# Amendments to the Code of Practice for Demolition of Buildings 2004

# (October 2023)

Legends:

Amended

Deleted

(10/2023)

Major amendments to the Code of Practice for Demolition of Buildings 2004 in October 2023 included:

(a) Table 3.4 – addition of propping requirement for light-weight mechanical plant of maximum 5,800 kg;

(b) clause 3.8.1 – corresponding amendment due to the establishment of the Hong Kong Institute of Construction;

(c) clause 3.8.8 – additional clause on the provision of precautionary measures at the interface between two adjacent demolition/construction sites;

(d) clause 3.8.9 – additional clause to enhance the safety precautionary measures for floor openings and free edges at buildings and structures;

(e) clause 3.8.10 – additional clause to enhance the control on conveying debris through floor openings;

(f) clause 3.10.7 – clarification on the requirements of disposal of construction and demolition (C&D) material;

(g) clauses 4.2.4(C)(1), 4.2.4(C)(3) and Figure 4.5 – revision of the requirements on method and procedures for the demolition of exterior column;

(h) clause 6(D) of Appendix E – clarification on personal information in Form BA20 to be posted close to the front entrance of the site; and

(i) Appendix F, Figure F.4 (sheet 2 of 4, sheet 3 of 4 and sheet 4 of 4), Figure F.5 (sheet 2 of 4), and Appendix G, Figure G.4 (sheet 1 of 5, sheet 2 of 5, sheet 3 of 5 and sheet 4 of 5) and Figure G.5 (sheet 3 of 5) – clarification that the provision of temporary platforms is required unless the cantilevered structures are demolished by cut and lift or other similar techniques as stated in Clause 3.5.1(B).

# Amendments to the Code of Practice for Demolition of Buildings 2004
# (October 2023)

<table>
<tr><th colspan="2">Item</th><th>Current version</th><th>Amendments</th></tr>
<tr><td>1.</td><td>Table 3.4</td><td>

**Table 3.4 Propping Requirements on the Operation of Mechanical Plant on Suspended Floor**

<table>
<tr><td>Design imposed load of floor to be demolished</td><td>3 kPa</td><td>5 kPa</td><td>7.5 kPa</td><td>12.5 kPa</td></tr>
<tr><td>Maximum weight of mechanical plant allowed</td><td>11,600 kg</td><td>11,600 kg</td><td>11,600 kg</td><td>11,600 kg</td></tr>
<tr><td>Minimum no. of consecutive floors required to distribute mechanical plant loading, through propping</td><td>5</td><td>3</td><td>2</td><td>2</td></tr>
<tr><td>Minimum no. of consecutive floors required to distribute localised loading from temporary ramp, through propping</td><td>5</td><td>4</td><td>3</td><td>2</td></tr>
<tr><td>Maximum spacing of steel props in each direction</td><td>1.2m</td><td>1.2m</td><td>1.2m</td><td>1.2m</td></tr>
</table>

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**Table 3.4 Propping Requirements on the Operation of Mechanical Plant on Suspended Floor**

<table>
<tr><td>Design imposed load of floor to be demolished</td><td>1.5 kPa</td><td>3 kPa</td><td>5 kPa</td><td>7.5 kPa</td><td>12.5 kPa</td></tr>
<tr><td>Maximum weight of mechanical plant allowed</td><td>5,800 kg</td><td>11,600 kg</td><td>11,600 kg</td><td>11,600 kg</td><td>11,600 kg</td></tr>
<tr><td>Minimum no. of consecutive floors required to distribute mechanical plant loading, through propping</td><td>5</td><td>5</td><td>3</td><td>2</td><td>2</td></tr>
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</table>

</td></tr>
<tr><td>2.</td><td>1st paragraph of Clause 3.8.1</td><td>

**3.8.1 Training and Communication**

Demolition workers, including plant or equipment operators, shall go through proper job safety training and be informed of the potential hazards by attending training sessions as well as on-the-job training. At present, the Construction Industry Training Authority has organised relevant training courses for site supervisors/foremen and plant or equipment operators.

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Demolition workers, including plant or equipment operators, shall go through proper job safety training and be informed of the potential hazards by attending training sessions as well as on-the-job training. At present, the Hong Kong Institute of Construction (previously known as the Construction Industry Training Authority) has organised relevant training courses for site supervisors/foremen and plant or equipment operators.

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| 3. Clause 3.8.8 | | **3.8.8 Provision of Precautionary Measures at the Interface Between Two Adjacent Demolition/Construction Sites**<br><br>The Authorized Person/Registered Structural Engineer shall design the precautionary measures for a demolition site to suit the site circumstances, in particular when the adjoining building(s) is/are under demolition or construction. The Authorized Person/ Registered Structural Engineer shall coordinate with Authorized Person/Registered Structural Engineer of the adjoining site(s) to provide adequate precautionary measures to protect persons and properties of the public and site personnel. The design of the precautionary measures shall be reviewed to cater for the changes in site circumstances. Corresponding amendment plans for demolition shall be submitted to the Buildings Department for approval if necessary.<br><br>The Registered Specialist Contractor (Demolition) of the demolition site shall co-ordinate with the contractors of adjacent demolition/construction sites to ensure adequate precautionary measures have been provided at different stages of demolition or construction works. |
| 4. Clause 3.8.9 | | **3.8.9 Safety Precautionary Measures for Floor Openings and Free Edges at Buildings and Structures**<br><br>As stated in 3.10.1, areas adjacent to the openings shall be barricaded when they are not in use and warning signs shall be posted to prevent workers from entering the areas.<br><br>Covers to all floor openings shall be constructed with solid material of sufficient strength and securely fixed in position to prevent fall of persons, materials and article. All covers to all floor openings shall be clearly and boldly marked to show their purpose. |

| Item | Current version | Amendments |
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| | | Rigid and secure railings shall be erected around the floor openings and at the free edges of a building or structure. They shall be in accordance with the Construction Sites (Safety) Regulations, include but not be limited to the following –<br><br>(a) top railing at a height of 900mm to 1150mm;<br>(b) intermediate railing at a height of 450mm to 600mm;<br>(c) toe board of 200mm high above the floor surface where no permanent upstand exists; and<br>(d) brightly coloured safety meshes mounted on the top railings and down to the toe boards.<br><br>For floor openings with considerable risks or safety concerns of falling persons or objects but provision of cover to the opening is impracticable, safety nets of suitable size and sufficient strength shall be provided to cover the floor openings. The safety nets shall be clear of any debris.<br><br>Where the erection of railings or provision of covers to prevent fall from a floor opening or a free edge is considered impracticable, the Registered Specialist Contractor (Demolition) shall provide suitable fall arrest system to workers with reference to the "Guidance Notes on Classification and Use of Safety Belts and their Anchorage Systems" published by the Labour Department.<br><br>The Registered Specialist Contractor (Demolition) shall develop and implement an effective and safe system of work to ensure that the above safety measures are properly implemented and maintained. |

