

Baukunst im Kleinen (BiK)

Martin van Beuzekom, George Bielen,
<u>Fred Hartjes,</u> Guus van Kessel
and Burkhard Schulz

CVA meeting Hilversum, October 22, 2011

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Copyright

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Zieter Wellmann; Bi.K.

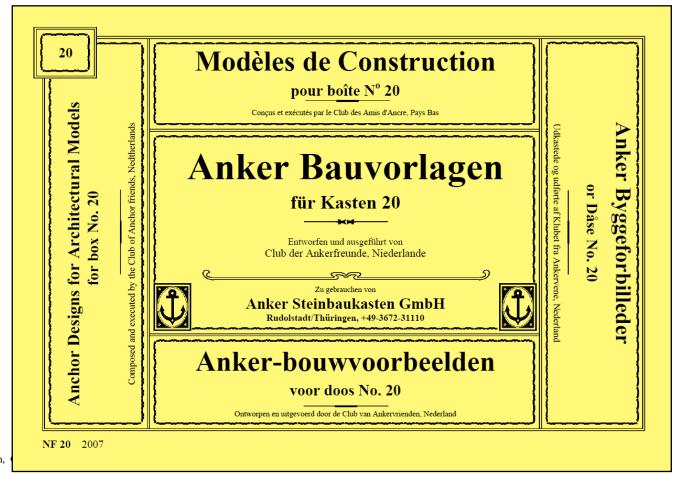
Purpose of "Baukunst im Kleinen" (BiK)

- Reviewing **new** designs for the stone sets that are produced by the new Anker factory
- ♦ => Presently only NF sets
- A design published by BiK has the **guarantee** that
 - The building can be made with the stones of the set it is intended for
 - The building is stable
 - The common Ankerfriend can built it without much problems
 - At least 75% of the stones is actually used
 - The building has certain esthetical qualities
 - The design is drawn according to Richter standards
- we do not consider large designs requiring executive stone sets
 - Often only the designer has all the stones to build it



Output

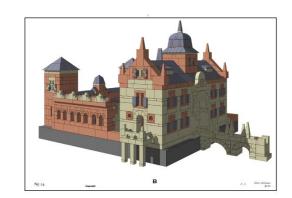
- ♦ Final output are booklets like Richter made them containing 10 15 designs
- Presently only virtual (on website)
 - Maybe some paper prints in future



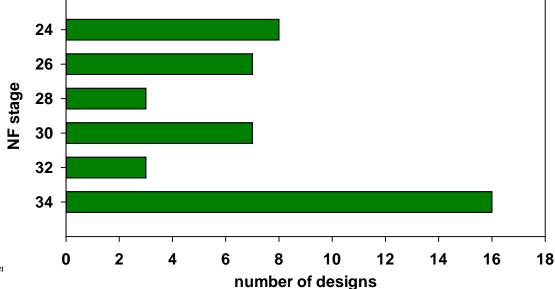
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Status of the review and drafting

- ♦ Presently 48 designs received for NF24 34
- 4 rejected
 - out of scope, hard to build, already published by Burkhard, not sufficient info
- **44** designs accepted for review
 - 10 older designs from Burkhard during last 7 months
 - 16 completely reviewed





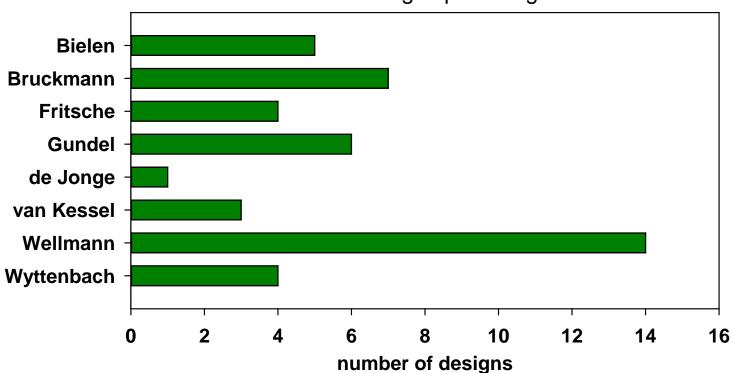


Which designers?

