#### Code of Practice for the Mandatory Building Inspection Scheme and the Mandatory Window Inspection Scheme

The Buildings Department has set up a Technical Committee (TC) to, among others, collect and consider the views and feedback from the building industry arising from the use of the Code of Practice for the Mandatory Building Inspection Scheme and the Mandatory Window Inspection Scheme 2012 (the Code). Taking into account the advice of the TC, the following amendments to the Code have been promulgated and the Code (2023 Edition)<sup>1</sup> incorporating all these amendments has been uploaded to BD website www.bd.gov.hk:

- (a) Appendix A September 2014;
- (b) Appendix B March 2017;
- (c) Appendix C April 2018;
- (d) Appendix D July 2020; and
- (e) Appendix E January 2022.

(YU Po-mei, Clarice) Building Authority

#### Ref. : BD GR/1-125/101/0 (IV) BD GR/1-50/88/0 (IV)

First issueJanuary 2022This revisionMay 2023 (AD/MBI) (Paragraph 1 amended and footnote1 added)

<sup>&</sup>lt;sup>1</sup> Include textual refinement and improvement of the numbering system for easy cross reference.

# Amendments to the Code of Practice for (PNBI-10) the Mandatory Building Inspection Scheme and the Mandatory Window Inspection Scheme 2012 (15 September 2014)

Item	Clause	2012 Original Version	2014 Amendments	Remarks
1	After the 3 <sup>rd</sup> paragraph of Section 8	The inspection shall cover all windows and glass louvers including window walls in individual private premises and common parts of the buildings. Curtain walls are subject to the MBIS and not the MWIS.	The inspection shall cover all windows and glass louvers including window walls in individual private premises and common parts Internal glass partitions and shopfront show windows at ground floor are not windows within the scope of prescribed inspection under the MWIS.	To clarify the scope of the MWIS.
2	Section 10	As per Section 10 in 2012 version.	Replacement of Section 10 (2014 version) (4 pages).	<ul> <li>To clarify the definition of representative of QP.</li> <li>To clarify methodology for inspection of window and actions to be taken in emergency situation.</li> </ul>

Item	Clause	2012 Original Version	2014 Amendments	Remarks
				<ul> <li>To provide best practice of repair of window components not affecting safety e.g. weather sealant, weather gasket/strip, etc.</li> <li>To provide guidelines for inspection of other common types of window.</li> </ul>
3	Section 11	As per Section 11 in 2012 version.	Replacement of Section 11 (2014 version) (2 pages).	<ul> <li>To clarify mandatory requirements and standards for window repair under the MWIS.</li> <li>To provide best practice of upgrading defective window components to current design and construction standard apart from meeting the standard under the MWIS.</li> <li>To remove requirements for measures against bi-metallic action.</li> </ul>

# **10. INSPECTION**

The QP shall carry out window inspection personally if he is a natural person. Where the QP is a RGBC or RMWC registered in the name of a company, the window inspection shall be carried out personally by its Authorized Signatory as the representative of the QP as prescribed in the B(I&R)R. The inspection shall cover all window elements of openable sash and fixed panel.

Components of window elements shall be inspected from the interior of the subject building as far as practicable. Areas for attention in inspection and assessment of window are given in section 10.1 below.

If emergency in relation to window safety is revealed during the inspection of windows, the QP shall advise the owners and occupants to take appropriate remedial action immediately and notify the BA.

# **Best Practice**

Under the MWIS, all defective window components affecting window safety must be repaired or replaced. As for those window components not affecting safety e.g. weather sealant, weather gasket/strip, etc., they are not within the scope of prescribed inspection and repair under the MWIS. If the ageing of window gaskets affects the smooth operation of windows or even results in water leakage, the QP may advise the owner to have defective non-structural window components repaired in conjunction with the window repair. In this regard, the QP should advise the owner which items of repair are safety-related and therefore must be carried out under the MWIS and which are recommended repair items.

# **10.1** Areas for Attention in Inspection and Assessment of Window

Aluminium Framed Windows	
Components:	Possible Defects/Sign of Deterioration:
(a) Window frames and sashes;	1. Difficult to open or in jerky motion;

	<ol> <li>Deformed or cannot be secured.</li> </ol>
(b) Hinges;	1. Deformed or missing parts; 2. Seriously corroded.
(c) Rivets and screws;	<ol> <li>Loosen or missing;</li> <li>Greyish white powder or rust.</li> </ol>
(d) Sliding tracks, shoes of sliding windows and window stays;	<ol> <li>Deformed or missing;</li> <li>Greyish white powder or rust.</li> </ol>
(e) Lock set;	<ol> <li>Loosen or missing;</li> <li>Broken strap, jammed handle.</li> </ol>
(f) Glass panes;	Broken or cracked.
(g) Glazing bead and gasket for supporting glass pane; and	Missing or defective.
(h) Other elements that may affec	t safety of the window.

Steel/Iron Framed Windows			
Components:	Possible Defects/Sign of Deterioration:		
(a) Window frames and sashes;	<ol> <li>Difficult to open or in jerky motion;</li> <li>Deformed or cannot be secured;</li> <li>Rusty;</li> <li>Flaking painting or exposed steel surface.</li> </ol>		
(b) Hinges;	<ol> <li>Deformed or missing;</li> <li>Seriously corroded.</li> </ol>		

(c) Screws;	<ol> <li>Loosen or missing;</li> <li>Corroded.</li> </ol>			
(d) Welds;	Cracked or seriously corroded.			
(e) Lock set;	<ol> <li>Loosen or missing;</li> <li>Jammed handle.</li> </ol>			
(f) Glass panes;	Broken or cracked.			
(g) Putty;	Missing or cracked.			
(h) Sliding tracks, shoes of sliding	1. Deformed or missing;			
windows and window stays; and	2. Corroded or hard to move.			
(i) Other elements that may affect safety of the window.				

Timber Framed Windows		
Components:	Possible Defects/Sign of Deterioration:	
(a) Window frames and sashes;	<ol> <li>Difficult to open or in jerky motion;</li> <li>Deformed or cannot be secured;</li> <li>Rotten;</li> <li>Missing or damaged timber section;</li> <li>Flaking painting or exposed timber surface.</li> </ol>	
(b) Hinges;	<ol> <li>Deformed or missing;</li> <li>Seriously corroded.</li> </ol>	
(c) Screws;	<ol> <li>Loosen or missing;</li> <li>Corroded.</li> </ol>	

(d) Lock set;	<ol> <li>Loosen or missing;</li> <li>Jammed handle.</li> </ol>
(e) Glass panes;	Broken or cracked.
(f) Putty; and	Missing or cracked.
(g) Other elements that may affect safe	ety of the window.

Window Walls		
Components:	Possible Defects/Sign of Deterioration:	
(a) Glass panes/fins;	Broken or cracked.	
(b) Mullions and Transoms;	<ol> <li>Seriously corroded;</li> <li>Deformed or defective.</li> </ol>	
(c) Brackets / Spider fixing;	<ol> <li>Loosen or missing;</li> <li>Deformed or defective.</li> </ol>	
(d) Anchors, bolts, nuts, and screws;	<ol> <li>Loosen or missing;</li> <li>Corroded.</li> </ol>	
(e) Glazing bead and gasket for supporting glass pane;	Missing or defective.	
(f) Structural sealant; and	<ol> <li>Missing or defective;</li> <li>Signs of deterioration or split such as change in color, wrinkle etc.</li> <li>N.B. QP may engage specialist to carry out the inspection and repair works for structural sealant.</li> </ol>	
(g) Other elements that may affect saf	ety of the window.	

# 11. REPAIR

# **11.1 Mandatory Requirements**

All windows shall be rendered safe after completion of repair works.

All defective window components affecting window safety shall be repaired or replaced. The renewed components shall be of such material and size not inferior to that of the original design. Under normal circumstances, replacement of the whole window is not necessary if the window can be rendered safe by suitable repair.

The specified fire resistance capability of windows shall be maintained after rectification. For repair or replacement of windows in buildings or commercial premises under the jurisdiction of the FS(CP)O or FS(B)O, QP's attention is drawn to the requirements on fire resistance capability for windows as required thereunder.

# **11.2 Best Practice**

Apart from meeting the prescribed repair standards stipulated under the Section 8 of the B(I&R)R, the QP may advise owner to consider replacing defective components with new components of such material and size complying with current design and construction standards.

If replacement of the whole window is necessary, QP shall comply with the BO and regulations and make reference to the relevant code of practice, technical guidelines, PNBI, PNAP and PNRC, wherever appropriate.

# 4-bar Hinges

4-bar hinge is more secure and shall be used as far as possible when the hinge is required to be replaced. It shall be of stainless steel with adjustable friction shoes, and all stainless steel bars of the hinge should preferably have a minimum thickness of 2.5mm.

# **Rivets and Screws**

For better corrosion resistance, stainless steel rivets or screws shall be used to replace defective or missing rivets or screws. Stainless steel rivets shall be of 4.8mm diameter and stainless steel screws of 5mm diameter.

When replacing a 4-bar hinge, sufficient anchorage shall be provided for the stainless steel rivet or screw to fasten the new hinge to the window frame and the openable sash. A positive mechanical fixing, for example, by inserting a stainless steel or hot dip galvanized steel plate or bar/angle of not less than 3mm thick inside the section to provide sufficient threads for the screws may be adopted.

As an alternative, the window sections for fixing the hinge may be thickened locally to not less than 5mm. When insertion of an extra piece of stainless steel or hot dip galvanized steel bar/angle inside the section or local thickening to 5mm is not adopted, the QP shall ensure that the thickness of the window frame and sash sections for fixing the 4-bar hinge can provide sufficient anchorage for the stainless steel rivet or screw.

Where the original rivet/screw holes have been enlarged due to corrosion, the QP shall consider adding stainless steel rivets or screws to the frame at proper positions in addition to the original to ensure safety.

# **Other Installation Requirements**

Reference can be made to PNAP APP-116 for other installation requirements of aluminium windows<sup>↓</sup>.

# 11.3 Regular Maintenance

Whilst the windows had been rendered safe after completion of the repair works, regular maintenance such as light lubrication of hinges and clearing of dust and dirt at hinges and tracks are required to maintain safety of the windows<sup>I</sup>. The QP shall advise the owners of the need for such regular maintenance.

