

香港特別行政區政府  
政務司司長辦公室轄下行政署



The Government of  
The Hong Kong Special Administrative Region  
Administration Wing,  
Chief Secretary for Administration's Office

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16 November 2015

Miss Flora TAI  
Clerk to the House Committee  
Legislative Council Secretariat  
Legislative Council Complex  
1 Legislative Council Road  
Central  
Hong Kong

Dear Miss Tai,

### **Special House Committee meeting on 8 October 2015**

At the special House Committee meeting on 8 October 2015, the Government was requested to provide records kept by the relevant government department(s) in respect of the inspection and checking conducted on water pipe parts/fittings used for fresh water plumbing systems of public housing estates. The supplementary information provided by the Housing Department is set out below.

Since the 1990s, the Hong Kong Housing Authority (HA) has been widely using off-site manufactured pre-cast concrete components for public housing developments to transfer more difficult in-situ construction works to a factory environment with more effective supervision. Various statutory and non-statutory measures have been put in place to ensure the quality of these off-site manufactured pre-cast concrete components, such as requiring certification of the production factory, requiring the factory to submit a Quality Assurance Scheme for HA's approval, commissioning Independent Professional Service Providers (PSPs) to supervise production in the factory, conducting regular factory visits to monitor the performance of the PSPs,

testing and checking materials etc. Relevant forms used by the PSPs in conducting supervision in factories to ensure quality of the pre-cast concrete components are at **Annex**.

Yours sincerely,

A handwritten signature in cursive script, appearing to read "Christine Wai".

( Ms Christine Wai )  
for Director of Administration

cc. Housing Department (Attn: Miss Leanne Ma)

**List of Resident Supervisor Inspection Forms**

1. Form 01 (C-1) Inspection for Works Before and During Concreting 130603 (2 pages)
2. Form 02 (F-1) Inspection Form for Finished Products 130603 (2 pages)
3. Form 03 (CT-1) Summary of Covermeter Test Witnessed by RS 130603 (1 page)
4. Form 04 (HT-1) Summary of Hammer Test Witnessed by RS 130603 (1 page)
5. Form 05 (WP-1) Summary of Works Progress 130603 (1 page)
6. Form 06 (MC-1) Summary of Checking of Materials 130603 (1 page)
7. Form 07 (DR-1) Defects Rectification Records 130603 (1 page)
8. Form 08 (ST-1) Summary of Surveillance Sampling & Testing 130603 (1 page)
9. Form 09 (SHC-1) Summary Record of Hammer & Covermeter Test 130603 (1 page)
10. Form 10 (DL-1) PCSE Delivery Record 130603 (1 page)
11. Form 11 (NCC-1) Non-Conformance Report for Works Before and During Concreting 130603 (1 page)
12. Form 12 (NCF-1) Non-Conformance Report for Finished Products 130603 (1 page)
13. Form 13 (A-1) Inspection for Finished Products (Architectural Items) 130603 (2 pages)

**Inspection for Works Before and During Concreting**

**Form no. C-1**

PCSE Factory: \_\_\_\_\_

al No.: \_\_\_\_\_

Project (Contract No.): \_\_\_\_\_

Types of PCSE\*: Volumetric Kitchen(VPK) / VPBathroom(VPB) / VPCum(VPC) / Façade(F) /  
 Beam(B) / Refuse Chute(RC) / Partition Wall(PW) / Hanger Wall (HW) / Staircase (ST) /  
 Half-landing (HL) / Semi-slab(SS) / Full-slab(FS)/Other \_\_\_\_\_ ( ) (\*Circle as  
 appropriate)

Date of Inspection: \_\_\_\_\_

| Product Type | Product I.D. | # (1) Steel Formwork | #(2) Reinforcement/Size /Number | #(3) Spacing/Chairs /Tying Wires | #(4) Lifting Inserts /Cast-in Items | #(5) Window Fixing/Lugs | # (6) Electrical Conduits /Accessories | # (7) Workmanship | # (8) Concreting | # (9) Others/ Pipe Sleeves/Floor/ Drain/Laundry/ RFID | # (10) Demoulding |
|--------------|--------------|----------------------|---------------------------------|----------------------------------|-------------------------------------|-------------------------|--|-------------------|------------------|---|-------------------|
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |
|              |              |                      |                                 |                                  |                                     |                         |  |                   |                  |   |                   |

Note: √ = Complied, X = Not Complied, NA = Not Applicable

Remarks: \_\_\_\_\_

Inspected by RS

Checked by LRS

(Name)

Date

(Name)

Date

\*See overleaf for inspection checklist, guidelines and notes.

