

# PRODUCTION & PARTS

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## CHOISE OF PROJECT

When we started the assignment, we began to brainstorm about which detail we wanted to make. We both agreed that it should be a detail that is made with a certain craftsmanship and where the material is used in a smart way. An architect who fits this design philosophy is Jaco de Visser. We made an appointment with him and sat down to see which detail would be interesting and which is also feasible to make. After looking at several projects, our choice finally fell on a renovation of an office property in Nieuwegein.

What makes this project special is that a timber roof is rarely used for such purpose. Gazebos usually one, or roofs that are not tied to structural requirements. The drainage of rainwater is often designed

in a way that it is a degradation to the overall design, it looks more like an extra accessory that is included, because it is required in the project. In the villa office in Nieuwegein, this accessory is concealed in the roof. This makes the detail interesting: by hiding the drainage is possible to keep the abstract lines of the design to retain the basic shape and to emphasize it. There are many projects where an expression is given to this principle, but there are few that are so evident as this project. Presenting this volume as a basic form, the design becomes more lively and contemporary. Experiencing the form is also enhanced by extending the volume.



*A degradation of the overall design*



*It does not have to be an extra accessory*

The choice of the facades exterior material is based on the idea that the renovation should be innovative, but in the course of time will blend in and become more of a unit: the cladding is made from untreated Western Red Cedar, which gives the timber more of a grey colour after a period of time. It will discolour in a shade that fits well with the existing building. The wooden parts are mounted horizontally; leaving no gap or transition, which is actually a degradation of the simplicity of the volume; the roof is blending into the facade. The structure

made of timber trusses carries out the appreciation of craft, even though they are designed more abstract than the old Dutch truss, such a comparison is unavoidable.



*A transition is actually a degradation of the simplicity of the form*

## THE PROJECT

### *Renovation Office Villa*

Architect: Jaco de Visser

Location: Bernardstraat Vreeswijk

Date: 2008

Client: Van der Louw Realty

Before the renovation the building was in moderate condition and did not reflect today's technical and functional requirements. The building dates from the late 50's and consisted of a narrow spatial structure, which also causes closeness to the outside world. Demolishing the building was not an option, because of considerations of sustainability and readable history that the building possesses. To finance the project, it was necessary to add an extra room that can be rented. An important principle was to create a contemporary design, where the scale of the existing building is treated with respect.

The architectural resources that the architect has used for the project to create a whole are: scale, shape and materials. The bottom part consists of structural columns, so that the space has a free floor plan. The purpose of this is to anticipate on the quality of the location and the possibilities for the future. Structurally the starting point is in particular the minimization of building parts, which is reflected in the simplicity of the volumes.

Through an incision in the existing volume, there is an intermediate zone created, where the spaces are grouped around. The idea is that the volumes have an autonomous nature and that the original house is still recognizable in scale and form. The materials are applied as pure as possible, less durable and serviceable finishes are avoided as much as possible.