#### Appendix B (PNBI-10)

# Amendments to the Code of Practice for the Mandatory Building Inspection Scheme and the Mandatory Window Inspection Scheme 2012 (6 March 2017)

Legends: New/amended I Deleted

Item	Clause	2012 Original Version	2017 Amendments	Remarks
1	Part C of Section 3.3.2	<ul> <li>(C) Cladding</li> <li>The following defects, and any other defects that the RI considers having safety concern, shall be identified:</li> <li>(a) Displacement of cladding panels;</li> <li>(b) Cracked or loose cladding panels;</li> <li>(c) Defective sealing joints;</li> <li>(d) Stains; and</li> <li>(e) Corrosion of fixing anchors or metal frames.</li> <li>Inspection of fixing anchors and concealed metal frames is not required unless obvious defects or signs</li> </ul>	<ul> <li>(C) Cladding The following defects, and any other defects that the RI considers having safety concern, must be identified: <ul> <li>(a) Displacement of cladding panels;</li> <li>(b) Cracked or loose cladding panels;</li> <li>(c) Defective sealing joints;</li> <li>(d) Rust stains; and</li> <li>(e) Corrosion of fixing anchors or metal frames.</li> </ul> Inspection of fixing anchors and concealed metal frames is not required unless obvious defects or signs of</li></ul>	Textual refinement.
		of corrosion are identified from external inspection.	corrosion are identified from external inspection.	
2	Part A of Section 3.4.2	(A) General Structural elements shall be inspected visually and/or by other non-destructive methods such as hammer-tapping, cover meter survey, crack width measurement or other feasible means, where appropriate, from ground level and other available vantage points and openings.	(A) General Structural elements must be inspected visually and/or by other non-destructive methods such as hammer-tapping, cover meter survey, crack width measurement or other feasible means, where appropriate, from ground level and other available vantage points and openings.	<ul> <li>2<sup>nd</sup> paragraph was deleted and moved to Part B of the same Section;</li> <li>Textual refinement.</li> </ul>
		For cantilevered slab canopy projecting over street, inspection by opening up the concrete cover at suitable locations at the root of the canopy immediately adjoining the parent structure should be conducted to assess the degree of corrosion of the existing main reinforcement. The RI shall exercise his professional judgment to select sufficient	*	

Item	Clause	2012 Original Version	2017 Amendments	Remarks
		opening up locations with at least 2 numbers for each discrete canopy of a building under inspection or 1 number for every 10m along the length of the canopy, whichever is the greater.		
		The RI <b>shall</b> keep daily inspection records, in which details including the time and date of inspections, locations and items or parts of buildings that have been inspected etc. should be recorded. These daily inspection records <b>shall</b> be submitted to the BD upon completion of the inspection.	The RI <b>must</b> keep daily inspection records, in which details including the time and date of inspections, locations and items or parts of buildings that have been inspected etc. should be recorded. These daily inspection records <b>must</b> be submitted to the BD upon completion of the inspection.	
		The following defects or phenomena, and any other defects that the RI considers having safety concern, <b>shall</b> be identified:	The following defects or phenomena, and any other defects that the RI considers having safety concern, <b>must</b> be identified:	
		<ul> <li>(a) Dampness;</li> <li>(b) Rust stains or corrosion of reinforcement;</li> <li>(c) Cracks or signs of distress;</li> <li>(d) Spalling;</li> <li>(e) Delamination;</li> <li>(f) Exposed reinforcement;</li> <li>(g) Voids and honeycombing;</li> <li>(h) Deformation or displacement; and</li> </ul>	<ul> <li>(a) Dampness;</li> <li>(b) Rust stains or corrosion of reinforcement;</li> <li>(c) Cracks or signs of distress;</li> <li>(d) Spalling of concrete;</li> <li>(e) Delamination;</li> <li>(f) Exposed reinforcement;</li> <li>(g) Voids and honeycombing in concrete;</li> <li>(h) Deformation or displacement; and</li> </ul>	
3	3 <sup>rd</sup> paragraph of Part B of Section 3.4.2	For cantilevered slab canopy, apart from the items in paragraph (A) above, the RI shall look out for any water ponding, defective drains, signs of water seepage, existence of UBW erected on and/or attached to the soffit of the canopy.	For cantilevered slab canopy, apart from the items in paragraph (A) above, the RI <b>must</b> look out for any water ponding, defective drains, signs of water seepage, existence of UBW erected on and/or attached to the soffit of the canopy.	To clarify the inspection and investigation requirements for cantilevered slab canopy projecting over street. RI must carry out inspection
			For cantilevered slab canopy projecting over street, the RI must also conduct the following investigation and take into account the information obtained on site to conduct assessment in accordance with section 4.3.3, 4.3.4 to ascertain the safety level of the canopy: (a) opening up the concrete cover at suitable	and investigation such as opening-up and coring and then conduct structural assessment to ascertain the safety level of the canopy.

Item	Clause	2012 Original Version	2017 Amendments	Remarks
			locations at the root of the canopy immediately adjoining the parent structure must be conducted to assess the degree of corrosion of the existing main reinforcement;	
			(b) coring at appropriate locations must be carried out to measure the actual slab thickness, compressive strength and carbonation of concrete;	
			(c) at the open-up locations, the layout of the existing reinforcement, including the bar diameter, bar spacing, the thickness of concrete cover, and the thickness of screeding and waterproofing on the canopy must be measured; and	
			(d) the span length of the cantilevered slab canopy, dimensions of any parapet wall, downturn and/or architectural features, etc must be measured.	
			The RI must exercise his professional judgment to select sufficient opening up and coring locations with at least 2 numbers for each discrete canopy of a building under inspection or 1 number for every 6m along the length of the canopy, whichever is the greater.	
4	2 <sup>nd</sup> paragraph of Part A of Section 3.6.2	For <b>concealed</b> drain pipes laid within common vertical pipe ducts located inside individual private premises, inspection may be made by gaining access from the individual private premises at least every 3 floors and at pipe duct outlet to assess the overall condition of the pipes and sign of seepage.	For <b>Common exposed drain pipes</b> / drain pipes laid within common vertical pipe ducts located inside individual private premises, inspection may be made by gaining access from the individual private premises at least every 3 floors and at pipe duct outlet to assess the overall condition of the pipes and sign of seepage.	To clarify the inspection requirements for the exposed drain pipes located inside private premises are the same as those concealed.

Item	Clause	2012 Original Version	2017 Amendments	Remarks
5	5 <sup>th</sup> paragraph of Part A of Section 3.6.2	<ul> <li>The following defects or deficiencies, and any other defects or deficiencies that the RI considers as affecting the sanitary condition of the building under inspection or affecting public health, shall be identified:</li> <li>(a) Corrosion, leakage, deformation, displacement, damage and blockage of drain pipes and traps including underground drains;</li> </ul>	<ul> <li>The following defects or deficiencies, and any other defects or deficiencies that the RI considers as affecting the sanitary condition of the building under inspection or affecting public health, <b>must</b> be identified:</li> <li>(a) Corrosion, leakage, deformation, displacement, damage and blockage of drain pipes and traps including underground drains <b>and misconnected common drains</b>;</li> </ul>	To include misconnected common drains affecting sanitary condition or affecting public health as drainage defects.
6	5 <sup>th</sup> paragraph of Section 3.6.3	The RI <b>shall</b> provide appropriate proposals for the rectification and repair <b>works</b> in the Inspection Report, based on the inspection findings, including any detailed investigation and professional judgement.	The RI <b>must</b> provide appropriate proposals for the rectification and repair <b>of the defective or insanitary condition identified</b> in the Inspection Report, based on the inspection findings, including any detailed investigation and professional judgement.	To elaborate the requirements.
7	4 <sup>th</sup> paragraph of Section 3.7.3	If emergency in relation to building safety is revealed during the building inspection, the RI <b>shall</b> notify the BA and alert the owners and occupants immediately.	If emergency in relation to building safety is revealed during the building inspection, the RI <b>must</b> notify the BA and alert the owners and occupants immediately. <b>The RI should also advise the owners to remove all the</b> <b>UBW identified.</b>	To elaborate RI's follow-up action on UBW.
8	Section 5.6.2	<ul> <li>For underground drains, the RI should consider the following repair methods and any other methods suitable and necessary in the circumstances of the building under repair:</li> <li>(a) Defective sections shall be replaced or repaired by using resin drain liner or other feasible means;</li> </ul>	<ul> <li>For underground drains, the RI should consider the following repair methods and any other methods suitable and necessary in the circumstances of the building under repair:</li> <li>(a) Defective sections must be replaced or repaired by using resin drain liner or other feasible means. Misconnected common drain affecting sanitary condition of the building or affecting public health must be rectified to alleviate the health and environmental nuisance;</li> </ul>	To include misconnected common drains affecting sanitary condition or affecting public health as drainage defects.

Item	Clause	2012 Original Version	2017 Amendments	Remarks
9	Section 6.4	The RI <b>shall</b> examine and supervise all the rectification and repair works carried out by the RC at such frequency and extent as he considers appropriate to ensure that the works are prepared, carried out and completed to the required standards.	The RI <b>must</b> examine and supervise all the rectification and repair works carried out by the RC at such frequency and extent as he considers appropriate <b>but not less than</b> <b>that specified in Appendix VI</b> to ensure that the works are prepared, carried out and completed to the required standards.	To clarify the minimum supervision requirements of RI and his supervision team.
		Defects and deficiencies mentioned in the Inspection Report and those identified during the repair stage <b>shall</b> be repaired or rectified. The RI <b>shall</b> supervise and examine the preparation, rectification and repair works to ensure that the works meet the minimum technical standards required. The RI may <b>designate a person as</b> <b>his representative</b> to provide supervision to the repair of the building elements at the stages of the repair works specified in Appendix VI. The <b>qualification and</b> <b>experience required of the person shall be at least a</b> <b>certificate or diploma holder in the field of</b> <b>construction including architecture, building studies,</b> <b>engineering and surveying with minimum total</b> <b>relevant working experience of 2 years.</b>	Defects and deficiencies mentioned in the Inspection Report and those identified during the repair stage <b>must</b> be repaired or rectified. The RI <b>must</b> supervise and examine the preparation, rectification and repair works to ensure that the works meet the minimum technical standards required. The RI may <b>set up his own</b> <b>supervision team</b> to provide supervision to the repair of the building elements at the stages of the repair works specified in Appendix VI. <b>The RI must ensure that his</b> <b>supervision team</b> is with adequate manpower, <b>qualification and experience to match the progress of</b> <b>works</b> .	
		If the building owners appoint the same RI to carry out both the building inspection and supervision of building repair works, the RI may include the particulars, qualifications and experience of the RI's <b>representative</b> in the repair proposal of the Inspection Report for submission to the BA.	If the building owners appoint the same RI to carry out both the building inspection and supervision of building repair works, the RI may include the particulars, qualifications and experience of the RI's <b>supervision</b> <b>team</b> in the repair proposal of the Inspection Report for submission to the BA.	
		The RI <b>shall</b> notify the BA in writing of any appointment or change of his <b>representative</b> and provide the BA with the particulars, qualifications and experience of his <b>representative</b> in accordance with the requirements stipulated in the B(I&R)R. The RI <b>shall</b> assume the overall responsibility for the supervision of the prescribed repair works carried out by the RC, even when part of the supervision is	The RI <b>must</b> notify the BA in writing of any appointment or change of his <b>supervision team</b> , <b>not less</b> <b>than 7 days before making the appointment or within</b> <b>7 days after the date of change</b> , and provide the BA with the particulars, qualifications and experience of his <b>supervision team</b> in accordance with the requirements stipulated in the B(I&R)R. The RI <b>must</b> assume the overall responsibility for the supervision of <b>the repair</b>	