**Inspection for Works Before and During Concreting**

**Form no. C-1 (Reverse)**

**Inspection Guidelines**

**(1) Steel Formwork**

- Mould is clean and surface is smooth. Dimensions are within MPD. Mould oil applied as specified.

**(2) Reinforcement**

- Number, size, length, position and spacing of reinforcement are provided as specified.
- Concrete cover to reinforcement is within MPD.
- Checking the usage of passed rebars.

**(3) Spacers/Chairs/Tying Wires**

- Brand name, size and type of spacers/chairs/tying wires are as specified / approved; Ends of tying wires are not encroached into cover zone.

**(4) Lifting Inserts/Cast-in Items**

- Brand name, size, number and position of lifting inserts/cast-in items are provided as specified/approved.

**(5) Window Frame/Fixing lugs**

- Brand name, setting out of window frame are provided as specified/approved;
- Fixing lugs are provided as specified/approved.

**(6) Electrical Conduits/Accessories**

- Brand name, size, routing, number and position of electrical conduits/boxes/accessories/earthing lugs are provided as specified/approved. Concrete cover to conduits/accessories is within MPD.

**(7) Workmanship**

- Steel mould/reinforcements are clean, free from contamination. Reinforcements are securely fixed.
- Steel mould is securely connected. Conduits/accessories are properly bent, fixed and jointed.
- Checking the condition of exposed aggregate at one side of pre-concreted window frame.

**(8) Concreting**

- Concreting works comply with the approved quality plan.
- To witness the Sampling of Concrete Cubes and Slump Tests on random basis.

**(9) Others/ Pipe Sleeves/Floor/ Drain/Laundry/ RFID**

- The materials are provided and installed as specified.

**(10) Demoulding**

- To check demoulding and dismantling of steel mould to be complied with the Specified / Approved method and properly carried out.
- To inspect test results of concrete cubes for demoulding in order to ensure that all PCSE are demoulded only after they have attained approved concrete strength and/or approved criteria.

**Notes**

- Record all inspections by marking: A cross (X Date) to denote a Fail; or a tick (√ Date) to denote a Pass.
- Do not use any symbols except those mentioned above.
- Identify the defects by marking the spots with appropriate method.
- Sign and record the date of each inspection.
- Inspected items are checked in accordance with the current DASM Site Inspection Guide Book & Specification Library.

**Example:**

| Product Type | Product I.D.                  | #(1)Steel Formwork | #(2)Reinforcement Sizes/Number | #(3) Spacing/Chairs /Tying Wires | #(4)Lifting Inserts /Cast-in Items | #(5)Window Fixing /Lugs | #(6) Electrical Conduits /Accessories | #(7) Workmanship | #(8) Concreting | #(9) Others Pipe Sleeves/Floor Drain/Laundry /RFID | #(10) Demoulding |
|--------------|-------------------------------|--------------------|--------------------------------|----------------------------------|------------------------------------|-------------------------|---------------------------------------|------------------|-----------------|--|------------------|
| F            | SSW/T65B/CF0505120<br>2/MFT2A | √ 1/4              | √ 1/4                          | X 1/4                            | √ 1/4                              | √ 1/4                   | X 1/4                                 | √ 1/4            | √ 1/4           | √ 1/4  | √ 2/4            |
|              |                               |                    |                                | √ 1/4                            |                                    |                         | √ 1/4                                 |                  |                 |  |                  |
| SS           | SSW/T65B/CP1605121<br>0/S17R  | √ 1/4              | × 1/4                          | √ 1/4                            | √ 1/4                              | √ 1/4                   | √ 1/4                                 | X 1/4            | √ 1/4           | N/A  | √ 2/4            |
|              |                               |                    | √ 1/4                          |                                  |                                    |                         |                                       | √ 1/4            |                 |  |                  |

