

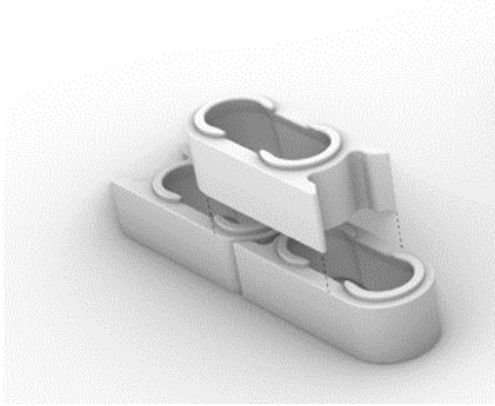
A new solution for
sustainable and
affordable housing

start
somewhere.eu
TwistBlocks

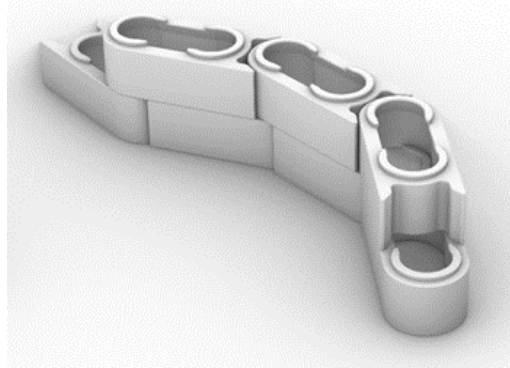


Product: Start Somewhere TwistBlocks

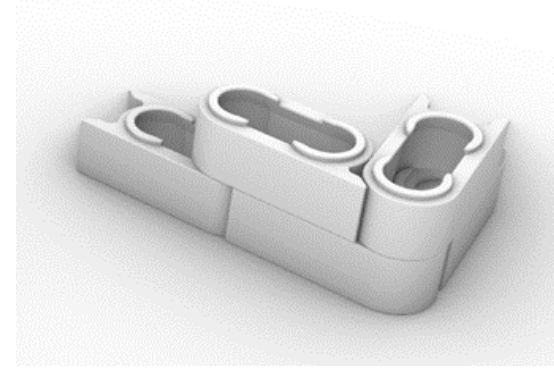
Interlocking **Plug** in System that allows to freely **Play** with the floor plan



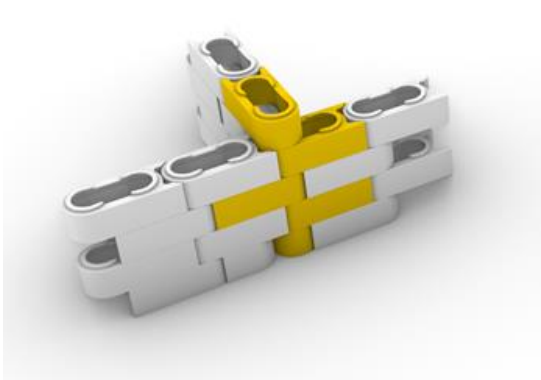
mortar-free plug-in system,
dismantable, material-saving



flexibility: stepless folding of
the wall segments up to 45°



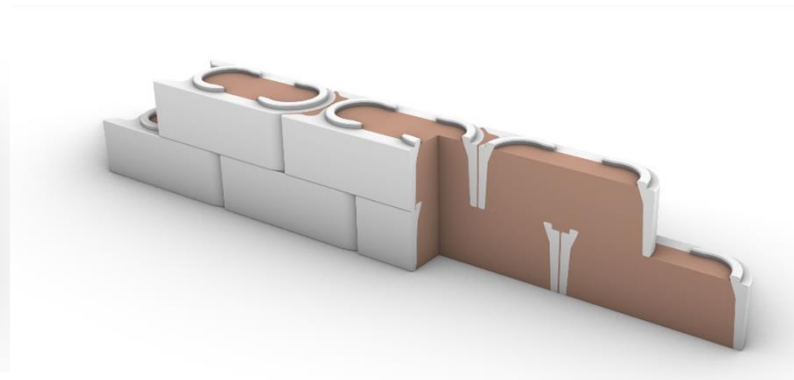
stepless folding of the
corners up to 100°



T-junction



X-junction



optional backfilling with soil to optimize
windproofness and thermal mass

✓ **Patented** in almost all
countries worldwide

✓  certification
Kenya Bureau of
Standards
Standards for Quality life



Start Somewhere has a unique product that is designed specifically for use in informal settlement environments.

