.

Date: 24-10-2020

- b. Quarterly QC consolidated report (missed reports) as per prescribed format given herein (one for flats and one for villas) to be submitted once a quarter on or before 15th April, 15th July, 15th October & 15th January respectively. Clearly mark missed report as XX and X where XX represents. QC can't be taken up now and X represents QC may be taken up immediately. Where work is not completed leave blanks and in other places put QC report no.
- c. Printout from E&D of list of plans in force for each site must be certified by project manager, E&D & QC after verification of original copies available at site. This report must be sent once a quarter along with report mentioned in point b above. Cancelled plans must be removed and filed in cancelled plans file.
- d. QC audit report to be sent once a month along with report mentioned in point b above.
- 6. All sites must have a pre-printed consultants comments book. Report default.
- 7. QC reports are being scanned uploaded on M-codex. Sites to print and maintain block wise/flat or villa wise files. Original reports to be returned to site for filing after closure by MD. This is to be followed from immediate effect. Ashaiya to maintain a log book for closing the QC reports.
- 8. Correction of QC check plans. In case after site inspection it is found that an error has crept in to the QC check plan, then, immediately prepare a new plan and get it approved by M.D. Include the new plan in the QC report along with the old plan. Strike off the old plan saying 'corrected plan attached'.
- 9. QC check plans atleast 10% of all diagonals must be marked in the plan. Diagonals must touch all corner columns of the structure.
- 10. Internal memo 917/6 stands cancelled. It is replaced by internal memo no. 912/115.
- 11. Internal memo no. 917/7 stand cancelled. QC shall upload reports on QC on the same day of inspection. A copy of report may be handed over at site, if required, in case of delay in uploading on Database.
- 12. Circular no. 603/a stand cancelled. Sites can proceed to next stage of work only after QC inspection and clearance from QC. In case where ATRs are required or QC check has to be redone, site cannot proceed with further work without complying with QC requirements.

- 13. Circular no. 605- concrete cube testing and weight of tor steel must be regularly checked. Hand held digital weighing machine may be purchased (2 nos.) for measuring weight of tor steel
- 14. Sizes of windows, Z angle templates and grills have been specified in internal memo no. 913/29.
 - a. They shall be accurately measured during inspection at each stage of work i.e., Z angles during brick work QC check, windows and grills during stage III QC check.
 - b. One QC member shall visit SSLLP workshop and stores once a month and inspect all grills, Z angles and windows to verify sizes of material under fabrication or material in stock. Report to be sent to MD once a month mention details only in case of default.
 - c. During inspection at site MS square pipe templates used to check inner and outer dimensions of window openings, must also be checked for exact size.
- 15. Slump cone test must be regularly checked as per internal memo no. 912/124.
- 16. QC to check strength of cement mortar for 7 days and 28 days for the following:
 - a. Proportion of 1:4, 1:6 & 1:8.
 - b. Mix types: cement + stone dust, cement + M sand, cement + river sand, cement + 50% M sand & 50% river sand.
 - c. Thereafter for proportion 1:6 check strength of mortar by using plasticizer, IWP separately for cement + M sand and cement + river sand.

17. Shuffling of QC engineers:

- a. Rajesh to report to HO from 1.11.2020 to be assigned to another site.
- b. Sanket to report to HO from 1.1.2021 to be replaced with another engineer.
- c. Vinod to report to HO from 1.7.2021 to be replaced with another engineer.

18. QC engineers to be strict in their reports:

- a. Do not inspect site if major works are pending. Send email cancelling the inspection.
- b. Mark for ATR in case routine works are not completed or in case of errors.
- c. Do not inspect site if routine works are not completed, despite repeatedly pointing out the same issues on earlier occasions.
- d. Do not inspect site if setback levelling is not completed and marking on external walls is not made.
- e. In villas, after plastering QC check mark for ATR if staircase is not in order. Staircase marking as per standard procedure may also be requested.

19. Miscellaneous guidelines to be strictly followed:

- a. Self check report of pedestals is mandatory. Do not check plinth beams in case report is not made.
- b. Share all self check plans with sites.
- c. QC team must have clear drawings for inspection.
- d. Mark level of 3'3" or 1 mtr from SFL on all columns. This marking can be continued for brick work and plastering. One or two screws may be fixed. Colour code for marking must be strictly followed.
- e. Honey combs must be packed within one working day of de-shuttering. Recommend pressure grouting in QC report for large voids in columns, column beam joints and beam joints. Pressure grouting can be done only after honey comb filling.
- f. Before footing and column casting sites must clearly mark level of concreting + 2ft or 60cms with white enamel at 2 or more places. Do not inspect in case of default.

20. Changes in QC check reports:

- a. Before casting footings villas page 2 add point 14 mark with white enamel 2ft above concreting level at 2 or more places.
- b. After column casting villas page 3- add point 7 mark with white enamel 2ft above concreting level at 2 or more places.

- c. Before casting slab villas page 2 add MS strips used for filling gaps Yes/No. add thermocol sheet used for electrical junctions Yes/No.
- d. After brick work page 3 add point 11 Check Z angle template size. Point 12 Window opening must be checked with MS square pipe templates of 2 sizes for inner and outer openings. Point 13 Z angle template must be 1" from brick wall surface from the inner side.
- e. After plastering Page 3 add tor steel is covered with mortar and steel is not exposed. Yes/No.
- f. After plumbing and electrical villas page 3 add Screeding done on walls upto 12" outside bathroom/utility Yes/No. Add bathroom/utility filled with 4" water for water proof check Yes/No. Add hole packing done around all pipes in ceiling and internal walls Yes/No. Add hole packing done around all pipes on external walls Yes/No. Add rainwater pipe is 2" below water proofing level Yes/No. Add photograph of OHT/head room water proofing provided Yes/No. Add -
- g. After finishing stage 2 page 4 add level of manhole covers Good/Average/Poor. Provision of earth pit and manhole cover Good/Average/Poor.
- h. After finishing stage 3 page 3 -add hole packing on external surfaces is in order Good/Average/Poor. Layout of CPVC & PVC is in order Good/Average/Poor. Use of fastners and clips for CPVC & PVC pipes is in order Good/Average/Poor. Painting marks and drops are cleaned from floor, windows, walls, portico, setback Good/Average/Poor. Correct quality of workmanship of lawn to levelling and compaction for lawn 6" below lawn FFL Good/Average/Poor. Page 1 correct provision for video door phone/ wifi cam Yes/No.
- i. Before casting slab page 1 add slab to slab height, specified, actual, within tolerance $\frac{1}{2}$ " Yes/No.
- j. After brick work page 3 correct pint 7 kitchen platform thickness 2", SFL to bottom 31" tolerance -1".

Soham Modi.

Flat No.	Others		Sl. No.						
Company	Project		Phase						
Prepared by	Sign		Date						
Project Manager	Sign		Date						
Previous Stage report no.		Report filed and sign	ed by PM?						
Apartment No.	Other		other						
Checked By MD on	MD Sign		For filling	☐ Yes ☐ No					
Recommendation: Stop further work. Submit ATR on QC report to QC team. Proceed only after recheck by QC. Stop further work. Proceed with work after submitting ATR on QC report to QC team. Proceed with further work only after making corrections pointed out in the QC report. ATR not required. Proceed with further work. ATR not required.									

Inspection should be done after:

- brickwork is completed
- chicken mesh fixed
- after cleaning the apartment
- electrical conducting work is completed

Brickwork Check.

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark **XXX** for major mistake that cannot be corrected.
- 5. Wall thickness should be as per plan. Use of 4", 6" & 8" blocks must be checked.
- 6. All walls should have 2 beds of about 2"to 3" thickness with one no. 6 mm or 8 mm rod with M15 CC.
- 7. Chicken mesh should be used in each and every joint between RCC & Brickwork.
- 8. Joint between brickwork & beam on external side must be filled.
- 9. Check room dimensions with working plan. (Tolerance: 1")
- 10. Diagonals of each room shall be equal. (Tolerance: 2")
- 11. Balcony sill level should be 3'3" from SFL. (Tolerance: 1")
- 12. Check room height with specified height. (Tolerance: 1")
- 13. Check plumb of walls wherever it appears to be out of plumb. (Tolerance: 1/2")
- 14. Specify the No. of beams which are not aligned by more than 1"in a room.
- 15. Door frames must have black Japan coating and wood primer /pellambar at cost of painter.

