



Raamland: Assemblages, on-screen and on-site

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RAAMLAND

Assemblages, on-screen and on-site

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Basing architecture on locally gathered reclaimed materials is becoming increasingly common. Such practice often downplays the role of representation, as design can be developed primarily through mock-ups using materials at hand.¹ *Raamland*,² a pavilion and community garden in Bruges designed by the authors' studio Norell/Rodhe, explores an alternative approach in which representation supports an extended design process. This involves documenting and assembling elements and materials on-screen, in a real-time rendered model, both before and in parallel with their assembly on site. This approach, which enabled much of the design to be developed remotely, has implications in which representation plays a crucial role. The rich materiality of the model became a means of overcoming the 'layers of abstraction' that make conventional CAD drawings ill-suited to reuse practice.³ Access to this materiality during the design process gave agency to the unique characteristics, such as texture and colour, that reclaimed materials typically possess. Constructing on-screen assembles with these characteristics present provided a way to test combinations of different forms and materialities, something that would normally require direct access to the material on site. Ultimately, the project yields a layered architecture that celebrates the diverse origins, histories, and temporalities of its constituent materials.

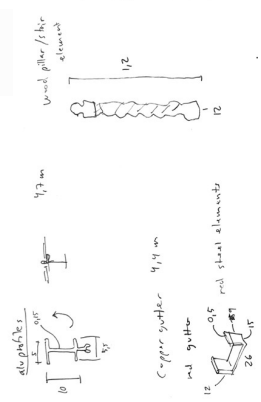
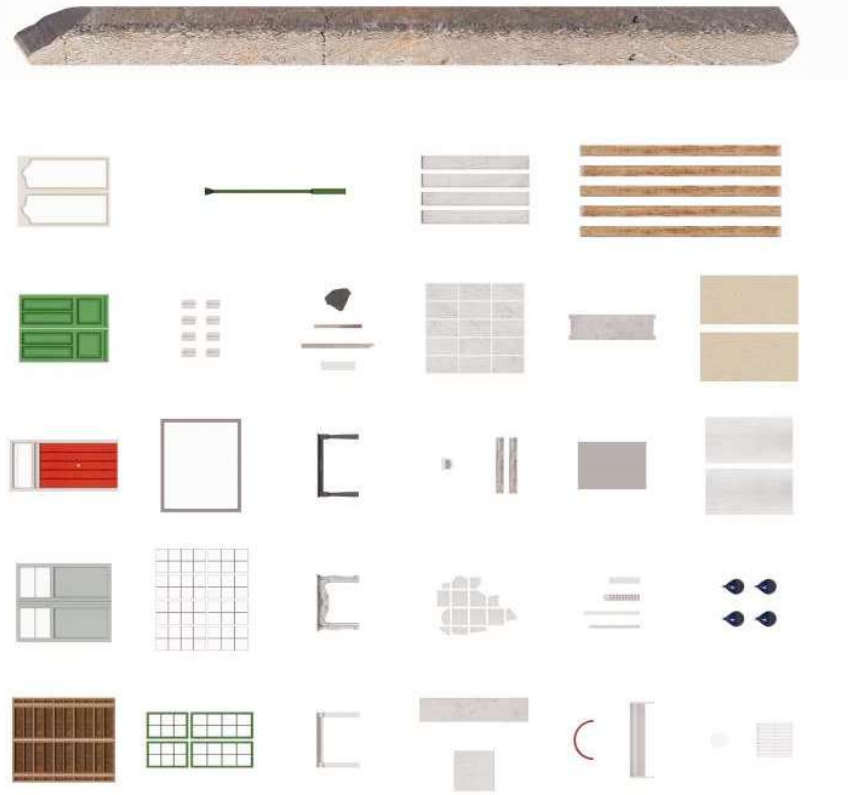
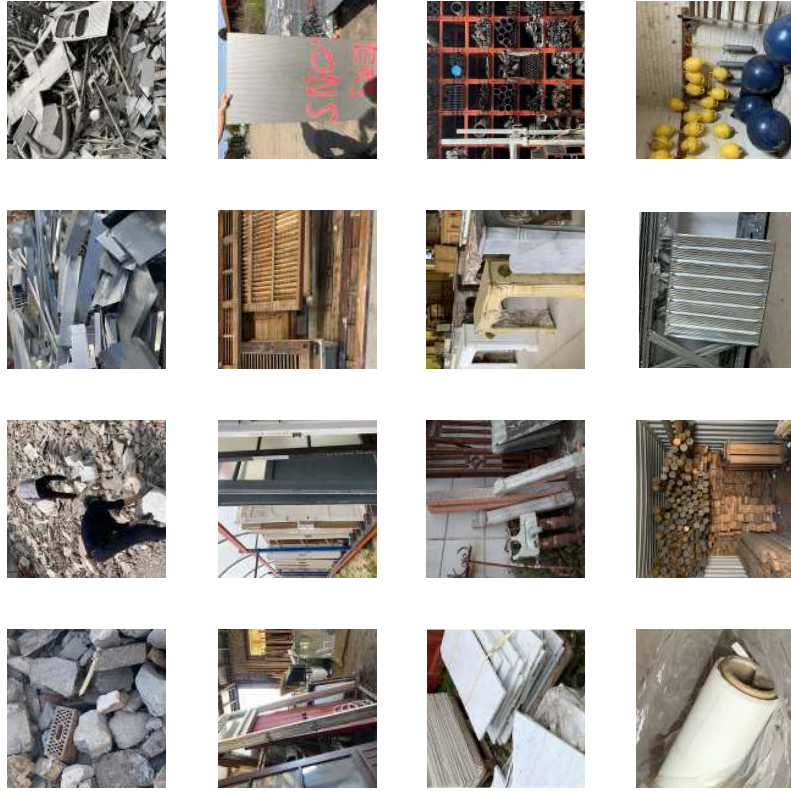
1 See Urszula Kozminska and Bie Plevoets, 'On Unbuilding: Overarching reflections on Practices in Research #05 Demolitions and Deconstructions', *Practices In Research*, issue #05 (December 2024), pp. 377–401 (p. 391).

