

SWG – Schraubenwerk Gaisbach

Buche LVL an den Grenzen des Möglichen

FORUM
HOLZBAU
INTERNATIONAL
4.-6. Dezember 2019

HK ARCHITEKTEN

Hermann Kaufmann + Partner ZT GmbH

HK ARCHITEKTEN

Seit Since 2018



www.hkarchitekten.at

christoph dünser

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TEAM

Architect :

HK Architekten

Mathias Schädler, Hanna Bayer, Benjamin Baumgartl, Thomas Fußenegger

Structure (Concrete) :

BHM Ingenieure

Uli Forster

Structure (Wood) :

SWG Engineering (Wood)

Henning Ernst

MEP :

BHM Ingenieure

Jörg Nowitzki, Josef Hinteregger

Fire Safety :

Portz Brandschutz

Ricco Kröger

Building Science :

RW Bauphysik

Bärbel Kolaczek

Project Control :

Mahl Projeksteuerung

Jürgen Mahl

Carpenter :

Schlosser Holzbau

Florian Eitel

Builder :

Leonhard Weiss

Hörmes Maximilian

Facade, Roof :

Eitle Dieter, Alwico

Jörg Möke, Tim Neuer















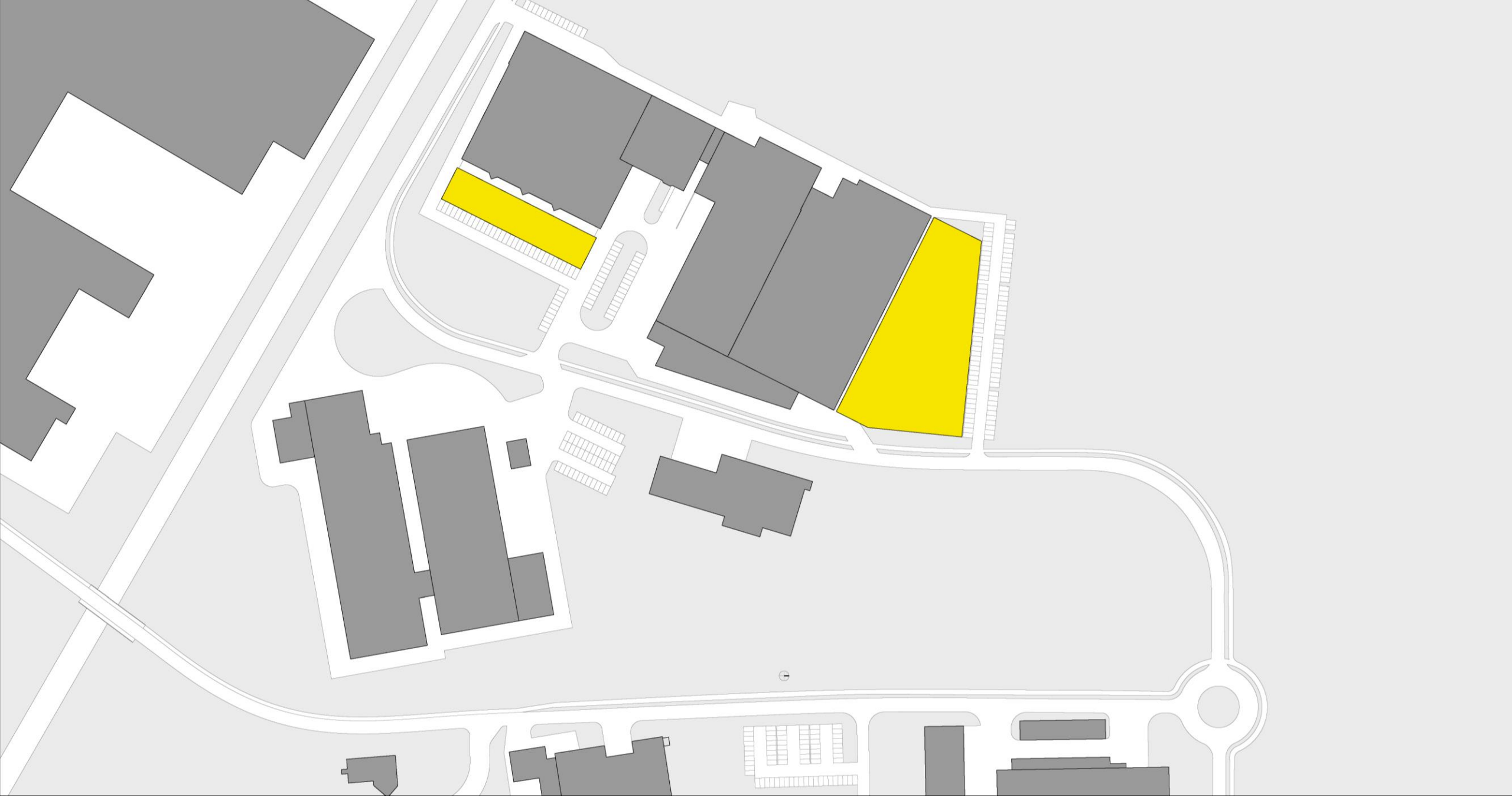


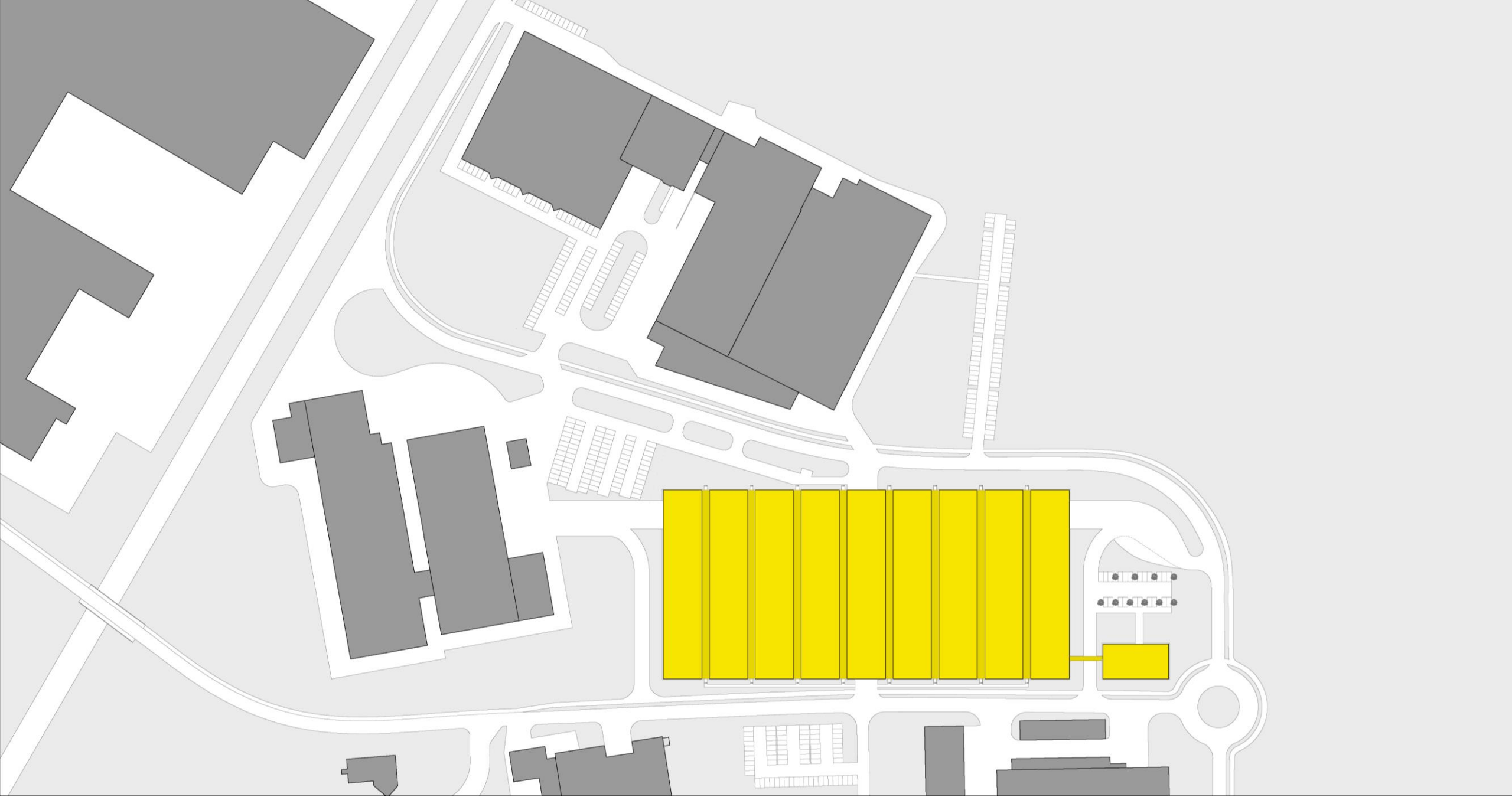
HALLE PRODUCTION HALL

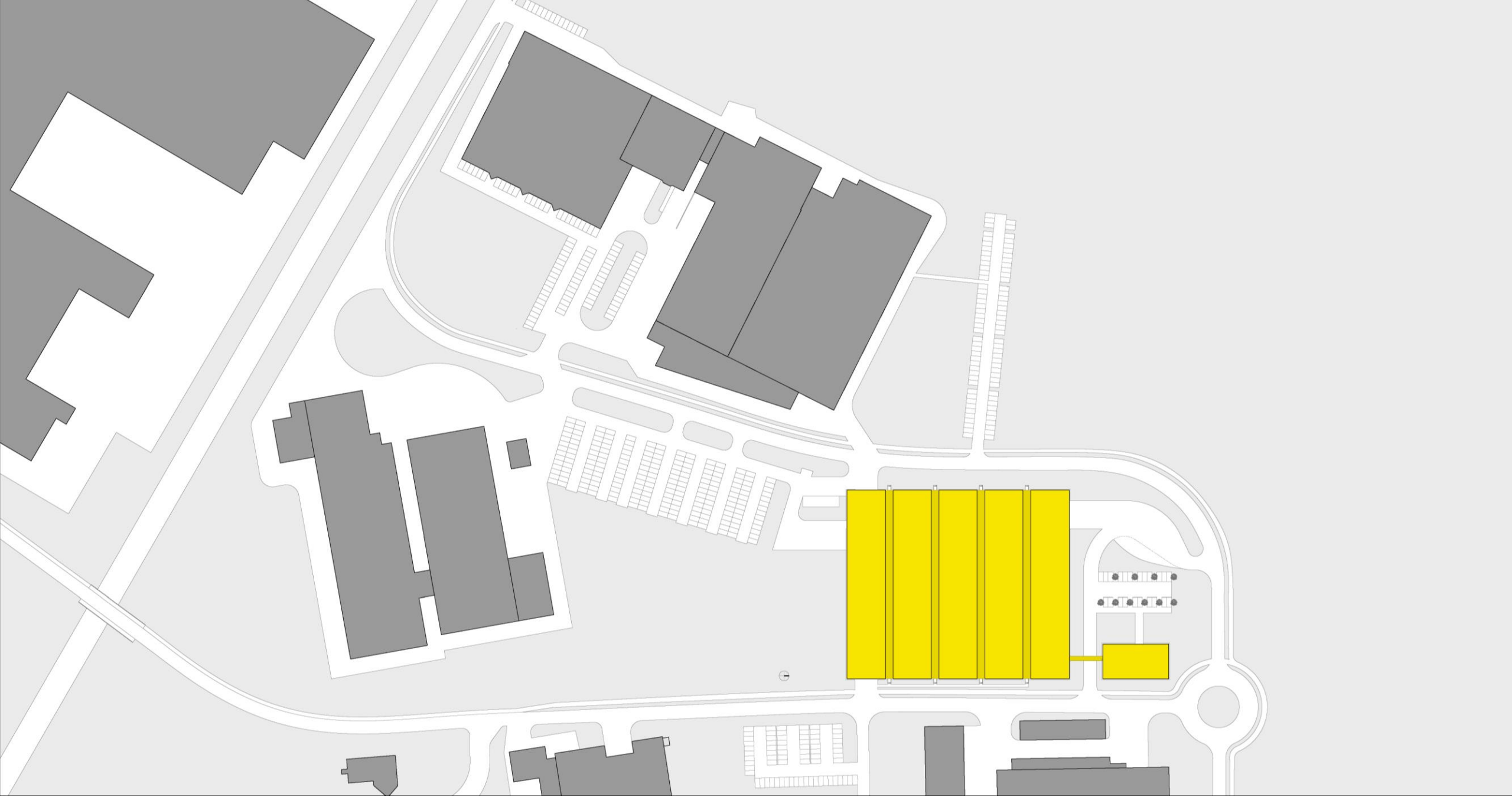
HK ARCHITEKTEN

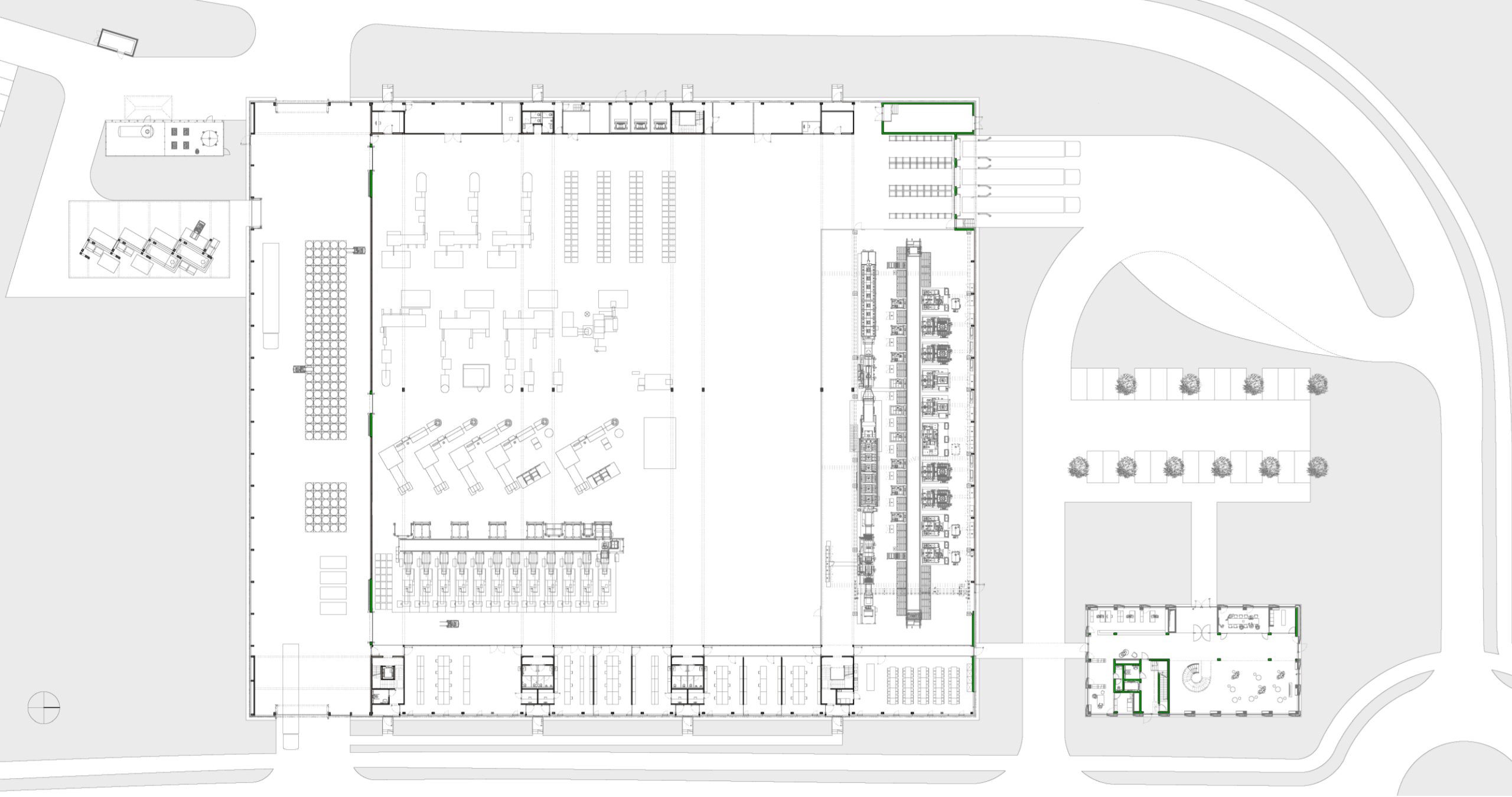
Hermann Kaufmann + Partner ZT GmbH

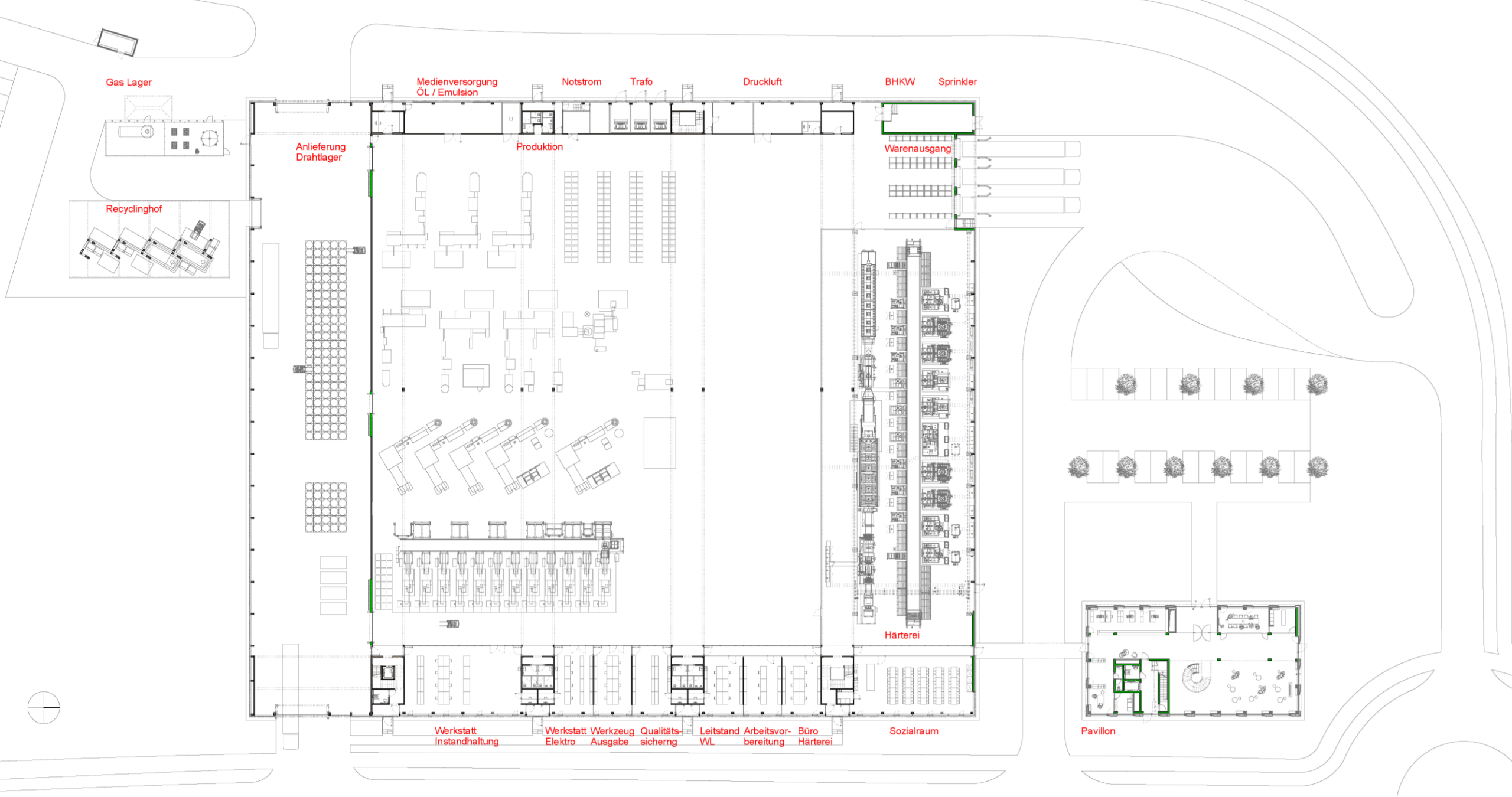


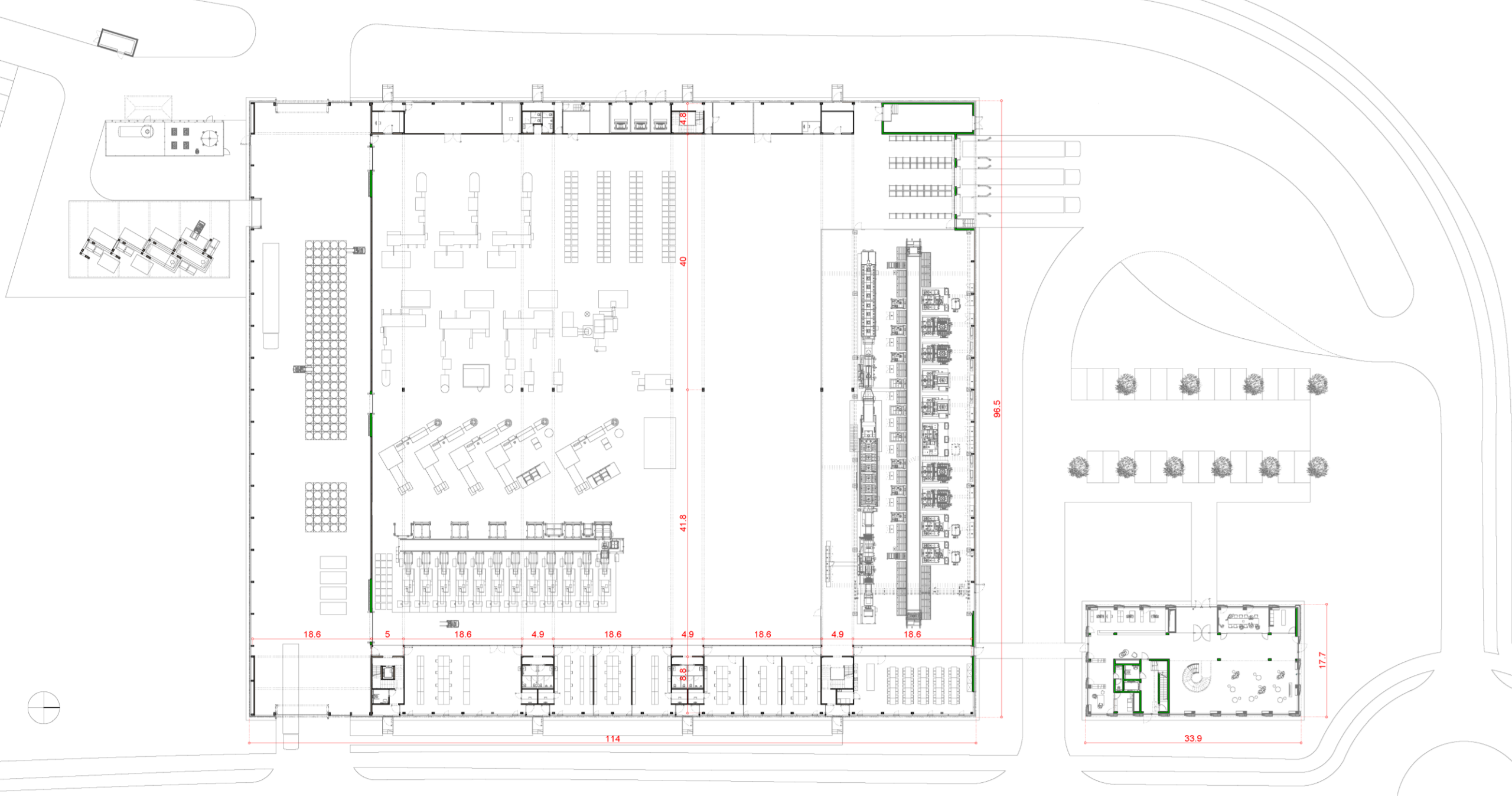


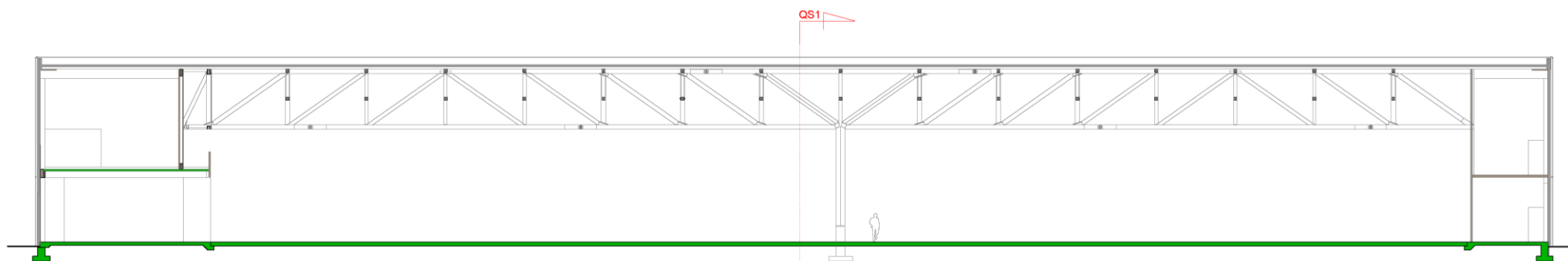
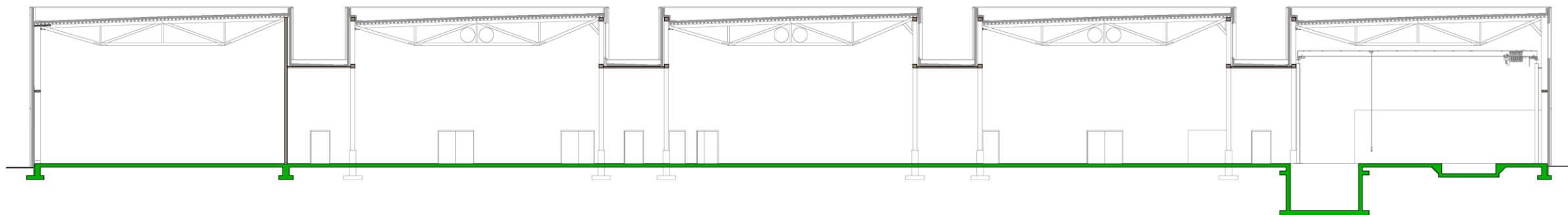