S No	Room	Wall thickness (• or ×)	Beds in walls (• or *)	Chicken mesh	External brickwork & beam joint (• or ×)	Room Dimensions (• or *x)	Room Dimensions Difference in inches	Diagonal (• or ×)	Diagonal Difference in inches	Balcony sill level	Room Height (• or *x)	Plumb of walls (Good/Avg./Bad)	Alignment of beams and walls - Nos.
1	Bedroom 1												
2	Toilet 1												
3	Bedroom 2												
4	Toilet 2												
5	Bedroom 3												
6	Toilet 3												
7	Drawing												
8	Dining												
9	Lobby 1												
10	Utility / balcony 1												
11	Utility / balcony 2												
12	Utility / balcony 3												
13	Kitchen												
14	Other												
15	Other												
Ren	narks												

Quality of edges and corners in all rooms?	Good Avg. Bad
Specify rooms that need correction:	'
Misc. Checks.	
Was 3.75 CFT proportion box provided?	☐ Yes ☐ No
Condition of proportion box?	Good Avg. Bad
Was the Apartment cleaned before starting brick work?	Yes No Cant' say
Is the Apartment cleaned for plastering?	☐ Yes ☐ No
Wastage?	High Medium Low
Storage of building material like bricks sand and cement.	Good Avg. Bad
Drum (200 ltrs) provided for curing in each flat?	☐ Yes ☐ No
Remarks:	

Door Frames & Windows check

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark $\times \times \times$ for major mistake that cannot be corrected.
- 5. Window template depth should be between 2 to 2 ½"after plastering.
- 6. Lentil level should be 7'3" from SFL & 7' from FFL. (Tolerance 1")
- 7. Lofts should be at a height of 7'to 7'3" from FFL. Kitchen plat form thickness should be 2", SFL to bottom 31".. (Tolerance 1")
- 8. Slopes of lofts and kitchen platforms to be checked by using 12"spirit level and check height from floor from 2 or 3 points.
- 9. Thickness of platforms & lofts should be between 2 & 2.5".
- 10. Provide single layer table brick at bottom of each door frame without threshold.
- 11. Check Z angle template size.
- 12. Window opening must be checked with MS square pipe templates of 2 sizes for inner and outer openings.
- 13. Z angle template must be 1" from brick wall surface from the inner side.

S No	Room	Door size, face and position (• or X)	Brick at bottom of door frame10 (✓ or X)	Door lentil level (• or X)	Door diagonal check (✓ or 🗶)	Door Plumb - two sides (✓ or 🗶)	Windows lentil & sill level (✓ or X)	Windows size (✓ or 🗙)	Windows - template depth & diagnal⁵ (✓ or X)	Windows - template red oxide painting (✓ or X)	Loft & Kitchen platform height (or X)	Loft & Kitchen platform slope (• or ×)	Door size, face and position (< or ×)
1	Bedroom 1												
2	Toilet 1												
3	Bedroom 2												
4	Toilet 2												
5	Bedroom 3												
6	Toilet 3												
7	Drawing												
8	Dining												
9	Lobby 1												
10	Utility / balcony 1												
11	Utility / balcony 2												
12	Utility / balcony 3												
13	Kitchen												
14	Other												
15	Other												
Ren	narks:												

Block No.		Column Nos		Sl. No.						
Company		Project		Phase						
Prepared by		Sign		Date						
Project Manager		Sign		Date						
Approved by MD Date		Sign		For Filing		Yes No				
Recommendation: Stop further work. Submit ATR on QC report to QC team. Proceed only after recheck by QC. Stop further work. Proceed with work after submitting ATR on QC report to QC team. Proceed with further work only after making corrections pointed out in the QC report. ATR not required. Proceed with further work. ATR not required.										
Quality of centering, roo										
Quality of centering, roo					Good	Avg. Bad				
Remarks:										
Curing.										
Tap provide at Apartme	nt for curing.			Yes No						
Distance of tap from fur	thest distance that re	equires curing. (max per	mitted 150')							
Source of water				Sump OHT None	Bore-we	ll direct connection				
Frequency of curing in r	number of times a da	у								
Quality of infrastructure	for curing.			Good Avg.	Bad					
Remarks:										

Covering blocks check.			
Specified size of covering blocks		Actual size of covering blocks being used	
Remarks:			
Earth Work Check.			
Quality of earth work?	Good Avg. Bad	Excess earth shifted away from site?	Yes No
Remarks:			

Footings Check.

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark **X X X** for major mistake that cannot be corrected.
- 5. Pit size should be 6" to 12"more than the footings size on all sides.
- 6. Excess earth must be shifted away from footings area.
- 7. Depth should be more than or equal to the specified depth. Keep in mind PCC thickness & sand filling wrt to road FFL.
- 8. PCC should be 3"more than the footing size (or as specified) and in one level. (Level tolerance 1")
- 9. Footing size & depth tolerance is 1". Depth of footing must be marked by paint on column steel.
- 10. Proper pegs must be made for centerline marking on all sides in CRS or brickwork. Marking with rods is not permitted.
- 11. If space between footings is less than 12"then a 4"hollow block wall with mortar is to be raised between the footings. Do not combine the footings.
- 12. Covering blocks of specified thickness must be used (generally 50 mm). Tolerance ¼".
- 13. Check the specified development lengths for mat and columns.
- 14. Mark white enamel 2ft above concreting level at 2 or more places.

S no	Col No	Col type	Pit size	Pit depth	PCC level	Footing size	Footing depth marking	Mat size	Mat steel	Column steel	Development lengths for mat & columns	Pegs for centre-line	Spacing between footings
1.													
2.													
3.													
4.													
5.													
6.													
7.													
8.													
9.													
10.													
11.													
12.													
13.													
14.													
15.													
16.													
17.													
18.													

S no	Col No	Col type	Pit size	Pit depth	PCC level	Footing size	Footing depth marking	Mat size	Mat steel	Column steel	Development lengths for mat & columns	Pegs for centre- line	Spacing between footings
19.													
20.													
21.													
22.													
23.													
24.													
25.													
26.													
27.													
28.													
29.													
30.													
31.													
32.													
33.													
34.													
35.													
36.													
37.													
38.													

<u> Օ</u> ւ	nality Control Check Repot. Stag	ge: After Column Casting (Apar	tments)								
Block No.	Column No.	Sl. No.									
Company	Project	Phase									
Prepared by	Sign	Date									
Project Manager	Project Manager Sign Date										
Previous stage report no.		Report filed ad signed by PM?	☐ Yes ☐ No								
Checked By MD on	MD Sign	For filling	g Yes No								
Stop further work. Subm. Stop further work. Proced. Proceed with further work.	Recommendation: Stop further work. Submit ATR on QC report to QC team. Proceed only after recheck by QC. Stop further work. Proceed with work after submitting ATR on QC report to QC team. Proceed with further work only after making corrections pointed out in the QC report. ATR not required. Proceed with further work. ATR not required.										
 2. Prepare Columns Position Ch a. Divide blocks into si b. Show size and orient c. Show inner – inner si d. Show diagonals for 2 e. Print an A3 size plant 3. Circle each correct dimension 	Columns Position Check. Notes: 1. Inspection should be done after casting of columns at each stage and before starting centering works for each slab. 2. Prepare Columns Position Check Plan as follows: a. Divide blocks into smaller sub-blocks. b. Show size and orientation of columns. (Tolerance 0.5") c. Show inner – inner space between columns. (Tolerance 1") d. Show diagonals for 20% of bays. (Tolerance 1.5") e. Print an A3 size plan.										
Columns Position Check Pla	n enclosed?	Yes No									
Slab Dimensions Check. Notes:											
Slab Dimensions Check Plan		Yes No	amonominent to it.								
Specified thickness of slab?		Actual thickness of slab?									

