

Corruption Prevention Checklist

Building Projects Adopting

MODULAR INTEGRATED CONSTRUCTION (MiC)





Introduction

MiC is an innovative construction method adopting the concept of “factory assembly followed by on-site installation”. It involves construction and fabrication activities in factories, which are usually located outside Hong Kong. For an MiC project, the contractor may appoint an MiC factory as a subcontractor, subject to the vetting and approval of the project client and/or its consultant (if one is engaged). To ensure the quality of the MiC modules, the project client and/or its consultant may deploy inspecting staff stationed full time or on a need basis at the MiC factory to supervise the construction and fabrication activities in the factory.

Given the territorial constraint and the current COVID-19 pandemic hampering effective supervision of the inspecting staff stationed at the MiC factory, there is a higher risk of them being compromised and bribed for lax supervision and acceptance of substandard works. In addition, the modules accepted at the MiC factory are exposed to the risk of being tampered with and the expensive / safety critical fixtures in the modules, e.g. fire safety and building service installations, are subject to unauthorised replacement by substandard ones at storage areas or during transportation, with or without the corrupt connivance of compromised inspecting staff.

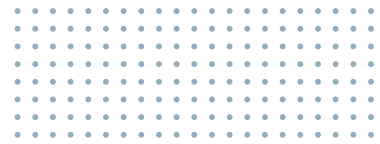
Corruption Prevention Checklist

In view of the above risks of corruption and malpractices and to assist project clients and/or their consultants in strengthening the corruption prevention measures in the integrity management of inspecting staff and the quality control of MiC modules in factories, the Corruption Prevention Department has prepared the following corruption prevention checklist for reference by project clients and/or their consultants when undertaking building projects adopting MiC.

(a) Integrity Management and Logistics Arrangement

(i) Inspecting Staff

- ✔ Issue a code of conduct or probity guidelines to all inspecting staff on, among other things, -
 - prohibition of offering, solicitation and acceptance of advantage and excessive/lavish entertainment in relation to their inspection duties;
 - avoidance and declaration of any actual, potential or perceived conflict of interest with contractors and MiC factory operators, and provide procedures for handling declared conflict of interest;



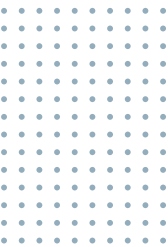
- ✔ Avoid requiring contractors or MiC factory operators to arrange and bear the expenses of transportation, accommodation and hospitalities for inspecting staff. If there are operational needs to do so, -
 - require inspecting staff to seek prior approval of designated senior staff for accepting transportation, accommodation and hospitalities arranged by contractors or MiC factory operators;
 - specify the maximum standards of transportation, accommodation and hospitalities provided by contractors or MiC factory operators, and require inspecting staff to report any provisions exceeding the specified standards;
- ✔ Reimburse inspecting staff for any expenses incurred in relation to their inspection duties directly, and prohibit them from seeking reimbursement from contractors or MiC factory operators;

(ii) Contractors / MiC Factory Operators

- ✔ Include in contract/subcontract documents probity clauses to commit contractors, MiC factory operators as well as their directors, agents and employees to ethical practices covering, among other things, -
 - prohibition of offering, solicitation and acceptance of advantage when conducting business in relation to the contracts/subcontracts;
 - avoidance and declaration of any actual, potential and perceived conflict of interest, and provide procedures for handling declared conflict of interest;

(b) Vetting and Approval of MiC Factories

- ✔ Lay down clear and objective criteria/requirements for the vetting and approval of MiC factories. The criteria/requirements may include -
 - implementing relevant quality assurance systems, e.g. ISO 9001, for key operations in factories, covering fabrication, inspection, testing, storage and handling of MiC modules and related installations and equipment;
 - maintaining effective security systems to guard against tampering with accepted MiC modules and related installations and equipment, e.g. designating different storage areas for accepted/tested modules and those pending inspection/testing; monitoring key operations in strategic locations of factories by closed-circuit televisions (CCTV);

- 
- adopting effective monitoring systems to ensure the authenticity and traceability of completed MiC modules and related installations and equipment, e.g. using radio-frequency identification (RFID) systems to monitor and record the movement of completed MiC modules and related installations and equipment;

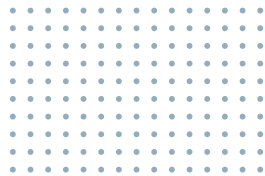
(c) Supervision of Works in MiC Factories

