

lasting strength
with fibre-cement

nutec[®]
ROOFING AND CLADDING SOLUTIONS

Manufactured by
EVERITE
Established in 1941

BUILDING COLUMNS





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Catalogue Information

The information contained in this catalogue serves as a general guide only and should not be accepted as the standard for all construction. EVERITE can assist in designs of a special nature, however, architects, engineers and specifiers must finally approve the acceptability in terms of the design and construction criteria, as well as other implications.

About Everite and Nutec

■ Everite Building Products

Everite Building Products, wholly owned by JSE listed Group Five, has been associated with the South African building industry since 1941. Producing a wide range of materials that satisfy the needs of the commercial, industrial and residential market sectors, Everite is renowned for its comprehensive range of Nutec Roofing and Cladding Solutions and includes fibre-cement roofing, cladding, ceilings and building columns amongst others.

Nutec fibre-cement high performance properties and added benefits include: the use of safe renewable fibres; considerable tensile strength with enhanced dynamic load bearing properties; excellent thermal properties; water and wind resistance; hail resistance; fire resistance and resistance to fungus, rodents and acid.

A programme of quality assurance in accordance with the requirements of the International Standards Organisation (ISO 9001:2008) is entrenched in Everite's process and management systems. Quality of all products is continuously monitored as specified by the South African National Standards and recognised international bodies.

Everite's 54 hectare manufacturing facility near Johannesburg is well located and has immediate access to all major road and rail links to national destinations and major ports. The company has branches located at major centres throughout South Africa. Nutec products are distributed through leading stockists countrywide and an established export market further endorses the international acceptance of the Nutec Roofing and Cladding Solutions range of products.

■ Nutec

Nutec is the registered name for products manufactured without asbestos as a raw material. Nutec fibre cement products are manufactured using a mixture of cellulose fibre, cement, silica and water.

Through ongoing research and development, Everite Building Products are committed to provide product of world-class quality.

Accordingly, the Nutec product range is continuously reviewed not only in the interests of the end-user and superior product performance, but also with respect to its impact on the environment. Everite Building Products has over the years established a reputation for producing a variety of outstanding quality products which have been used in a wide range of external and internal applications.

Environmental benefits of Nutec Fibre Cement

- Environmental costs incurred by using fibre cement are measurably less than for other building materials. (Low embodied energy per m²).
- Requires less energy in assembly and construction than all other wall materials except timber.
- Low energy consumption in transportation and installation.
- Environmental costs relating to ozone layer depletion, carcinogenic substances and solid waste emissions are almost negligible.
- Low environmental impact in relation to ozone layer depletion, carcinogenic substances, and solid waste emissions.
- No pesticides are involved in the manufacture or use of fibre cement.

The benefits of Nutec Fibre Cement

- The use of safe fibres.
- Considerable tensile strength with enhanced dynamic load bearing properties.
- Cost competitive.
- Excellent thermal properties.
- Water tight and wind resistant.
- Hail resistant.
- Fire-resistant.
- Fungus and rodent resistant.
- Acid resistant.
- ISO 9001 : 2008 Quality Management System.

The environmental benefits in the manufacturing process of Nutec Fibre Cement

- Recycling the water used in production many times.
- Recycling solid wastes.
- Using sustainable raw materials in production.

Embodied Energy – Definition

Embodied energy is the energy consumed by all of the processes associated with the production of a building, from the mining and processing of natural resources to manufacturing, transport and product delivery. Embodied energy does not include the operation and disposal of the building material. This would be considered in a life cycle approach. Embodied energy is the 'upstream' or 'front-end' component of the lifecycle impact of a home. Fibre cement is one of the most energy efficient materials on the market and it has one of the lowest embodied energy contents per square metre of cover of any building product.

Nutec Building Columns

Nutec Building Columns are used in many and varied applications. Due to the inherent properties of Nutec, the columns are strong, durable and can be used as a permanent shuttering for reinforced concrete.