Ouality of centering and concreting Ouality of centering and concreting

Quanty of centering, rod bending and concreting.			
Quality of centering, rod bending and concreting?		Good Avg. Bad	
Quality of starters?		Good Avg. Bad	
Number and size of honey combs?		High Medium. Low	
Are the honey combs is slab and columns packed?	Good Avg. Bad		
Number of beams that are sagging, bulging, caved or deflected in the slab by mor	e than 1"		
Have 6 cubes each for columns and slab casted and numbered for testing?		☐ Yes ☐ No	
Remarks:			
Curing.			
Bunds for curing made on slab?	Yes No		
Bund size is less than 100 sft?	Yes No		
Drum (200 lts) provided for curing?	Yes No		
Gunny bags used for column curing?	Yes No		
Distance of tap from further distance that requires curing. (max permitted 100')			
Frequency of curing in number of times a day (enquire from labourers)			
Is the pressure in the curing pipe more than 15' head?	Yes No		
Quality of infrastructure for curing.	Good Avg.	Bad	
Remarks:			

Columns height, plumb, steel & level marking check.

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark **X X X** for major mistake that cannot be corrected.
- 5. Tolerance: Plumb 0.25".
- 6. Circle actual height of columns if level differs from specified height by more than 1".
- 7. Mark with white enamel 2ft above concreting level at 2 or more places.

S No	Col No.	Col type		nt in ft		✓ or X)	Honeycombs	Plumb ((• or X)	Reference level
			Spec.	Actual	No of rods	Size of rods		Side 1	Side 2	marked on column?
1.										Yes No
2.										Yes No
3.										Yes No
4.										Yes No
5.										Yes No
6.										Yes No
7.										Yes No
8.										Yes No
9.										Yes No
10.										Yes No
11.										Yes No
12.										Yes No
13.										Yes No
14.										Yes No
15.										Yes No
16.										Yes No
17.										Yes No

S No	Col No.	Col type	Heig	ght in ft	Steel	(• or X)	Honeycombs	Plumb	(• or X)	Reference level
			Spec.	Actual	No of rods	Size of rods		Side 1	Side 2	marked on column?
18.										Yes No
19.										☐ Yes ☐ No
20.										☐ Yes ☐ No
21.										☐ Yes ☐ No
22.										☐ Yes ☐ No
23.										☐ Yes ☐ No
24.										☐ Yes ☐ No
25.										☐ Yes ☐ No
26.										☐ Yes ☐ No
27.										☐ Yes ☐ No
28.										☐ Yes ☐ No
29.										☐ Yes ☐ No
30.										☐ Yes ☐ No
31.										☐ Yes ☐ No
32.										☐ Yes ☐ No
33.										☐ Yes ☐ No
34.										☐ Yes ☐ No
35.										Yes No
36.										Yes No
37.										Yes No
38.										Yes No
39.										Yes No

S No	Col No.	Col type	Heig	ght in ft	Steel	(• or X)	Honeycombs	Plumb	(• or X)	Reference level
			Spec.	Actual	No of rods	Size of rods		Side 1	Side 2	marked on column?
40.										Yes No
41.										☐ Yes ☐ No
42.										Yes No
43.										Yes No
44.										Yes No
45.										Yes No
46.										Yes No
47.										Yes No
48.										Yes No
49.										Yes No
50.										Yes No
51.										Yes No
52.										Yes No
53.										Yes No
54.										Yes No
55.										☐ Yes ☐ No
56.										Yes No
57.										Yes No
58.										Yes No
59.										Yes No
60.										Yes No
61.										Yes No

S No	Col No.	Col type	Heig	ght in ft	Steel	(⋄ or ×)	Honeycombs	Plumb	(⋄ or ×)	Reference level
			Spec.	Actual	No of rods	Size of rods		Side 1	Side 2	marked on column?
62.										Yes No
63.										Yes No
64.										Yes No
65.										Yes No
66.										Yes No
67.										Yes No
68.										Yes No
69.										Yes No
70.										Yes No
71.										Yes No
72.										Yes No
73.										Yes No
74.										Yes No
75.										Yes No
76.										Yes No
77.										Yes No
78.										Yes No
79.										Yes No
80.										Yes No
81.										Yes No
82.										Yes No
83.										Yes No

S No	Col No.	Col type	Hei	ght in ft	Steel	(⋄ or ×)	Honeycombs	Plumb	(• or X)	Reference level
			Spec.	Actual	No of rods	Size of rods		Side 1	Side 2	marked on column?
84.										Yes No
85.										Yes No
86.										Yes No
87.										Yes No
88.										Yes No
89.										Yes No
90.										Yes No
91.										Yes No
92.										Yes No
93.										Yes No
94.										Yes No
95.										Yes No
96.										Yes No
97.										Yes No
98.										Yes No
99.										Yes No
100.										Yes No
101.										Yes No
102.										Yes No
103.										Yes No
104.										Yes No
105.										Yes No

Quality Control Check Repot. Stage: After Plumbing & Electrical (Apartments)

Flat No.	Other		Sl. No.		
Company	Project		Phase		
Prepared by	Sign		Date		
Project Manager	Sign		Date		
Previous stage report no.		Report filed and signe	Report filed and signed by PM?		
Additions & alterations she	eet date	All pages signed by en	All pages signed by engineer & customer?		
Checked By MD on	MD Sign		For filling	Yes No	
Stop further work. Pro	mit ATR on QC report to QC team. Proceed with work after submitting ATR ork only after making corrections poin ork. ATR not required.	on QC report to QC team			

Inspection should be done after:

- after cleaning the apartment.
- before starting painting, tiling & flooring.
- electrical conduct, waterproofing & plumbing work is completed (for stage II only).
- additions & alterations is finalized and signed. In case there are no additions and alterations printout of email by PM to CR confirming the same must be filed.
- additions & alterations sheets to be transferred to QC file. QC to check if A&A are made as per request.

After Plumbing & Electrical Check.

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark **X X X** for major mistake that cannot be corrected.
- 5. Location of CPVC & PVC fittings must be checked as per measurements given in circular. Tolerance 1".
- 6. Location, height and spirit level of electrical points must be checked as per measurements given in circular & plan. Tolerance 1".
- 7. Civil work near pipes in balcony & utility must be neat and mortar should be removed from the pipes.
- 8. Water proofing must cover all pipes & check height above SFL.
- 9. Fasteners must be used as specified in circular. Especially check fixing of PVC pipes.
- 10. Height of DB box must be 6" below false ceiling level or 12" below slab level.
- 11. In case of many changes in civil work, electrical work and plumbing work, a new drawing must be prepared at HO and approved by MD.

Quality Control Check Repot. Stage: After Plumbing & Electrical (Apartments)

		Civil work near pipes in	CPVC & PVC Check ⁵	Electrical points check ⁶	Water proofing	Proper use of fasteners	DB ¹⁰ (✓ or	Placement of Generator
S No	Room	balcony & utility ⁷ (✓ or	(⋄ or X)	(⋄ or X)	check ⁸ (• or ×)	check ⁹ (• or	X)	changeover (✓ or X)
\sim	R A	X)				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		(• or ×)
1	Bedroom 1							
2	Toilet 1							
3	Bedroom 2							
4	Toilet 2							
5	Bedroom 3							
6	Toilet 3							
7	Drawing							
8	Dining							
9	Lobby 1							
10	Utility / balcony 1							
11	Utility / balcony 2							
12	Utility / balcony 3							
13	Kitchen							
14	Other							
15	Other							
Ren	narks							
Ren	marks on additions & a	lteration sheet:						
Sign	ned by engineer,		Yes No	Signed	by customer,		Yes No	
Rev	vised drawing required	from HO	Yes No	Approv	ved revised draw	ing attached	Yes No	

Quality Control Check Repot. Stage: After Plumbing & Electrical (Apartments)

Miscellaneous check Screeding done on walls upto 12" outside bathroom/utility Bathroom / utility filled with 4" water for water proof check Hole packing done around all pipes in ceiling and internal walls Remarks:

Quality Control Check Repot. Stage: After Finishing Stage III (Apartments)

