

Appendix VII – Recommended Design and Details for Classes II & III Minor Works

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2004
 - Code of Practice for the Structural Use of Steel 2005
 - Code of Practice for the Structural Use of Concrete 2004
- All structural steel to be stainless steel grade 316 to BS 1449.
- All anchor bolts to be Hilti HSA-R-M8 (stainless steel) and shall be installed according to the manufacturer's specification.
- All connections to be 3mm fillet weld all round or butt weld with weld strength of $p_w = 220 \text{ N/mm}^2$ to BS EN 1011 and all electrodes to BS EN ISO 2560.
- All stainless steel screws to be grade A2-50 to BS 6105 with permissible yield stress of $y_s = 210 \text{ N/mm}^2$.
- All sealant to be "DOW CORNING" silicone sealant 795 (BD REF. BD-SS-001).
- Existing concrete grade and minimum thickness of the parent wall are assumed to be Grade 20 and 100 mm respectively.

DESIGN LOADS:

- Dead Load = 0.20 kN/m^2
- Wind Load = 2.01 kN/m^2 with total pressure coefficient C_p of 1.4

ANCHOR BOLT DESIGN FORCE:

- Design Vertical Shear = 0.2 kN
- Design Tension = 2.7 kN

PREPARATION WORKS :

- Obtain the existing design drawings/information for reference prior to the commencement of works.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- Inform the utilities company or sector if the works to be involved.
- Obtain the original design of the approved structure for reference of any required reinstatement works.
- The structural adequacy of the parent structure due to the additional installation of minor works must be checked to the satisfaction of structural requirements prior to carrying out of minor works.
- Existing rendering or plastering to be removed before installation of steel frame.

SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 1 Double-row bamboo scaffold and working platform over pavement
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

A) Erection

- Install the cladding as per the drawing.
- Make good and reinstate the affected areas of the parent building.
- Dismantle the bamboo scaffold and clean the site.

B) Repair

- Remove the defective cladding panel and use the same size of panel for replacement
- Make good and reinstate the affected areas of the parent building.
- Dismantle the bamboo scaffold and clean the site.