Challenge – The problems of informal settlements

An estimated 3 billion people will require adequate and affordable housing by 2030



Problems of informal settlements:

Lack of jobs



- High unemployment rate, e.g. 50 % in Kibera, Nairobi
- Residents of informal settlements mostly work as low-paid day labourers in big cities under unfair conditions

Unsafe, unhealthy homes



- Vulnerability to weather and disasters due to weak structures
- Fast spread of diseases due to no windows, dirt floor, leaky walls
- Fires spread quickly because of wood as construction material
- Costs for conventional buildings are too high

No secure land tenure



- The permanent risk of eviction discourages people from investing their limited financial resources to better housing
- Many low-income inhabitants meet their immediate need for shelter with poor shacks



Housing and occupation are pressing issues that every third citizen of the earth faces.

Solution

A construction and production method that caters for the problems of informal housing



How can the situation in informal settlements be improved?

Lack of
jobs



Small-scale TwistBlock factories

Create know-how, jobs and value in concrete block manufactories within the slum area

Unsafe,
unhealthy
homes



Easy-to-build concrete houses

Affordable and flexible housing which is easy and quick to set up

No secure
land tenure



Reusability

Enable private home ownership in uncertain legal environments: 85% of the blocks can be dismantled and reused in case of eviction



Start Somewhere fosters resilience in slums and addresses some of the most urgent issues of vulnerable people.

Holistic approach of Start Somewhere

A new construction method creates employment in local manufactories



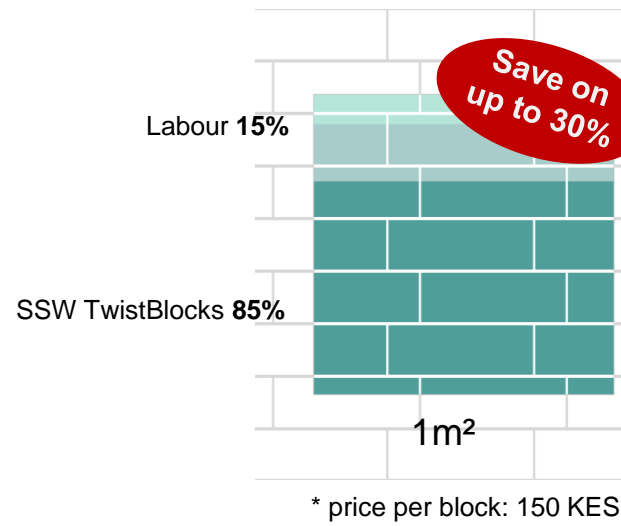
SSW TwistBlocks saves up to 30% in comparison to standard masonry construction



SSW TwistBlocks

~ 2000 KES per m² finished wall *

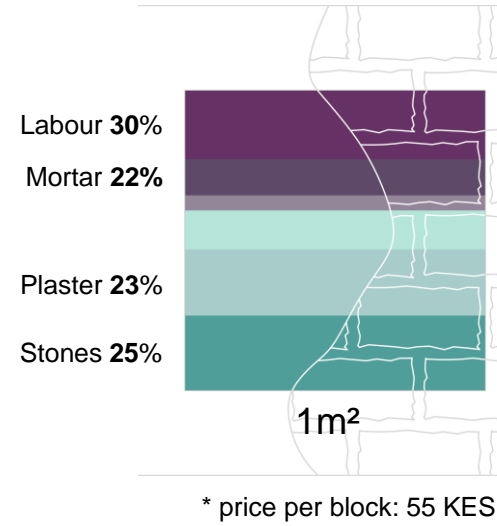
- ✚ Minimal construction time
- ✚ Save on formwork, plaster, mortar
- ✚ up to 85% of blocks can be reused
- ✚ Modern design with curved walls



