

((Introduction))

## **Working platform: accessibility, stability, certificate**

*The EFFC Working Groups H&S and Contracts have decided to publish guidelines in the character of general terms and conditions. The principal points must be adapted by the national federation. The guidelines can be used, developed and modified by national federations. There are two documents on the topic:*

- *Political for clients, engineers, main contractors (part A)*
- *Technical for Deep and Special Foundation (SF) Contractor; Specialist (part B)*

**Action: Prove the content and send requests to: [d.lukic@infra-suisse.ch](mailto:d.lukic@infra-suisse.ch)**

### **Summary**

The EFFC should prepare a position paper (eg. Electronic bidding) to rise the topic and make a clear statement to problem. Additional papers can be used by national federations and should be adapted to the national regulations.

Because of the different target groups, needs, requirements and goals different documents and tools have been created. To keep it simple, all the information will be kept in one single document before publishing.

<b>Targetgroup</b>	<b>Product</b>
Authorities	Document, statistic
Client public and private	Document
Designer, engineer, geologist	Document, Examples, framework, numbers, prices
Contractor (main)	Documents, tools (calculation stability, price, time, etc.)
SF contractor	Documents, tools (examples, calculation stability, price, time, training, etc.)

((End of introduction))

## Working platform: accessibility, stability, certificate (part A)

### Main Text / Content

The size, weight and height of Special Foundation Machines and the nature of the works can have risks. To help to reduce the risk and prevent the client from fatal occurrences, the EFFC created this checklist for clients, investors and insurances to reduce risks, to make the works possible with clear responsibilities, effective and efficient. Goal is preventing falling machines, damaging important structures and avoiding personal accidents. Due to clear orders and well-prepared construction site, works can be finished in less time, in better quality and saver.

Working or just being on constructions sites can be dangerous. To reduce risks for all, workers, visitors, supplier etc. it's necessary and given by law (EU-directive and national regulations) to make a risk analysis befor starting the works. The legislation is clear but not precise in all points. The working platform is often misunderstood and not payed sufficient attention. Turn-over from machines, cranes, trucks can have fatal consequences, not only for the operator but all persons and things on and close to the construction site. A second important fact is that most accidents occur trip / slip / fall on bad ground conditions. A proper working platform is a collective safety measure on every construction site and must be prepared and ordered by the client.

A good working platform reduces many risks (safety of machinery and personnel), improves the quality of works and enhances the efficiency of the whole construction site.

It's necessary for all involved parties to be aware of the legal framework and the practical benefits from well executed working platforms. Since the special foundation workers are among the first on the construction site, the EFFC has developed guidelines, information's and tools to support their members and helping the clients making a good foundation for their success.

### Authorities

About 50% of the total number of accidents at work within our sector are due to tripping or slipping on the ground floor. The working platform must be viewed as a preventive and collective measurement. It's of utmost importance that the working platform:

- is built with a practicable top layer (fine grained) → prevention of ankle sprains
- is free from protruding rods → prevention of tripping and falling
- contains no water or mud → prevention of slipping and falling
- is free from any form of pollution (e.g. asbestos) → prevention of health risks
- has sufficient storage space → prevention of lifting and manipulation incidents
- is maintained and repaired, also after rain, changed execution phases and/or adapted installation of the construction site
- The way to and from the work sheds must be free of obstacles and separated from the traffic on the job site
- sufficient lighting is provided, especially during the winter
- An evaluation of the working platform by our site management is necessary prior to the supply of material to discuss any modifications

### **Client public and private**

Legal point of view / responsibilities:

Before the arrival of the SF-Specialist, the nature of the working platform should be checked for the possible presence of cavities (e.g. cellars). If such cavities exist, they will have to be filled correctly to - as mentioned in the preceding point- guarantee the required stability.

Any old foundations or other obstacles shall be removed from the site beforehand, except if such removal work forms an integral part of our contract.

Inclinations of possible slopes shall always be subject to preliminary discussions and shall be approved by our site manager. This is also the case for the minimum distance between the foundations to be carried out and the tops of the slopes.

### **Designer, engineer, geologist**

It is essential to choose the right type of machines for the provided activity. Special foundation works often require heavy machinery that work with big and eccentric loads on often bad ground. It's important to find the right measure and often helpful to contact the local Special Foundation contractor.

It is essential to identify the right factors for designing a good platform, time resistant, and safety to use. Such factors can be:

#### **A. Type of works and resources involved:**

- Personnel, vehicles, machinery, equipment, fixtures and stockpiles
- Existence of affected services and obstacles
- Suitability of the natural terrain
- Position of the water table
- Duration of the works
- Weather forecast

#### **B. Specifications of accesses and platforms:**

- Site scanning for the future platforms and access areas, including the restricted access area around the working platform
- Water draining system
- Slopes
- Particular specifications as: external access roads for vehicles (straight sections, curved sections), access between pits of heavy machinery, working platforms
- Type of platform sections: natural terrain; simple filling; geogrid or geotextile reinforcement; filling and geotextile filter; filling, reinforcing geotextile and geotextile filter; improvement of the natural terrain
- Specific filling material

Example:

The bearing capacity of the working platform should be sufficient to ensure the stability of rigs, also after

bad weather (rain, etc.). Therefore, the working platform must meet the requirement of 25 MPa pressure resulting from measurements by means of a plate load test.

### **Main Contractor**

It is essential to clarify the necessity of a good working platform. Cost's for ground investigations, building the working platform and ensuring good slopes should be considered. The maintaining during the works must be defined and contain at least points as:

- Prior checks on arrival of the working platform and equipment (certificate?)
- Controls at the time of discharge equipment
- Maintenance and control of the platform during its operation
- Others?

The area of the working platform is a restricted zone and must be marked properly. Only authorized personnel is allowed to enter. Sufficient space for moving and operating must be provided.