

# Zwart Janstraat Rotterdam

## Rotterdam, NL



## Case Study



### Property Owner

IBT



### Main Contractor

Den Butter & Voogt



### Architect

JADE architecten



### CLT by

Ekoflin

## Straviwood WallBreak-S Straviwood WallBracket

- Resilient strip for acoustic decoupling of CLT walls (Straviwood WallBreak-S)
- Acoustic angle bracket for structural joints in CLT construction. Ideal for CLT constructions where shear and vertical load distribution between structural elements is intended. (Straviwood WallBracket)

## OVERVIEW

Zwart Janstraat, nestled in the heart of Rotterdam's historic Old North district, is experiencing a vibrant resurgence. Teaming up harmoniously with Noordmolenstraat, it collectively shapes the dynamic Noorderboulevard. Yet, a parcel of land had remained dormant since the turn of the millennium, patiently awaiting a new purpose. The long-awaited moment has arrived: two distinct and exceptional townhouses, along with a versatile commercial space, have been erected. Throughout the realization of this endeavor, a close collaboration unfolded with Ekoflin, a distinguished leader in supplying Cross-Laminated Timber (CLT).

The central challenge encountered in this venture revolved around controlling sound propagation within the wooden framework of the edifice. Given the lighter nature of timber structures, there exists a heightened susceptibility to sound transmission compared to conventional construction materials like concrete or steel. Hence, a paramount objective was to meticulously curtail sound propagation across the cross-laminated timber walls and floors, all while ensuring that the walls were properly anchored to the floors.



## SOLUTION

Our local partner, Delta-L, harnessed their expertise to ingeniously tackle these intricate acoustic hurdles.

The CLT walls underwent a process of deliberate decoupling, facilitated by the implementation of elastic [Straviwood WallBreak-S](#) strips. This strategic measure adeptly severs the path for impact sounds and vibrations to traverse. Introducing polyurethane foam strips, each 12.5 mm in thickness and 100 mm in width, beneath the CLT walls situated across the 1st and 2nd levels further fortified the acoustic insulation.

In the realm of wall-to-floor integration, the adept utilization of [Straviwood WallBracket](#) emerged as the linchpin. Remarkably, for this specific undertaking, a tailor-made variant was conceived to withstand a substantial load of 72 kN per anchorage while concurrently delivering exemplary acoustic separation.

## AT A GLANCE

### CHALLENGES

- Curtail sound propagation across the cross-laminated timber walls and floors
- Ensuring that the walls were acoustically decoupled while at the same time properly anchoring them to the floors

### BENEFITS

- Quick and easy to install solutions
- Ideal for wall-floor decoupling in CLT construction
- Compression via foolproof system ([Straviwood WallBracket](#))

**72 kN**  
per  
bracket

