

Woodside Vale, Leeds

Horsforth, Leeds, West Yorkshire



TYPE OF PROJECT Reinforced Soil Walls And Slope Reinforcement	YEAR OF CONSTRUCTION 2025	CLIENT Taylor Wimpey	CONTRACTOR Bridgebank	DESIGNER Geoman
PROD. RELATED MACWALL (Undefined)				

Challenge

As part of a residential development, retaining walls were required to support the rear boundaries of the current phase of housing units. The site presented a number of design and construction challenges, including the need to incorporate multiple staircases within the retaining structures to provide access between levels. Speed of installation was also a critical factor, as the retaining walls needed to be completed promptly to allow the housing construction to proceed without delay.

The developer required a solution that could be rapidly deployed, easily adapted to accommodate architectural features such as staircases, and installed within a tight construction programme. Additionally, the retaining structures needed to meet long-term performance requirements while maintaining aesthetic consistency across the development.



ParaGrid geogrid reinforcement used for MacWall



Completed MacWall 4.0

Solution

To meet these requirements, Maccaferri proposed the use of its MacWall 4.0 segmental retaining wall system. This modular solution was selected for its flexibility, structural reliability, and ease of integration with site-specific features. The inherent adaptability of the MacWall system allowed for the seamless incorporation of multiple staircases into the design, which were installed efficiently without requiring significant modifications to the wall layout.

The retaining walls were constructed within a three-week timeframe, enabling the housing development to progress on schedule. The rapid installation was facilitated by the straightforward construction methodology of the MacWall system, which minimised on-site labour and equipment requirements.

The geotechnical design was carried out by Geoman, who provided detailed engineering support to ensure the walls met all structural and regulatory standards. Maccaferri worked closely with the design team to optimise the wall layout and ensure compatibility with the overall site plan.

This project highlights the versatility and efficiency of the MacWall 4.0 system in residential applications, particularly where speed, adaptability, and integration with architectural features are key considerations.





MacWall 4.0



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