

### 3 Categorization of “Minor Works”

The 118 items of “minor works” (“MW”) can be categorized by the substance of works into 23 combinations. In this chapter, all categories of MW will be illustrated by photographs, with simple comparison of their descriptions<sup>3</sup> and other relevant considerations in the design, planning and carrying out of them. The version of codes or manuals mentioned is for reference only. Latest edition prevailing at the time of works should be followed.

#### 3.1 Building Works Associated with Service Lift, Stairlift or Lift Platform

MW Items	1.3	1.33
<b>Simple Comparison of Descriptions</b>	... installation or alteration of service lift ...	... removal of service lift ...
	No additional load to cantilevered slab;	
	Not involve alteration of structural elements, except a simply supported beam that – (i) not of pre-stressed construction; & (ii) not used to support any column, flat slab or ribbed beam.	
	Rated load of lift $\leq 250$ kg;	
	Internal floor area of lift car $\leq 1$ m <sup>2</sup> ; & Internal height of lift car $\leq 1.2$ m.	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>B(C)R 9A, Lift Code &amp; PNAP APP-29 – construction of lift well, lift pit, machine room, etc. for the service lift.</li> <li>B(C)R 90 &amp; FRC Code para. 11.1 &amp; 11.2 – provision of fire resisting construction to the vertical shafts.</li> <li>Associated slab openings may be MW item 1.2 or 2.1.</li> </ul>	

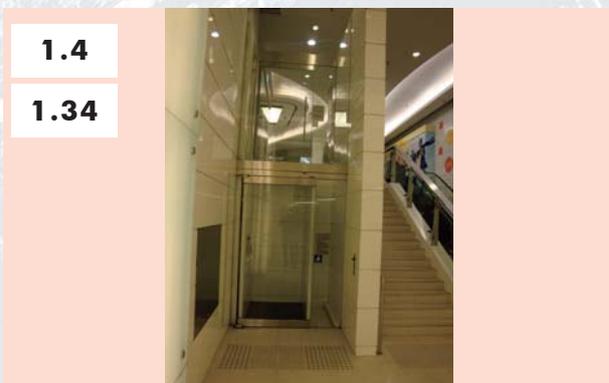
B(C)R represents Building (Construction) Regulations; FRC Code represents Code of Practice for Fire Resisting Construction 1996; Lift Code represents Code of Practice on the Design & Construction of Buildings & Building Works for the Installation & Safe Use of Lifts and Escalators & PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers.



3. The comparison is provided only for reference purpose. For detailed descriptions & criteria of each minor works item, Part 3 of Schedule 1 of the Building (Minor Works) Regulation (“B(MW)R”) should be referred or Appendix II.

MW Items	1.4	1.34
<b>Simple Comparison of Descriptions</b>	... installation or alteration of stairlift or lifting platform ...	... removal of stairlift or lifting platform ...
	No additional load to cantilevered slab;  Not involve alteration of structural elements, except a simply supported beam that – (i) not of pre-stressed construction; & (ii) not used to support any column, flat slab or ribbed beam.	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(P)R 72, PNAP APP-41 &amp; BFA Manual Div. 13 &amp; 19 – provision of clear signs of stairlift or lifting platform for used by persons with a disability &amp; provision of vertical transportation to persons with a disability.</li> </ul>	
	<ul style="list-style-type: none"> <li>• Stairlift / platform not located inside the required staircase; &amp;</li> <li>• Existing provision under BFA Manual not contravened.</li> </ul>	

B(P)R represents Building (Planning) Regulations; BFA Manual represents Design Manual – Barrier Free Access 2008 & PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers.



## 3.2 Canopy

MW Items	1.27	3.25	3.37	3.38
<b>Simple Comparison of Descriptions</b>	Erection, alteration or removal ...		Strengthening ...	Alteration ...
			unauthorized ...	
	projecting from external wall ...			
	over an entrance to the building;			
	No additional load to cantilevered slab;			
	Not constructed of concrete;			
	Project > 500 mm & ≤ 2 m; &	Project ≤ 500 mm; &		Project > 500 mm & ≤ 750 mm immediately before;
				Project ≤ 500 mm immediately after; &
	Highest point > 3 m from ground.		If highest point ≤ 3 m from ground, not project over any street / common part of the building.	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(P)R 10(1) – Adequate clearance (clearance ≥ 5.5 m &amp; ≤ 7.5 m) beneath the canopy if it is within 600 mm of the outer edge of a footpath or projecting over a road.</li> <li>• B(P)R 10(2) – Adequate clearance (clearance ≥ 3.3 m &amp; ≤ 7.5 m) beneath the canopy if it is over a footpath.</li> <li>• B(P)R 10(3) – Provision of adequate surface water drainage.</li> <li>• B(P)R 10(4) – Not projecting over a street by &gt; 1/10 of its width or within 4.5 m from the centre line of street.</li> <li>• B(P)R 12 – No doorway to the top of canopy.</li> <li>• B(P)R 2 &amp; 31 – Min. dimension of the unobstructed horizontal planes of the open air not affected when fixing canopies at light wells or re-entrants.</li> <li>• PNAP APP-139 – Allowing for the wind channel down effect in design.</li> <li>• Agreement from the IO / co-owners of the external wall / roof (if being common part) should be sought.</li> </ul>			

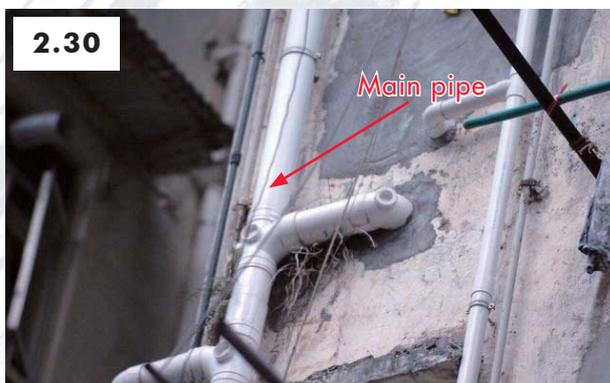
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### 3.3 Drainage

MW Items	2.30	3.23	3.24
<b>Simple Comparison of Descriptions</b>	Erection, alteration or removal of aboveground drain ...		Removal of aboveground drain ...
	No additional load to cantilevered slab;		erection of which ... unauthorized ...
	Not MW item 3.23.	Not involve main pipe, other than the replacement of components at existing junctions; &	
	Not involve embedded pipe, other than through a wall or slab.		
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(SSFPDWL)R 11 – Proper disposal of soil.</li> <li>• B(SSFPDWL)R 24 &amp; 25 – Provision of traps in soil &amp; waste pipes.</li> <li>• B(SSFPDWL)R 28 – Control of bends in soil &amp; waste pipes.</li> <li>• B(SSFPDWL)R 29, PNAP APP-93 &amp; PNAP ADV-14 – Provision of access for repair &amp; maintenance.</li> <li>• B(SSFPDWL)R 34 – Control of the materials for pipes.</li> <li>• PNAP APP-133 – Using cast iron pipes of acceptable performance requirements / standards.</li> <li>• FRC Code para. 10 – Protection of openings for the passage of pipes through fire resisting walls &amp; floors.</li> <li>• Agreement from the IO / co-owners of the external wall / roof (if being common part) should be sought.</li> </ul>		

B(SSFPDWL)R represents Building (Standards of Sanitary Fittings, Plumbing, Drainage Works and Latrines) Regulations; FRC Code represents Fire Resisting Construction 1996 & PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers.



MW Items	1.25	1.36	2.28	2.36	2.29	1.26
<b>Simple Comparison of Descriptions</b>	Repair ...	Removal ...	Repair ...	Removal ...	Addition or alteration ...	
	underground drain ... involve excavation of ...					
	depth > 1.5 m & ≤ 3 m;		depth ≤ 1.5 m;			depth > 1.5 m & ≤ 3 m;
	Distance between excavation & structure / building ≥ depth of excavation;					
	Not involve excavation within "scheduled areas" No. 1 or 3;					
	Not involve the last manhole; &					
	If the works are carried out beside the ...					
	... crest of a slope with a gradient ≤ 30°, distance between excavation & the outer edge of crest ≥ height of slope;			... crest of a slope –		
... crest of a slope with a gradient > 30° –			(i) gradient ≤ 15°;			
(i) height of slope ≤ 3 m; &			(ii) height of slope ≤ 3 m; &			
(ii) distance between excavation & the outer edge of crest ≥ 1.5 times the height of slope;			(iii) distance between excavation & the outer edge of crest ≥ height of slope.			
... top of a retaining wall –						
(i) height of wall ≤ 3 m; &						
(ii) distance between excavation & the wall ≥ 1.5 times the height of wall.						
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(SSFPDWL)R 40 &amp; 41 – Proper disposal of foul &amp; surface water.</li> <li>• PNAP APP-103 – Not laying drainage on newly reclaimed land. Differentiation settlement for newly reclaimed land should be considered.</li> <li>• Associated excavation works may be MW item 1.12 or 2.11.</li> <li>• Agreement from the IO / co-owners of the common part should be sought.</li> </ul>					

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### 3.4 Drying Rack

MW Items	3.29	3.36	3.30
<b>Simple Comparison of Descriptions</b>	Erection, alteration or removal ...	Strengthening ... unauthorized ...	Removal ...
	projecting from external wall ...		
	No additional load to cantilevered slab; Projects $\leq 750$ mm; &		Not DEW item 15 (see 6.1).
	Highest point $> 3$ m from ground.	If highest point $\leq 3$ m from ground, not project over any street / common part of the building.	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(P)R 7(3) – No undesirable projection over a street.</li> <li>• B(P)R 30 – Natural lighting &amp; ventilation not obstructed.</li> <li>• B(P)R 35A &amp; PNAP APP-27 – Not positioning the drying rack directly above any aperture of gas water heater.</li> </ul>		

B(P)R represents Building (Planning) Regulations; DEW represents designated exempted works & PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers.



