



**Temporary Works
forum**

Promoting best practice in
the construction industry.

TW20.039 – 31st March 2020

TWf INFORMATION SHEET No. 11 Implementing construction site closures: temporary works

1.0 Background

1.1 With site shutdowns being implemented rapidly across the industry (Covid-19) the issue of existing or part-constructed temporary works brings to the fore some increased risk.

1.2 Partly-constructed temporary works **must** be left in a safe condition for the shutdown (and this should be considered essential work). Not so obvious is temporary works whose loading is time-dependent. Temporary structures such as retaining walls, trench supports, batters and excavations, tunnels, scaffolding - and structures carrying wind loads - in their partially-finished or fully-completed condition all have as an element of their design some time-dependent behaviour, e.g. short-term loads (the magnitude of which is entirely dependent upon the duration of the installation). Being left for a number of weeks may change significantly the loading regimes on these structures and cause localised or progressive collapse mechanisms.

2.0 Considerations

2.1 Of particular concern is the structural stability of items during the shutdown, e.g.:

- Partially-completed temporary and permanent works;
- Temporary conditions where any loading is time-related (e.g. soil, wind);
- Rebar cages (in particular, walls and columns);
- Excavations (e.g. designs using short-term soil properties that may now be subject to longer-term conditions);
- Dewatering (Where this may be required for an extensive period, or cannot be guaranteed, the designer should consider a load case with the highest recorded water level in the ground and flooding of the excavation itself).

2.2 Other issues to consider include (but are not limited to):

- Risk mitigation measures (if required) may include inspection, monitoring, back-filling, exclusion zones and remedial measures;
- Fire safety on timber-framed buildings (and whether, from a fire prevention and mitigation viewpoint, the work is at a safe stage to stop work);
- The isolation of - or the consequences of disruption to - services (and whether temporary measures are needed);
- The arrangements for access and egress (including in an emergency) and temporary traffic management;
- Security, maintenance, lone worker access, etc.;
- The short term weatherproofing of sections of buildings.

3.0 Recommendations

3.1 It is recommended that Temporary Works Coordinators (TWCs) assess which works they have ongoing on their site(s) that will remain in place during any shutdown. The



Temporary Works Register should be updated, with risk assessments reviewed. Advice should be sought from temporary works designer(s), as appropriate, to determine whether it might be necessary to modify and/or strengthen the works (or, indeed, remove it). Any new significant risk should be identified and highlighted. Designers should take account of the possibility of a reduced workforce and the need to maintain separation whilst working to install or remove temporary works.

3.2 The TWC should ensure that when sites are closed arrangements are in place for the safe monitoring, inspection and security of any temporary works. Consider whether inspections can be undertaken on a longer than usual interval and how they might be undertaken after significant weather issues, e.g. yellow warning events. It may be possible to undertake this using remote technology, e.g. phone apps, digital monitoring, etc. The number of individuals undertaking such work should be kept to a safe minimum.

3.3 Most importantly, the principles of social isolation should be followed (see link, below). An adequate level of supervision should be maintained. There should be a contingency plan in the case where a TWC is in isolation and/or not available.

3.4 Sites should be made safe and left tidy before closing to avoid risks such as materials blowing off site. When returning to resume work, temporary works will require a formal inspection by a competent person before a general re-entry to site and work recommencing.

4.0 Tower cranes

4.1 The Construction Plant-hire Association (CPA) has issued a Tower Crane Safety Alert, Long-term out of service issues and requirements on shut-down sites. This provides advice to tower crane users relating to how tower cranes should be left out-of-service for potentially lengthy periods of time. Failure to take the crane out of service in line with manufacturer's instructions and to periodically inspect the crane whilst out-of-service could result in very high wind loadings being placed on the crane with consequential collapse of the jib or the whole crane. See <https://www.cpa.uk.net/news-events/tower-crane-safety-alert--coronavirus/>

5.0 Points to consider before attending a site during the COVID-19 epidemic

5.1 The Institution of Structural Engineers (IStructE) has published advice for structural engineers who may be asked to visit a site to enable progression of works to continue, resolve an issue or to ensure that the site is safe to be left for a significant period in its current state. See <https://www.istructe.org/resources/guidance/points-to-consider-before-attending-a-site/>

6.0 Site Operating Procedures during Covid-19

6.1 The Construction Leadership Council (CLC) has published Site Operating Procedures. It is stated that it is vital that "... If an activity cannot be undertaken safely due to a lack of suitably qualified personnel being available, or social distancing being implemented, it should not take place. We are aware that emergency services are also under great pressure and may not be in a position to respond as quickly as usual. ...". See <http://www.constructionleadershipcouncil.co.uk/news/site-operating-procedures-during-covid-19/>

7.0 Social distancing

7.1 Social distancing is essential and guidance for everyone in the UK can be found at <https://www.gov.uk/government/publications/covid-19-guidance-on-social-distancing-and-for-vulnerable-people/guidance-on-social-distancing-for-everyone-in-the-uk-and-protecting-older-people-and-vulnerable-adults>