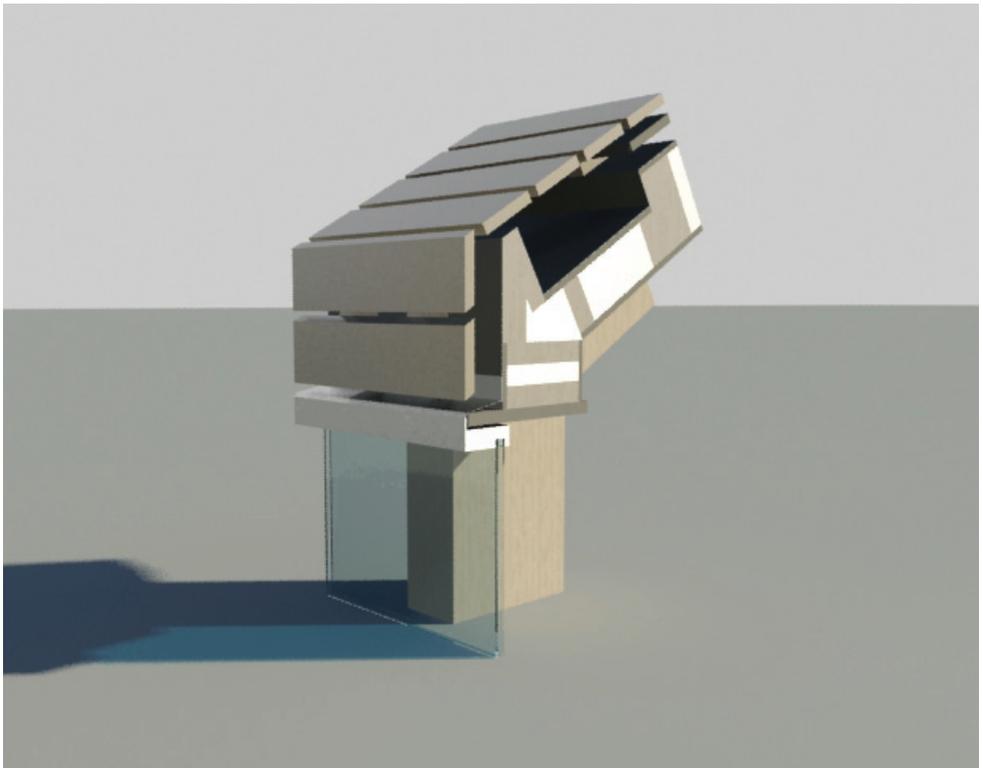
## MAKING A REAL SCALE MODEL

The first part which we started with, is the timber truss which actually supports the entire detail. At that time we found out that making a detail is actually a distorted view, because the course of the forces is very different when you cut off a piece of the frame.

Initially, we started looking for a piece of timber where the truss could be cut out, but this was mostly too expensive and the detail would be too heavy. So we decided to choose MDF; easy to work with and available in the acquired size. After gluing the various parts, a stable structure arose, which serves as the basis for the rest of the detail. Before we started we made a 3Dmodel, which provides an image of

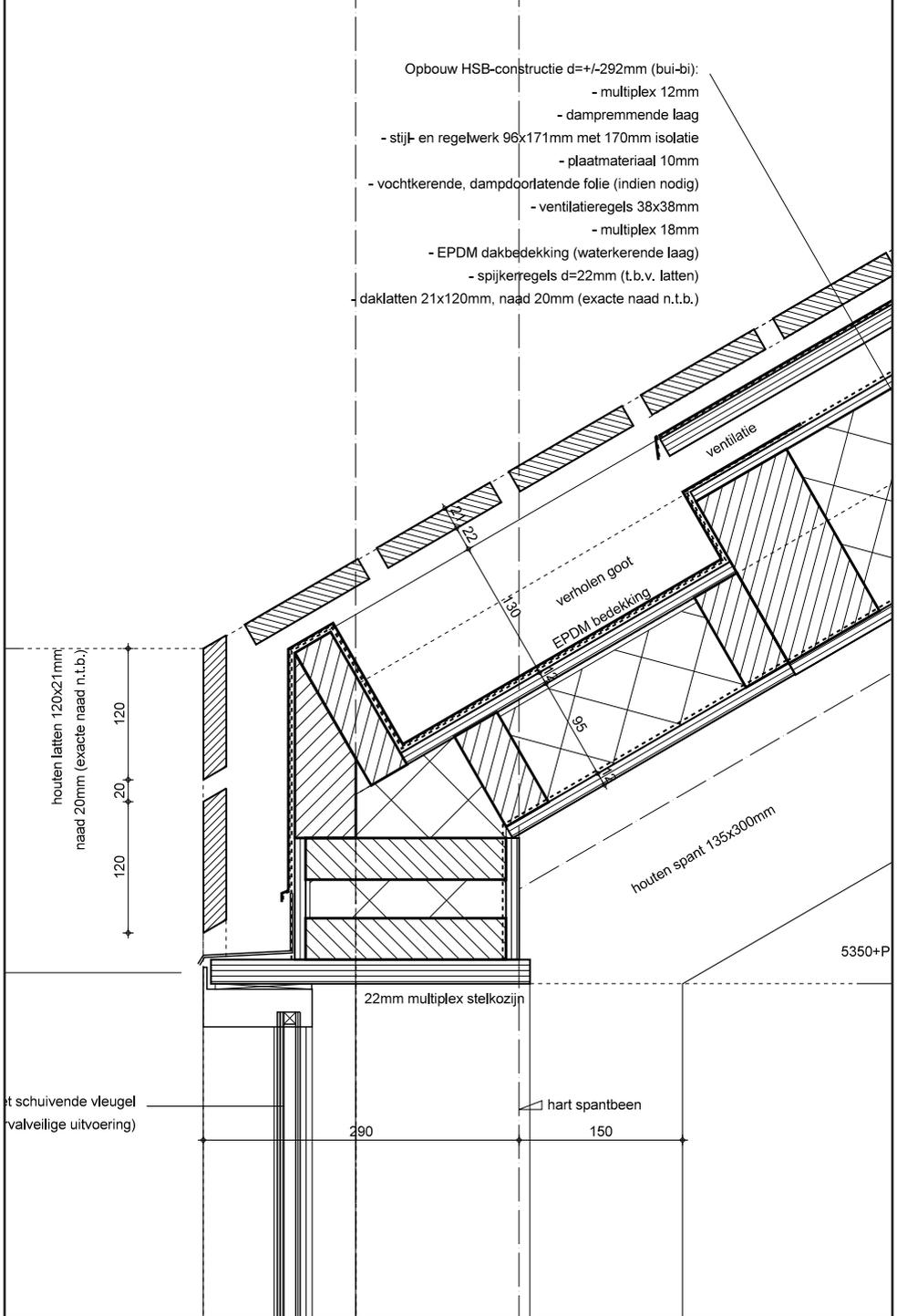
the final result and could also be used to determine the dimensions.