### 3.5 Excavation Works & Spread Footing Associated with “Minor Works”

MW Items	1.11	2.10
<b>Simple Comparison of Descriptions</b>	Construction or alteration of spread footing associated with the carrying out of other minor works or designated exempted works ...	
	Involve excavation of depth	
	≤ 3 m;	≤ 1.5 m;
	Overall gradient of area bounded by lines 10m away from the location of the footing in the downhill direction	
	≤ 15°;	≤ 5°;
	No slope > 15° within the area bounded by lines 10m away from the location of the footing in the downhill direction;	
	No retaining wall or terrace wall > 1.5 m, or below a line drawn down from the base of the footing that is 45° to the horizontal, within the area bounded by lines 10m away from the location of the footing in the downhill direction;	
	Allowable pressure imposed by the footing on the ground ≤ 100kPa or (if the footing is located below the ground water level) 50 kPa;	
	Footing is not founded on soft clay or mud;	
	No involve excavation within “scheduled area” No. 1 or 3; &	
	Not MW item 2.10.	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(C)R Part XII, Concrete Code &amp; PNAP APP-142 – Design of concrete.</li> <li>• Foundations Code s.4 &amp; s.7.1.3 – General design requirements of shallow foundations &amp; sampling &amp; testing requirements of concrete &amp; reinforcement.</li> <li>• PNAP ADV-15 &amp; PNRC 41 – Control of the fixing of reinforcement.</li> <li>• Associated excavation works may be MW item 1.12 or 2.11.</li> </ul>	

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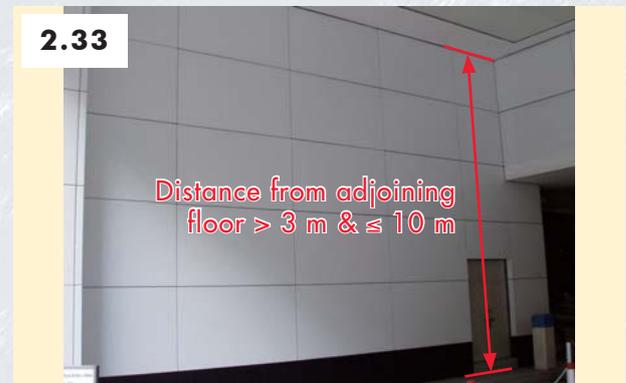
MW Items	1.12	2.11
<b>Simple Comparison of Descriptions</b>	Excavation works associated with the carrying out of any other minor works or designated exempted works ...	
	No excavation within "scheduled area" No. 1 or 3; &	
	Depth of excavation:	
	> 1.5 m & ≤ 3 m.	> 0.3 m & ≤ 1.5 m.
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• PNAP APP-48 &amp; Supervision Code – Provision of qualified supervision (PNAP APP-28 for supervision in the "scheduled areas").</li> <li>• Construction Site (Safety) Regulations 41 – Safe guarding the edges of excavation.</li> <li>• No additional floor area will be resulted after the excavation work.</li> <li>• The MOE, MOA &amp; EVA not affected.</li> </ul>	

PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers; Supervision Code represents Code of Practice for Site Supervision 2005; MOE represents means of escape in case of fire; MOA represents means of access for fire fighting and rescue & EVA represents emergency vehicular access.



### 3.6 External Rendering, External Wall Tiles, Roof Tiles or Panel Fixed by Metal Dowels

MW Items	1.31	2.33
<b>Simple Comparison of Descriptions</b>	Erection, repair or removal of panel fixed by metal dowels & fixings onto a wall inside a building ...	
	Highest point of the panel from adjoining floor	
	> 10 m.	> 3 m & ≤ 10 m.
<b>Other considerations</b>	Fire resistance of the wall not affected.	



MW Items	2.34	3.31
<b>Simple Comparison of Descriptions</b>	Laying, repair or removal of external rendering, external wall tile or roof tile ...	Erection, repair or removal of any cladding fixed to the external wall ... any part of the cladding $\leq 6m$ from the adjoining ground or adjoining floor.
	For repair of any external rendering, highest point of the area to be repaired $> 3m$ from the adjoining ground or adjoining floor;	
	Other than the repair of external rendering, highest point of the rendering or tile $> 3m$ from the adjoining ground or adjoining floor; &	
	For roof tile, gradient of roof $> 1$ in 4.	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>PNAP APP-102 para. 5 &amp; Guidelines for the Removal of Typical Unauthorized Building Works &amp; General Maintenance of External Walls s.5 – General safety requirements.</li> <li>Agreement from the IO / co-owners of the external wall / roof (if being common part).</li> </ul>	<ul style="list-style-type: none"> <li>B(C)R 39 &amp; PNAP APP-16 – Proper specification of material, fixings, strength &amp; durability for cladding.</li> </ul>
	<ul style="list-style-type: none"> <li>B(C)R 48 – Making the roof weatherproof.</li> <li>PNAP ADV-31 / PNRC 67 – Proper design &amp; specification for external rendering / tiling works.</li> </ul>	

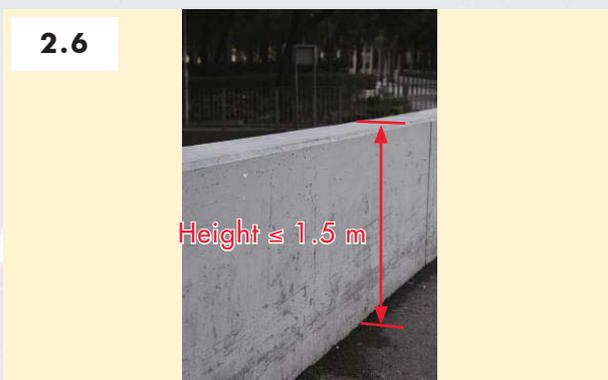
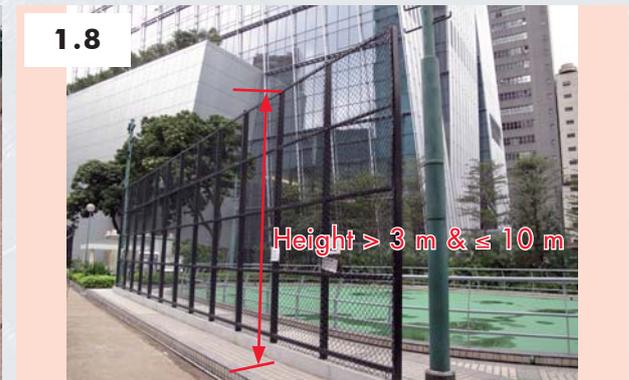
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### 3.7 Fence Wall or External Mesh Fence

MW Items	1.7	2.6	1.8	2.7
<b>Simple Comparison of Descriptions</b>	Erection or alteration ...			
	... solid fence wall ...		... external mesh fence ...	
	Erected on-grade; &			
	Height > 1.5 m & ≤ 5 m.	Height ≤ 1.5 m.	Height > 3 m & ≤ 10 m.	Height ≤ 3 m.
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(P)R 30 – No obstruction to the natural lighting &amp; ventilation</li> <li>• PNAP APP-103 – Not construct fence wall on newly reclaimed land.</li> <li>• PNAP ADV-22 – Control of the felling or transplanting of trees.</li> <li>• Associated excavation works &amp; footing may be MW item 1.12 or 2.11 &amp; 1.11 or 2.10.</li> <li>• The MOE, MOA &amp; EVA not affected.</li> </ul>			

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MW Items	1.9	3.4	1.10	3.5
<b>Simple Comparison of Descriptions</b>	Removal ...			
	... solid fence wall ...		... external mesh fence ...	
	Erected on-grade; &			
	Height > 3 m.	Height > 1.1 m & ≤ 3 m.	Height > 5 m.	Height > 3 m & ≤ 5 m.
<b>Other considerations</b>	Code of Practice for Demolition of Buildings 2004 – Provision of precautionary measures.			



### 3.8 Glass Reinforced Polyester ("GRP") Water Tank

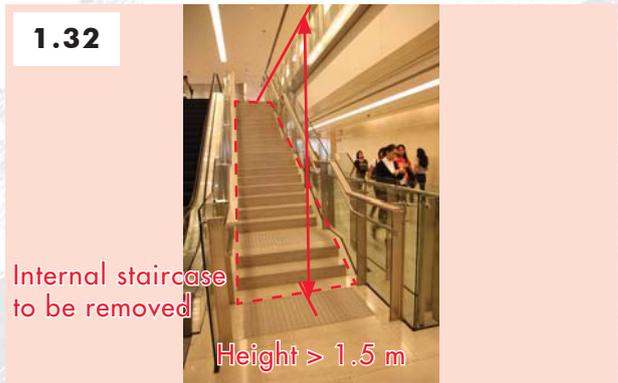
MW Items	2.3	2.4
<b>Simple Comparison of Descriptions</b>	Replacement ... GRP water tank on roof ...	Removal ... GRP water tank on roof ...
	in accordance with the original design ...	
	Water head of tank $\leq 2\text{m}$ ;	
	Capacity of tank $\leq 9\text{ m}^3$ ; &	
	Distance from the edge of roof $\leq 1.5\text{ m}$ .	
<b>Other considerations</b>	Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers APP-100 – Structural design of the tank & the fixing arrangement.	



