

# Steel roadplates standard

## 1. Background

Roadplates provide a means of temporarily covering excavations in carriageways. Although the use of roadplates can support efficiency and expedite the progress of work, roadplates are a hazard that can pose risks to vehicles using the road. We have an obligation to manage these risks.

## 2. Scope

This standard applies to all Wellington Water controlled sites, or by Contractors working on our behalf.

## 3. Policy

Our policy is that we will:

- **Eliminate** risks to health and safety associated with the use of roadplates, by avoiding the use of roadplates in carriageways, as an alternative to backfilling and sealing, so far as is reasonably practicable. Backfilling and sealing of the road surface is the preferred method of closing in trenches.
- If it is not reasonably practicable to eliminate risks by avoiding the use of roadplates, we will minimise these risks so far as is reasonably practicable by:
  - Isolating the plates from traffic through barricading where this is practicable; and if it is not reasonably practicable to isolate the plates from traffic, by
  - Implementing measures to minimise the hazards associated with roadplates in active carriageways.

Designers must consider the possible need to use roadplates during construction as part of Safety in Design (SID) and must, through design, eliminate or minimise the need to use roadplates so far as is reasonably practicable.

## 4. Minimum standard

### 4.1. Controlling risks associated with roadplates

A documented risk assessment is required prior to the installation of any roadplates. This risk assessment must identify all risks associated with the use of roadplates in that particular situation and must take account of all factors that may influence risks associated with the use of the plates (for example, will the plates be on or near a corner, the width of the road, will the plates be on a slope or a bus route, and so on).

The risk assessment must set out how each risk will be eliminated so far as is reasonably practicable. If it is not reasonably practicable to eliminate all risks, the risk assessment must set out how remaining risks will be minimised so far as is reasonably practicable.

Sufficient time must be allowed to install the plates correctly, in accordance with this Standard.

Safe lifting practices must be adopted when lifting the roadplates.

The trench must be shored as necessary to eliminate the risk of trench collapse and plate failure. The plates must be securely fixed in place to prevent dislodgement and not represent a nuisance or risk.

The use of roadplates in active carriageways Wellington Water sites must comply with Clause 5.6.3 (3) of the National Code of Practice for Utility Operators' Access to Transport Corridors (November 2011) and with the requirements described in the following sections.

## 4.2. Planned use of steel roadplates

Where the use of roadplates forms part of the Contractor's proposed methodology, details including a risk assessment must be set out in the contractor's methodology statement.

Details of the proposed use of roadplates must also be included in the Traffic Management Plan (TMP) for the site and in the site-specific Health and Safety Plan.

## 4.3. Emergency use of steel roadplates

Where a situation arises where the contractor needs to use roadplates, which is different from the site-specific Health and Safety Plan or the Traffic Management Plan (TMP) for the site, or that has not been previously notified to Wellington Water, installation details including photographs and a copy of the risk assessment must be provided without delay to Wellington Water.

## 4.4. Surface-mounted roadplates in active carriageway

Surface mounted roadplates in active carriageways must comply with the following requirements:

- The roadplates must be handled so as to avoid damage to non-skid surfaces.
- The plates must be able to withstand the maximum legal traffic loading safely and without noticeable deflection.
- The plates must extend a minimum of 300mm beyond the trench edges. A greater distance may be necessary to prevent excessive loadings on the trench walls.
- The plate surface must have a skid-resistance equal to or greater than the adjacent existing roadway surface and a British Pendulum Number (BPN) of not less than 55 (refer to BS EN 13036-4:2011 - Road and airfield surface characteristics - Test methods Part 4: Method for measurement of slip/skid resistance of a surface: The pendulum test). This level of skid resistance must be maintained for the duration of the roadplates usage.
- Where testing indicates a plate achieves or exceeds the specified minimum level of skid resistance, the cost of testing will be met by Wellington Water.
- Where testing indicates a plate does not have the specified level of skid resistance, the cost of testing, and retesting after the contractor has carried out remedial works, will be met by the contractor.
- The plates must be cushioned with rubber mats as required to prevent unnecessary traffic noise.
- The plates must have a durable ramp formed and filleted from an appropriate material (such as cold or hot mix asphalt) at all edges to provide a smooth riding surface for vehicles.
- Where plates are used adjacent to each other, they must be butted – not overlapped.

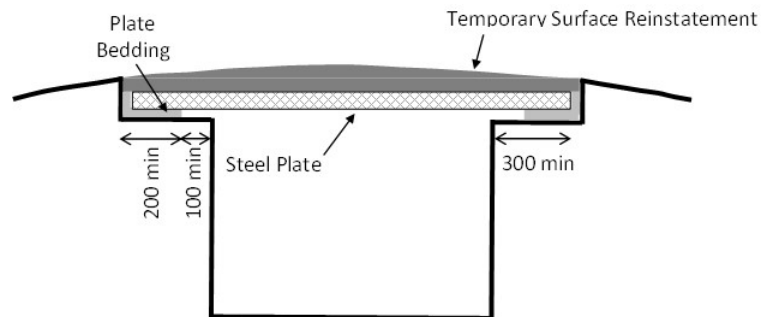
- Site signage must comply with the approved TMP and must include W3-9 Uneven Surface signs positioned between 30m and 50m before the road plates. **Note:** This sign has an orange background. The similar W14-5 Uneven Surface sign, which has a yellow background, is not acceptable.
- A temporary speed limit of no more than 30 km/h must be in place.
- The plates must be monitored to ensure compliance with this minimum standard. The plates must be inspected at periods not exceeding 12 hours with written records kept of these inspections and provided on request to Wellington Water.



### 4.5. Recessed roadplates

Recessed roadplates must comply with the following requirements:

- The plates must be able to withstand the maximum legal traffic loading and other superimposed loadings safely and without noticeable deflection.
- The plates must extend a minimum of 300mm beyond the trench edges. A greater distance may be necessary to prevent excessive loadings on the trench walls.
- The plates must be bedded evenly on a 10 to 20mm thick layer of hot or cold mix material.
- The bedding must be at least 200mm wide and start at least 100mm away from the trench edges to minimise loading on the excavation walls.
- The temporary reinstatement above the plate must be shaped to conform to the existing road surface contours and provide a smooth riding surface for vehicles.
- Site signage and speed limits must comply with the approved TMP.



## 5. Responsibilities

| Position title | What they are responsible for |
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## 6. Training and Qualifications

## 7. Related Documents

| Document number | Title                      |
|-----------------|----------------------------|
| HSEP-0022       | Traffic management process |

## 8. Reference documents

| Document name  | Entity                                | Location  |
|--|---------------------------------------|---|
| BS EN 13036-4:2011 - Road and airfield surface characteristics - Test methods Part 4: Method for measurement of slip/skid resistance of a surface: The pendulum test | Standards New Zealand                 | <a href="https://shop.standards.govt.nz/catalog/130364%3A2011%28BS+EN%29/view">https://shop.standards.govt.nz/catalog/130364%3A2011%28BS+EN%29/view</a> |
| National Code of Practice for Utility Operators' Access to Transport Corridors (November 2011)   | NZ Utilities Advisory Group Roadshare | <a href="https://mstn.govt.nz/wp-content/uploads/2017/03/nr_13213959041.pdf">https://mstn.govt.nz/wp-content/uploads/2017/03/nr_13213959041.pdf</a>     |

## 9. Legislation and standards

- Health and Safety at Work Act 2015

## 10. Definitions

| Word or Phrase | Definition |
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