Flat No	Other	Sl. No.										
Company	Project	Phase										
Prepared by	Sign	Date										
Project Manager	Sign	Date										
Previous stage report no.		Report filed and signed by PM	Yes No									
Checked By MD on	MD Sign	For filling	☐ Yes ☐ No									
Stop further work. Proced Proceed with further work Proceed with further work Inspection should be done after: Completing stage II works Complete works like door In case of modular kitche Provide video door phone	Stop further work. Submit ATR on QC report to QC team. Proceed only after recheck by QC. Stop further work. Proceed with work after submitting ATR on QC report to QC team. Proceed with further work only after making corrections pointed out in the QC report. ATR not required. Proceed with further work. ATR not required. Inspection should be done after: Completing stage II works. Complete works like doors, windows, grills, electrical wiring, switches, french door glass, etc. In case of modular kitchen provide platform, granite and dado and modular kitchen in this stage. Provide video door phone in this stage.											
Modular kitchen to be provid	ed Yes No	Modular kitchen provided	Yes No									
Modular kitchen workman ship												
Video door phone /wifi cam t provided	to be Yes No	Video door phone/wifi cam provided	Yes No									
Painting marks and drops are	cleaned from floor, windows, walls.	Good A	vg Poor									

Quality Control Check Repot. Stage: After Finishing Stage III (Apartments)

													Rate the quality of (Good ✓, Avg. X, Poor – needs correction X X, NA)									
S No Room	Koom	Door, door knob & door stopper fitting	Door, door knob & door stopper cleaning	Window grills & quality	Window grills fitting & finishing	Windows quality	Window fitting & finishing	Balcony railing quality & finishing	French door quality & fitting	CP jali quality and fitting	Edge building	Switch boards fitting & covering with plastic covers	Junction box covers painting									
1 Be	Bedroom 1)										
	Bedroom 2																					
	Bedroom 3																					
	Drawing																					
5 D	Dining																					
	Lobby 1																					
	Jtility / balcony 1																					
	Jtility / balcony 2																					
	Jtility / balcony 3																					
	Kitchen																					
	Coilet 1																					
12 To	Coilet 2																					
13 To	Coilet 3																					
	Other																					
	Other																					
Remar	rks																					

Block No	Slab No.		Sl. No.									
Company	Project		Phase									
Prepared by	Sign		Date									
Project Manager	Sign		Date									
Receipt at HO date	Copy sent to site	e on	Sign									
Checked By MD on	MD Sign		For filling	Yes No								
Stop further work. Proceed Proceed with further work	Stop further work. Submit ATR on QC report to QC team. Proceed only after recheck by QC. Stop further work. Proceed with work after submitting ATR on QC report to QC team. Proceed with further work only after making corrections pointed out in the QC report. ATR not required. Proceed with further work. ATR not required.											
 2. Prepare Slab Dimensions Check a. Show outer dimension b. Show length and width c. Show inner dimension d. Show location of sunk e. Print an A3 size plan. 	Slab Check. Notes: 1. Inspection should be done before casting of slab at each stage i.e. when the slab is ready for casting. 2. Prepare Slab Dimensions Check Plan as follows: a. Show outer dimensions of slab. (Tolerance 2") b. Show length and width of balconies (Tolerance 1") c. Show inner dimensions of ducts. (Tolerance 1") d. Show location of sunken slab. e. Print an A3 size plan.											
Slab Dimensions Check Plan	•	Yes No										
Staircase – mid landing 1	Specified ht:	Actual ht:	Within tolerance of ½"?	Yes No								
Staircase – mid landing 2	Specified ht:	Actual ht:	Within tolerance of ½"?	Yes No								
Staircase width	Specified wd:	Actual wd:	Within tolerance of ½"?	Yes No								
Staircase slab thickness Specified: Actual: Within tolerance of 1/4"? Yes [
Slab to slab height	Specified:	Actual:	Within tolerance of ½"?	Yes No								

Quality of centering, rod bending and concreting.

Quality of centering, rod bending and concreting?	Good Avg. Bad
18"extension to beam bottom runners on outer side provided?	Yes No
Quality of Bracing Provided?	Good Avg. Bad
Alignment of beams on outer side?	Good Avg. Bad
Shuttering leveling?	Good Avg. Bad
Column steel overlapping and cranking? (overlapping length should be 45 to 50 D)	Correct Needs correction
Remarks:	

Slab Steel check.

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark **X X** for major mistake that cannot be corrected.
- 5. Columns overlapping length should be 45 to 50 D.
- 6. MS strips should be used for filling gaps.
- 7. Thermocol sheet should be used for electrical junctions.

S No	Item	Quantitative Check (• or ×)	Qualitative Check (Good / Avg. / Bad)
1.	Steel Check - Beam no of rods	(5171)	Good Avg. Bad
2.	Steel Check - Beam size of bars		Good Avg. Bad
3.	Steel Check - Beams Extra Bars		Good Avg. Bad
4.	Steel Check - Beams Overlapping & Cranking		Good Avg. Bad
5.	Steel Check - Beams Bearing		
6.	Covering blocks for beams		Good Avg. Bad
7.	Depth and width of beams		Good Avg. Bad
8.	Steel Check - Slab size of bars		Good Avg. Bad
9.	Steel Check - Slab spacing of bars		Good Avg. Bad
10.	Steel Check – Slab cranking & chairs		Good Avg. Bad
11.	Steel Check - Slab Extra Bars		Good Avg. Bad
12.	Covering blocks for slab		Good Avg. Bad
13.	Steel Check - Column steel overlapping length and cranking		Good Avg. Bad
14.	Electrical Conducting		Good Avg. Bad
15.	Steel check – floating columns		Good Avg. Bad
16.	Steel check – slab extensions/ joints		Good Avg. Bad
Remarks:			

Flat No.		Other		Sl. No.	
Company		Project		Phase	
Prepared by		Sign		Date	
Project Manager		Sign		Date	
Previous stage report	no.		Report filed ad signed	by PM?	
Checked By MD on		MD Sign		For filling	☐ Yes ☐ No
Recommendation:					
Stop further work.	Submit ATR on QC r	eport to QC team. Proc	eed only after recheck	by QC.	
Stop further work	. Proceed with work at	fter submitting ATR on	QC report to QC team	i.	
Proceed with furth	ner work only after mal	king corrections pointed	d out in the QC report.	ATR not required.	
Proceed with furth	ner work. ATR not requ	uired.		-	

Inspection should be done after:

- brickwork & 2 coats plastering is completed
- after cleaning the villa.
- Water proofing, screeding in bathrooms is completed.
- before starting painting, tiling & flooring.

Plastering Check.

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark $\times \times \times$ for major mistake that cannot be corrected.
- 5. 9"unplastered area from SFL should be left including in common areas and terraces.
- 6. Windows must be checked with templates. <u>Plastering must be 3mm margin for luppum work</u>. Tolerance ¹/₄".
- 7. Provision of tiles in bathrooms, kitchen & wash areas (rough plastering).
- 8. Check size of sink bowl. Hole should be 1" to 2" larger. (Tolerance: 1")
- 9. All doors frames should have ½"grooves.
- 10. Sill top must me of uniform thickness, correct height, at one level & without broken edges.