Standard Plastered Masonry

~ 2600 KES per m² finished wall *

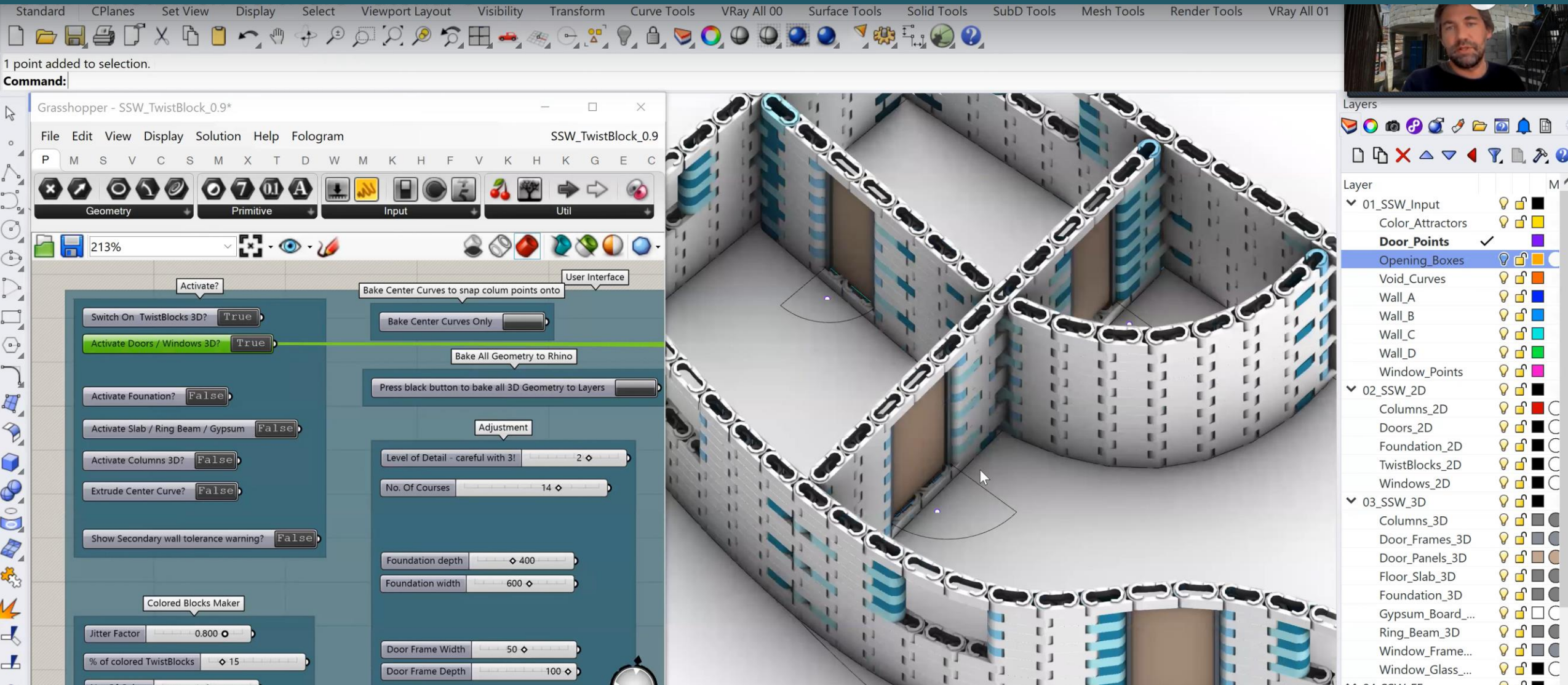
- ✖ Low building speed
- ✖ Mortar, formwork, plaster required
- ✖ Low reusability of blocks
- ✖ Rough finish



The innovative SSW TwistBlock technology save on construction time and material and offers even more assets with its flexibility in design and reusability of the blocks.

