

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) his Site Engineer
(who has a BE + 5 years' experience)
- c) his Supervisor
(who has 30 years' experience)
- d) other site crew
(Operators, riggers, carpenters)

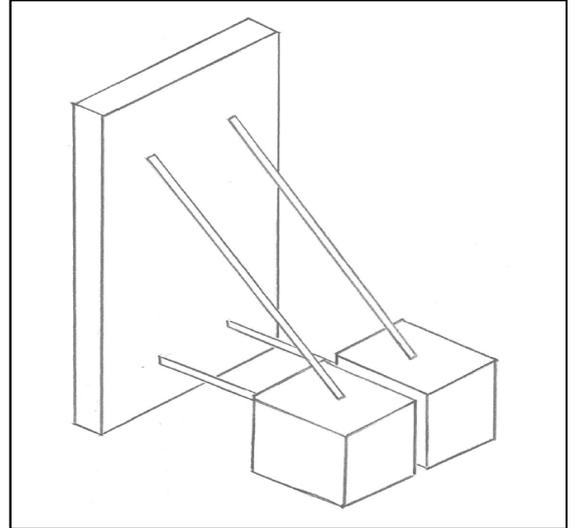
Roles and Designations

The Director has adopted the TW forum GPG as 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 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 himself, but for good order, prepares 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. He summarizes the design on a sketch noting the stage at which the props can be removed as per the Contract Drawings. He 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 his role as TWC, the site engineer 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 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

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