Item	Clause	2012 Original Version	2017 Amendments	Remarks
		performed by his <b>representative</b> .	works carried out by the RC, even when part of the supervision is performed by his supervision team.	
		Supervision requirements of some typical rectification/ repair works and proof tests to be provided by the RI and his representatives are listed in Appendix VI. For rectification/ repair works and proof test that are not covered in Appendix VI, the RI shall examine and supervise and repair works and proof tests at such frequency and extent as he considers appropriate in fulfilling his duties as an RI.		
		For rectification/repair works that fall within Class I minor works, supervision should also be made in accordance with the requirements of the Technical Memorandum for Supervision Plans and Code of Practice for Site Supervision as necessary.	minor works, supervision should also be made in accordance with the requirements of the Technical	
		The RI <b>shall</b> inspect the entire rectification and repair works of the building upon the completion of works by the RC prior to his submission of the certificate of completion to the BA.	entire rectification and repair works of the building upon	

Item	Clause	2012 Original Version	2017 Amendments	Remarks
10	2 <sup>nd</sup> and 3 <sup>rd</sup> paragraphs of Section 10	Components of window elements <b>shall</b> be inspected from the interior of the subject building as far as practicable. Areas for attention in inspection and assessment of window are given in section 10.1 below.	Components of window elements <b>must</b> be inspected from the interior of the subject building as far as practicable. Areas for attention in inspection and assessment of window are given in section 10.1 below.	To remind QP to take precautionary measures in carrying out window inspection.
			Care must be taken during window inspection to prevent windows from falling off the external wall. If necessary, the windows must be temporarily secured by appropriate means such as safety rope.	
		If emergency in relation to window safety is revealed during the inspection of windows, the QP <b>shall</b> advise the owners and occupants to take appropriate remedial action immediately and notify the BA.	If emergency in relation to window safety is revealed during the inspection of windows, the QP <b>must</b> advise the owners and occupants to take appropriate remedial action immediately and notify the BA.	
11	2 <sup>nd</sup> paragraph of Section 11	All defective window components affecting window safety <b>shall</b> be repaired or replaced. The renewed components <b>shall</b> be of such material and size not inferior to that of the original design. Under normal circumstances, replacement of the whole window is not necessary if the window can be rendered safe by suitable repair.	All defective window components affecting window safety <b>must</b> be repaired or replaced. <b>Defective or</b> <b>corroded screws, rivets and broken/cracked glass</b> <b>panes must be replaced.</b> The renewed components <b>must</b> be of such material and size not inferior to that of the original design. Under normal circumstances, replacement of the whole window is not necessary if the window can be rendered safe by suitable repair.	To provide more examples/scenarios for replacement of window components.
12	Appendix VI	As per Appendix VI in 2012 Version	Replacement of Appendix VI (2017 Version) (5 pages)	<ul> <li>To clarify the minimum supervision requirements of RI and his supervision team;</li> <li>To allow a representative</li> </ul>
				of RI to carry out level 2 supervision on behalf of RI.

Item	Clause	2012 Original Version	2017 Amendments	Remarks
13	Item (f) under title "Rectification and Repair Works " in Appendix VIII	(f) Summary of all rectification and repair works supervised by RI's <b>Representative</b> .	(f) Summary of all rectification and repair works supervised by RI's supervision team, including the date of inspection; items inspected; and inspection results.	To clarify the requirements on record of supervision in the completion report.
14	"Form 5 – Drainage System" under Appendix XI	As per "Form 5 – Drainage System" under Appendix XI in 2012 Version	Replacement of "Form 5 – Drainage System" under Appendix XI (2017 Version) (1 page)	To update to the amendments made above.

# Appendix VI

# Minimum Supervision Requirements of RI

The RI must ensure that repair is carried out in accordance with the repair proposal.

The RI may appoint a Level 1 representative and a Level 2 representative to form a supervision team to supervise the rectification/repair works and proof tests on his behalf. However, the RI must carry out the first inspection to rectification/repair works and proof tests that are specified for Level 2 Supervision in Table 3. The minimum qualifications and experience required for Level 1 and Level 2 representative are set out in Table 1. The RI has the overall responsibility and accountability for his supervision team. The representative is directly accountable to the RI.

The minimum requirements on the frequency of inspection and level of supervision to various typical rectification/repair works and proof tests are set out in Table 2 and Table 3 respectively. For rectification/repair works and proof test that are not covered in the table, the RI and his supervision team must examine and supervise the repair works and proof tests at such frequency and extent as the RI considers appropriate in fulfilling his duties as a RI.

# Table 1 – Minimum qualifications and experience for RI's Level 1 and Level 2Representative

RI's	Minimum qualifications and experience
<b>Representative</b>	
Level 1	Equivalent to the technically competent person (TCP) of
Representative	grade T1 for Building Works or Class I Minor Works, as
	stipulated in the Code of Practice for Site Supervision.
Level 2	(a) Equivalent to the TCP of grade T3 for Building Works or
<b>Representative</b>	Class I Minor Works, as stipulated in the Code of Practice
	for Site Supervision; or
	(b) Passed specified top-up course with minimum total
	relevant working experience of 5 years.

# Table 2 – Minimum Frequency of Inspection

RI or RI's Representative	Minimum Frequency of Inspection Note
RI	First inspection to rectification/repair
	works and proof tests that are specified
	for Level 2 Supervision
Level 2 Representative	Fortnightly Inspection
Level 1 Representative	Fortnightly Inspection

Note:

Level 2 Representative may take up the responsibilities of Level 1 Representative but their inspection frequency cannot be combined.

Table 3 – Minimum supervision requirements for typical stages of work

	<b>Building Elements</b>	Level of Supervision
	<b>External Elements</b>	
Prepa	ration	
(a)	Verifying hacking of loose finishes and preparation of bedding	1
(b)	Examining substrate prior to laying tile finishes	2
(c)	Checking location, alignment and size of drill holes for new anchor bolts	1
Repa	ir	
(a)	Examining first trial bedding mortar	2
(b)	Checking dimensions of replaced cladding panels and curtain wall elements	1
(c)	Supervising installation of new anchor bolts	1
(d)	Supervising installation of cladding panels	1

	Building Elements	Level of Supervision
	<b>External Elements</b>	
(e)	Supervising application of structural sealant for curtain wall works	1
Proof Test		
(a)	Supervising hammer-tapping	1
(b)	Conducting pull-off tests	2

	<b>Building Elements</b>	Level of Supervision	
	Structural Elements		
Prepa	ration		
(a)	Verifying hacking of damaged, loose, hollow sounding concrete, spalling and honeycomb	1	
(b)	Supervising opening up of concrete for cracks	1	
(c)	Checking spacing between sound concrete and exposed reinforcement	1	
(d)	Checking removal of rust and mill scale	1	
Conc	Concrete Repair		
(a)	Checking new replacing reinforcement	1	
(b)	Examining reinforcement and sound concrete prior to application of bond coat and repair mortar	2	
(c)	Supervising application of bond coat and repair mortar	1	
(d)	Supervising resin injection for cracks	1	
Recas	Recasting		
(a)	Checking formwork and falsework	1	
(b)	Supervising concrete mixing	1	

	<b>Building Elements</b>	Level of Supervision
	Structural Elements	
(c)	Examining reinforcement prior to concreting	2
(d)	Supervising concrete compaction and curing	1
Stru	ctural Steel Repair	
(a)	Checking corrosion protection to steel elements and their connections	1
(b)	Supervising replacement of structural members including provision of temporary supports	2
(c)	Checking welded joints of structural members	1
Proof Test		
(a)	Supervising hammer-tapping	1
(b)	Conducting pull-off test	2
(c)	Conducting rebound hammer tests, repair mortar compressive strength and bond strength tests, and concrete cube tests	1
(d)	Conducting strength tests on new reinforcement and structural steel wherever necessary	1
(e)	Conducting non-destructive testing of welds	2

	<b>Building Elements</b>	Level of Supervision
	<b>Fire Safety Elements</b>	
Rect	ification and Repair	
(a)	Supervising application of fire resisting materials	1
	including measurement of coat thickness	
(b)	Supervising repair or rectification of fire safety	
	elements such as elements of construction, walls, fixed	1
	light, doors, fire shutters.	

	Building Elements	Level of Supervision		
	Drainage System			
Prepa	ration			
(a)	Checking alignment, fall and sub-grade material prior to laying underground drain pipes	1		
Rectif	Rectification and Repair			
(a)	Checking fixings for brackets and connections	1		
(b)	Checking connection of pipes and connections to last manhole prior to backfilling	1		
Proof	Test			
(a)	Supervising ball tests, air tests, water tests and smoke tests	1		
(b)	Conducting CCTV survey	2		

Notes:

Level 1 supervision –	may be performed by RI's Level 1 representative,		
	RI's Level 2 representative or RI.		
Level 2 supervision –	may be performed by the RI's Level 2 representative or RI.		
	The RI however must carry out the first inspection to		
	rectification/repair works and proof tests that are specified		
	for Level 2 supervision.		

#### Form 5 – Drainage System

Building address:			Report Page No:		
MBIS Notice No.:	Name of Registered Inspector:	Date of Ir	nspection:		
Time:	Weather Condition:				
Inspection of Drainage System					

Location	Element	Defect Type*	Type of Unauthorised	Fol	Follow-up Actions Required		o No.	Demontra	
Location	Element		drainage works**	DI	Repair	od ÖZ Remarks	Kelliarks		
External wall facing XX Road	Surface water pipes	1			~		5		
	Additional pipe		А	~			8	Suspected unauthorised waste pipe connected to surface water system	
5/F Flat B	Pipes within common pipe duct				~		12		
8/F Flat B	ditto	1			~		13		
Podium right below flat B	Pipe outlet	1			~		14		
G/F rear lane	Surface channel	2			~		26	Cracked and broken corner	
<mark>G/F yard</mark>	Underground manhole	7			✓			Misconnected common drain must be rectified	

#### Legend:

#### \* Defects

- 1 Corrosion, leakage, deformation, displacement or surface damage of pipe
- 2 Damage of manhole or broken of surface channel, gullies and catch pits
- 3 Blockage of pipe, manhole, surface channel, gullies or catch pit
- 4 Corrosion, loosening or breaking of metal brackets
- 5 Missing grating of ventilating pipe
- 6 Deterioration of mica flap in fresh air inlet
- 7 Misconnected common drain affecting sanitary condition of building or affecting public health
- 8 Others (please specify)

#### **\*\*** Unauthorised drainage works

- A Expedient connection of foul or waste water to surface water drainage system
- B Discharge of foul or waste water to external of building or open space
- C Discharge of untreated trade effluent into drainage system
- D Discharge of untreated trade effluent to external of building or open space
- E Others (please specify)

#### Appendix C (PNBI-10)

# Amendments to the Code of Practice for the Mandatory Building Inspection Scheme and the Mandatory Window Inspection Scheme 2012 (30 April 2018)