**Inspection Form for Finished Products**

**Form no. F-1**

PCSE Factory: \_\_\_\_\_

al No.: \_\_\_\_\_

Project (Contract No.): \_\_\_\_\_

Types of PCSE\*: Types of PCSE\*: Volumetric Kitchen(VPK) /VPBathroom(VPB)  
 /VPCum(VPC) /Façade(F) /Beam(B) /Refuse Chute(RC) /Partition Wall(PW) /Hanger Wall (HW)  
 /Staircase (ST) /Half-landing (HL)/Semi-slab(SS) /Full-slab(FL)/ Other \_\_\_\_\_ ( ) (\*Circle  
 as appropriate)

Date of Inspection: \_\_\_\_\_

| Product Type | Product I.D. | # (1) Concrete Surface/<br>Surface Receiving Tile | # (2) Construction<br>Joints | # (3) Dimensions | # (4) Starter Bars | # (5) Engraved Logo<br>/Date /Product I.D. | # (6) Lifting Inserts | # (7) Window Frame<br>(Protection) | # (8) Electrical Conduits<br>/Accessories | # (9) Wall Tiles/Nonslip<br>Ceramic Nosing Tile | # (10) Others / Laundry<br>Rack Support /RFID | # (11) Handling/Storage<br>/Transportation | # (12) Curing | # (13) Hammer Test | # (14) Covermeter Test |
|--------------|--------------|---|------------------------------|------------------|--------------------|--|-----------------------|------------------------------------|---|---|---|--|---------------|--------------------|------------------------|
|              |              |   |                              |                  |                    |  |                       |                                    |   |   |   |  |               |                    |                        |
|              |              |   |                              |                  |                    |  |                       |                                    |   |   |   |  |               |                    |                        |
|              |              |   |                              |                  |                    |  |                       |                                    |   |   |   |  |               |                    |                        |
|              |              |   |                              |                  |                    |  |                       |                                    |   |   |   |  |               |                    |                        |
|              |              |   |                              |                  |                    |  |                       |                                    |   |   |   |  |               |                    |                        |
|              |              |   |                              |                  |                    |  |                       |                                    |   |   |   |  |               |                    |                        |
|              |              |   |                              |                  |                    |  |                       |                                    |   |   |   |  |               |                    |                        |
|              |              |   |                              |                  |                    |  |                       |                                    |   |   |   |  |               |                    |                        |
|              |              |   |                              |                  |                    |  |                       |                                    |   |   |   |  |               |                    |                        |
|              |              |   |                              |                  |                    |  |                       |                                    |   |   |   |  |               |                    |                        |

Note: √ = Complied, X = Not Complied, NA = Not Applicable

Remarks: \_\_\_\_\_

Inspected by RS

Checked by LRS

\_\_\_\_\_  
 (Name)

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 (Name)

\_\_\_\_\_  
 Date

"See overleaf for inspection checklist, guidelines and notes.

**Inspection Form for Finished Products**

**Form no. F-1 (Reverse)**

**Inspection Guidelines**

- (1) *Concrete Surface/Surface Receiving Tile*
  - *Concrete surface/surface receiving tile is free from defects.*
- (2) *Construction Joints*
  - *Construction joints are formed as per specifications and approved sample.*
- (3) *Dimensions*
  - *Dimensions are within MPD.*
- (4) *Starter Bars*
  - *Number, size and position of starter bars are provided as specified.*
- (5) *Engraved Logo /Date /Product I.D.*
  - *The engraved supplier's logo and casting date and printed Product's ID are as specified/approved and match with relevant certificates and delivery notes.*
- (6) *Lifting inserts*
  - *The cast-in items and lifting inserts are provided as specified/approved .*
- (7) *Window Frame (Protection)*
  - *Package is not damaged.*
- (8) *Electrical Conduits/Accessories/Earthing lugs*
  - *Brand name, size, routing, number and position of electrical conduits and accessories are provided as specified/approved. Concrete cover to conduits/accessories is within MPD. The earthing lugs are tested for electrical continuity.*
- (9) *Wall Tiles/Non-slip Ceramic Nosing Tile*
  - *The materials are provided and installed as specified.*
- (10) *Others / Laundry Rack Support /RFID*
  - *Installed as specified.*
- (11) *Handling/Storage/Transportation*
  - *The stage works comply with the approved quality plan.*
- (12) *Curing*
  - *The curing works are carried out as per specifications.*
- (13) *Hammer Tests*
  - *Schmidt hammer tests for early strength concrete have been carried out at the specified frequency (5%) and the results were satisfactory.*
- (14) *Covermeter Tests*
  - *Covermeter tests have been carried out at the specified frequency (5%) and no failed location found.*

