

# Reinforced Fill

Infilled Void, Trigrig, Industrial Unit, Meltham, UK



## Project Description

Towndoor owns and manages the site of the former David Brown Tractors Group factory in West Yorkshire. Once the UK's largest tractor factory, the site is now a thriving collection of industrial units. The present buildings date from the 1940s but there are also remnants of the earlier Brooks silk mills which had two large concrete lined water reservoirs on the site.

## The Challenge

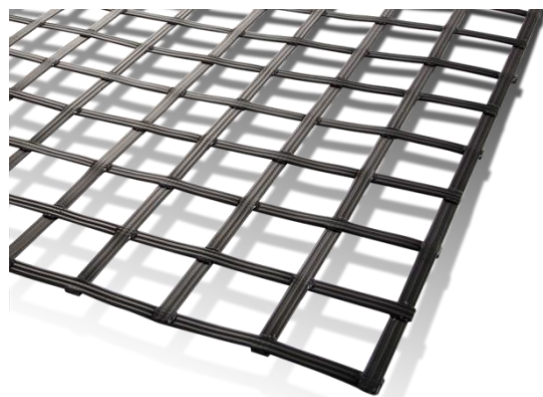
Towndoor required additional hard standing for car parking immediately adjacent to a factory unit. There was space available but the existing ground was 1.5m – 2.0m below road level and in-filling was required. The factory wall was incapable of receiving lateral loads if the void was filled, so an independent retaining structure was required. A concrete retaining wall would be prohibitively expensive. Since the area was intended for parking, a vehicle barrier was also required to protect the factory wall from possible vehicle impact

## The Solution

**ABG** suggested the use of reinforced fill which would be self-supporting and therefore not impose any loads onto the factory wall. The crushed stone fill was reinforced with **Trigrig EX30** biaxial geogrid using the wrap-around method of facing. It was essential that a small space remained between the face of the reinforced fill and the factory wall.

## Project Information

Client	Towndoor
Contractor	Geogreen Solutions
Consultant	Towndoor
Products	Trigrig EX30,
Quantity	400m <sup>2</sup>
Benefits	<ul style="list-style-type: none"><li>• Allows placement of fill adjacent to non-structural wall.</li><li>• Eliminates need for concrete retaining wall</li></ul>



ABG Trigrig EX30

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The factory wall was used to provide temporary lateral restraint to a “climbing” timber form which maintained the void between the reinforced fill and the factory wall as each layer was constructed. The reinforced fill comprised geogrid at 500mm spacing and a graded crushed stone. **Trigrid EX30** is a high performance geogrid comprising polyester tensile elements in a robust polypropylene sheath. The polyester core provides creep-resistant long term strength whilst the polypropylene sheath provides protection from installation damage.

### The ABG Service

**ABG** was able to provide a solution which was completed in a month and a half prior to Christmas in weather conditions that might have prohibited conventional in-situ concrete work.



Trigrid temporarily held against brick wall as crush stone fill is placed.



“Climbing” temporary timber void former.



Layers of Trigrid EX30 wrapped around 500mm of crushed stone.

Contact ABG today to discuss your project specific requirements and discover how ABG past experience and innovative products can help on your project.