### 3.9 Internal Staircase

MW Items	1.1	1.32	3.1
<b>Simple Comparison of Descriptions</b>	Erection or alteration ...	Removal ...	Removal of the whole ... on the lowest storey ...
	internal staircase ... not used as a MOE or MOA ...		
	Not involve alteration of structural elements, except a simply supported beam that – (i) not of pre-stressed construction; & (ii) not used to support any column, flat slab or ribbed beam; &		
	No additional load to cantilevered slab.	Not MW item 3.1.	Height of staircase ≤ 1.5 m.
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>B(C)R 8 – Provision of protective barrier if level difference &gt; 600 mm is resulted after completion of works.</li> </ul>		
	<ul style="list-style-type: none"> <li>B(C)R Part XII – Design of concrete.</li> <li>B(C)R 90 &amp; FRC Code para. 5, 6 &amp; 10.2 – Compartment volume &amp; fire resisting construction.</li> <li>B(P)R 72, PNAP APP-41 &amp; BFA Manual Div. 7 &amp; 8 – Persons with a disability to travel.</li> <li>FRC Code para. 12 – Smoke barrier.</li> <li>Associated formation of slab opening may be MW items 1.2 or 2.1.</li> </ul>	<ul style="list-style-type: none"> <li>Demolition Code – Necessary provision of precautionary measures.</li> <li>Not the access for maintenance to roof, flat roof or canopy, etc.</li> </ul>	

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### 3.10 Metal Gate on Fence Wall or at the Entrance of a Building

MW Items	1.16	2.16	3.13
<b>Simple Comparison of Descriptions</b>	Erection, alteration or repair...		Erection, alteration, repair or removal...
	at a fence wall or at an entrance to a building ...		
	No additional load to cantilevered slab;		
	Not involve alteration of other structural elements;		
	Height of gate $\leq 3.2$ m; &		
	Weight of at least one leaf $> 300$ kg.	Weight of at least one leaf $> 200$ kg; &	
	Weight of each leaf $\leq 300$ kg;	Weight of each leaf $\leq 200$ kg.	
		Not DEW item 8 (see 6.1).	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(P)R 15 – Not to open the gate over streets.</li> <li>• MOE Code para. 8.2, Table 2 &amp; para. 16.4 – Provision of locking devices that can be readily open from inside without the use of key &amp; control of the min. width of metal gate if the metal gate is fixed at the entrance of building as well as the exit of any required staircase.</li> <li>• PNAP APP-146 &amp; PNRC 68 – Design &amp; installation standards of metal gate.</li> <li>• The MOE, MOA &amp; EVA not affected.</li> <li>• Shutter Code issued by the Electrical &amp; Mechanical Services Department should be complied with if the metal gates are electrically operated.</li> <li>• A Safety Guide on Gate Work issued by the Labour Department – Safety tips &amp; key points to note on gate-related work.</li> </ul>		

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MW Items	1.40	2.40	3.33
<b>Simple Comparison of Descriptions</b>	Removal ...		
	at a fence wall or at an entrance to a building ...		
	No additional load to cantilevered slab;		
	Not involve alteration of other structural elements;		
	Height of the gate $\leq 3.2$ m; &		
	Weight of at least one leaf $> 300$ kg.	Weight of at least one leaf $> 200$ kg; &	
	Weight of each leaf $\leq 300$ kg;	Weight of each leaf $\leq 200$ kg.	
		Not DEW item 8 (see 6.1).	
<b>Other considerations</b>	Code of Practice for Demolition of Buildings 2004 – Necessary provision of precautionary measures.		

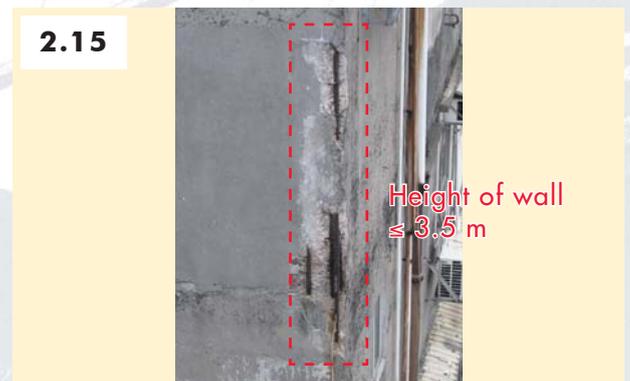
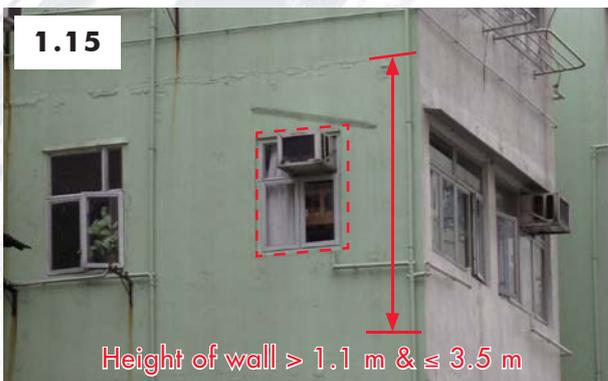
DEW represents designated exempted works.



### 3.11 Non-loadbearing External Reinforced Concrete ("RC") / Block Wall

MW Items	1.15	2.13	2.15
<b>Simple Comparison of Descriptions</b>	Erection, alteration or removal ...		Repair ...
	external RC wall (other than a load bearing wall) of a building ...		
	No additional load to cantilevered slab;		
	Not involve alteration of other structural elements; &		
	Height of wall		
	> 1.1m & ≤ 3.5 m.	≤ 1.1 m.	≤ 3.5 m.
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(C)R 41 – Protection against penetration of moisture.</li> <li>• B(C)R Part XII – Design of concrete.</li> <li>• PNAP APP-24 para. 10 &amp; PNRC 14 para. 9 – Not having any opening within 5m of the MTR vent shaft.</li> <li>• PNAP APP-86 – Design &amp; construction of non-loadbearing wall.</li> <li>• PNAP ADV-15 &amp; PNRC 41 – Control of fixing of reinforcement.</li> <li>• B(DW)R 10 – Not to overload the floor.</li> <li>• B(DW)R 11 – Provision of precautionary measures from sudden collapse on cutting the steelwork.</li> <li>• B(P)R 3A &amp; PNAP APP-110 – Provision of protective barrier to opening on external wall.</li> <li>• Demolition Code – Necessary provision of precautionary measures for removal.</li> <li>• FRC Code para. 7, 12.3, 11.7, 11.8, etc. – Fire resisting wall / spandrel.</li> <li>• Existing provision for the building under JPN 1 &amp; 2 not contravened if green features are provided.</li> <li>• Agreement from the IO / co-owners of the external wall (if being common part) should be sought.</li> </ul>		

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MW Items	2.14	3.11	3.12
<b>Simple Comparison of Descriptions</b>	Erection, alteration or removal ...		Repair ...
	external block wall (other than a load bearing wall) of a building ...		
	No additional load to cantilevered slab;		
	Not involve alteration of any other structural elements; &		
	Height of wall		
	> 1.1 m & ≤ 3.5 m.	≤ 1.1 m.	≤ 3.5 m.
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(C)R 41 – Protection against penetration of moisture.</li> <li>• PNAP APP-24 para. 10 &amp; PNRC 14 para. 9 – Not having any opening within 5m of the MTR vent shaft.</li> <li>• PNAP APP-86 – Design &amp; construction of non-loadbearing wall.</li> <li>• B(DW)R 10 – Not to overload the floor.</li> <li>• B(P)R 3A &amp; PNAP APP-110 – Provision of protective barrier to opening on external wall.</li> <li>• FRC Code para. 12.3 – Provision of spandrel, if applicable.</li> <li>• Existing provision for the building under JPN 1 &amp; 2, if applicable, not contravened.</li> <li>• Demolition Code – Necessary provision of precautionary measures. Precautionary measures are required before the formation of opening in a block wall to avoid the collapse of block wall above the opening. Provision of lintel for the new opening is also required.</li> </ul>		

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### 3.12 Opening in Floor Slab

MW Items	1.2	2.1
<b>Simple Comparison of Descriptions</b>	Formation of opening in a slab ...	
	No additional load to cantilevered slab;	
	Not involve alteration of structural elements, except a simply supported beam that – (i) not of pre-stressed construction; & (ii) not used to support any column, flat slab or ribbed beam.	
	Area of opening > 1 m <sup>2</sup> & ≤ 4.5 m <sup>2</sup> .	Area of opening ≤ 1 m <sup>2</sup> ; & Not DEW item 1 (see 6.1).
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(DW)R 10 – Not overload the floor.</li> <li>• B(DW)R 11 – Provision of precautionary measures from sudden collapse on cutting the steelwork.</li> <li>• B(C)R 90 &amp; FRC Code para. 5, 6 &amp; 10.2 – Control of compartment volume &amp; fire resisting construction.</li> <li>• FRC Code para. 12 – Provision of a 450 mm smoke barrier to surround the opening at the underside of the floor.</li> <li>• Usage of the slab opening e.g. for passage of building service, drainage, lift, staircase etc be clearly indicated on plan;</li> <li>• B(C)R 8 &amp; B(P)R 3A – Level difference resulted after completion of works.</li> <li>• For forming openings to combine two adjoining residential units, JPN 1 &amp; 2 should not be contravened if there are green features provided to the units.</li> </ul>	

B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; B(P)R represents Building (Planning) Regulations; DEW represents designated exempted works; FRC Code represent Code of Practice for Fire Resisting Construction 1996; JPN represents Joint Practice Notes & PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers.