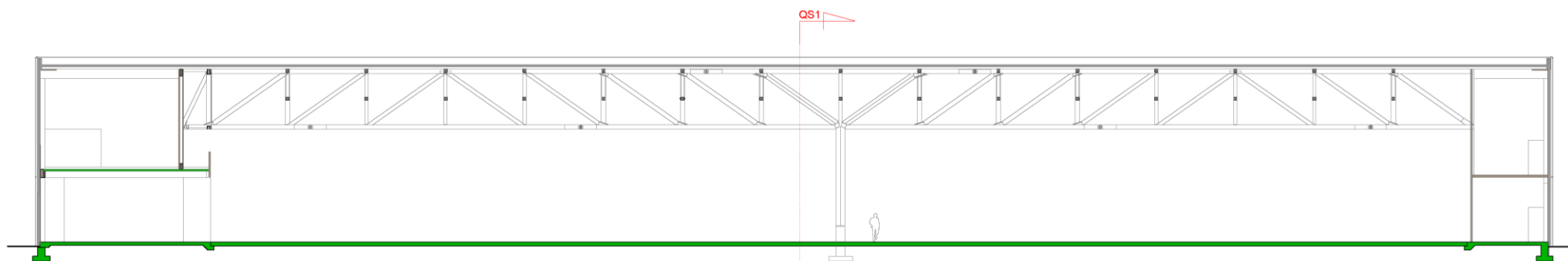
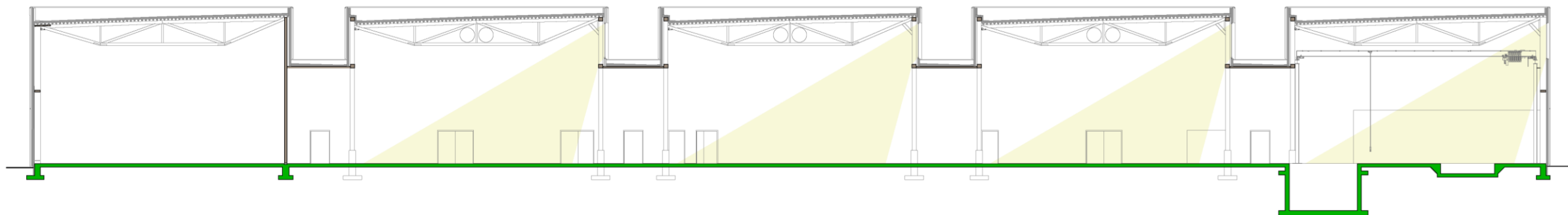




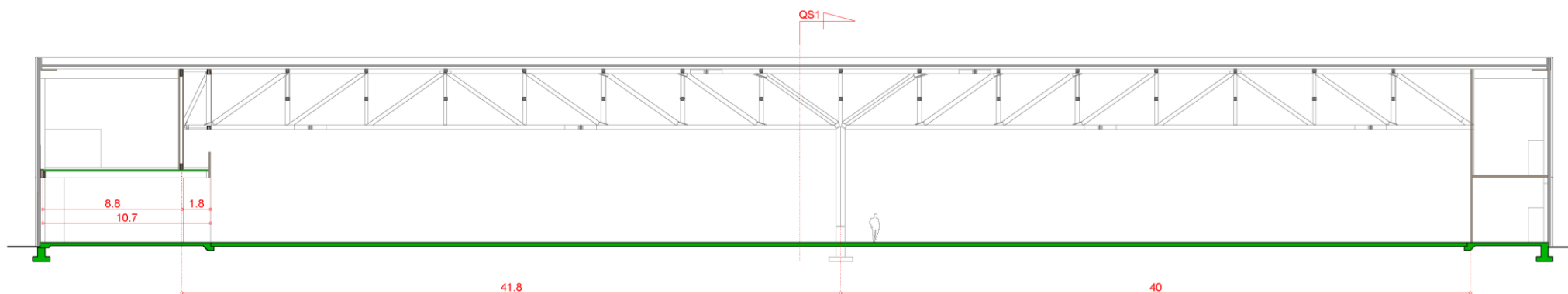
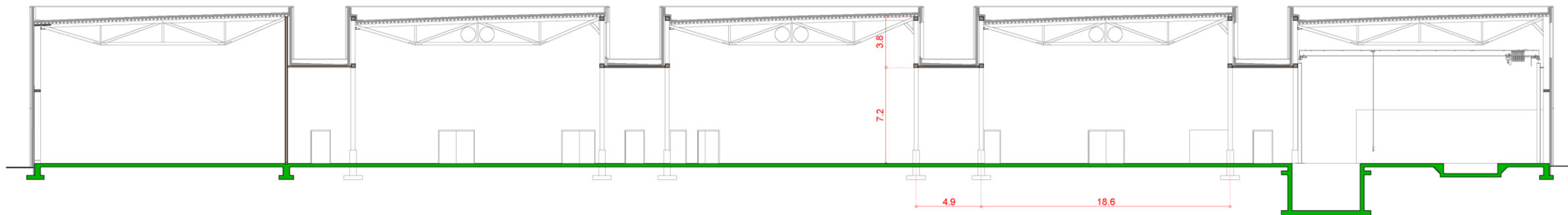


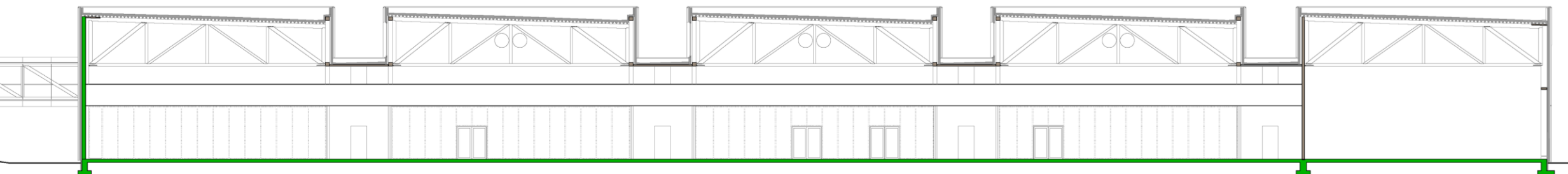




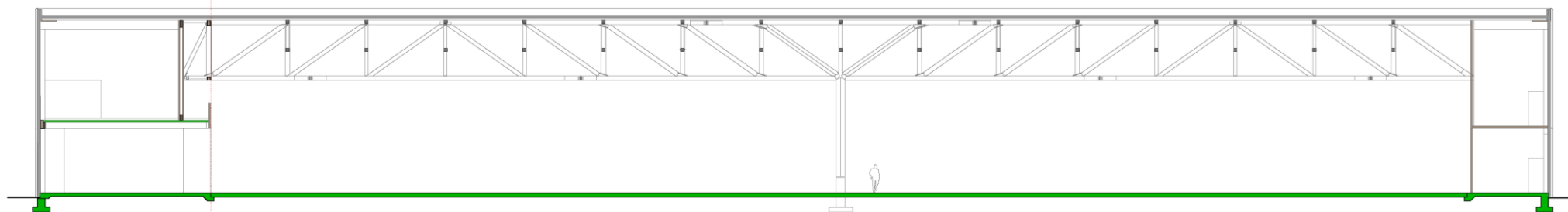


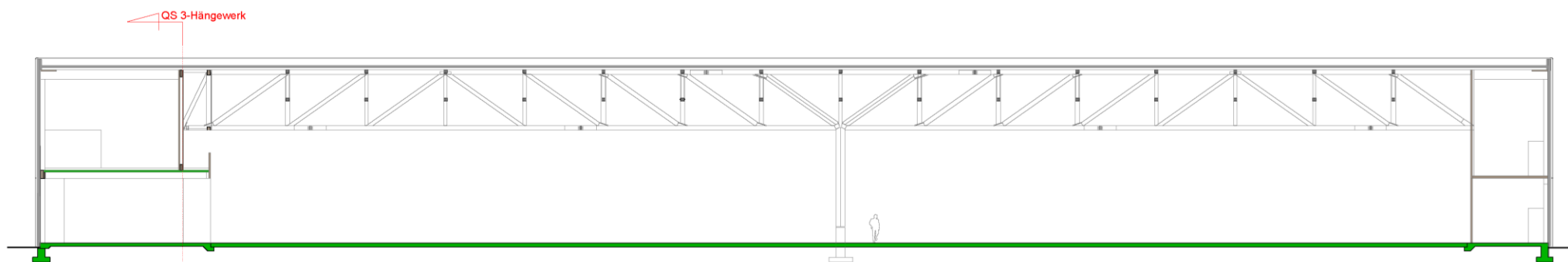
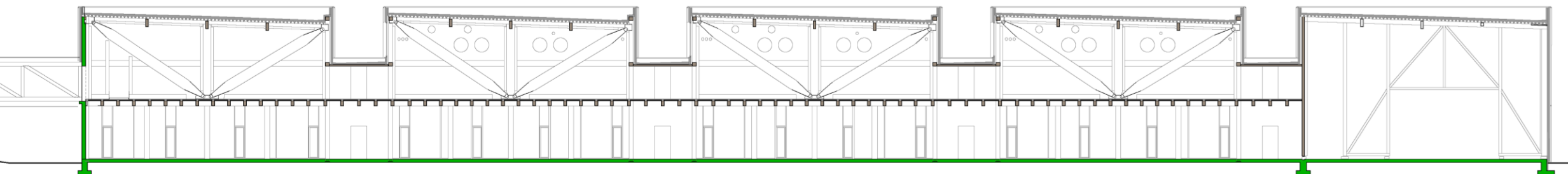




