Betongindustri
HEIDELBERGCEMENT Group

We’re adjusting our cement range for more sustainable construction – transition of Anläggningscement FA

The construction and civil engineering sector’s requirements for reduced climate impact are now clearly influencing the industry's major clients. In order to meet customer demand for more climate-adapted building materials, while enhancing the competitiveness of the concrete sector, Betongindustri is gradually adapting its range to phase out the types of cement with the highest climate impact in favour of new, more climate-optimised products.

Choice of cement hugely significant

Climate change is a very high priority for us and, as one of the major players, we have signed up to the industry’s common goal of being able to deliver climate-neutral concrete by 2045.

Most of the climate impact of concrete arises during the production of cement – a process that generates large volumes of carbon dioxide. The types of cement sold on the Swedish market differ greatly in terms of climate impact (data from EPD). By choosing a cement with a low climate impact, we are changing the entire volume of concrete we produce, resulting in a significant overall reduction in carbon dioxide.

Examples of changes:

- In 2015-2018, we phased out traditional Portland cement (SH cement) on the house-building side, which was often used for winter casting. This cement, however, had a 10-15% higher climate impact compared to conventional Bascement. This has resulted in significant carbon dioxide savings.

- Starting in 2019, we have begun implementing the corresponding change on the civil engineering side, where ANL (CEM I 42.5 N - SR 3 MH/LA) is gradually being replaced with Anläggningscement FA (CEM II/A-V 42.5 N - MH/LA/NSR). Fully implemented, this initiative will result in a carbon dioxide reduction of approximately 20% on the total volume of infrastructure concrete.

- In order to meet the need for individual projects with greater requirements for climate reduction, in 2019 Betongindustri launched a new concrete range with climate-enhanced concrete, BIO 1-2-3, which reduces carbon dioxide emissions by an additional 10, 25 and 40%.

Proven solution, good performance and 20% lower climate impact

The new cement for infrastructure concrete, Anläggningscement FA, is what is known as Portland Fly Ash cement with the designation CEM II/A-V 42.5 N - MH/LA/NSR. This means that in addition to Portland clinker, the cement also contains some fly ash. Reducing the clinker content in this way vastly improves the climate profile of this new cement. In other respects, Anläggningscement FA has similar properties to its predecessor Anläggningscement, i.e. it is adapted for use in all types of civil engineering structures. Temperature and crack parameters have been produced for concrete with

Anläggningscement FA, which means that it is possible to draw up action proposals to meet any crack safety requirements in the same way as for concrete with Anläggningscement.

Anläggningscement FA is approved for use in accordance with the concrete standard SS-EN 206 and SS 137003 to the same extent as Anläggningscement, i.e. the new cement can be utilised in normally occurring exposure classes for civil engineering structures. Anläggningscement FA also meets the requirements set out in AMA Anläggning 13 and in later editions.

Meets Swedish Transport Administration's new climate requirements

Anläggningscement FA meets the requirements imposed by the Swedish Transport Administration in *TDOK 2015:0480 Climate requirements on planning, construction phase, maintenance and on technically approved railway material.* Concrete manufactured with the cement has just over 20% lower climate impact. Betongindustri has been using the cement since 2015 and is well-satisfied with its performance.

Transition plan

As Anläggningcement FA becomes available at each cement depot, Betongindustri will gradually change cement type at these locations.

For the Stockholm region, preparations are under way for initial implementation at our factories in Värtan and Täby. The plan is to expand during Q4 to include Uppsala, Tumba, Ulvsunda, Hammarby and Sollentuna.

Preliminary timetable for transition to Anläggningscement FA at Betongindustri's factories:

Factory:	Preliminary timetable	Factory:	Preliminary timetable
Karlskrona	Q3 2021	Uppsala	Q4 2021
Malmö	Q2 2020	Borlänge	Q3 2021
Staffanstorp	Q1 2021	Malung	Q3 2021
Billeberga	Q4 2019	Norrköping	Q1 2020
Helsingborg	Q1 2020	Linköping	Q1 2020
Kristianstad	Q2 2020	Motala	Q1 2020
Halmstad	Q4 2020	Tranås	Q1 2020
Sölvesborg	Q2 2021	Undersåker	Q3 2020
Gislaved	Q3 2020	Östersund	Q3 2020
Jönköping	Q1 2020	Gävle	Q3 2021
Värnamo	Q1 2020	Visby	Q3 2021
Hammarby	Q4 2021	Falkenberg	Q2 2020
Sollentuna	Q4 2021	Varberg	Q3 2020
Tumba	Q4 2021		
Täby	Q3 2021		
Ulvsunda	Q4 2021		
Värtan	Q3 2021		

See map on next page.

Questions and contact

If you'd like more information, please don't hesitate to get in touch with your local contact at Betongindustri.