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| 5. | Clause 3.8.10 | | **3.8.10 Control on Conveying Debris through Floor Openings**<br><br>As stated in 3.10.1 and 3.10.4, all chutes shall be designed with adequate strength and support to allow safe conveyance of debris. Debris shall only be conveyed through floor openings with suitable chutes, full enclosures or shafts.<br><br>Debris generated in the works shall be regularly removed to prevent excessive stockpiling that could –<br><br>(a) affect the integrity of the building or structure;<br>(b) affect the access to and egress from the workplaces;<br>(c) result in a risk of fire; or<br>(d) cause health and safety hazards.<br><br>The Registered Specialist Contractor (Demolition) shall define designated areas for conveying debris through floor openings with chute, full enclosure or shaft for acceptance by the Authorized Person/Registered Structural Engineer. The designated areas shall have an enclosed structure to contain the falling debris where the hazard of workers or the public being struck by falling objects/rebounding debris is eliminated. The designated areas shall be clearly identified, and fenced off or barricaded to prevent unauthorised entry. Overhead conveyance of debris through designated areas shall be suspended during removal of debris therein. All site personnel involved shall be unequivocally informed of the suspension of overhead conveyance of debris through the designated areas. Warning notice shall be posted at all entry points of the designated areas to warn site personnel of the potential hazards.<br><br>The Registered Specialist Contractor (Demolition) shall ensure that all chutes, full enclosures or shafts installed at the floor openings – |

| Item | Current version | Amendments |
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| | | (a) shall be of adequate strength and securely fixed and supported to allow safe and free falling of debris therein;<br>(b) shall be fully enclosed at every entry point to prevent a person from falling therein;<br>(c) shall be adequately secured having regard to the weight of the chute, full enclosure or shaft and the weight of possible accumulated load therein;<br>(d) shall prevent escape of materials and dust; and<br>(e) shall be able to minimise the noise while debris is passing through.<br><br>Where the compliance of any provisions above are considered impracticable, the Registered Specialist Contractor (Demolition) shall submit an alternative proposal for conveying debris through floor openings, with due consideration and mitigation of hazards including, but not limited to falling from height and struck by falling objects, for acceptance by the Authorized Person/ Registered Structural Engineer before the commencement of conveying debris through floor openings. |
| 6. 1st paragraph of Clause 3.10.7 | **Waste Management**<br><br>On-site sorting of surplus construction and demolition (C&D) material is strongly recommended so that inert material can be disposed of at public filling areas as far as practicable, and the remaining C&D waste disposed of at landfills. …… | **Waste Management**<br><br>Construction and demolition (C&D) material shall be disposed of in compliance with the Waste Disposal Ordinance. On-site sorting of surplus C&D material is strongly recommended so that inert material can be disposed of at public filling areas as far as practicable, and the remaining C&D waste disposed of at landfills. …… |

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| 7. Clauses 4.2.4 (C)(1) and (C)(3) | (C) Exterior Column<br><br>Exterior column may be demolished by the following procedures and as illustrated in Figure 4.5.<br><br>(1) The top of the column shall first be secured to a structural member by wire and winch;<br><br>(2) …….; and<br><br>(3) After pre-weakening, the column shall be pulled down by the wire and winch towards the interior in a controlled manner. | (C) Exterior Column<br><br>Exterior column may be demolished by the following procedures and as illustrated in Figure 4.5.<br><br>(1) The top and bottom of the column shall first be tied to a structural member by wires and winches;<br><br>(2) …….; and<br><br>(3) After pre-weakening, the column shall be pulled down by the wires and winches towards the interior in a controlled manner. |

| Item | Current version | Amendments |
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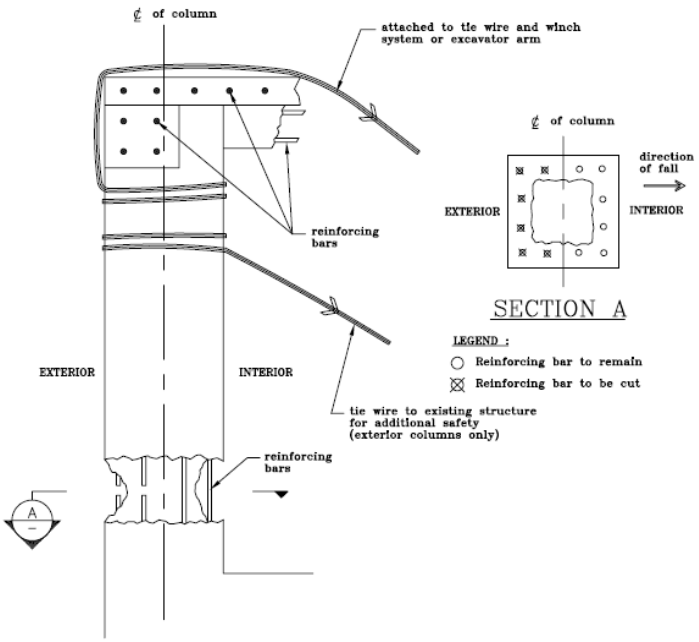
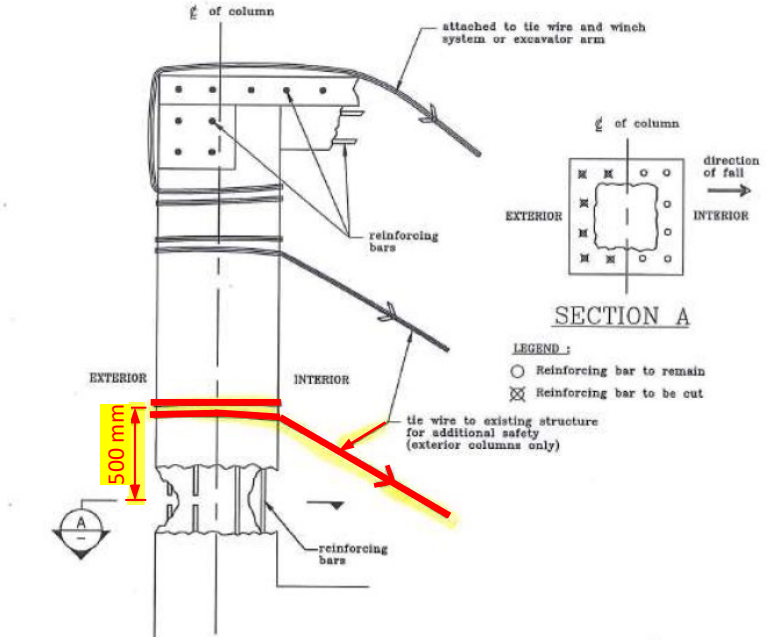
| 8. Figure 4.5 |  <br>NOTES :<br>1. Secure the column by wire & winch to existing structure or excavator arm.<br>2. Pre–weakening at the bottom of column<br>i) Break away the concrete to expose the reinforcing bars.<br>ii) cut the reinforcing bars at the exterior half of the column. Cutting shall be performed immediately prior to pulling.<br>3. Pulling down the column in a controlled motion. |  <br>STEPS:<br>1. Tie the column by wires & winches to existing structure or excavator arm to control the movement direction of the column.<br>2. Pre – weakening at the bottom of column<br>i) Break away the concrete to expose the reinforcing bars.<br>ii) cut the reinforcing bars at the exterior half of the column. Cutting shall be performed immediately prior to pulling.<br>3. Pulling down the column in a controlled motion. |
| 9. Clause 6 (D) of Appendix E | **Posting of Information**<br>……<br>(D) Form BA20 informing the Technically Competent Person in charge of the demolition work; and | **Posting of Information**<br>……<br>(D) Form BA20 informing the Technically Competent Person in charge of the demolition work. Part of the Hong Kong identity card number (HKID) on Form BA20 can be redacted, i.e. only the alphabet(s) and the first three digits of HKID to be disclosed for posting on site; and |