S No	Room	Skirting Provision (• or ×)	Furnishing around door frame (• or x)	Beams & columns finishing (• or x)	Finishing of lofts (• or x)	Electricity junctions finishing (• or ×)	Windows check (✓ or ★)	Tiles provision (or x)	Sink provision & size (• or *)	Grooves for door frames (< or ×)	Balcony & terrace sill top finishing (or x)	Screeding in bathroom & utility (or x)	Screeding in 6" above FFL? (• or ×)
1	Bedroom 1												
2	Toilet 1												
3	Bedroom 2												
4	Toilet 2												
5	Bedroom 3												
6	Toilet 3												
7	Bedroom 4												
8	Toilet 4												
9	Drawing												
10	Dining												
11	Lobby 1												
12	Lobby 2												
13	Terrace/ balcony 1												
14	Terrace / balcony 2												
15	Terrace / balcony 3												
16	Portico												
17	Kitchen												
18	Other												
Ren	narks												

Quality Control Check Repot. Stage: After Finishing Stage II (Apartments)

Flat No		Other		Sl. No.				
Company		Project		Phase				
Prepared by		Sign		Date				
Project Manager		Sign		Date				
Previous stage report no.			Report filed and signe	ed by PM	Yes No			
Checked By MD on		MD Sign		For filling	Yes No			
Recommendation:								
Stop further work.	Submit ATR on QC r	eport to QC team. Proc	eed only after recheck	by QC.				
Stop further work	. Proceed with work at	Fter submitting ATR on	QC report to QC team	l.				
Proceed with further work only after making corrections pointed out in the QC report. ATR not required.								
Proceed with further work. ATR not required.								
Inspection should be done after:								
- Completion of flooring bothsoom (utility tiles first cost of point								

- Completion of flooring, bathroom /utility tiles, first coat of paint.
- Completion of doors, windows, grills, electrical wiring, switches must be done in next stage
- False ceiling must be completed before flooring.
- Kitchen platform, granite and dado must be completed where modular kitchen is not provided.
- Provide granite soffit for main door and balconies in this stage.

Miscellaneous check:

Main door fixed with lock & stopper	Yes No		
Granite soffit for balcony required	Yes No	Granite soffit for balcony provided	Yes No
Balcony granite soffit workmanship	Good Avg Poor	Balcony granite soffit edge polishing	Good Avg Poor
Granite soffit for main door required	Yes No	Granite soffit for main door provided	Yes No
Main door granite soffit workmanship	Good Avg Poor	Main door granite soffit edge	Good Avg Poor
		polishing	

Quality Control Check Repot. Stage: After Finishing Stage II (Apartments)

	Tiling & granite work		Rate the quality of (Good ✓, Avg. X, Poor – needs correction X X, NA)											
S No	Room	Workmanship of tiling	White cement filling around CPVC lines	Corners finishing	Finishing near doors	Finishing on top of tiles	Finishing near ventilators	Step at bathroom entrance / utility	Step for shower / pot wash	Tile joint grouting	Granite platform finishing and edge polishing	Granite platform slope	Granite platform height	Finishing under granite platform
1	Toilet 1													
2	Toilet 2													
3	Toilet 3													
4	Toilet 4													
5	Wash basin in													
	dining area													
6	Kitchen													
7	Utility													
8	Other													
9	Other													
Rer	narks													

Quality Control Check Repot. Stage: After Finishing Stage II (Apartments)

	Flooring & painting	Rate the quality of (Good 🗸, Avg. 🗶, Poor – needs correction 🗶 🗶, NA)												
S No	Room	Color variation of floor tiles	Flooring workman ship & grouting	Skirting size (3")	Skirting workmanship	Plastering above skirting	Plastering & finishing of walls	Crack filling	Loft Finishing	Windows check	General quality of painting & finishing	Door & frame painting quality	Door beading, luppam and painting quality.	Edge building
1	Bedroom 1													
2	Bedroom 2													
3	Bedroom 3													
4	Drawing													
5	Dining													
6	Lobby 1													
7	Utility / balcony 1													
8	Utility / balcony 2													
9	Utility / balcony 3													
10	Kitchen													
11	Other													
12	Other													
	Remarks													

Self check - Quality Control Check Repot.Stage: After Plastering (Villas)

Villa No		Stage		Sl. No.	
Company		Project		Phase	
Prepared by		Sign		Date	
Project Manager		Sign		Date	
Previous stage report no.			Report filed and signe	ed by PM?	
QC engineer name		Sign		Date	

Inspection should be done after:

- brickwork & 2 coats plastering is completed
- after cleaning the villa.
- Water proofing, screeding in bathrooms is completed.
- before starting painting, tiling & flooring.

Plastering Check.

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark **X X X** for major mistake that cannot be corrected.
- 5. 9"unplastered area from SFL should be left including in common areas and terraces.
- 6. Windows must be checked with templates. Tolerance 1/4".
- 7. Provision of tiles in bathrooms, kitchen & wash areas (rough plastering).
- 8. Check size of sink bowl. Hole should be 1" to 2" larger. (Tolerance: 1")
- 9. All doors frames should have ½"grooves.
- 10. Sill top must me of uniform thickness, correct height, at one level & without broken edges.

<u>Self check - Quality Control Check Repot.Stage: After Plastering (Villas)</u>

S No	Room	Skirting Provision (• or ×)	Furnishing around door frame (or x)	Beams & columns finishing (• or ×)	Finishing of lofts (• or X)	Electricity junctions finishing (or x)	Windows check (• or X)	Tiles provision (• or x)	Sink provision & size (• or x)	Grooves for door frames (• or ×)	Balcony & terrace sill top finishing (or x)	Screeding in bathroom & utility (• or x)	Screeding in 6 " above FFL? (\checkmark or \mathbf{x})
1	Bedroom 1												
2	Toilet 1												
3	Bedroom 2												
4	Toilet 2												
5	Bedroom 3												
6	Toilet 3												
7	Bedroom 4												
8	Toilet 4												
9	Drawing												
10	Dining												
11	Lobby 1												
12	Lobby 2												
13	Terrace/ balcony 1												
14	Terrace / balcony 2												
15	Terrace / balcony 3												
16	Portico												
17	Kitchen												
18	Other												
Ren	narks												

<u>Self check - Quality Control Check Repot.Stage: After Plastering (Villas)</u>

Miscellaneous check

Overall quality of plastering?	Good Avg. Bad
Plastering of compound wall & gate pillars (• or ×)	
Is plastering of compound wall and villa external wall 6" below FFL of setbacks?	Yes No
Plastering quality of parapet walls (✓ or 🗙)	
Plastering and finishing of chajjas (✓ or 🗙)	
Terrace/parapet wall tor steel is covered with mortar and steel is not exposed	Yes No
Remarks:	

Block No		Other		Sl. No.						
Company		Project		Phase						
Prepared by		Sign		Date						
Project Manager		Sign		Date						
Previous stage report no.			Report filed and	d signed by PM	?					
Approved by MD on date		Sign		For filling	7	Yes No				
Recommendation: Stop further work. Submit ATR on QC report to QC team. Proceed only after recheck by QC. Stop further work. Proceed with work after submitting ATR on QC report to QC team. Proceed with further work only after making corrections pointed out in the QC report. ATR not required. Proceed with further work. ATR not required.										
Quality of centering, rod be	Quality of centering, rod bending and marking.									
						Avg. Bad				
Remarks:										
Curing.										
Tap provide at bungalow for	r curing.			Yes No						
Distance of tap from furthes	st distance that require	s curing. (max peri	nitted 100')							
Source of water		Sump OHT Bore-well direct connection None								
Frequency of curing in number of times a day (enquire from labourers)										
Quality of infrastructure for curing.										
Remarks:			- '							

Covering blocks check.			
Specified size of covering blocks		Actual size of covering blocks being used	
Remarks:			
Kemarks.			
Earth Work Check.			
Quality of earth work?	Good Avg. Bad	Excess earth shifted away from site?	Yes No
Remarks:			

Footings Check.

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark **X X X** for major mistake that cannot be corrected.
- 5. Pit size should be 6" to 12"more than the footings size on all sides.
- 6. Excess earth must be shifted away from footings area.
- 7. Depth should be more than or equal to the specified depth. Keep in mind PCC thickness & sand filling wrt to road FFL.
- 8. PCC should be 3"more than the footing size (or as specified) and in one level. (Level tolerance 1")
- 9. Footing size & depth tolerance is 1". Depth of footing must be marked by paint on column steel.
- 10. Proper pegs must be made for centerline marking on all sides in CRS or brickwork. Marking with rods is not permitted.
- 11. If space between footings is less than 12"then a 4"hollow block wall with mortar is to be raised between the footings. Do not combine the footings.
- 12. Covering blocks of specified thickness must be used (generally 50 mm). Tolerance 1/4".
- 13. Check the specified development lengths for mat and columns.
- 14. Mark with white enamel 2ft above concreting level at 2 or more places.

