

space\_translators  
office for architecture & spatial design

**Servie Boetzkes**

**Bas Kolkman**

**Loes van Rijnsbergen**

september 2016

we get a invitation for a possible project

making some technical details for an  
existing sports hall to make that building  
energy positive.

and straw bales will be the insulation  
material in this project...



**wrap it up!**





1977/79  
sports hall  
udenhout











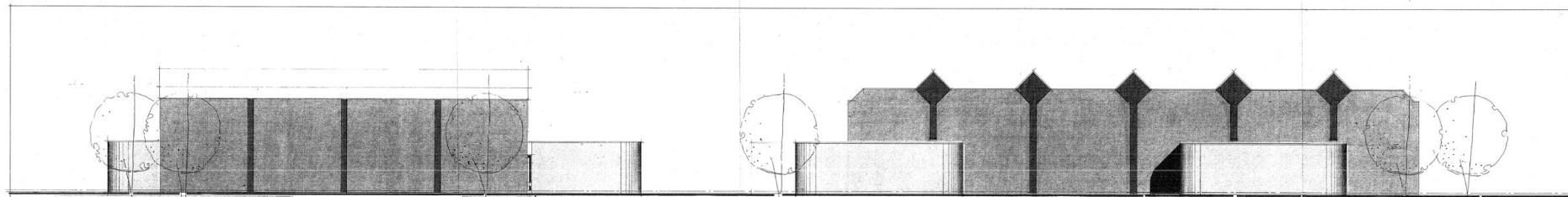






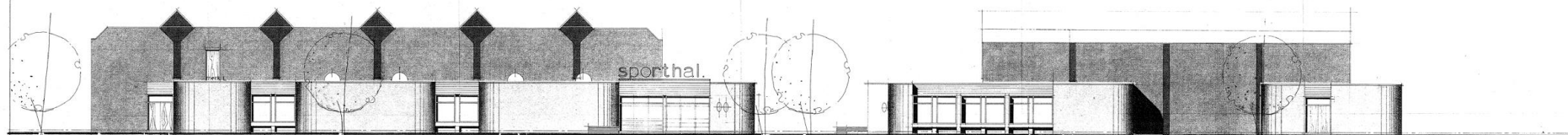






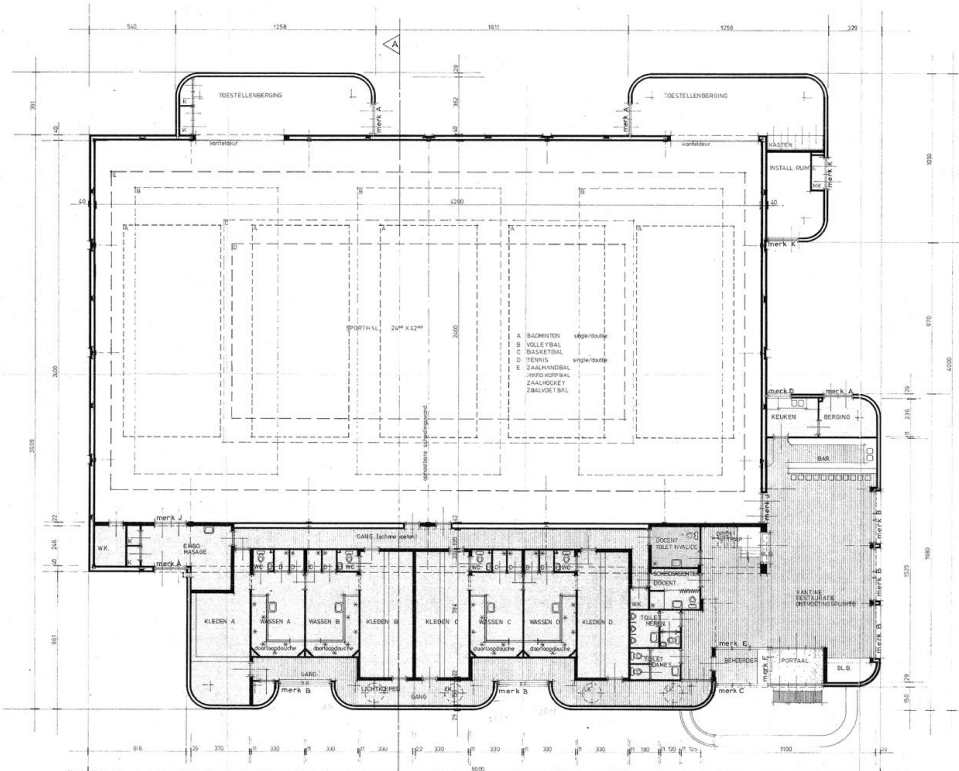
LINKER GEVEL

ACHTERGEVEL

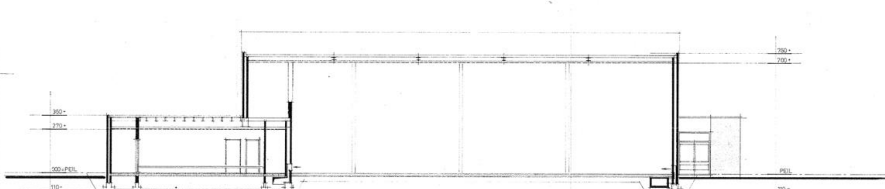


VOORGEVEL

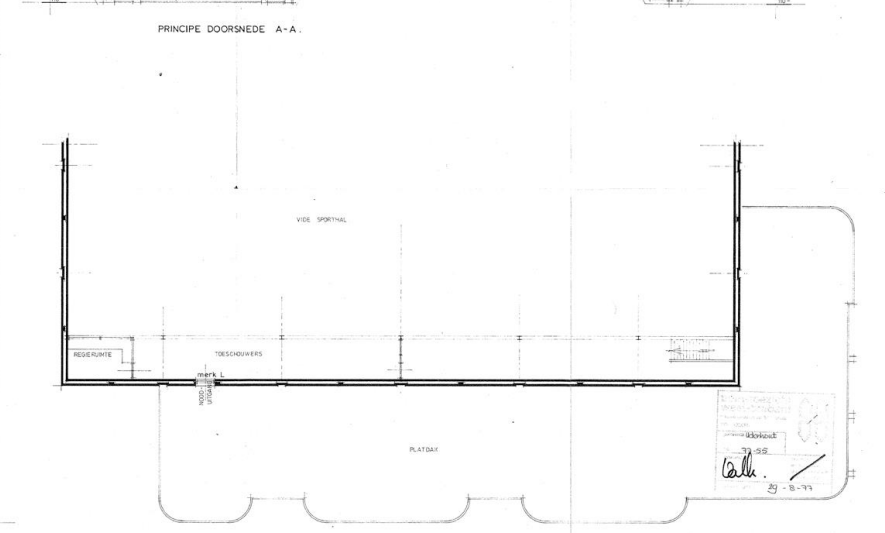
RECHTER GEVEL



PLATTE GROND



PRINCIPE DOORSNEDE A-A



VERDEPIEG

BESTEKTEKENING BLAD 1

PROJECT: SPORHAL IN DE GEMEENTE UDENHOUT.

GET. V. EXTEL.	DATUM 20-6-1977	GEW. 1	DAT. BESTEKKA. 5/76
ROZ.	SCHAAL 1:400	REV. 1	DAT. BOUWMAAT 08-11-77
ARCHITECTENBURO		HOOFDKANTOOR BEEK EN DONK KOPPELSTRAAT 29 TEL. 04753 21 83	
Th. J. LAMMERS B.V.		SIBRANTOOR ORANJE NASSAULAAN 1 TEL. 073 1473 68	





  
Tilburg  
- Centrum Oost  
Hilvarenbeek  
N 269 ↑

Eindhoven  
A 58 ↗ E 312





what are  
we going  
to do with  
this?

ibun  
Cen  
Ivalenbeek  
N 269 ↑

Eindhoven  
A 58 ↗ E 312

# quick analysis:

## **Is this technique fit for this specific building?**

- complex existing detailing (roof, alternating facades).
- blocking and minimizing windows and doors.

## **What do they get after this investment?**

- new facade
- better internal climate
- energy neutral/ positive building

## **But:**

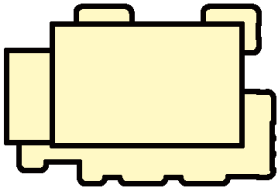
- the whole interior still breaths the '70s
- the floorplan still isn't updated to this age
  - the building will stay introvert
- how will residents and sporters react to this