C) Removal

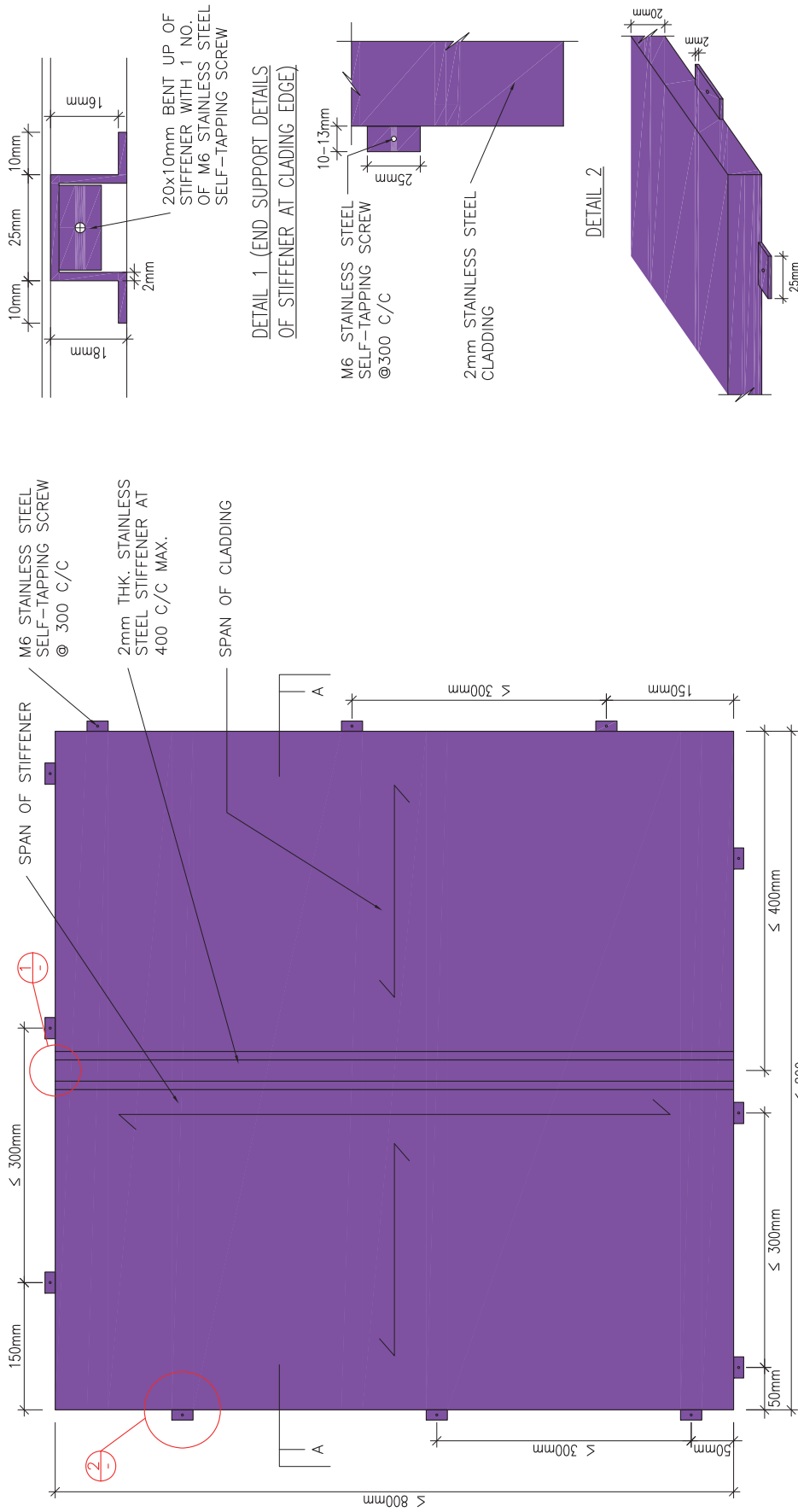
- Remove the cladding using hand-held mechanical tool.
- Cut the backing frame into small pieces for construction waste disposal.
- Make good and reinstate the affected areas of the parent building.
- Dismantle the bamboo scaffold and clean the site.

ERECTION OF CLADDING

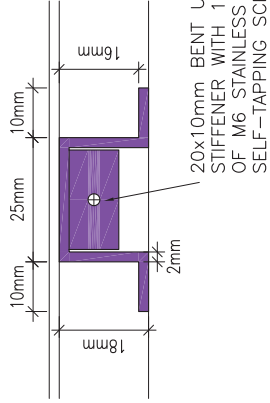
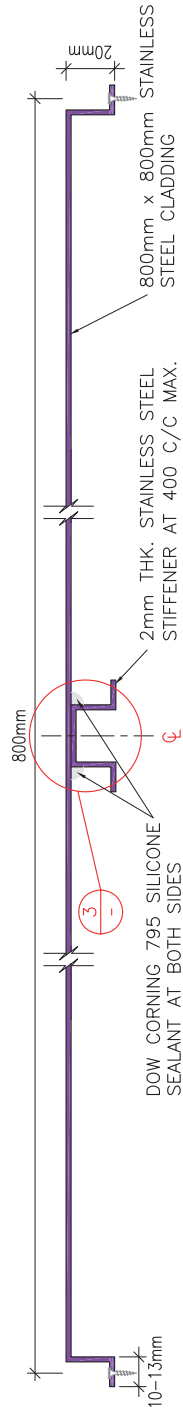
MINOR WORKS ITEM 3.31

