

20 July 2020

To: All Authorized Persons  
Registered Structural Engineers  
Registered Inspectors  
Registered General Building Contractors  
Registered Minor Works Contractors

Dear Sir/Madam,

**Code of Practice for the Mandatory Building Inspection Scheme and  
the Mandatory Window Inspection Scheme 2012  
Amendments**

Subsequent to the publication of the Code of Practice for the Mandatory Building Inspection Scheme and the Mandatory Window Inspection Scheme 2012 (the Code), the Technical Committee (TC) set up by this department regularly collects views and feedback received from the practitioners and the stakeholders arising from the use of the Code, and reviews the contents thereof for the necessary update.

2. Having considered the TC's recommendations, certain amendments and clarifications to the Code at Annex are promulgated with immediate effect from the date of this letter and have been uploaded to the Buildings Department website [www.bd.gov.hk](http://www.bd.gov.hk).

3. The major amendments include:

- (a) clarification on the inspection requirements for the concealed external elements and other physical elements;
- (b) amendments to the mandatory requirements for window replacement/repair; and
- (c) amendments to the best practice for the replacement of rivets and screws.

Yours faithfully,



(NG Kin-shing)

Assistant Director/ Mandatory Building Inspection  
for Building Authority

**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		<p><b>(J) Concealed Elements</b></p> <p>For concealed external elements and other physical elements, the RI shall exercise professional judgment to expose sufficient elements for a representative assessment.</p> <p>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.</p> <p>In any case, the RI shall inspect at least 30% of the area of an external wall with concealed element.</p>	<ul style="list-style-type: none"> <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	<p><b>Mandatory Requirements</b></p> <p>All windows shall be rendered safe after completion of repair works.</p> <p>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.</p> <p>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.</p>	<p><b>Mandatory Requirements</b></p> <p>All windows shall be rendered safe after completion of repair works.</p> <p>All defective window components <b>or signs of deterioration</b> 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.</p> <p>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.</p> <p><b>When replacing a hinge, at least 3 numbers of screws or rivets shall be used to fasten it to the window frame and the openable sash.</b></p> <p><b>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.</b></p> <p><b>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.</b></p> <p><b>Where a stainless steel rivet is used (for example,</b></p>	<ul style="list-style-type: none"> <li>■ To amend paragraph 2 and add paragraphs 4 to 11.</li> <li>■ To elaborate the mandatory requirements for window replacement/repair.</li> </ul>

Item	Clause	2017 Version	2020 Amendments	Remarks
			<p>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.</p> <p>QP and RC should ensure that installation of the screws and rivets shall be in accordance with the manufacturer's specifications.</p> <p>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.</p> <p>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.</p> <p>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.</p>	

Item	Clause	2014 Version	2020 Amendments	Remarks
3	Section 11.2	<p><b>Best Practice</b></p> <p>Apart from meeting the prescribed repair standards stipulated under the Section 8 of the B(I&amp;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.</p> <p>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.</p> <p><b>4-bar Hinges</b></p> <p>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.</p> <p><b>Rivets and Screws</b></p> <p>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.</p> <p>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</p>	<p><b>Best Practice</b></p> <p>Apart from meeting the prescribed repair standards stipulated under the section 8 of the B(I&amp;R)R <b>and the 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.</p> <p>↓</p> <p><b>4-bar Hinges</b></p> <p>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.</p> <p><b>Rivets and Screws</b></p> <p>For better corrosion resistance, stainless steel rivets or screws shall be used to replace defective or missing rivets or screws. ↓</p> <p>↓</p>	<ul style="list-style-type: none"> <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>

Item	Clause	2014 Version	2020 Amendments	Remarks
		<p>the screws may be adopted.</p> <p>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.</p> <p>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.</p> <p><b>Other Installation Requirements</b></p> <p>Reference can be made to PNAP APP-116 for other installation requirements of aluminium windows.</p>	<p>↓</p> <p>↓</p> <p><b>Other Installation Requirements</b></p> <p>Reference can be made to PNAP APP-116 for other installation requirements of aluminium windows.</p>	

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