Made by eight designers



Number of designs per designer



Reviewing schedule

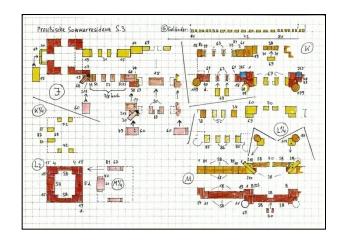
1. "Build" virtually in Ankerplan

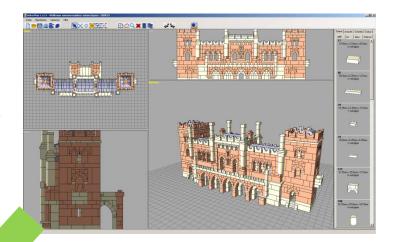
- Minor errors will be corrected (missing stones)
- At major errors the design will be returned to the designer
- Generate temporary drawings with stone numbers in the cross sections

2. Build physically 1st time (with stones)

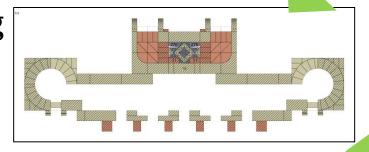
- Minor errors will be corrected in the AnkerPlan drawing
- At major errors the design will be returned to the designer
- 3. Produce final drawings; adding all formatting (NO stone numbers like at Richter)
- **4. Build physically** 2nd time
- 5. Correct final drawings







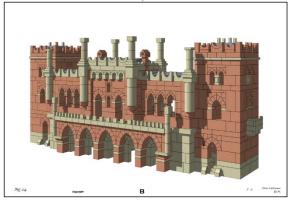
Reviewing schedule in images

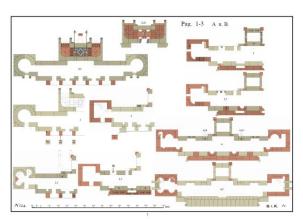










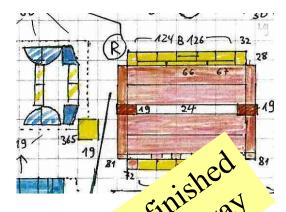


Status production of drawings for NF 24-34

- **Taking over from** Burkhard Schulz who did this until 2010
- **Assembly program:** AnkerPlan instead of AnkerCAD
 - Calculating shadows using POV-Ray
 - Generating cross sections
- Other tools
 - Micrographx Designer 9 (vector program)
 - **Digital Image 2006 Suite Edition Editor** (Photoshop based)
- Systematically producing all drawings
 - => starting with NF24 (8 designs)
 - 3 by Wellmann
 - ♦ Hand drawn, complicated structure, many cross sections
 - 5 by Gundel and van Kessel
 - ♦ Already drawn in AnkerCAD => easier to implement in AnkerPlan

It will cost us several years to produce all 44 designs in decent drawing

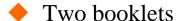




Two designs finished.

About drafting formats

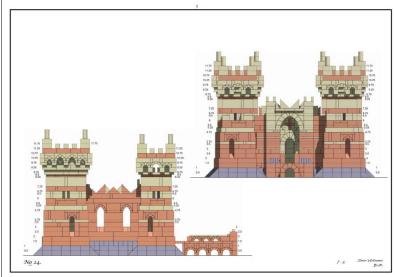
- Style based on Richter but:
 - Adding gable views (generated by AnkerPlan)
 - Arches also indicated when visible in 3D views
 - Layers indicated by height in stones, not by letter
- ♦ Paper: **A3** from NF24 on
 - Better visibility, larger cross sections