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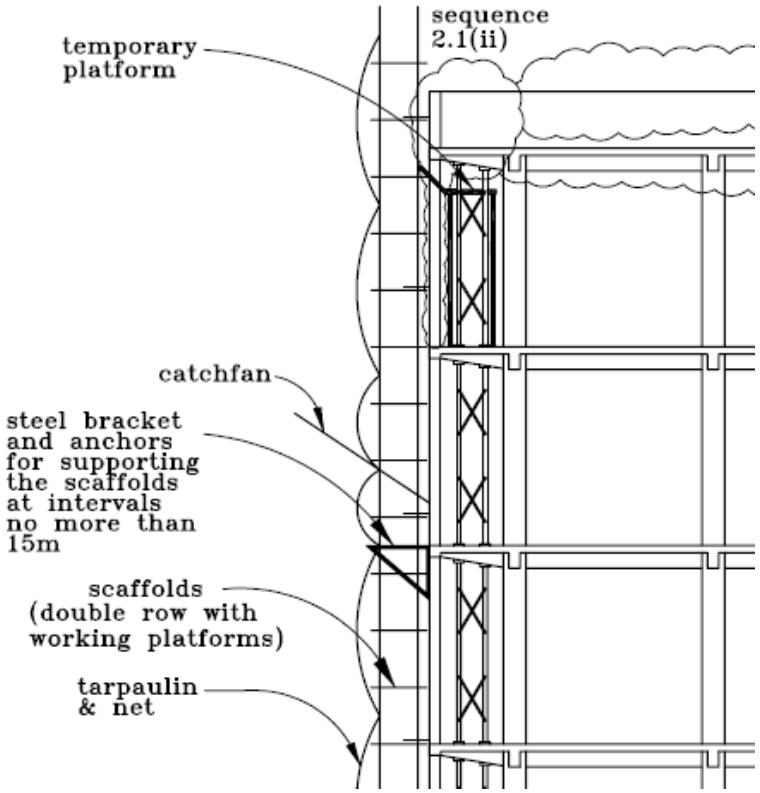
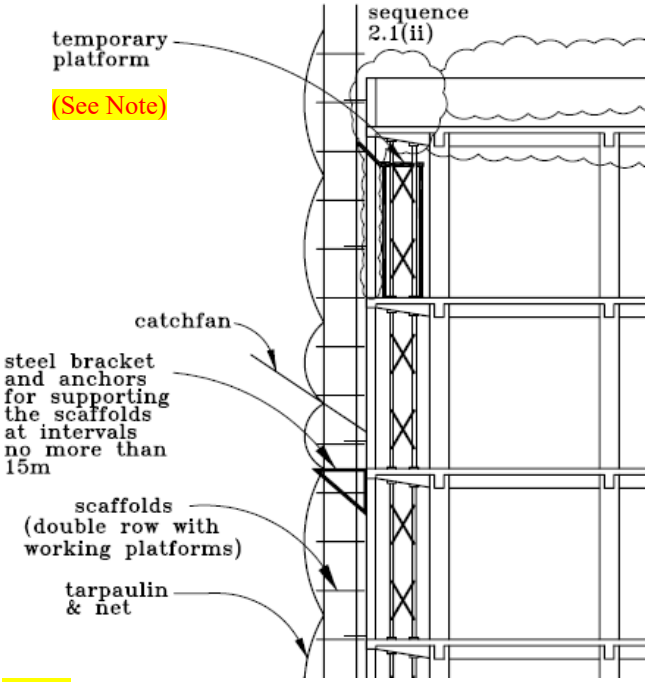
| 10. Appendix F<br><br>Figure F.4 (sheet 2 of 4) |  |  <br>Note:<br>Provision of temporary platform is required unless the cantilevered structures are demolished by cut and lift, or other similar techniques as stated in paragraph 3.5.1(B). |

