



Green
concrete
reduces project
CO₂-load

Skanska's Green Concrete

A **better** option going forward and a **must** for a sustainable future.

Green concrete vs Standard concrete (CO₂/ m³)

Industry standard concrete for walls: 245 kg
Grön väggbetong: 118 kg

Industry standard concrete for floor structures: 285 kg
Grön bjälklagsbetong: 175 kg

Industry standard concrete for garages: 325 kg
Grön garagebetong: 288 kg

Green and sustainable

Concrete is a safe and sustainable part of urban development but we must make sure that it gets even more climate-smart. That's why we've developed and quality assured products that are green and meet market demands for sustainable concrete. Skanska has developed a new type of concrete under the collective name Green Concrete, which consists of a high proportion of slag that replaces some of the cement volume.

Better
→ concrete

The concrete we are developing at Skanska is quality assured so that it can continue to meet the same requirements of durability, strength, longevity and casting ability. Skanska has competence that extends over the entire chain - from house purchasers, those who build the house to those who supply the materials. This means that the products are secured in an optimal way.

Contact us and we'll tell you more.

Grön väggbetong

Cement clinker reduction: 65%

Meets exposure class: XC1

Strength class: C28/35

Grön väggbetong is **the concrete quality with the lowest carbon footprint**. We can cut concrete CO₂ emissions by about 50% without compromising on either longevity or quality. Suitable for structural elements such as interior walls.

To keep in mind: Get in touch with us if you have tough demands for quick stripping of wall forms. We help you assess strength development, choose accelerator and with other tips to improve the curing process.

Grön bjälklagsbetong

Cement clinker reduction: 50%

Meets exposure class: XC2

Strength class: C32/40

Grön bjälklagsbetong has been **developed for floor structures** and other concrete families in exposure class XC2. The concrete complies with water-tightness requirements (VCT 0.60) which allows for use in structural elements of the same type. The concrete **lowers the climate impact of the construction element markedly** as the floor structure stands for a large volume of concrete in many buildings. An important climate choice to reduce the climate impact of the entire building.

To keep in mind: Investigate if there are other requirements that govern the choice of concrete, where dehydration can be a factor for example.

Grön Garagebetong

Cement clinker reduction: 30%

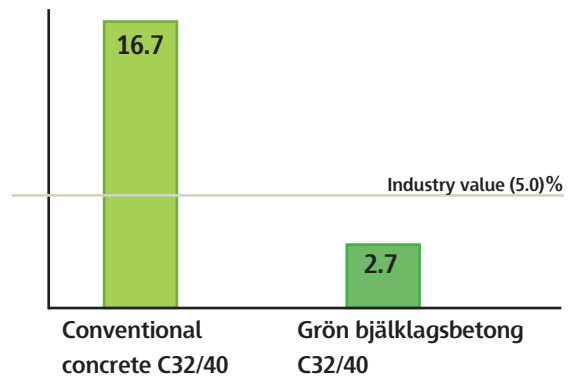
Meets exposure class: XC4, XD3, XF1 and XS3

Strength class: C45/55

Grön garagebetong is **suitable for tough environments** such as garages. In a warm garage, the salt that has been put on our roads can melt onto the concrete, causing arminisation corrosion and affect the stability of the concrete. Green concrete for garages has **improved resistance to chlorides**, which extends the longevity and durability of the structure further.

Chloride migration coefficient

($D \cdot 10^{(-12)} \text{ m}^2/\text{s}$) 180 days

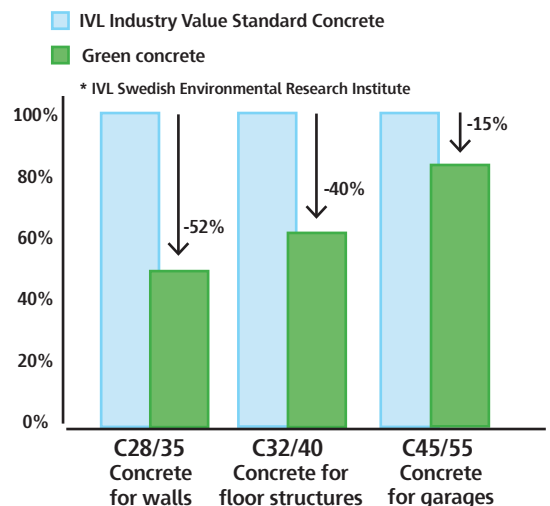


To keep in mind: It is important during and after casting with green concrete for garages to avoid both small and large cracks. The risk of plastic shrinkage cracking is greater during spring and summer, and may require extra measures. Also applies to conventional concrete.

Meet green demands

Skanska's green concrete **meets high environmental demands** for environmental certification in building construction. A direct and positive climate measure is to replace conventional concrete with green concrete.

Reduction of CO₂ emissions



By using Green Concrete, **we reduce the climate impact by up to 52 percent** compared to standard concrete. A better concrete product that greatly reduces the carbon footprint without compromising quality and durability of the building.