Decking Systems

The purpose of this technical bulletin is to

1) Identify the basic elements of the decking systems
2) Briefly explain the design assumptions
3) Outline safety requirements

1) Basic components:
There are five basic components which are utilized in this shoring system: the main support beam, secondary beams or panels, the post shores the dropheads and the bracing components. The main beams are supported on dropheads which are attached to post shores. The panels or secondary beams are supported on the main beams. The entire structure is assembled in a predetermined grid to support the loads imposed by the concrete slab. The post shores are braced using gates (frame braces) or tripods.

2) Design:
Decking systems are designed to allow for the stripping of the panels (or secondary beams), and the main beams, without disturbing the shores. In the stripping operation the dropheads are lowered to allow for the removal of the panels and the main beams. The dropheads and the post shores remain in place (undisturbed) to support the freshly poured concrete slab.

3) Safety Precautions
• Contractors must ensure slabs have sufficient strength prior to stripping panels/beams to avoid any damage to the slab.
• Designer/engineer must examine the entire structure for accumulative loading conditions if the post shores are left “undisturbed” to avoid overloading of the post shores.
• Careful attention must be paid to the bracing requirements especially when the system is used to form sloping slabs.
• Due care is to be taken during erection process to avoid leading edge panels from flipping over when workers are walking on them.
• Loading of heavy construction material such as rebar bundles must be positioned at specific locations to avoid localized overloading of the system. (Follow manufacturer’s recommendations)
• Slab edge conditions are to be carefully detailed to allow for safe erection and removal of panels.