Planning Software

Projects can be planned and coordinated over long distances with a high degree of automation



All blocks are automatically generated in 3d, doors & windows can be placed intuitively, curves drawn in plan are automatically stretched to multiples of block lengths, block plans are generated, reinforcement is calculated and visualized

2 Story School building Kibera

Built during pandemic only via plan illustrations and video call



» The building was customized by its users and by the local “Fundis”.

Residents of Kibera apply the technology themselves

3 local shops built self organized by trained workers for residents of Kibera



The blocks find acceptance within the community and serve as advertising wall for shopfronts.

Residential Housing Kibera

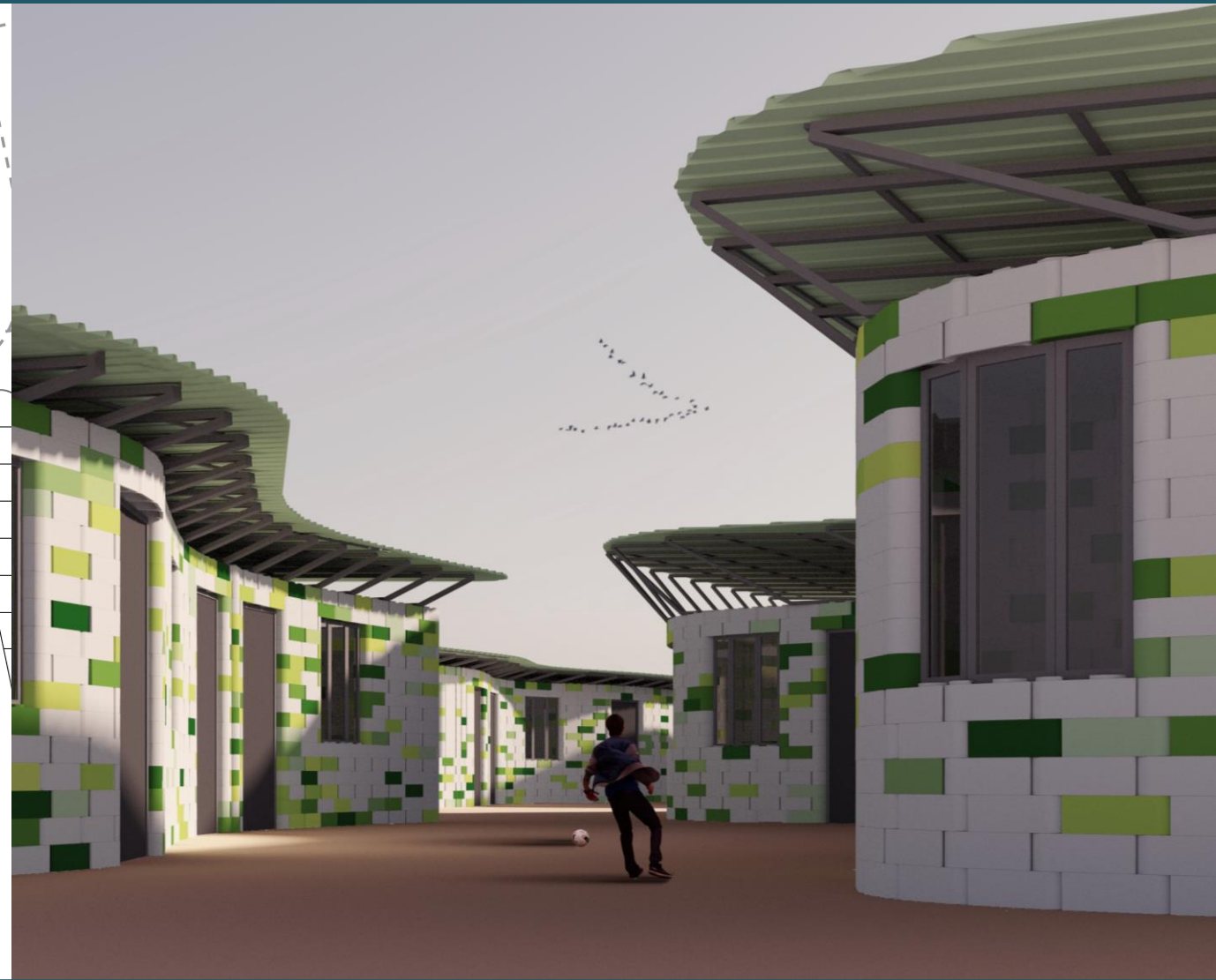
11 housing units rebuilt after fire breakout



According to the residents, the new housing units feel like a real estate in Kibera and give security and perspective to their life.