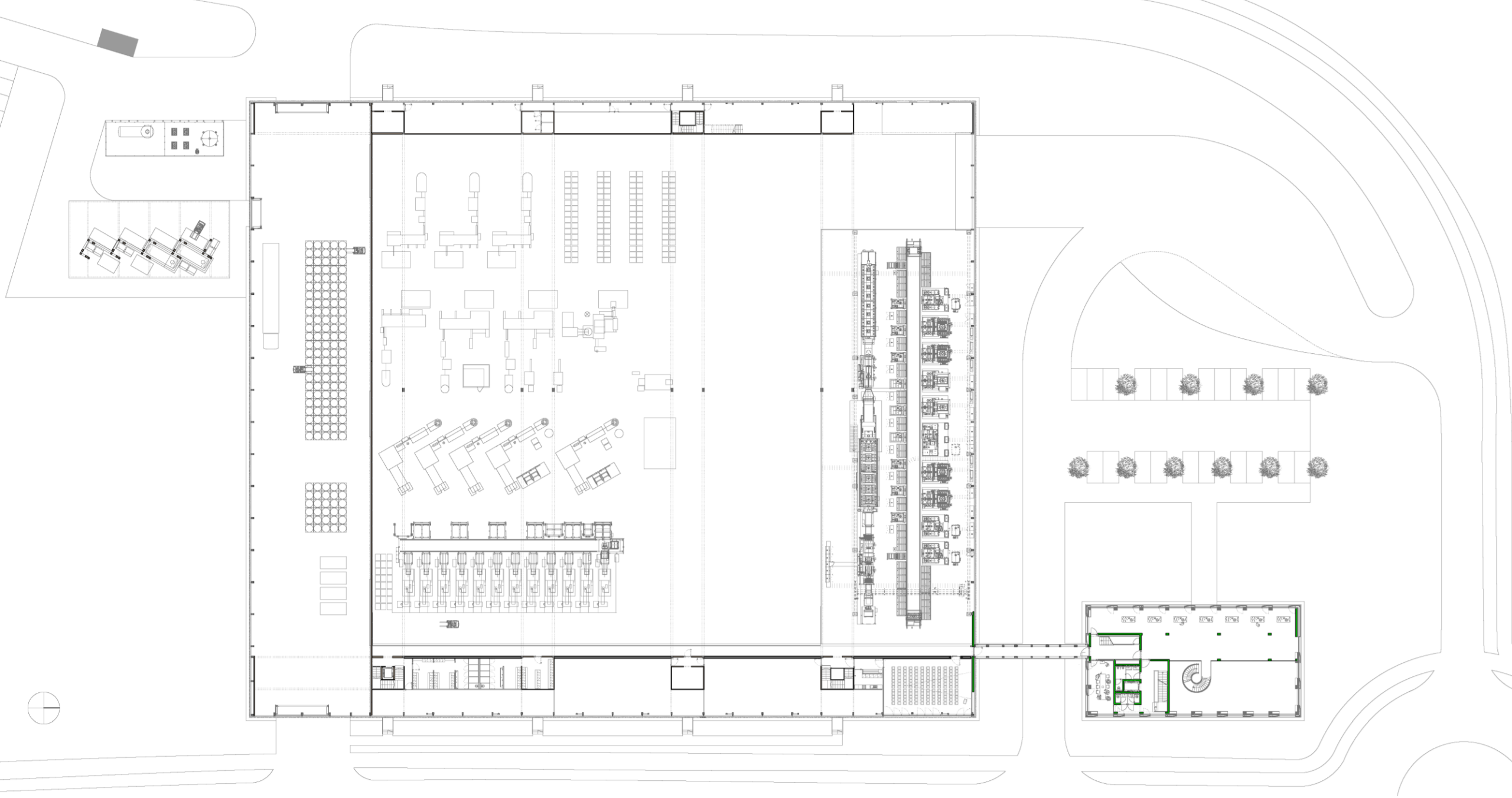


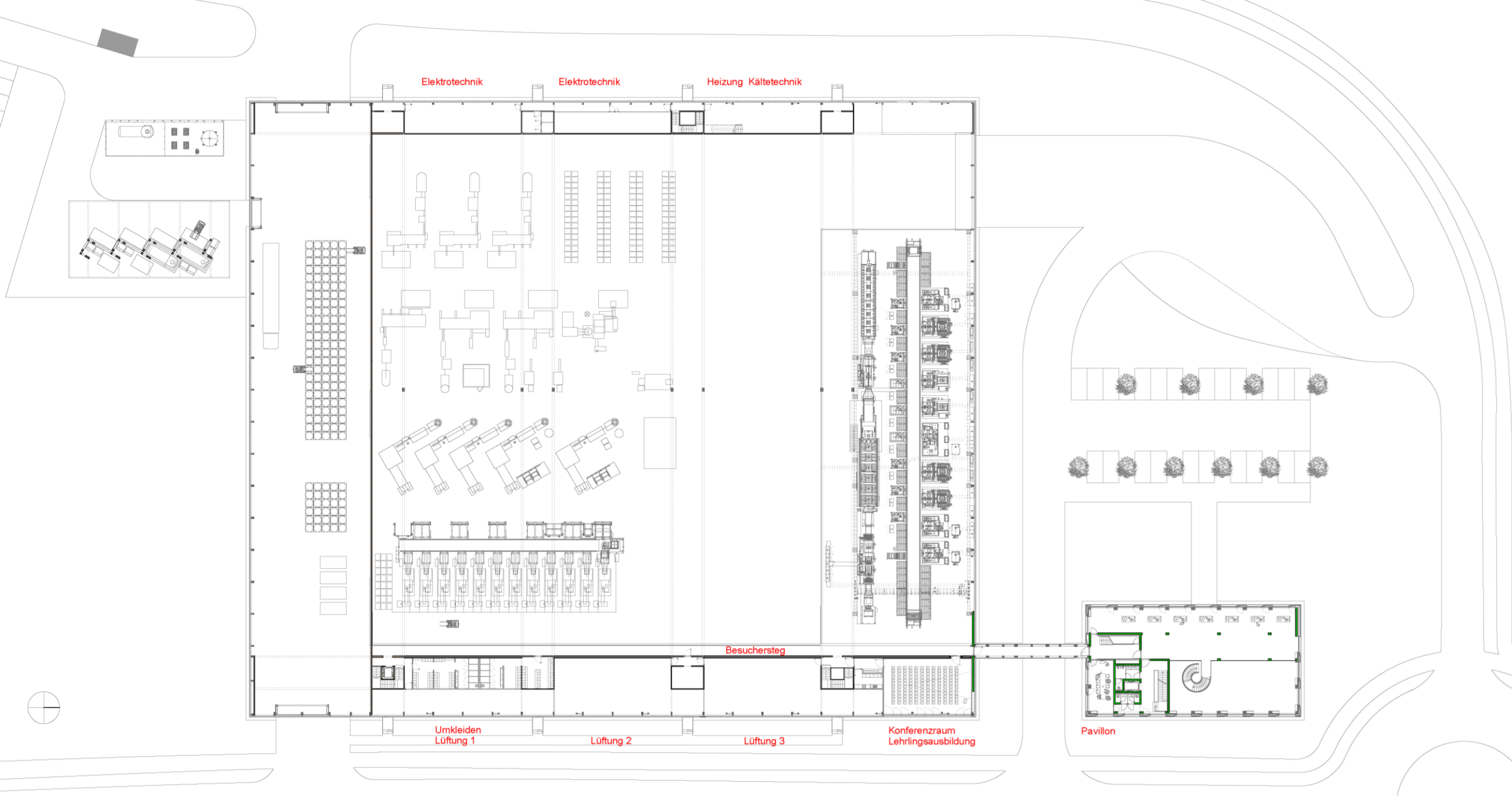
QS 2-Aussteifungsfachwerk

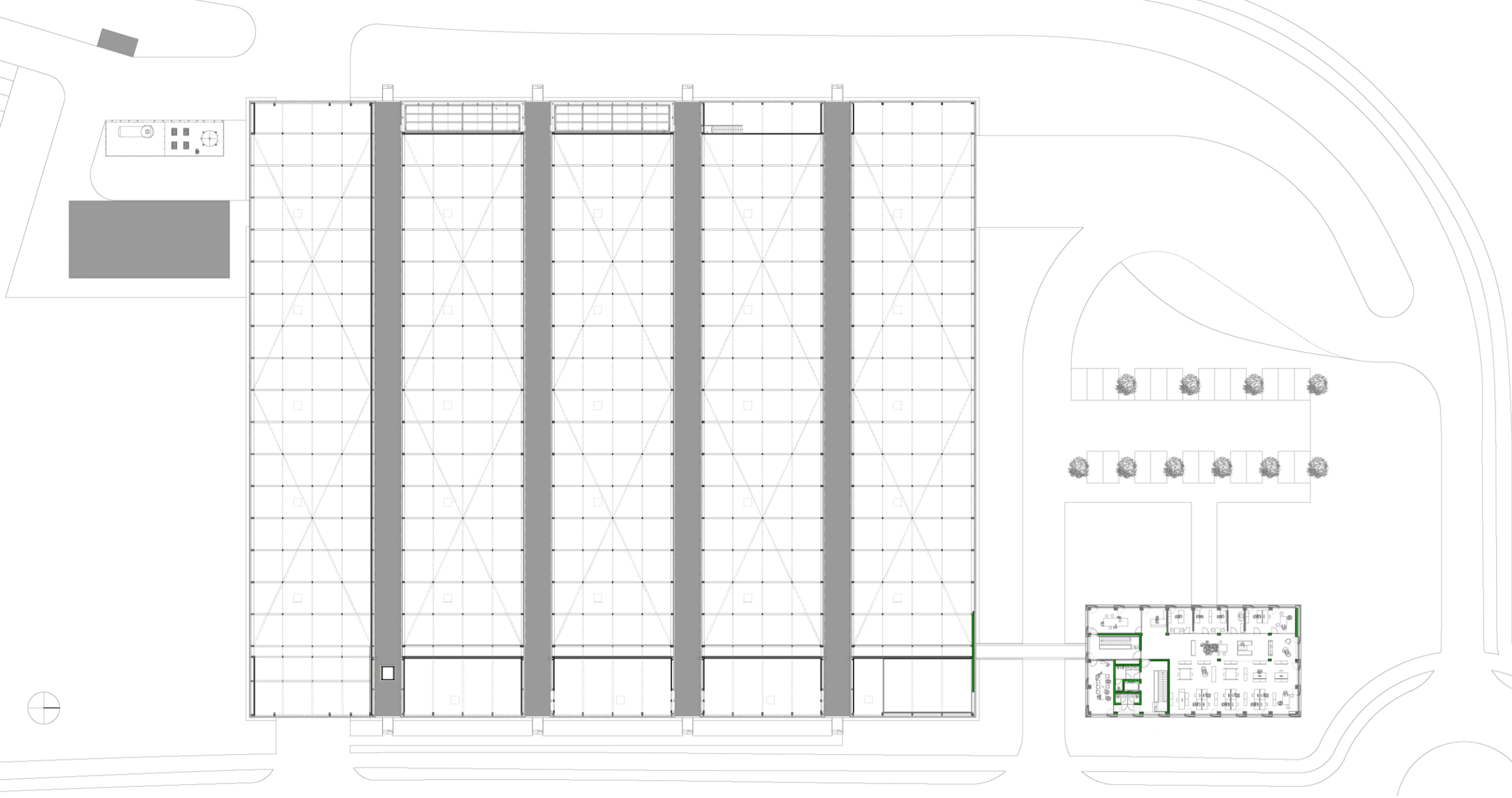


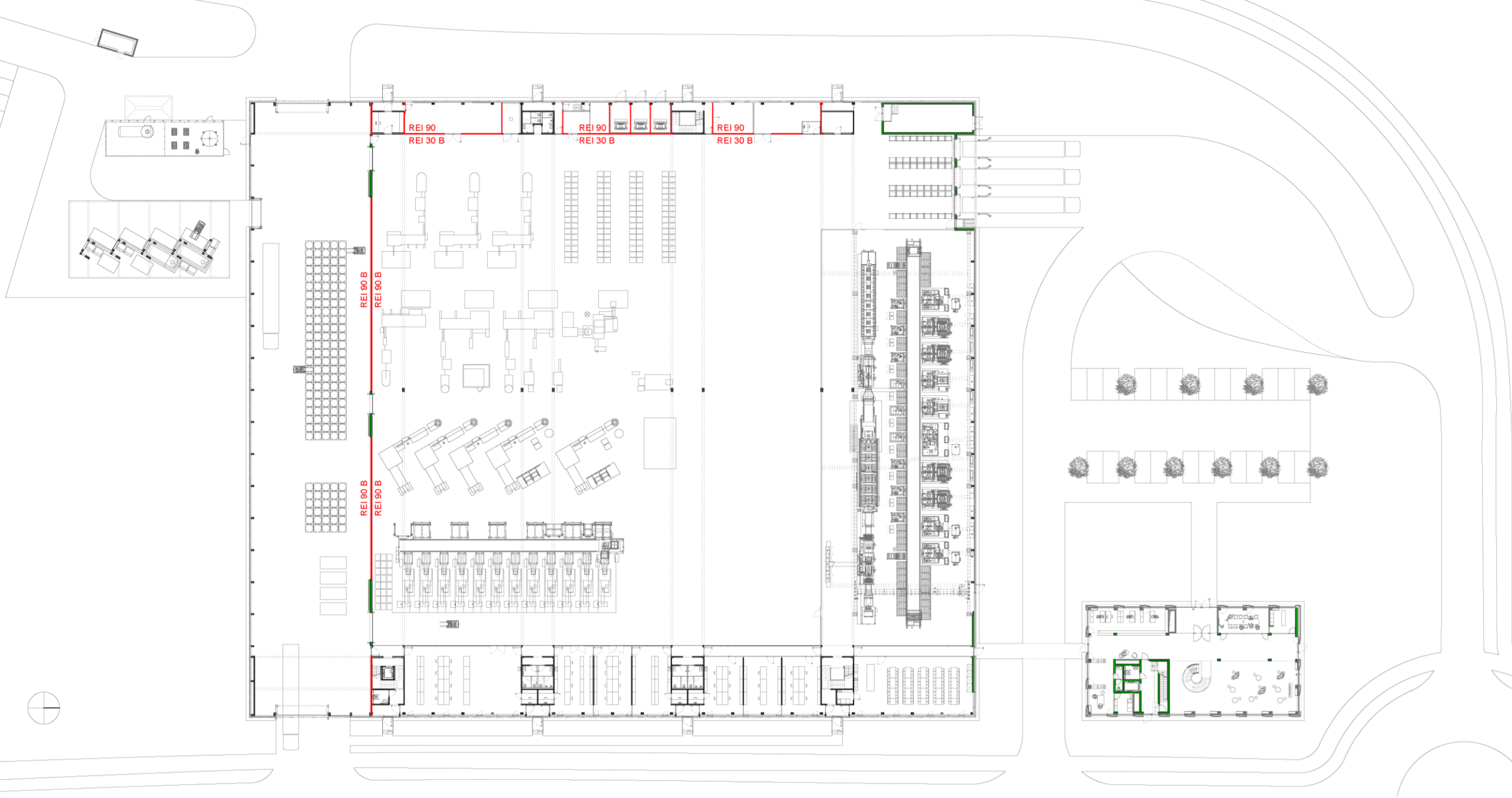




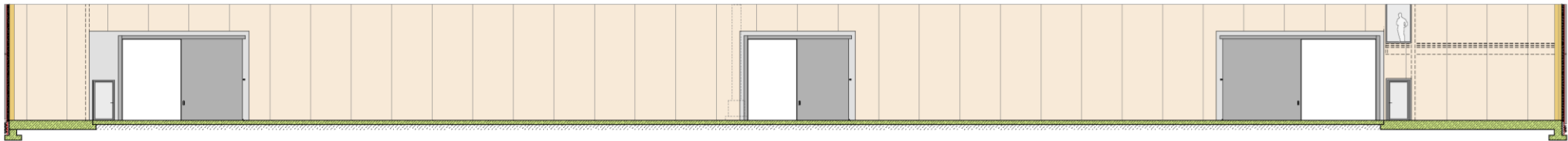




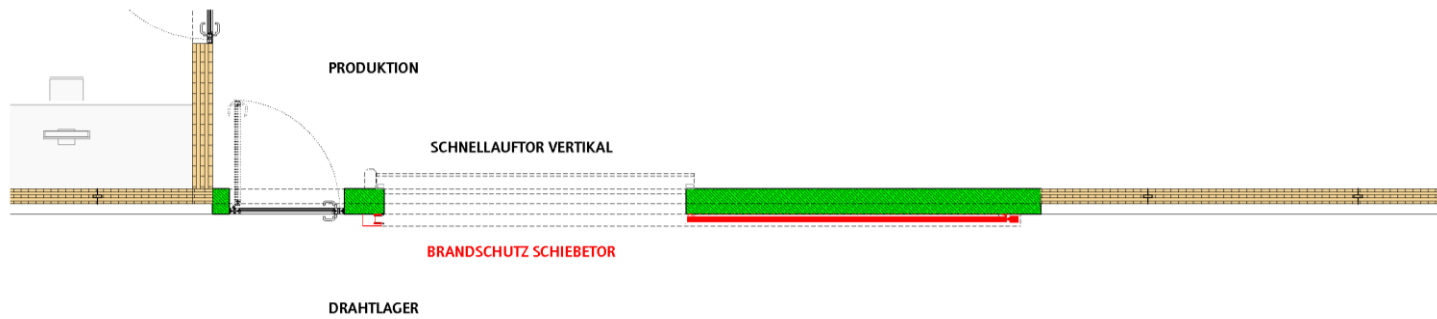