Legends: New/amended **¥** Deleted

Item	Clause	2012 Original Version	2018 Amendments	Remarks
1	Section 5.3.1	In general, removal and reinstatement is the most effective and reliable repair technique for rendering and tiling. Appendix IV provides the technical standards of commonly used repair method and proof test.	In general, removal and reinstatement is the most effective and reliable repair technique for rendering and tiling. Appendix IV provides the technical standards of commonly used repair method and proof test. In addition, the finish of the external wall should be reinstated (e.g. application of paint) after completion of repair to external rendering to match the existing appearance.	To elaborate the requirements.
2	Section 5.3.6	For repair of finishes in the common corridors and lobbies, reference may be made to section 5.3.1 above wherever applicable. Defective false ceiling in the common corridors and lobbies shall be removed and/or replaced.	For repair of finishes in the common corridors and lobbies, reference may be made to section 5.3.1 above wherever applicable, including reinstatement of finishes (e.g. application of painting) taking into account the existing appearance. Defective false ceiling in the common corridors and lobbies shall be removed and/or replaced.	To elaborate the requirements.
3	Section 9.1	<ul> <li><u>Main Procedural Requirements:</u></li> <li>(a) Notification to the BA of his appointment as QP in the specified form (Form MWI 1) within 7 days after the date of appointment;</li> <li>(b) Notification to the BA in writing of his cessation to act as QP within 7 days after the date on which the QP has ceased to act;</li> <li>(c) Where no prescribed repair is required, submission of a certificate in the specified form (MWI 2a) to</li> </ul>	¥	<ul> <li>To delete paragraphs (a) and move paragraph (b) to paragraph (d).</li> <li>To replace Specified Forms MWI 1, MWI 2, MWI 2a, MWI 3 and MWI 4 with Specified Forms WI 1, WI 2 and WI 3.</li> </ul>

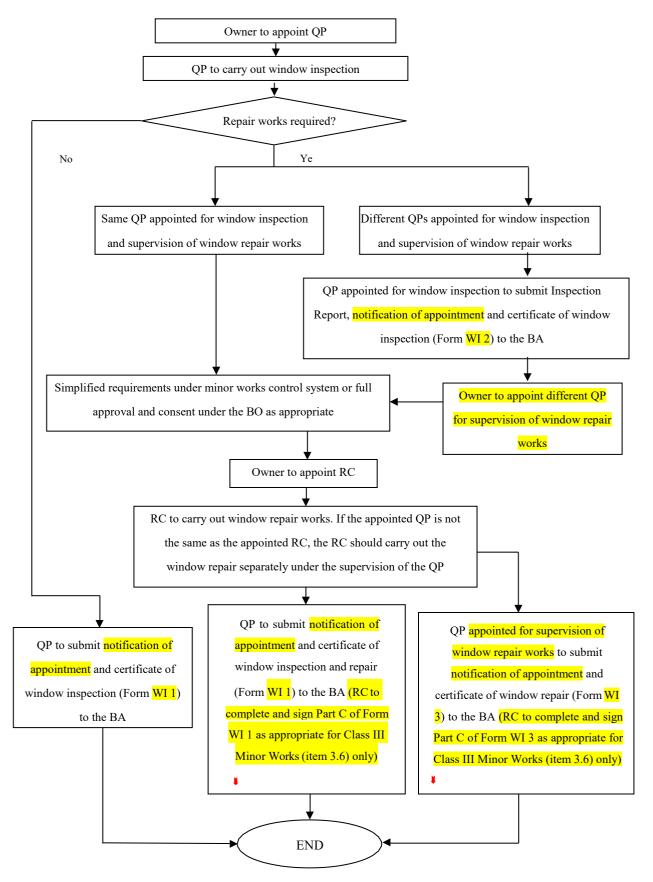
Item	Clause	2012 Original Version	2018 Amendments	Remarks
		the BA within 14 days after completion of a prescribed inspection and delivery of the same on the same day to the person for whom the prescribed inspection is carried out;	<b>and</b> certificate in the specified form (Form WI 1) to the BA within 14 days after completion of prescribed inspection and delivery of the same on the same day to the person for whom the prescribed inspection is carried out;	
		(d) Where prescribed repair is required, and	(b) Where prescribed repair is required, and	
		<ul> <li>(i) the same QP is appointed for both the prescribed inspection and supervision of prescribed repair</li> </ul>	(i) the same QP is appointed for both the prescribed inspection and supervision of prescribed repair	
		<ul> <li>submission of a certificate in the specified form (Form MWI 3) to the BA within 14 days after completion of a prescribed repair; and</li> </ul>	<ul> <li>submission of notification of appointment and certificate in the specified form (Form WI 1) to the BA within 14 days after completion of prescribed repair; and</li> </ul>	
		• delivery of the same on the same day to the person for whom the prescribed repair is carried out.	• delivery of the same on the same day to the person for whom the prescribed repair is carried out.	
		(ii) the QP is appointed for the prescribed inspection only	(ii) the QP is appointed for the prescribed inspection only	
		<ul> <li>submission of an Inspection Report and a certificate in the specified form (Form MWI 2) to the BA within 7 days after completion of a prescribed inspection;</li> </ul>	<ul> <li>submission of an Inspection Report and notification of appointment and certificate in the specified form (Form WI 2) to the BA within 7 days after completion of prescribed inspection;</li> </ul>	
		• delivery of the same on the same day to the person for whom the prescribed inspection is carried out; and	• delivery of the same on the same day to the person for whom the prescribed inspection is carried out; and	
		<ul> <li>delivery of the same to the QP appointed for supervision of the prescribed repair within 1 month after the date of submission to the BA or before the</li> </ul>	<ul> <li>delivery of the same to the QP appointed for supervision of the prescribed repair within 1 month after the date of submission to the BA or before the</li> </ul>	

Item	Clause	2012 Original Version	2018 Amendments	Remarks
		commencement of the prescribed repair, whichever is the earlier.	commencement of the prescribed repair, whichever is the earlier.	
		(iii) the QP is appointed for the supervision of the prescribed repair only	(iii) the QP is appointed for the supervision of the prescribed repair only	
		• submission of any revised remedial proposal, if applicable, to the BA within 7 days after certain matter is revealed or circumstance arises, during the course of the prescribed repair, in response to which the QP considers it necessary to revise the proposal;	• submission of any revised remedial proposal, if applicable, to the BA within 7 days after certain matter is revealed or circumstance arises, during the course of the prescribed repair, in response to which the QP considers it necessary to revise the proposal;	
		• submission of a certificate in the specified form (Form <b>MWI 4</b> ) to the BA within 14 days after completion of a prescribed repair;	<ul> <li>submission of notification of appointment and certificate in the specified form (Form WI 3) to the BA within 14 days after completion of prescribed repair;</li> </ul>	
		• delivery of the same on the same day to the person for whom the prescribed repair is carried out; and	• delivery of the same on the same day to the person for whom the prescribed repair is carried out; and	
		• if the QP so appointed is not acting as the RC to carry out the prescribed repair, delivery of the Inspection Report before the commencement of the prescribed repair and any revised remedial proposal on the same day on which the revised proposal is submitted to the BA to the RC.	• if the QP so appointed is not acting as the RC to carry out the prescribed repair, delivery of the Inspection Report before the commencement of the prescribed repair and any revised remedial proposal on the same day on which the revised proposal is submitted to the BA to the RC.	
		(e) Where the window repair works are designated minor works or involving works that require the prior approval of plans and consent to commencement of works of the BA under the BO, apart from the above procedural requirements under the MWIS, the procedural requirements	(c) Where the window repair works are designated minor works or involving works that require the prior approval of plans and consent to commencement of works of the BA under the BO, apart from the above procedural requirements under the MWIS, the procedural requirements under	

Item	Clause	2012 Original Version	2018 Amendments	Remarks
		under the MWCS or the full approval and consent system, as the case may be, should also be complied with as appropriate.	<ul> <li>the MWCS or the full approval and consent system, as the case may be, should also be complied with as appropriate.</li> <li>(d) Notification to the BA in writing of his cessation to act as QP within 7 days after the date on which he has ceased to act.</li> </ul>	
4	Item (A)(I)(d) of Appendix V	(d) Treatment to Reinforcement The exposed reinforcement shall be wire-brushed to remove all loose mill scale and rust. Where the reinforcement is corroded seriously (i.e. loss of sectional area greater than 10%), it shall be replaced by new reinforcement with adequate lapped length to the remained existing reinforcement. The reinforcement shall be primed after cleaning so as to enhance protection against corrosion.	(d) Treatment to Reinforcement The exposed reinforcement shall be wire-brushed to remove all loose mill scale and rust. Where the reinforcement is corroded seriously (i.e. loss of sectional area greater than 15%), it shall be replaced by new reinforcement with adequate lapped length to the remained existing reinforcement. The reinforcement shall be primed after cleaning so as to enhance protection against corrosion.	To revise the threshold for replacement of corroded reinforcement from 10% loss of sectional area to 15%.
5	Appendix IX	Flow chart for procedural requirements for MWIS	Revised flow chart in page 5 of this Annex	To incorporate the amendments in item 3 above.
6	Appendix X	Tables for Specified Forms for MBIS and MWIS	Revised tables in pages 6 and 7 of this Annex	To incorporate the amendments in item 3 above.

**Appendix IX** 





# Appendix X

### Specified Forms for MBIS and MWIS

#### MBIS

Stage	Description	Form No.
Prescribed	Notification of appointment of RI for	Form MBI 1
Inspection	prescribed inspection and / or prescribed	
	repair of building	
	Certificate of building inspection	Form MBI 3a
	(prescribed repair not required)	
	Certificate of building inspection	Form MBI 3
	(prescribed repair required)	
Prescribed Repair	Notification of nomination of another RI to	Form MBI 2
	temporarily act in the stead of the original RI	
	to supervise the prescribed repair	
	Certificate of building repair	Form MBI 4
	Certificate of no business connection	Form MBI 5
	between the previous RI who carried out the	
	building inspection and the RC	

#### MWIS

Prescribed Repair Works Not Required After Prescribed Inspection						
	Description Form No.					
Notification of appoi	ntment of QP and certificate of prescribed	Form WI 1				
inspection of window	/ <mark>s</mark>					
Presc	ribed Repair Required After Prescribed Ins	spection				
<mark>Scenario</mark>	Description	<mark>Form No.</mark>				
1. Same QP	Notification of appointment of QP and	Form WI 1				
appointed for	certificate of prescribed inspection / repair					
prescribed	<mark>of windows<sup>1</sup></mark>					
inspection and						
supervision of						
repair works						

RC to complete and sign Part C of Form WI 1 as appropriate for Class III Minor Works (item 3.6) only

2. Different QPs	Notification of appointment of QP and	Form WI 2
appointed for	certificate of prescribed inspection of	
prescribed	windows (by the QP appointed for	
inspection and	prescribed inspection)	<mark>+</mark>
supervision of		
repair works	Notification of appointment of QP and	Form WI 3
	certificate of prescribed repair of windows <sup>2</sup>	
	(by the different QP appointed for	
	supervision of prescribed repair works)	

 $^{2}$ RC to complete and sign Part C of Form WI 3 as appropriate for Class III Minor Works (item 3.6) only)

- The End -

#### Appendix D (PNBI-10)

# Amendments to the Code of Practice for the Mandatory Building Inspection Scheme and the Mandatory Window Inspection Scheme 2012 (20 July 2020)