ERECTION, REPAIR OR REMOVAL OF CLADDING FIXED TO THE EXTERNAL WALL OF A BUILDING

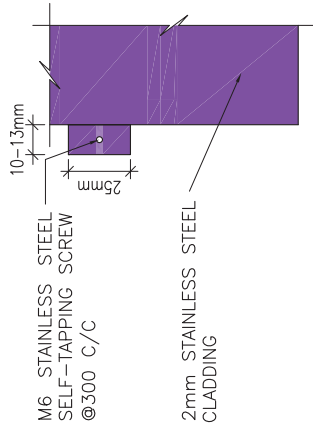
SHEET 1 OF 3



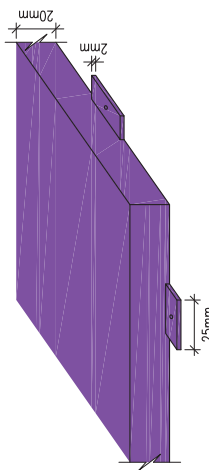
TYPICAL DETAIL FOR STAINLESS STEEL CLADDING



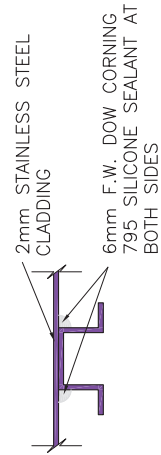
DETAIL 1 (END SUPPORT DETAILS OF STIFFENER AT CLADDING EDGE)



DETAIL 2



ISOMETRIC VIEW OF CLADDING EDGE BENT-UP FIXING DETAILS



DETAIL 3

MINOR WORKS ITEM 3.31

ERECTION, REPAIR OR REMOVAL OF CLADDING FIXED TO THE EXTERNAL WALL OF A BUILDING

SHEET 2 OF 3

GENERAL NOTES :

The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

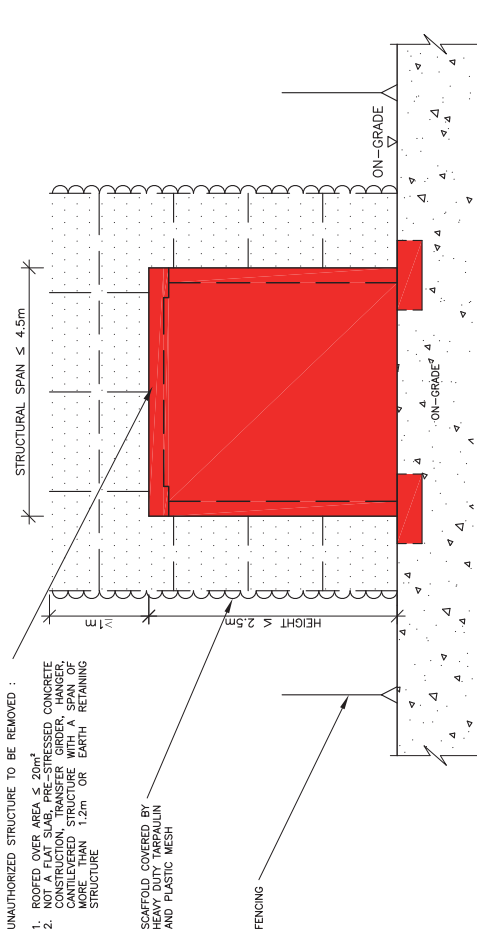
1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