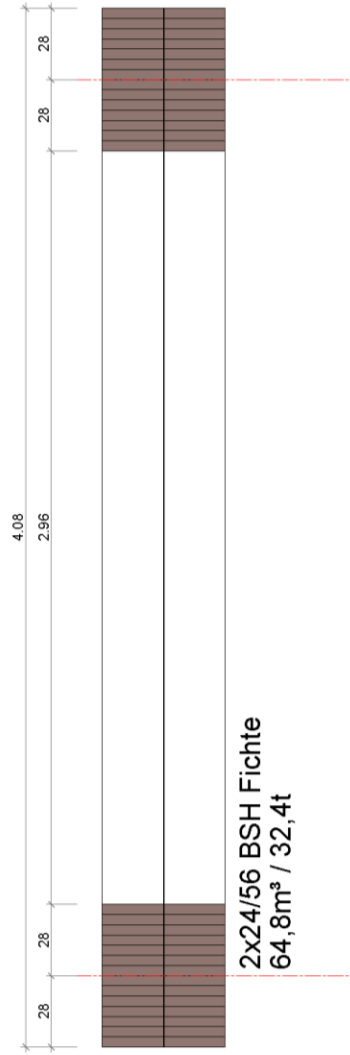


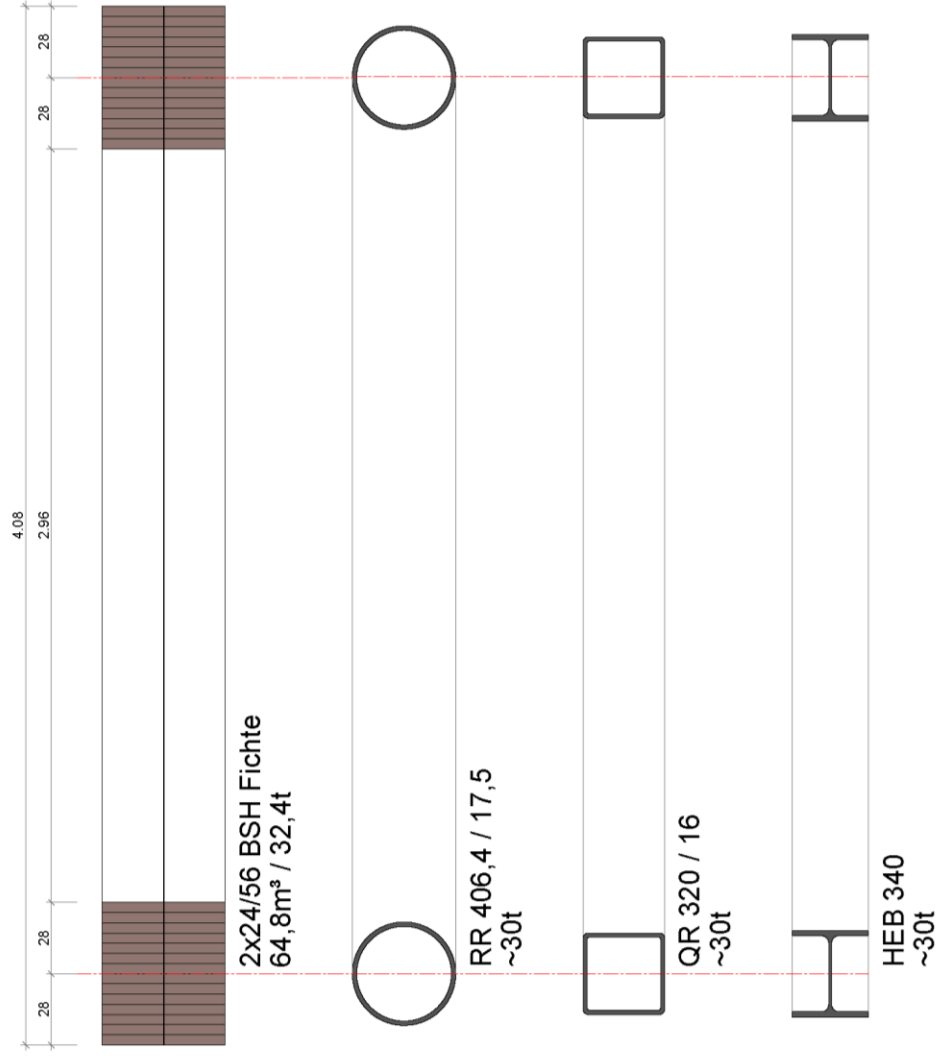
ANSICHT DRAHTLAGER

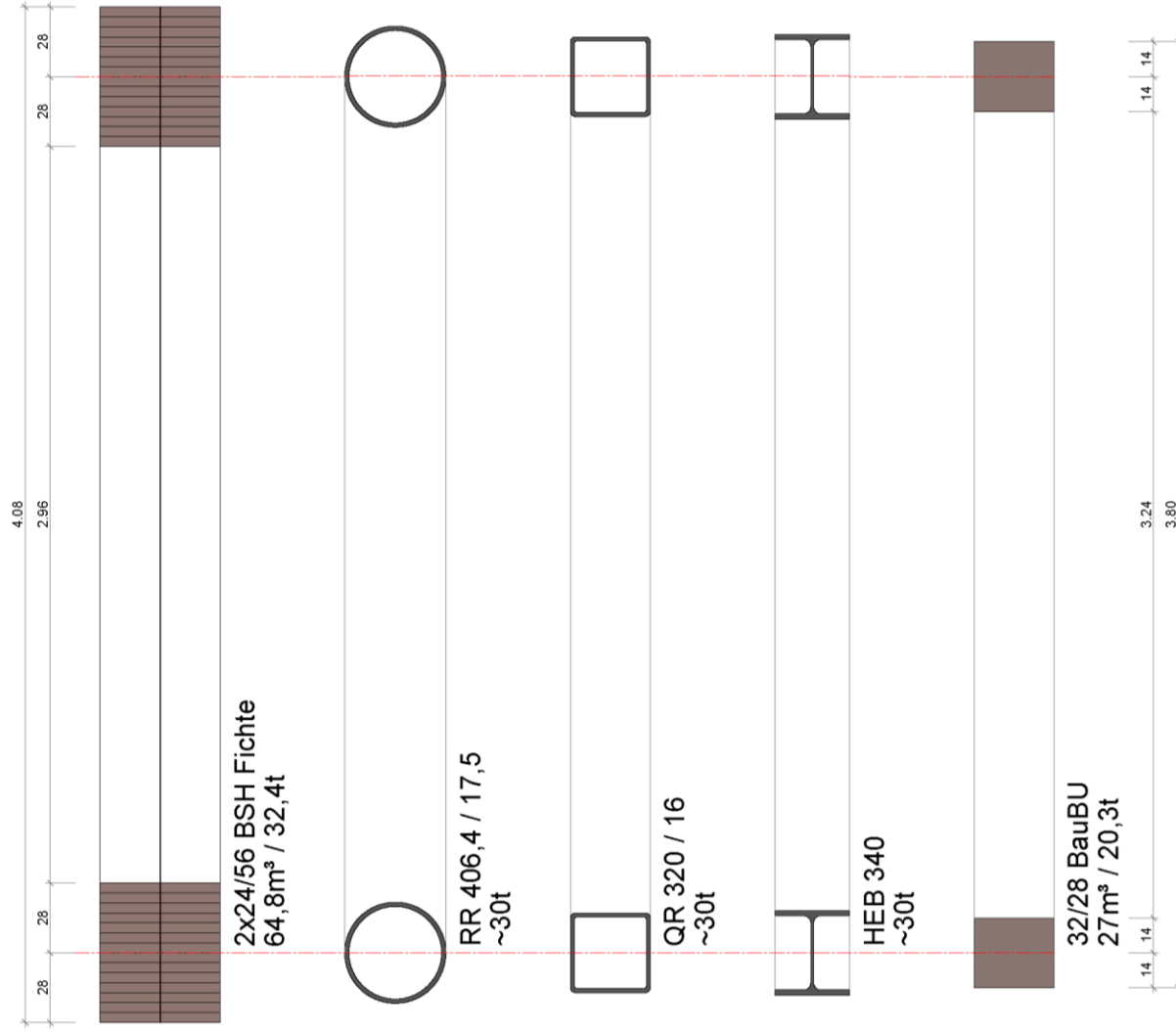


BETONRAHMEN
UM BRANDSCHUTZTOR

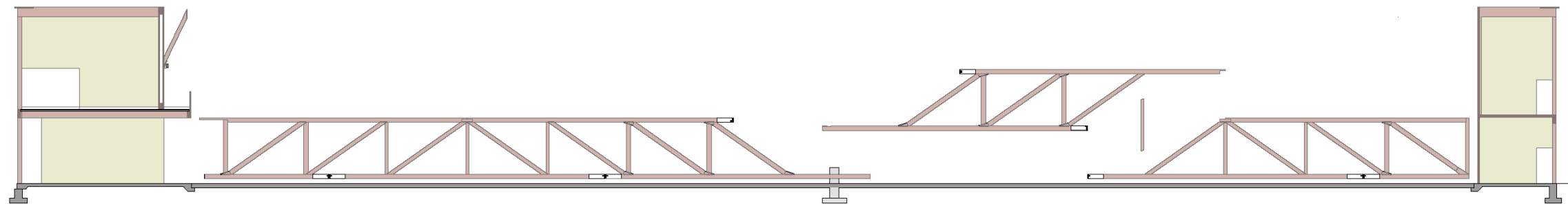
ELEMENTIERUNG HAUPTFACHWERK SUBDIVISIONS MAIN TRUSS