**We need a more inclusive concept to make this work!**

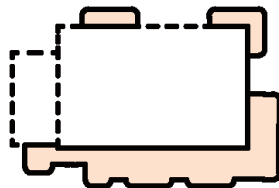
**think  
inside the  
box**

**(of straw)**

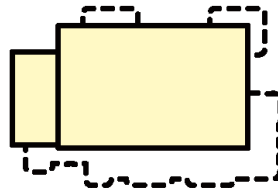
# making things simple



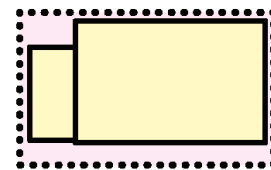
1. existing



2. demolish



3. maintain

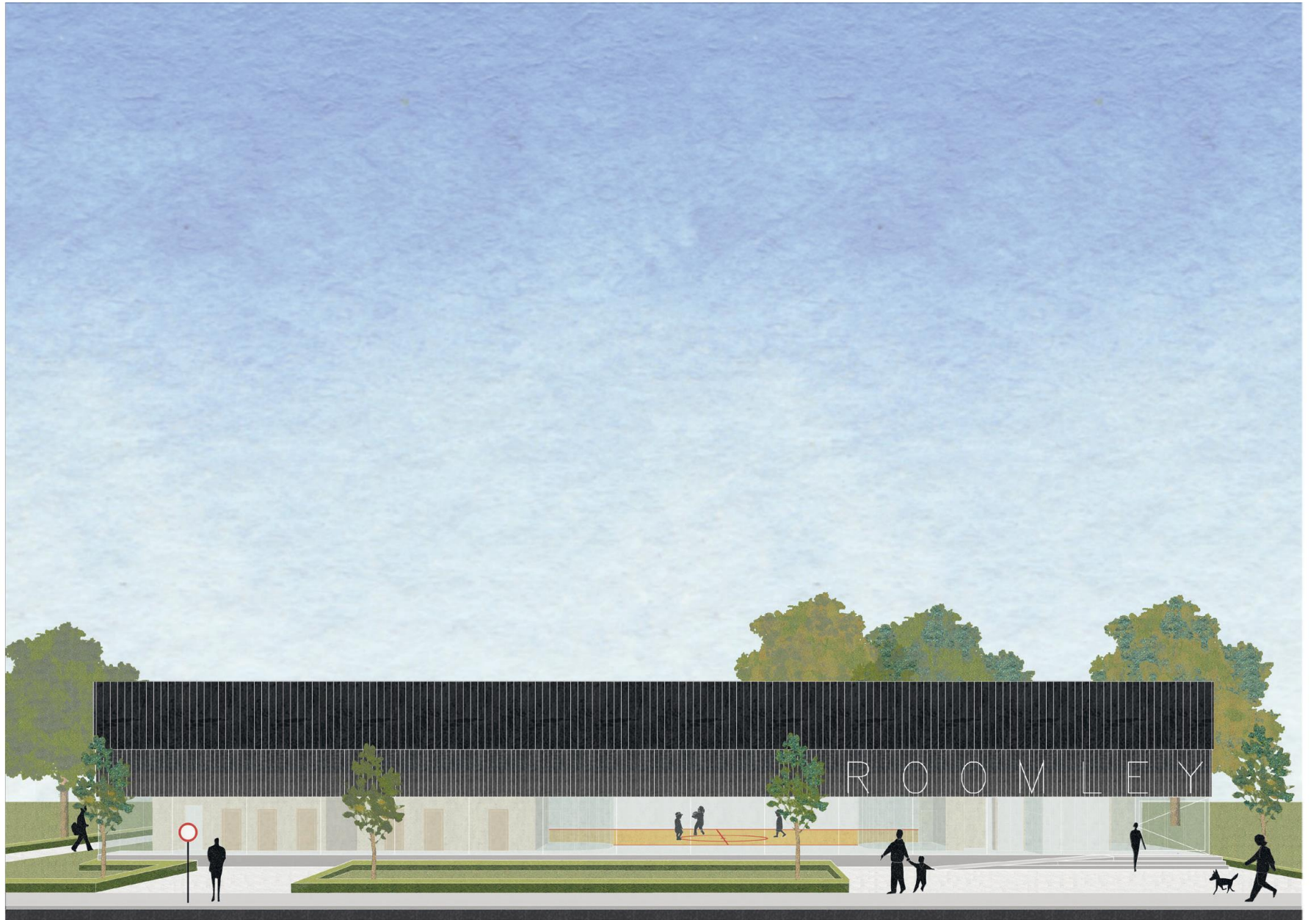


4. wrap-it

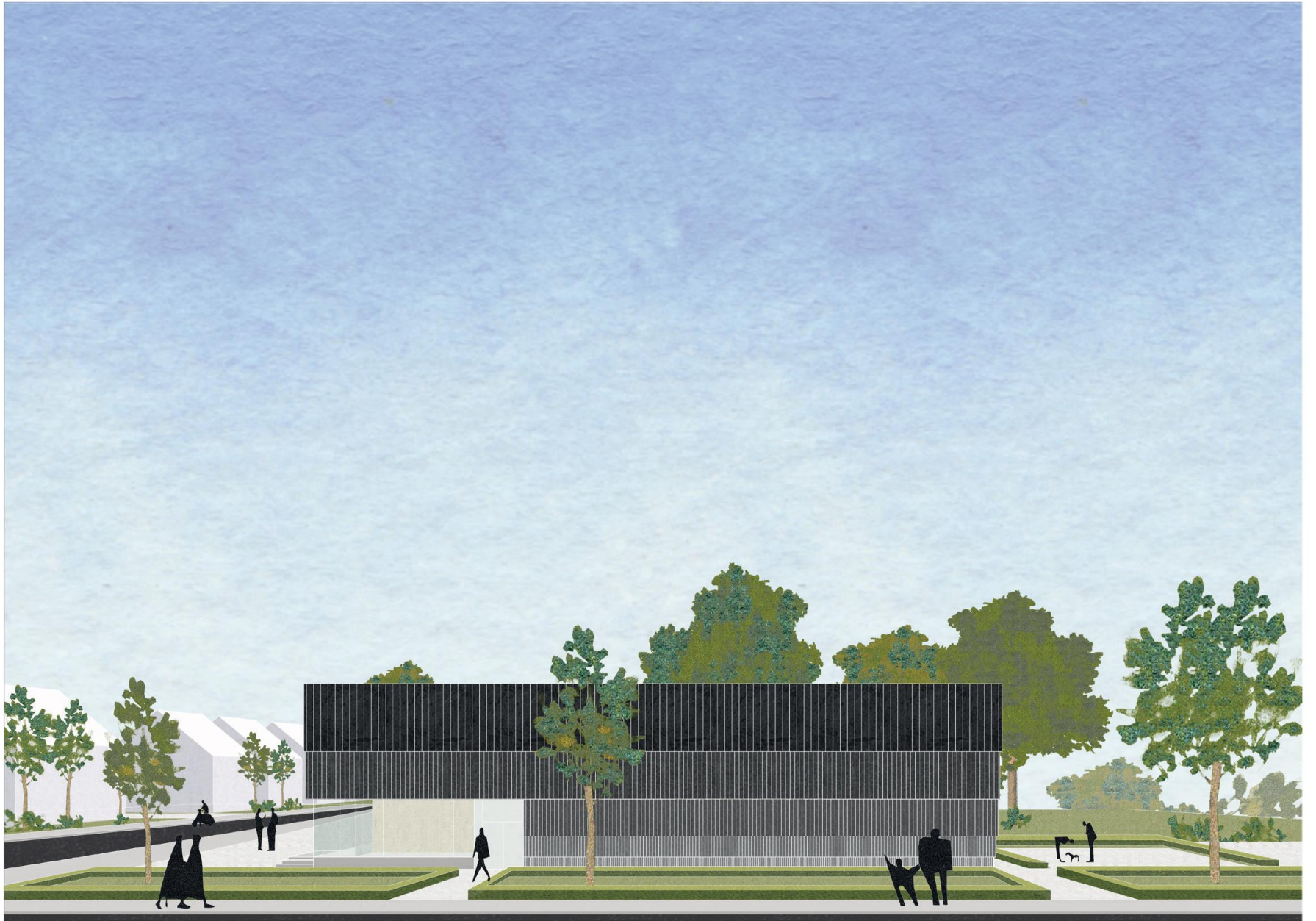


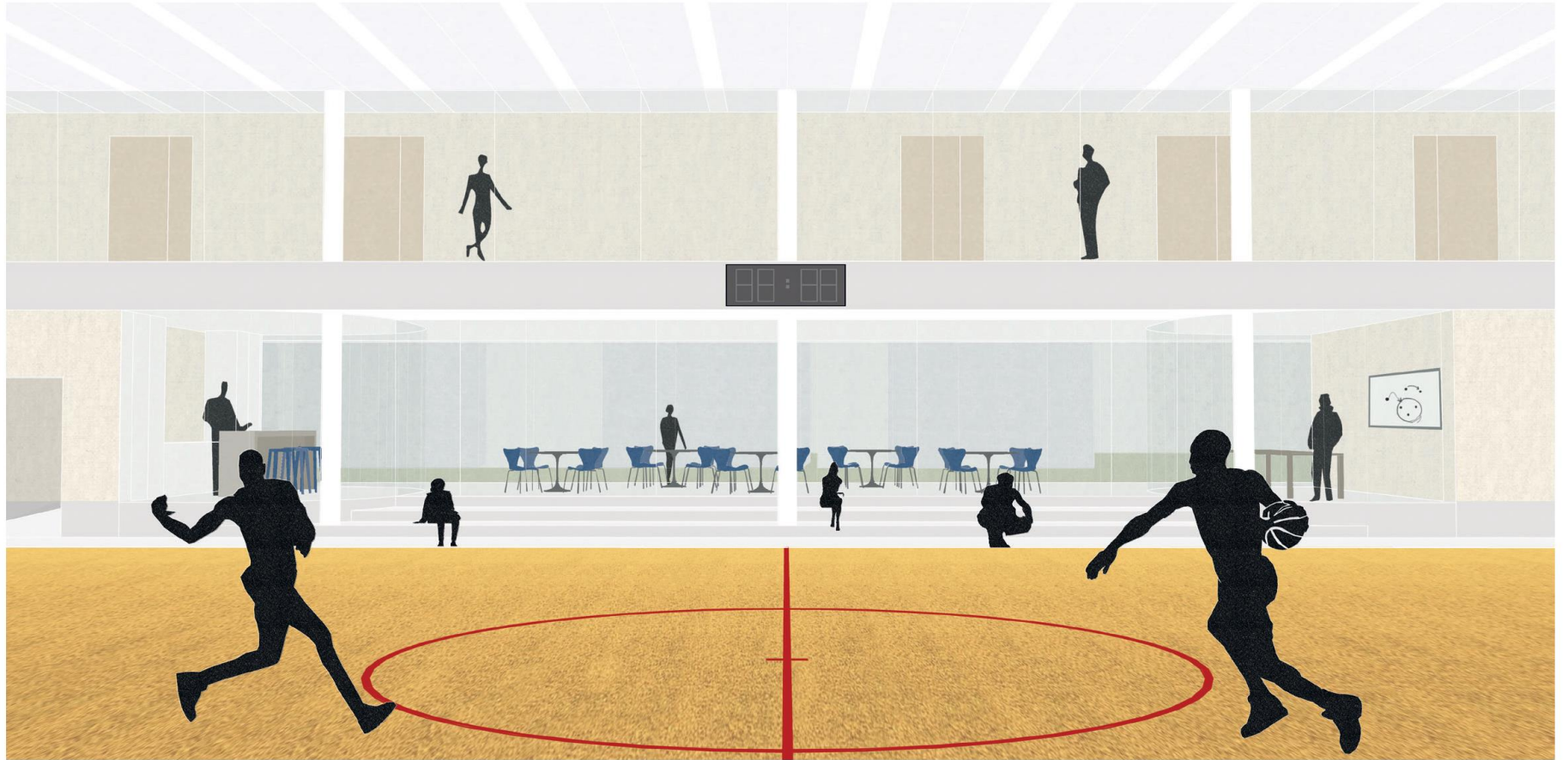
5. box

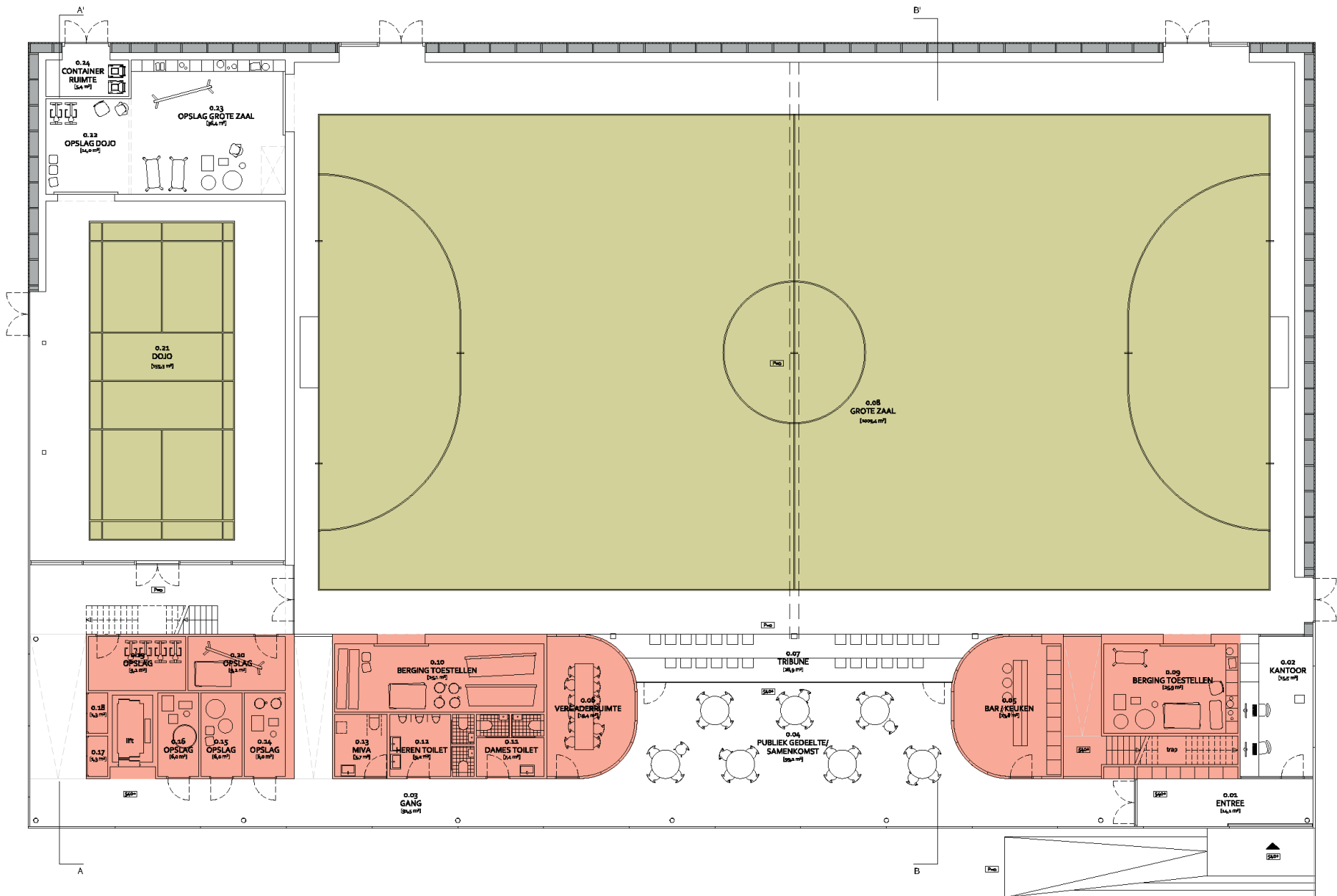
diagram

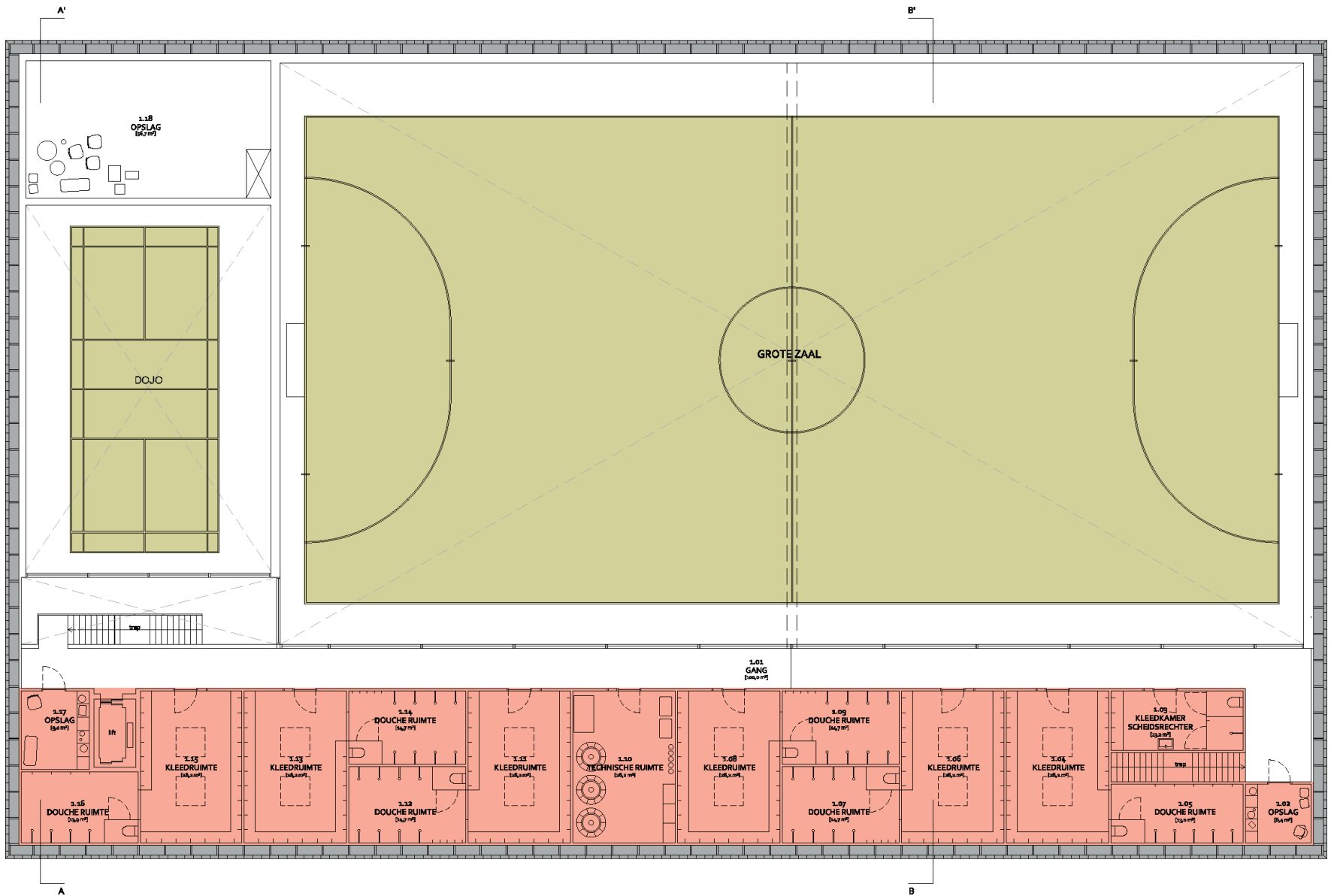












