

How to timber together:

How to build

Why? What?

How?

temporary structures

that spark and facilitate

a collective while not to wasting human energy, falling prey energy and resources.

Temporary occupations are an interesting tool to swiftly adapt buildings to new needs.

Due to its fast character, choices are made instantly and directly get a physical result.

CONSTRUCTLAB identified three ways of dealing with modular and temporary structures in a sustainable way.

The downside is that budgets and research for sustainable material choices are often limited.



Overtredders W



Tom Sachs

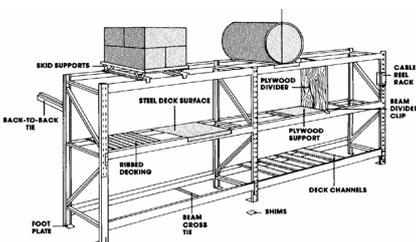


Urban Camping

1. The material is never altered, no cuts or punctures only standard sizes. Structures are assembled by reversible connections such as straps and rope. After the project the raw materials can be used like new.
2. The material is altered in a specific structure that can be put together and taken apart several times.
3. The material is assembled in a specific structure and is never taken apart, the structure moves in its totality.

This publication further explores the second method as it seems to give the most freedom within our projects.

Through researching all sorts of building methods, pallet racking systems and scaffolding became a point of focus.

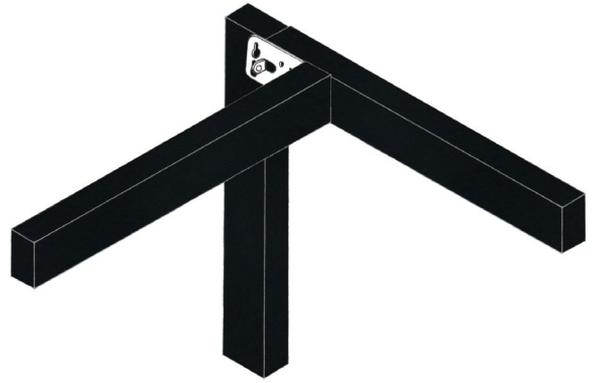


These systems are used for all sorts of purposes by using a similar kind of clicking connection. The downside is the price and thus the barrier to using (or hacking) many of them in a temporary setting is high.

