

January 12, 2021

Use of Haseko's Original Environment-Friendly "H-BA Concrete" With High Versatility in Buildings for the First Time Increasing Use Toward Achieving a Decarbonized Society

Tokyo, Japan, January 12, 2021--HASEKO Corporation (head office: Minato-ku, Tokyo; president: Kazuo Ikegami) has used H-BA concrete—an environment-friendly concrete developed in-house which is undergoing patent application—for the first time in certain parts of a new condominium in Yokohama City.

H-BA concrete is produced by mixing ordinary Portland cement with blast furnace cement type-B. It is an environment-friendly concrete that reduces CO₂ emissions derived from concrete materials by approximately 8.2% to 18.5%. Having the same quality as ordinary concrete, H-BA concrete has attained building technology performance certification from the General Building Research Corporation of Japan (GBRC Performance Certification No. 17-21).

As H-BA concrete's workability has been confirmed through verification to be the same as ordinary concrete by applying it to an exterior structure at Haseko Technical Center (Tama City, Tokyo), the decision was made to apply it to buildings.

Going forward, Haseko will seek to increase its use of environment-friendly concrete as part of its initiative toward achieving a decarbonized society by using H-BA concrete's feature of being applicable to all parts of a building, together with CELBIC (environment-friendly BF concrete)*¹, according to each building's characteristics.

*1. CELBIC is an environment-friendly BF concrete developed by the CELBIC Study Group, which comprises 13 general contractors led by Haseko Corporation. It is produced by mixing ordinary Portland cement with 10% to 70% ground granulated blast furnace slag.

First property to use H-BA concrete

Project name: New construction project at Yoshida-cho, Totsuka-ku, Yokohama City (tentative)

Property name: Renai Yokohama Totsuka

Location: 778-10 Yoshida-cho, Totsuka-ku, Yokohama City, Kanagawa Prefecture, etc. (lot number)

Access: 12 minutes on foot from Totsuka Station on the JR Tokaido Line; 12 minutes on foot from Totsuka Station on the Yokohama Municipal Subway Blue Line

Number of units: 439

Structure and scale: Reinforced concrete structure with 7 stories above ground

Seller: Sohgo Real Estate Co., Ltd.

Design: Haseko Corporation

Construction: Haseko Corporation

Planned completion: January 2021



Corridor of a courtyard that used H-BA concrete



Conceptual image of exterior of Renai Yokohama Totsuka

Attainment of building technology performance certification

H-BA concrete has attained building technology performance certification from the General Building Research Corporation of Japan (GBRC Performance Certification No. 17-21) on October 15, 2017.

Features of H-BA concrete

(1) Same quality as ordinary concrete

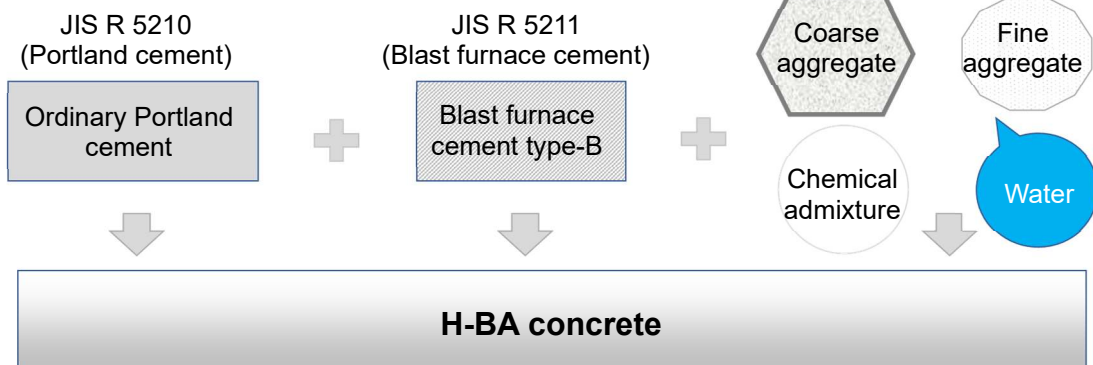
As H-BA concrete's strength development and durability are the same as ordinary concrete, it can be treated as concrete with quality conforming to JIS A 5308 (Ready-mixed concrete).

(2) Significant CO₂ reduction from extensive use in buildings

With strength development and durability equivalent to ordinary concrete, H-BA concrete allows for extensive use, regardless of where it is applied on the building, thereby showing potential to substantially reduce CO₂ emissions from concrete derived materials (approximately 8.2% to 18.5%).

(3) Similar to ordinary concrete in production and application

Both the ordinary Portland cement and blast furnace cement type-B materials used for H-BA concrete are readily available at almost all ready-mix concrete plants in Japan. H-BA concrete can therefore be manufactured with a mix design similar to ordinary concrete. No special consideration is required in construction processes either, allowing it to be applied in the same way as ordinary concrete.



Haseko Group's four main CSR themes

Environment-friendly concrete is a technology that contributes toward "Energy & CO₂" for achieving "Protecting the precious environment," one of the Haseko Group's four main CSR themes.

The four main CSR themes stipulate the goal of the Haseko Group's CSR efforts based on the CSR Vision and CSR Policy formulated in March 2018. The four themes are: Creating attractive living spaces, Building a company worth working at, Protecting the precious environment, and Nurturing a culture of trust.

Protecting the precious environment

Housing development has a huge impact on the environment. With a full understanding of such impact, we are not only promoting environmental activities to realize processes and technologies with minimal environmental burden but also engaging in research and technological development.

Related SDGs

7 Affordable and clean energy

12 Responsible consumption and production

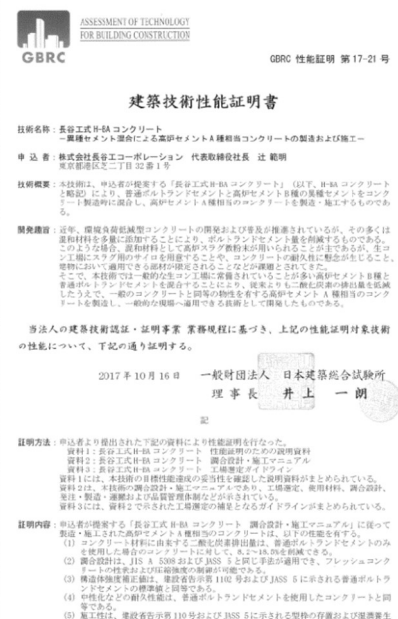
13 Climate action

15 Life on land

17 Partnerships for sustainable development

Energy & CO₂

Condominiums require a lot of energy and release CO₂ not only during construction but also while in use. Consideration is thus given in all stages, from planning and designing to maintenance and management.



Building technology performance certificate of H-BA concrete