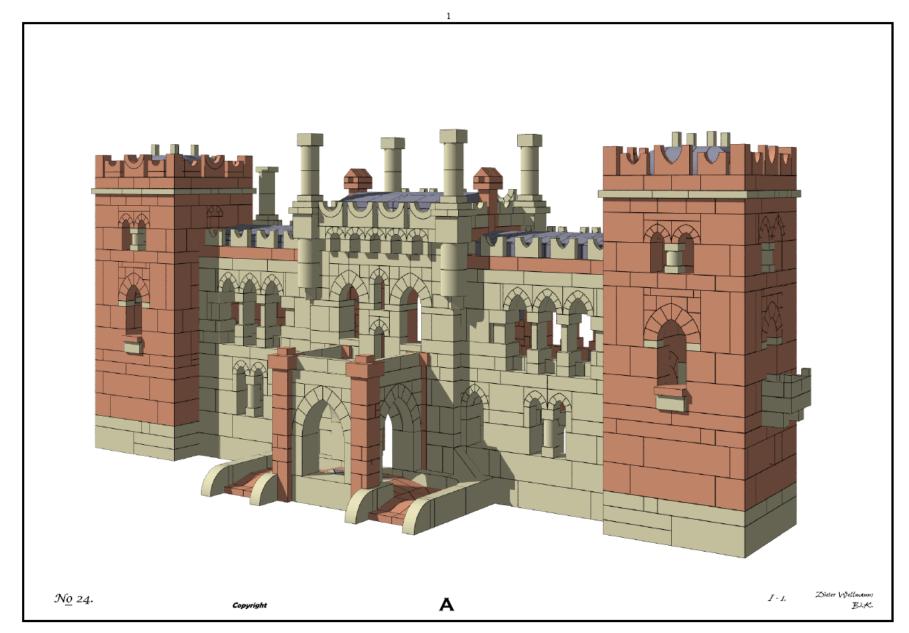
• **Bauvorlagen**: Geometric views + gable views

• Schnitte: Cross sections

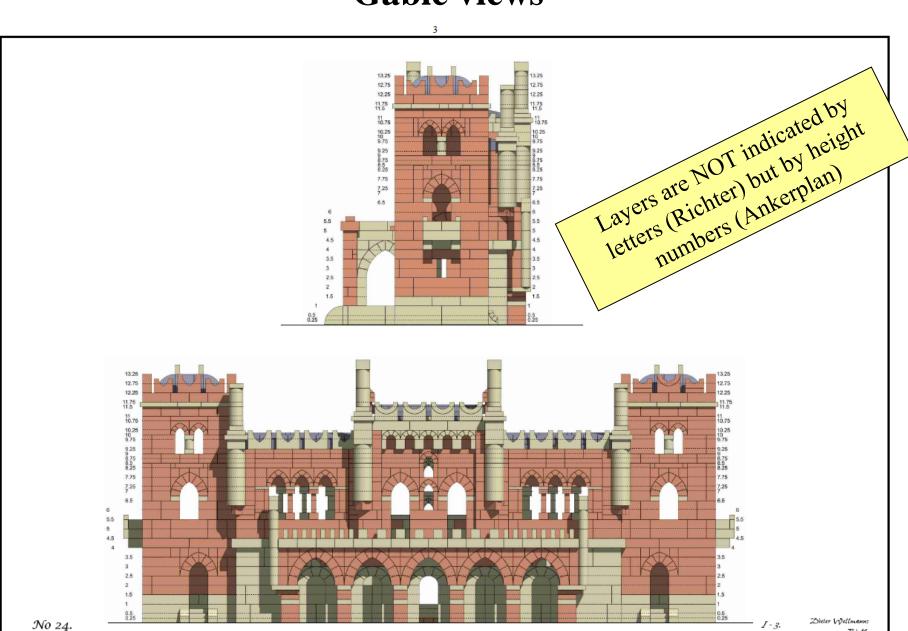
- Availability
 - Presently only virtual on my home page (http://www.nikhef.nl/~i56/Anker.html)
 - pdf files
 - In future on public Anker site (which one?)
 - Maybe in paper as well??