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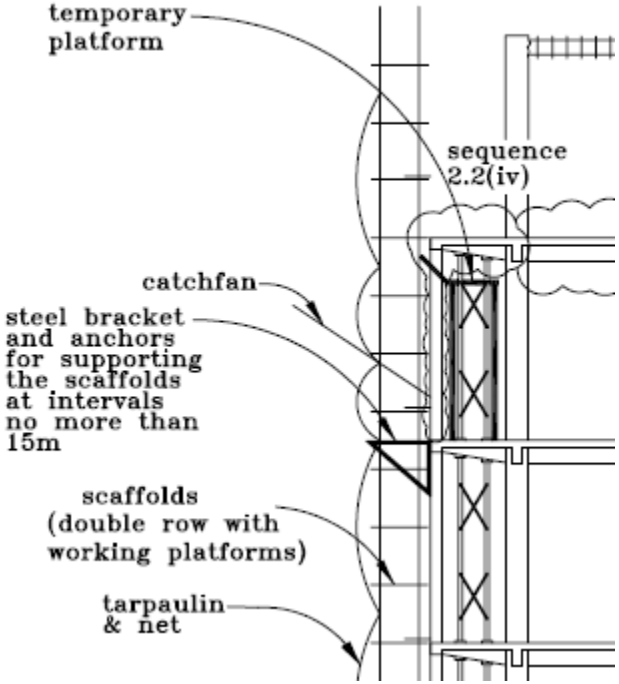
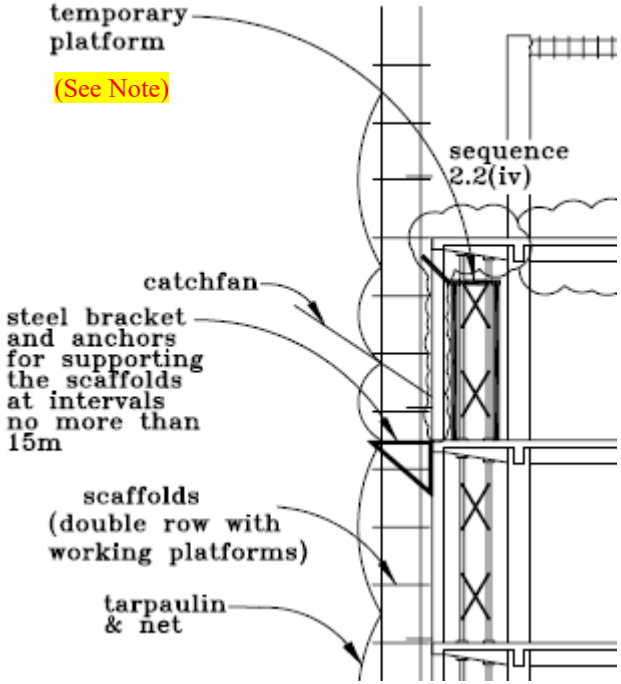
| Appendix F<br><br>Figure F.4 (sheet 3 of 4) |  |  <br>Note:<br>Provision of temporary platform is required unless the cantilevered structures are demolished by cut and lift, or other similar techniques as stated in paragraph 3.5.1(B). |

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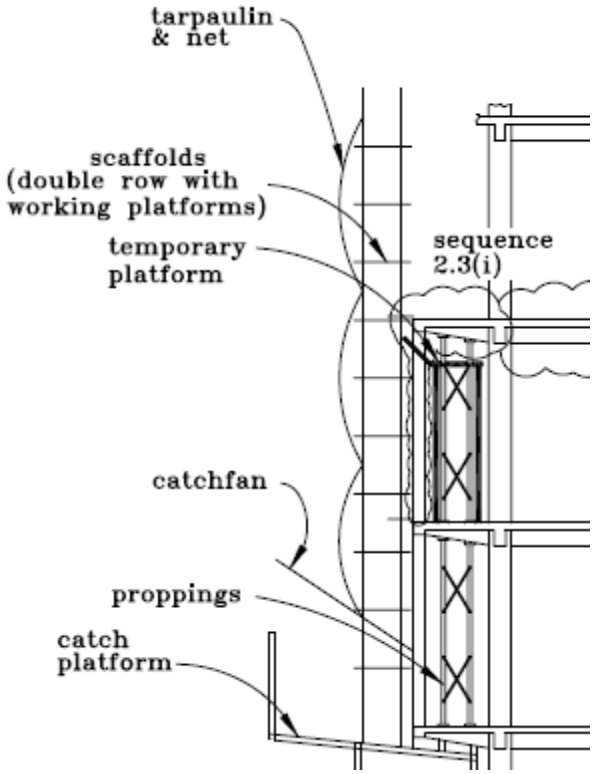
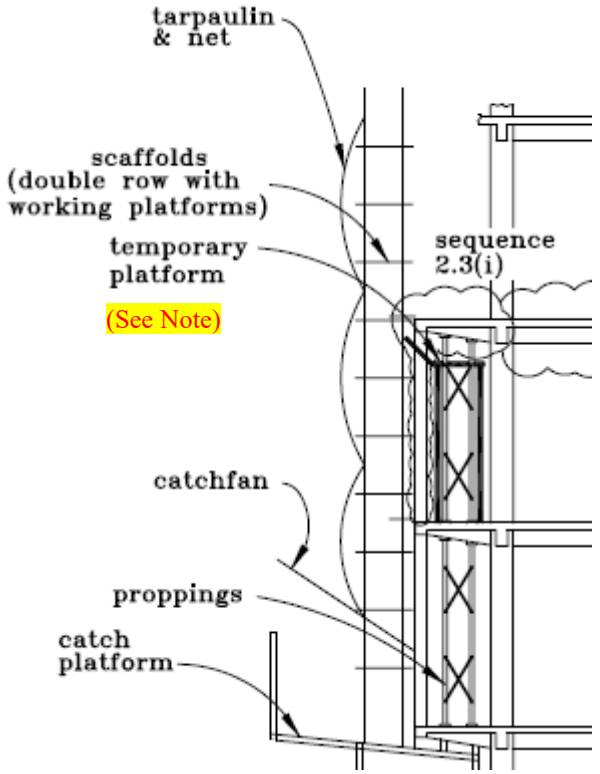
| Appendix F<br><br>Figure F.4 (sheet 4 of 4) |  |  <br>Note:<br>Provision of temporary platform is required unless the cantilevered structures are demolished by cut and lift, or other similar techniques as stated in paragraph 3.5.1(B). |

