Temporary Edge Protection when working From height on Tensar Soil Structures

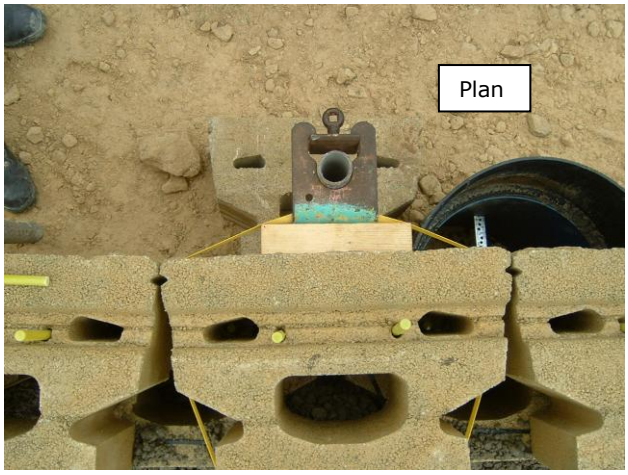
The following information is a guideline only and Tensar accepts no responsibility for the suggestions. The Contractor must carry out a thorough risk assessment specific to their individual structure and be responsible for the suitability of the chosen system. Furthermore the system should be designed and installed by experienced specialist contractors, with particular regard to adequate bracing and any potential impact damage. It is the Contractor's responsibility to comply with all associated Health and Safety requirements.

Tensar Walls:

Modular Block Wall & Incremental Panel Systems.

With these structures the individual concrete facing elements are not very high and temporary edge protection is usually needed from an early stage in the construction.
Generally an external system of scaffold tube and fittings is erected and the handrail raised progressively with the structure.

In some situations, such as when building adjacent to rivers and railway lines, there may be insufficient space in front of the wall face to accommodate a conventional scaffold frame.
This has been overcome by two methods:
i) fixing rawl bolt eye rings into the block face at appropriate centres to accommodate the scaffold tube uprights. Matching coloured mortar is used to make good the holes on stripping the scaffold.
ii) securing the scaffold upright tubes with woven polyester banding straps wrapped around blocks (see page 2). Each strap is passed through the perp joints in a block, wrapped around the tube and secured by tensioning onto a steel buckle at the rear of the block. A timber packer is placed between the tube and block. The straps must be placed at appropriate centres to secure the upright tubes. When the scaffold is stripped the strap can be neatly cut back to the block edges.



Eye bolts have been used to secure scaffold uprights

Straps can be used with the TWS to secure scaffold uprights in tight areas

Full Height Panel Wall Systems

Generally push-pull props to the front face temporarily support the panels.
Due to the height of the panel, edge protection is not usually needed until the height of the backfill local to the face reaches within 910mm of the top of the panel.
At that stage temporary edge protection should be installed.

Tensar Steep Slope Systems:

Wraparound faced slopes with external temporary formwork.

The formwork may take the form of scaffolding tube and fittings with boards and so this can also be used for edge protection.

Small lifting shutters may also be used to form wraparound faced structures.
(NB: If a geogrid bodkin joint is used this needs to be located a sufficient distance from the face to clear the horizontal support leg of the shutter.)

In this case the edge protection may be prefabricated on to the top of the shutter.

Steel Mesh Panel (SMP) faced slopes

As with full height panel walls (above), due to the height of the panel, edge protection is not generally needed until the height of the backfill local to the face reaches within 910mm of the top of the panel.

At that stage the remaining layers of geogrid should be connected to the face prior to attaching the temporary edge protection.

Edge protection installed as fill nears the top of

Tensar SMP's are supplied with plastic safety caps, which should be fitted to the tops of the vertical bars of the mesh. Please also refer to the Tensar Construction Sequence for the recommended installation method relevant to the type for the TSS.
Where occasional maintenance is required to a slope, e.g. trimming vegetation, this should be done wherever possible using appropriate mechanical plant. If manual maintenance is required then consideration needs to be given to safe access, including the use of safety harnesses and secure roped anchorage points.

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