Quality Control Check Repot. Stage: Before Casting Footings (Villas)

S no	Col No	Col type	Pit size	Pit depth	PCC level	Footing size	Footing depth marking	Mat size	Mat steel	Column steel & stirrups	Development lengths for mat & columns	Pegs for centre- line	Spacing between footings
1.													
2.													
3.													
4.													
5.													
6.													
7.													
8.													
9.													
10.													
11.													
12.													
13.													
14.													
15.													
16.													
17.													
18.													
19.													
20.													
21.													
22.													
23.													

Villa No		Other		Sl. No.		
Company		Project		Phase		
Prepared by		Sign		Date		
Project Manager		Sign		Date		
Previous state report r	10,		Report filed and signe	ed by PM?		
Checked By MD on		MD Sign		For filling	Yes No)
Recommendation:						
Stop further work.	Submit ATR on QC re	eport to QC team. Proc	eed only after recheck	by QC.		
Stop further work	. Proceed with work at	fter submitting ATR on	QC report to QC team			
Proceed with furth	ner work only after mal	king corrections pointed	d out in the QC report.	ATR not required.		
Proceed with furth	ner work. ATR not requ	iired				

Inspection should be done after:

- Brickwork, CRS for compound wall, compound wall ang gate pillars are completed.
- · chicken mesh fixed
- after cleaning the bungalow.
- external scaffolding tied.
- external brickwork & beam joints filling completed.
- electrical conducting work is completed (except bathrooms).

Brickwork Check.

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark **XXX** for major mistake that cannot be corrected.
- 5. Wall thickness should be as per plan. Use of 4"and 6"blocks must be checked.
- 6. All walls should have 2 beds of about 2"to 3"thickmess with one no. 6 mm or 8 mm rod with M15 CC.
- 7. Chicken mesh should be used in each and every joint between RCC & Brickwork.
- 8. Joint between brickwork & beam on external side must be filled.
- 9. Check room dimensions with working plan. (Tolerance: 1")
- 10. Diagonals of each room shall be equal. (Tolerance: 2")
- 11. Balcony sill level should be 3'3" from SFL. (Tolerance: 1")
- 12. Check room height with specified height. (Tolerance: 1")
- 13. Check plumb of walls where ever it appears to be out of plumb. (Tolerance: 1/2")
- 14. Specify the No. of beams which are not aligned by more than 1"in a room.
- 15. Door frames must have black Japan coating and wood primer / pellambar at cost of painter.
- 16. Setbacks must be levelled atleast 6" below FFL of setbacks to ensure plastering in 6" below FFL.

S No	Room	Wall thickness (• or ×)	Beds in walls (• or x)	Chicken mesh (v or x)	External brickwork & beam joint (• or x)	Room Dimensions (• or x)	Room Dimensions Difference in inches	Diagonal (v or X)	Diagonal Difference in inches	Balcony sill level (• or x)	Room Height (• or ×)	Plumb of walls (Good/Avg./Bad)	Alignment of beams and walls - Nos.
1	Bedroom 1												
2	Toilet 1												
3	Bedroom 2												
4	Toilet 2												
	Bedroom 3												
6	Toilet 3												
	Bedroom 4												
	Toilet 4												
9	Drawing												
10	Dining												
11	Lobby 1												
	Lobby 2												
	Terrace/ balcony 1												
14	Terrace / balcony 2												
	Terrace / balcony 3												
	Portico												
	Kitchen												
	Other												
	Other												
Rem	arks												

Quality of edges and corne	ers in all rooms?	Good	Avg. Bad								
Specify rooms that need co	orrection:										
Chajjas Quality Check Notes: Width of chajja should b	be 6"more than the width or the d	oor or window.									
Total Nos. of Chajjas	Slopes incorrect – nos.	Thickness incorrect –nos	Width incorrect - nos.	Height in correct - nos							
Remarks											

Door Frames & Windows check

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark **XXX** for major mistake that cannot be corrected.
- 5. Window template depth should be between 2 to 2 ½"after plastering.
- 6. Lentil level should be 7'3" from SFL & 7' from FFL. (Tolerance 1")
- 7. Lofts should be at a height of 7'to 7'3" from FFL. Kitchen plat form thickness should be 2", SFL to bottom 31". (Tolerance 1")
- 8. Slopes of lofts and kitchen platforms to be checked by using 12"spirit level and check height from floor from 2 or 3 points.
- 9. Thickness of platforms & lofts should be between 2 & 2.5".
- 10. Provide single layer table brick at bottom of each door frame without threshold.
- 11. Check Z angle template size.
- 12. Window opening must be checked with MS square pipe templates of 2 sizes for inner and outer openings.
- 13. Z angle template must be 1" from brick wall surface from the inner side.

SNo	Room	Door size, face and position (✓ or X)	Brick at bottom of door frame 10 (or X)	Door lentil level	Door diagonal check (✓ or 🗶)	Door Plumb - two sides	Door frame black Japan/ wood primer/Peelambar check (✓ or X)	Windows lentil & sill level (• or X)	Windows size (✓ or 🗙)	Windows - template depth & diagnal⁵ (✓ or 🗙)	Windows - template powder coated (✓ or X)	Loft & Kitchen platform required ?(• or ×)	Loft & Kitchen platform provided (or X)	Loft & Kitchen platform slope (• or X)
1	Bedroom 1													
2	Toilet 1													
3	Bedroom 2													
4	Toilet 2													
5	Bedroom 3													
6	Toilet 3													
7	Bedroom 4													
8	Toilet 4													
9	Drawing													
10	Dining													
11	Lobby 1													
12	Lobby 2													
13	Terrace/ balcony 1													
14	Terrace / balcony 2													
15	Terrace / balcony 3													
16	Portico													
17	Kitchen													
18	Other													
19	Other													
	Remarks:													
	l .													

Misc. Checks.	
Was 3.75 CFT proportion box provided?	Yes No
Condition of proportion box?	Good Avg. Bad
Was the villa cleaned before starting brick work?	Yes No Cant' say
Is the bungalow cleaned for plastering?	☐ Yes ☐ No
Wastage?	High Medium Low
Storage of building material like bricks sand and cement.	Good Avg. Bad
Drum (200 lts) provided for curing in each bungalow?	☐ Yes ☐ No
Remarks:	
Compound wall check	
CRS + bed – specified level below FFL.	Actual level below FFL.
Specified compound wall height above FFL.	Actual level below FFL.
Quality and level of PCC on ground floor?	☐ Good ☐ Avg. ☐ Bad
Quality and level of PCC for portico?	Good Avg. Bad
Is leveling in the setbacks of the villa 6" below FFL?	Yes No
Specified height of gate columns	Actual height provided
Specified distance between gate columns	Actual distance provided
Chicken mesh provided on external joints of villa (or x)	·
Parapet wall thickness, height and design (v or X)	
Parapet and compound wall railing design quality, fitting & redox	tide painting (v or X)
Remarks:	

Quality Control Check Repot. Stage: Before Casting Slab (villas)

Villa No	Slab No.		Sl. No.								
Company	Project		Phase								
Prepared by	Sign		Date								
Project Manager	Sign		Date								
Receipt at HO date	Copy sent to site	e on	Sign								
Checked By MD on	MD Sign		For filling [Yes No							
Stop further work. Proceed Proceed with further work	Stop further work. Submit ATR on QC report to QC team. Proceed only after recheck by QC. Stop further work. Proceed with work after submitting ATR on QC report to QC team. Proceed with further work only after making corrections pointed out in the QC report. ATR not required. Proceed with further work. ATR not required.										
 2. Prepare Slab Dimensions Check a. Show outer dimensions b. Show length and width c. Show inner dimensions d. Show location of sunke e. Print an A3 size plan. 	Slab Check. Notes: 1. Inspection should be done before casting of slab at each stage i.e. when the slab is ready for casting. 2. Prepare Slab Dimensions Check Plan as follows: a. Show outer dimensions of slab. (Tolerance 2") b. Show length and width of balconies (Tolerance 1") c. Show inner dimensions of ducts. (Tolerance 1") d. Show location of sunken slab. e. Print an A3 size plan.										
Slab Dimensions Check Plan e		Yes No									
Staircase – mid landing 1	Specified ht:	Actual ht:	Within tolerance of ½"?	Yes No							
Staircase – mid landing 2	Specified ht:	Actual ht:	Within tolerance of ½"?	Yes No							
Staircase width	Specified wd:	Actual wd:	Within tolerance of ½"?	Yes No							
Staircase slab thickness	Specified:	Actual:	Within tolerance of 1/4"?	Yes No							
Slab to slab height Specified: Actual: Within tolerance of ½"? Yes No											

Quality Control Check Repot. Stage: Before Casting Slab (villas)

Slab Steel check.