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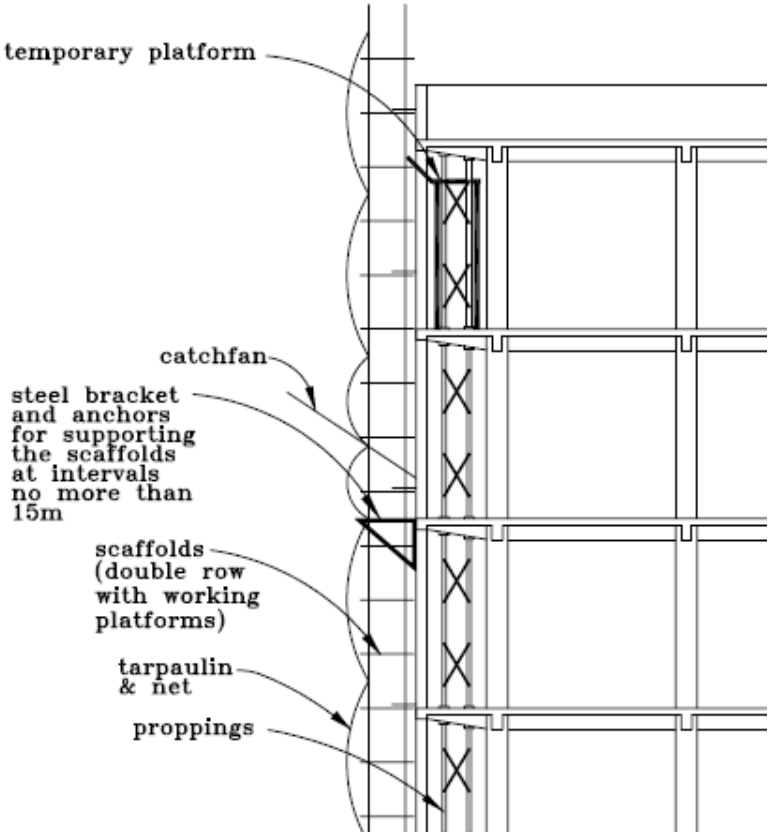
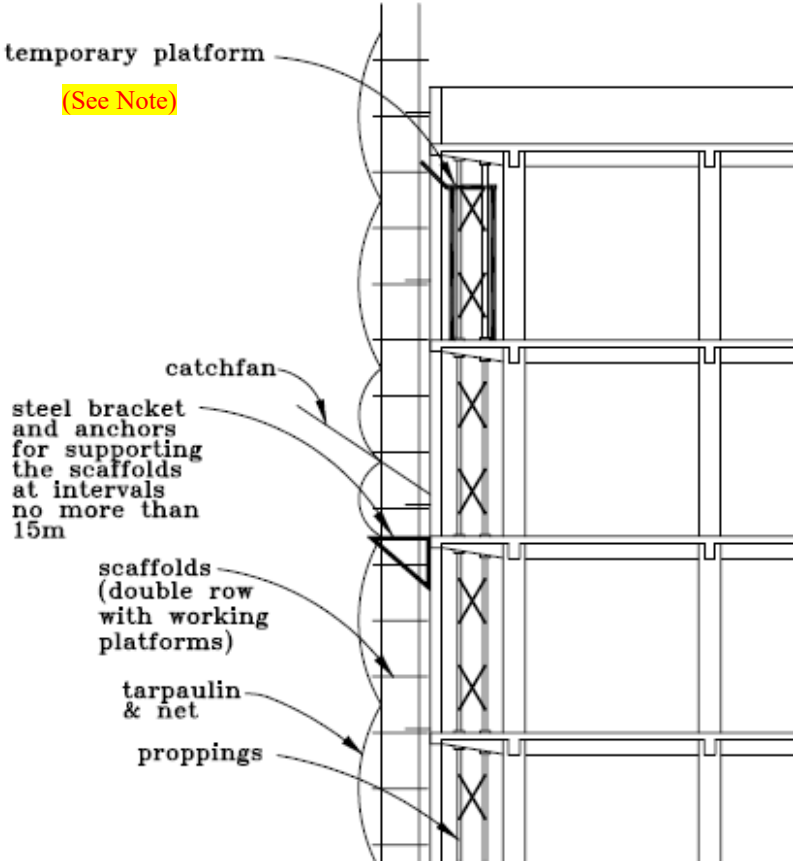
| Appendix F<br><br>Figure F.5 (sheet 2 of 4) |  |  <br>Note:<br>Provision of temporary platform is required unless the cantilevered structures are demolished by cut and lift, or other similar techniques as stated in paragraph 3.5.1(B). |

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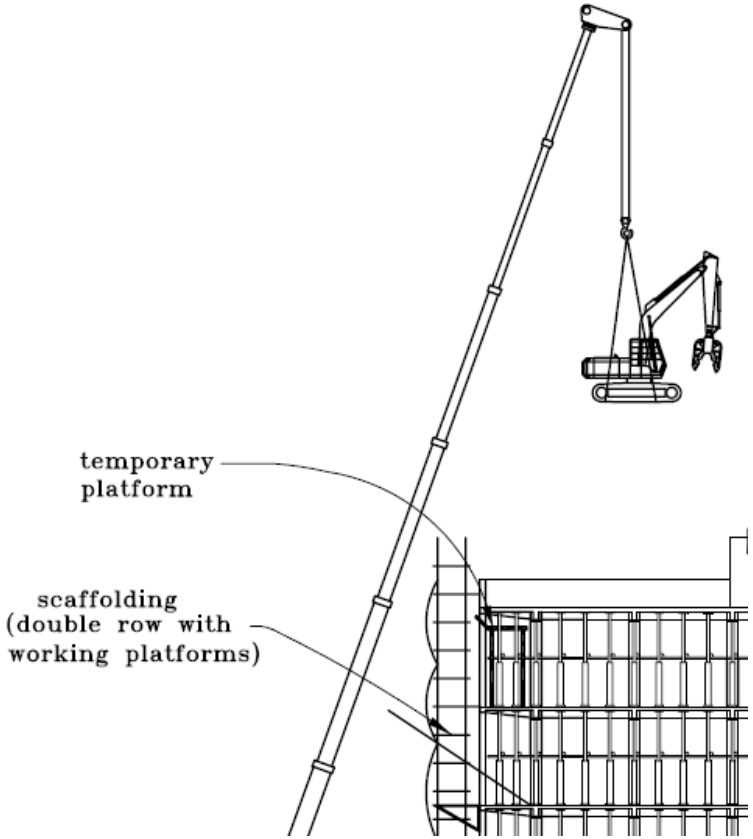
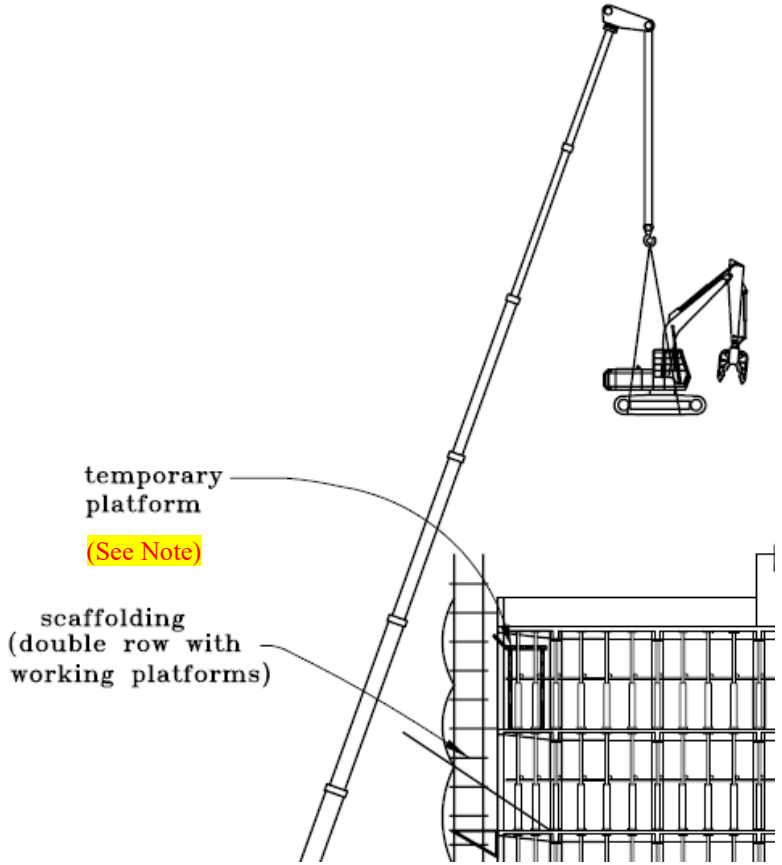
|---|---|---|
| Appendix G<br><br>Figure G.4 (sheet 1 of 5) |  |  <br>Note:<br>Provision of temporary platform is required unless the cantilevered structures are demolished by cut and lift, or other similar techniques as stated in paragraph 3.5.1(B). |