Legends: New/amended ¥ Deleted

Item	Clause	2012 Original Version	2020 Amendments	Remarks
1	Section 3.3.2		<ul> <li>(J) Concealed Elements</li> <li>For concealed external elements and other physical elements, the RI shall exercise professional judgment to expose sufficient elements for a representative assessment.</li> <li>Where an external wall is concealed by a wall signboard with display area more than 40m<sup>2</sup>, the RI shall make all efforts to enable inspection of at least 30% of the concealed area by removing portion of the display surface of the signboards temporarily or by other feasible inspection methods. If signs of defect are revealed during the inspection, the RI shall inspect more portion of the concealed area to ascertain the condition of the external wall.</li> <li>In any case, the RI shall inspect at least 30% of the area of an external wall with concealed element.</li> </ul>	<ul> <li>To add Item (J) after Item (I).</li> <li>To clarify the inspection requirements for concealed external elements and other physical elements.</li> </ul>

Item	Clause	2017 Version	2020 Amendments	Remarks
2	Section 11.1	Mandatory Requirements	Mandatory Requirements	To amend paragraph 2 and add paragraphs 4 to
		All windows shall be rendered safe after completion of repair works.	All windows shall be rendered safe after completion of repair works.	11.
		All defective window components affecting window safety must be repaired or replaced. Defective or corroded screws, rivets and broken/cracked glass panes must be replaced. The renewed components must be of such material and size not inferior to that of the original design. Under normal circumstances, replacement of the whole window is not necessary if the window can be rendered safe by suitable repair.	All defective window components or signs of deterioration affecting window safety must be repaired or replaced. Defective or corroded screws, rivets and broken/cracked glass panes must be replaced. The renewed components must be of such material and size not inferior to that of the original design. Under normal circumstances, replacement of the whole window is not necessary if the window can be rendered safe by suitable repair.	To elaborate the mandatory requirements for window replacement/repair.
		The specified fire resistance capability of windows shall be maintained after rectification. For repair or replacement of windows in buildings or commercial premises under the jurisdiction of the FS(CP)O or FS(B)O, QP's attention is drawn to the requirements on fire resistance capability for windows as required thereunder.	The specified fire resistance capability of windows shall be maintained after rectification. For repair or replacement of windows in buildings or commercial premises under the jurisdiction of the FS(CP)O or FS(B)O, QP's attention is drawn to the requirements on fire resistance capability for windows as required thereunder.	
			When replacing a hinge, at least 3 numbers ofscrews or rivets shall be used to fasten it to the window frame and the openable sash.	
			When replacing a hinge with a stainless steel hinge, or replacing the rivets or screws of an existing stainless steel hinge, stainless steel rivets or screws shall be used to fasten the hinges to the window frames or openable sashes.	
			Where a stainless steel screw is used, its diameter shall be not less than 5mm and sufficient anchorage shall be provided in the window frame and openable sash.	
			Where a stainless steel rivet is used (for example,	

Item	Clause	2017 Version	2020 Amendments	Remarks
			open end blind rivet, multi grip blind rivet or blind rivet nut), its diameter shall be not less than 4.8mm and the rivet head shall be of sufficient size to clamp and hold components together securely.	
			QP and RC should ensure that installation of the screws and rivets shall be in accordance with the manufacturer's specifications.	
			Where the original rivet/screw holes have been enlarged due to corrosion, the QP shall consider adding stainless steel rivets or screws to the frame at proper positions in addition to the original to ensure safety.	
			To reduce the risk of corrosion, holes in hinges, window frames and openable sashes shall be filled with appropriate sealant prior to the installation of screws or rivets. Sealant shall also be applied to the head of screws or rivets to protect the exposed parts of the fasteners from corrosion. Reference shall be made to PNAP APP-116.	
			If replacement or repair of the window is necessary, QP and RC shall comply with the BO and its subsidiary regulations, and make reference to the relevant codes of practice, technical guidelines, PNBI, PNAP and PNRC.	

Item	Clause	2014 Version	2020 Amendments	Remarks
3	Section 11.2	<b>Best Practice</b> Apart from meeting the prescribed repair standards stipulated under the Section 8 of the B(I&R)R, the QP may advise owner to consider replacing defective components with new components of such material and size complying with current design and construction standards.	<b>Best Practice</b> Apart from meeting the prescribed repair standards stipulated under the section 8 of the B(I&R)R <b>and the</b> <b>mandatory requirements set out in section 11.1 above</b> , the QP may advise owner to consider replacing defective components with new components of such material and size complying with current design and construction standards.	<ul> <li>To delete paragraph 2 on Best Practice and paragraphs 2 to 4 on Rivets and Screws.</li> <li>To amend paragraph 1 on rivets and screws.</li> <li>Textual refinements.</li> </ul>
		If replacement of the whole window is necessary, QP shall comply with the BO and regulations and make reference to the relevant code of practice, technical guidelines, PNBI, PNAP and PNRC, wherever appropriate.	¥	
		4-bar Hinges	4-bar Hinges	
		4-bar hinge is more secure and should be used as far as possible when the hinge is required to be replaced. It shall be of stainless steel with adjustable friction shoes, and all stainless steel bars of the hinge should preferably have a minimum thickness of 2.5mm.	4-bar hinge is more secure and should be used as far as possible when the hinge is required to be replaced. It shall be of stainless steel with adjustable friction shoes, and all stainless steel bars of the hinge should preferably have a minimum thickness of 2.5mm.	
		Rivets and Screws	Rivets and Screws	
		For better corrosion resistance, stainless steel rivets or screws shall be used to replace defective or missing rivets or screws. Stainless steel rivets shall be of 4.8mm diameter and stainless steel screws of 5mm diameter.	For better corrosion resistance, stainless steel rivets or screws shall be used to replace defective or missing rivets or screws.	
		When replacing a 4-bar hinge, sufficient anchorage shall be provided for the stainless steel rivet or screw to fasten the new hinge to the window frame and the openable sash. A positive mechanical fixing, for example, by inserting a stainless steel or hot dip galvanized steel plate or bar/angle of not less than 3mm thick inside the section to provide sufficient threads for	*	

Item	Clause	2014 Version	2020 Amendments	Remarks
		the screws may be adopted. As an alternative, the window sections for fixing the hinge may be thickened locally to not less than 5mm. When insertion of an extra piece of stainless steel or hot dip galvanized steel bar/angle inside the section or local thickening to 5mm is not adopted, the QP shall ensure that the thickness of the window frame and sash sections for fixing the 4-bar hinge can provide sufficient anchorage for the stainless steel rivet or screw.	*	
		Where the original rivet/screw holes have been enlarged due to corrosion, the QP shall consider adding stainless steel rivets or screws to the frame at proper positions in addition to the original to ensure safety.	*	
		Other Installation Requirements	Other Installation Requirements	
		Reference can be made to PNAP APP-116 for other installation requirements of aluminium windows.	Reference can be made to PNAP APP-116 for other installation requirements of aluminium windows.	

- The End -

#### Appendix E

(PNBI-10)

# Amendments to the Code of Practice for

the Mandatory Building Inspection Scheme and the Mandatory Window Inspection Scheme 2012

(January 2022)

Legends: New/amended I Deleted

Item	Version	2022 Amendments	Remarks
1. Section 3.2	2012 Version The RI shall review if the subject building is under the purview of the FS(CP)O or FS(B)O. Where applicable, the RI should also check if any Directions have previously been served by the BD on the building owners concerned and the status of the FS Works.	The RI shall review if the subject building is under the purview of the FS(CP)O or FS(B)O. Where applicable, the RI <b>↓</b> shall check if any Directions have previously been served by the BD on the building owners concerned and the status of the FS Works. The RI shall also check if any statutory orders for repair or investigation served by	To remind RI to check and cover outstanding statutory orders for repairs or investigation in the MBIS.
		the BD under the BO on the building owners concerned that are still outstanding for action and will be covered by inspection and repair under MBIS.	
2. Section 3.6.1	2012 Version The Scope of inspection of the drainage system shall include the following:	The Scope of inspection of the drainage system (including anti-syphonage pipes and ventilating pipes) shall include the following:	To remind RI drainage system include anti- syphonage pipes and ventilating pipes.

Item		Version	2022 Amendments	Remarks
	ction 5.2(B)	2012 Version (B) Unauthorised Alterations and Additions	(B) Unauthorised Alterations and Additions	Textual refinement on misconnections of drainage systems.
		The following unauthorised alterations and additions, and any other unauthorised alterations and additions to the drainage system that the RI considers may adversely affect the drainage system shall be identified and reported to the BA: (a) Misconnection of foul or waste water to the surface water drainage system or discharge of foul or waste water to external parts of the building or open areas;	The following unauthorised alterations and additions, and any other unauthorised alterations and additions to the drainage system that the RI considers may adversely affect the drainage system shall be identified and reported to the BA: (a) Misconnections ↓ in drainage systems (i.e. discharging foul or waste water to the surface water drainage system, discharging foul water into drainage pipe solely for waste water, ↓ discharging foul or waste water to external parts of the building or open areas, or discharging surface water to foul or waste water system); and	or dramage systems.
		<ul><li>(b) Drainage alteration and addition resulting in discharge of untreated trade effluent, including hot water, into the drainage system or to external parts of the building or open areas; and</li><li>(c) Mis-connection of surface water to foul</li></ul>	<ul> <li>(b) Drainage alteration and addition resulting in discharge of untreated trade effluent, including hot water, into the drainage system or to external parts of the building or open areas <i>L</i>.</li> </ul>	
4 5	ction 3.6.3 -	water system. 2017 Version		
	t paragraph	The RI must provide appropriate proposals for the rectification and repair of the defective or insanitary condition identified in the Inspection Report, based on the inspection findings, including any detailed investigation and professional judgement.	The RI must provide appropriate proposals for the rectification and repair of the defective or insanitary condition of drains or sewers, or misconnections between common drains identified in the Inspection Report, based on the inspection findings, including any detailed investigation and	<ul> <li>To include misconnection between common drains affecting sanitary condition or affecting public health as drainage</li> </ul>

Item	I	Version	2022 Amendments	Remarks
			professional judgement.	defects.
5.	Section 5.6(b)	<ul> <li>2012 Version</li> <li>(b) Relevant guidelines and requirements issued by the Drainage Services Department and the Environment Protection Department.</li> </ul>	(b) Relevant guidelines and requirements issued by the BD, the Drainage Services Department and the Environment Protection Department.	To remind RI to check guidelines and requirements issued by BD.
6.	Section 5.6.1	<ul> <li>2012 Version</li> <li>For common drains, the RI should consider the following repair methods and any other methods suitable and necessary in the circumstances of the building under repair:</li> <li>(a) Defective sections shall be replaced;</li> </ul>	<ul> <li>For common drains, the RI should consider the following repair methods and any other methods suitable and necessary in the circumstances of the building under repair:</li> <li>(a) Defective sections shall be replaced and misconnections in the last paragraph of Section 3.6.3 shall be rectified;</li> </ul>	To provide guidelines to rectify drainage misconnections in item 4 above.
7.	Section 6.4 - 3 <sup>rd</sup> to 5 <sup>th</sup> paragraphs	2017 Version If the building owners appoint the same RI to carry out both the building inspection and supervision of building repair works, the RI may include the particulars, qualifications and experience of the RI's supervision team in the repair proposal of the Inspection Report for submission to the BA.	If the building owners appoint the same RI to carry out both the building inspection and supervision of building repair works, the RI may include the supervision proposal with particulars, qualifications and experience of the RI's supervision team in the repair proposal of the Inspection Report for submission to the BA or submit the supervision proposal separately. If the building owners appoint another RI to supervise the building repair works, the appointed RI must, within 7 days after the date of appointment, notify the BA of the appointment and submit the supervision proposal with particulars, qualifications and experience of the RI's supervision team.	<ul> <li>To provide a standard supervision proposal.</li> <li>Textual refinement.</li> </ul>