2 *Raamland* was commissioned for the 2024 Bruges Triennial: Spaces of Possibility. Design: Norell/Rodhe, Daniel Norell and Einar Rodhe. Curators: Shendy Gardin and Sevie Tsampalla. Local architects: Dertien 12. Main contractor: HuisMus bv.

3 Maarten Gielen in Giovanna Borasi, Maarten Gielen, and Konstantinos Pantazis, 'Specifying from a Broader Catalogue', *Canadian Centre for Architecture*, 2017 <<https://www.cca.qc.ca/en/articles/issues/24/into-the-material-world/53665/specifying-from-a-broader-catalogue>> [accessed 6 August 2025].



Norell/Rodhe, *Raamland* (2024). The design and construction were based on reclaimed materials gathered from various contexts, including wall panels from an abandoned club in Oostende, second-hand Carrara marble tiles from Brussels and timber studs and plywood sheets from previous triennials.



To source materials, a series of excursions were undertaken to locations in the region such as recycling plants (first row), reuse retailers (second and third row), and a warehouse where leftover materials from previous triennials were stored (fourth row). Taking cues from Alison and Peter Smithson's notion of as-found, this involved understanding 'how the existing built fabric of the place had come to be as it was', as well as gathering and assembling materials 'where the art is in the picking up, turning over and putting with...'. 'Building a catalogue of objects was a design-oriented activity, characterised both by chance encounters with special finds that spurred the imagination and by a systematic process of surveying and sorting.'

4 Alison and Peter Smithson, "The "As Found" and the "Found", in *The Independent Group. Postwar Britain and the Aesthetics of Plenty*, ed. by David Robbins (The MIT Press, 1990), pp. 201-202 (p. 201).

Found elements and materials were measured and represented using texture-mapped models, with textures derived from photographs. The realism of these models in a real-time rendering environment makes it possible to assess the condition and characteristics of each piece in ways that extend beyond what regular wire-frame models can offer.⁵

5 Precedents for this approach that favours realism over abstraction in representation of material include drawings of elements for Sala Beckett by Flores + Prats.



MATERIALS TO LOOK FOR: INSURE REQUIREMENTS FOR THE GARDEN WALL

The wall facing the garden needs a specific design element that serves dual purposes: the flooring of the floor. This includes both vertical elements (small openings) as well as horizontal metal profiles along the bottom edge.

Vertical elements: Must be laser-cut metal elements, measuring ca. 2000 mm in height, depth ca. 100 mm, and width ca. 40 mm. Connecting against the white concrete floor with a 10 mm gap. The wall must have a 10 mm gap between the wall and the floor on the side of the screen and in the back.

Horizontal elements: Must be laser-cut metal elements, measuring ca. 2000 mm in height, depth ca. 100 mm, and width ca. 40 mm. Connecting against the white concrete floor with a 10 mm gap. The wall must have a 10 mm gap between the wall and the floor on the side of the screen and in the back.