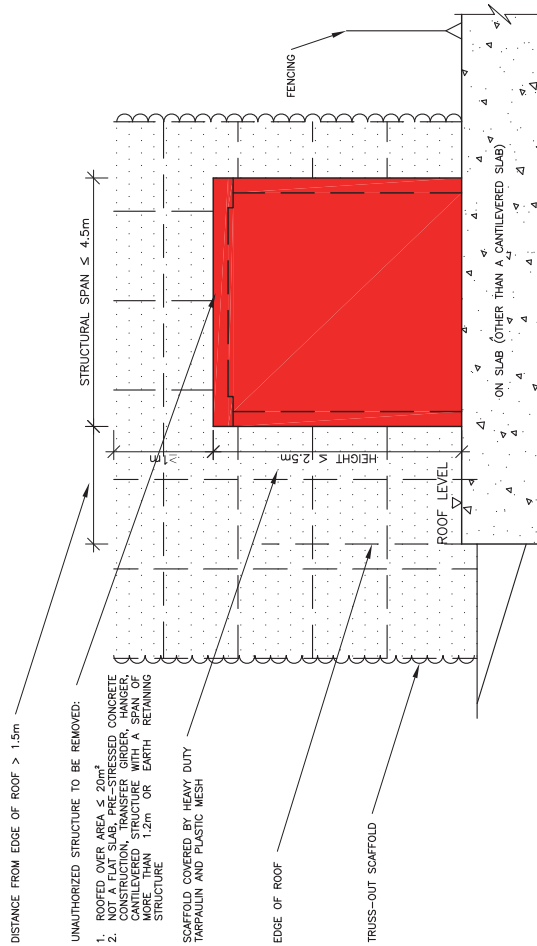
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold
3. No accumulation of demolished parts should be stored on roof.
4. Reference for removal of unauthorized structures shall be made to "Guidelines for the Removal of Typical Unauthorized Building Works and General Maintenance of External Walls" published by the Buildings Department.

WORKING PROCEDURES :

1. Remove all loose features inside the unauthorized building structures prior to the demolition of walls.
2. Demolish the unauthorized building structure from top to bottom. All structures shall be cut to a manageable size (i.e 300mm x 300mm).
3. Make good and reinstate the affected areas (including water proofing layer) of the building.
4. Dismantle the bamboo scaffold and clean the site.



CASE 1: ON-GRADE



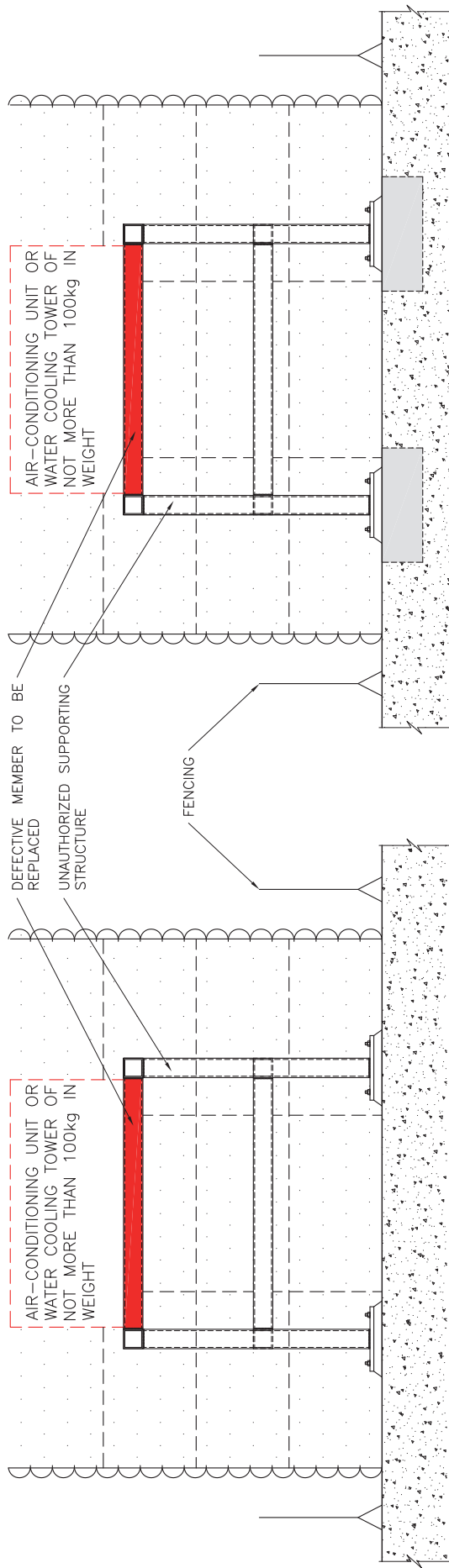
CASE 2: ON SLAB (OTHER THAN A CANTILEVERED SLAB)

