



Dirk Mortier

## *Rediscovering the Half-Timber Tradition*

*Redescubrir la tradición del entramado de madera*

*Redescobrir a tradição das casas em enxaimel*

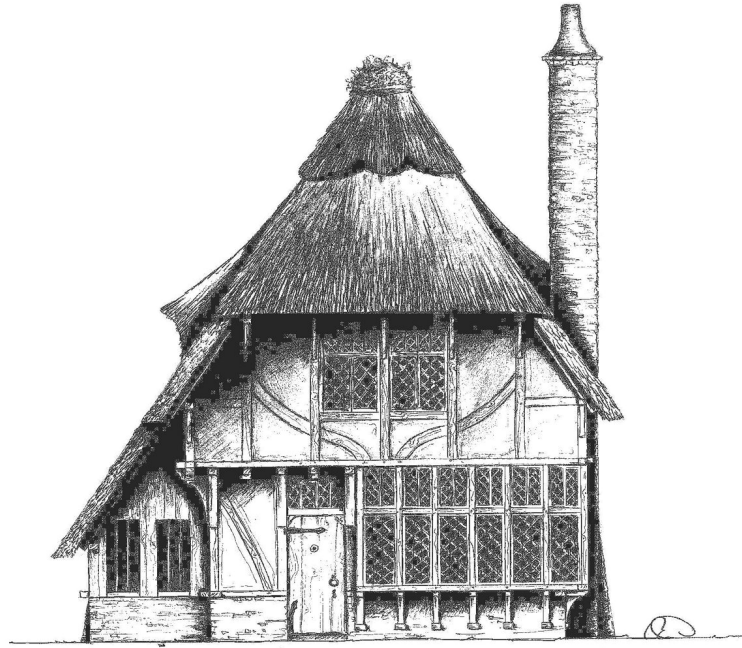
### Abstract | Resumen | Resumo

After many years working as a commercial manager in the petrochemical industry, I decided at the age of forty to radically change direction and devote myself to timber-framed architecture—a tradition that in Belgium was nearly lost. I studied historic rural buildings, visited open-air museums, and began restoring and building with traditional techniques and natural materials such as green wood, reclaimed bricks, and lime mortar. I seek to show that these methods are not relics of the past but viable, sustainable approaches for today. I also feel a responsibility to pass on this knowledge. Through regular workshops and hands-on activities with young people, I help preserve traditional know-how and encourage future generations to value and continue these time-tested ways of building.

Después de trabajar largo tiempo como director comercial en la industria petroquímica, a los cuarenta años decidí cambiar radicalmente de rumbo y dedicarme a la arquitectura de entramado de madera, una tradición que en Bélgica estaba a punto de desaparecer. Estudié construcciones rurales históricas, visité museos al aire libre y comencé a restaurar y construir con técnicas tradicionales y materiales naturales, como madera fresca, ladrillos recuperados y mortero de cal. Intento demostrar que estos métodos no son reliquias del pasado, sino enfoques viables y sostenibles hoy en día. También me siento responsable de transmitir estos conocimientos. Mediante talleres periódicos y actividades prácticas con jóvenes, contribuyo a conservar los conocimientos tradicionales y animo a las generaciones futuras a valorar y mantener estos métodos de construcción de eficacia probada.

Após muitos anos a trabalhar como gestor comercial na indústria petroquímica, decidi, aos quarenta anos, mudar radicalmente de rumo e dedicar-me à arquitetura em enxaimel – uma tradição que, na Bélgica, estava quase perdida. Estudei edifícios rurais históricos, visitei museus ao ar livre e comecei a restaurar e a construir com técnicas tradicionais e materiais naturais, como madeira verde, tijolos reutilizados e argamassa de cal. Procuro mostrar que estes métodos não são relíquias do passado, mas abordagens viáveis e sustentáveis para os dias de hoje. Também sinto a responsabilidade de transmitir este conhecimento. Através de workshops regulares e atividades práticas com jovens, ajudo a preservar o saber tradicional e incentivo as gerações futuras a valorizar e continuar estas formas de construção validadas pelo tempo.