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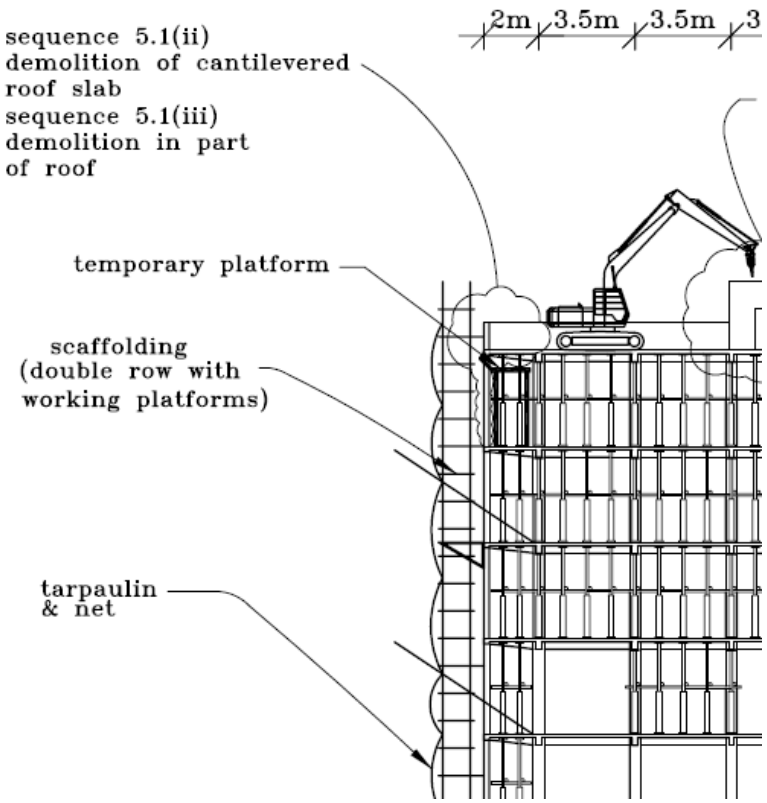
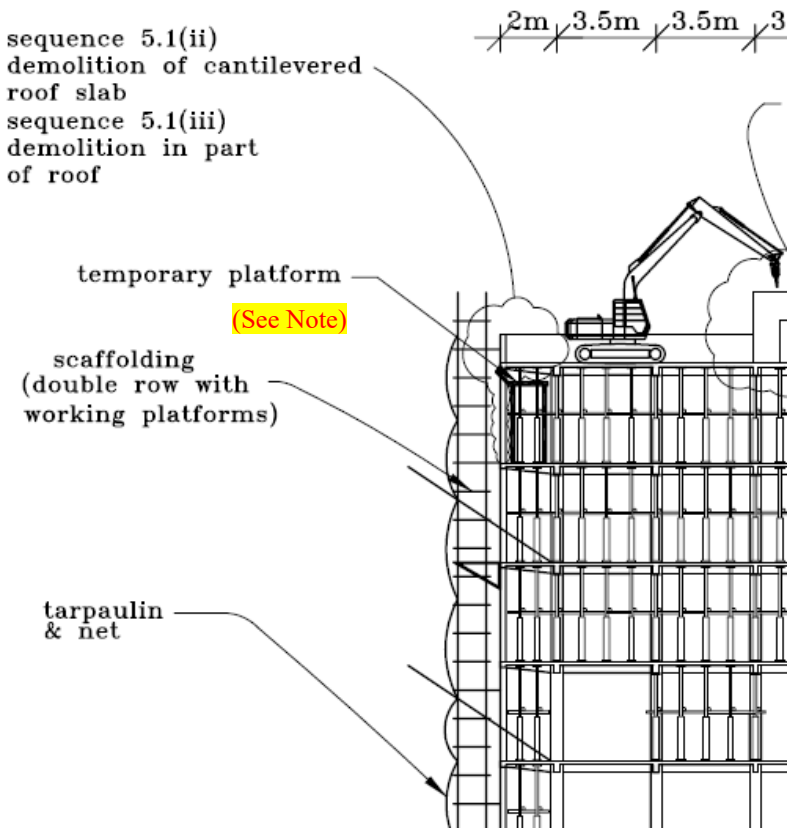
| Appendix G<br><br>Figure G.4 (sheet 2 of 5) |  |  <br>Note:<br>Provision of temporary platform is required unless the cantilevered structures are demolished by cut and lift, or other similar techniques as stated in paragraph 3.5.1(B). |