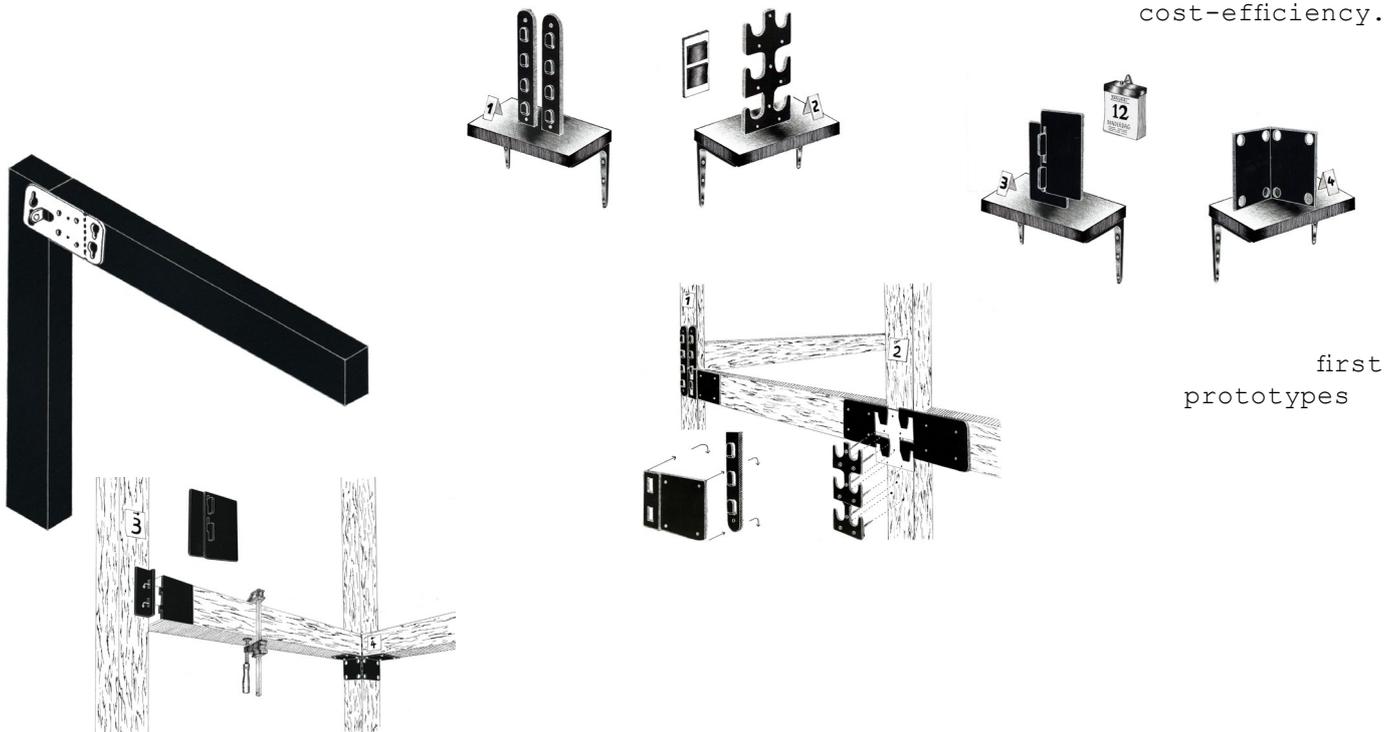
CONSTRUCTLAB became interested in developing a system to connect widely available inexpensive, sustainable building materials that are connected in a similar way as these rack systems.

The aim was to develop a connector that gives the possibility to

1. Design and build structures that can be put together and taken apart.
2. Design structures that can be altered and further built upon infinitely.
3. Combine secondary materials on a structure using the same connector.

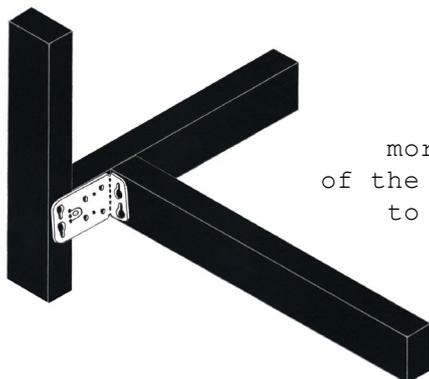


Timber became a logical central element for the system, because of its durability, low CO2 impact and cost-efficiency.



In temporary architecture single use of wood occurs commonly, destroying the material after the project. Wood is quite a sustainable building resource compared to many others, capturing CO2 instead of emitting it.

Even when wood constructions are designed with the idea to use them again screws are commonly used to hold everything together. In case a screwed together structure needs to be transported, altered, or removed those screws are taken out and the original wooden planks are scarred with screw holes. Each alteration or transportation of the structure creates more scars resulting in a numbered use of the raw material, making it hard to design and build in a sustainable way.



CONSTRUCTLAB looked to transform the correlation of temporary occupation architecture and the finite use of timber.

By looking for a certain construction wood that is affordable, durable and widely available.

Scandinavian Lumber Standard (SLS) seemed the way to go.

SLS, the European counterpart of Canadian Lumber Standard (CLS) is a widely produced construction wood.

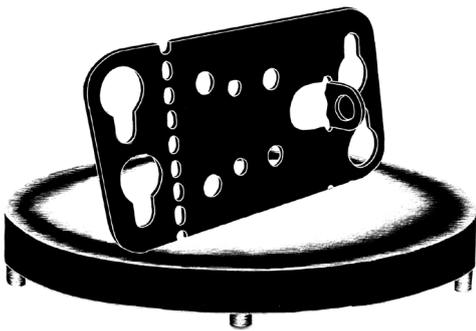
It is usually manufactured from kiln-dried fir, pine, or spruce.

