

NON-DRILL HANDRAILS IMPROVE SAFETY AND PRODUCTIVITY

Australian-designed fall protection offers ease of installation

The provision of suitable fall prevention proprietary systems is an important on-site challenge when working at heights.

Much effort and expense is invested in ensuring that personnel, tools and materials are protected from falls, only for this to be repeated at the next stage of construction.



Fitted upwards and downwards from precast lifting anchors, non-drill posts provide flexible handrail solutions and can provide worker protection as they are installed.

The situation

Many of the existing solutions for protective handrails involve disposable timber, or the fixing of rails to concrete or other materials. Building and removing temporary handrails can be difficult, time-consuming and expensive.

An Australian-made proprietary post and handrail system now being used on level crossing removal sites and other projects offers a flexible and cost-effective means of installing fall protection without the need to drill and fix to concrete.

Specially constructed steel posts are designed to screw into attachments to lifting anchors in precast concrete. Tube and clip scaffold components are then affixed to complete the handrails.

The steel posts can also be used on culvert cells, chain-wire fencing, bridge decks or parapets. The system can also be used on jersey barriers, to attach gawk screens of up to 3m or signs, hoardings or crash barriers.

The posts can be fitted and removed in a matter of minutes, thus greatly reducing installation times, which can lead to cost savings. Easy six-step visual instructions are supplied, to enable personnel to quickly learn to use the product and to assist with verification of competency (VOC).

This system has been used on the Aviation Road Level Crossing Removal Project in Laverton, in Melbourne's west. There, the handrails were fitted to reinforced earth retaining wall panels, while the road and bridge over rail lines were constructed.

The system, which won a SafeWork NSW award in 2018, was also used on sites at Abbotts Road, in Dandenong, and at Noble Park on the Caulfield to Dandenong project.

The addition of special recessed settings also allows the system to be considered for use as a permanent handrail.

The solution

The benefits of using this handrail system include:

- quick and easy to fit and remove
- provides worker edge protection as they are progressively fitted
- does not require difficult or high-risk removal work
- eliminates the need for reworking such as patching
- complies with Australian standards for some uses
- has been designed to suit a range of lifting anchors
- flexible and reusable, reducing wastage
- minimal damage to concrete structures.

Program Office: Level Crossing Removal Project (LXRP)
Work Package: Western Program Alliance (WPA)
Principal Contractor: McConnell Dowell
Solution vendor: Non-Drill Pty Ltd

Cost: From about \$68 per metre
Contact: www.non-drill.com.au