**Notes**

- (1) *Record all inspections by marking:*
  - *a cross ( x Date ) to denote a Fail*
  - *a tick ( ✓ Date ) to denote a Pass*
- (2) *Do not use any symbols except those mentioned above.*
- (3) *Identify the defects by marking the spots with appropriate method.*
- (4) *Sign and record the date of each inspection.*

Hong Kong Housing Authority  
Professional Services for Factory Inspection on Precast Concrete Components Produced in  
South Region of Guangdong Province of China  
HKHA Agreement No. \_\_\_\_\_

**Summary of Covermeter Test Witnessed by RS**

**Form no. CT-1**

PCSE Factory: \_\_\_\_\_

Serial No.: \_\_\_\_\_

Project (Contract No.): \_\_\_\_\_

Date : \_\_\_\_\_

| Product I.D. | Type of PCSE | Casting Date | Testing Date | Testing Result | Remarks |
|--------------|--------------|--------------|--------------|----------------|---------|
|              |              |              |              |                |         |
|              |              |              |              |                |         |
|              |              |              |              |                |         |
|              |              |              |              |                |         |
|              |              |              |              |                |         |
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|              |              |              |              |                |         |
|              |              |              |              |                |         |
|              |              |              |              |                |         |
|              |              |              |              |                |         |

Note: \* PCSE cast on Sunday/Public Holiday/Rest Day

Remarks: \_\_\_\_\_

Prepared by RS .

Checked by LRS .

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
Date

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
Date



**Summary of Schmidt Hammer Test Witnessed by RS**

**Form no. HT-1**

PCSE Factory: \_\_\_\_\_ Serial No.: \_\_\_\_\_

Project (Contract No.): \_\_\_\_\_

Date : \_\_\_\_\_

| Products ID Number | Type of PCSE | Casting Date | Testing Date | Testing Result | Remarks |
|--------------------|--------------|--------------|--------------|----------------|---------|
|                    |              |              |              |                |         |
|                    |              |              |              |                |         |
|                    |              |              |              |                |         |
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|                    |              |              |              |                |         |
|                    |              |              |              |                |         |
|                    |              |              |              |                |         |
|                    |              |              |              |                |         |

Note: \* PCSE cast on Sunday/Public Holiday/Rest Day

Remarks: \_\_\_\_\_

Inspected by RS of \_\_\_\_\_

Checked by LRS of \_\_\_\_\_

(Name)

Date

(Name)

Date

**Summary of Works Progress**

**Form no. WP-1**

PCSE Factory: \_\_\_\_\_ Serial No.: \_\_\_\_\_

Project (Contract No.): \_\_\_\_\_

Date : \_\_\_\_\_

| Types of PCSEs          | Total Number of PCSEs to be produced for the Project | Number of PCSEs Produced for this Month | Total Number of PCSEs Produced up to this Month | Percentage of Completion |
|-------------------------|--|---|---|--------------------------|
| Volumetric Kitchen(VPK) |  |   |   |                          |
| VPBathroom(VPB)         |  |   |   |                          |
| VP Cum(VPC)             |  |   |   |                          |
| Façade(F)               |  |   |   |                          |
| Beam(B)                 |  |   |   |                          |
| Refuse Chute(RC)        |  |   |   |                          |
| Partition Wall(PW)      |  |   |   |                          |
| Hanger Wall (HW)        |  |   |   |                          |
| Staircase (ST)          |  |   |   |                          |
| Half-landing (HL)       |  |   |   |                          |
| Semi-slab(SS)           |  |   |   |                          |
| Other                   |  |   |   |                          |
| Total                   |  |   |   |                          |

