



Allégra Luxembourg

PROJECT

Allégra

LOCATION

Leudelange, Luxembourg

CLIENT

CDCL

ARCHITECTURE

Architecture +
Aménagement S.A.

**START OF
CONSTRUCTION**

May 2020

COMPLETION

January 2022

LENGTH

46.8 m

WIDTH

40.6 m

HEIGHT

13.2 m

**NUMBER OF FLOORS
ABOVE GROUND**

4

**GROSS FLOOR
AREA (GFA)**

5,600 m²

**USABLE FLOOR
SPACE**

4,595 m²

Combining proven sustainability with urban architecture

CREE's strategic partner, CDCL in Luxembourg, has set a new benchmark in the Luxembourg construction industry and illustrates the significant advantages of precast manufacturing combined with the CREE building system. Allégra is a modern 5,600m² building in the middle of Leudelange, Luxembourg, which appears to be two separate complexes but upon closer examination, observers will find them connected.

The four above-ground floors were built with the highest level of prefabrication, especially the state-of-the-art façade, which was already installed off-site. This exemplifies the highest degree of prefabrication ever used on a timber-hybrid building. This allowed CDCL to erect the stunning office at an insane speed despite adverse weather conditions, and even scaffold-free.



Facts

TYPE OF USE

Commercial

LOCATION

Am Bann business park
in Leudelange

CERTIFICATION

BREEAM very good,
targeting nZEB
(nearly Zero Energy Building)

WEATHERPROOF BUILDING TECHNOLOGY

Weatherproof components
enabled fast assembly
despite unfavorable weather
conditions during the
construction process

DIFFERENT LAYOUTS

From single offices to full-
floor open office spaces.
Three underground levels
including parking

ACTIVATED SLABS

Integrated heating pipes
in the concrete part of the
components result in an
energy-efficient solution
through thermal mass
activation plus time savings
during the construction

ENERGY EFFICIENT

Building heat provided by
geothermal heat pumps,
photovoltaic installation
produces 27,000 kWh p.a.

BUILDING INFORMATION MODELING

Advanced documentation
of the planning and
construction process.
Building data for all
components, logistics,
assembly, and operation

INTELLIGENT MANAGEMENT SYSTEM

Reduction of electrical
loads, remote management
of certain functions, and
anomalies detection

MODULAR CONSTRUCTION

Full system assembly
in 9 weeks (North wing)
and 4 weeks (South wing)

BEATING THE SCHEDULE

Acceleration of assembly
time of the building's second
part due to the advantage of
learning the repetitive tasks
of a systemized construction