Item	Version	2022 Amendments	Remarks
		A standard supervision proposal is given in Annex A of Appendix VI.	
	The RI must notify the BA in writing of any appointment or change of his supervision team, not less than 7 days before making the appointment or within 7 days after the date of change, and provide the BA with the particulars, qualifications and experience of his supervision team in accordance with the requirements stipulated in the B(I&R)R. The RI must assume the overall responsibility for the supervision of the repair works carried out by the RC, even when part of the supervision is performed by his supervision team.	The RI must notify the BA in writing of any I change of his supervision team I within 7 days after the date of change I and provide the BA with the particulars, qualifications and experience of his supervision team in accordance with the requirements stipulated in the B(I&R)R. The RI must ensure the full implementation of the supervision proposal and assume the overall responsibility for the supervision of the repair works carried out by the RC, even when part of the supervision is performed by his supervision team.	
	For rectification/repair works that fall within Class I minor works, supervision should also be made in accordance with the requirements of the Technical Memorandum for Supervision Plans and Code of Practice for Site Supervision as necessary.	For rectification/repair works that fall within Class I minor works, <b>RI's</b> supervision should also be made in accordance with the requirements of the Technical Memorandum for Supervision Plans and Code of Practice for Site Supervision as necessary.	
8. Section 10 - 1 <sup>st</sup> paragraph	2014 Version The QP shall carry out window inspection personally if he is a natural person. Where the QP is a RGBC or RMWC registered in the name of a company, the window inspection shall be carried out personally by its Authorized Signatory as the representative of the QP as prescribed in the B(I&R)R. The inspection shall cover all window elements of openable sash and fixed panel.	The QP shall carry out window inspection personally if he is a natural person. Where the QP is a RGBC or RMWC registered in the name of a company, the window inspection shall be carried out personally by its Authorized Signatory as the representative of the QP as prescribed in the B(I&R)R. The inspection shall cover all window elements of openable sash and fixed panel. Where windows are concealed by decoration, furniture, etc., the	To remind QP to inspect windows concealed by decoration, furniture, etc.

Item	Version	2022 Amendments	Remarks
		QP shall make all efforts to remove the obstructions to enable inspection to all components of window elements.	
9. Appendix II	2012 Version Appendix II	Replacement by Appendix II (2022 Version) (1 page)	<ul> <li>Consequential amendments under item 1 above.</li> </ul>
10. Appendix V - Item (A)(I)(b)	<ul> <li>2012 Version <ul> <li>(b) Materials</li> <li>Cementitious mortar and polymer modified cementitious mortar are the most common types of repair mortar. The RI shall ensure that the compressive strength of the repair mortar shall not be inferior to that of the concrete substrate.</li> <li>Prior to the commencement of the patch repair works, the RI shall conduct tests on compressive strength and bond strength of the repair mortar at an age of 7 days. A minimum of two specimens shall be tested for each of the above strength properties. The RI shall include the test results in the Completion Report.</li> </ul> </li> </ul>	<ul> <li>(b) Materials <ul> <li>Cementitious mortar and polymer modified cementitious mortar are the most common types of repair mortar. The RI shall ensure that the compressive strength of the repair mortar shall not be inferior to that of the concrete substrate.</li> </ul> </li> <li>Prior to the commencement of the patch repair works, the RI shall conduct tests on compressive strength and bond strength of the repair mortar at an age of 7 days. A minimum of two specimens shall be tested for each of the above strength properties. Such material tests are not required if the repair mortar is covered by a valid certificate of conformity (CoC) under the Product Conformity Certification Scheme for Repair Mortar issued by an accredited certification body.</li> <li>The RI shall include the test results or the CoC of the repair mortar in the Completion Report.</li> </ul>	To provide an alternative way to material tests on repair mortar.

Item	Version	2022 Amendments	Remarks	
11. Appendix VI	2017 Version Appendix VI	Replacement by Appendix VI (2022 Version) (15 pages)	<ul> <li>Consequential amendments under item 7 above and updated RI's supervision requirements.</li> </ul>	
12. Appendix VII	2012 Version Appendix VII	Replacement by Appendix VII (2022 Version) (4 pages)	Consequential amendments under item 1 above.	
13. Appendix VIII	2017 Version Appendix VIII	Replacement by Appendix VIII (2022 Version) (2 pages)	Consequential amendments under item 1 above.	

# Appendix II

### **Pre-inspection Preparation**

The RI shall obtain and review the following background building information prior to the carrying out of building inspection:

- (a) OP date;
- (b) Usage;
- (c) Approved plans;
- (d) Plans and details of minor works carried out under the simplified requirements;
- (e) Plans and documents submitted to the BA under section 39C of the BO;
- (f) Whether the subject building or premises is subject to the FS(CP)O or FS(B)O and whether Fire Safety Directions or Fire Safety Improvement Directions have been served;
- (g) Whether the subject building or premises has any outstanding statutory orders for repair or investigation issued under the BO;
- (h) Previous records on building inspection, rectification and repair; and
- (i) Maintenance manual.

# Appendix VI

# **Minimum Supervision Requirements of RI**

The RI must ensure that repair is carried out in accordance with the repair proposal and supervised in accordance with the supervision proposal.

The RI may appoint a Level 1 representative and a Level 2 representative to form a supervision team to supervise the rectification/repair works and proof tests on his behalf. The minimum qualifications and experience required for Level 1 and Level 2 representative are set out in Table 1. The RI has the overall responsibility and accountability for his supervision team. The representative is directly accountable to the RI.

The minimum ♣ frequency of site inspection ♣ required for the RI and his supervision team are set out in Table 2 ♣.

A standard supervision proposal is set out in Annex A.

The effect of the scale of rectification/repair works should be considered in determination of supervision requirements for each site inspection. It should be assessed by a scale factor of the works in accordance with the Code of Practice for Site Supervision.

RI should devise checklists for his representatives by making reference to the items listed in Table 3 and to include any other particular items considered appropriate and necessary. All items inspected must be properly recorded as inspection records as in Annex B. All non-conformities detected during the checking must be properly recorded in the Non-conformity and Rectification Reports as in Annex C.

When witnessing proof tests and checking materials on site, all essential information must be properly recorded as in Annex D and Annex E respectively.

All the checklists and inspection records must be completed contemporaneously and properly kept for the inspection of the BA upon request.

# Table 1 – Minimum qualifications and experience for RI's Level 1 and Level 2 Representatives

RI's Minimum qualifications and experience	
Representative	
Level 1 Representative	Equivalent to the technically competent person (TCP) of grade T1 for Building Works or Class I Minor Works, as stipulated in the Code of Practice for Site Supervision.

Level 2 Representative	(a)	Equivalent to the TCP of grade T3 for Building Works or Class I Minor Works, as stipulated in the Code of Practice for Site Supervision; or		
	(b)	Passed specified top-up course with minimum total relevant working experience of 5 years.		

# Table 2 – Minimum Frequency of Site Inspection

RI or RI's Representative	Minimum Frequency of Site Inspection Note	
RI	First inspection to rectification/repair works and proof	
	tests that are specified for Level 2 Supervision	
Level 2 Representative	Fortnightly Inspection	
Level 1 Representative	Weekly Inspection	

Note:

A Level 2 Representative may take up the responsibilities of a Level 1 Representative **#** provided that the minimum frequency of site inspection by Level 1 Representative shall be adhered to.

# Table 3 – ↓ Typical Items for the Checklist

# **General Supervision Items**

Item No.	Typical Items for General Supervision	Supervisi	ion Level
		Level 2	Level 1
G1	Establish systems for co-ordinating, compiling and filing of reports, maintaining filing systems; and forwarding reports to RI in case of non-conformity.	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>
G2	Check that the provision and condition of scaffolding, catch fans, matscreens and heavy duty nylon mats, as appropriate, are satisfactory.		✓
G3	Register reports of non-conformity and inform relevant parties of non-conformity.	✓	<ul> <li>✓</li> </ul>
G4	Report to the RI if non-conformity is considered to pose an imminent danger, to be a significant risk or a source of danger or the RC does not comply with rectification instructions.	✓	✓
G5	Check that lower level of representative and RC are conducting site inspections no less than the required frequency and carrying out duties in accordance with the Code of Practice the Mandatory Building Inspection Scheme and the Mandatory Window Inspection Scheme, and the Code of Practice for Site Supervision.	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>
<mark>G6</mark>	Check and monitor that all temporary works are installed in accordance with agreed method statement.	✓	<ul> <li>✓</li> </ul>
Gn	Any other items considered essential by the RI		

# Quality Supervision Items

Item No.	Typical Items for External Elements	Typical Items for External Elements Supervisio	
		Level 2	Level 1
	Preparation		
E1	Verify hacking of loose finishes and preparation		<ul> <li>✓</li> </ul>
I	of bedding		
E2	Examine substrate prior to laying tile finishes	✓	
E3	Check location, alignment and size of drill holes		<mark>✓</mark>
	for new anchor bolts		
I	Rectification/Repair		
<mark>E4</mark>	Examine first trial bedding mortar	✓	
E5	Check dimensions of replaced cladding panels and		✓
I	curtain wall elements		
<mark>E6</mark>	Supervise installation of new anchor bolts		✓
E7	Supervise installation of cladding panels		✓.
E8	Supervise application of structural sealant for		<ul> <li>✓</li> </ul>
	curtain wall works		
I	<mark>Materials</mark>		
<mark>E9</mark>	Check material delivery records and ensure they		<ul> <li>✓</li> </ul>
	meet the approved requirements		
	Proof Test		
<mark>E10</mark>	Supervise hammer-tapping		<ul> <li>✓</li> </ul>
E11	Conduct pull-off tests	✓	
<mark>En</mark>	Any other items considered essential by the RI		