Remarks: \_\_\_\_\_

Inspected by RS

Checked by LRS

\_\_\_\_\_  
 (Name)

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 (Name)

\_\_\_\_\_  
 Date

**Summary of Checking of Materials**

**Form no. MC-1**

PCSE Factory: \_\_\_\_\_ Serial No.: \_\_\_\_\_

Project (Contract No.): \_\_\_\_\_

Date : \_\_\_\_\_

| Materials               | Approved Brand/Supplier | Date of Checking | Shelf Life | Application | Remarks |
|-------------------------|-------------------------|------------------|------------|-------------|---------|
| Tile Adhesive & Grout   |                         |                  |            |             |         |
| Nosing Tile             |                         |                  |            |             |         |
| Tactile                 |                         |                  |            |             |         |
| uPVC Electrical conduit |                         |                  |            |             |         |
| uPVC Drain Pipe         |                         |                  |            |             |         |
|                         |                         |                  |            |             |         |
|                         |                         |                  |            |             |         |
|                         |                         |                  |            |             |         |
|                         |                         |                  |            |             |         |

Note:

1. Inspection on the above materials shall be carried out not less than twice a month.
2. The tile adhesive, tile grout, uPVC and accessories shall be used the Approved brands.
3. The tile adhesive, tile grout and accessories shall be used before the date of expiry.
4. The application of tile adhesive, tile grout, and accessories shall be in accordance with Manufacturer's recommendation/instructions.

Remarks: \_\_\_\_\_

Inspected by RS

Checked by LRS

\_\_\_\_\_  
 (Name)

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 (Name)

\_\_\_\_\_  
 Date

Hong Kong Housing Authority  
 Professional Services for Factory Inspection on Precast Concrete Components Produced in  
 South Region of Guangdong Province of China  
HKHA Agreement No.

**Defects Rectification Records**

**Form no. DR-1**

PCSE Factory: \_\_\_\_\_ Serial No.: \_\_\_\_\_  
 Project (Contract No.): \_\_\_\_\_  
 Date : \_\_\_\_\_

| Type of<br>PCSE | Product<br>I.D. | Defects Identified |      |                 |                                     | Inspection after Rectification |      |              | Remarks |
|-----------------|-----------------|--------------------|------|-----------------|-------------------------------------|--------------------------------|------|--------------|---------|
|                 |                 | Details of Defects | Date | Inspected<br>by | Relevant<br>Inspection<br>Form Nos. | Inspection<br>Result           | Date | Inspected by |         |
|                 |                 |                    |      |                 |                                     |                                |      |              |         |
|                 |                 |                    |      |                 |                                     |                                |      |              |         |
|                 |                 |                    |      |                 |                                     |                                |      |              |         |
|                 |                 |                    |      |                 |                                     |                                |      |              |         |

Note: 1. Details of rectification works refer to the approved Quality Assurance Plan.  
 2. (√) = satisfactory and (x) = unsatisfactory.

Remarks: \_\_\_\_\_

Inspected by RS

Checked by LRS

(Name)

Date

(Name)

Date

Hong Kong Housing Authority  
Professional Services for Factory Inspection on Precast Concrete Components Produced in  
South Region of Guangdong Province of China  
HKHA Agreement No.:

**Summary of Surveillance Sampling & Testing**

**Form no. ST-1**

PCSE Factory: \_\_\_\_\_

Serial No.: \_\_\_\_\_

Project (Contract No.): \_\_\_\_\_

Date : \_\_\_\_\_

| Date of Sampling | Materials         | Type of Testing | Number of Sample | Result | Date of Test Report Received | Remarks |
|------------------|-------------------|-----------------|------------------|--------|------------------------------|---------|
| 1 July 2011      | Cement            | Physical        |                  |        |                              |         |
|                  | Aggregate<br>10mm |                 |                  |        |                              |         |
|                  | Aggregate<br>20mm |                 |                  |        |                              |         |
|                  | Stone Fines       |                 |                  |        |                              |         |
|                  | GGBS              |                 |                  |        |                              |         |
|                  |                   |                 |                  |        |                              |         |
|                  |                   |                 |                  |        |                              |         |
|                  |                   |                 |                  |        |                              |         |
|                  |                   |                 |                  |        |                              |         |
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|                  |                   |                 |                  |        |                              |         |
|                  |                   |                 |                  |        |                              |         |
|                  |                   |                 |                  |        |                              |         |
|                  |                   |                 |                  |        |                              |         |