- ✓ Draw up a supervision plan for the construction of MiC modules and related installations and equipment in factories. The supervision plan should set out, inter alia, -
 - the critical activities subject to inspections, e.g. checking of materials / equipment delivered to MiC factories, fixing of reinforcing steel bars, selection of materials / equipment for compliance tests;
 - the frequencies of and the ranks of inspecting staff responsible for the inspections, e.g. full-time and continuous supervision on concreting, sample checks on non-safety critical building service installations;
 - the requirement on proper documentation of the inspection results, follow-up actions taken / to be taken, with supporting photos / videos and/or checklists containing all essential inspection items;
- ✓ Regularly monitor the implementation of the supervision plan to detect and deter non-compliance and, if necessary, review and update the plan to meet the changing operational needs;
- ✓ For high-value and/or safety critical installations and equipment in MiC modules, consider using anti-tampering tapes to identify and seal them after they are inspected and accepted with a view to protecting them against unauthorised tampering or replacement;
- ✓ Regularly reconcile the quantities of materials and equipment delivered to factories, tested and approved, and used/installed in completed MiC modules to detect and deter malpractices, e.g. use of untested materials in the fabrication process;
- ✓ If compliance tests on materials, installations and/or equipment are conducted outside Hong Kong, subject those tests to the same standards and requirements on tests conducted in Hong Kong, e.g. adopting the same sampling and testing standards, frequencies and methods;
- ✓ If compliance tests are conducted in Hong Kong, put in place effective security measures to prevent test samples from being tampered with during cross-border transportation, e.g. identification and storage of test samples using anti-tampering tapes and/or bags, transportation of test samples under the supervision of inspecting staff;

- ✔ With the aid of information technologies, conduct random and remote supervisory checks to ensure the proper conduct of works supervision by inspecting staff, e.g. conducting real-time supervisory checks through video-telephony or other instant communication software;
- ✔ For more corruption prevention measures / best practices on quality control of materials and supervision of works on site, please refer to the **Corruption Prevention Guide on Works Supervision**, which can be downloaded at the following website -



https://cpas.icac.hk/EN/Info/Lib_List?cate_id=3&id=2565



(d) Safekeeping and Transportation of MiC Modules

- ✔ Through the use of built-in RFID tags or other security labels, assign a unique number or code to each completed MiC module to enhance its identification and traceability during storage and transportation;
- ✔ Keep completed and accepted MiC modules and related installations and equipment at designated areas which are subject to CCTV surveillance;
- ✔ Regularly review the CCTV footages to detect any suspicious activities or malpractice, e.g. tampering with material samples pending test or accepted modules pending delivery;
- ✔ Transport completed modules from MiC factories to construction sites by designated vessels/trucks equipped with global-positioning tracking devices to monitor and record the movement of the modules;

(e) Inspection and Acceptance of Modules on Site

- ✔ Upon delivery of completed modules to construction sites, ascertain the authenticity of the modules and high-value / safety critical installations and equipment by checking built-in RFID tags, security labels and/or anti-tampering tapes, etc;
- ✔ Draw up an acceptance plan / checklist to set out the essential items, installations and/or equipment of the modules for inspections, the ranks of site supervisory staff responsible and the documentation requirement for the inspection results and any follow-up actions taken / to be taken;
- ✔ Where necessary and practicable, conduct (non-destructive) compliance tests to verify the quality of the modules and related installations and equipment;

(f) Contract Payments and Related Procedures

- ✔ If contractors are allowed to apply for interim payments for completed MiC modules before they are delivered to construction sites, put in place measures to ensure that payments are processed and certified in a proper and accountable manner, such as -
 - requiring contractors to provide supporting documents, e.g. work records in the factories, photos showing the modules being stored at the designated secured area with clear identification of the owner, for their payment applications;
 - checking payment applications against inspection and testing records of MiC modules in factories maintained by inspecting staff;
 - including provisions in contracts to ensure that the title to completed MiC modules passes to project clients upon payments, and require contractors to provide payment bond to cover the value of the modules.



The Corruption Prevention Advisory Service (CPAS) of the Corruption Prevention Department of ICAC provides free, confidential and tailor made service to private organisation including non-governmental organisations. Please contact CPAS through the following channels:

- ☎ 2526 6363
- 📠 2522 0505
- ✉ cpas@cpd.icac.org.hk
- 💻 <http://cpas.icac.hk>

