



Entryway, Kiwi Forests



Location: Northland, New Zealand
Client: KIWI FORESTS
Installation date:
2/11/2011



Gravel Lock
Stabilization & dust control
products. Proud to be supplying the
Roading industry with innovative
solutions to real problems

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FLEXI-C-MENT® WAS SELECTED IN A
LOW-LYING ENTRYWAY ADJOINING A
PUBLIC ROAD



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**Application Rate : 4.2kgs FLEXI-C-MENT
 per sqm**

Purpose: Stabilization

Expectations: 12 months

Application Method: Grade and wet roll

Note: Heavily used entry-way

Equipment used: Pulverize Grader, 8 ton Roller, Water Cart, Powder Spreader Truck

Weather on the date of application: Fine

Gravel added: None

Gravel depth: 50mm

Depth Treated: 70mm

Comments: The surface has performed so well the section has not needed to be chip sealed

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Disclaimer

The data presented in these Graphs are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all test results by their own trials. We reserve the right to alter product constants within the scope of technical progress or new developments. Any recommendations made in our literature should be checked by preliminary trials because of conditions during application over which we have no control, especially where raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose



FLEXI-C-MENT

Why FLEXI-C-MENT was selected

Features & Benefits

- Improves cement stabilization
- Can be tested using standard engineering practices
- Water resistance
- Flexibility
- Dry tack
- Dispersibility
- Dry opacity
- Long storage stability
- Less logistical footprint
- Faster Stronger Cheaper
- Save on aggregate depth
- Use low quality aggregate
- Hard wearing no lose metal

WHAT DOES FLEXI-C-MENT® DO ?

One application of Flexi-C-Ment® on soil or unpaved roads puts two stabilizing mechanisms to work simultaneously:

- 1) Dispersible adhesive co-polymer and cement properties work to bind the soil particles together.
- 2) The chemical composition increases unconfined compression strength.

WHERE SHOULD FLEXI-C-MENT® BE USED?

Use Flexi-C-Ment® wherever you would lime and cement stabilize. Flexi-C-Ment does not need to be sealed. It works to control dust and stabilize aggregate and dirt surfaces on virtually any type of road. For example, it can be used on mine haul, construction site haul and forest/timber haul roads, as well as military, agriculture, industrial and council roads. Private and rural roads, parking lot surfaces, industrial and construction staging areas and airfield helicopter pads are also appropriate surfaces for Flexi-C-Ment applications. Flexi-C-Ment® can also be used to stabilize road bases and shoulders. Flexi-C-Ment® helps in road base stabilization by increasing base strength and reducing compaction costs. On road shoulders, Flexi-C-Ment® will maintain a firm, tight surface increasing shoulder safety and reducing maintenance costs.



Application method

Apply powder, grade, shape and wet roll



HOW to GET THE BEST RESULTS using FLEXI-C-MENT®

Prior to surface preparation, it is extremely important to shape the road correctly. Before applying Flexi-C-Ment® make sure that any ruts, washboards, potholes, drainage problems, gravel segregation and hard impervious areas have been rectified. Correct surface preparation is very important in the overall success of the dust and stabilization control treatment to shed the water in the winter months.

WHAT IS THE BEST APPLICATION RATE ?

We recommend applying Flexi-C-Ment®

PRE-MIX from 4kg-15kg @ 75-200mm deep per square metre. Our application procedures will minimize runoff and obtain deep, even penetration. Other application rates can be used for greater strength, but the basic rate is best for first time applications and for the longest length of stability.

Higher rates will achieve higher strengths. Roads and subgrade strengths can be designed by your engineers. By combining Portland cement and Flexi-C-Ment, a strength increase of 100% can be achieved by using the same weight of Flexi-C-Ment compared to cement.

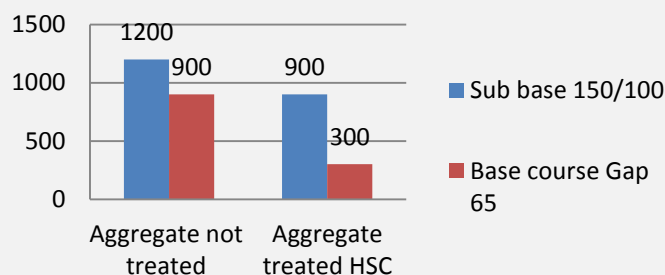
HOW MUCH AGGREGATE DOES Flexi-C-Ment SAVE?

Per kilometre standard construction on this road used 1200 cubic metres of 100-150 aggregate in the sub-base and was overlaid with 900 cubic metres of GAP 65.

Our method used 900 cubic metres of 100-150 aggregate in the sub-base and was overlaid with 300 cubic metres of GAP 65

Savings: 900 Cubic meters of aggregate, plus 112 truck movements

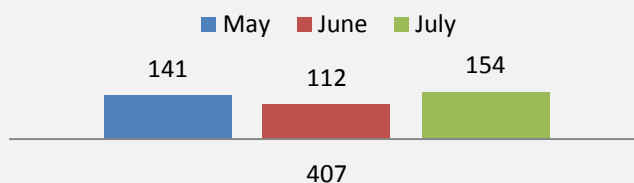
Aggregate Savings



HOW DOES IT PERFORM in wet weather?

This road has experienced over 407 mm of rain. Information collected from NIWA

Rainfall data mm



Entryway built in 3 hours



Shape Road



Applicate Flexi-C-Ment



Add liquid form co-polymer



Pulverise and mix



Grade to shape



Roll and slurry – completed in 3 hours

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35,000 tons of logs have been hauled over this entryway with no maintenance needed

This application of Flexi-C-Ment joined a public road. The objectives of using Flexi-C-Ment® were to minimize loose aggregate spreading on to the chip seal surface. Another advantage of using Flexi-C-Ment® in this location is that it is very low lying and subject to surface flooding.

Problem Solved.

Gravel Lock



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