After that we started with the greatest bearing parts, so basically the order in which they actually build the construction. The difference is that in reality the walls are made first, before one embarks on the roof. In our detail the window frame and the wall are actually suspended from the roof. So that's why we first started with the roof. We wanted the materials as similar as possible to come to reality, which is managed by the plywood sheeting and pinewood fasteners. But since it was all still pretty expensive, we have made some beams of MDF, with pinewood glued on the ends.



*An image of the final result*

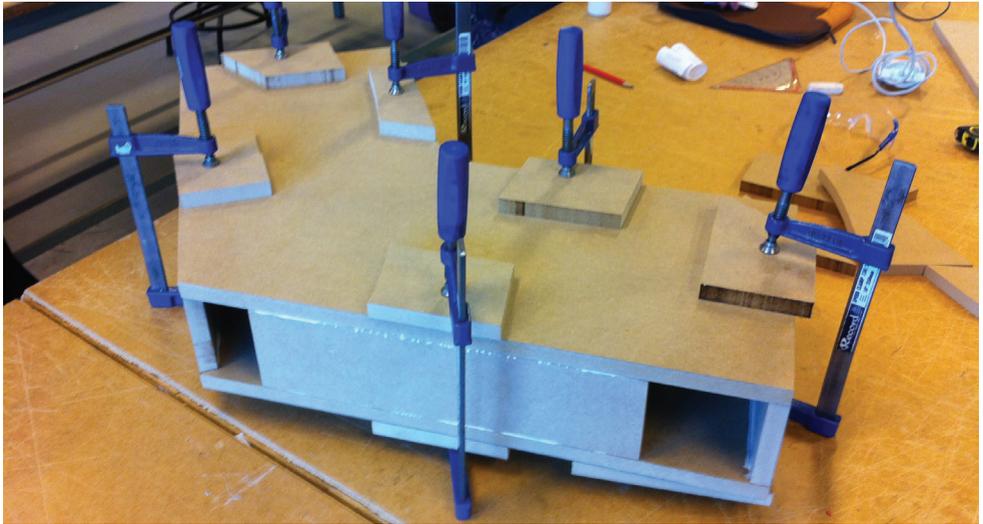
- Opbouw HSB-constructie d= $\pm$ 292mm (bui-bi):
- multiplex 12mm
  - dampremmende laag
  - stijl- en regelwerk 96x171mm met 170mm isolatie
  - plaatmateriaal 10mm
  - vochtkerende, dampdoorlatende folie (indien nodig)
    - ventilatieregels 38x38mm
    - multiplex 18mm
  - EPDM dakbedekking (waterkerende laag)
    - spijkerregels d=22mm (t.b.v. latten)
  - daklatten 21x120mm, naad 20mm (exacte naad n.t.b.)



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The hardest part was actually the attachment of the frame, because we only wanted to make the horizontal part, but the problem is that the window (in this case two pieces of plexiglas) would be dangling in the frame. That is why we have included the corner of the window frame, because

it provides much more stability to the whole and it also gives the model an extra dimension. It is indeed not corresponding to reality, but in consultation with the teacher we found that this intervention was required.



## A RETROSPECTIVE

Looking back on this assignment, we both believe that it was fun and interesting to make an architectural detail at an operational scale, because it forces you to think about how it all fits together. The choice of a model that is largely made of wood is a conscious choice, because we could work with materials that best match

reality. We believe that this is what it is all about: the art of making. Actually this title is not completely in place, because the way our model was made does not correspond with reality; 'the art of faking' would be more appropriate here. Nevertheless, we are both satisfied with the result.

