

T H E WHITE SITE

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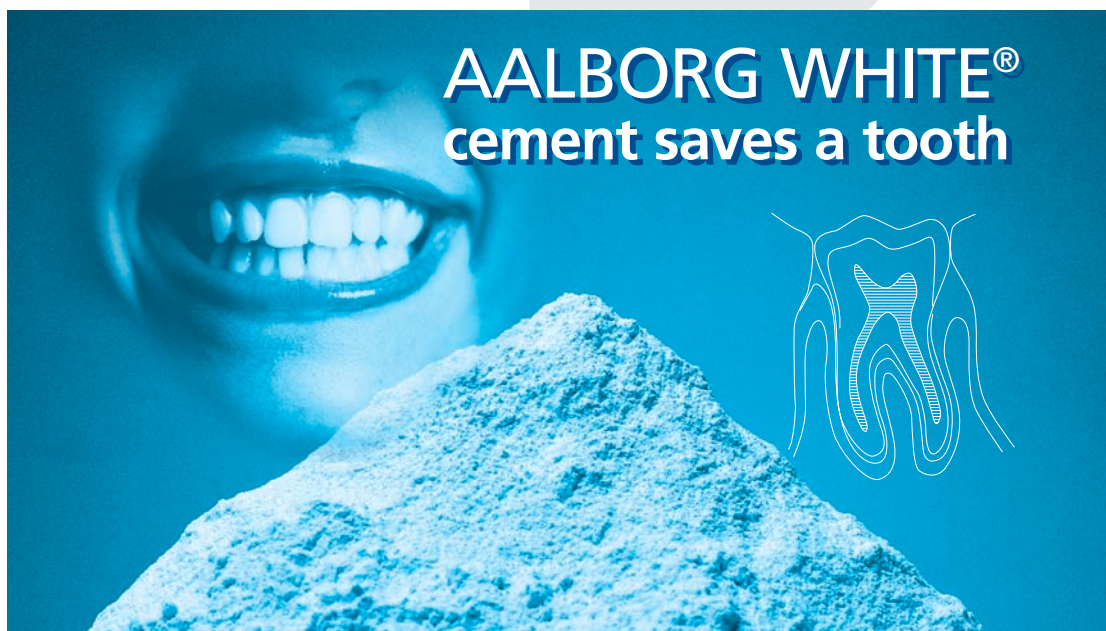
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**Keep your eyes
"WHITE" open...**

AALBORG WHITE® is white cement – made from nature's own raw materials, refined by supreme technology, and used for beautiful and functional solutions.

NEWSLETTER FROM AALBORG WHITE®

AALBORG WHITE® cement saves a tooth



The editors have received the following article from Carolyn M. Primus PhD, Florida, USA.

Usually this newsletter is devoted to large-scale applications of AALBORG WHITE® cement, but sometimes the usefulness of AALBORG WHITE® cement may surprise you. In this article we describe how AALBORG WHITE® cement might save you from a terrible toothache, or worse yet, the loss of a tooth. DENTSPLY, the world's largest dental products company, has tested and patented two dental materials that incorporate portland cement. One of these inventions cites the use of special batches of AALBORG WHITE® cement, combined with other ingredients to help treat dental diseases.

Dental materials containing AALBORG WHITE® cement have been tested in animals and in humans, and were found to be safe and effective in several clinical applications. The AALBORG WHITE® cement was selected for these tests because of its reputation for its whiteness and consistency.

You might think of cement to be used for securing a crown or bridge, or maybe for filling a cavity, but other applications exist. One use for cement in dentistry is when caries are developed that injure the dental pulp. Usually, a medication is applied to save the tooth from further infection and encourage healing. This pulp-capping procedure can prevent pulp "death", which would cause pain and cause a patient to require a root canal, or tooth extraction. The special cement-containing material was more successful and easier to use than another common material used for "pulp-capping" in saving teeth.

Another use for the material is for filling the ends of teeth that have become infected. An endodontist may have to amputate a root, if it becomes infected. In this situation, a root canal has been done and surgery to cut off the root tip has been performed. The special dental material is used to "plug" the root, via a complex surgical procedure, to arrest the infection. The special material has enabled teeth to be saved from

extraction, and cause healing in the area of the root. Figure 1 shows histological (tissue) sections of teeth that have been treated with the experimental material.

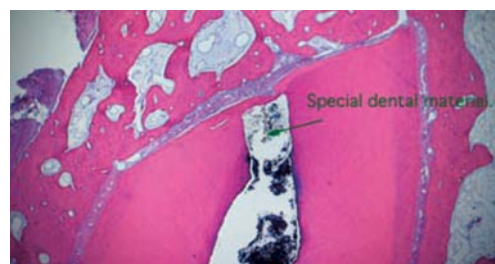


Figure 1: Histological section of a root of a tooth that has been filled with a special dental material containing AALBORG WHITE® cement. The end of the tooth has healed over the material, indicating a healthy response to the material.