REMOVAL OF UNAUTHORIZED SINGLE STOREY STRUCTURE LOCATED ON-GRADE OR ON A SLAB (OTHER THAN A CANTILEVERED SLAB)

MINOR WORKS ITEM 3.32

Appendix VII – Recommended Design and Details for Classes II & III Minor Works

<p>GENERAL NOTES :</p> <ol style="list-style-type: none"> The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.) <p>PREPARATION WORKS :</p> <ol style="list-style-type: none"> Obtain the existing design drawings/ information of the metal gate for reference. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works. Obtain the original design of the approved structure for reference of any required reinstatement works. Disconnect the electric locking device (if any) prior to the commencement of work. <p>SAFETY AND PRECAUTIONARY MEASURES :</p> <ol style="list-style-type: none"> Fence-off the working area from the public. Diversion arrangement shall be taken if necessary. The use of lifting device shall be in accordance with relevant Code of Practice/ Guidance Notes issued by the Labour Department. <p>WORKING PROCEDURES :</p> <ol style="list-style-type: none"> Use of proper lifting device with slings to secure the gate. Cut off the hinges connected to the metal gate. Lower the metal gate onto floor horizontally. Cut the metal gate into manageable small size and remove off site for construction waste disposal. Make good and reinstate the affected area. <p>REMARKS :</p> <p>This case excludes item 8 of the Designated Exempted Works.</p>	
<p>MINOR WORKS ITEM 3.33</p>	<p>REMOVAL OF METAL GATE AT A FENCE WALL OR AT AN ENTRANCE TO A BUILDING</p>



ON ROOF OR SLAB (OTHER THAN A CANTILEVERED SLAB)

ON-GRADE

GENERAL NOTES :

The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a bamboo scaffold

WORKING PROCEDURES :

1. Temporary remove existing air-conditioning unit, water tower or any associated air ducts if necessary. (Ensure all water pipes and electrical cable or wires were disconnected prior to any removal works.)
2. Remove the defective members and replace with new members having the same size as the existing one.
3. Make good and reinstate the affected areas of the parent building.
4. Remove the bamboo scaffold and clean the site.

REMARKS :

The works include the connection of flexible condensation pipe from the air-conditioning unit to an existing drain pipe. In case the building is not provided with a disposal system for drainage of the condensation, the building management/ IO/ other owners (where appropriate) should be informed for the provision of a proper disposal system.

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<p>MINOR WORKS ITEM 3.35</p>	<p>STRENGTHENING OF UNAUTHORIZED SUPPORTING STRUCTURE FOR AN AIR-CONDITIONING UNIT OR ASSOCIATED AIR DUCTS PROJECTING FROM THE EXTERNAL WALL OF A BUILDING</p>

GENERAL NOTES :