**let's go!**

**team:**

**municipality  
tilburg**

**strobouw  
nederland**

**architect**

**technical  
advisors**

**building-cost  
advisor**







# the result:

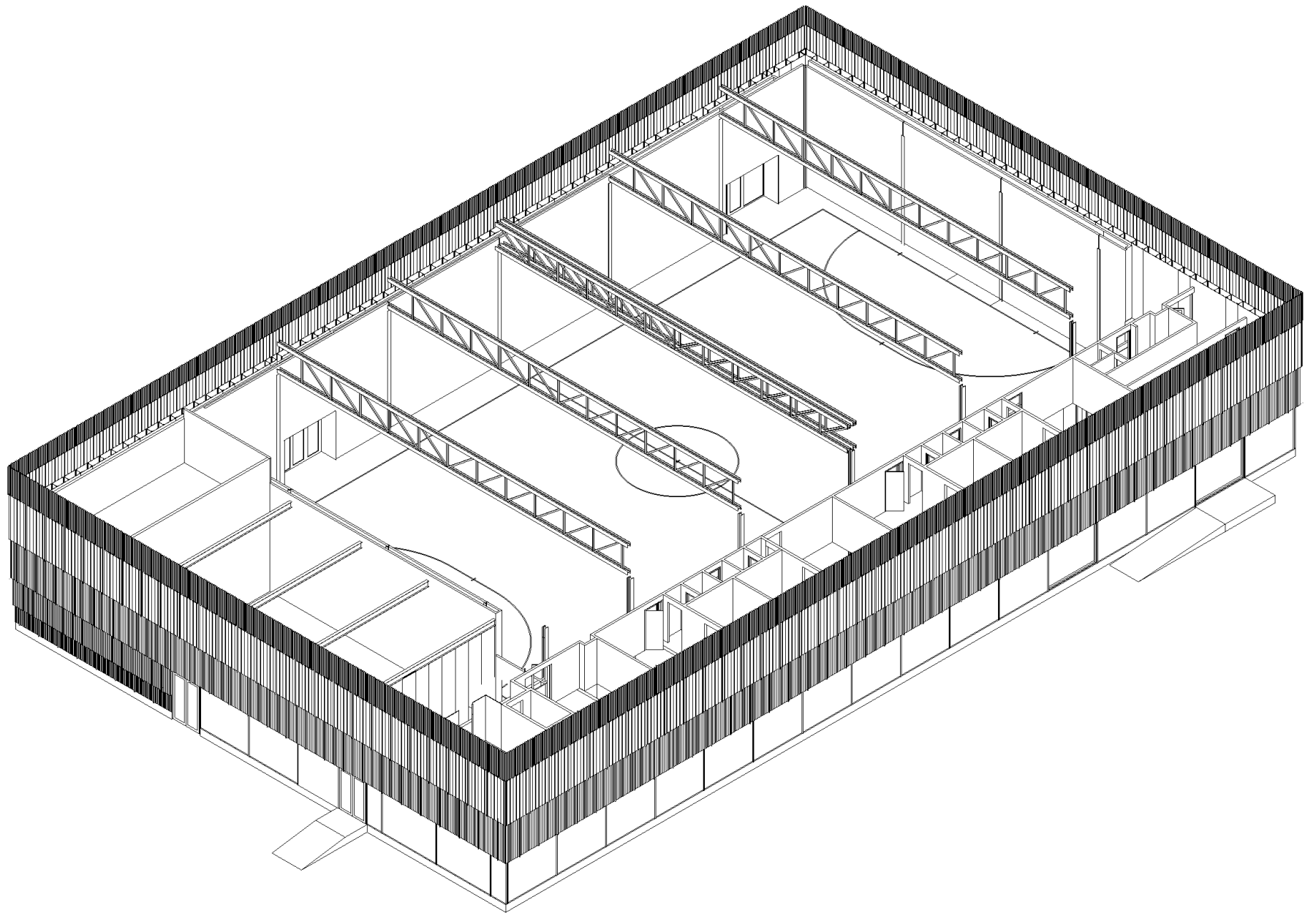
3 different facade designs

3 market approaches

several budget cuts

