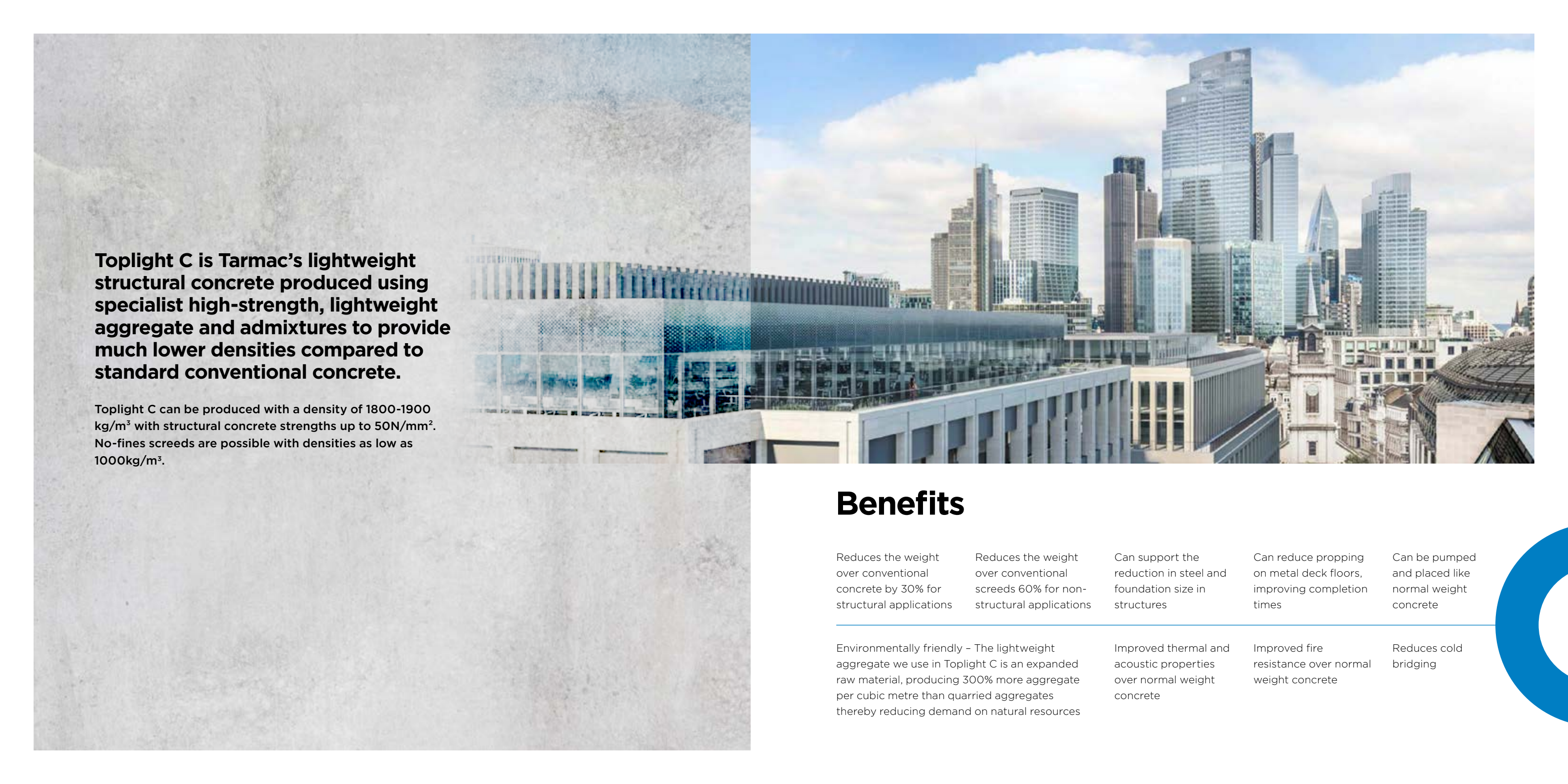




# **TOPLIGHT C**

Lightweight structural concrete



**Toplight C is Tarmac's lightweight structural concrete produced using specialist high-strength, lightweight aggregate and admixtures to provide much lower densities compared to standard conventional concrete.**

Toplight C can be produced with a density of 1800-1900 kg/m<sup>3</sup> with structural concrete strengths up to 50N/mm<sup>2</sup>. No-fines screeds are possible with densities as low as 1000kg/m<sup>3</sup>.

## Benefits

Reduces the weight over conventional concrete by 30% for structural applications

Reduces the weight over conventional screeds 60% for non-structural applications

Can support the reduction in steel and foundation size in structures

Can reduce propping on metal deck floors, improving completion times

Can be pumped and placed like normal weight concrete

Environmentally friendly - The lightweight aggregate we use in Toplight C is an expanded raw material, producing 300% more aggregate per cubic metre than quarried aggregates thereby reducing demand on natural resources

Improved thermal and acoustic properties over normal weight concrete

Improved fire resistance over normal weight concrete

Reduces cold bridging

# Applications

**Toplight C can be used in any application where normal weight concrete is specified as follows:**

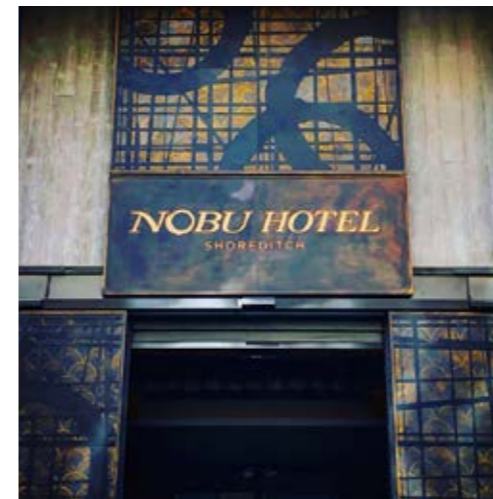
To create lighter concrete slabs, foundations and floors to reduce loads on structures

## **For reinforced concrete slabs:**

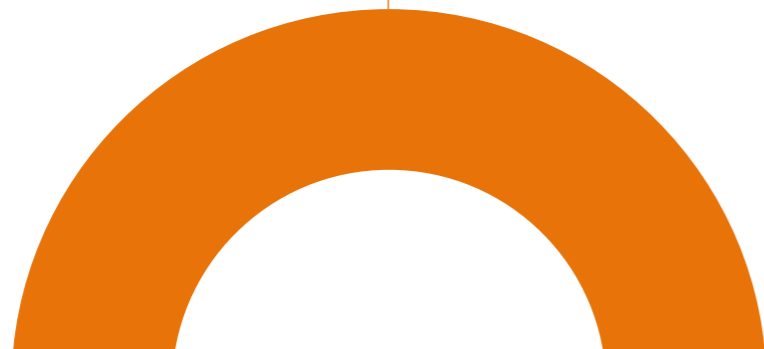
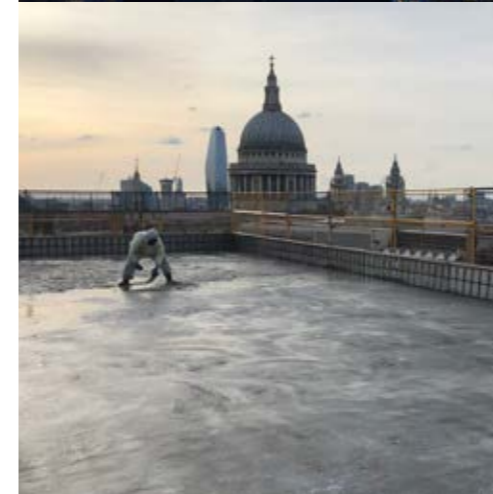
Using Toplight C, Designers can not only look to reduce the thickness of the slab and foundations but also reduce the amount of steel mesh required resulting in a quicker more cost-effective greener building.

## **On composite metal decking:**

Toplight C is ideal for composite metal decking. As spans increase the deflection becomes the defining factor. The use of Toplight C minimises the weight by up to 30% therefore reducing the deflection.



Lighter concrete slabs, foundations and floors to reduce loads on structures



# How it works

## Harnessing the power of admixtures and specialist aggregates

Key to the exceptional performance of Toplight C is the presence of tailored admixtures and specialist engineered lightweight aggregates. These materials provide improved fire resistance compared to conventional concrete and a reduced weight by almost 30% in structural and 60% in non-structural concretes.

## High Strength and flexible in complex environments

Thanks to the presence of specific admixtures and specialist aggregates, Toplight C provides a lightweight concrete which can still reach strengths of up to 50N. It can be pumped, placed and compacted similar to conventional concretes whilst providing all the required benefits of a lightweight concrete in challenging environments.

## Technical

The aggregate we use in our lightweight concrete complies to BS EN 13055, designed in accordance with BS EN 206 and BS 8500.



Argex structurally engineered,  
lightweight aggregate.