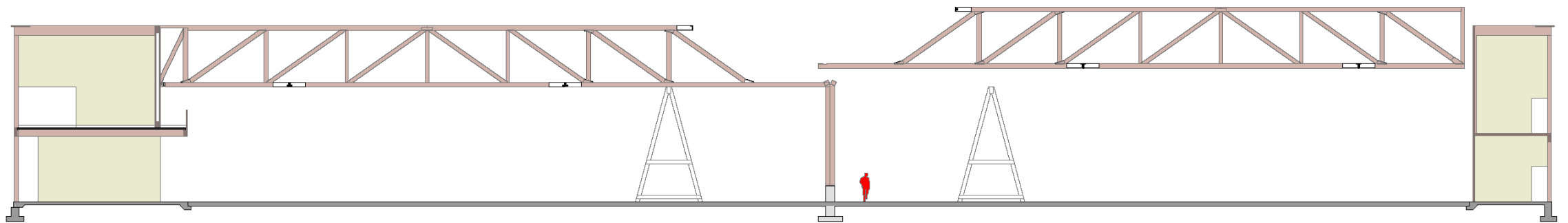


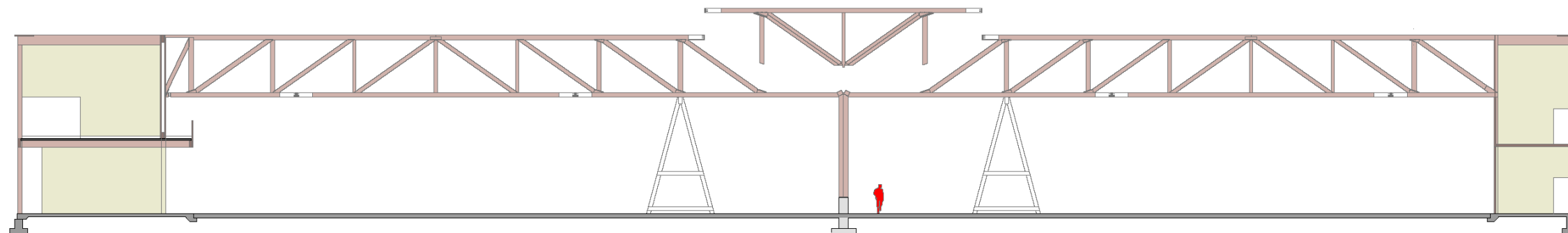


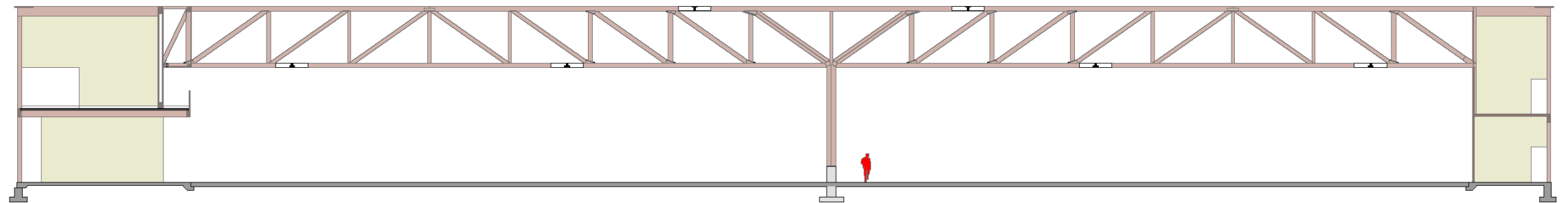


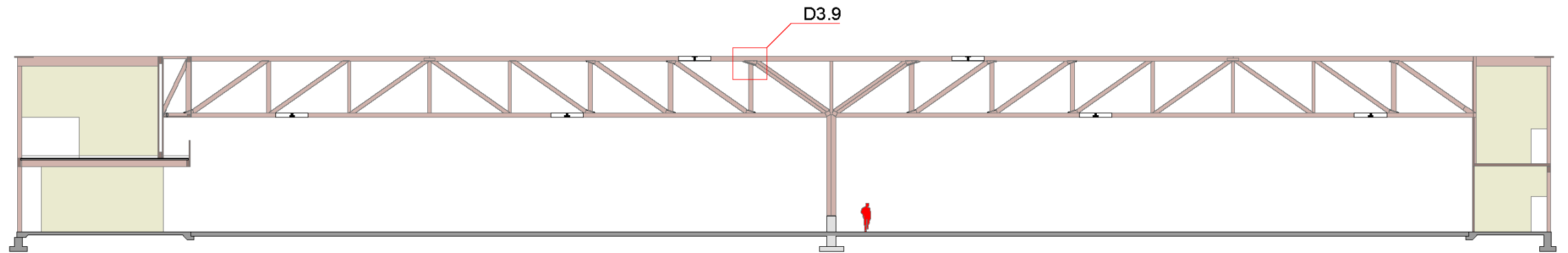


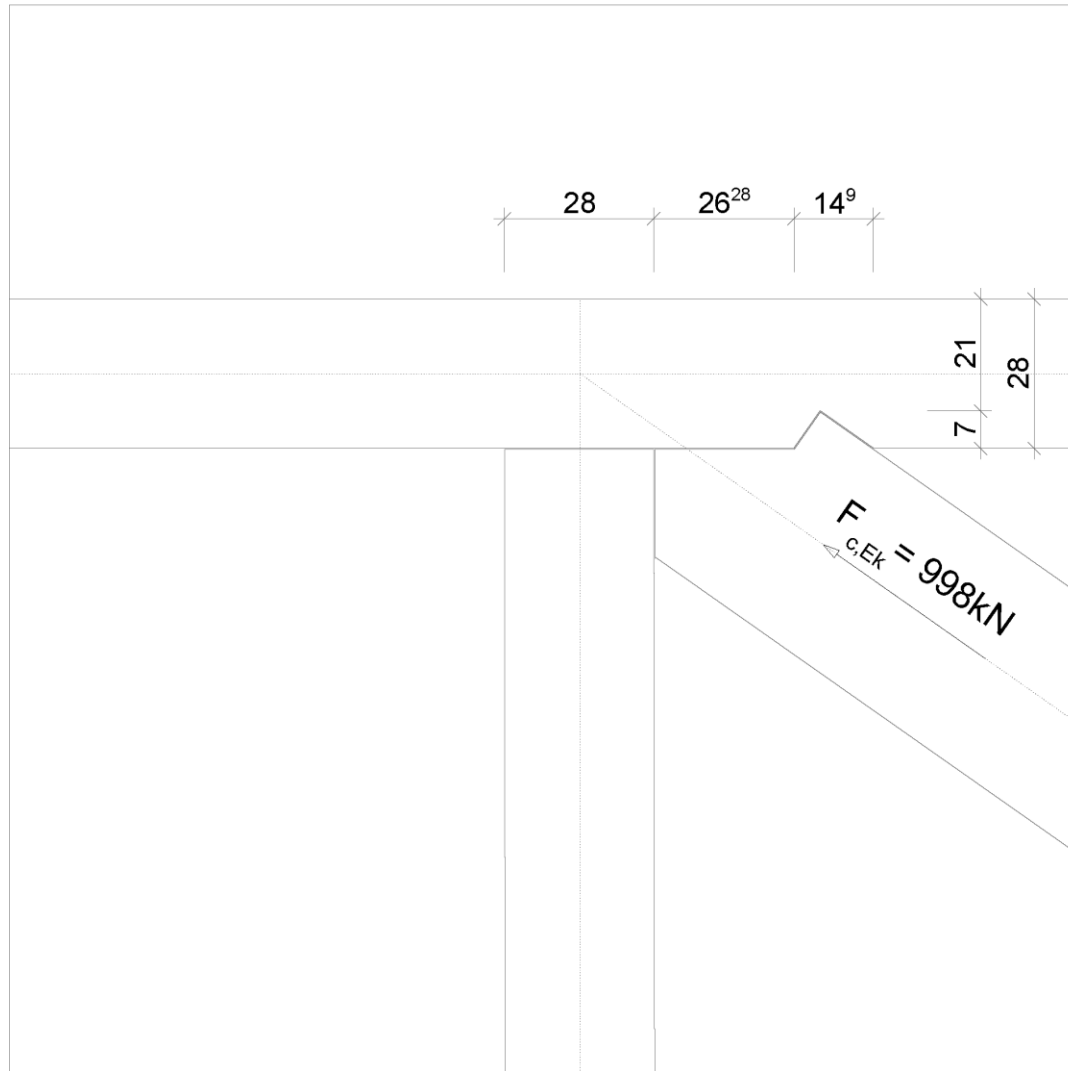








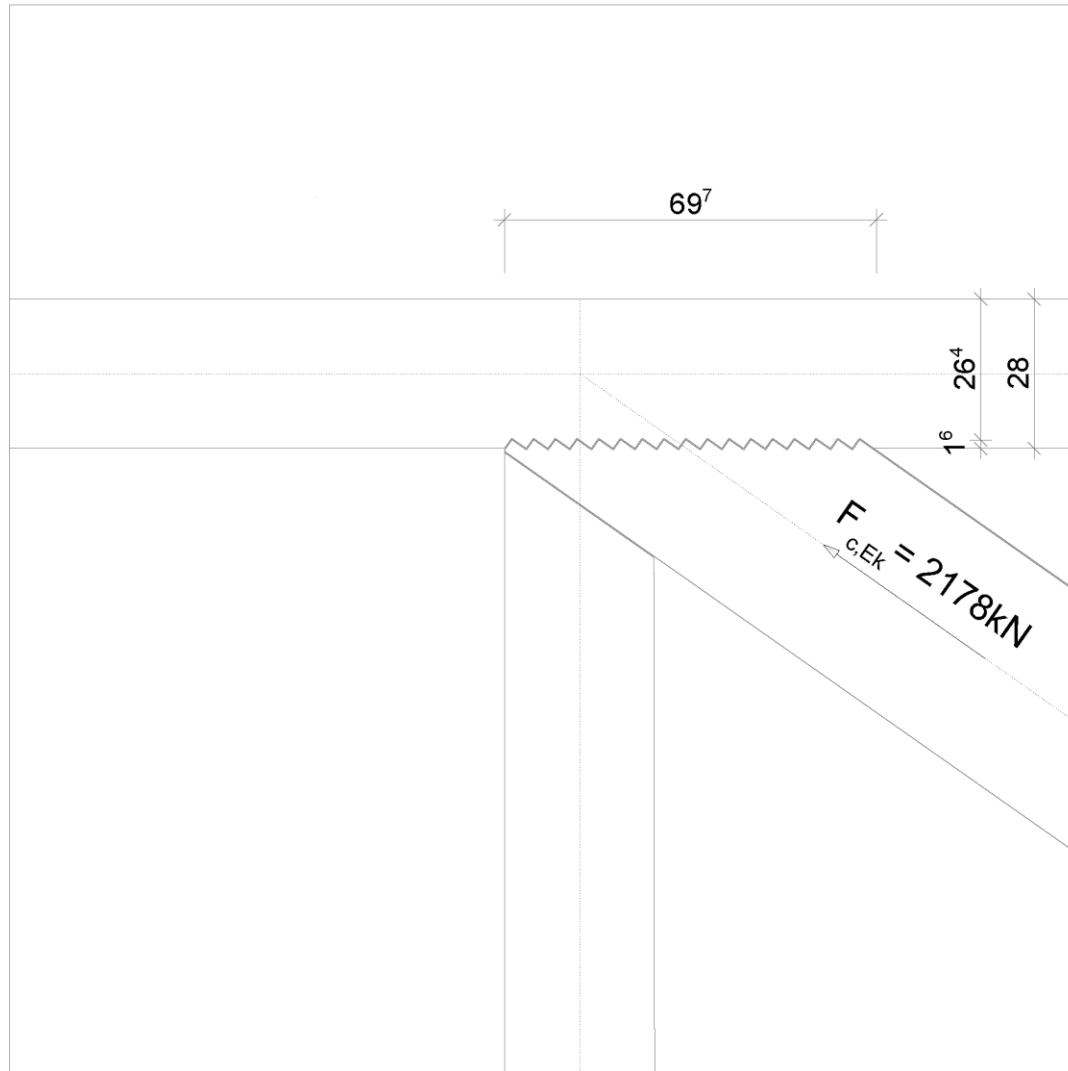




Utilisation of the compressive strenght

Notched connection:

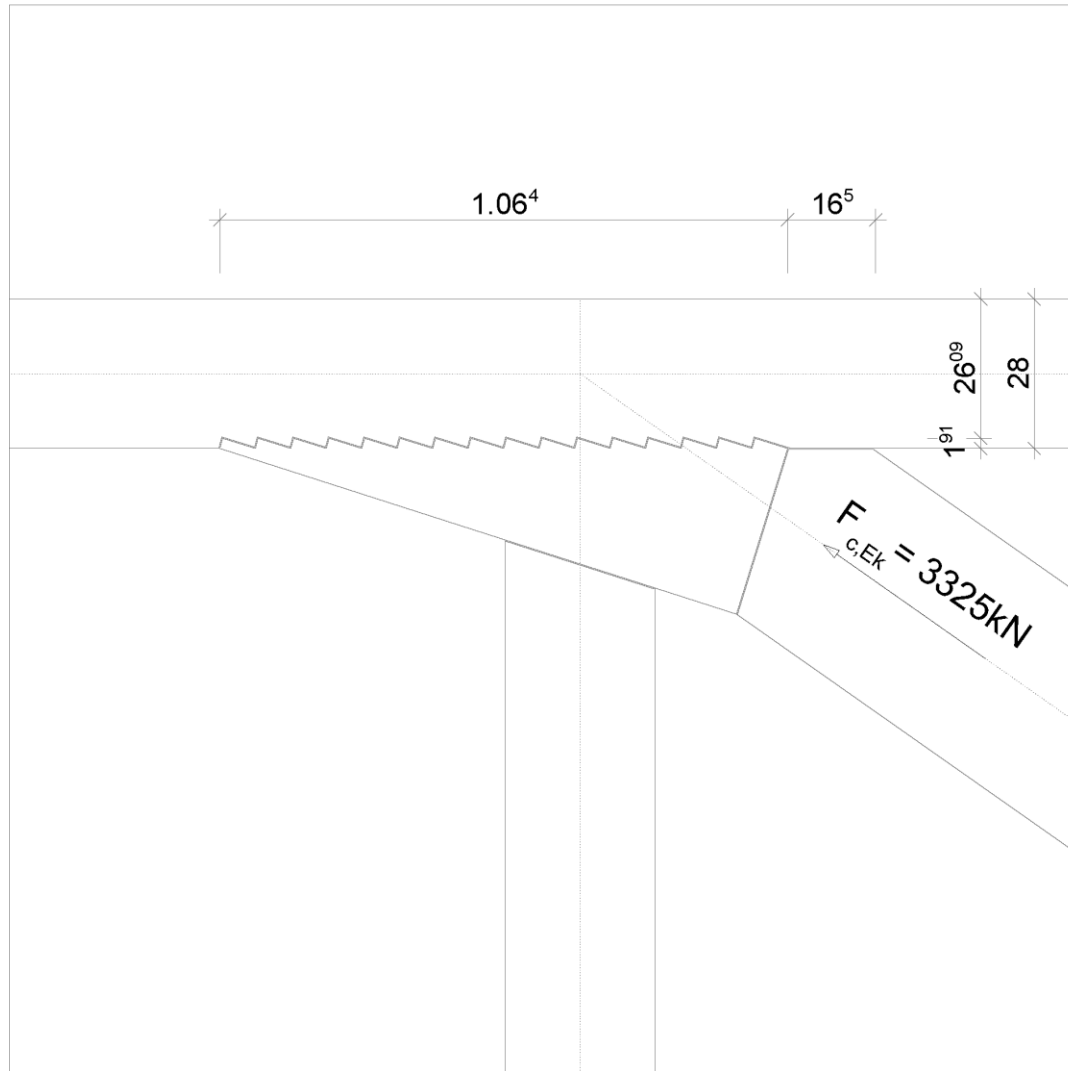
- massive weakening of the upper / lower chord
- high dimensional tolerance and positively
- absorbable compressive force: $F_{c,EK} = 998 \text{ kN}$



Utilisation of the compressive strenght

Multiple notched connection:

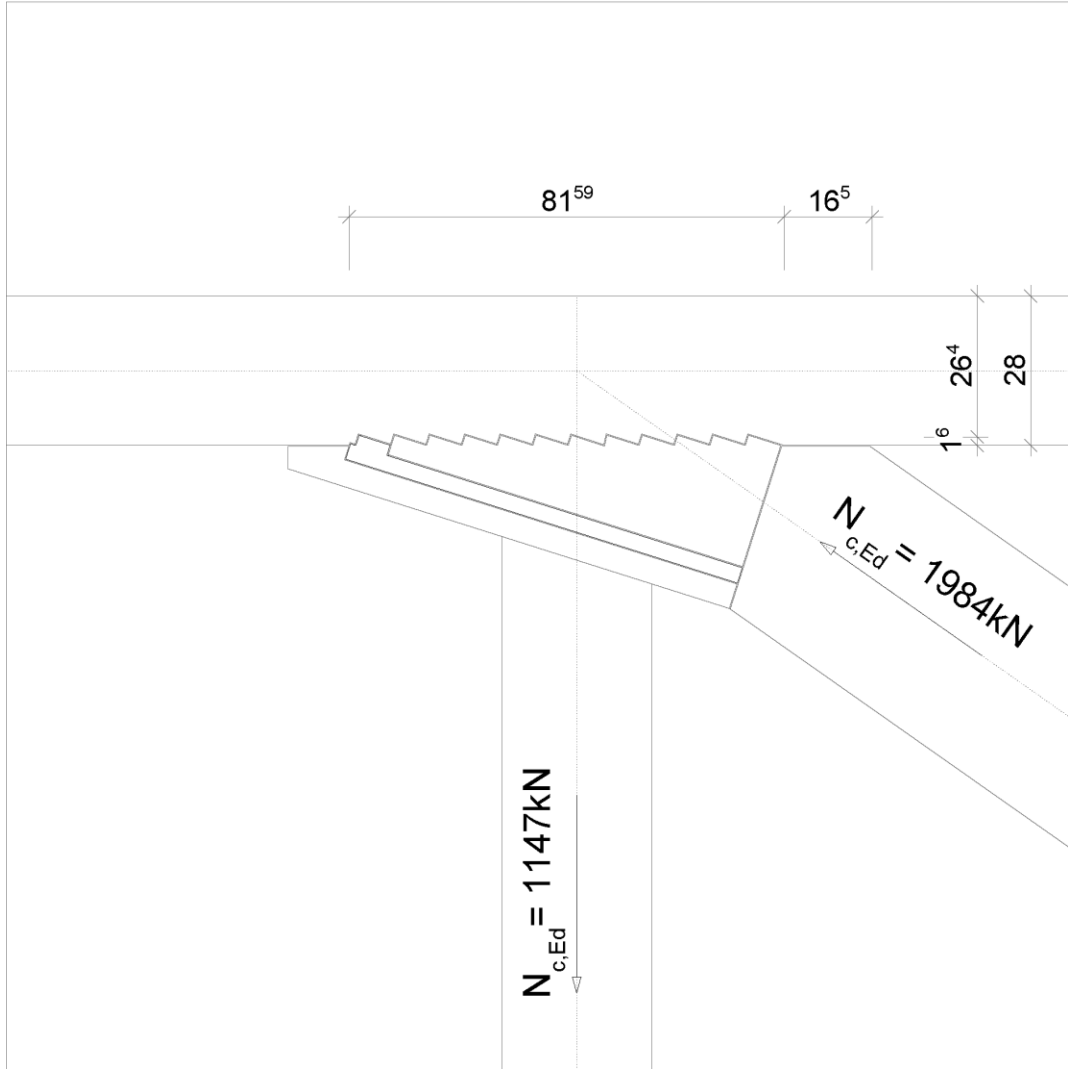
- slight weakening of the upper / lower chord
- no dimensional tolerance and positively
- absorbable compressive force: $F_{c,EK} = 2178 \text{ kN}$

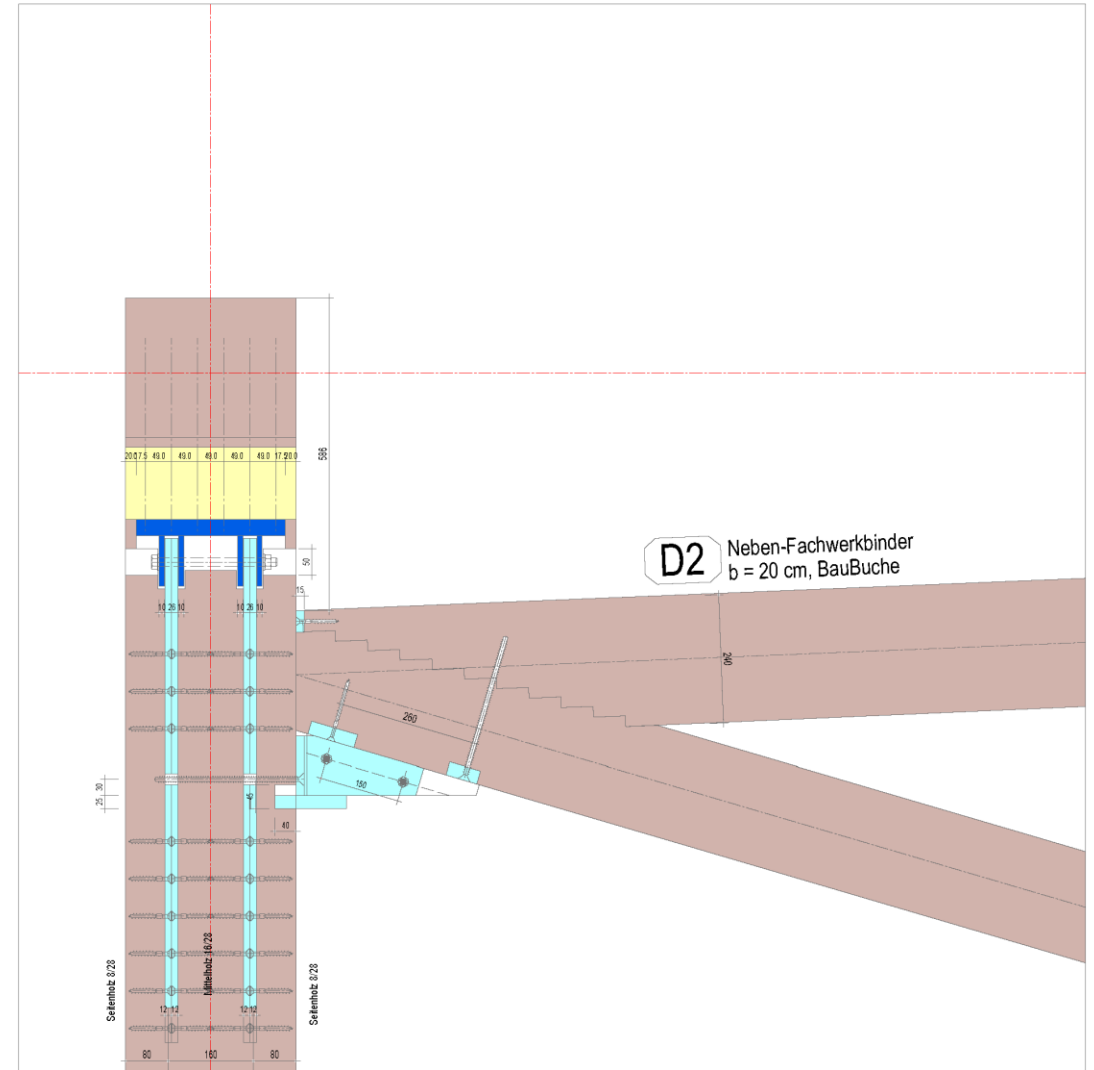
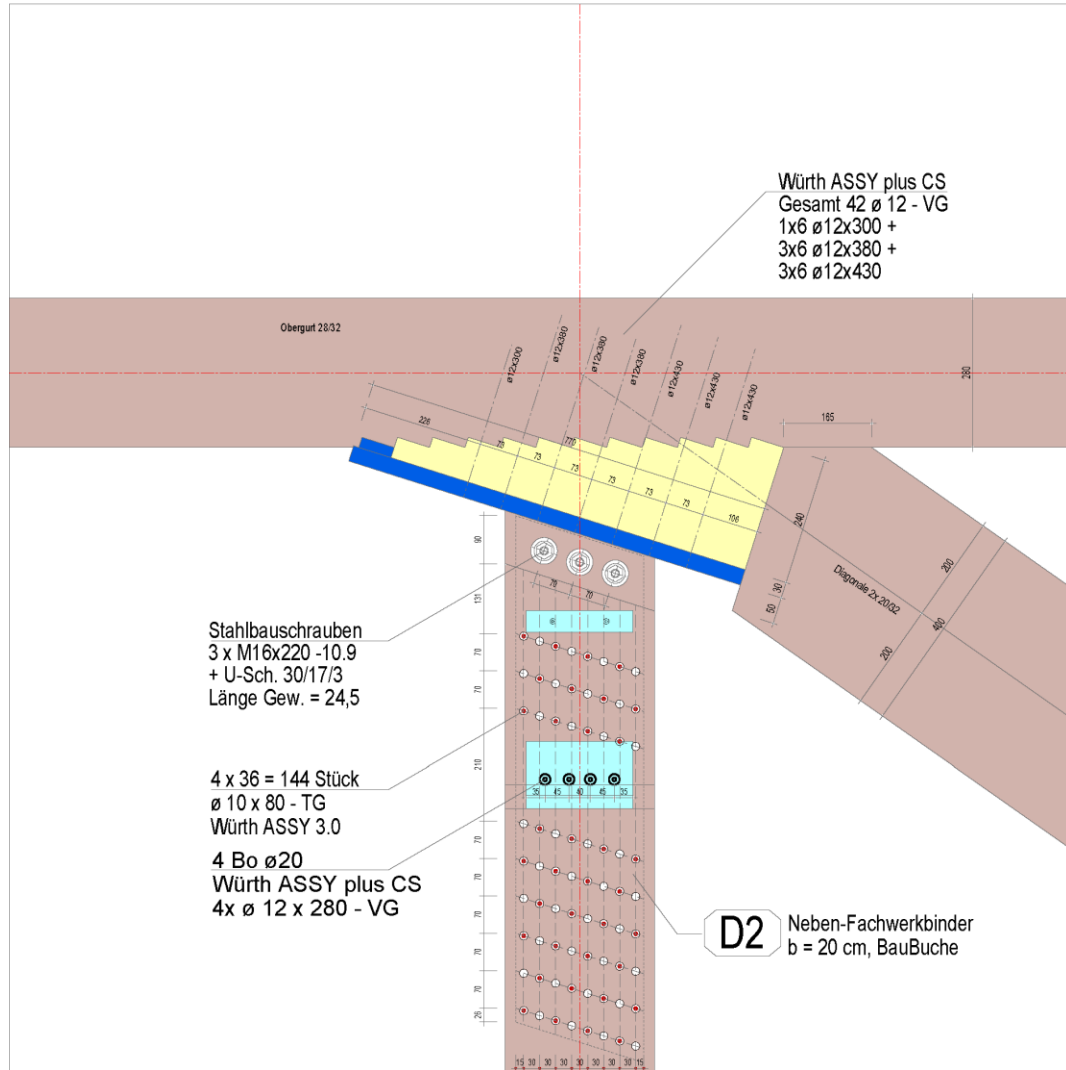


