

# **THE HONG KONG HOUSING AUTHORITY**

## **Memorandum for the Housing Authority**

### **Interim Report - Initiatives on Quality Public Housing Production**

#### **PURPOSE**

To inform Members of current initiatives to ensure the quality of public housing production.

#### **BACKGROUND**

2. The Housing Authority (HA) has a record of steady incremental improvements to the design and construction of public housing. Quality has risen in line with rising public aspirations. However, during the meeting of the Housing Authority on 4 June 1998, several Members expressed their views that more should be done to ensure the quality of the finished product.

3. This paper sets out briefly what has already been achieved. It then goes on to describe initiatives currently in train and measures being taken to strengthen the monitoring of the public housing production, especially during the forthcoming two to three years period when production is at an all time peak.

#### **PRESENT POSITION**

4. Over the last few years have seen significant improvements to design and construction. Technically, the department has changed designs to improve durability, established materials testing independent from the contractor, set up technical unit to action design feedback, developed testing methods for windows and drainage, adopted precast facade to improve quality. In the selection of contractors, the department has also linked tendering opportunities to performance through Performance Assessment

Scoring System (PASS) and required contractors to be certified to the quality assurance standard ISO 9000.

5. A number of working groups have been established within the department to examine areas for further improvement. These covered all stages of work including design, tender, construction, handover and defects rectification. The Building Committee (BC) had started to examine how to change the contractor culture with a view to improving quality (BC 7/98). This includes improving work skills and stability of employment, reducing extent of subcontracting, rewards and penalties for performance and design for buildability. This paper also serves to respond to the BC's concern. Full recommendation by the working groups will be put to the BC in November 1998. Proposals in hand related to improvements on construction, handover and defects rectification are set out below.

## **OBJECTIVE**

6. HA is the largest housing developer in Hong Kong. The department's concern for quality stretches from individual project level to that of a global level. They can be examined under the following perspectives -

- On individual project level, timely delivery of quality product in accordance with design requirement, specification and within agreed cost limit.
- On a global level, guaranteed consistency in delivery of quality end product.

7. Detailed objectives are developed corresponding to stages of work. They are -

<b>Stage of Work</b>	<b>Detailed Objectives</b>
All stages	· Benchmarking and reinforcing quality target
Commencement	· Get right at source
Construction	· Site vigilance · Hardline contract enforcement
Completion	· Good goal-keeping · Cleanliness
Handover	· Communication and interface
Defects rectification	· Quick and effective rectification of defects

## **KEY INITIATIVES**

8. Having established the detailed objectives by stages of work, initiatives are further formulated under the categories of Quick-Wins Contract Management, Site Supervision and Independent Performance Assessment.

## **QUICK-WINS**

9. Pending the completion of the quality review exercise by various working groups, the Department had already communicated on various public occasions on the commitment on quality. Drastic actions were also taken in cases where contractors continuously failed to improve. Directorate-led check-points' would soon be implemented to reinforce the quality message across the board on critical stages of work. Key initiatives are as follows -

- (a) Check point no. 1 to affirm quality target at sample wing.
- (b) Check point no. 2 to reinforce target at intermediate finishing stage and empower decisive action whenever necessary.
- (c) Check point no. 3 to back-up requirement for high quality end-product at pre-handover.

## **CONTRACT MANAGEMENT**

10. Contract management is being reviewed to curb contract deviations at source through hard-line approach. Customer satisfaction is given due emphasis during construction, handover and defects rectification stages. Key initiatives are as follows -

(a) During Construction

- Streamline mechanism to withhold payment and removal of work not satisfying contract requirement.
- Strengthen and enforce contract requirement for certified tradesman and qualified superintendent.

(b) During Completion

- Reinforce goal-keeping through validation by Quality Assessor.
- Upgrade and enforce stringent cleansing criteria under the contract.

(c) During Handover

- Define handover criteria, strengthen interface, communication between branches and early involvement of Private Management Agencies (PMA).

(d) During Defects Rectification

- Introduce staged release of retention as positive inducement for quick and effective defects rectification within two months from substantial completion.