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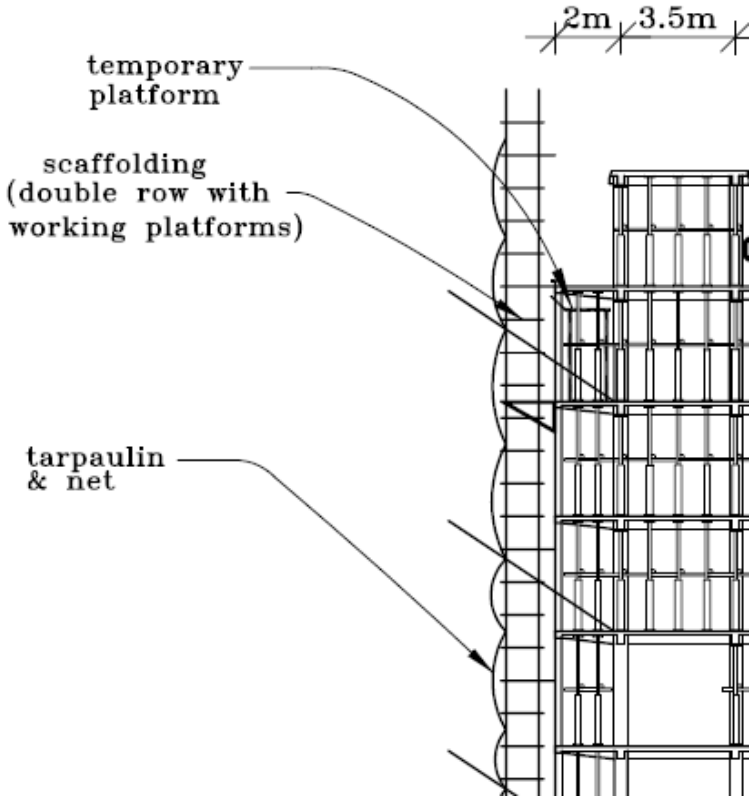
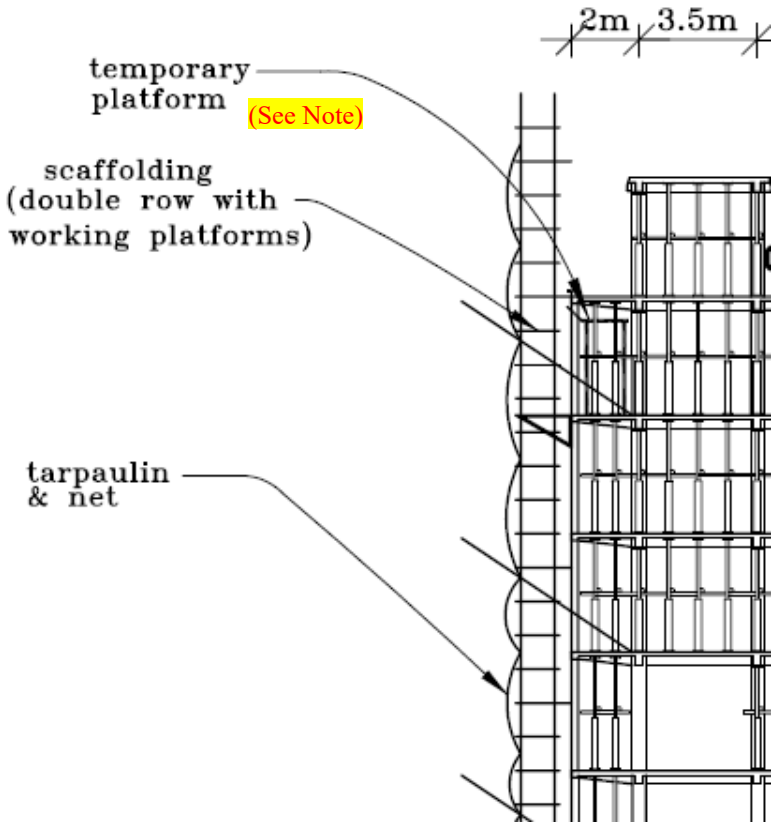
| Appendix G<br><br>Figure G.4 (sheet 3 of 5) |  |  <br>Note:<br>Provision of temporary platform is required unless the cantilevered structures are demolished by cut and lift, or other similar techniques as stated in paragraph 3.5.1(B). |