It is then treated, planed, and finished with rounded edges to create accurate and precise tolerances.

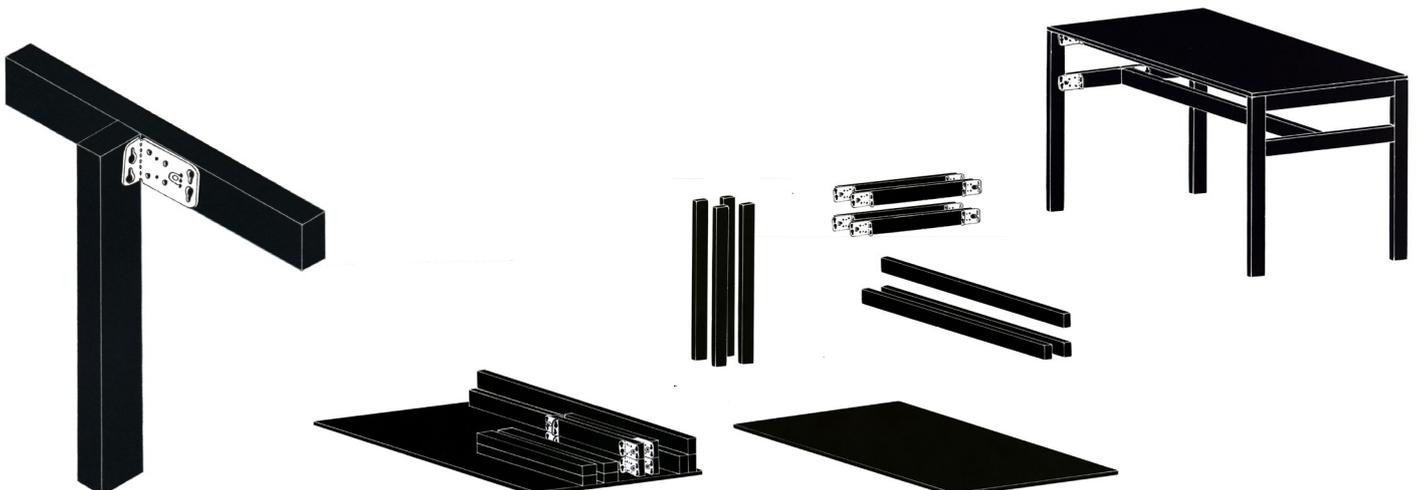
Due to its curved edges and smooth finish SLS is easy to handle and ferry.

Its strength and durability over other types of wood timber make it ideal for construction and internal structural work. Because it is available in varying lengths and widths it minimizes cutting, thus eliminating waste.

CONSTRUCTLAB developed a simple yet effective connection piece combining the versatility of scaffolding connections with inexpensive timber.



One connector is capable of connecting three SLS beams in all three axes, while allowing secondary materials to be added on the structure.



This publication
is made to offer
different interactions
with building.

Is it building something from scratch
with a set of connectors and a bundle of SLS,
or altering structures that were already
placed earlier in a CONSTRUCTLAB project,
transporting structures to a new context.

CONSTRUCTLAB believes the act of building can become
a liberating tool in the current pressured
landscape of temporary occupations.

CONSTRUCTLAB is a
supranational multi
disciplinary network
breaking with traditional
divisions of architecture.
The organisation engages a team of
multitalented designer-builders as well
as sociologists, urban planners,
graphic designers, curators, educators and
web developers who carry the creative process
from the drafting table into the field.

With
emphasis on
collaboration, both
with one another and with
members of the community,
CONSTRUCTLAB's practitioners take on a
variety of projects, permanent and temporary,

At the heart of CONSTRUCTLAB's work which
includes commissioned projects throughout
the world is a desire to enhance feelings
of community and heighten the sense of place.

This publication accompanies a new
construction system for the BROEI project
in Ghent, Belgium by CONSTRUCTLAB.

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