The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

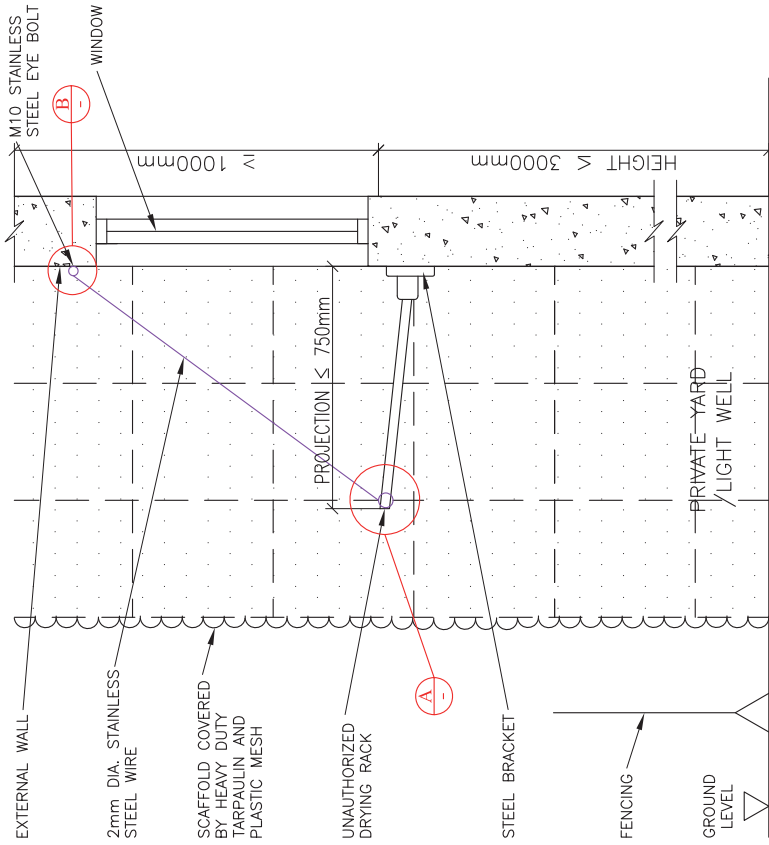
1. Obtain the existing design drawings/ information for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

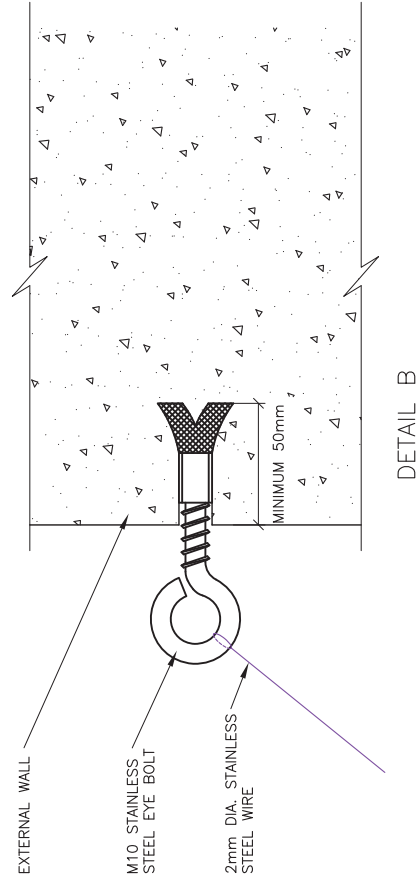
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

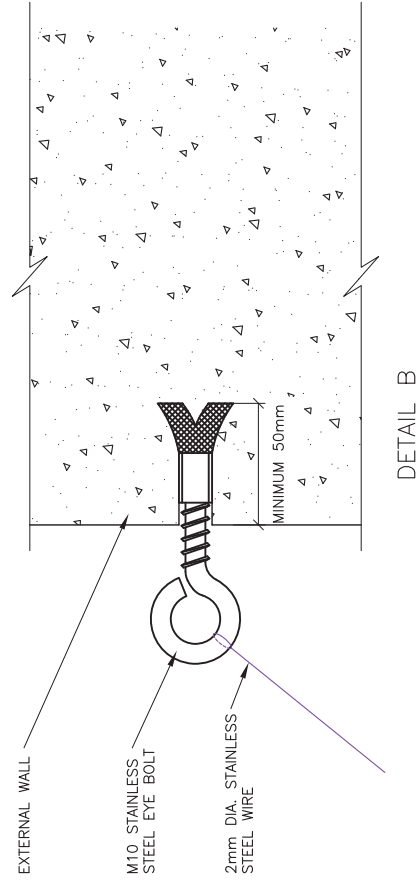
1. Install the strengthening works (stainless steel eye bolt and wire) as per the drawing.
2. Make good and reinstate the affected areas of the parent building.
3. Dismantle the bamboo scaffold and clean the site.



