

**OLWAZINI DISCOVERY CENTRE/GOLDEN HORSE CASINO**  
SCOTTSVILLE, PIETERMARITZBURG, KZN

**ARCHITECTURE & LANDSCAPING**

**Product: Gabions**

**Problem**

The Olwazini Discovery Centre is a science museum located within the Golden Horse Casino Complex in the Scottsville Race course in Pietermaritzburg. The museum was developed to increase tourism within the Pietermaritzburg region and in particular was aimed at illustrating simple science concepts to developing communities.

The interior designers – Egg Design wanted to blend the colonial history of Pietermaritzburg with the modern technology of the science artefacts. A need for a rural South African environment coupled with a sophisticated interior was required.

The interior designer approached Maccaferri wanting to use a gabion cladding around columns - 310mm x 460mm x 2,5m high. In order to maximise floor space the cladding had to have a maximum thickness of 200mm. In addition, 2 free standing gabion walls, up to 2,5m high, were required.

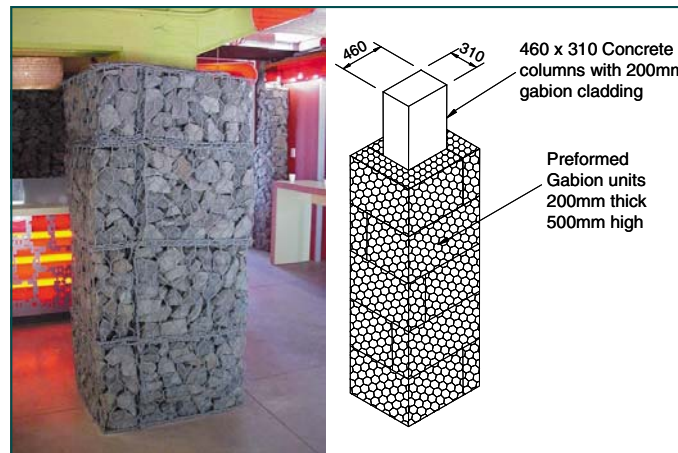
**Solution**

Special L-shaped units were manufactured from woven hexagonal double twisted mesh for placing and lacing together around the rectangular columns. The units were made from a single piece of mesh and bent at the strategic points to form the units on site. The lids and bases were supplied separately and laced on site.

Two units were laced around the column to form the cladding without the need for any further adhesive or anchorage to the columns.

Braces were used from the outer to inner facing to eliminate any bulging.

The free standing walls were constructed with standard gabion units. The units were cut and shaped on site.



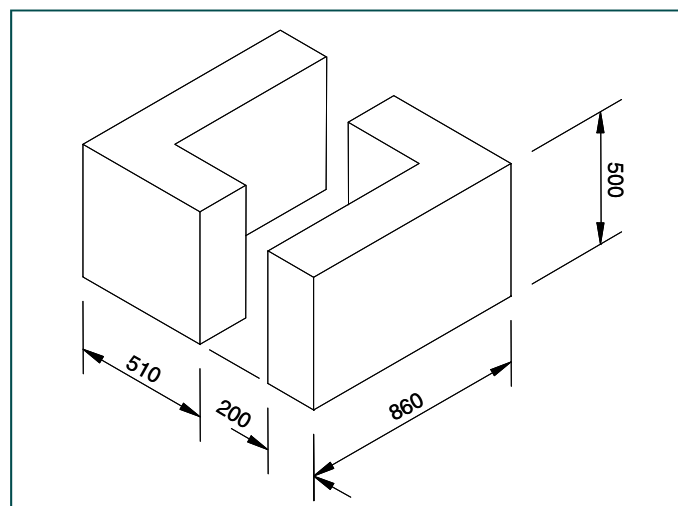
Gabion cladded column

Date: Mar 2002



Gabion cladded columns

Date: Mar 2002



Column cladding units

Client name:

PIETERMARITZBURG TOWN COUNCIL

Main contractor name:

MURRAY & ROBERTS, DURBAN

Consultant:

EGG DESIGN (INTERIOR DESIGNER)

Product used:

SPECIAL PRE-FORMED "L" SHAPED GABIONS

Construction info:

Construction date:	MARCH 2002
--------------------	------------

Completion date:	APRIL 2002
------------------	------------

**Benefits**

The use of these unique units allowed for:

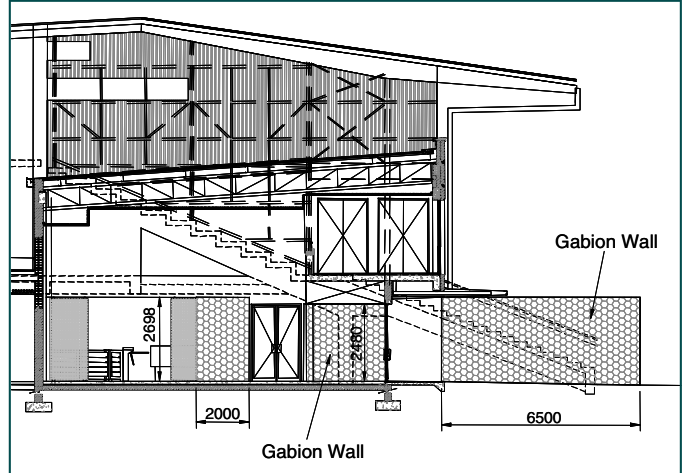
- thin cladding,
- no additional adhesive material to fix the units to the columns,
- standard lacing and bracing techniques for gabions to be utilised to fix the units to the columns.

The ease with which the mesh could be shaped on site allowed for:

- easy adjustments of units to accommodate discrepancies in the columns dimensions,
- a reduction in transportation costs,
- increased productivity.

The Maccaferri On-site Installation Training Unit provided guidance to the contractor for the gabion construction to ensure well packed, aesthetically pleasing structures.

FREE technical assistance was offered by Maccaferri SA to Egg Designs in the form of advice and professional AutoCAD drawings.

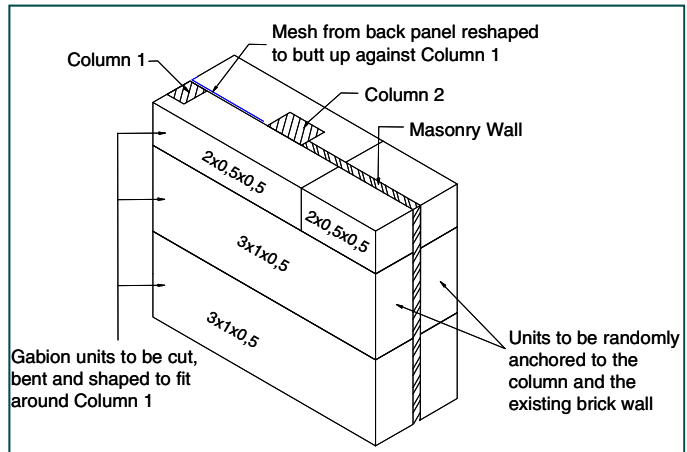


**Typical section**



**Free Standing Wall**

Date: Apr 2002



**Wall cladding detail**



**Cladded Gabion Walls**

Date: Apr 2002

**Maccaferri SA (Pty) Ltd**

**HEAD OFFICE - DURBAN, SOUTH AFRICA**  
P O Box 15777, Westmead, 3608 Tel: +27-31-700 8456 Fax: +27-31-700 8469 e-mail: dbnsales@maccaferri.co.za

**JOHANNESBURG, SOUTH AFRICA**  
P O Box 2285, North Riding, 2162 Tel: +27-11-704 0160 Fax: +27-11-704 0159 e-mail: jhbsales@maccaferri.co.za

**CAPE TOWN, SOUTH AFRICA**  
P O Box 22150, Fish Hoek, 7974 Tel: +27-21-702 1416 Fax: +27-21-702 2977 e-mail: cptsales@maccaferri.co.za

**MADAGASCAR**  
BP 168 Antananarivo 101, Madagascar Tel: +261-20-22-231 02 Fax: +261-20-22-553 90 e-mail: maccaferri@moov.mg

[www.maccaferri.co.za](http://www.maccaferri.co.za)