Remarks: \_\_\_\_\_

Prepared by LRS

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
Date

**Summary Record of Hammer & Covermeter Test**

**Form no. SHC-1**

PCSE Factory: \_\_\_\_\_ Serial No.: \_\_\_\_\_

Project (Contract No.): \_\_\_\_\_

Date : \_\_\_\_\_

| Type of PCSE | Number of PCSEs produced this month | No. of Hammer Test | Percentage of Hammer Test for this month (%) | No. of Covermeter Test | Percentage of Covermeter Test of this month (%) |
|--------------|-------------------------------------|--------------------|--|------------------------|---|
| Façade (e.g) |                                     |                    |  |                        |   |
|              |                                     |                    |  |                        |   |
|              |                                     |                    |  |                        |   |
|              |                                     |                    |  |                        |   |
|              |                                     |                    |  |                        |   |
|              |                                     |                    |  |                        |   |
|              |                                     |                    |  |                        |   |
|              |                                     |                    |  |                        |   |
|              |                                     |                    |  |                        |   |
|              |                                     |                    |  |                        |   |
|              |                                     |                    |  |                        |   |

Remarks: \_\_\_\_\_

Inspected by RS

Checked by LRS

\_\_\_\_\_  
 (Name)

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 (Name)

\_\_\_\_\_  
 Date

Hong Kong Housing Authority  
 Professional Services for Factory Inspection on Precast Concrete Components Produced in  
 South Region of Guangdong Province of China  
 HKHA Agreement No. \_\_\_\_\_

**PCSE Delivery Record**

**Form no. DL-1**

PCSE Factory: \_\_\_\_\_

Serial No. \_\_\_\_\_

Project (Contract No.): \_\_\_\_\_

| Delivery Date | Product Type | Product I.D. | Detailed Inspection Before Concreting | Schmidt Hammer Test | Inspection on Finished Product before Delivery | Cover meter Test | Delivery Docket No. | Remarks |
|---------------|--------------|--------------|---------------------------------------|---------------------|--|------------------|---------------------|---------|
|               |              |              |                                       |                     |  |                  |                     |         |
|               |              |              |                                       |                     |  |                  |                     |         |
|               |              |              |                                       |                     |  |                  |                     |         |
|               |              |              |                                       |                     |  |                  |                     |         |
|               |              |              |                                       |                     |  |                  |                     |         |

Remarks: \_\_\_\_\_

- Note: i) Any non-conformities should be marked in remark column;  
 ii) PQCM of PCSE Factory should be notified for any Non-conformities; and  
 iii) PQCM of PCSE Factory should confirm the Non-conformities have been rectified, if any.

Prepared by RS

N.C. in Remarks column  
 has been rectified

Checked by LRS

\_\_\_\_\_  
 (Name)                      Date

\_\_\_\_\_  
 (Name/PQCM)              Date

\_\_\_\_\_  
 (Name)                      Date

**Non-Conformance Report for Works Before and During Concreting      Form no. NCC-1**

PCSE Factory: \_\_\_\_\_ Serial No.: \_\_\_\_\_

Project (Contract No.): \_\_\_\_\_

Types of PCSE\*: Volumetric Kitchen(VPK) / VPBathroom(VPB) / VPCum(VPC) / Façade(F) /  
 Beam(B) / Refuse Chute(RC) / Partition Wall(PW) / Hanger Wall (HW) / Staircase (ST) /  
 Half-landing (HL) / Semi-slab(SS) / Other \_\_\_\_\_ ( ) (\*Circle as appropriate)

Date of Inspection: \_\_\_\_\_

Product Type:   F        Product I.D. : \_\_\_\_\_

Non-compliance Items: \*(1) / (2) / (3) / (4) / (5) / (6) / (7) / (8) / (9) / (10) / \_\_\_\_\_ (other)

**Deficiencies Identified for Each Non-Compliance Items:**

| Item | Deficiencies Identified |
|------|-------------------------|
|      |                         |