Example of finished design "Sommerresidenz" (NF24)

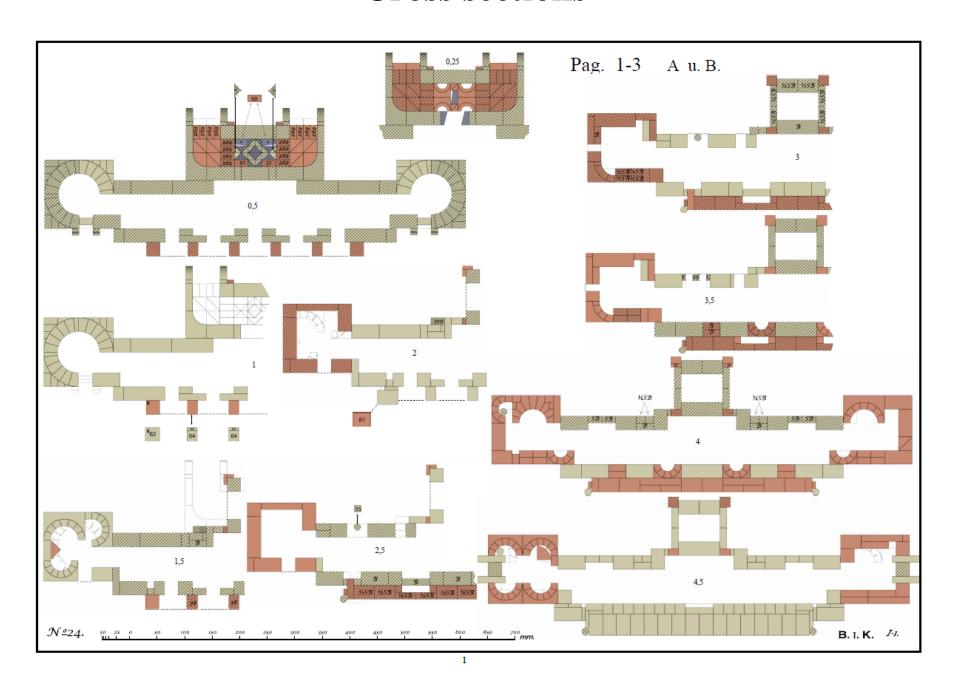


Gable views



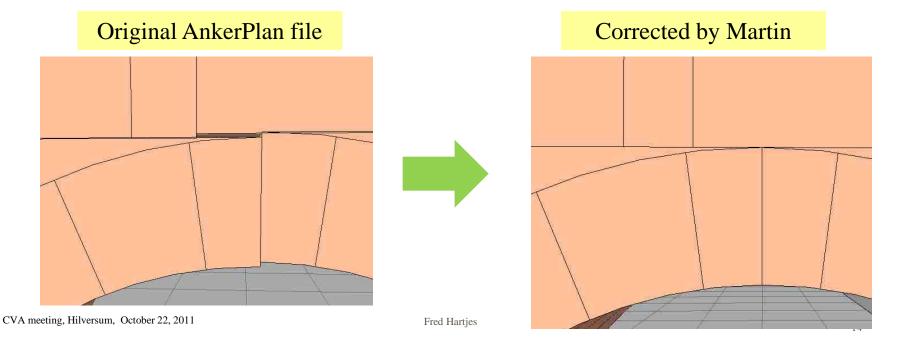
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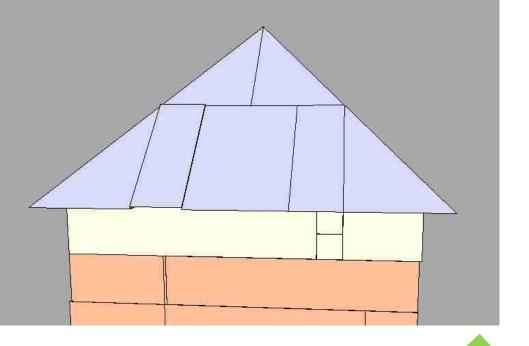
Cross sections