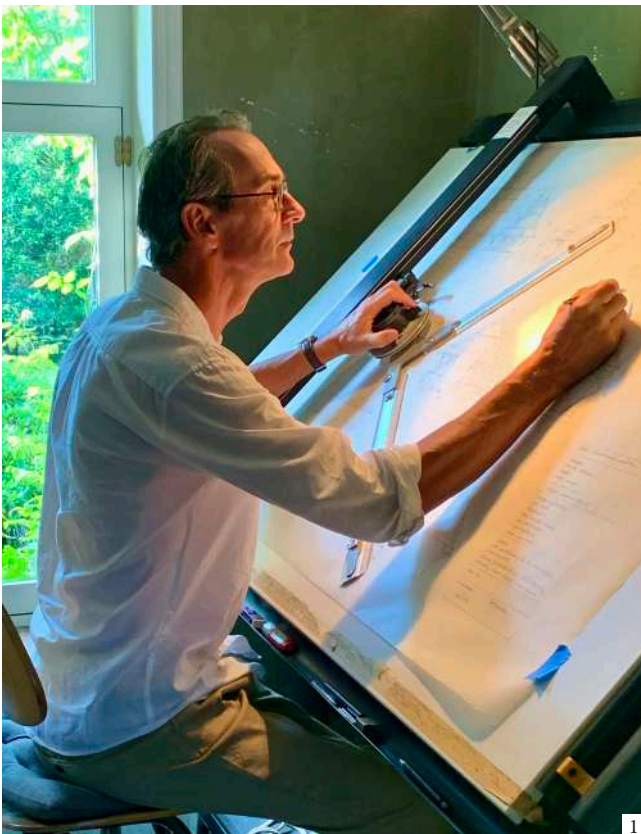
< Dirk Mortier's workshop



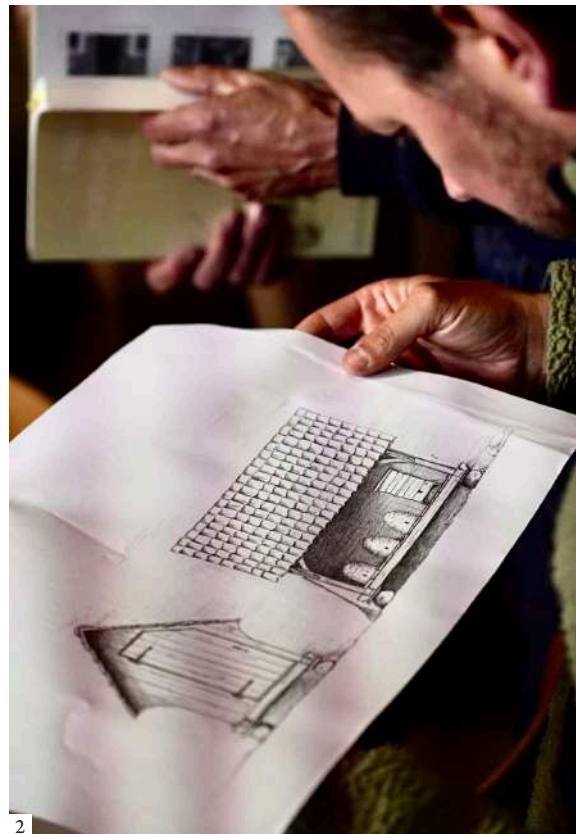
Sketches for upcoming half-timber structures

My journey into the world of timber-framed architecture began not in a carpenter's workshop but in the offices of the petrochemical industry. For years I worked as a commercial manager, overseeing transactions in the sector. But at the age of forty I reached a turning point. Realizing that I had two more decades of work ahead, I began to question how I truly wanted to spend my time. I had always admired traditional craftsmanship, so I decided to take a chance and attempt to revive a nearly forgotten architectural heritage.