Contemporary trends in architecture show that columns are being used internally and externally for functional and aesthetic considerations. Due to their strength and durability the applications of Nutec Building Columns range from simple supports for carports and garden pergolas to sophisticated aesthetically pleasing entrance façade features.

In many coastal areas, constraints such as sand dunes, vegetation and steep terrains make the use of conventional strip foundations costly and time consuming. Nutec Building Columns placed on concrete bases and filled with reinforced concrete, used to support the elevated main structure, will avoid massive foundation work and back filling which would otherwise be required.

As permanent shuttering for reinforced concrete columns they form an integral part of the structure performing a practical function as well as being aesthetically pleasing due to the true circular shape and naturally good outside finish. No further treatment such as plastering is required. Nutec Building Columns are supplied in their natural grey colour and are compatible with a variety of in situ applied coatings and paints.

■ Features

- Permanent shuttering for concrete.
- Functional, aesthetic and economical solution.
- True circular shape.
- Smooth outside finish - no further treatment such as plastering is necessary.
- Standard lengths and diameters.
- Attractive range of headers and footers.
- Compatible with a variety of coatings and paints.
- Everite is an accredited ISO 9001:2008 Quality Management System listed company.

Product Range

■ Nutec Building Columns Product Range, Dimensions and Properties

Product No.	Diameter mm	Length mm	Wall thickness mm (Nominal)
758-001	200	2 000	9.5
758-002	200	2 500	9.5
758-003	200	3 000	9.5
758-032	200	5 000	9.5
758-004	250	2 000	9.5
758-005	250	2 500	9.5
758-006	250	3 000	9.5
758-033	250	5 000	9.5
758-007	300	2 000	9.5
758-008	300	2 500	9.5
758-009	300	3 000	9.5
758-034	300	5 000	9.5
758-085	350	2 000	12.5
758-083	350	2 500	12.5
758-084	350	3 000	12.5
758-064	350	5 000	12.5
758-065	400	5 000	12.5
758-066	450	5 000	12.5
758 025	500	5 000	12.5

■ Nutec Headers and Footers Product Range, Dimensions and Properties

Product No.	Description	Size	Diameter ø
583 075	header	380 x 380 x 200 h	200 mm
583 073	header	435 x 435 x 220 h	250 mm
583 071	header	525 x 525 x 250 h	300 mm
583 074	footer	380 x 380 x 200 h	200 mm
583 072	footer	435 x 435 x 220 h	250 mm
583 070	footer	525 x 525 x 250 h	300 mm

Headers and Footers are not structural components, they are for aesthetic purposes only.

Square 200 Pipe I/D



380 mm x 380 mm width

200 mm height

Square 250 Pipe I/D



435 mm x 435 mm width

220 mm height

Square 300 Pipe I/D



525 mm x 525 mm width

250 mm height

NB : Nutec Headers and Footers are light weight
 > Header Pipe fits on spigot.
 > Footer Pipe fits in centre.

Nutec Building Columns Application Examples

■ Application

- As permanent supports for simple garden structures such as pergolas and verandas.
- As supports for single and multiple carports where a reinforced concrete fill would normally be required.
- As a permanent shuttering for structural columns where the reinforced concrete core must on its own be able to meet the structural capacity required for the individual applications.
- For other diameters/lengths please consult EVERITE.

In every case the selection of the correct diameter and the design of the concrete core will require the expertise of a professional engineer.

General Design Criteria

■ Column Designs

Where Nutec Building Columns are designed as load bearing structures in buildings, they should be considered as a permanent shuttering only and the reinforced concrete core on its own should have the capacity to withstand all movement and axial loads. The lightest class of pipe can therefore be used, as it only has to withstand the installation loads.

The design of the concrete core requires professional expertise and should be executed by a professional engineer.

Safety, Storage and Handling Instructions

General

Manufactured from Nutec fibre-cement, Nutec Building Columns do not contain asbestos fibre and are therefore excluded from the following:

- Asbestos Regulations of 2001, which forms part of the Act No. 85: Occupational Health and Safety.
- South African Code SANS 10229: Packaging of dangerous goods for road and rail transportation in South Africa.