STRENGTHENING OF UNAUTHORIZED DRYING RACK PROJECTING FROM THE EXTERNAL WALL OF A BUILDING



DETAIL A



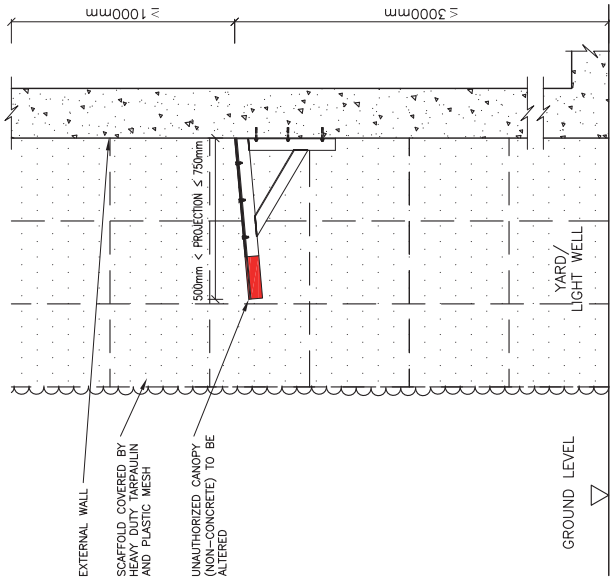
DETAIL B

MINOR WORKS ITEM 3.36

STRENGTHENING OF UNAUTHORIZED DRYING RACK PROJECTING FROM THE EXTERNAL WALL OF A BUILDING

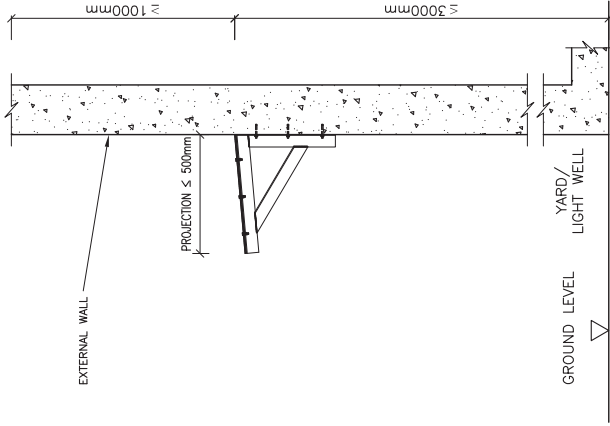
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<p>MINOR WORKS ITEM 3.37</p>	<p>STRENGTHENING OF UNAUTHORIZED CANOPY PROJECTING FROM THE EXTERNAL WALL OF A BUILDING</p>



BEFORE ALTERATION

CASE 1



AFTER ALTERATION

GENERAL NOTES :

The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Inform the utilities company or sector if the works to be involved.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

