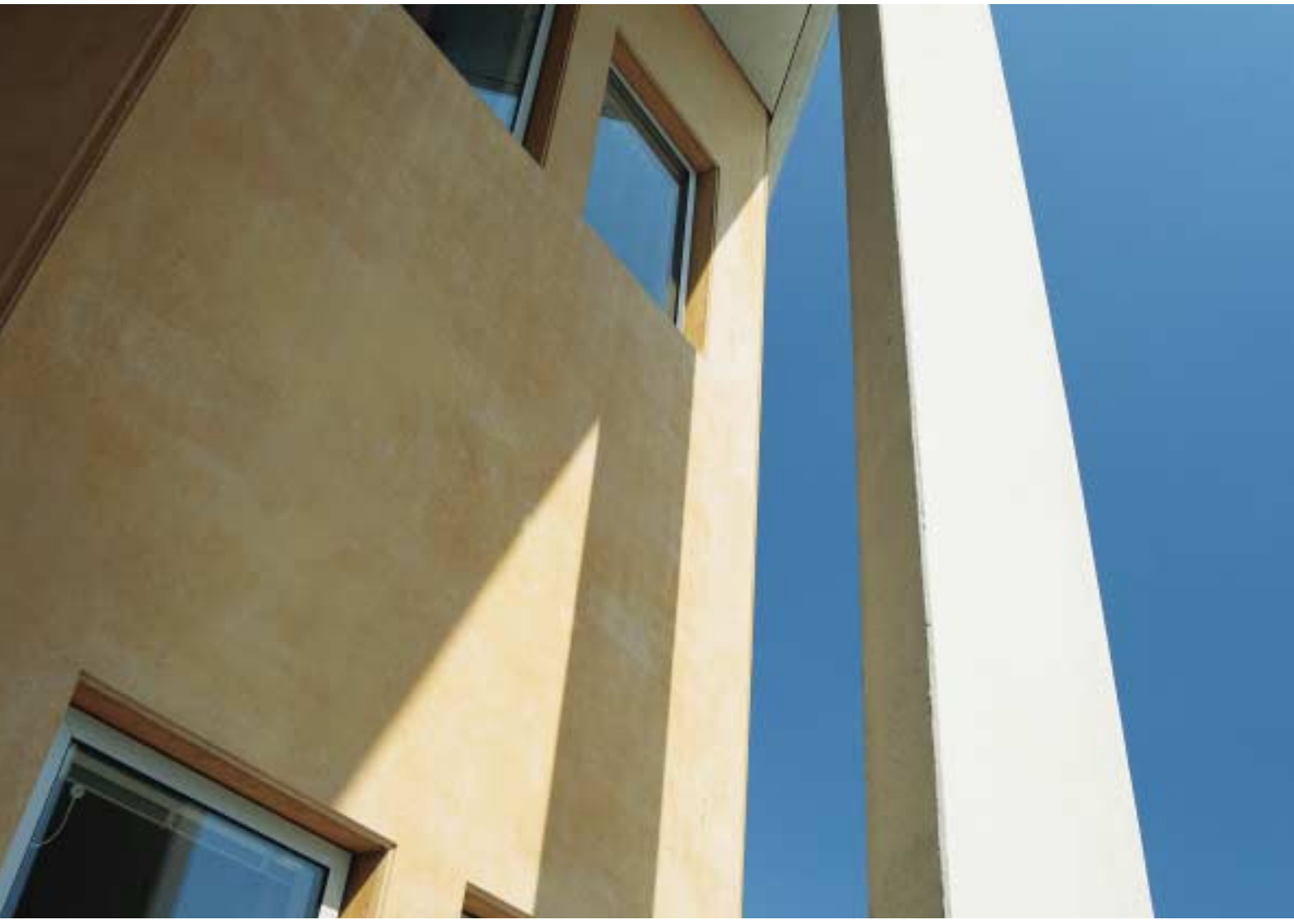
AALBORG WHITE®

Structural Concrete
Brilliant Sophistication with AALBORG WHITE®



AALBORG WHITE®
- Nature´s own raw materials
- refined by supreme technology
- used for beautiful and functional solutions

Sophisticated, Brightly Coloured Concrete Structures

Concrete Panels

Concrete panels can be produced in many exciting shapes with a wealth of possibilities in terms of refined details and desired surface texture. The high and very consistent reflective index of AALBORG WHITE® makes it possible to create white or brightly coloured panels with a futuristic appearance.

Top left: Vikingemuseet, Lindholm Høje
Top middle: Part of office building, Viby, Jutland
Top right: Fibre reinforced concrete
Bottom: Office building, Viby, Jutland

AALBORG WHITE®

with AALBORG WHITE®

In Situ Cast Structures

The greatest freedom in shaping concrete usually exists for constructions where the concrete is poured and cast on site. Only your imagination and what is practically possible with moulds and formwork limit the possibilities. When mixed properly, concrete based on AALBORG WHITE® cement obtains very high strength and durability due to the high strength potential of the cement.

Top left: Central foyer area, the Black Diamond, Copenhagen.
Top right: Unicon Headquarter, Roskilde
Bottom: Fibre reinforced concrete

Columns and Beams

By building with columns and beams one has all the possibilities of creating an attractive airy indoor environment. With columns and beams of white or coloured concrete based on AALBORG WHITE® the immediate impression is one of elegance and lightness in construction. This is further enhanced by admitting natural light through the extensive use of glass, thereby taking full advantage of the AALBORG WHITE® high reflective index.

Glass Fibre Reinforced Concrete (GRC)

GRC is used for very thin and light panels. A common application is in the renovation of facings to rejuvenate old buildings. GRC produced with AALBORG WHITE® has optimum strength and toughness due to the high intrinsic strength of the cement and its strong binding capacity to the fibres.

The Colours of Light

Colouring with Pigments

Clear bright colours are also obtained with coloured concrete when produced from AALBORG WHITE®. Today, colouring is usually achieved with synthetically produced inorganic pigments, which are limeproof, alkali-resistant, weather resistant, and non-fading. By choosing aggregates with the same range of colours and reflective properties as the pigments, coloured surfaces can be created with a minimum of fading and discoloration over the lifetime of the concrete.

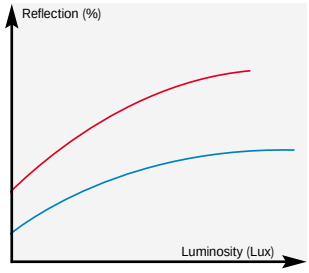
Choosing the Aggregates

The choice of aggregates is important to the colour of the concrete. To the right are shown a few examples of non-pigmented concrete produced with AALBORG WHITE® and various aggregates.

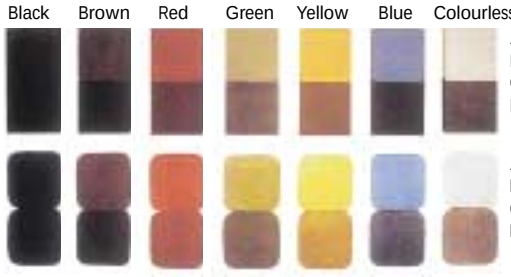
Surfaces

The desired surface texture can be achieved during casting by choice of the correct mould or formwork, or by insertion of various matrices in the mould. The surface can also be treated after casting – by polishing, exposure, brushing, blasting, shaping by hewing, etc.

The clear bright appearance of concrete produced from AALBORG WHITE® is due to the exceptionally high purity of the chalk used to produce the white cement which reflects the light far better than grey cement.



The figure illustrates the difference in reflection of white and grey concrete having the same surface texture, measured at increasing lux.



AALBORG WHITE®
Dry concreting $^{w}/_{c}$ = 0.27
Grey Cement
Dry concreting $^{w}/_{c}$ = 0.27

AALBORG WHITE®
Plastic concreting $^{w}/_{c}$ = 0.45
Grey Cement
Plastic concreting $^{w}/_{c}$ = 0.45

The shades of coloured concrete depend not only on the cement used in the concrete. The w/c ratio has a major influence.

White concrete with aggregates of calcined flint.

White concrete with aggregates of crushed white marble.

White concrete with Glen Sanda. (Scottish aggregates)

White concrete with aggregates of white anorthosite.

Polished surface cast in a steel mould.

Brushed surface.

Sand-blasted surface.

Texture applied with wooden planks.

Aalborg Portland A/S
Aalborg Portland White A/S

Rørdalsvej 44
Postbox 165
DK-9100 Aalborg

Phone +45 98 16 77 77
Fax +45 98 10 11 86
E-mail: sales@aalborg-portland.dk
Internet: www.aalborg-portland.dk

B10 MARKETING A/S 239.081.03/01.04