<mark>Item No.</mark>	Typical Items for         Structural Elements         Supervisit		ion Level
		Level 2	Level 1
	Preparation		
<mark>S1</mark>	Verify hacking of damaged, loose, hollow		<ul> <li>✓</li> </ul>
	sounding concrete, spalling and honeycomb		
<mark>S2</mark>	Supervise opening up of concrete for cracks		✓
<mark>S3</mark>	Check spacing between sound concrete and		<mark>✓</mark>
	exposed reinforcement		
<mark>S4</mark>	Check removal of rust and mill scale		<ul> <li>✓</li> </ul>
	Concrete Repair		
<mark>85</mark> 86	Check new replacing reinforcement		<mark>✓</mark>
<mark>S6</mark>	Examine reinforcement and sound concrete prior	<ul> <li>✓</li> </ul>	
	to application of bond coat and repair mortar		
<mark>S7</mark>	Supervise application of bond coat and repair		<mark>✓</mark>
	mortar		
<mark>S8</mark>	Supervise resin injection for cracks		<ul> <li>✓</li> </ul>
	Recasting		
<mark>S9</mark>	Check formwork and falsework		<mark>√</mark>
<mark>S10</mark>	Supervise concrete mixing		<ul> <li>✓</li> </ul>
<mark>S11</mark>	Examine reinforcement prior to concreting	<ul> <li>✓</li> </ul>	
<mark>S12</mark>	Supervise concrete compaction and curing		<ul> <li>✓</li> </ul>

	Structural Steel Repair		
<mark>S13</mark>	Check corrosion protection to steel elements and		<ul> <li>✓</li> </ul>
	their connections	_	
<mark>S14</mark>	Supervise replacement of structural members	<mark>✓</mark>	
	including provision of temporary supports		
<mark>S15</mark>	Check welded joints of structural members		✓
	Materials		_
<mark>S16</mark>	Check material delivery records and ensure they		<ul> <li>✓</li> </ul>
	meet the approved requirements		
	Proof Test		_
<mark>S17</mark>	Supervise hammer-tapping	_	<ul> <li>✓</li> </ul>
<mark>S18</mark>	Conduct pull-off test	<ul> <li>✓</li> </ul>	_
<mark>S19</mark>	Conduct rebound hammer tests 4 and concrete		<ul> <li>✓</li> </ul>
	cube tests		_
<mark>S20</mark>	Conduct repair mortar compressive strength and		<ul> <li>✓</li> </ul>
	bond strength tests (if repair mortar is not covered		
	by a valid certificate of conformity under the		
	Product Conformity Certification Scheme for		
	Repair Mortar)		_
<mark>S21</mark>	Conduct strength tests on new reinforcement and		<ul> <li>✓</li> </ul>
	structural steel wherever necessary		
<mark>S22</mark>	Conduct non-destructive testing of welds	<ul> <li>✓</li> </ul>	
<mark>Sn</mark>	Any other items considered essential by the RI		

<mark>Item No.</mark>	Typical Items for Fire Safety Elements	Supervisi	ion Level
		Level 2	Level 1
	Rectification and Repair		
F1	Supervise application of fire resisting materials		✓
<mark>F2</mark>	including measurement of coat thickness Supervise repair or rectification of fire safety		<mark>✓</mark>
	elements such as elements of construction, walls, fixed light, doors, fire shutters.		
	Materials		
F3	Check material delivery records and ensure they meet the approved requirements		✓
<mark>Fn</mark>	Any other items considered essential by the RI		

<mark>Item No.</mark>	Typical Items for Drainage System	Supervisi	ion Level
		Level 2	Level 1
	Preparation		_
D1	Check alignment, fall and sub-grade material prior		<ul> <li>✓</li> </ul>
	to laying underground drain pipes		
	<b>Rectification and Repair</b>		
D2	Check fixings for brackets and connections		<ul> <li>✓</li> </ul>
D3	Check connection of pipes and connections to last		<ul> <li>✓</li> </ul>
	manhole prior to backfilling		
	Materials		
D4	Check material delivery records and ensure they		<ul> <li>✓</li> </ul>
	meet the approved requirements		

	Proof Test		
D5	Supervise ball tests		<ul> <li>✓</li> </ul>
<mark>D6</mark>	Supervise air tests		<ul> <li>✓</li> </ul>
D7	Supervise water tests		<ul> <li>✓</li> </ul>
D8	Supervise smoke tests		<ul> <li>✓</li> </ul>
<mark>D9</mark>	Conduct CCTV survey	<ul> <li>✓</li> </ul>	
<mark>Dn</mark>	Any other items considered essential by the RI		

Notes:

Level 1 supervision – may be performed by RI's Level 1 representative, RI's Level 2 representative or RI.

Level 2 supervision – may be performed by the RI's Level 2 representative or RI. The RI however must carry out the first inspection to rectification/repair works and proof tests that are specified for Level 2 supervision.

# Mandatory Building Inspection Scheme

MBIS Notice No.\* :

# **Registered Inspector (RI)** Supervision Proposal for Repair Works

To the Building Authority,

2. We have signed under Parts I and II respectively of this supervision proposal. Our signatures indicate our undertaking that the supervision of building repair works at this building will be carried out in accordance with this supervision proposal. We also undertake that the management and execution of both site safety and quality supervision of the works covered by this supervision proposal will be carried out in the manner prescribed by the provisions of the BO, the Building (Inspection and Repair) Regulation (B(I&R)R) and the Code of Practice for the Mandatory Building Inspection Scheme and the Mandatory Window Inspection Scheme (the Code).

# Part I - Supervision Proposal of the Registered Inspector (RI)

Type of Building Works	Date of Repair Proposal	<mark>Cost</mark>	Scale Factor
Class I minor works* Class II/III minor works		A supervision plan submitted to the B in accordance with Control System.*	building Authority

3. The works covered by this supervision proposal are:

Notes -

<sup>1.</sup> The amount of supervision by RI's representative is given in Annex A1.

The determination of the scale factor is in accordance with the Code of Practice for Site Supervision.

<sup>\*</sup> Delete if not applicable.

### 4. RI's supervision team for the designated type of works identified are:

	Full Name in English^	Full Name in Chinese ^	I.D. No.^/RI Registration No.**/ Technically Competent Person (TCP) No.**	Expiry Date of RI Registration <sup>§</sup> / TCP Validity Period <sup>§</sup> (if applicable)	Minimum Frequency of Site Inspection <sup>a</sup>
RI RI					
Level 2 Representative Level 1 Representative					

Note - The CVs showing their relevant experience and academic qualifications are given in the attachment. If more than one Level 1 Representative or Level 2 Representative is proposed, the demarcation of their responsibility should be provided.

- <sup>^</sup> In accordance with the Hong Kong Identity Card.
- \*\* CV is not required if RI Registration No. or TCP No. under the TCP Registration Scheme is provided.
- § In accordance with the registration record.
- $\alpha$  Minimum frequency of site inspection shall be in accordance with Table 2 in Appendix VI of the Code.

5. I (name in full) \_\_\_\_\_\_\_\_, RI, certify that Part I (paragraphs 3 and 4) of this supervision proposal is prepared by me and it complies with the requirements of the BO, B(I&R)R and the Code. I have also read and hereby confirm paragraphs 1 and 2 of this supervision proposal. Confirmation for appointment and contact information of Level 1 Representative and Level 2 Representative (Annex A2) is submitted with this supervision proposal.

Date:

Certificate of Registration No.<sup>#</sup> Date of Expiry of Registration<sup>#</sup> Signature<sup>#</sup> Any false certification or declaration may be subject to legal action

# Part II - Supervision Proposal of Registered Contractor (RC) for Class II/III Minor Works

6. RC's supervision team for the designated type of works identified as specified in paragraph 3 of Part I are:

	Full Name in English^	Full Name in Chinese^	I.D. No.^	Minimum Frequency of Site Inspection**
Authorized signatory (AS)				As and when necessary or continuous supervision*
Representative of RC				continuous supervision

\*\* In accordance with section 9AA(6)(a) of BO, the appointed RC must provide continuous supervision in relation to the carrying out of the site works. AS must fill in the above table and indicate that he or the representative of RC shall be responsible for the continuous supervision of the works. If more than one representative of RC are proposed to be responsible for the continuous supervision of site works, the demarcation of their responsibilities should be provided.

^ In accordance with the Hong Kong Identity Card.

7. I (name in full) \_\_\_\_\_\_\_\_, AS of the registered general building contractor (RGBC)/registered minor works contractor (RMWC)\*, certify that Part II (paragraphs 6) of this supervision proposal is prepared by me and it complies with the requirements of the BO, B(I&R)R and the Code. I have also read and hereby confirm paragraphs 1 and 2 of this supervision proposal. Confirmation for appointment and contact information of AS and representative of RC (Annex A2) is submitted with this supervision proposal.

Date:

 Date:
 Signature#

 Any false certification or declaration may be subject to legal action

 Name# of RGBC/RMWC\*
 :

 (Chinese)
 :

 Certificate of Registration No.#
 :

 Date of Expiry of Registration#
 :

Enclosures: Annexes

# In accordance with registration record.

\* Delete if not applicable.

#### <mark>Personal Data</mark>

#### **Purposes of Collection**

- 1. The personal data provided by means of this supervision proposal will be used by the Buildings Department for the following purposes:
  - (a) activities relating to the processing of your submission in this supervision proposal;
  - (b) activities relating to the above proposed building works; and
  - (c) facilitating communication between the Buildings Department and yourself.
- 2. It is obligatory for you to provide the information as required in the supervision proposal. If you fail to provide the required data, delay may be caused in processing of your submission or even result in rejection of the application.

#### **Classes of Transferees**

 The personal data you provided by means of this supervision proposal may be disclosed to other government departments, bureaux, organisations or any persons for the purposes mentioned in paragraph 1 above.

#### Access to Personal Data

4. You have the right of access and correction with respect to the personal data as provided under the Personal Data (Privacy) Ordinance. The Buildings Department has the right to charge a reasonable fee for the processing of any data access request. Request for personal data access and correction should be addressed to the Mandatory Building Inspection Sections of the Buildings Department.

Building Works		Supervision Input				
(1)	<mark>(2)</mark>	(3)	<mark>(4)</mark>	<mark>(5)</mark>	<mark>(6)</mark>	
Types of Building Works	Scale Factor (S)	RI's Representative	Frequency of Site Supervision	Notional Supervision Input	Adjusted Supervisi on Input (2) x (5)	
				(man-hou	<mark>ur/day)</mark>	
Class II/III Minor Works & Other Rectification/Repair Works		Level 2	Fortnightly	8		
		Level 1	<b>Weekly</b>	<mark>8</mark>		

# The amount of supervision by RI's representative

Note - The determination of the scale factor is in accordance with the Code of Practice for Site Supervision.

# **Mandatory Building Inspection Scheme** Confirmation of Appointment of Representatives of RI/RC\* Supervision Team

MBIS Notice No.*	Name and Address of Building	
Type of Works		

Full Name in	Post of		<b>Correspondence Address</b>	<mark>Telephone</mark>	<mark>Email Address</mark>	Signature of RI's
English/Chinese <sup>1</sup>	<b>Supervision</b>	Frequency of		<b>Number</b>		<b>Representative</b> /
	<b>Team</b>	Site Inspection <sup>1</sup>				<b>Representative of RC<sup>2</sup></b>
	Level 2					
	Representative*					
	Level 1					
	Representative*					
	<b>Representative</b>					
	of RC					

### Notes -

- 1. The RI/AS\* should ensure that the name of the Level 2/Level 1 Representative/Representative of RC and the minimum frequency level of inspection are the same as that shown on the supervision proposal submitted to the Building Authority (BA). If there is a change of Representative in future, the RI/RC shall submit the revised supervision proposal, with new Representative's confirmation, to the BA within 7 days of the change.
- 2. Signature in this confirmation indicates the Representative's acknowledgement of appointment and availability for the job, and he/she is not overloaded with engagement in other construction sites. If there is any change subsequently, he/she should notify the RI/AS and the BA. The signature in this confirmation also indicates that the Representative has read, understood and agreed the notes for "Personal Data" attached to this Form.

