

# Vegetated Retaining Wall

ABG Webwall, Sedbergh Sports & Leisure Centre, Bradford, UK



CASE STUDY



## Project Description

The Sedbergh Sports & Leisure Centre is a City of Bradford Metropolitan District Council property constructed on the former Sedbergh recreation ground in Odsal.

The new leisure centre includes a six lane 25-metre swimming pool, an eight-court sports hall, 80-station fitness suite, dance studios and café, as well as outdoor pitches for football and rugby.

## The Challenge

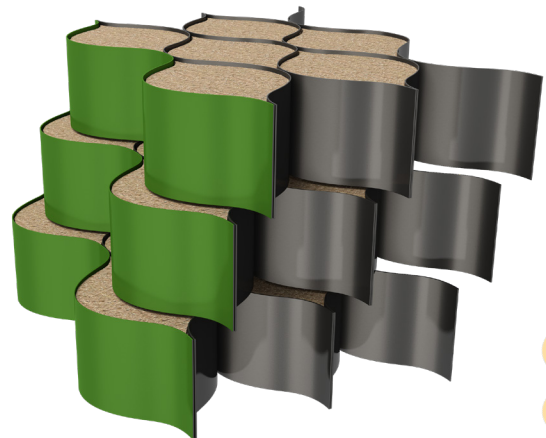
The site boundary is restricted, with limited space available to fit the two full size grass pitches outlined in the planning proposals. In particular the south-west corner is in close proximity to the Cleckheaton Road and bound by a public footpath and private gardens. A solution was required that would retain the elevation change at this corner of the sports pitches and be aesthetically pleasing to the owners of the adjoining properties.

## The Solution

The ABG Webwall gravity earth retaining system was proposed by the consulting engineer and adopted by the client. Without the Webwall retaining system, a much shallower embankment face would be required, taking up significantly more space and limiting the size of the playing pitches.

## Project Information

<b>Client</b>	City Of Bradford Metropolitan District Council
<b>Contractor</b>	Moortown Group
<b>Product</b>	ABG Webwall
<b>Benefits</b>	<ul style="list-style-type: none"><li>• Corner Webwall design to fit in close proximity to the site boundary</li><li>• Natural aesthetic</li><li>• Quick to construct</li></ul>



ABG Webwall Geocell

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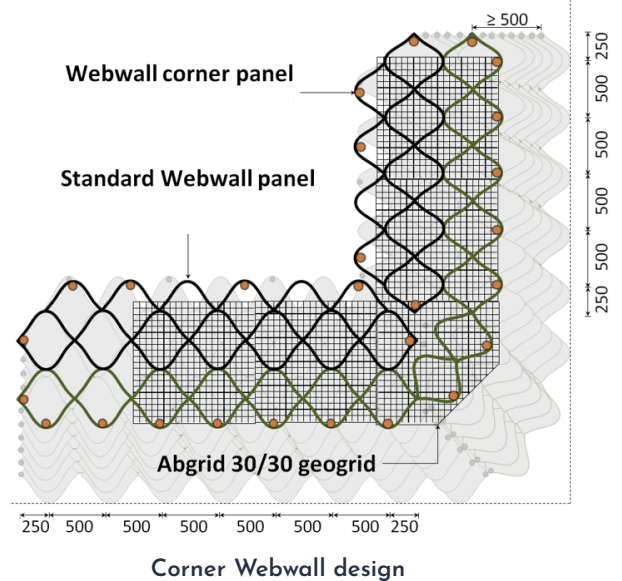


The vegetated face of the **Webwall** design was also preferred to a stone based alternative (e.g. gabion or crib walls) in order to blend in with the nearby gardens. ABG Webwall is also much lighter and easier to transport to and around the construction site, offering a big reduction in carbon footprint compared to aggregate based retaining structures. The **Webwall** geocellular panels are simply expanded and pinned into position and each successive row is then backfilled with soil (typically site won fill can be used) until the design height is quickly reached (to a height of 4m on this project and taking approximately three days to complete).

Another benefit was the ability to construct the wall to a 90° external corner of the football pitch, which ensured the second full-sized pitch is neatly accommodated within the tight site boundary.

## The ABG Service

ABG's Geotechnical Engineers designed the gravity **Webwall** system, extending 10m along the toe and 6m along the crest edge at either side of the corner of the playing pitch.



ABG gravity Webwall constructed around the constricted site boundary



ABG gravity Webwall prior to planting and vegetation growth

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