**Date of Rectification Works :** \_\_\_\_\_

**Rectification Works for Each Non-Compliance Items:**

| Item | Rectification Works |
|------|---------------------|
|      |                     |

Remarks: \_\_\_\_\_

Inspected by RS \_\_\_\_\_

Checked by LRS \_\_\_\_\_

\_\_\_\_\_  
 (Name)

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 (Name)

\_\_\_\_\_  
 Date



**Non-Conformance Report for Finished Products**

**Form no. NCF-1**

PCSE Factory: \_\_\_\_\_ Serial No.: \_\_\_\_\_

Project (Contract No.): \_\_\_\_\_

Types of PCSE\*: Volumetric Kitchen(VPK) / VPBathroom(VPB) / VPCum(VPC) / Façade(F) /  
 Beam(B) / Refuse Chute(RC) / Partition Wall(PW) / Hanger Wall (HW) / Staircase (ST) /  
 Half-landing (HL) / Semi-slab(SS) / Other \_\_\_\_\_ ( ) (\*Circle as appropriate)

Date of Inspection: \_\_\_\_\_

Product Type: \_\_\_\_\_ Product I.D. : \_\_\_\_\_

Non-compliance Items: \*(1) / (2) / (3) / (4) / (5) / (6) / (7) / (8) / (9) / (10) / (11) / (12) / (13) / (14)  
 / \_\_\_\_\_ (other)

**Deficiencies Identified for Each Non-Compliance Items:**

| Item | Deficiencies Identified |
|------|-------------------------|
|      |                         |

Date of Rectification Works: \_\_\_\_\_

**Rectification Works for Each Non-Compliance Items:**

| Item | Rectification Works |
|------|---------------------|
|      |                     |

Remarks: \_\_\_\_\_

Inspected by RS

Checked by LRS

\_\_\_\_\_  
 (Name)

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 (Name)

\_\_\_\_\_  
 Date

**Inspection Form for Finished Products (Architectural Items)**

**Form no. A-1**

PCSE Factory: \_\_\_\_\_ Serial No.: \_\_\_\_\_

Project (Contract No.): \_\_\_\_\_

Types of PCSE : Volumetric Precast Bathroom(VPB)/ Volumetric Precast Kitchen(VPK)/  
 Volumetric Precast Bathroom cum Kitchen(VPC)

Date of Inspection: \_\_\_\_\_

| Product Type | Product I.D. | # (1) Waterproofing<br>Item 3,4,5,6,7 (10%) | # (2) Painting<br>Item 2,3,4 (10%) | # (2) Painting<br>Item 5,7 (Random) | # (3) Wall Tiles<br>Item 3,4,6,8,9,10,11,12,13 (10%) | # (3) Wall Tiles<br>Item 2,5 (Random) | # (4) Floor Tiles<br>Item 3,4,6,8,9,10,11,12,13,14 (10%) | # (4) Floor Tiles<br>Item 2,5 (Random) | # (5) Screeding<br>Item 2,5,7,8,9 (10%) | # (5) Screeding<br>Item 3,4 (Random) | # (6) Aluminum Window Installation<br>Item 3,4,5,6,7,8 (10%) | # (6) Aluminum Window Installation<br>Item 1,2 (Random) | # (7) Shower Tray<br>Item 1,2,3,4,5 (10%) |
|--------------|--------------|---|------------------------------------|-------------------------------------|--|---------------------------------------|--|--|---|--------------------------------------|--|---|---|
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |
|              |              |   |                                    |                                     |  |                                       |  |  |   |                                      |  |   |   |

Note: √ = Complied, x = Not Complied, NA = Not Applicable

Remarks: \_\_\_\_\_

Inspected by RS

Checked by LRS

(Name) \_\_\_\_\_ Date \_\_\_\_\_

(Name) \_\_\_\_\_ Date \_\_\_\_\_

\*See overleaf for inspection checklist, guideline and notes.