Factory and Campus in Ahero

Co-sponsored by Habitat for Humanity: Setup of a new factory that builds a new campus



The project is in cooperation with the Austrian NGO “Förderverein Fishnet”, the Kenyan NGO “Go Fishnet” and “Habitat for Humanity” as co-sponsor and advisor. Habitat for Humanity aims to adapt the idea of the TwistBlock factory as a franchise model and scale it up.

“Bethany Joy School” in Kawangware, Nairobi

Start Somewhere has build a new school for over 400 kids in an informal settlement.



The school comprises of 18 classrooms, a staff room, office, kitchen and library and a two-storey toilet block.

Global One New Primary School Kibera

Start Somewhere is building the first 3 storey school building out of TwistBlocks in Nairobi.



The school is being build out of 7500 Twistblocks produced by the community in the nearby factory.

New Hope Initiative School Kibera

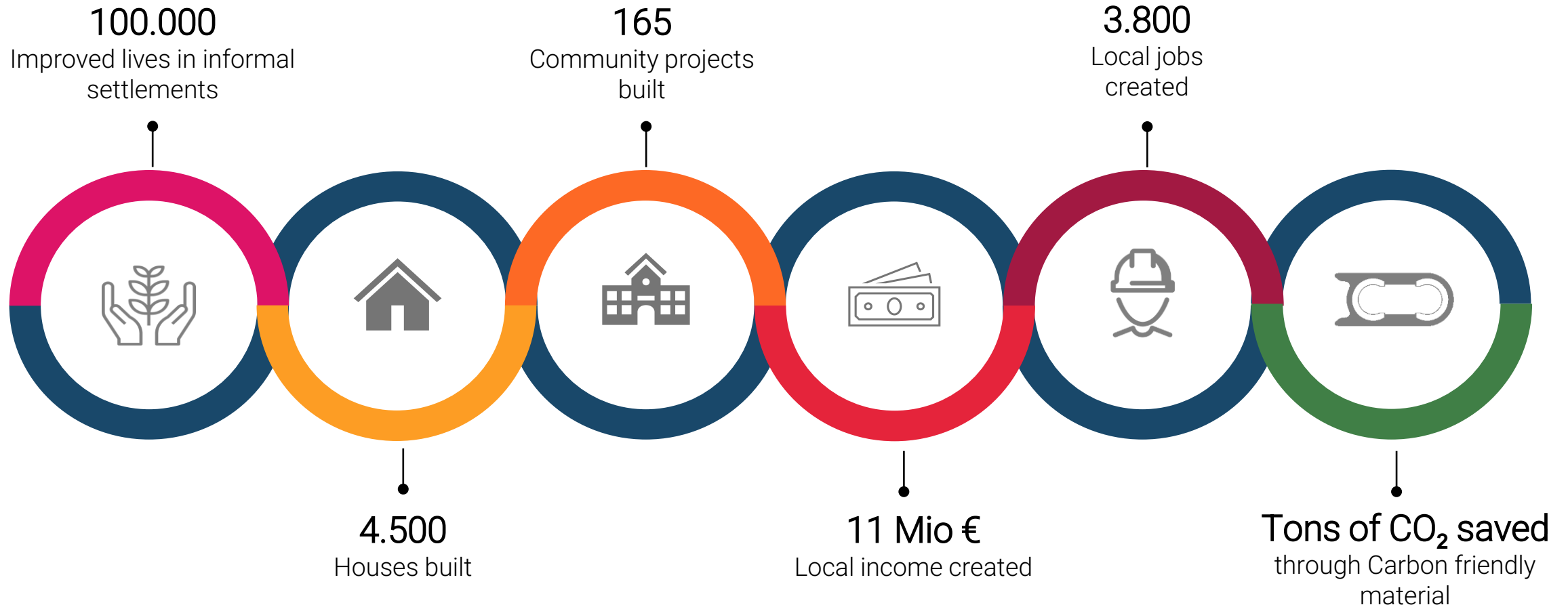
5 storey school building from a client in Kibera.