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark **X X X** for major mistake that cannot be corrected.
- 5. Columns overlapping length should be 45 to 50 D.

Quality Control Check Repot. Stage: Before Casting Slab (villas)

2. St 3. St 4. St	teel Check - Beam no of rods teel Check - Beam size of bars teel Check - Beams Extra Bars teel Check - Beams Overlapping & Cranking	(∨ or X)	Good Avg. Bad Good Avg. Bad Good Avg. Bad Good Avg. Bad
2. St 3. St 4. St	teel Check - Beam size of bars teel Check - Beams Extra Bars		Good Avg. Bad
3. St 4. St	teel Check - Beams Extra Bars		
4. St			Good Avg. Bad
	teel Check - Beams Overlapping & Cranking		i
			Good Avg. Bad
5. St	teel Check - Beams Bearing		
6. C	overing blocks for beams		Good Avg. Bad
7. D	epth and width of beams		Good Avg. Bad
8. St	teel Check - Slab size of bars		Good Avg. Bad
9. St	teel Check - Slab spacing of bars		Good Avg. Bad
10. St	teel Check – Slab cranking & chairs		Good Avg. Bad
11. St	teel Check - Slab Extra Bars		Good Avg. Bad
12. C	overing blocks for slab		Good Avg. Bad
	teel Check - Column steel overlapping length and ranking		Good Avg. Bad
14. El	lectrical Conducting		Good Avg. Bad
15. St	teel check – floating columns		Good Avg. Bad
16. St	teel check – slab extensions/ joints		Good Avg. Bad
17. M	IS strips used for filling gaps		Yes No
18. T	hermocol sheet used for electrical junctions		Yes No
Remarks:			

Quality Control Check Repot. Stage: After Finishing Stage II (Villas)

Villa No		Other		Sl. No.							
Company		Project		Phase							
Prepared by		Sign		Date							
Project Manager		Sign		Date							
Previous stage report	no.		Report filed and signe	ed by PM	Yes No						
Checked By MD on		MD Sign		For filling	Yes No						
Stop further work Proceed with furth	Submit ATR on QC ro . Proceed with work af ner work only after maker work. ATR not requ	ter submitting ATR on cing corrections pointed	QC report to QC team								
	spection should be done after:										
 Completion of 	 Completion of flooring, bathroom /utility tiles, first coat of paint. 										
 Completion of 	• Completion of doors, windows, grills, electrical wiring, switches must be done in next stage										

- Completion of doors, windows, grills, electrical wiring, switches must be done in next stage
 False ceiling must be completed before flooring.
- Kitchen platform, granite and dado must be completed where modular kitchen is not provided.
- Provide granite soffit for main door and balconies in this stage.

Miscellaneous check:

Main door fixed with lock & stopper	Yes No		
Granite soffit for balcony required	Yes No	Granite soffit for balcony provided	Yes No
Main door granite soffit workmanship	Good Avg Poor	Main door granite soffit edge	Good Avg Poor
		polishing	

Quality Control Check Repot. Stage: After Finishing Stage II (Villas)

	Tiling & granite work		Rate the quality of (Good ✓, Avg. X, Poor – needs correction X X, NA)											
S No	Room	Workmanship of tiling	White cement filling around CPVC lines	Corners finishing	Finishing near doors	Finishing on top of tiles	Finishing near ventilators	Step at bathroom entrance / utility	Step for shower / pot wash	Tile joint grouting	Granite platform finishing and edge polishing	Granite platform slope	Granite platform height	Finishing under granite platform
1	Toilet 1													
2	Toilet 2													
3	Toilet 3													
4	Toilet 4													
5	Wash basin in dining area													
6	Kitchen													
7	Utility													
8	Other													
9	Other													
Ren	narks													

Quality Control Check Repot. Stage: After Finishing Stage II (Villas)

	Flooring & painting		Rate the quality of (Good ✓, Avg. X, Poor – needs correction X X, NA)											
S No	Room	Color variation of floor tiles	Flooring workman ship & grouting	Skirting size (3")	Skirting workmanship	Plastering above skirting	Plastering & finishing of walls	Crack filling	Loft Finishing	Windows check	General quality of painting & finishing	Door & frame painting quality	Door beading, luppam and painting quality.	Edge building
1	Bedroom 1												, , , , ,	
2	Bedroom 2													
3	Bedroom 3													
4	Drawing													
5	Dining													
6	Lobby 1													
7	Utility / balcony 1													
8	Utility / balcony 2													
9	Utility / balcony 3													
10	Kitchen													
11	Other													
12	Other													
	Remarks													

Quality Control Check Repot. Stage: After Finishing Stage II (Villas)

Miscellaneous check – after finishing stage II

Quality and workmanship of portico tiles

Quality and workmanship of flooring & setback

Quality and workmanship of external cladding /texture

Quality and workmanship of external cladding /texture

Quality and workmanship of external cladding /texture

Good Avg Poor

Level of manhole covers

Provision of earth pit and manhole cover

Remarks:

Quality Control Check Repot. Stage: After Plumbing & Electrical (Villas)

Villa No.	Other		Sl. No.					
Company	Project		Phase					
Prepared by	Sign		Date					
Project Manager	Sign		Date					
Previous stage report no.		Report filed and signe	Report filed and signed by PM?					
Additions & alterations sho	eet date	All pages signed by e	All pages signed by engineer & customer?					
Checked By MD on	MD Sign		For filling					
Recommendation: Stop further work. Submit ATR on QC report to QC team. Proceed only after recheck by QC. Stop further work. Proceed with work after submitting ATR on QC report to QC team. Proceed with further work only after making corrections pointed out in the QC report. ATR not required. Proceed with further work. ATR not required.								

Inspection should be done after:

- after cleaning the apartment.
- before starting painting, tiling & flooring.
- electrical conduct, waterproofing & plumbing work is completed (for stage II only).
- additions & alterations is finalized and signed. In case there are no additions and alterations printout of email by PM to CR confirming the same must be filed.
- additions & alterations sheets to be transferred to QC file. QC to check if A&A are made as per request.

After Plumbing & Electrical Check.

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark **X X X** for major mistake that cannot be corrected.
- 5. Location of CPVC & PVC fittings must be checked as per measurements given in circular. Tolerance 1".
- 6. Location, height and spirit level of electrical points must be checked as per measurements given in circular & plan. Tolerance 1".
- 7. Civil work near pipes in balcony & utility must be neat and mortar should be removed from the pipes.
- 8. Water proofing must cover all pipes & check height above SFL.
- 9. Fasteners must be used as specified in circular. Especially check fixing of PVC pipes.
- 10. Height of DB box must be 6" below false ceiling level or 12" below slab level.
- 11. In case of many changes in civil work, electrical work and plumbing work, a new drawing must be prepared at HO and approved by MD.

