



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

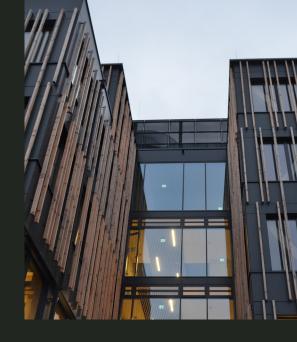
SPACE

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 fullfloor 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