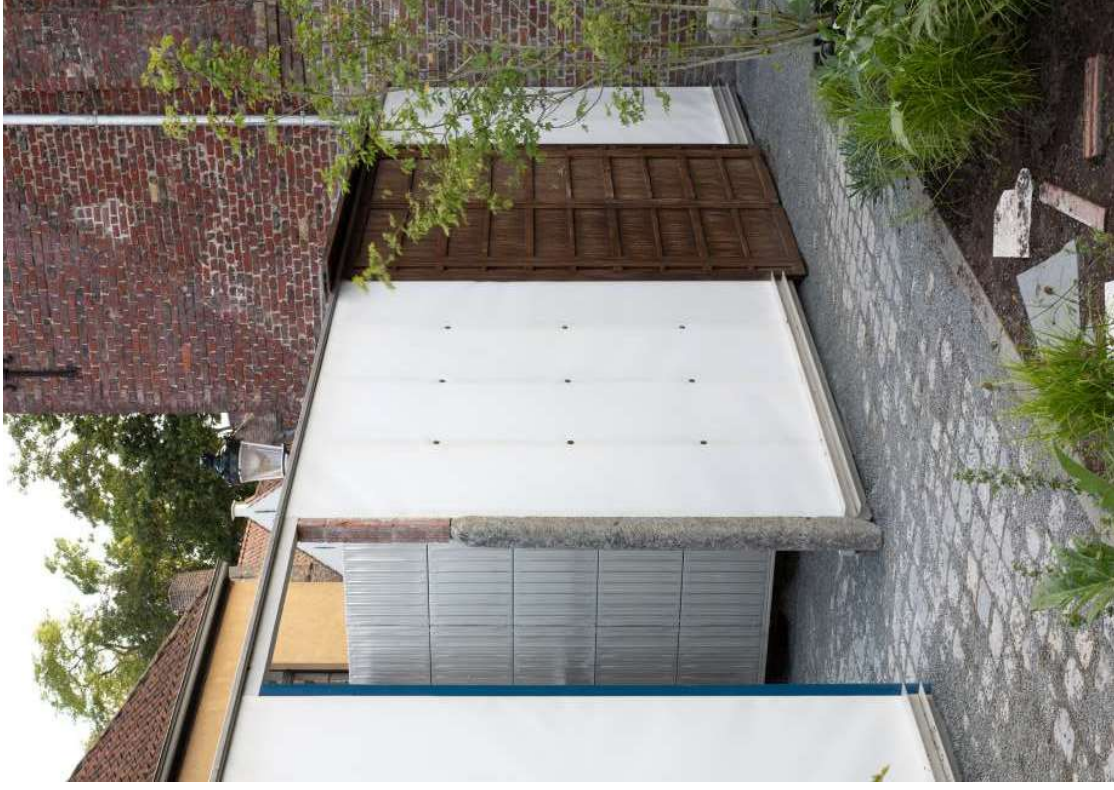
Material: Metal frame
D = 100-150 mm
E = 100-150 mm
Finish: Laser-cut
Dimensions: 2000 x 40 x 40 mm



Material: Aluminum profile
R = 125-200 mm
D = 125-200 mm
Finish: Anodized
Dimensions: 2000 x 125-200 x 40 mm