Quality Control Check Repot. Stage: After Plumbing & Electrical (Villas)

2	Bedroom 1 Toilet 1 Bedroom 2 Toilet 2 Bedroom 3				X)	X)		changeover (✓ or X)	
3 3	Bedroom 2 Toilet 2								
4	Toilet 2								
5	Padroom 2								
	Dearoon 3								
6	Toilet 3								
7	Bedroom 4								
8	Toilet 4								
9	Drawing								
10	Dining								
11	Lobby 1								
12	Lobby 2								
13	Terrace /								
1	balcony 1								
14	Terrace /								
	balcony 2								
15	Head room								
	Portico								
17	Kitchen								
	Utility								
19	Other								
Rema	arks								
Rema	arks on additions	& alteration sheet:							
Signe	ed by engineer,		Yes No	Sign	ed by customer,		Yes No		
Revis	sed drawing requi	ired from HO	Yes No	Appı	oved revised drav	ving attached	Yes No		

Quality Control Check Repot. Stage: After Plumbing & Electrical (Villas)

Miscellaneous check

Depth of drainage line at compound wall specified:	Depth provided:
Fastners for external PVC/CPVC lines (• or ×)	
Setbacks properly leveled and compacted to 3" below proposed FFL?	☐ Yes ☐ No
Lawn area property leveled and compacted to 9" below lawn FFL?	Yes No
Electricity pipes for electric power supply & communication provided from compound wall?	Yes No
Workmanship of drainage lines	Good Avg. Poor
Earthing provided?	☐ Yes ☐ No
Screeding done on walls upto 12" outside bathroom/utility	Yes No
Bathroom /utility filled with 4" water for water proof check	☐ Yes ☐ No
Hole packing done around all pipes in ceiling and internal walls	Yes No
Hole packing done around all pipes on external walls	Yes No
Rainwater pipe is 2" below water proofing level	Yes No
Photograph of OHT/head room water proofing provided	☐ Yes ☐ No
Remarks:	

Quality Control Check Repot. Stage: After Finishing Stage III (Villas)

Villa No	Other	Sl. No.							
Company	Project	Phase							
Prepared by	Sign	Date							
Project Manager	Sign	Date							
Previous stage report no.		Report filed and signed by PM	Yes No						
Checked By MD on	MD Sign	For filling	g Yes No						
Stop further work. Proceed with Proceed with further work only Proceed with further work. ATI Inspection should be done after: Completing stage II works. Complete works like doors, wind In case of modular kitchen proven Provide video door phone in this Possession for wood work canno	h work after submitting AT after making corrections por R not required. ows, grills, electrical wiring, swiide platform, granite and dado an stage.	pointed out in the QC report. ATR not re-							
Stage III check notes: 1. Window grills must be fitted at the depth of ¼" from the wall. 2. Switchboards must be fitted to plum. 3. Cover junction boxes with cement covers and not PVC covers. Use pin head type sheet metal screws (not MS). Miscellaneous check:									
Modular kitchen to be provided	Yes No	Modular kitchen provided	Yes No Good Avg Poor						
Modular kitchen workman ship Good Avg Poor Modular kitchen granite & dado workman ship & finishing									

Video door phone/ wifi cam

provided

Yes No

Video door phone/ wifi cam to be

provided

Yes No

Quality Control Check Repot. Stage: After Finishing Stage III (Villas)

		Rate the quality of (Good ✓, Avg. X, Poor – needs correction X X, NA)											
S No	Room	Door, door knob & door stopper fitting	Door, door knob & door stopper cleaning	Window grills & quality	Window grills fitting & finishing	Windows quality	Window fitting & finishing	Balcony railing quality & finishing	French door quality & fitting	CP jali quality and fitting	Edge building	Switch boards fitting & covering with plastic covers	Junction box covers painting
1	Bedroom 1												
2	Bedroom 2												
3	Bedroom 3												
4	Drawing												
5	Dining												
6	Lobby 1												
7	Utility / balcony 1												
8	Utility / balcony 2												
9	Utility / balcony 3												
10	Kitchen												
11	Toilet 1												
12	Toilet 2												
13	Toilet 3												
14	Portico												
15	Other												
Ren	narks												

Quality Control Check Repot. Stage: After Finishing Stage III (Villas)

Miscellaneous check – after finishing stage III Quality and workmanship of gate Good Avg Poor Quality and workmanship of railings Good Avg Poor Good Avg Poor Painting of gates & railings Cleaning, painting of external cladding/texture Good Avg Poor Hole packing on external surfaces is in order Good Avg Poor Layout of CPVC & PVC is in order Good Avg Poor Use of fastners and clips for CPVC & PVC pipes is in order Good Avg Poor Painting marks and drops are cleaned from floor, windows, walls, portico, setback Good Avg Poor Correct quality of workmanship of lawn to levelling and compaction for lawn 6" below lawn FFL Good Avg Poor Remarks:

Quality Control Check Report. Stage: After Column Casting (villas)

Bungalow No.	Column No.	Sl. No.							
Company	Project	Phase							
Prepared by	Sign	Date							
Project Manager	Sign	Date							
Previous stage report no.		Report filed and signed by PM?							
Checked By MD on	MD Sign	For filling	☐ Yes ☐ No						
Recommendation: Stop further work. Submit ATR on QC report to QC team. Proceed only after recheck by QC. Stop further work. Proceed with work after submitting ATR on QC report to QC team. Proceed with further work only after making corrections pointed out in the QC report. ATR not required. Proceed with further work. ATR not required.									
Columns Position Check. Notes: 1. Inspection should be done after casting of columns at each stage and before starting centering works for each slab. 2. Prepare Columns Position Check Plan as follows: a. Divide blocks into smaller sub-blocks. b. Show size and orientation of columns. (Tolerance 0.5") c. Show inner – inner space between columns. (Tolerance 1") d. Show diagonals for 20% of bays. (Tolerance 1.5") e. Print an A3 size plan.									
		ension with red colour and mention actual	dimension next to it.						
Columns Position Check Plan enclosed? Slab Dimensions Check. Notes: 1. Prepare Slab (or plinth beams) Dimensions Check Plan as follows: a. Show outer dimensions of slab. (Tolerance 2") b. Show length and width of balconies (Tolerance 1") c. Show inner dimensions of ducts and lift well. (Tolerance 1") d. Show location of sunken slab. e. Print an A3 size plan. 2. Circle each correct dimension with green colour. Circle each incorrect dimension with red colour and mention actual dimension next to it. Slab Dimensions Check Plan enclosed?									
Specified thickness of slab? Actual thickness of slab?									

Quality Control Check Report. Stage: After Column Casting (villas)

Quality of centering, rod bending and concreting. Quality of centering, rod bending and concreting? Good ☐ Avg. ☐ Bad Quality of starters? Good Avg. Bad Number and size of honey combs? High Medium. Low Good Avg. Bad Are the honey combs in slab and columns packed? Number of beams that are sagging, bulging, caved or deflected in the slab by more than 1" Have 6 cubes each for columns and slab casted and numbered for testing? ☐ Yes ☐ No Remarks: Curing. Bunds for curing made on slab? TYes No Bund size is less than 100 sft? **∃**Yes No Drum (200 lts) provided for curing? Yes \log Gunny bags used for column curing? ☐ Yes \neg No Distance of tap from further distance that requires curing. (max permitted 100') Frequency of curing in number of times a day (enquire from labourers) Is the pressure in the curing pipe more than 15' head? TYes \square No Quality of infrastructure for curing. Good Avg. Bad Remarks:

Quality Control Check Report. Stage: After Column Casting (villas)

Columns height, plumb, steel & level marking check.

- 1. Mark ✓ for correct or minor mistake which does not require correction
- 2. Mark **X** for minor mistake that requires minor correction.
- 3. Mark **X X** for major mistake that requires correction by replacement or re-fixing.
- 4. Mark **X X X** for major mistake that cannot be corrected.
- 5. Tolerance: Plumb 0.25".
- 6. Circle actual height of columns if level differs from specified height by more than 1".
- 7. Mark with white enamel 2ft above concreting level at 2 or more places.

S No	Col No.	Col type		nt in ft		✓ or X)	Honeycombs	Plumb (v or X)		Reference level
			Spec.	Actual	No of rods	Size of rods		Side 1	Side 2	marked on column?
1.										Yes No
2.										Yes No
3.										Yes No
4.										Yes No
5.										Yes No
6.										Yes No
7.										Yes No
8.										Yes No
9.										Yes No
10.										Yes No
11.										Yes No
12.										Yes No
13.										Yes No
14.										Yes No
15.										Yes No
16.								_	_	Yes No
17.										Yes No