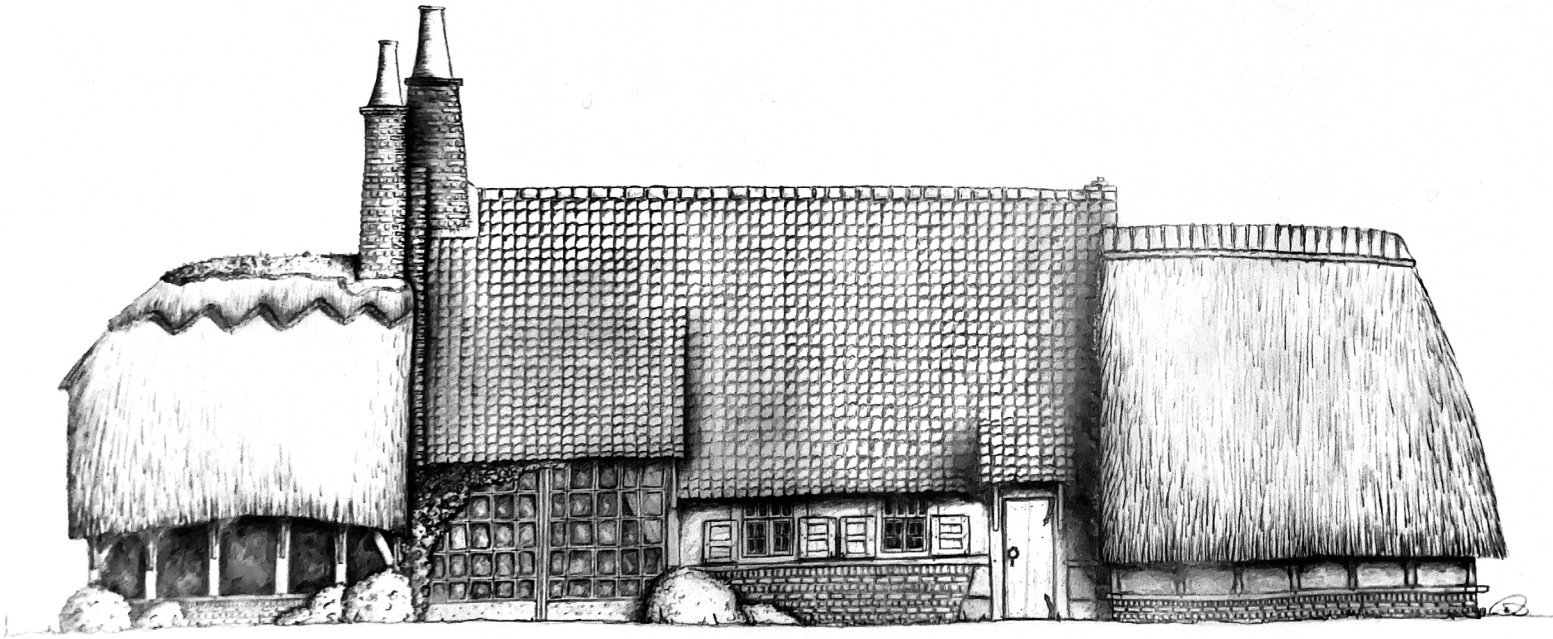
- 1: Designing a new timber-frame project at the drawing table (Emmanuel Sepulchre)
- 2: Discussing a commission with a client



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Half-timber architecture, once prevalent in Flanders, has largely disappeared. War and industrialization have erased most remnants of it from the landscape and modern regulations make its revival difficult. Post-war reconstruction prioritized efficiency, resulting in the replacement of vernacular structures with standardized, mass-produced ones. The rural architecture that once defined the region was deemed old-fashioned and impractical.



Selecting and measuring trees before milling



1: Restored barn in Brakel, Belgium

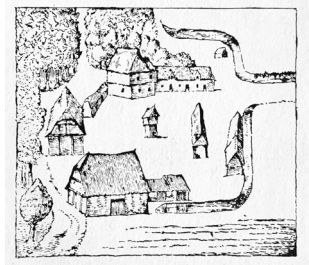
2: One of Dirk Mortier's first reconstructions, completed in 2007 in Ellezelles

This loss goes beyond aesthetics; it is a break in cultural heritage. For centuries, builders and artisans selected local timber, handcrafted joints, and worked with natural materials suited to each place—practices shaped by a deep understanding of those materials and by the climate and community. Today, these principles have largely been forgotten and replaced by rigid construction codes that ignore traditional methods.