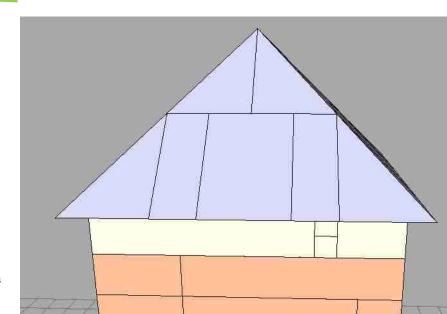
Trying to deal with AnkerPlan shortcomings

- Incorrect stone definition
 - => stones wrongly positioned
 - => especially with arches and roof stones
- Original .xaz file corrected by BiK member Martin van Beuzekom
 - Alignment to 1/8 stone grid
 - Improved definition of arches 136 141



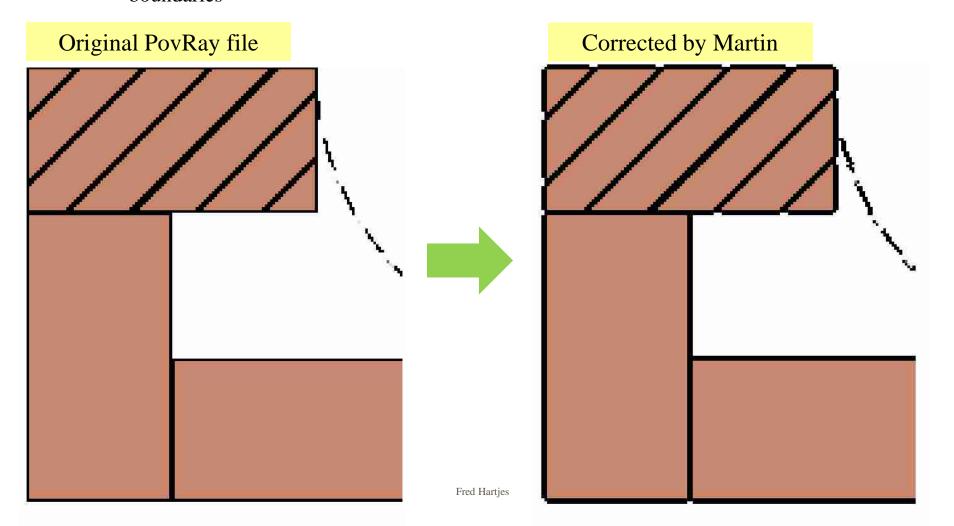


Improved placement of roof stones



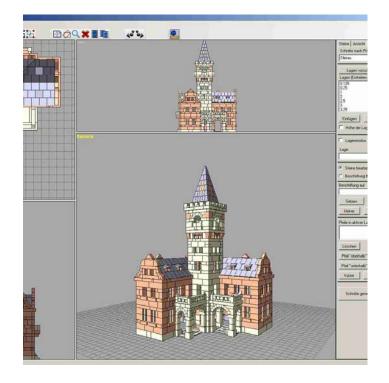
Correcting AnkerPlan shortcomings

- Wrong line thickness
 - Internal lines twice as thick as external boundaries



AnkerPlan being renewed

- Will be completely rewritten
 - Big enterprise, already going on for 4 months
- Several people from Flying Cat* involved
 - Christian Korn
 - Markus Schuster
 - Rafael Bild (20 h/week)
- Addressing all know problems from the present AP version
- ♦ Estimated time scale: 6 months (May 2012?)