MW Items	1.35	2.35
<b>Simple Comparison of Descriptions</b>	Reinstatement ...	
	in accordance with the original design ...	
	No additional load to cantilevered slab;	
	Not involve alteration of other structural elements; &	
	Area of opening $> 1 \text{ m}^2$ & $\leq 4.5 \text{ m}^2$ .	
		Distance between the 2 farthest points within the area of opening $> 150 \text{ mm}$ .
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(C)R Part XII, Concrete Code &amp; PNAP APP-142 – Design of concrete.</li> <li>• PNAP ADV-15 &amp; PNRC 41 – Control of fixing of reinforcement.</li> </ul>	

B(C)R represents Building (Construction) Regulations; Concrete Code represents Code of Practice for Structural Use of Concrete 2004; PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers & PNRC represents Practice Notes for Registered Contractors.



### 3.13 Protective Barrier (other than an External RC or Block Wall)

MW Items	1.6	2.5	3.3
<b>Simple Comparison of Descriptions</b>	Alteration or removal ...	Repair or replacement ...	
	protective barrier (other than an external RC wall or block wall) ...		
		in accordance with the original design ...	
	Not result in any additional load to any cantilevered slab; &		
		Level on which the protective barrier is located	
		> 2 m	≤ 2 m
	from its adjacent level.		
	If the lowest frame of the existing window or window wall ≤ 1.1 m from its adjoining structural floor level, part of the window or window wall forms part of the existing protective barrier.		
	Modification of the design, layout, materials used, etc. for these kinds of existing window or window wall are alteration of protective barrier under minor works item 1.6. Repair or replacement of them in accordance with the original design is minor works item 2.5 or 3.3.		
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(C)R 8 &amp; PNAP APP-110 – Layout of protective barrier to the staircase &amp; associated opening.</li> <li>• B(C)R 17 – Design of min. horizontal imposed loads on protective barrier.</li> <li>• B(P)R 3A &amp; PNAP APP-110 – Layout of protective barrier to opening on external wall.</li> <li>• PNAP APP-37 – Curtain wall, window &amp; window wall systems, in particular the guidelines on design, standards &amp; installation of window system, quality &amp; heat soak process of tempered glass, and submission of compliance certificate of test report.</li> <li>• FS Code clause C11.1 - Fire resisting spandrel.</li> <li>• Existing provision for the building under JPN 1 &amp; 2, if applicable, not contravened.</li> </ul>		

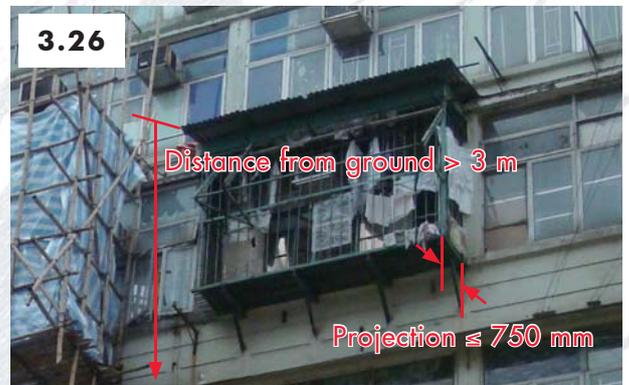
B(C)R represents Building (Construction) Regulations; B(P)R represents Building (Planning) Regulations; FS Code represents Code of Practice for Fire Safety in Buildings 2011; JPN represents Joint Practice Notes; & PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.



3.14 Removal of Architectural Projection, Canopy, Supporting Frame for an Air-conditioning Unit or any Associated Air Ducts, or Rack (other than a drying rack)

MW Items	2.31	3.26
<b>Simple Comparison of Descriptions</b>	Removal ... projecting from external wall of a building ...	
	Projects > 750 mm;	Projects ≤ 750 mm;
	Not constructed of concrete; & Not DEW item 13 or 14 (see 6.1).	
<b>Other considerations</b>	Building (Demolition Works) Regulations 5 – Not having the electric cables or the apparatus remained electrically charge, if applicable.	

DEW represents designated exempted works.



### 3.15 Removal of Chimney

MW Items	1.37	2.37
<b>Simple Comparison of Descriptions</b>	Removal ... attached to external wall ... or on the roof of a building ...	
	Highest point $\leq 10\text{m}$ from the level of adjoining roof; &	Highest point $\leq 5\text{m}$ from the level of adjoining roof; &
	Not MW item 2.37	Smallest cross-sectional dimension $\leq 500\text{ mm}$ .
<b>Other considerations</b>	Building (Demolition Works) Regulations 3 – Provision of precautionary measures.	



### 3.16 Removal of Unauthorized Floor Slab or Unauthorized Structure

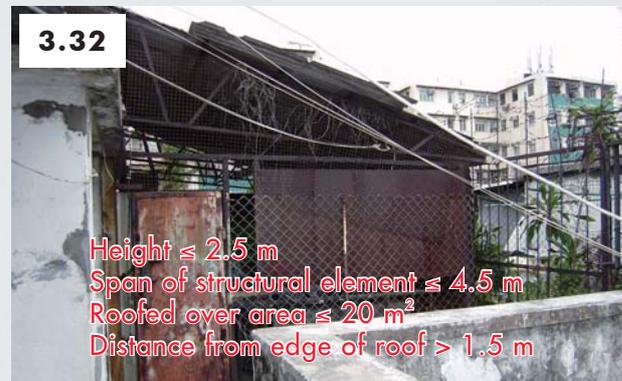
MW Items	1.30	2.32
<b>Simple Comparison of Descriptions</b>	Removal ... unauthorized structure (other than an architectural projection, canopy, frame or rack) ...	
	projecting > 2 m from the external wall; &	projecting ≤ 2 m from the external wall; &
	If the structure is fixed to a balcony or canopy that is a cantilevered slab, the span of balcony or canopy > 1 m.	If the structure is fixed to a balcony or canopy that is a cantilevered slab, the span of balcony or canopy ≤ 1m.
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(DW)R 10 – Not to overload the floor.</li> <li>• B(DW)R 11 – Provision of precautionary measures from sudden collapse on cutting the steelwork.</li> <li>• PNAP APP-21 – Provision of measures for public safety when carrying out demolition works.</li> <li>• Other legislations affecting the associated provision of protective barrier / external wall should be complied with.</li> <li>• Guidelines for the Removal of Typical Unauthorized Building Works &amp; General Maintenance of External Walls s.4 – General safety requirements.</li> </ul>	

B(DW)R represents Building (Demolition Works) Regulations & PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers.



MW Items	1.38	2.39	3.32
<b>Simple Comparison of Descriptions</b>	Removal ... unauthorized structure	Removal ... unauthorized single storey structure	
	located on-grade or on a slab (other than a cantilevered slab);		
	No alteration of structural elements;		
	Height of structure		
	> 5 m & ≤ 10 m;	≤ 5 m;	≤ 2.5 m;
	Not a flat slab, pre-stressed concrete construction, transfer girder, hanger, cantilevered structure with a span > 1.2 m or earth retaining structure;		
	Span of structural element of the structure		
	≤ 6 m; &	≤ 4.5 m;	
Structure ≤ 2 storeys.	Not MW item 3.32.	Roofed over area ≤ 20 m <sup>2</sup> ; &	
		If on roof, any part of the structure > 1.5 m from the edge of roof.	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(DW)R 10 – Not to overload the floor.</li> <li>• B(DW)R 11 – Provision of precautionary measures from sudden collapse on cutting the steelwork.</li> <li>• PNAP APP-21 – Provision of measures for public safety when carrying out demolition works.</li> <li>• Other legislations affecting the associated provision of protective barrier / external wall should be complied with.</li> <li>• Guidelines for the Removal of Typical Unauthorized Building Works &amp; General Maintenance of External Walls s.4 – General safety requirements.</li> </ul>		

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MW Items	1.39	2.38
<b>Simple Comparison of Descriptions</b>	Removal ... unauthorized floor slab.	Removal ... unauthorized structure hung underneath the soffit of a balcony or canopy (other than a cantilevered slab) or fixed to a balcony or canopy (other than a cantilevered slab).
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(DW)R 10 – Not to overload the floor.</li> <li>• B(DW)R 11 – Provision of precautionary measures from sudden collapse on cutting the steelwork.</li> <li>• PNAP APP-21 – Provision of measures for public safety when carrying out demolition works.</li> <li>• Other legislations affecting the associated provision of protective barrier / external wall should be complied with.</li> <li>• Guidelines for the Removal of Typical Unauthorized Building Works &amp; General Maintenance of External Walls s.4 – General safety requirements.</li> </ul>	

B(DW)R represents Building (Demolition Works) Regulations & PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers.