Date

Full Name<sup>#</sup> of RI/AS\*

Signature<sup>#</sup> Any false certification or declaration may be subject to legal action

Certificate of Registration No. for RI/RC\*

Date<sup>#</sup> of Expiry of Registration

\* Delete if not applicable.

In accordance with registration record.

# Supervision Record taken by Representative under RI/RC\* Stream

MBIS Notice No.* :	
Name and Address of Building	
Type of Works :	
Full Name <sup>(1)</sup> of RI/	
RI's Representative/	
AS/Representative of RC* :	
Frequency of Inspection :	

Date	<u>(e.g. 28 June 2021 (Monday)</u>				
	Locations of the Works Inspected (if applicable)	Inspectio	<b>Photos</b>		
Item No. <sup>(2)</sup>	Location/Details	<mark>Result</mark> (S <sup>(3)</sup> /NS <sup>(4)</sup> /NA <sup>(5)</sup> )	<mark>Remedial / Remark</mark>	<mark>(if any)</mark>	
<mark>Signature</mark>			I	I	

# \* Delete if not applicable.

Note <sup>(1)</sup>	:	Full name of the RI/RI's Representative/AS/Representative of RC as provided in the
		supervision proposal.
Note <sup>(2)</sup>	:	According to the checklists attached.
Note <sup>(3)</sup>	:	"S" denotes "Satisfactory".
		If a non-conformity is very minor in nature and has been rectified to the satisfaction of the
		RI at the same inspection, it would be recorded as "satisfactory".
Note <sup>(4)</sup>	:	"NS" denotes "Not Satisfactory".
		It should be recorded in the site supervision report and where applicable Form SP2.
		Completion of Form SP2 is required for a non-conformity that (a) has material concern
		for safety; or (b) does not have material concern for safety but the works item/rectification
		works cannot be verified due to the areas have been covered up during inspection or
		re-inspection.
Note <sup>(5)</sup>	:	"NA" denotes "Not Applicable".

# Annex C of Appendix VI Form SP2

### Non-Conformity and Rectification Reports

PART 1	
MBIS Notice No.* :	
Name and Address of Building :	
Record of Non-Conformity	
Date Discovered :	
Details :	
Signature^	
Full Name <sup>#</sup> of RI /RI's Representative*	
Date	
PART 2	
Record of Rectification Works	
Instruction for rectification given to :	(Full Name <sup>α</sup> of
	date).
Details of Instruction :	
Rectification works certified completion on	(date).
Signature <sup>^</sup>	:
Full Name <sup>#</sup> of RI/ RI's Representative*	
Date	:
	-
c.c. Building Authority	

- \* Delete if not applicable.
- ^ RI's signature in accordance with registration record and the signature of representative of RC in accordance with supervision proposal.
- # Full name of the RI/RI's Representative as provided in the supervision proposal.
- α Full name of AS/Representative of RC as provided in the supervision proposal.

## Annex D of Appendix VI Form SP3

#### Supervision Record of Proof Tests

MBIS Notice No.* :		
Name and Address of Building :		
Full Name <sup>#</sup> of RI/RI's Representative*:		
Location(s) of Test :	(see attached plan	)
Date of Test:	· · · · · · · · · · · · · · · · · · ·	
Name of HOKLAS :		
Test Method/Standard :		

Type of Proof Test	Location of Test Sample	Size / Description of Test Sample	Comments/ Remarks

The test report(s) in respect of <u>(type of proof test)</u> prepared by <u>(full name of staff prepared the proof test)</u> was/were checked in accordance with the above details and found in order.

I, *(name in full)* \_\_\_\_\_\_, RI, confirm that the proof test(s) has/have been carried out and supervised by me/my supervision team\* and the test(s) is/are acceptable/unacceptable\* under relevant building regulations and I am satisfied/dissatisfied\* with the performance of the tests.

Date:

Certificate of Registration No.<sup>#</sup> Date of Expiry of Registration<sup>#</sup> Signature<sup>#</sup> of RI Any false certification or declaration may be subject to legal action

Delete if not applicable.
 # In accordance with registration record.

# Annex E of Appendix VI Form SP4

# Materials On-Site Checking Record

Item No.	Date of Checking	Product Name	Location of Material Used	Name of Manufacturer & Place of Manufacture (City & Country)	Compliance with Relevant Building Regulations & Code of Practice	Testing Report/ Result/ Certificate	Remarks/ Comments	Checked by RI/ RI's Representative* (Full name <sup>#</sup> )	Signature <sup>#</sup> of RI/ RI's Representative*
				1 1 1 1 1					

Note - The materials used in repair works must be checked to comply with the relevant Building Regulations.

Delete if not applicable.

\* #

In accordance with registration record and as provided in the supervision proposal.

# **Appendix VII**

### **Inspection Report - Essential Information**

#### **Cover Page**

The cover page shall contain the following information:

- (a) Building name, address and the lot number
- (b) MBIS notice number
- (c) Name, certificate of registration number and date of expiry of registration of the RI
- (d) Date of the report

#### Summary

This section shall contain a concise summary on the condition of the building inspected and the RI's recommendations.

#### **Building Information**

The report shall contain the following building information:

- (a) OP date;
- (b) Original and current usage
- (c) Number of storeys and units
- (d) Approved floor plans where available
- (e) Principal construction materials
- (f) Salient information of previous inspection and repair, if available
- (g) Name of Incorporated Owners and management company, if any

# **Reference Documents**

This section shall list the documents which have been reviewed by the RI including the following:

- (a) Approved building, structural, drainage, alteration and addition plans
- (b) Plans and details of minor works carried out under the simplified requirements
- (c) Plans and documents submitted to the BA under section 39C of the BO
- (d) Fire Safety Directions served by the BD on the building owners, if any
- (e) Outstanding statutory orders served by the BD on the building owners for repair or investigation, if any
- (f) Other relevant documents

## Method Statement for Building Inspection

This section shall give the method statement for inspection of the various types of building elements covered by the MBIS. Where the RI conducts tests including those for the detailed investigation wherever applicable, details of the tests such as the type, sampling rate, location and method shall also be given.

#### **Inspection Results**

This section shall include the following information:

- (a) Daily inspection records, in which details including the time and date of inspections, locations and items or parts of buildings that have been inspected etc.
- (b) Particulars, qualifications and experience of the RI's representative that the RI has engaged to assist him in ascertaining the extent of the defects in accordance with section 3.3.2(B).
- (c) Photos for each elevation of the building
- (d) Summary of all building defects and deficiencies in table form accompanied by

annotated photos and marked up plans, where necessary, or inspection results accompanied by annotated photos showing conditions of the building inspected where rectification and repair works are not required (see Appendix XI). The RI shall also highlight the areas subject to outstanding statutory orders for repair or investigation, if any, in the marked up plans

- (e) Record of defects extending from common parts or external walls to individual flats to which the RI intends to draw the BD's attention, e.g. sections 3.3.3 and 3.4.3 refer
- (f) Record of defective flat entrance door of private premises having adverse effects on the fire safety, section 3.5.3 refers
- (g) Results of all tests carried out during the inspection stage
- (h) A statement reporting that, if the building is subject to Fire Safety Directions, the upgrading works have not yet been completed, section 3.5.2(A) refers
- (i) A statement confirming that the inspection has covered the areas subject to outstanding statutory orders for repair or investigation, section 3.2 refers
- (j) Record of all UBW identified, including those obstructing the building rectification and repair wherever applicable, in table form accompanied by annotated photos and marked up plans, section 3.7.3 refers
- (k) Report on signs of suspected subdivision of flats, section 3.7.1 refers

Sample inspection records are given in Appendix XI for reference.

#### Assessment

Based on the findings of the building inspection and detailed investigation, where necessary, the RI shall assess the conditions of the whole building and its major elements. The RI shall prepare a repair proposal for all defects and deficiencies identified, wherever applicable.

The RI shall also highlight those building components and areas which require regular maintenance, replacement or management for maintaining safety until the next cycle of inspection and advise the owners of the need for regular maintenance and replacement of such components.

# **Repair Proposal**

Under the MBIS, building elements that have become dangerous or liable to become dangerous shall be repaired. Where rectification and repair works are required, the repair proposal shall contain the following information:

- (a) Marked-up plans, where appropriate, showing the demarcation of the different types of rectification and repair works to be carried out in accordance with the simplified requirements under the MWCS (specifying the class, type, and item), exempted building works or works requiring prior approval of plans and consent to the commencement of works from the BA
- (b) Method statement for rectification and repair works including details of the proposed methods, materials, specifications and precautionary measures
- (c) Proposal of proof tests
- (d) Supervision proposal, if applicable
- (e) Particulars, qualifications and experience of the RI's representative where the RI is appointed for both building inspection and supervision of building repair works and he designates a person to provide supervision on his behalf in accordance with section 6.4

Whilst the MBIS requires the carrying out of basic repair works to render the building safe, the owners may wish to take this opportunity to carry out other improvement or upgrading works concurrently, including those under the purview of the FS(CP)O or FS(B)O. In such circumstances, the repair works required under the MBIS should be clearly stated in the repair proposal and should be distinguished from the additional improvement or upgrading works.

# **Completion Report - Essential Information**

# **Cover Page**

The cover page shall contain the following information:

- (a) Building name, address and the lot number
- (b) MBIS notice number
- (c) Name, certificate of registration number and date of expiry of registration of the RI
- (d) Name, certificate of registration number and date of expiry of registration of the RC
- (e) Date of the report

### **Rectification and Repair Works**

This section shall contain the following information:

- (a) Summary of all rectification and repair works carried out, accompanied by annotated photos where necessary
- (b) Marked-up plans, where appropriate, showing the demarcation of the different types of rectification and repair works completed in accordance with the simplified requirements under the MWCS (specifying the class, type, and item), exempted building works or works having obtained the prior approval of plans and consent to the commencement of works from the BA
- (c) Photos for each elevation of the building after repair
- (d) Method statement adopted for and records of results of all proof tests
- (e) Certificates and reports of materials used, e.g. glass panes, structural sealant, reinforcement, concrete test cubes, repair mortar, structural steel, drainage pipes, fire doors etc.

- (f) Summary of all rectification and repair works supervised by RI's supervision team, including the date of inspection; items inspected; and inspection results
- (g) A statement confirming that the rectification and repair works have covered the areas subject to outstanding statutory orders for repair or investigation, and the RI has separately notified the corresponding sections of BD that the rectification and repair works required by the statutory orders have been completed
- (h) An account of all revisions to the repair proposal submitted with the Inspection Report

# **Details of Voluntary Removal of UBW**

This section shall contain record of all voluntary removal of UBW accompanied by annotated photos and marked up plans.

- The End -