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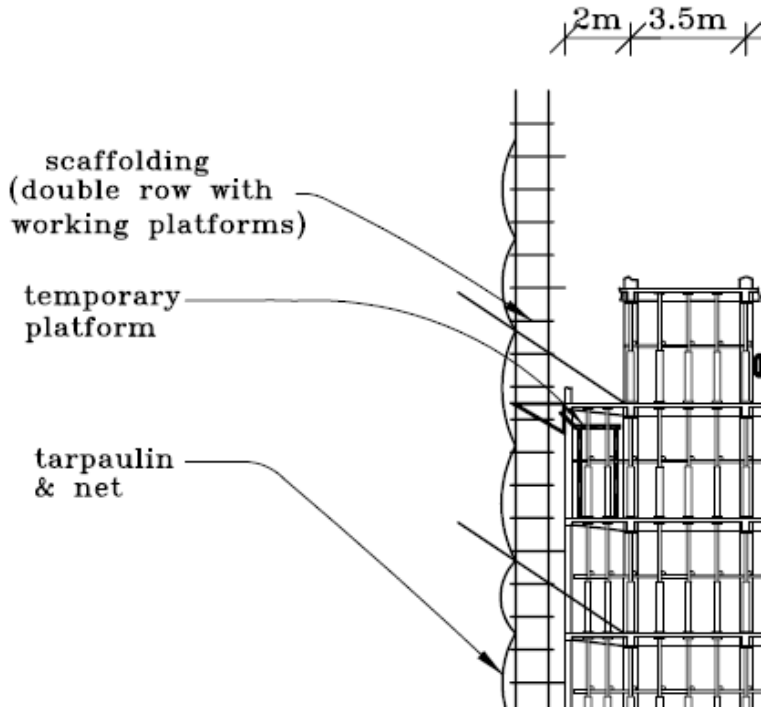
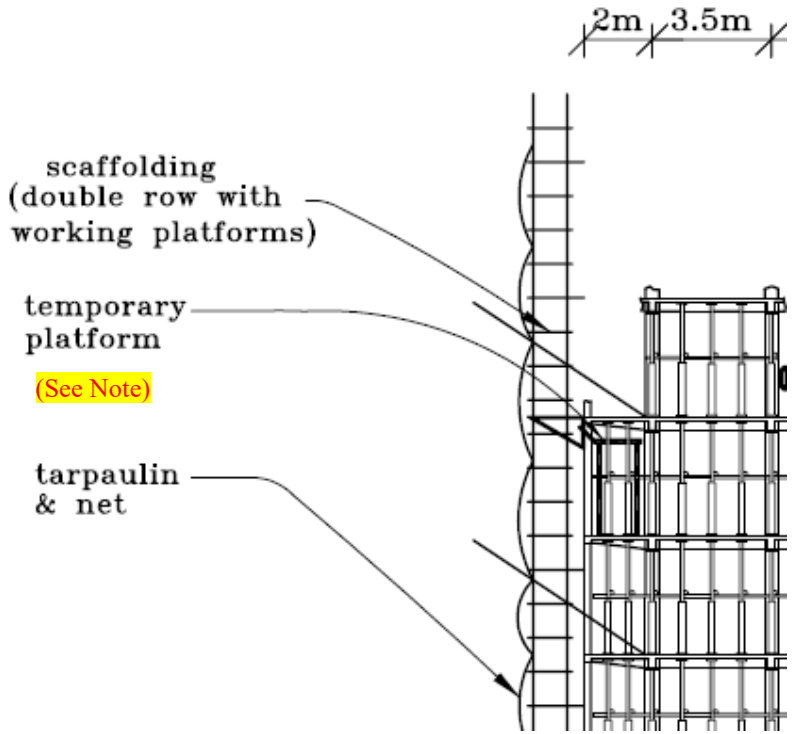
| Appendix G<br><br>Figure G.4 (sheet 4 of 5) |  |  <br>Note:<br>Provision of temporary platform is required unless the cantilevered structures are demolished by cut and lift, or other similar techniques as stated in paragraph 3.5.1(B). |

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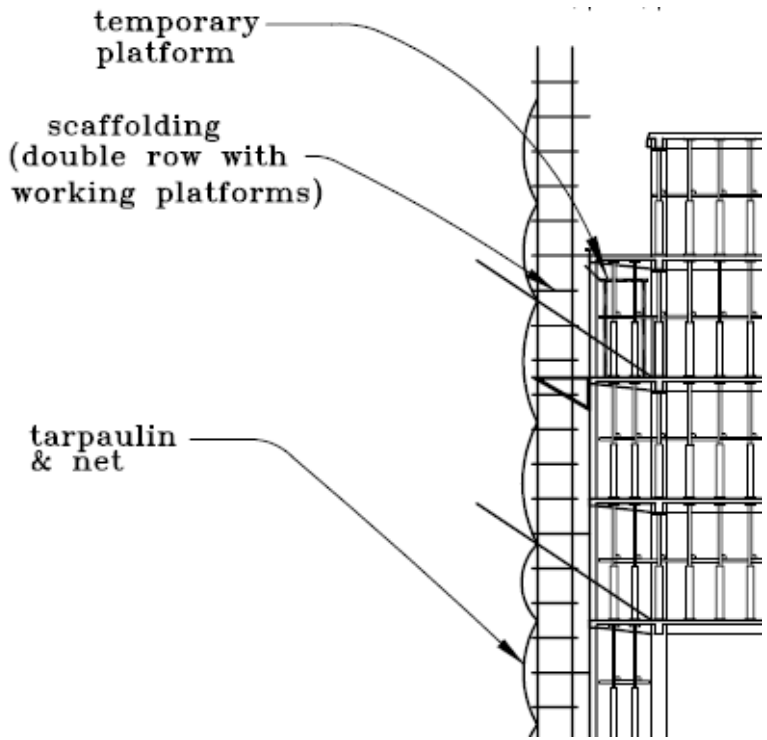
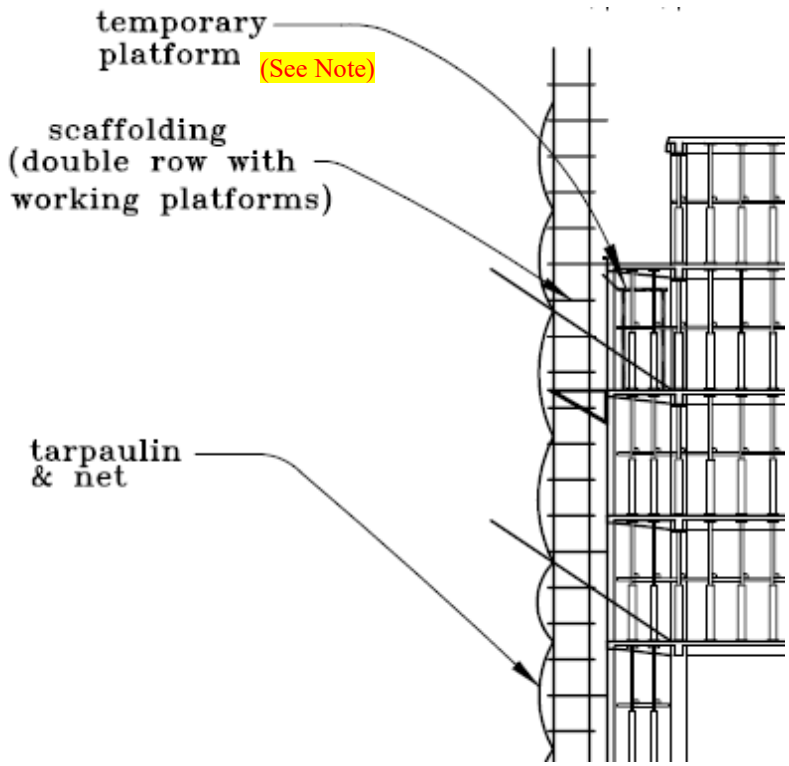
| Appendix G<br><br>Figure G.5 (sheet 3 of 5) |  |  <br>Note:<br>Provision of temporary platform is required unless the cantilevered structures are demolished by cut and lift, or other similar techniques as stated in paragraph 3.5.1(B). |