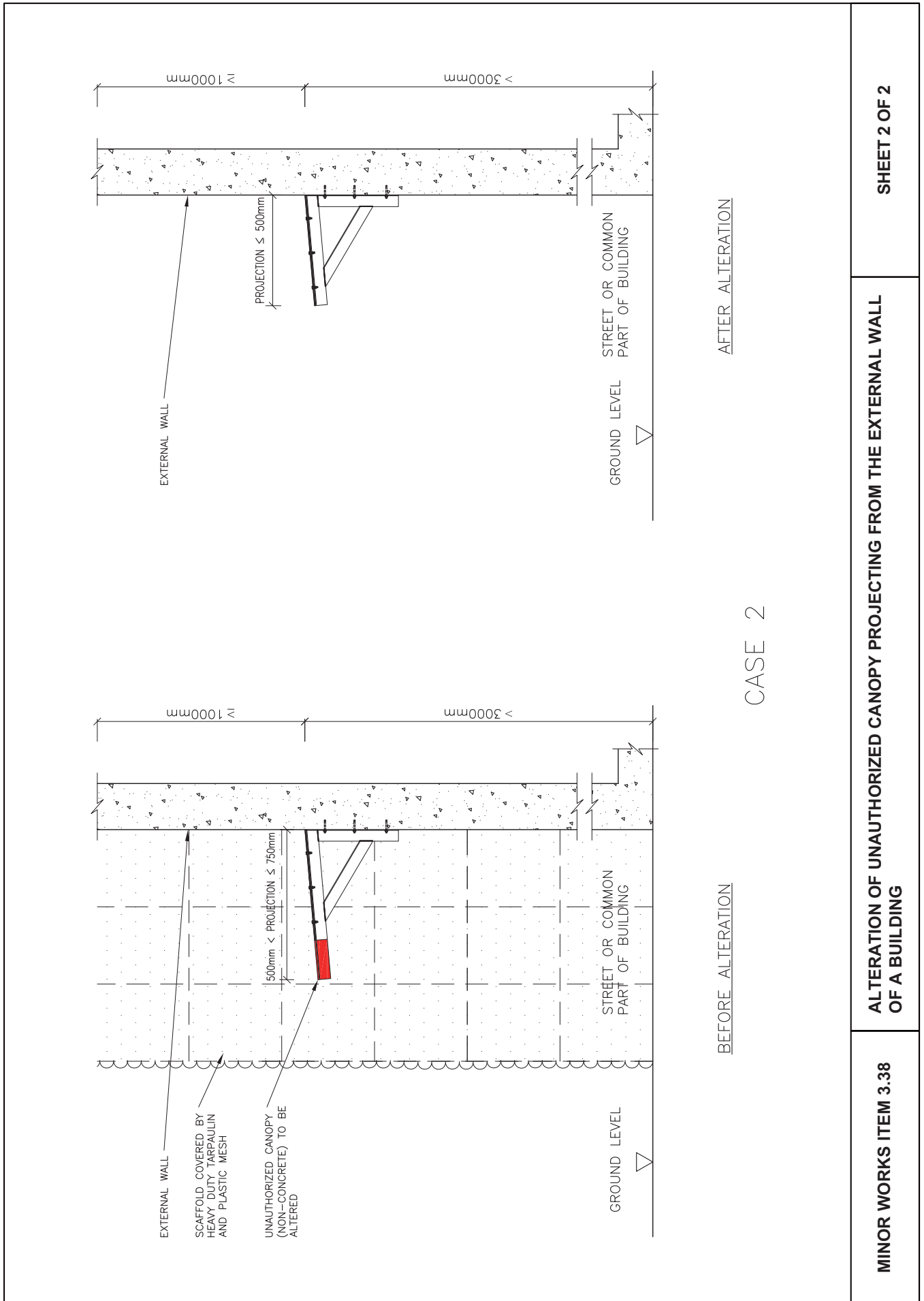
1. Use mechanical tools to cut the canopy as per the drawing.
2. Make good and reinstate the affected areas of the parent building.
3. Dismantle the bamboo scaffold and clean the site.

MINOR WORKS ITEM 3.38

ALTERATION OF UNAUTHORIZED CANOPY PROJECTING FROM THE EXTERNAL WALL OF A BUILDING

SHEET 1 OF 2

Appendix VII – Recommended Design and Details for Classes II & III Minor Works



AFTER ALTERATION

CASE 2

BEFORE ALTERATION

SHEET 2 OF 2

ALTERATION OF UNAUTHORIZED CANOPY PROJECTING FROM THE EXTERNAL WALL OF A BUILDING

MINOR WORKS ITEM 3.38