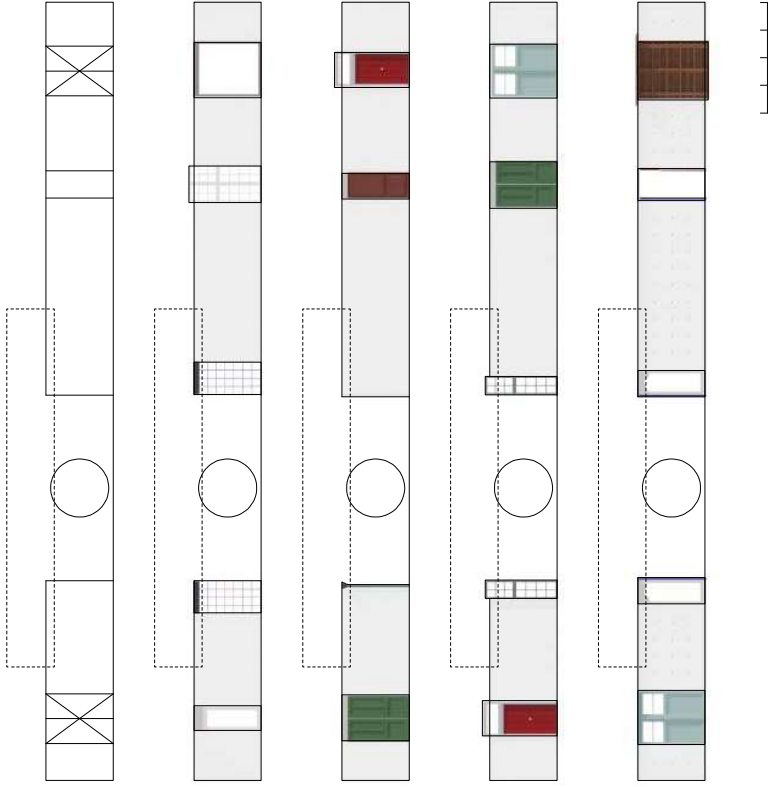


Material: Wood, aluminum
D = 125-200 mm
Finish: Anodized
Dimensions: 2000 x 125-200 x 40 mm



Rather than serving as a static vision of an anticipated result used to sell a proposal, rendered models became a tool for working remotely with a specific set of available resources. The continuously updated model served as a means to test compositions of elements against one another.

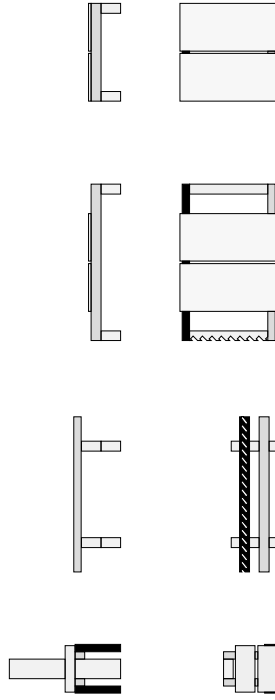
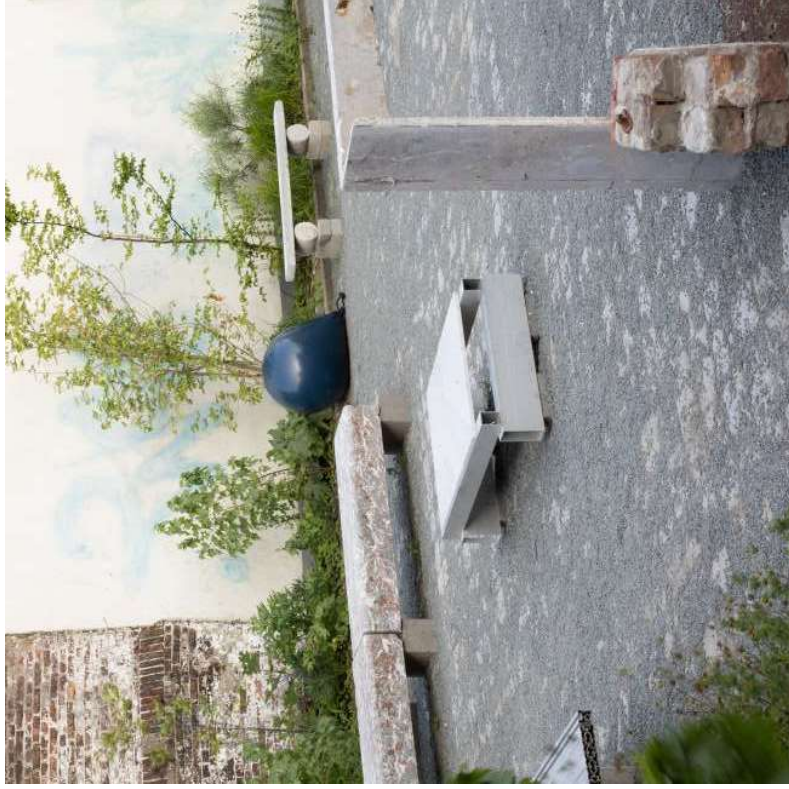
Norell/Rodhe, *Raamländ* (2024). The project deliberately extended the search for material beyond valuable items available on the market, such as doors from reuse retailers, to include waste materials such as concrete and brick beams and stone fragments.



Testing different elements against one another was carried out both at a detailed level in three-dimensional views and in elevation studies. The garden façade elevation featured a composition of doors, windows, and framed openings set against the abstract white surface of a fabric that had been reused from a previous triennial installation.



Loosely formed assemblages were developed into the pavilion and garden furniture through an iterative process of on-site and on-screen studies. Close collaboration with the contractor HuisMus by, led by Tim Van Gaever (pictured), was essential.