Finding my place in construction wasn't straightforward. I wasn't the only one wanting to build and it took me time to find my way. That changed the day I came across a book by a builder of oak-wood structures, full of pictures of timber-framed buildings. These, however, were commercial models—pre-designed and fabricated for distribution across the continent. While they looked appealing, to me they seemed soulless, lacking the authenticity I sought.

Eclectic half-timber residence in Koersel, completed in 2018





Original miniature from the seventeenth-century



Reconstruction of a Flemish pigeon tower inspired by a seventeenth-century miniature

This made me reflect on my own region. Every place has its own architectural identity, yet here in Belgium, particularly in Flanders and Wallonia, much of the timber-framed heritage contributing to that identity has disappeared. Romanticized timber villages were to be seen in fairy-tale books and films, but most of our historic wooden-framed buildings had gone. Flanders, having been a battlefield for centuries, had seen much of its architectural wealth wiped away by successive wars. That realization prompted me to explore what remained of our traditions and to reconnect with our ancestral building heritage.

Determined to revive this tradition, I immersed myself in the study of historical rural structures, visited open-air museums such as Bokrijk in Limburg, and explored foundational texts such as *Landelijke Architectuur* by Clemens V. Trefois and *Hoeven op land gebouwd* by Vic Goedseels and Luc Vanhaute.

One of my first experiences was with a timber-framed barn that a local farmer intended to dismantle and use as firewood. Recognizing its value, I was able to acquire it, hoping to reconstruct it. However,



1: Timber-framed pigeon tower built for a landscape exhibition in Beveren-Waas, Belgium

2: Assembling two timber pigeon towers in the workshop

3: Completed pigeon tower integrated into the rural landscape (Emmanuel Sepulchre)

bureaucratic hurdles in Belgium made rebuilding impossible, and in the end I had to sell it on to someone in the Netherlands, where it was successfully reassembled in a village.

This first experience strengthened my mission: to design and build using traditional techniques adapted to modern needs. Every step of my work, from sourcing timber to crafting joints and assembling structures, is performed in keeping with former methods. Unlike modern timber construction, in which beams are pre-cut to standardized sizes, I work with varying dimensions based on historical models.

Another defining project was the reconstruction of a pigeon tower, inspired by a seventeenth-century miniature illustration. In Flanders, all historical timber-framed dovecotes had been demolished, with only written references and drawings remaining. I built my first such tower as a demonstration at a country fair, and to my surprise, the organizers asked me to leave it there permanently. This exposure led to commissions and helped reignite interest in this nearly defunct architectural form.



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1: Archival image of a cart shed destroyed during the First World War  
2: A surviving shed identified for dismantling and reassembly  
3-5: Step-by-step restoration of the timber cart shed



Restored cart shed on its historical site in Westvleteren, Belgium

A larger project was the restoration of a historic wagon shed originally located next to a residence of the Knights Templar. The only surviving record of it was a black-and-white photo from the time of World War I. We found a similar shed just a few miles away and carefully dismantled it so as to move it piece by piece to the Templar site. Using traditional joinery techniques with wooden pegs rather than nails, we ensured that the structure retained its original integrity. This project reflected the flexibility of historical construction—many timber buildings were designed to be disassembled and relocated, adapting to their owners’ needs over generations.

I have also been involved in the design and construction of numerous barns, garden structures, and homes using traditional Flemish timber framing. These projects emphasize the integration of architecture with landscape, using natural materials that weather gracefully over time. The realization of these commissions has demonstrated that traditional building techniques are not just relics of the past but viable solutions for sustainable architecture today.

Unlike in most modern timber construction, which relies on industrially processed wood, I select trees directly from the forest. These must be straight, not unduly knotty, and from the middle of the forest rather than the edges, where they are more exposed to wind and develop a twisted grain. Contrary to modern custom, I work with green wood, which shrinks into place as it dries, tightening the joints naturally. This practice, seen in historical buildings, has proven to be both effective and enduring.