The whole school building has been constructed very fast within 110 days.

Our goals for 2030

Join us to create long-term impact through sustainable, community-oriented construction



Outlook – ongoing research & development

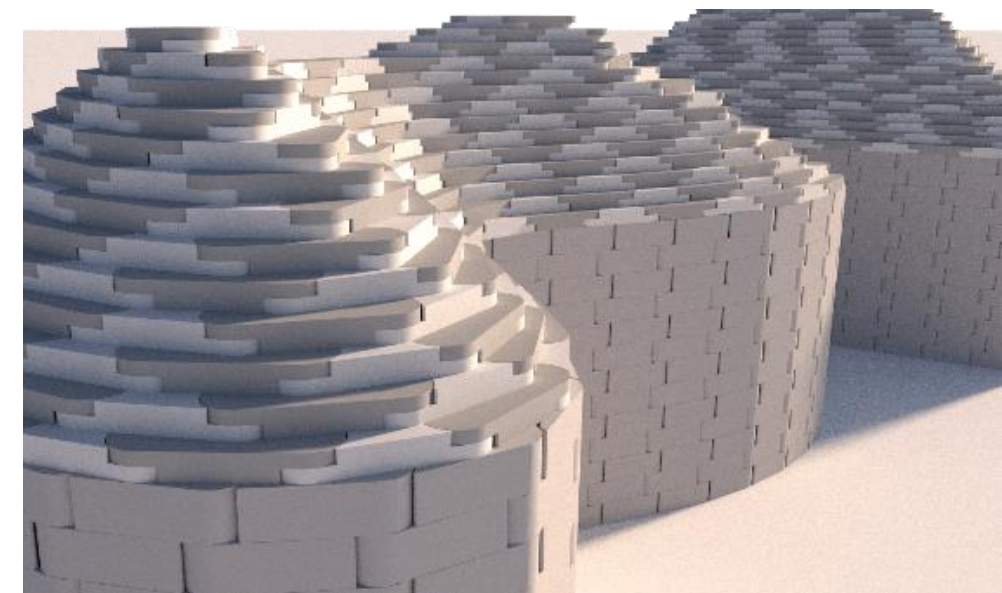
CO2 - friendly materials and expansion of the construction system



**Hemp and
Lime**



**Cement free
concrete**



**Compatible
roof system**



Two approaches for sustainable materials have been investigated with strong partners from Industry and from ETH Zürich. The base for a new roof system has been developed through a PhD fellowship.

No need for:
Mortar, plaster or formwork

1

Added functions:
Blocks can double as flexible, reusable formwork.

2

Minimum use of materials:
Only 1/3 volume a full wall with only 10% cement

3

Focus on circularity and waste reduction:
TwistBlocks can be dismantled up to 90 % and be reused

4



Circular
processing ladder

Refuse

Rethink

Reduce

Reuse

Repair

Refurbish

Remanufacture

Repurpose

Recycle

Recover



Source: Amsterdam Circular Strategy

Research & Development – TwistBlocks out of Hemp

More sustainable TwistBlocks are a longterm goal of Start Somewhere



Please visit us on:

www.startsomewhere.eu



Transsolar
KlimaEngineering



TRANSFORM8

LEICHT



OSTBAYERISCHE
TECHNISCHE HOCHSCHULE
REGENSBURG



Habitat
for Humanity®

sam - architects



VISIOTECH



TECHNISCHE
UNIVERSITÄT
DARMSTADT

ÖAW

ÖSTERREICHISCHE
AKADEMIE DER
WISSENSCHAFTEN

mds.



TECHNICAL UNIVERSITY OF KENYA
Education and Training for the Real World



Team Germany and Team Kenya with the first ever produced TwistBlocks and the first TwistBlock wall in Kenya.
Below Start Somewhere's partner and supporter network.