**2.38**

### 3.17 Repair of Structural Elements

MW Items	1.17	2.17
<b>Simple Comparison of Descriptions</b>	Repair ... structural elements (including any column, shear wall, flat slab, cantilevered slab, ribbed slab, waffle slab, pre-stressed beam, post-tensioned beam, cantilevered beam, transfer plate, transfer beam or earth retaining structure) ...	Repair ... slab or beam (other than a flat slab, cantilevered slab, ribbed slab, waffle slab, pre-stressed beam, post-tensioned beam, cantilevered beam, transfer plate or transfer beam) ...
	in accordance with the original design ... not result in any additional load to any cantilevered slab.	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(C)R Part XII – Design of concrete.</li> <li>• B(DW)R 11 – Provision of precautionary measures from sudden collapse on cutting the steelwork.</li> <li>• PNAP ADV-15 &amp; PNRC 41 – Control of the fixing of reinforcement.</li> <li>• PNAP APP-102 para. 5 &amp; Guidelines for the Removal of Typical Unauthorized Building Works &amp; General Maintenance of External Walls s.5 – General safety requirements.</li> </ul>	

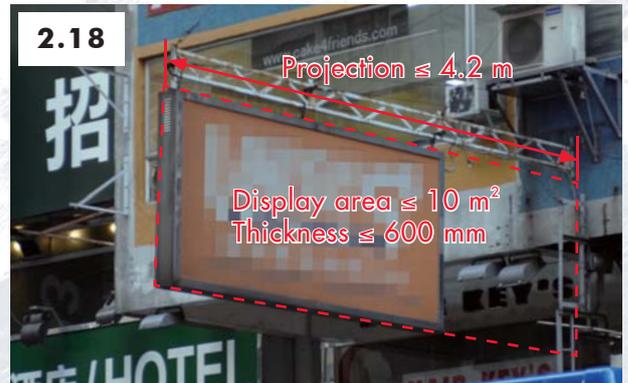
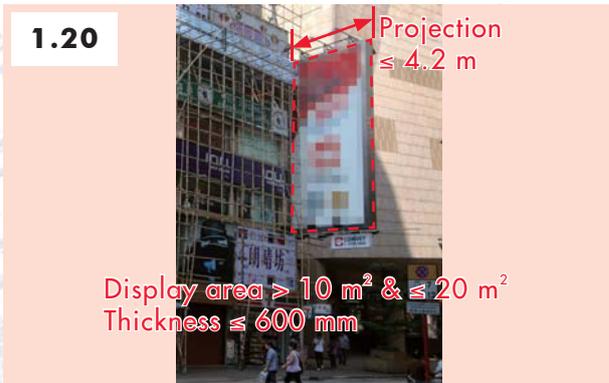
B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations & PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers.



### 3.18 Signboard

MW Items	1.20	2.18	3.16
<b>Simple Comparison of Descriptions</b>	Erection or alteration ... projecting signboard ...		Erection, alteration or removal ... projecting signboard (including replacement of display surface ...)
	Not consist of stone;		
	No additional load to cantilevered slab;		
	Not involve alteration of structural elements;		
	Display area > 10 m <sup>2</sup> & ≤ 20 m <sup>2</sup> ;	Display area ≤ 10 m <sup>2</sup> ;	Display area ≤ 1 m <sup>2</sup> ;
	Projects ≤ 4.2 m; &	Projects ≤ 1 m;	
	Thickness ≤ 600 mm.	Thickness ≤ 300 mm; &	
	Not MW item 3.16.	Any part of signboard ≤ 6 m from ground.	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• BO s31(1)(aa) &amp; PNAP APP-126 Appendix G – Control of the projections of signboard on or over streets.</li> <li>• PNAP APP-126 Appendices C-F, H &amp; I – Design &amp; construction requirements of signboard given by the BA, FSD, TD &amp; HyD, etc.</li> <li>• B(P)R 30 – Natural lighting &amp; ventilation, prescribed plane for prescribed window for adjacent building on the same site, if any, not obstructed.</li> <li>• PNAP APP-24 Appendix A s.C.1 &amp; PNRC 14 – No signboard projected within 6 m of the MTR tracks.</li> <li>• Agreement from the IO / co-owners of the external wall / roof (if being common part) should be sought.</li> </ul>		
	Harbour Planning Guidelines for Victoria Harbour and its Harbour-front Areas issued by the Harbour-front Enhancement Committee – Harbour planning principles.	In case of signboard projecting ≤ 600 mm over a footpath, any part of the signboard should have a clearance ≥ 2.5 m from ground.	

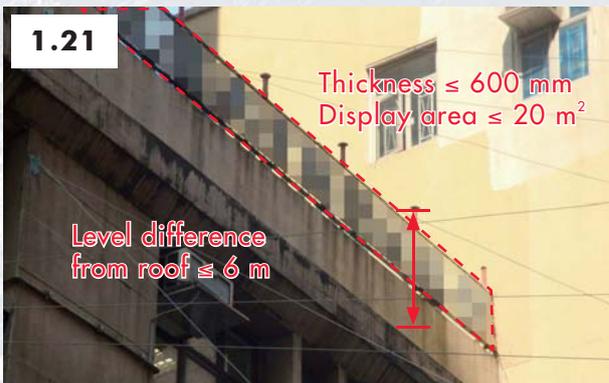
B(P)R represents Building (Planning) Regulations; BA represents Building Authority; BO represents Buildings Ordinance; FSD represents Fire Services Department; HyD represents Highways Department; PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors & TD represents Transport Department.



MW Items	1.21	2.20	2.22
<b>Simple Comparison of Descriptions</b>	Erection or alteration ... signboard on roof ...	Erection or alteration ... signboard on or hung underneath the soffit of a balcony or canopy (other than a cantilevered slab) ...	Erection or alteration of any outdoor signboard together with a spread footing ...
	Not consist of stone;		
	Display area $\leq 20 \text{ m}^2$ ;	Display area $\leq 2 \text{ m}^2$ ;	Display area $\leq 1 \text{ m}^2$ ;
	No part projects beyond the external wall of the building;	No part projects beyond the balcony or canopy;	
	Thickness $\leq 600 \text{ mm}$ ;	Thickness $\leq 100 \text{ mm}$ ; &	Thickness $\leq 300 \text{ mm}$
	Any part of signboard $\leq 6 \text{ m}$ from the level of roof;		Any part of signboard $\leq 3 \text{ m}$ from ground;
	No additional load to cantilevered slab; & Not involve alteration of structural elements	Height of signboard $\leq 600 \text{ mm}$	Involve depth of excavation $\leq 500 \text{ mm}$ for construction of the footing; & Not involve excavation within "scheduled areas" no. 1 or 3.
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>PNAP APP-126 Appendices C-F, H &amp; I – Design &amp; construction requirements of signboard given by the BA, FSD, TD &amp; HyD, etc.</li> <li>Agreement from the IO / co-owners of the external wall / roof / the ground (if being common part) should be sought.</li> </ul>		
	B(P)R 30 – Natural lighting & ventilation not obstructed.		Associated excavation works & footing may be MW item 1.12 or 2.11 & 1.11 or 2.10.
	<ul style="list-style-type: none"> <li>Hong Kong Airport (Control of Obstructions) Ordinance &amp; PNAP APP-32 – Not exceeding the airport height restrictions.</li> <li>If roof is a refuge floor, complied with respective requirements under MOE Code.</li> <li>Drainage on roof not obstructed.</li> </ul>	BO s31(1)(aa) & PNAP APP-126 Appendix G – Control of the projections of signboard on or over streets.	

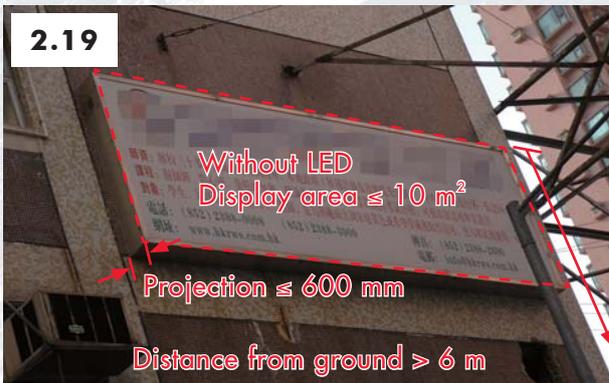
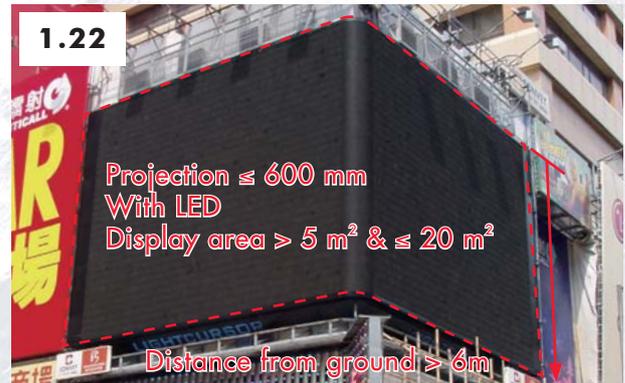
MW Items	1.21	2.20	2.22
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>Existing water proofing of the roof not damaged.</li> <li>Harbour Planning Guidelines for Victoria Harbour and its Harbour-front Areas issued by the Harbour-front Enhancement Committee – Harbour planning principles.</li> </ul>		