Design drawing and finished timber chicken coop





Additionally, I use reclaimed bricks and traditional lime mortar for infill and masonry work. These materials, when properly sourced and applied, provide excellent thermal performance and breathability, preventing moisture buildup and structural decay.

In my workshop I keep a collection of tools that tell the story of craftsmanship from another era. One of my favorites is a plane that has a handle carved from a single piece of mahogany, evidencing the attention to detail that went into making it. In former times, craftsmen didn't just buy tools; they made them themselves, purchasing the ironwork but handcrafting the wooden parts to suit their needs. These were more than just functional objects—they were infused with skill and pride. That's why I keep them on my bench and share them with young visitors, letting them experience the difference between mass-produced plastic-handled tools and those made with care to last for generations.

1: Exhibition stand presenting Dirk Mortier's work at the Beervelde Country Fair

2: Demonstration session during a traditional carpentry workshop (Emmanuel Sepulchre)

3: Timber-frame assembly under way in the workshop

> Timber pavilion with integrated chicken coop designed for a garden



Despite the wealth of historical knowledge that exists, traditional architecture faces challenges in Belgium today. Regulations often favor modern construction techniques, imposing structural requirements incompatible with older methods. Official guidelines frequently prescribe oversized beams on safety grounds, despite the evidence of centuries-old structures still standing with much smaller sections. Many planners and officials lack the experience to assess the real structural integrity of traditional techniques, which results in excessive reinforcement requirements.

I remember a discussion I had with an architect about a timber-framed building we were working on. Traditionally, these structures stand freely on their stone foundations without any anchoring—like the historic buildings in Belgium or the ancient structures in China’s Forbidden City, which have survived for thousands of years in spite of earthquakes. But the architect was convinced that the walls had to be anchored, fearing that strong winds might carry them away. Despite his 20 years of experience, he couldn’t trust this long-standing method. He insisted I anchor the building, but I refused—and by that stage it wasn’t even possible to secure it as he wanted. If we look at centuries-



Fabrication of structural elements for the De Wilde–De Scheppe project in Laarne, Belgium



Installing the timber framework on site

old buildings in places like Colmar, France, we find none of them are anchored to their foundations, yet they have stood the test of time. Still, fear prevailed. It's strange—why doubt techniques that have worked for so long?

Another challenge is economic pressure in development. Traditional building techniques take time, and in an era where speed is prioritized, many clients are unwilling to invest in slow, artisanal methods. The general public often perceives traditional architecture as expensive or impractical while overlooking its durability. In contrast to modern structures, which often rely on synthetic materials that degrade over time, timber-framed buildings last for centuries if properly maintained.

What motivates me is not just the technical aspect of building but the joy of creating something that resonates with history and place. Many of my clients become enduring friends, and appreciate the spirit that goes into their homes. This personal connection is why I choose to remain a lone craftsman rather than expand into a commercial enterprise. I also feel a responsibility to pass on this knowledge,

Assembled timber truss during the erection of the structure in Laarne





Roofing work underway on the De Wilde-De Scheppe project



Completed timber pavilion

which is why I regularly share my experience with younger generations through workshops organized by La Table Ronde de l'Architecture, an organization that promotes craftsmanship and architectural heritage. These encounters serve not only to preserve traditional know-how but also to spark curiosity and enthusiasm in future builders, helping keep these methods alive.

Through continuing research, practice, and advocacy, I hope to inspire others to see that traditional architecture is a viable, living legacy that can contribute meaningfully to contemporary construction. If more builders, architects, and homeowners recognize their value, traditional techniques may again play a role in how we build for the future.

**Biography | Biografia | Biografia****Dirk Mortier**

Dirk Mortier (born 1965, Ghent) was the youngest of three brothers in a working-class family. His father, a house painter and interior architect (Sint-Lucas Ghent, highest honors), taught him the craft. After a twenty-year career as a commercial manager in the chemical and petrochemical industry, boredom at work prompted him to make a change, as he rediscovered his passion for built heritage and specialized in the design and construction of traditional half-timbered houses. Today his work combines craftsmanship, heritage, and sustainability, rooted in a deep respect for his region's culture.

Timber shade structure built by Mortier in his own garden