Before a dental material is tested in humans, it must be tested for its performance in laboratory tests, and in preliminary biocompatibility tests. The special formula, containing AALBORG WHITE® cement passed these tests with flying colors showing that the material was suitable for use in the mouth without potential risk to humans.

The US FDA and the European community closely control dental materials; therefore, raw materials must be specially controlled for use in a medical device. DENTSPLY has meticulously screened each batch of AALBORG WHITE® cement for its purity and physical properties. In addition, there are unique ISO standards that relate to each dental material, and testing must be done to ensure high quality and performance. Again, the AALBORG WHITE® cement containing batches met the standards.

Continual progress is being made by companies to save and restore teeth to their original function – chewing that meat and biting that apple. Despite the success of the AALBORG WHITE® cement – don't let that be your excuse not to brush or floss!

WHO organisation rewarding Aalborg White Asia

dd@aalborgwhite.com.my



Aalborg White Asia Sdn. Bhd. has received from the World Health Organisation their "Healthy Settings - Healthy Workplace" award. Through active participation in the health and safety programs Aalborg White Asia was chosen as a role model for other industries in improving the working environment.

Mr Bo Ankerfelt, MD of Aalborg White Asia, receiving the award from WHO consultant Dr Cordia Chu. Standing from left are Mr Velayuthan, Mr Ho Gib Ren, Mr Daniel Devadass, Mr En Amir, Mr Fua Jin Hoe & Dr Bernard.

Additional white cement capacity of 230,000 tonnes

Aalborg Portland A/S, the world's leading producer of white cement, continues to increase its white cement production capacity

nor@aalborg-portland.dk

This time, the Aalborg plant is being expanded. CEO Søren Vinther says: "One grey cement kiln will be converted to the production of white cement. We are investing DKK 200 million in the conversion. The new white cement kiln, with a capacity of 230,000 tonnes, is expected to be ready for use by the fourth quarter of 2003, bringing the total capacity of the Aalborg plant to 850,000 tonnes white cement."

Adding the capacities of the majority-owned white cement plants in Egypt and Malaysia, the

total white cement capacity of the Aalborg Portland Group will reach 1.5 million tonnes, making it the world's largest producer of white cement. Given the difficult market conditions for grey cement, Aalborg has decided to concentrate on Denmark and selected export markets within this field, while strengthening its position as the world leader in white cement production and sales. The AALBORG WHITE® trade mark represents white cement of outstanding and consistent high quality primarily for use in decorative concrete all over the world.

ARTicles of AALBORG WHITE®



Picture to the left: For the Balinese, frogs are a constant source of fun.

Picture in the middle: A plant's natural beauty. It would not be a cultural inspiration landscape without a landscape structure made from AALBORG WHITE® cement.

Picture to the right: These Balinese-style structures were produced from AALBORG WHITE® cement, sand and pigment.



Precast landscape sculptures – Balinese style

ycs@aalborgwhite.com.my

Products made from the natural raw materials white limestone and pure white clay – that's AALBORG WHITE®.

To recreate ancient colours and realistic structures, the best approach is to use AALBORG WHITE® cement, sand and pigment. The different cultural riches of each region, such as Balinese style, can thus be reproduced.

All the landscape sculptures shown here were produced in Malaysia using AALBORG WHITE® cement to capture a "natural feel". The quality of the end product also provides a poetic impression of the tropical cultural heritage.





AALBORG WHITE®

Biomedicum Helsinki

High class white concrete facades

hbn@aalborgwhite.dk / hbn@aalborgwhite.dk

The building was designed by architects Timo Vormala, Matti Lummaa and their associates. The central objective of the architecture used in the six-storey building is to create an inspiring research environment which encourages interaction within the scientific community of the building.

Among the reasons for presenting the Biomedicum with the concrete-structure-of-the-year award in 2000 were the impressive way in which the building fits into the townscape, its excellent functionality and its capability for change. Furthermore, the project included many innovative details, such as the new hollow-core structure in which ducts are installed and which enables them to be repaired or changed, and the facades of self-bearing concrete claddings. The high quality of the concrete facades was also mentioned.

The Biomedicum project was launched in 1995 at the initiative of the University of Helsinki and the Helsinki University Central Hospital. Now that the building is in full operation, it provides state-of-the-art facilities for the University's basic research and for clinical research conduc-

ted by the University Central Hospital. It thus creates a unified, high-standard medical campus. This new research and training institute not only enhances cooperation between the University's own departments and research groups, but also promotes interaction between the University and society in general, and between the University and industry in particular.



Facts:

KOY Biomedicum, Helsinki.
A biomedical research centre for 1,000 biomedical scientists.

Total volume: 200,000 m³.

Architect: Gullichsen Vormala Arkkitehdit ky

Construction designer: Ins.tsto Magnus Malmberg Oy

Project Management
Constructor: SRV-Viitosen Oy

Precast concrete claddings:
Parma Betonila Oy (part of Addtek International Oy)

The facades were made from AALBORG WHITE® cement and white marble aggregates.

An exceptional feature of the building is the special way in which some of the elements were treated with glazing colours, giving them a golden appearance and adding a very decorative effect to the building.

Glazing products are often silicate based and penetrate the surface of the concrete thus improving the concrete durability. Most glazing colours are transparent in order to preserve and often even emphasise the texture of the concrete. White concrete is the perfect product for a neutral base surface for glazing colours.

A white world of possibilities in Finland

hbn@aalborgwhite.dk

In Finland, the last 10 years have seen purposeful collaboration between architects, researchers, producers and other interested parties in the use of white concrete. Architects can now exploit the technological and aesthetic results of this effort in their daily work by challenging white concrete technology in exciting new projects.

There was therefore a strong desire to present the new possibilities at the "Annual Award Conference for the Best Domestic Concrete Building or Structure". The conference and award presentation are organised by Betnitieto OY, the Finnish Concrete Association, who held the event on 13 February 2003 at HUT Dipoli, the Helsinki University of Technology. Mr Hans Bruun Nissen, architect with the AALBORG WHITE® Technical Team, was invited to present the many possibilities using selected architectural examples from around the world. The talk,

titled "White Concrete in Architecture - A World of Possibilities", was given for an audience of some 500 architects, producers, researchers and other interested parties from the concrete sector just before the award was presented.

At the buffet reception following the presentation, many new cross-disciplinary contacts were made, and there is thus ample opportunity for further challenges in the use of the most versatile building material of the future – white concrete.



Svend waves goodbye...

nor@aalborg-portland.dk

Svend Barnholdt has decided to take on new challenges. Having led the white cement Technical Team through its first few years, Svend has now decided that it is time to move on. A new challenge in the form of co-ownership of a domestic concrete products manufacturer was too great a chance for Svend to turn down.

"It is a once-in-a-lifetime opportunity to become an entrepreneur," he explains, adding "I want to thank each and every one of Aalborg White's loyal customers for their cooperation over the years".

The White Site wishes Svend Barnholdt the best of luck, and success in his new job.

AALBORG WHITE® marketing material

gb@aalborg-portland.dk

Two additional advertisements with the theme "Think – Think again" are now available. The new theme variants can be ordered as ready-to-use advertisements by sending an e-mail to marketing@AalborgWhite.dk



Aalborg RCI becomes Aalborg White Asia

nor@aalborg-portland.dk

With RCI selling its share of the mutual company, Aalborg is changing the company name in Malaysia to better describe its purpose in the region: To cover Asian requirements for white cement. Aalborg White Asia was chosen as a fitting company name.

Within the organisation, Mr Jesper Høstgaard, project manager, was promoted to Vice President, Production & Engineering of Aalborg White Asia.

News from Egypt...

nor@aalborg-portland.dk

Within the domestic sales organisation in Sinai White Cement, the present sales manager, Mr Mohamed Fathy, has been promoted to sales director.

Mr Fathy joined the Sinai White company when it started operations in 2001, and has since contributed successfully to building up the Sinai White Cement company's market share for white cement in Egypt.

The White Site congratulates Mr Fathy on his promotion, and wishes him luck in his new position.

Keep your eyes "WHITE" open... and win a digital camera

gb@aalborg-portland.dk

A competition was advertised in the last issue of The White Site. Check your e-mail to see whether you have received a link to the website describing competition rules. If you have not

received a mail from us, send your e-mail address to marketing@AalborgWhite.dk and we will ensure that you too have the opportunity to keep your eyes "WHITE" open.



Aalborg Portland A/S
Rørdalsvej 44
P. O. Box 165
DK-9100 Aalborg

Phone: +45 98 16 77 77
Fax: +45 98 10 11 86
E-mail: marketing@AalborgWhite.dk
Website: www.AalborgWhite.com

Editorial group:
Jørgen Norup, Chief Editor
Gurli Brogaard, Editor

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Att.: The White Site
Rørdalsvej 44
P.O. Box 165
9100 Aalborg
Denmark

Stamp

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The White Site is issued 4 times a year.

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too often adequate too seldom

Would you prefer that The White Site was only available on www.AalborgWhite.com or in printed form as well?

web only web and printed form

Does The White Site have an appealing graphic design?

yes no

Overall, how would you rate The White Site on a scale from 1 to 5 (5 = best)?

1 2 3 4 5

Send or fax the form back to us to participate in a prize draw in which five elegant Balmain pen sets can be won. Fax no. +45 98 10 11 86.