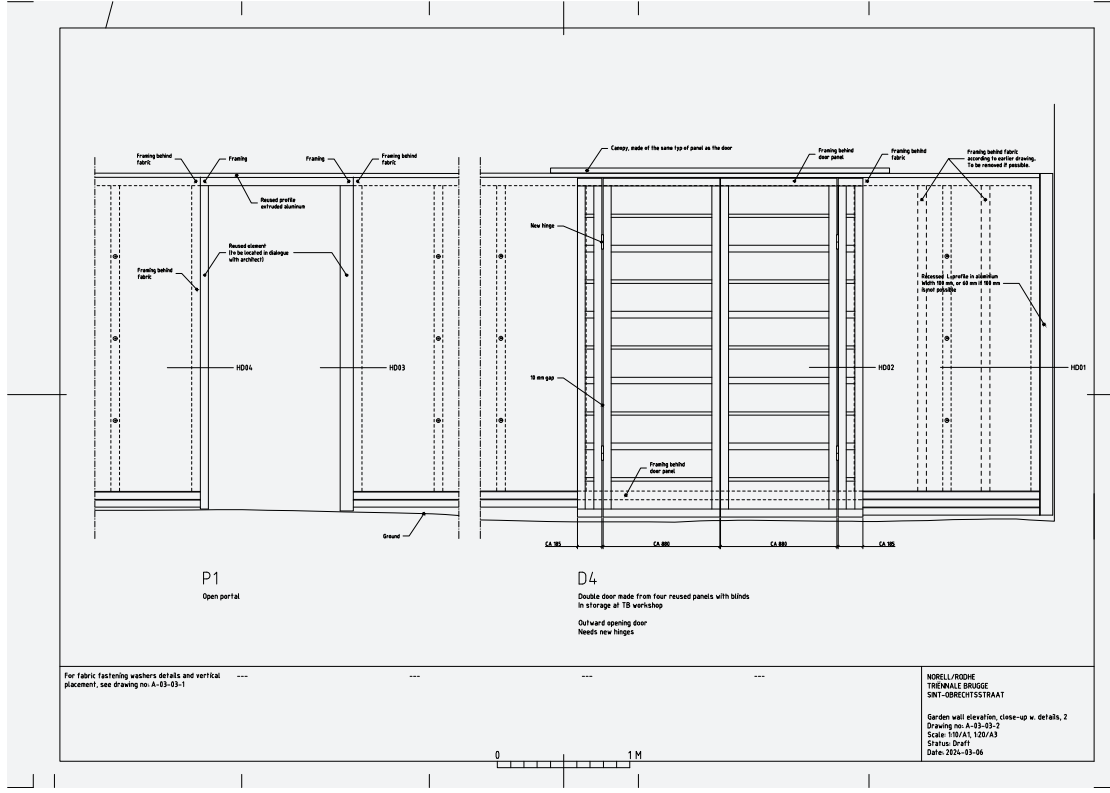
Furniture assemblages were developed by combining spontaneous on-site testing with analytical studies in drawings. This attuned the authors to different qualities that used objects possess, from reading their histories through features that reveal their 'other lives' to assessing them for what they might become, that is, for their potentiality as building materials.⁶

6 For a precedent for this way of viewing materials, see Tim Ingold, "The Materials of Life", in *Making: Anthropology, Archaeology, Art and Architecture* (Routledge, 2013), pp.17-52 (p. 17).

Norell/Rodhe, *Raamländ* (2024). The community garden furniture was constructed from reclaimed elements gathered from various contexts, including aluminium profiles from a metal recycling plant, marble blocks that had once formed steps in a grand staircase, and a mantelpiece sourced from an exclusive retailer for antique building elements.



In addition to supporting assemblage studies, the real-time rendered model worked as an immersive environment for walkthroughs during online meetings with collaborators such as the local architect or contractor. These on-screen discussions were made viable by the authors' numerous in-person visits, during which relationships with both materials and people had been established.



The real-time rendered model was complemented by a set of annotated construction drawings that were based on the model.



Norell/Rodhe, *Raamländ* (2024). The steel structure and roof cladding were the only parts of the project not based on reclaimed material. These elements were instead prepared for future reuse, for example by avoiding construction methods that would compromise the structural integrity of the beams, such as drilling and bolting.



Norell/Rodhe, *Raamländ* (2024). Once integrated into the pavilion, the gathered elements such as doors and windows established visual relationships with elements in the surrounding urban fabric to which they originally had belonged. In this way, the pavilion became a 'representation' of a category of materials that, for one reason or the other, had been discarded. This ability to 'speak' for streams of material with a low visibility in society became a defining feature of the architecture of *Raamländ*.