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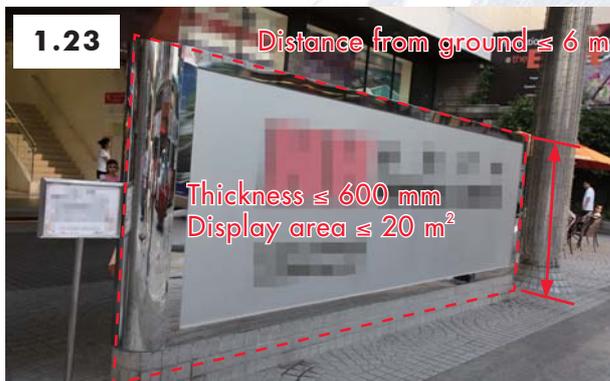
MW Items	1.22	2.19	3.17
<b>Simple Comparison of Descriptions</b>	Erection or alteration ... wall signboard ...		Erection, alteration or removal ... wall signboard (including replacement of display surface ...)
	No additional load to cantilevered slab;		
	Not involve alteration of structural elements;		
	With LED, display area		
	> 5 m <sup>2</sup> & ≤ 20 m <sup>2</sup> ;	≤ 5 m <sup>2</sup> ;	
	Without LED, display area		
	> 10 m <sup>2</sup> & ≤ 40 m <sup>2</sup> ; &	≤ 10 m <sup>2</sup> ; &	≤ 5 m <sup>2</sup> ;
	Not consist of stone if any part of signboard > 6m from ground.	Any part of signboard ≤ 6 m from ground; &	
	Not MW item 3.17 or DEW item 10 (see 6.1).	Not DEW item 10 or 11 (see 6.1).	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• BO s31(1)(aa) &amp; PNAP APP-126 Appendix G – Control of the projections of signboard on or over streets.</li> <li>• PNAP APP-126 Appendices C-F, H &amp; I – Design &amp; construction requirements of signboard given by the BA, FSD, TD &amp; HyD, etc.</li> <li>• B(P)R 30 – Natural lighting &amp; ventilation.</li> <li>• Agreement from the IO / co-owners of the external wall / roof (if being common part) should be sought.</li> <li>• If signboard projecting ≤ 600mm over a footpath, clearance ≥ 2.5 m from ground.</li> <li>• Wall signboards at overhead of shopfront should have a clearance ≥ 2.5 m from ground; and should be structurally independent without supporting any roller shutter, air-conditioning unit or being used for storage.</li> <li>• Harbour Planning Guidelines for Victoria Harbour and its Harbour-front Areas issued by the Harbour-front Enhancement Committee – Harbour planning principles.</li> </ul>		

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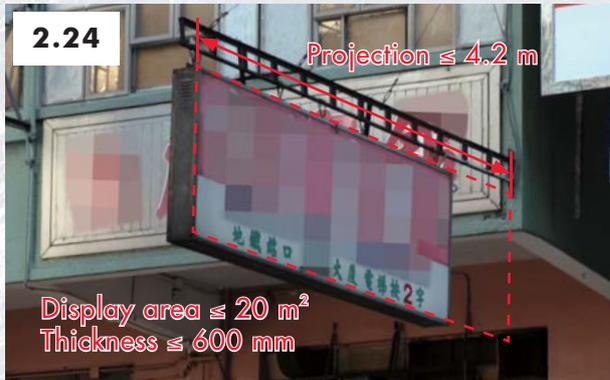
MW Items	1.23	2.21	2.23
<b>Simple Comparison of Descriptions</b>	Erection or alteration ... outdoor signboard fixed on-grade (other than the construction of a spread footing) ...		Replacement of display surface of any signboard of MW item 1.20, 1.21, 1.22, 1.23, 2.18, 2.19, 2.20, 2.21 or 2.22.
	Display area $\leq 20 \text{ m}^2$ ;	Display area $\leq 10 \text{ m}^2$ ;	
	Thickness $\leq 600 \text{ mm}$ ; &		
	Any part of signboard $\leq 6 \text{ m}$ from ground.	Any part of signboard $\leq 2 \text{ m}$ from ground.	
	Not MW item 2.21		
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• PNAP APP-126 Appendices C-F, H &amp; I – Design &amp; construction requirements of signboard given by the BA, FSD, TD &amp; HyD, etc.</li> <li>• Associated excavation works &amp; footing may be MW item 1.12 or 2.11 &amp; 1.11 or 2.10.</li> <li>• Agreement from the IO / co-owners of the external wall / roof (if being common part) should be sought.</li> </ul>		
	Harbour Planning Guidelines for Victoria Harbour and its Harbour-front Areas issued by the Harbour-front Enhancement Committee – Harbour planning principles.		

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MW Items	1.24	2.24	3.18
<b>Simple Comparison of Descriptions</b>	Removal of any signboard (other than removal of spread footing of any outdoor signboard) other than MW item 2.24, 2.25, 2.26, 2.27, 3.16, 3.17, 3.18, 3.19, 3.20, 3.21 or 3.22 or DEW item 11 (see 6.1).	Removal ... projecting signboard	
		Display area $\leq 20 \text{ m}^2$ ; & Not MW item 3.18.	Display area $\leq 2 \text{ m}^2$ ; Projects $\leq 2 \text{ m}$ ; & Any part of signboard $\leq 6 \text{ m}$ from ground.
<b>Other considerations</b>	Building (Demolition Works) Regulations 5 – Not having the electric cables or the apparatus remained electrically charge.		

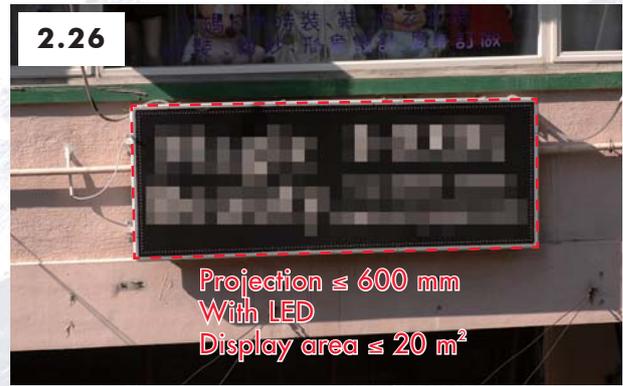
DEW represents designated exempted works.



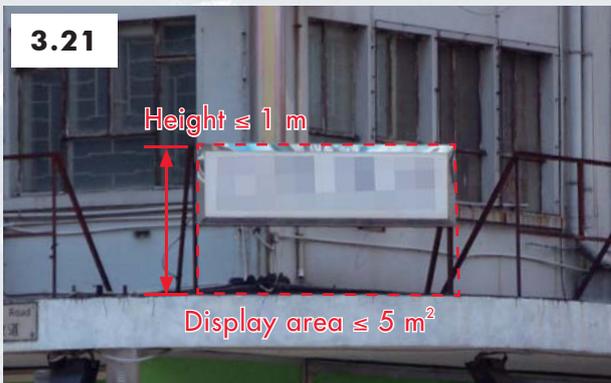
MW Items	2.25	3.19	3.22
<b>Simple Comparison of Descriptions</b>	Removal ... signboard on the roof ..., or ... outdoor signboard ... on-grade (other than removal of the spread footing of outdoor signboard), ...	Removal ... signboard on roof ...	Removal ... outdoor signboard fixed on-grade (other than removal of the spread footing of any outdoor signboard) ...
	Display area		
	$\leq 20 \text{ m}^2$ ; &	$\leq 5 \text{ m}^2$ ;	$\leq 1 \text{ m}^2$ ; &
	Not MW item 3.19 or 3.22.	Height of signboard $\leq 2 \text{ m}$ ; & Any part of signboard $> 1.5 \text{ m}$ from the edge of roof.	$\leq 3 \text{ m}$ from ground.
<b>Other considerations</b>	Building (Demolition Works) Regulations 5 – Not having the electric cables or the apparatus remained electrically charge		

MW Items	2.26	3.20
<b>Simple Comparison of Descriptions</b>	Removal ... wall signboard ...	
	With LED, display area $\leq 20 \text{ m}^2$ ;	
	Without LED, display area	
	$\leq 40 \text{ m}^2$ ; &	$\leq 10 \text{ m}^2$ ;
		Any part of signboard $\leq 6 \text{ m}$ from ground; &
Not MW item 3.20 or DEW item 11 (see 6.1).	Not DEW item 11 (see 6.1).	
<b>Other considerations</b>	B(DW)R 5 – Not having the electric cables or the apparatus remained electrically charge, if applicable.	

B(DW)R represents Building (Demolition Works) Regulations; DEW represents designated exempted works; & LED represents light emitting diodes.



MW Items	2.27	3.21
<b>Simple Comparison of Descriptions</b>	Removal ... signboard located on or hung underneath the soffit of a balcony or canopy (other than a cantilevered slab) ...	
	Not MW item 3.21.	If on balcony / canopy, display area $\leq 5 \text{ m}^2$ ;
		If hung underneath ..., display area $\leq 2 \text{ m}^2$ ; &
		Height of signboard $\leq 1 \text{ m}$ .
<b>Other considerations</b>	Building (Demolition Works) Regulations 5 – Not having the electric cables or the apparatus remained electrically charge, if applicable.	



