

# GOLDSMITH STREET

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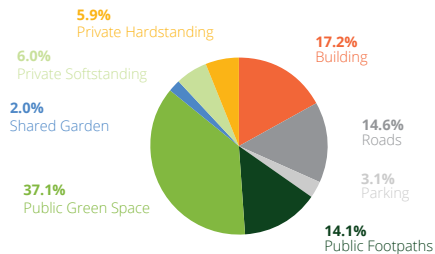
Carbon and Placemaking Case Study 03

## KEY ASPECTS:

- Form factor, orientation and response to the sun in the housetype design
- Putting people first in streets and spaces with limited parking and play spaces to rear
- Natural materials including timber frame and cellulose insulation; Passivhaus standard

**Site:** 2.54ha  
**Units:** 105  
**Density:** 100 dwellings/ha  
**Parking:** 0.72 per unit (plus car club)  
**POS:** 0.99ha (39%)

## Indicative Area Split:



## STREETS AND SPACES

Focusing on providing pedestrian-friendly spaces that are not dominated by cars leads to a better environment and lower embodied carbon, but can be hard to adopt and manage for local authorities.

## REAR ACCESS AND PLAY

The communal space between the back gardens with access control on either end creates a safe place for play and interaction, fostering the sense of community and ownership which has a positive impact on resident health and well-being.

## CHARACTER AND MATERIALS

Durability and longevity as drivers for external material choices such as the brick and pantiles can lower whole life carbon due to reduced maintenance and replacement cycles.

## PROCUREMENT AND QUALITY CONTROL

A traditional contract arrangement and Passivhaus Certification allows for better quality control and delivery of client ambitions.

## DENSITY AND EFFICIENCY

The scheme provides high density with low-rise built form at human scale with narrow streets and considered window placement, allowing for efficient form factor and use of land.

## CONSTRUCTION MATERIALS

Timber frame with cellulose insulation is a low-carbon construction method, but needs early consideration due to increased wall-thicknesses and building footprints.

## FORM FACTOR

Compact terraces with apartment blocks at either end result in a good form factor whilst also providing active frontages and an interesting street scene.

## ORIENTATION AND HOUSETYPE DESIGN

The streets and roof forms are determined by the sun angles to maximise solar gains and access to sunlight. The housetypes are adapted to their orientation to provide south-facing kitchen/dining areas and bedrooms in every instance, rather than flipping standardised footprints.

