



A Case Study

Tarmac vs. EcoGrid



Case study: The relative costs of a commercial car park.

Details

Here, we have a fictitious client. B&J Wholesale. They are doing rather well and need to construct a car parking/delivery area for their new warehouse that has been constructed on their site. The car park needs are:

- Has to take the loading of 7.5 tonne delivery vehicles and fork lift trucks.
- Needs to comply with Disabled access regulations
- Has to have a minimum longevity of 20 years



Study: 250 square metre car parking and exterior warehousing

We will put forward the relative costs of Tarmac against EcoGrid. Both surfaces will have a standard specification and will have the same load bearing capacities. All figures are generalised and labour will be also standardised at a rate of £80.00 per hour for a 4 man team. Excavation and removal of spoil from site will be at the rate of £15 per tonne. (Price correct at time of writing)



Excavation: £1218.00

250 square metres of excavation to get to the sub-grade @ £15.00 per tonne based on 325mm excavation for a tarmac course. 1 tonne of excavation = 10 sqm @ 100mm, therefore $325=3.25 \times 25 \times £15= £1218$ (only for comparison purposes)

Plant: £630.00

3 tonne mini excavator hire @ £90.00/day, 4 days hire

Bomag roller @ £90.00/day, 3 days hire

Labour (4 man team) based on an 8 hour day @ £640/day: £7,680.00 2 days to prepare site

3 days to put drainage in and inspection chambers

2 days to lay half battered kerbing

1 day to put in sub-base and compact

2 days to lay binder course

1 day to lay wearing course/surface level

1 day to paint bay markers

Materials: £6943.00

116 half battered kerbs

8 tonnes grit sand

20 x 25kg bags cement

Inspection chamber

Drainage

Aco channels

Gullies

82 tonnes Sub base

25 tonnes tarmac binder

17 tonnes wearing course

Line marking



Excavation: £843.00

250 square metres of excavation to get to the sub-grade @ £15.00 per tonne based on 220mm excavation for an EcoGrid course. 1 tonne of excavation = 10 sqm @ 100mm, therefore 220=2.25 x 25 x £15= £1218 (only for comparison purposes)

Plant: £630.00

3 tonne mini excavator hire @ £90.00/day, 4 days hire

Bomag roller @ £90.00/day, 3 days hire

Labour (4 man team) based on an 8 hour day @ £640/day: £3840.00

2 days to prepare site

1 day to put in sub-base and compact

1 day to lay geotextile, screed layer, half grids

1 day to lay EcoGrid, markers and fill

1 day to lay EcoGrid Bloxx and fill grids

Materials: £5849.00

55 tonnes Sub base

10 tonnes fine stone screed

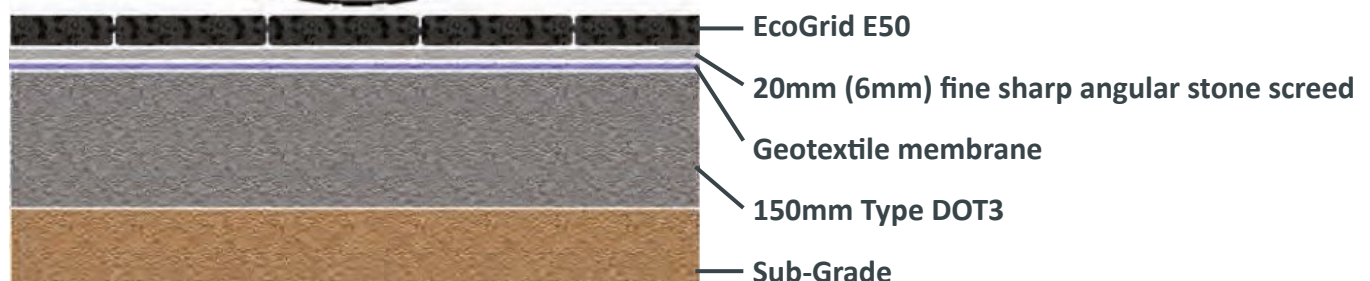
225 square metres of Geotextile membrane

225 square metres of EcoGrid E50

75 no EcoGrid 50mm bay markers

25 square metres of EcoGrid Bloxx concrete sett

infill 20 tonnes fine sharp angular stone infill



Tarmac layers to car parking

- With the Tarmac car park, there is little or no sustainability and very little aesthetics
- Surface water will drain to the local watercourse and will increase flood risk
- A maintenance factor has to be considered
- 20 years is 'a stretch' for Tarmac

EcoGrid

- Carries a 20 year guarantee
- Is made from fully recycled materials
- Is resistant to all chemicals
- Is fully UV stable
- Is free draining
- Is environmentally neutral

For an EcoGrid installation in this scenario the products of suggestion were:



EcoGrid Bloxx



EcoGrid E50



50mm Flush Bay Markers