extra funding

construction team





GEMEENTE TILBURG

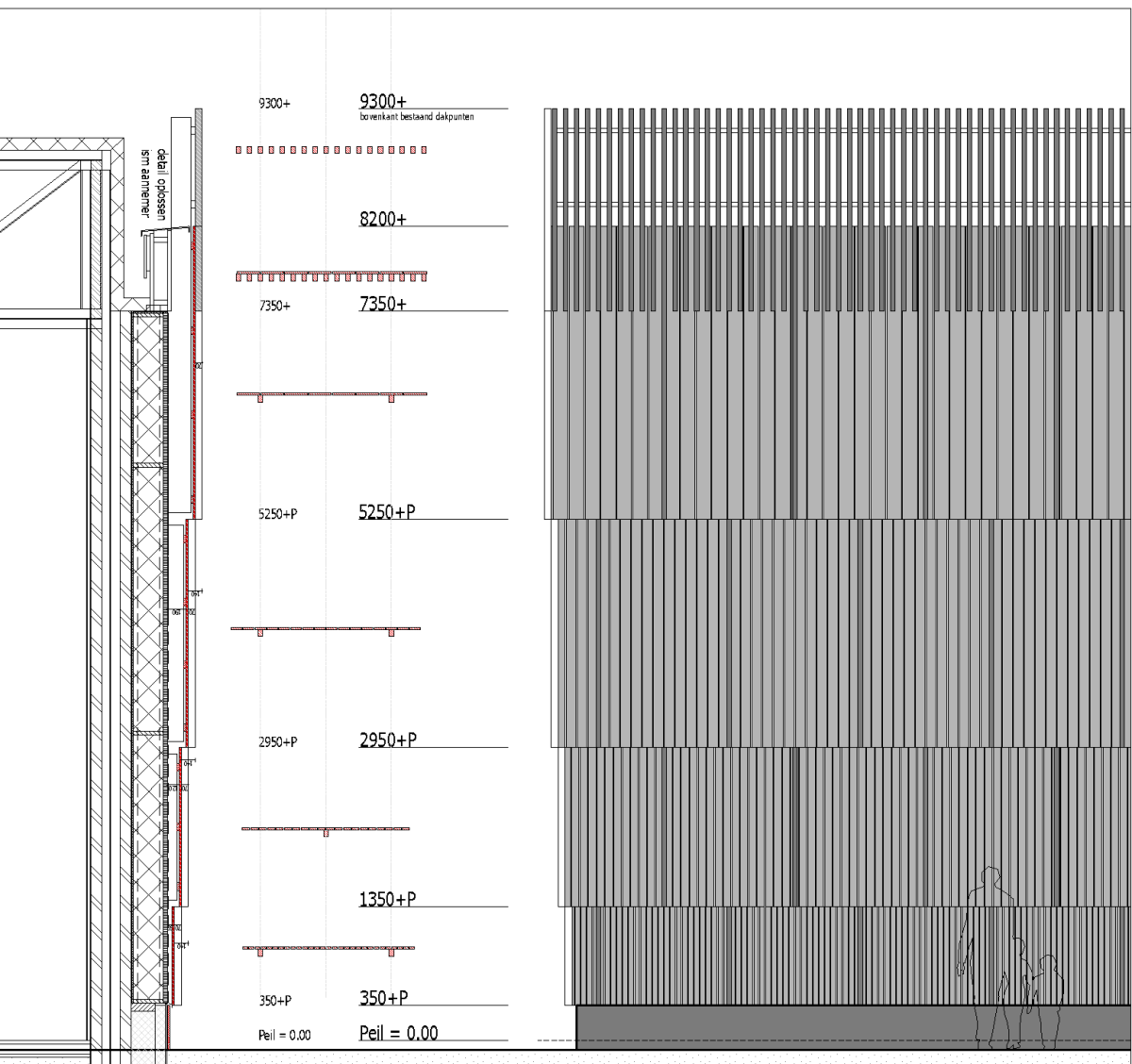


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VAN DER WEEGEN BOUWGROEP







doorsnede  
1:20

gevelfragment  
1:20

Verduurzamen  
Sportstad De Toernley  
Lidstichting  
Fase ... Prijs en Contractvorming  
Onderwerp ... gevelfragment  
Staat ... definitief  
Schaal ... 1:20  
Datum ... 03 april 2019  
Projectnummer ... 29.104533  
Project en tekeningnummer ... s1003.25.210

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# data:

facade	1693 m <sup>2</sup>
wood	1437 m <sup>2</sup>
glass	256 m <sup>2</sup>

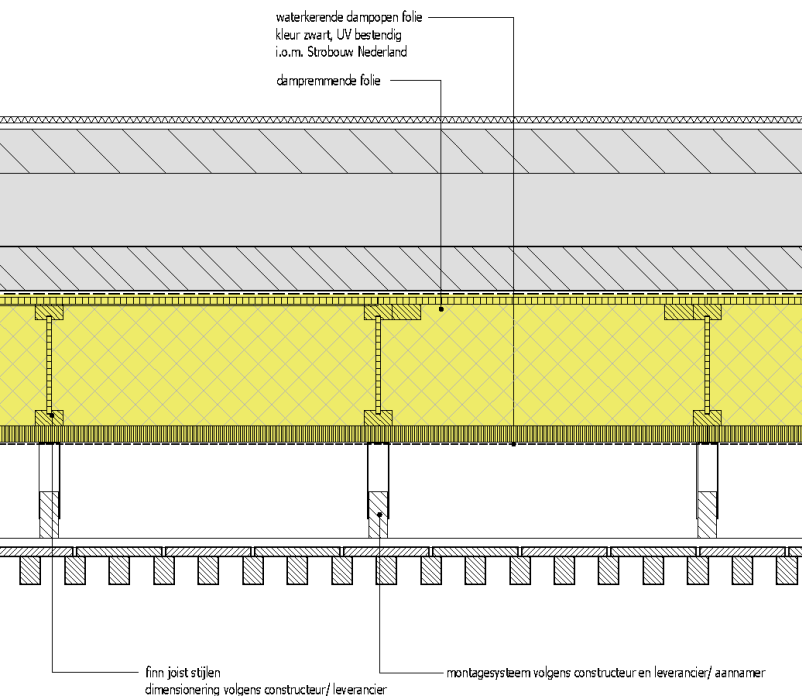
straw panels 1236 m<sup>2</sup>

thickness 36 cm

straw 371 m<sup>3</sup>

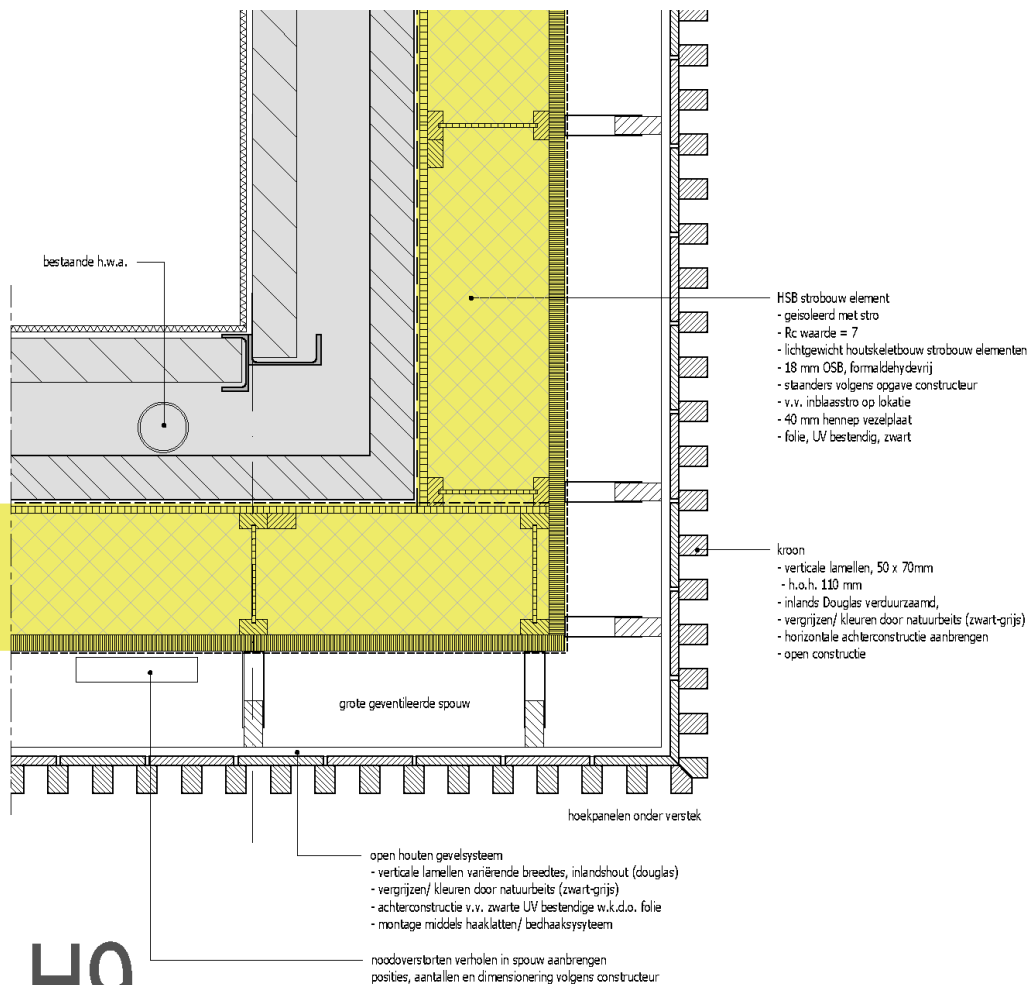






H8

OSB sheet  
Finnjoist beams  
Straw filling  
Gutex pyroresist



H9

Rc = 7 m<sup>2</sup>K/W



















**Interreg**   
EUROPEAN UNION  
**North-West Europe**  
**UP STRAW**  
European Regional Development Fund



**Renovatie met inblaas-stro**  
duurzaam en circulair



**Interreg**   
North-West Europe  
UP-Straw



GEMEENTE TILBURG

**strobouwer**

strobouw   
nederland

UP   
STRAW





# T TILBURG BOUWT VERDER

Project: Verduurzaming Sporthal De Roomley  
Uitvoering: Juni 2019 – mei 2020  
Opdrachtgever: Gemeente Tilburg

Project komt mede tot stand met financiële bijdrage vanuit Europa/Interreg/UpStraw

interreg  
Nieuw-Europese  
UP STRAW

Totaal budget: €3,36 miljoen  
www.nweurope.eu



Aannemers: VAN DER WEEGEN BOUWGroep Hoppenbrouwers

www.gemeentetilburg.nl Gemeente Tilburg

**VAN DER WEEGEN BOUWGroep**  
NIEUWBOUW • ONDERHOUD • RENOVATIE 013-5491608

BEVEILIGD DOOR  
**BouWatch**  
www.bouwatch.nl

W  
W



**Interreg**  
North-West Europe



**UP STRAW**

European Regional Development Fund

U P   
S T R A W



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# Interreg



EUROPEAN UNION

## North-West Europe

### UP STRAW

European Regional Development Fund

thank you!