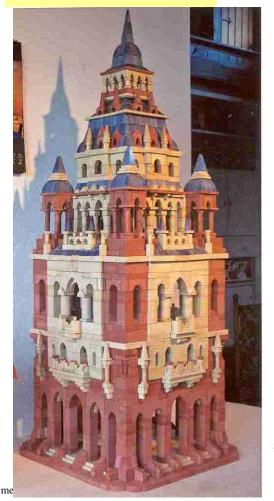


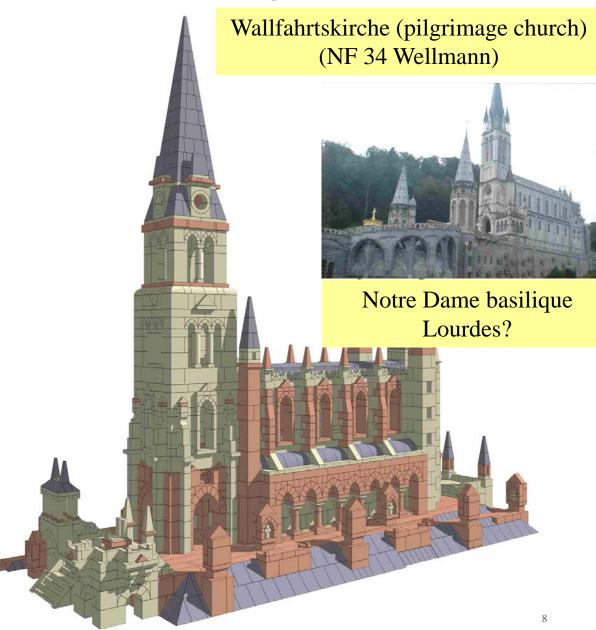
Quoting a recent mail from Christian Korn:

I am very happy to say that the factory, in particular Mr Knischewski, know about what we are doing and encourage us. We aim at building an AP version that provides full functionality for CVA needs, but is also suitable for the average Anker customer, and while it will always be free for CVA members, I hope to eventually sell some licenses to the general public.

Three new designs arrived during last 6 months

Lyck tower (NF 34 Wellmann)

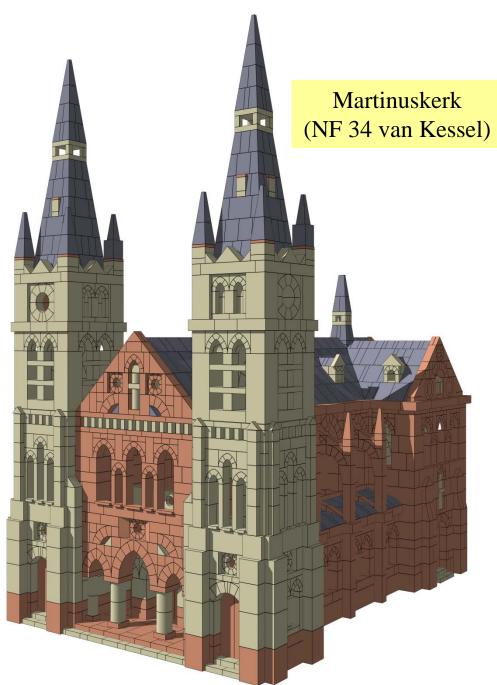




Newly arrived (cntd)

Martinuskerk Cuijk





Concluding

Again three new designs (van Kessel, Wellmann) contributed for NF34 in the last 6 months

Spending lot of time on optimizing drafting format

Still continuing

Using Ankerplan and various other tools

Richter style

Drafting really started

- 44 designs
- 3rd close to finish
- 41 over => several years ι

Rewriting AnkerPlan very promising

- Big effort
- **More info** about BiK on my home page
 - http://www.nikhef.nl/~i56/Anker.html

Always open for new designs for NF24 - 34 But it may take quite some time before your design is finally drawn

Liete