They do not pose any adverse effects on the environment. Off-cuts and dust created during site work may be disposed off on any non-hazardous waste landfill site.

Storage and Handling Instructions

Nutec Building Columns should be stacked on a flat level surface and should be handled carefully to avoid damage to the column or column ends.

General Installation Guidelines

- Although Nutec Building Columns are asbestos-free, it is still recommended that the creation of excessive dust be avoided.
- Determine whether any cut-outs in the column are required for service, water outlets, bolts etc. and cut out before the column is placed in position.
- When setting up a column on a concrete base, the column must be kept in position by framing the base of the column with a timber frame which is nailed down to the concrete base. A similar timber frame to which the stays for bracing can be attached should be fixed to the top end of the column.
- Ensure that the reinforcing steel is properly positioned.
- While pouring the concrete check the bracing and ensure that the column is in a plumb position and that the reinforcing remains correctly positioned. Concrete in longer columns should be done incrementally to avoid the Nutec Building Column from bursting open at the base.
- **Do not tap sides of column with a hammer to distribute the concrete, use a concrete vibrator.**
- **Do not lean ladders against the column for pouring of concrete, use platforms.**
- **Clean off excess concrete which may have splashed onto the column before it hardens.**
- **Bracing can be removed after a minimum of 48 hours.**

CONTACT DETAILS

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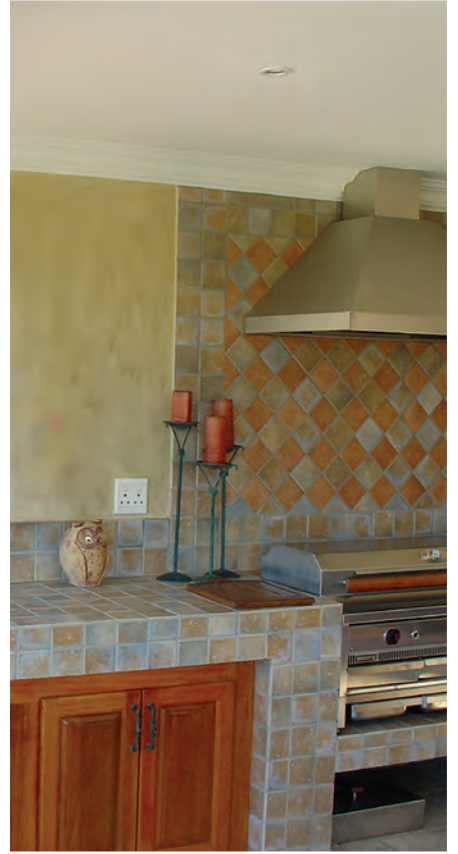
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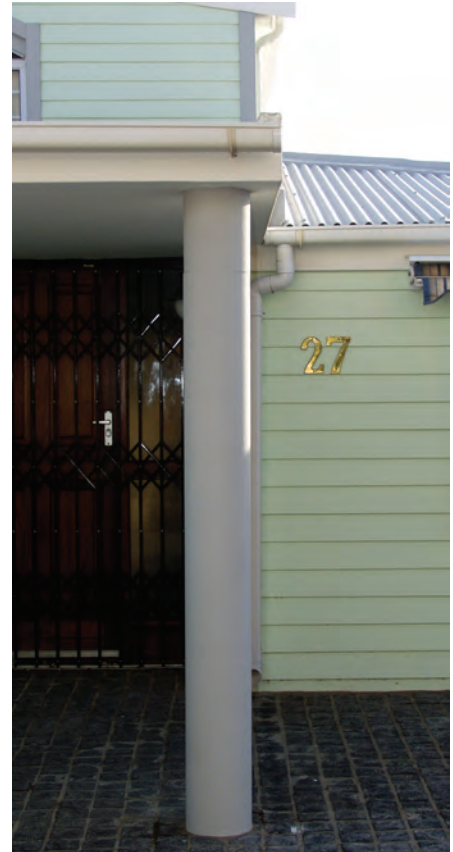
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