### 3.19 Supporting Frame / Structure for Air-conditioner & Water Cooling Tower

MW Items	1.5	2.2	3.2
<b>Simple Comparison of Descriptions</b>	Removal ...		
	on a cantilevered slab with a span of > 1 m.	on-grade / on a slab;	
		(if cantilevered slab, span ≤ 1 m); &	other than a cantilevered slab;
		Not MW item 3.2.	Height of structure > 1 m & ≤ 2 m; &
			If on roof – (i) > 1.5 m from edge of roof; or (ii) with protective barrier ≥ 1.1 m high at the roof edge.
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• Building (Demolition Works) Regulations 5 – Not having the electric cables or the apparatus remained electrically charge.</li> <li>• Report to the Environmental Protection Department if the cooling tower contains asbestos &amp; will be demolished on site. The works must be conducted by registered qualified personnel under the supervision of registered consultant. See 10.6.4 for reference of the standards &amp; guidelines on the handling, transportation &amp; disposal of asbestos containing material.</li> </ul>		



MW Items	1.28	3.27	3.35
<b>Simple Comparison of Descriptions</b>	Erection, alteration or removal ...		Strengthening ...
			... unauthorized ...
	supporting frame for A/C unit or any associated air ducts projecting from external wall ...		
	No additional load to cantilevered slab;		
	Projects ≤ 750 mm;	Projects ≤ 600 mm;	
	Highest point of frame > 3 m from ground;		If highest point of frame ≤ 3 m from ground, not project over any street / common part of the building; &
	Designed for an A/C unit		
	> 100 kg; &	≤ 100 kg.	
Not MW item 3.27.			
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(P)R 7(3) – Not making undesirable projection.</li> <li>• B(P)R 30 &amp; 31 – Natural lighting &amp; ventilation.</li> <li>• PNAP APP-112 – Proper disposal system for condensation.</li> <li>• Agreement from the IO / co-owners of the common area should be sought for erection of metal frame.</li> <li>• B(DW)R 5 – Not having the electric cables or the apparatus remained electrically charge before alteration or removal.</li> <li>• Report to the Environmental Protection Department if the cooling tower contains asbestos &amp; will be demolished on site. The works must be conducted by registered qualified personnel under the supervision of registered consultant. See 10.6.4 for reference of the standards &amp; guidelines on the handling, transportation &amp; disposal of asbestos containing material.</li> </ul>		

B(DW)R represents Building (Demolition Works) Regulations; B(P)R represents Building (Planning) Regulations & PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers.



MW Items	1.29	3.28	3.34
<b>Simple Comparison of Descriptions</b>	Erection or alteration ...	Erection, alteration or removal ...	Strengthening ... ... unauthorized ...
	supporting structure for A/C unit, water cooling tower or any associated air ducts on-grade / on a slab (other than a cantilevered slab) ...		
	Height of structure $\leq 1.5\text{m}$ ; &		
	Designed for an A/C unit / water cooling tower		
	$> 150\text{ kg.}$	$\leq 150\text{ kg; \&}$	$\leq 100\text{ kg.}$
		Not DEW item 12 (see 6.1).	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(P)R 30 &amp; 31 – Natural lighting &amp; ventilation.</li> <li>• If the structure is fixed on roof &amp; the roof is designated as refuge floor, the respective requirements for refuge floor stipulated in the MOE Code complied with.</li> <li>• Drainage on roof not obstructed.</li> <li>• Existing water proofing of the roof not damaged.</li> <li>• PNAP APP-112 – Proper disposal system for condensation.</li> <li>• Agreement from the IO / co-owners of the common part should be sought for erection of structure.</li> <li>• B(DW)R 5 – Not having the electric cables or the apparatus remained electrically charge before alteration.</li> <li>• Report to the Environmental Protection Department if the cooling tower contains asbestos &amp; will be demolished on site. The works must be conducted by registered qualified personnel under the supervision of registered consultant. See 10.6.4 for reference of the standards &amp; guidelines on the handling, transportation &amp; disposal of asbestos containing material.</li> </ul>		

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## 3.20 Supporting Structure for Antenna, Transceiver or Radio Base Station on Roof

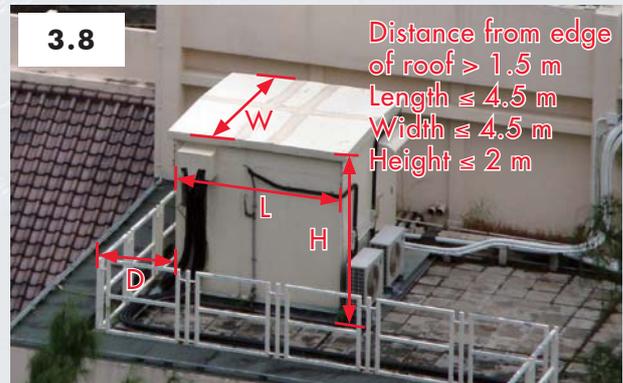
MW Items	1.13	3.9	1.14
<b>Simple Comparison of Descriptions</b>	Erection or alteration ...	Erection, alteration or removal ...	Erection or alteration ...
	supporting structure for an antenna or transceiver on the roof ...		supporting structure for a radio base station solely for telecommunications services in the form of an equipment cabinet on the roof ...
	No additional load to cantilevered slab;		
	No part projects beyond the external wall of the building; &		Length of cabinet $\leq 1.5$ m; width of cabinet $\leq 1$ m; & height of cabinet $\leq 2.3$ m.
	Designed for an antenna or transceiver		
	> 150 kg.	$\leq 150$ kg.	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>Hong Kong Airport (Control of Obstructions) Ordinance &amp; PNAP APP-32 – Not exceeding the airport height restrictions.</li> <li>B(DW)R 5 – Not having the electric cables or the apparatus remained electrically charge before alteration.</li> <li>If the roof is designated as refuge floor, the respective requirements for refuge floor stipulated in the MOE Code complied with.</li> <li>Prescribed plane for prescribed window for adjacent building on the same site, if any, not obstructed.</li> <li>Drainage on roof not obstructed.</li> <li>Agreement from the IO / co-owners of the roof (if being common part) should be sought.</li> <li>Existing water proofing of the roof not damaged.</li> <li>The antenna, transceiver and radio base station in the form of equipment cabinet of a size not larger than 1.5 m (L) <math>\times</math> 1 m (W) <math>\times</math> 2.3 m (H) are equipment only and not considered as minor works. Erection or alteration of radio base stations larger than 1.5 m (L) <math>\times</math> 1 m (W) <math>\times</math> 2.3 m (H) are building works requiring prior approval of plans and consent from the BA.</li> <li>Guidance Note for Submission of Applications by Operators for the Installation of Radio Base Stations for Public Telecommunications Services in Buildings and on Rooftops issued by the Office of the Telecommunications Authority.</li> </ul>		

B(DW)R represents Building (Demolition Works) Regulations & PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers.



The antenna, transceiver and radio base station in the form of equipment cabinet of a size not larger than 1.5 m (L) × 1 m (W) × 2.3 m (H) are equipment only and not considered as minor works. Erection or alteration of radio base stations larger than 1.5 m (L) × 1 m (W) × 2.3 m (H) are building works requiring prior approval of plans and consent from the BA.

MW Items	2.12	3.8	3.10
<b>Simple Comparison of Descriptions</b>	Removal ...		Removal ...
	radio base station for telecommunications services in the form of an enclosure or equipment cabinet together with its supporting structure located on the roof of a building ...		supporting structure for an antenna or transceiver located on the roof of a building.
	Length of station $\leq 4.5$ m;		
	Width of station $\leq 4.5$ m;		
	Height of station		
	$\leq 2.3$ m; &	$\leq 2$ m;	
Not MW item 3.8.	Any part of the station $> 1.5$ m from the edge of roof; &		
	Not involve any concrete structural elements.		
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>Building (Demolition Works) Regulations 5 – Not having the electric cables or the apparatus remained electrically charge, if applicable.</li> <li>The antenna, transceiver and radio base station in the form of equipment cabinet of a size not larger than 1.5 m (L) <math>\times</math> 1 m (W) <math>\times</math> 2.3 m (H) are equipment only and not considered as minor works.</li> </ul>		



The antenna, transceiver and radio base station in the form of equipment cabinet of a size not larger than 1.5 m (L)  $\times$  1 m (W)  $\times$  2.3 m (H) are equipment only and not considered as minor works.

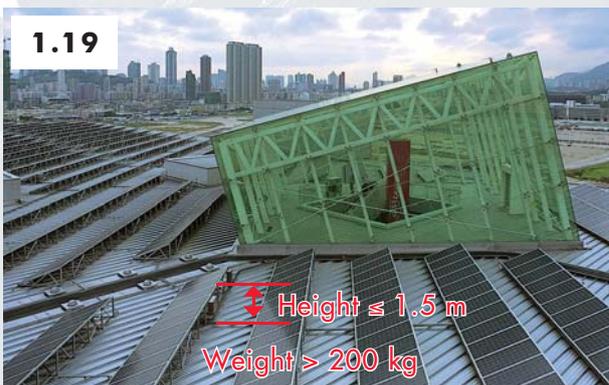
### 3.21 Supporting Structure for Photovoltaic System

MW Items	1.5	2.2	3.2
<b>Simple Comparison of Descriptions</b>	Removal ...		
	on a cantilevered slab with a span of > 1 m.	on-grade / on a slab;	
		(if cantilevered slab, span $\leq$ 1 m); &	other than a cantilevered slab;
		Not MW item 3.2.	Height of structure > 1 m & $\leq$ 2 m; & If on roof – (i) > 1.5 m from edge of roof; or (ii) with protective barrier $\geq$ 1.1 m high at the roof edge.
<b>Other considerations</b>	Building (Demolition Works) Regulations 5 – Not having the electric cables or the apparatus remained electrically charge.		