## **SITE SUPERVISION**

11. Site supervision is being reviewed to address the problem of staff shortage and to put in place more effective inspection mechanism. Key initiatives are as follows -

(a) During Construction

- Reinforce process-oriented check for better assurance over safety and workmanship.
- Effectively organize focused inspection on critical aspects.
- Step-up on-job training and directions to junior staff.
- Allow adequate staff support.
- Establish task force/outsource for extensive investigation on necessity basis.

(b) During Completion

- Establish task force/outsource for functional testing and inspection including water tightness, waterproofing, formwork tieholes, etc.
- Step-up checking for non-domestic elements.

## **INDEPENDENT PERFORMANCE ASSESSMENT**

12. Production bunching, increasing outsourcing and the move towards mixed developments are positive calls for a quality benchmark under the single umbrella of HA. The existing PASS is being reviewed by one of the working groups for more objective and consistent scoring by independent team.

13. Apart from being a reliable tool for selection of good performance contractor, one of the prime objective of the Modified PASS' is to provide quality guarantee against target benchmarks at critical stages of work in longer term. Key initiatives are as follows -

- (a) Before Commencement
  - Introduce measurable, acceptable target range of sample flats and sample trades for all to abide before tender.
- (b) During Construction
  - Merging database with daily inspection records and testing records for more reliable performance analysis.
- (c) During Completion
  - Introduce one-off comprehensive check on substantial completion to gauge quality of end product.
- (d) During Defects Rectification
  - Take into account defects rectification for tendering and bonus considerations.

## **EXECUTIVE SUMMARY**

14. Summary of Key Initiatives on Quality Public Housing  
— Production in matrix form is at **Annex**.

## **INFORMATION**

15. Members are requested to note the interim progress on the current initiatives regarding quality improvements for public housing production. The overall consolidated recommendations will be submitted to BC and reported back to HA at a later stage.

---0---0---0---

File Ref. : HD(AR)Vet6/1/9  
Date : 14 September 1998

**Summary of Key Initiatives on Quality Housing Production**  
**(Commencement, Construction, Completion, Handover and Defects Making Good Stages)**

Stage of Work	Objective	Key Initiatives			
		Quick-Wins - Directorate led	Contract Management	Site Supervision	Independent Performance Assessment
Commencement	Get right at source	<ul style="list-style-type: none"> <li>Checkpoint No. 1 - affirm target at sample wing.</li> </ul>			<ul style="list-style-type: none"> <li>Establish target range of sample flats, sample trades before tender.</li> </ul>
Construction	Site vigilance Hardline contract enforcement	<ul style="list-style-type: none"> <li>Checkpoint No. 2 - reinforce target at intermediate finishing stage and empower decisive action whenever necessary.</li> </ul>	<ul style="list-style-type: none"> <li>Withhold payment/ removal of defective work not satisfying contract requirement.</li> <li>Certified tradesman and qualified superintendent.</li> </ul>	<ul style="list-style-type: none"> <li>Process-oriented check.</li> <li>Focused inspection.</li> <li>Training/direction.</li> <li>Adequate staff resources support.</li> <li>Task force/outsource investigation.</li> </ul>	<ul style="list-style-type: none"> <li>Merging database with daily inspection record for more objective and reliable performance analysis.</li> </ul>
Completion	Good goal-keeping Cleanliness	<ul style="list-style-type: none"> <li>Checkpoint No. 3 - backup high quality end product at pre-handover.</li> </ul>	<ul style="list-style-type: none"> <li>Reinforce goal-keeping by Quality Assessor.</li> <li>Upgrade cleansing standard.</li> </ul>	<ul style="list-style-type: none"> <li>Task force/outsource functional testing/inspection.</li> <li>Strengthen inspection on non-domestic elements.</li> </ul>	<ul style="list-style-type: none"> <li>One-off comprehensive check to gauge quality of end product.</li> </ul>
Handover	Communication and interface		<ul style="list-style-type: none"> <li>Define handover criteria.</li> <li>Strengthen interface, communication and early involvement of PMA.</li> </ul>		
Defects Rectification	Quick/Effective rectification of defects		<ul style="list-style-type: none"> <li>Retention induced quick and effective defects rectification.</li> </ul>		<ul style="list-style-type: none"> <li>Take into account defects rectification for tendering consideration.</li> </ul>