



# STEEL DECKING SOLUTION for Concrete Slabs



TRUEDEK IS A PERMANENT FORMWORK AND REINFORCEMENT SYSTEM THAT PROVIDES SIGNIFICANT FEATURES AND BENEFITS COMPARED TO EXISTING STEEL DECKING SYSTEMS.

TRUEDEK comprises a rigid and robust truss panel and an optional flat infill panel offering:

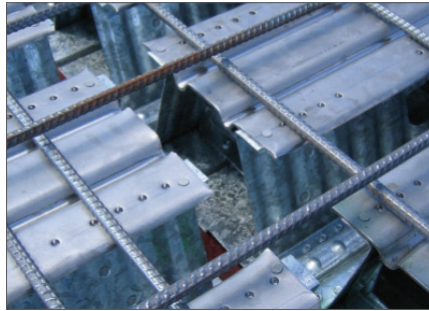
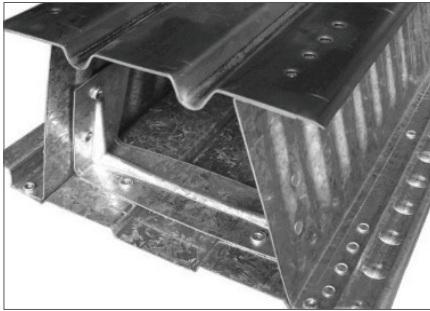
- Longer unpropped spanning capacity than other decking systems – more than 6m!
- Greater strength for higher load carrying capacity
- Pre-cambering to eliminate wet concrete deflection and produce a truly flat soffit
- Modular system for versatility in applications
- Thinner slabs reducing concrete volume and steel reinforcement
- Accommodates prestressing cables
- Optional web-holing allows for solid or voided slab
- Standard truss and infill panels are nominally 250mm wide for ease of handling and faster installation
- Predictable formwork costs
- Truss heights 90, 110, 140 and 160
- Earlier introduction of trades and services

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TECHNOLOGIES PTY LTD  
CUSTOM ROLL FORMING AND MANUFACTURING

# TRUEDEK IS AN ENGINEERED PRODUCT, SPECIALLY DESIGNED AND MANUFACTURED FOR EACH PROJECT.



TRUEDEK is an engineered product, specially designed and manufactured for each project. With the base of the truss and the infill panel made from quality galvanised HI TENSILE steel, it provides a consistent soffit appearance, and can be made to suit a wide variety of applications from a range of standard components.

## TRUEDEK PANELS

The truss panels of TRUEDEK's patented system can be supplied in a wide range of standard heights to cater for different formwork and composite loadings and spans. Versatility in application comes from the ability to mix steels with different grades, thicknesses and coatings for the base, web and top plate of a standard panel. The truss panels when produced without web holes form a void, reducing the concrete volume and weight of the slab. Alternatively they can be partially or completely filled with concrete depending on the application. By locally filling voids at ends, TRUEDEK does not interfere with stud shear connectors in composite beams.

## TRUEDEK CONFIGURATIONS

Two possible arrangements using TRUEDEK are shown in Figs 1 and 2. In Fig. 1 only truss panels are used. The webs are holed and reinforcing bars or prestressing cables may be passed transversely through the panels if needed. A one-way ribbed slab can also be achieved by leaving the truss panels closed by incorporating an optional void former, e.g. polystyrene as shown in Fig. 2.

Many other arrangements are possible including mixing of truss panels with different heights. Pre-cambered Panels The truss panel can be made with a predetermined longitudinal camber to offset deflection when concrete is poured. Pre-camber provides a uniform flat soffit and an aesthetically pleasing finish.

## REINFORCEMENT

Another benefit of TRUEDEK is the reduced requirement for steel reinforcing. Shear studs can be pre-welded to steel beams to further simplify site works.

## OTHER BENEFITS

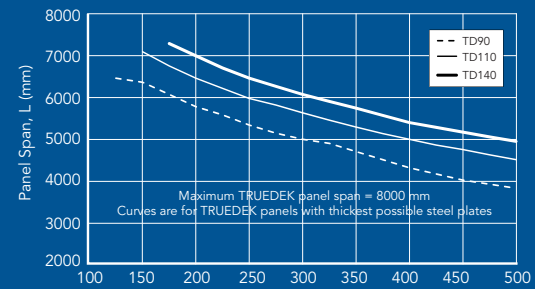
TRUEDEK can also improve the construction cycle by allowing immediate and unrestricted access to the floor below. On site, TRUEDEK provides OH&S benefits by creating a safe working platform with reduced trip hazards, and eliminates the time, labour and materials associated with installing and removing conventional formwork and props.

## TRUEDEK APPLICATIONS

TRUEDEK's unique capability to span over 6m unpropped, makes it ideal for:

- Concrete frame buildings including bandbeam and slab arrangements (minimum slab depth 130mm)
- Steel frame buildings (minimum slab depth 130mm)
- Masonry wall & domestic construction
- All types of civil works and mining structures with deep slabs (>600mm)
- Mezzanine floors
- High floor to ceiling heights in concrete or steel frame buildings
- Infills for cranes, lifts and enclosures
- Areas with limited access for propping in refurbishments.

## TRUEDEK Long Span Structural Decking Truss – Solid/Truss – Solid



### Overall Composite Slab Depth Dcs (mm)

Span Chart for Truss - Solid/Truss - Solid Slabs in Unpropped Construction using Simply-Supported Panels

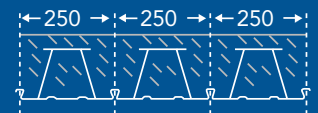


Figure 1: Truss panels connected by specially profiled lap and filled with concrete.



Figure 2: Truss panels voided creating ribbed slab.



Overall depth of TRUEDEK panels is 90, 110, 140 or 160 mm (Where required, pre-punched holes in webs – 50 x 90 mm at variable spacings).

TRUEDEK panels are pre-cambered in the factory to prevent concrete ponding.



For further information on TRUEDEK, please contact **Ross Grey**, National Manager TRUEDEK

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