MW Items	1.19	3.15
<b>Simple Comparison of Descriptions</b>	Erection or alteration ...	Erection, alteration or removal ...
	on-grade / on a slab (other than a cantilevered slab) ...;	
	Height of structure $\leq 1.5$ m; &	
	Designed for ... system with	
	at least 1 module $> 200$ kg.	module each $\leq 200$ kg;
		Not DEW item 12 (see 6.1).
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(P)R 30 – Natural lighting &amp; ventilation.</li> <li>• Hong Kong Airport (Control of Obstructions) Ordinance &amp; PNAP APP-32 – Not exceeding the airport height restrictions.</li> <li>• B(DW)R 5 – Not having the electric cables or the apparatus remained electrically charge before alteration.</li> <li>• If the roof is designated as refuge floor, the respective requirements for refuge floor stipulated in the MOE Code complied with.</li> <li>• Drainage on roof not obstructed.</li> <li>• Agreement from the IO / co-owners of the roof (if being common part) should be sought.</li> <li>• Existing water proofing of the roof not damaged.</li> </ul>	

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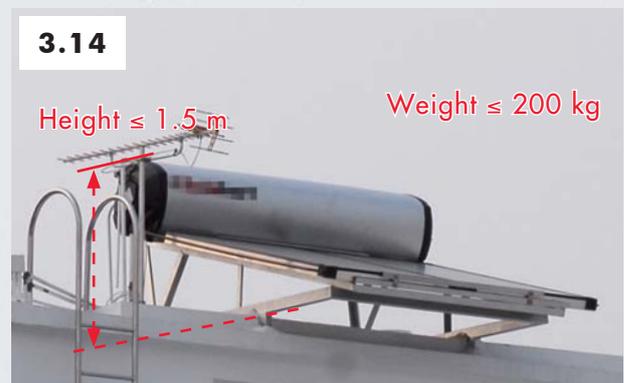


### 3.22 Supporting Structure for Solar Water Heating System

MW Items	1.5	2.2	3.2	
<b>Simple Comparison of Descriptions</b>	Removal ...			
	on a cantilevered slab with a span of > 1 m.	on-grade / on a slab;		
		(if cantilevered slab, span ≤ 1 m); &	other than a cantilevered slab;	
		Not MW item 3.2.	Height of structure > 1 m & ≤ 2 m; &	
		If on roof – (i) > 1.5 m from edge of roof; or (ii) with protective barrier ≥ 1.1 m high at the roof edge.		
<b>Other considerations</b>	Building (Demolition Works) Regulations 5 – Not having the electric cables or the apparatus remained electrically charge.			

MW Items	1.18	3.14
<b>Simple Comparison of Descriptions</b>	Erection or alteration ...	Erection, alteration or removal ...
	on-grade / on a slab (other than a cantilevered slab) ...;	
	Height of structure $\leq 1.5$ m;	
	Designed for ... system with	
	at least 1 thermal collector $> 200$ kg; &	thermal collector each $\leq 200$ kg;
	If thermal collector & the water tank are integrated, structure ... designed for a system with gross weight (when water tank is in full capacity)	
	$> 100$ kg/m <sup>2</sup> of the ground / slab area.	$\leq 100$ kg/m <sup>2</sup> of the ground / slab area; &
		Not DEW item 12 (see 6.1).
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(P)R 30 – Natural lighting &amp; ventilation.</li> <li>• Hong Kong Airport (Control of Obstructions) Ordinance &amp; PNAP APP-32 – Not exceeding the airport height restrictions.</li> <li>• B(DW)R 5 – Not having the electric cables or the apparatus remained electrically charge before alteration.</li> <li>• If the roof is designated as refuge floor, the respective requirements for refuge floor stipulated in the MOE Code complied with.</li> <li>• Drainage on roof not obstructed.</li> <li>• Agreement from the IO / co-owners of the roof (if being common part) should be sought.</li> <li>• Existing water proofing of the roof not damaged.</li> </ul>	

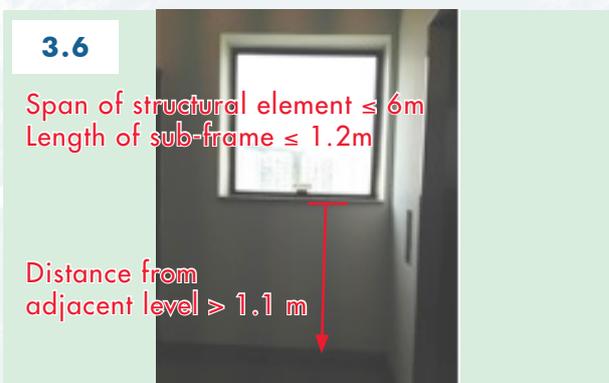
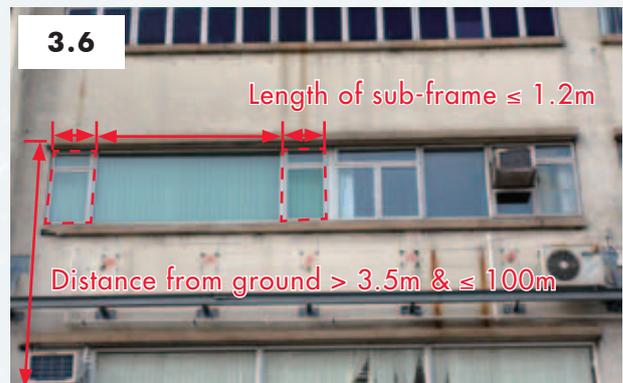
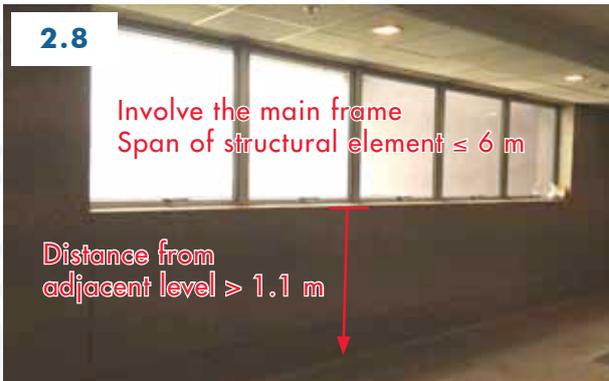
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### 3.23 Window or Window Wall (lowest frame of window or window wall > 1.1m from the adjoining floor)

MW Items	2.8	3.6
<b>Simple Comparison of Descriptions</b>	Construction, alteration or repair of window or window wall ...	
	No additional load to cantilevered slab;	
	Not involve alteration of structural elements, except a simply supported beam that – (i) not of pre-stressed construction; & (ii) not used to support any column, flat slab or ribbed beam;	
	Not form part of existing protective barrier, i.e. the lowest frame of window or window wall > 1.1m from the adjoining floor (see also section 3.13 on p.32)	
	Distance between the highest point of the window or window wall & the ground	
	> 3.5 m,	If ≤ 3.5 m,
	span of structural element of the window or window wall ≤ 6 m; &	
	If ≤ 100 m – (i) involve the main frame of the window or window wall; or (ii) involve the sub-frame of the window or window wall, & length of the sub-frame > 1.2 m; &	If > 3.5 m & ≤ 100 m – (i) involve the sub-frame of the window or window wall only; & (ii) length of the sub-frame ≤ 1.2 m.
If > 100 m – (i) area of the external wall opening for the window or window wall ≤ 6 m <sup>2</sup> ; & (ii) length or width (whichever is shorter) of the opening ≤ 1.8 m.		
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(C)R 90 &amp; FS Code subsection C5 &amp; clause C11.1 – Requirements of fire resisting construction.</li> <li>• B(P)R 29-33 – Natural lighting &amp; ventilation.</li> <li>• Building (Energy Efficiency) Regulation 4, Code of Practice for Overall Thermal Transfer Value in Buildings 1995 &amp; PNAP APP-67 – Energy efficiency in commercial building / hotel.</li> <li>• PNAP APP-24 para. 10 &amp; PNRC 14 – No window opening within 5 m of the MTR vent shaft.</li> <li>• PNAP APP-37 – Curtain wall, window &amp; window wall systems, in particular the guidelines on design, standards &amp; installation of window system, quality &amp; heat soak process of tempered glass, and submission of compliance certificate of test report.</li> <li>• PNAP APP-116 &amp; PNRC – Guidelines on design &amp; installation of aluminium window &amp; fixing of hinges.</li> <li>• Requirements stipulated in B(P)R 3A complied with, if applicable.</li> </ul>	

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### Protective Barrier



MW Items	2.9	3.7
<b>Simple Comparison of Descriptions</b>	Removal of any window or window wall ...	
	Not involve alteration of structural elements;	
	Not form part of existing protective barrier, i.e. the lowest frame of window or window wall > 1.1m from the adjoining floor (see also section 3.13 on p.32)	
	Height of the window or window wall ≤ 6 m; &	Highest point of the window or window wall ≤ 3.5 m from ground.
	Not MW item 3.7.	
<b>Other considerations</b>	<ul style="list-style-type: none"> <li>• B(C)R 90 &amp; FS Code subsection C5 &amp; clause C11.1 – Requirements of fire resisting construction.</li> <li>• B(P)R 29-33 – Natural lighting and ventilation. Prescribed windows not removed.</li> <li>• Building (Energy Efficiency) Regulation 4, Code of Practice for Overall Thermal Transfer Value in Buildings 1995 &amp; PNAP APP-67 – Energy efficiency in commercial building / hotel.</li> <li>• PNAP APP-24 para. 10 &amp; PNRC 14 – No window opening within 5 m of the MTR vent shaft.</li> <li>• PNAP APP-116 and PNRC – Guidelines on design and installation of aluminium window and fixing of hinges.</li> <li>• Requirements stipulated in B(P)R 3A complied with, if applicable.</li> </ul>	

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