**Inspection Guidelines**

| Waterproofing WAT6.03    |                          |
|--------------------------|--------------------------|
| Item                     | Recommended Inspection % |
| 3 Background Preparation | 10%                      |
| 4 Materials & Type       | 10%                      |
| 5 Application            | 10%                      |
| 6 Thickness and coats    | 10%                      |
| 7 Curing and Protection  | 10%                      |

| Floor Tiles FIN5.03       |                          |
|---------------------------|--------------------------|
| Item                      | Recommended Inspection % |
| 2 Material, Type and Size | Random                   |
| 3 Background Preparation  | 10%                      |
| 4 Tile Preparation        | 10%                      |
| 5 Mixing of Bedding       | Random                   |
| 6 Bedding & Fixing        | 10%                      |
| 8 Tile Joint              | 10%                      |
| 9 Grouting                | 10%                      |
| 10 Finish                 | 10%                      |
| 11 Levels & Falls         | 10%                      |
| 12 Alignment of Joints    | 10%                      |
| 13 Cleanliness            | 10%                      |
| 14 Soundness              | 10%                      |

| Screeding FIN3.01        |                          |
|--------------------------|--------------------------|
| Item                     | Recommended Inspection % |
| 2 Background Preparation | 10%                      |
| 3 Mix of Screed          | Random                   |
| 4 Laying Screeds         | Random                   |
| 5 Thickness of Screeds   | 10%                      |
| 7 Finish                 | 10%                      |
| 8 Evenness & Fall        | 10%                      |
| 9 Soundness              | 10%                      |

| Painting FIN7.01                  |                          |
|-----------------------------------|--------------------------|
| Item                              | Recommended Inspection % |
| 2 Background Preparation          | 10%                      |
| 3 Wood Preservative / Sealer      | 10%                      |
| 4 Stop, Knot and Prime            | 10%                      |
| 5 Mixing and Application of Paint | Random                   |
| 7 Undercoats                      | Random                   |

| Aluminium Windows Installation COM2.03 |                          |
|--|--------------------------|
| Item                                   | Recommended Inspection % |
| 1 Pivot and Stay                       | Random                   |
| 2 Drainage                             | Random                   |
| 3 Bituminous Paint                     | 10%                      |
| 4 Fixing Lugs                          | 10%                      |
| 5 Transom & Mullion Stiffener          | 10%                      |
| 6 Positioning & Fixing                 | 10%                      |
| 7 Protection                           | 10%                      |
| 8 Equipotential Bonding                | 10%                      |

| Wall Tiles (Internal) FIN5.01 |                          |
|-------------------------------|--------------------------|
| Item                          | Recommended Inspection % |
| 2 Materials, Type and Size    | Random                   |
| 3 Background Preparation      | 10%                      |
| 4 Tiles Preparation           | 10%                      |
| 5 Mixing of Bedding           | Random                   |
| 6 Bedding & Fixing            | 10%                      |
| 8 Tile Joints                 | 10%                      |
| 9 Grouting                    | 10%                      |
| 10 Finish                     | 10%                      |
| 11 Cleanliness                | 10%                      |
| 12 Evenness & Alignment       | 10%                      |
| 13 Soundness                  | 10%                      |

| Miscellaneous Works - Shower tray MIS.01 |                          |
|--|--------------------------|
| Item                                     | Recommended Inspection % |
| 1 Dimension Check                        | 10%                      |
| 2 Surface Quality                        | 10%                      |
| 3 Two-way floor drain                    | 10%                      |
| 4 Galvanized mesh under shower tray      | 10%                      |
| 5 Protection                             | 10%                      |

**Note:**

- (1) Do not use any symbols except those mentioned above.
- (2) Identify the defects by marking the spots with appropriate method.
- (3) Sign and record the date of each inspection.
- (4) Inspection for painting is applied for KT1A project
- (5) Inspection for shower tray is applied for KT1B project
- (6) Examples for showing how to use the form:

Example 1: If RS inspected Item 3 of any work stage and found passed, then the corresponding cell shall be filled as:

|   |   |
|---|---|
| 3 | √ |
|---|---|

Example 2: If RS inspected all items of any work stage and found passed, then the corresponding cell shall be filled as:

|   |   |
|---|---|
| A | √ |
|---|---|

Example 3: If RS inspected Item 5 of any work stage and found failed, then the corresponding cell shall be filled as:

|   |   |
|---|---|
| 5 | x |
| 5 | √ |

If re-inspection passed, the lower cell shall be filled as: