

FIBRECEMENT: A PERFECTLY RECYCLABLE BUILDING MATERIAL

Luc Van der Heyden
Redco N.V., Kuiermansstraat 1, 1880 Kapelle-op-den-Bos, Belgium
luc.van.der.heyden@redco.be

Keywords: recycling, fibreceement, clinker, waste

Abstract.

The concept of sustainability has become a major component of the general management policy of most companies, especially for those that operate in the construction industry. With respect to the manufacturing of building materials, this is clearly illustrated by the ever growing attention that is given to the sparing use of the limited natural resources, the reduction of the non-recyclable waste that is generated by the production process and finally, the recycling of the products in valuable applications at the end of their service lifetime.

The present paper deals with some ways for the valuable recycling of fibreceement waste, irrespective of whether it concerns production, construction or demolition waste. Though, especially with respect to construction and demolition waste, the potential of NIR-analysis as a simple and reliable method to distinguish asbestoscement from fibreceement is indicated. Next, the results of an extensive scientific study that focussed on the application of crushed FC waste in road construction, are commented. Further, the potential of FC waste as a sustainable component of the Portland clinker raw meal is discussed by means of a selection of results taken from 2 technico-scientific studies on the behaviour of FC in the Portland clinker process. Finally, the recycling of FC waste in the air-cured resp. autoclaved FC production (so-called internal recycling) is dealt with.
