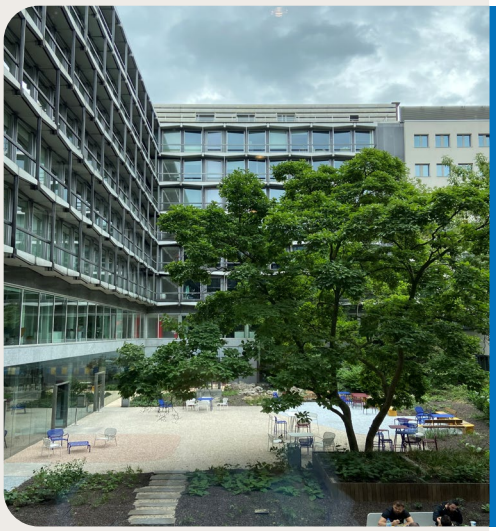
WAVETHRU by AGC



SUCCESS STORY with Befimmo

# ARTS 56

Restoring high-quality, multi-operator mobile telephone coverage for building occupants

**CUSTOMER**
Befimmo

**BUILDING**
ARTS56

**LOCATION**
Brussels

**OCCUPIED BY**
11 tenants spread across 7 storeys
+ 1 coworking centre

**NUMBER OF GLAZING UNITS TREATED WITH WAVETHRU**
300

**PROJECT DURATION**
3 weeks

**MOBILE SIGNAL IMPROVEMENT**
Up to x50 for all operators

> AFFORDABLE, MULTI-OPERATOR SOLUTION THAT WAS EASY TO DEPLOY AND IS SUSTAINABLE…

## CONTEXT

- → 28 000 m² of office space spread over 8 floors.
- → The building is 20 metres deep and features a conventional composition of high-performance double glazing, aluminium frames and reinforced concrete pillars. All the facades are glazed.
- → In terms of interior layout, some floors are arranged as open plan office space while others have been organised into meeting rooms.

## CHALLENGE

Occupants complained about issues with mobile telephone coverage: difficulty making and receiving phone calls as well as surfing the web via mobile data. As the building is occupied by several companies that use different mobile operators, the traditional active solutions offered by the operators were expensive to set up and often only applied to a single operator.

## PROPOSED SOLUTION

WAVETHRU is a technology that uses a laser to treat some of the double glazing units to ensure they let through the radio waves used in mobile telephone communications. This solution does not alter the thermal and aesthetic properties of the glazing in any way.

## RESULTS

- → Coverage for all 2G/3G/4G and future 5G technologies present outside the building was restored.
- → Analog (2G/3G) and digital (4G) voice calls can now be made on all floors treated, regardless of mobile operator used.
- → Signal strength was improved by 5dB to 16dB (depending on frequency) for all mobile operators. For users, this translates into more information routed via 4G and therefore faster information transfer and more bandwidth.

WAVETHRU by AGC

## INSTALLATION IN 3 PHASES

### DIAGNOSIS

A mobile coverage assessment was carried out both outside and inside the building and users were surveyed. The diagnosis showed that signal attenuation was caused by the building envelope, and that the priority areas to be treated were located on the lower floors on the courtyard side.

### TREATMENT

The WAVETHRU treatment was applied to glazing units on the three lowest floors, i.e. 300 glazing units spread across the various facades. All of the glazing units on the courtyard side were treated and half of the units on the street side

### POST-TREATMENT ASSESSMENT

A post-treatment mobile coverage assessment was carried out, as well as another user survey, to verify that the situation had indeed improved.

① DIAGNOSIS

② TREATMENT

③ POST-TREATMENT ASSESSMENT

## TESTIMONIALS

"Usually I don't have any network signal, the entering calls do not go through and the customers fall directly on my voicemail. When I get a little closer to the windows, I have two bars, which is an improvement for me."

"Now my calls are brilliant again! I am delighted to be able to receive incoming calls again, and myself to be able to call again. The quality of the call is really top notch. And it does not matter where, there is signal now everywhere. I am more than satisfied, thank you."

Building occupant
Souade ATORI, lawyer

" BEFORE, WE COULDN'T MAKE OR RECEIVE CALLS. NOW OUR CALL QUALITY IS PERFECT, NO MATTER WHERE WE ARE IN THE BUILDING. OUR CUSTOMERS CAN ALWAYS REACH US, WHICH IS IMPORTANT FOR OUR BUSINESS."

Employee at
Cushman & Wakefield

| OPERATORS | BEFORE WAVETHRU | AFTER WAVETHRU |
|---|---|---|
| orange | | |
| | | |
| | | |

## CONTACT US NOW AT WAVEBYAGC@AGC.COM