

ROCKDANIEL ROAD REFURBISHMENT CARRICKMACROSS, MONAGHAN, NORTHERN IRELAND

PAVEMENTS

Product: MacGrid® AR 5A.7 Asphalt Reinforcement

Problem:

As part of the Carrickmacross sewage scheme, this project involved the rehabilitation of a concrete road which has been subjected to extensive service installations.

Monaghan County Council were concerned that cracking would reflect up from the service trenches through the asphalt overlay.

Solution:

The 100-250mm thick concrete slabs were overlaid with a 60mm regulating layer and then a self-adhesive MacGrid® AR 5A asphalt reinforcement geogrid was applied.

A 40mm wearing course was then laid over the MacGrid® providing effective protection against reflection cracking.

MacGrid® AR is a geocomposite manufactured from glass fibres woven into a grid configuration, with a polymeric protective coating grid. It offers high tensile strength and high modulus of elasticity at low elongation. Stress concentrations in the asphalt matrix are relieved and redistributed by the reinforcement, delaying the initiation of the cracks.

The MacGrid® AR 5A.7 used in this project has 50kN ultimate tensile strength in both directions. It also features a self-adhesive, pressure activated backing. This holds the grid firmly in place whilst the asphalt is placed upon it.

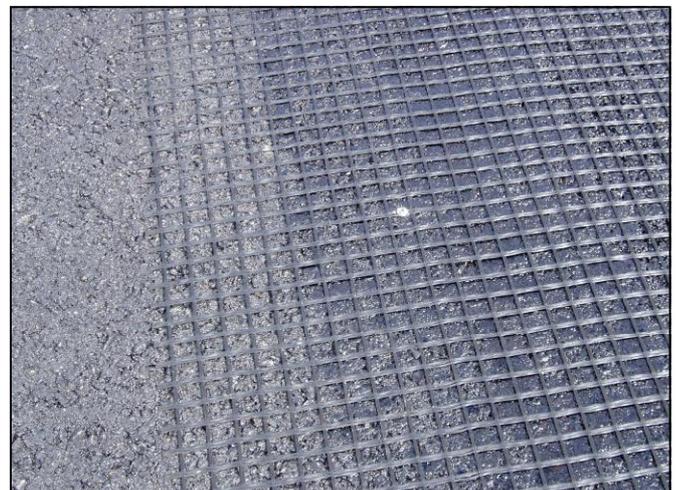
The MacGrid® AR is unrolled onto the surface of the existing pavement and the adhesive activated by rolling with a pneumatic tyred roller.



Laying MacGrid™ AR onto road surface



Asphalt delivery truck



Installed MacGrid AR in intimate contact with road surface

Client:

MONAGHAN COUNTY COUNCIL

Main contractor:

P&S CIVIL WORKS

Designer:

MONAGHAN COUNTY COUNCIL

Products used:

9085m² MacGrid® AR5A

Date of construction

August 2010



Asphalt placement

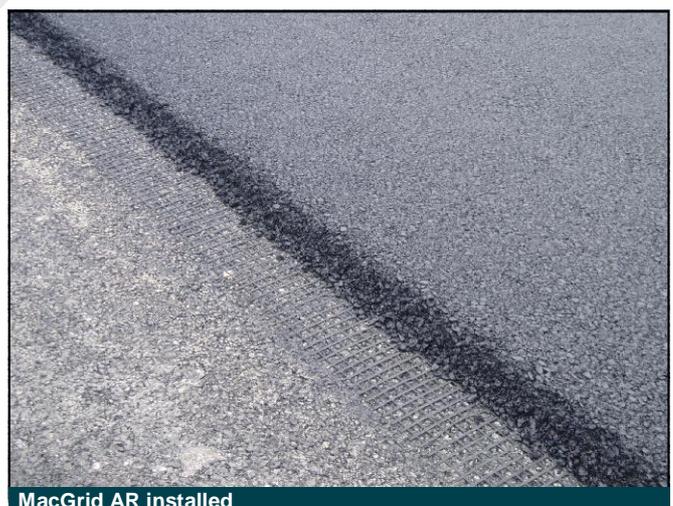
The 40mm asphalt overlay was then placed as normal onto the MacGrid® AR.

MacGrid® AR is increasing in popularity on resurfacing projects where clients want to limit reflective cracking because of its cost effectiveness and ease of installation.

Maccaferri offers a full range of products for asphalt and unbound pavements, as well as drainage geocomposites to remove water from the pavement structure.



Asphalt placement



MacGrid AR installed

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