

## Temporary Works Procedural Control Examples of Construction Work Complying with the GPG

### Example 3: Temporary Propping of a Suspended Concrete Slab

#### Description

A suspended concrete slab is to be constructed in a 2-story building. The new slab will be 4m above the floor below.

#### The Contractor

The Company is a small-medium sized Building Contractor and does not employ any engineers who are CPEng.

Key staff include:

- a) the Director/Owner  
(an experienced Building Contractor)
- b) his Site Engineer  
(who has a BE but is not CPEng)
- c) his Supervisor  
(who has 30 years' experience)
- d) other site crew  
(Carpenters, scaffolders, labourers etc.)

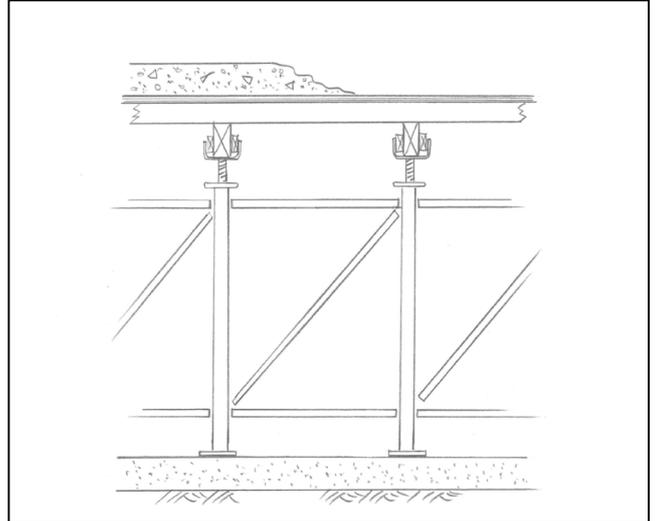
#### Roles and Designations

The Director has adopted the TW forum GPG as his procedure for all Temporary Works.

He is the "Designated Individual" (DI) as defined in the TW forum GPG.

He has briefed his key staff on how to follow the GPG, explaining the importance of good process. He has appointed his site engineer as TWC and his Supervisor as TWS and formalised this using the Appointment Letters in Appendix B of the GPG.

He considers that training his staff to be TWC's and TWS's involves coaching and mentoring so he maintains regular contact and makes site visits to observe their work.



#### Planning Stage

The Director has given this job to the Site Engineer (TWC) and Supervisor (TWS) to work on together.

1. The TWC knows that Suspended Slabs are Temporary Works so enters it on a **TW Register** (see Appendix C in the GPG)
2. By comparing the task with Appendix E in the GPG, the TWC assesses it as **Category 2**.
3. The TWC prepares a Design Brief similar to Part 1 in the GPG.
4. The TWC engages a Consulting Engineer (CPEng) to carry out the design of formwork and falsework. The Consulting Engineer provides drawings and completes a Design Certificate equivalent to Part 2 in the GPG.
5. The Consulting Engineer arranges for another suitably qualified and suitably independent engineer within his company to carry out a Design Review and the Reviewer signs a Check Certificate equivalent to Part 3 in the GPG.
6. The TWC dialogues with the TWS and the Consulting Engineer during the design stage to ensure that hazards are reduced as far as reasonably possible and that an optimum solution is found.
7. The TWC confirms that he has IFC sketches, that both design and check certificates have been completed and signed and notes the requirements for inspections and "HOLD POINTS". He updates the **TW Register**.

#### Execution Stage

1. The TWC briefs the TWS on site before work starts noting the need for inspections and "HOLD POINTS".
2. The falsework and formwork are constructed as per the design sketch.
3. The TWC inspects formwork and falsework finding it satisfactory, issues a PTL and updates the **TW Register**.  
(It is usual for the Consulting Engineer to have one of his staff inspect as well, and this may be one of his requirements.)
4. The wet concrete is placed.
5. When the slab has reached the required strength, the TWC double-checks with the structural engineer who confirms by email that the falsework can be removed. The TWC issues a PTU, updates the **TW Register** and the falsework is removed.

#### Abbreviations

<b>GPG</b> - Temporary Works Procedural Control Good Practice Guideline published by the Temporary Works forum New Zealand		
<b>DI</b> - Designated Individual	<b>TWC</b> - Temporary Works Coordinator	<b>TWS</b> - Temporary Works Supervisor
<b>IFC</b> - Issued For Construction	<b>PTL</b> - Permit to Load	<b>PTU</b> - Permit to Unload
<b>CPEng</b> - Chartered Professional Engineer	<b>TW</b> - Temporary Works	