

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

### Example 2: Precast Panel Propping Constructed by a Small Specialist Sub-Contractor (NOT CPEng)

#### Description

Precast Concrete Panels are to be placed and temporarily propped.

#### The Contractor

The Company is a small but specializes in the erection and temporary propping of precast concrete panels.

Key staff include:

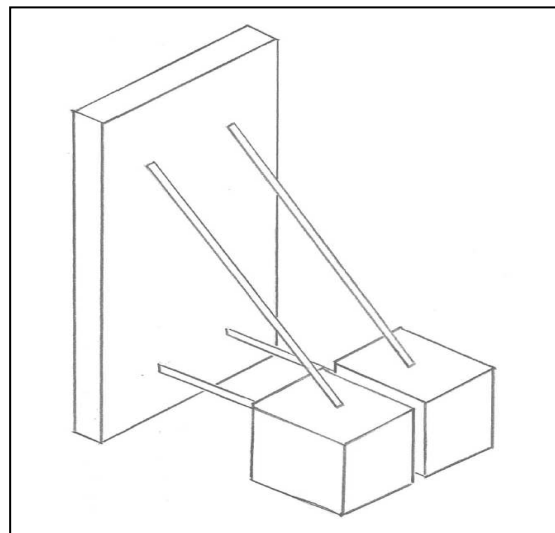
- a) the Director/Owner  
(an experienced engineer, but not a CPEng)
- b) the Site Engineer  
(who has a BE + 5 years' experience)
- c) the Supervisor  
(who has 30 years' experience)
- d) other site crew  
(Operators, riggers, carpenters)

#### Roles and Designations

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

The Director is the "Designated Individual" (DI) as defined in the GPG.

The Director has briefed the key staff on how to follow the GPG, explaining the importance of good process. The site engineer has been appointed as the TWC and the Supervisor as TWS and this was formalised using the Appointment Letters in Appendix B of the GPG. The Director considers that training staff to be TWC's and TWS's involves coaching and mentoring. For this reason, on-the-job training, evaluations and site visits are regularly carried out and recorded.



#### 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 PC Panel Propping is 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 1**.
3. The TWC will do the design work, but for good order, the TWC writes up a Design Brief similar to Part 1 in the GPG.
4. The TWC now takes the role of Designer and considers wind and seismic loads in accordance with AS/NZS 1170. In this case, wind governs. The TWC summarizes the design on a sketch noting the stage at which the props can be removed as per the Contract Drawings. The TWC completes a Design Certificate equivalent to Part 2 in the GPG.
5. As Designer, the TWC dialogues with the TWS (and the Director) during the design stage to ensure that hazards are reduced as far as reasonably possible and that an optimum solution is found.
6. The Director reviews the design as "Design Reviewer" and signs a Check Certificate (Part 3).
7. Back to the role of TWC, the site engineer confirms that all documents are complete: IFC sketches, signed design and check certificates and clear requirements for inspections and "HOLD POINTS".

The TWC 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 Panels are delivered and propped as per the design sketch.
3. As TWC, the site engineer inspects the propped panels and fixings, issues a PTL and updates the **TW Register**.
4. Once a week, either the TWC or the TWS (or both) inspect the panel propping and no signs of movement or deflection are found. The **TW Register** is updated after each inspection.
5. When the building has reached the stage of no longer requiring panel props, the TWC double-checks this with the structural engineer who confirms this by email. The TWC fills out a PTU and the props are removed.

#### Important Note regarding Chartered Engineers

It is the responsibility of the Employer or PCBU (in this example, the Director/Owner) to assess as competent all people involved. Whilst the GPG does not require TWC's or Designers to be CPEng, it recommends a CPEng for some circumstances.

An advantage of assigning a CPEng to a Design or Design Review role is that suitable competence is easier to demonstrate.

#### 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	