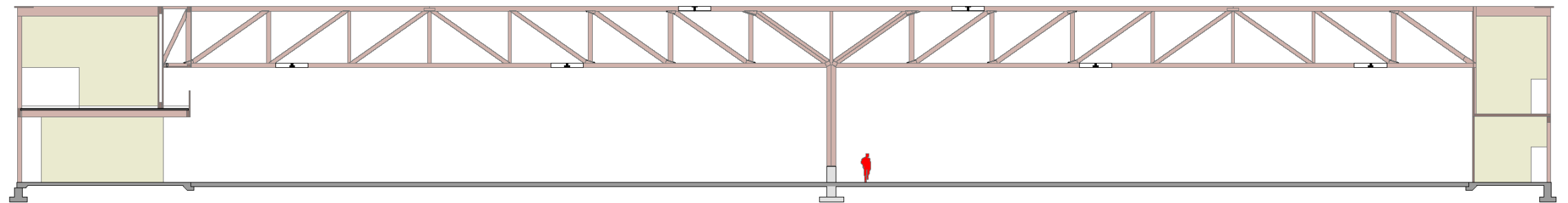
Utilisation of the compressive strenght

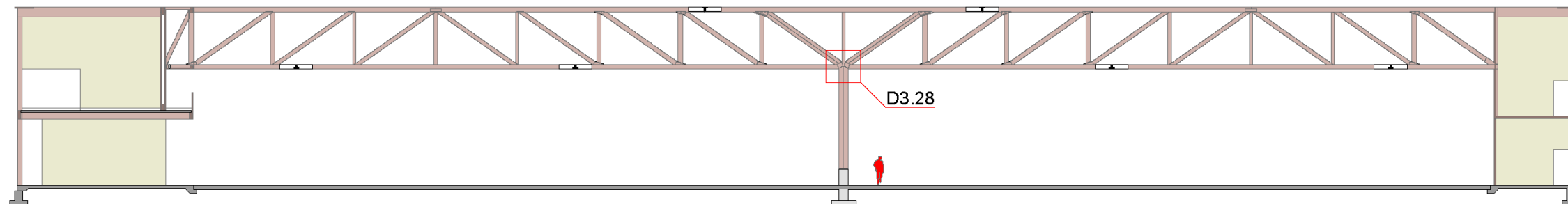
Extended multiple notched connection:

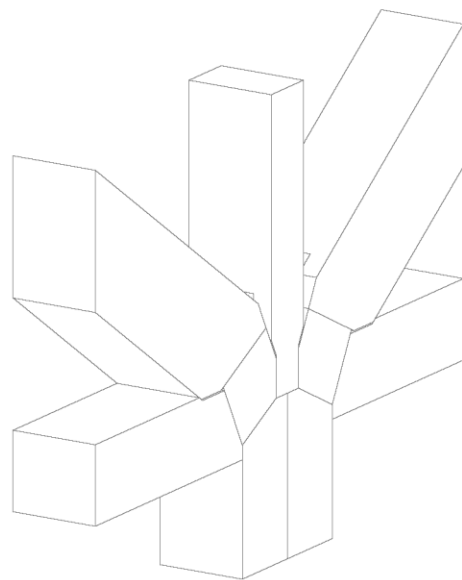
- slight weakening of the upper / lower chord
- no dimensional tolerance and positively
- absorbable compressive force: $F_{c,EK} = 3325\text{ kN}$

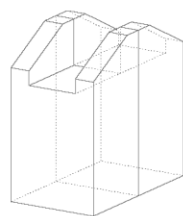


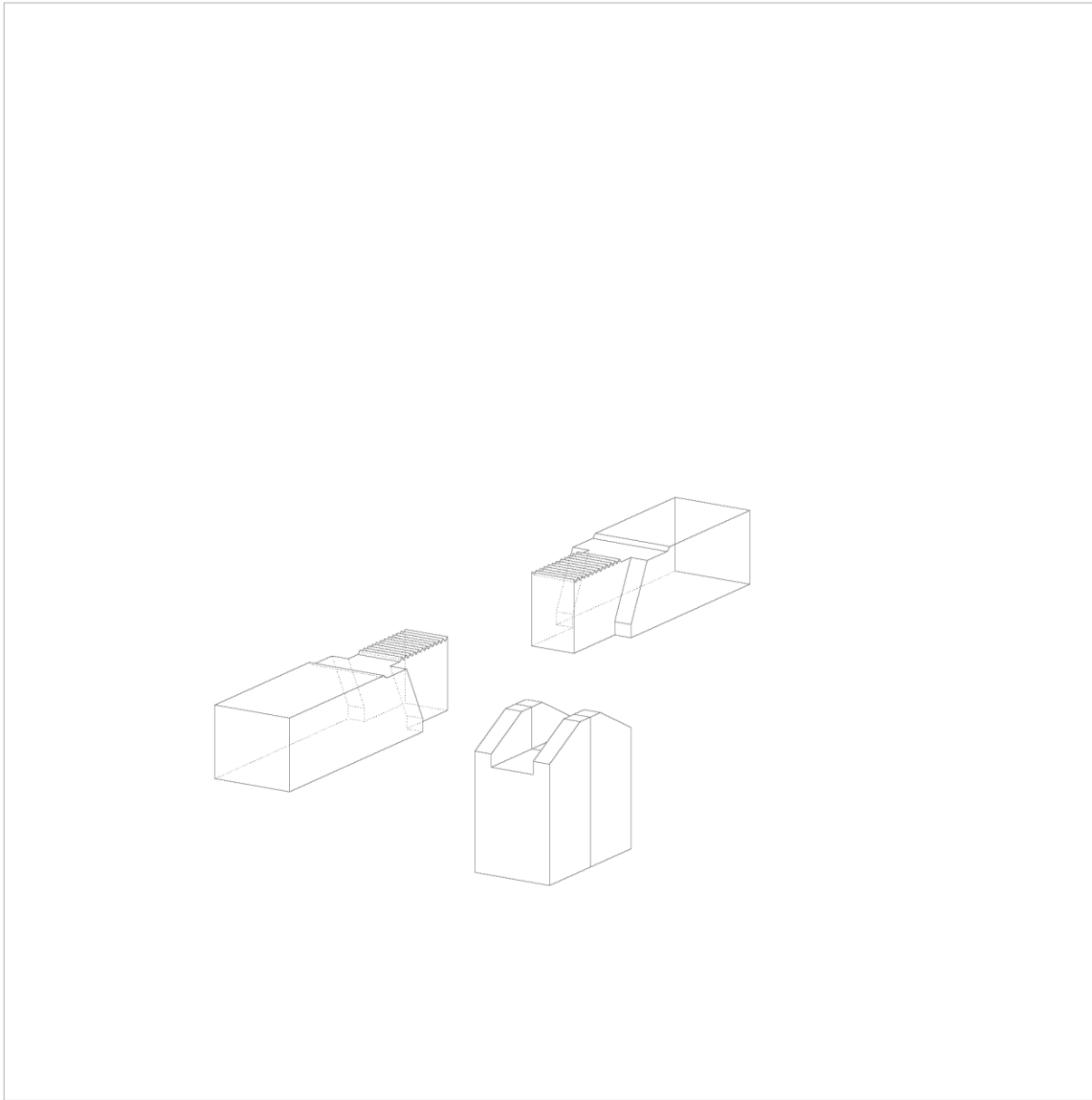


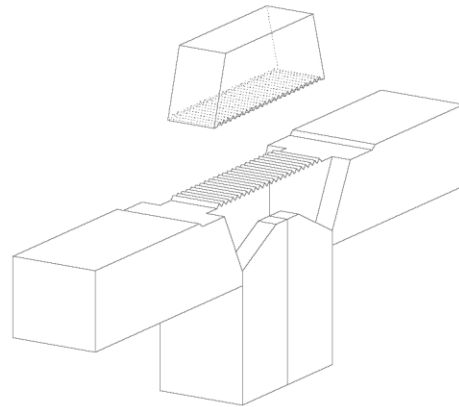


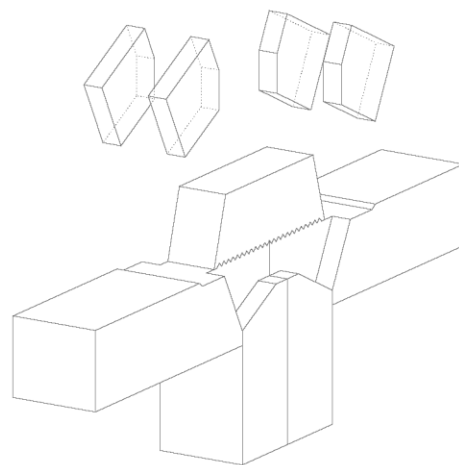




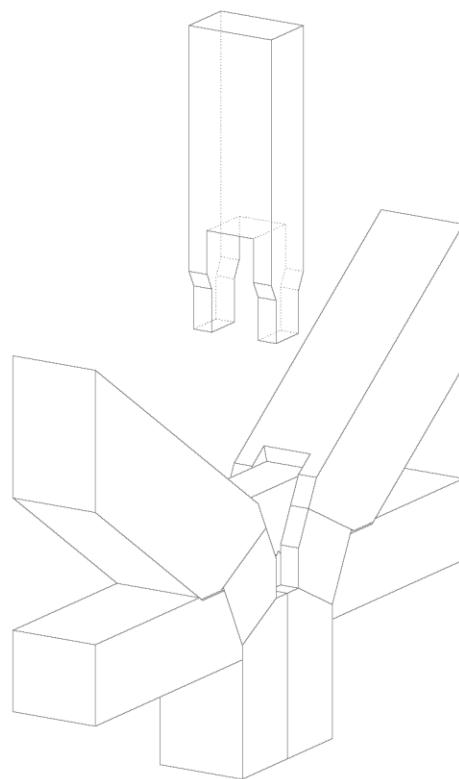


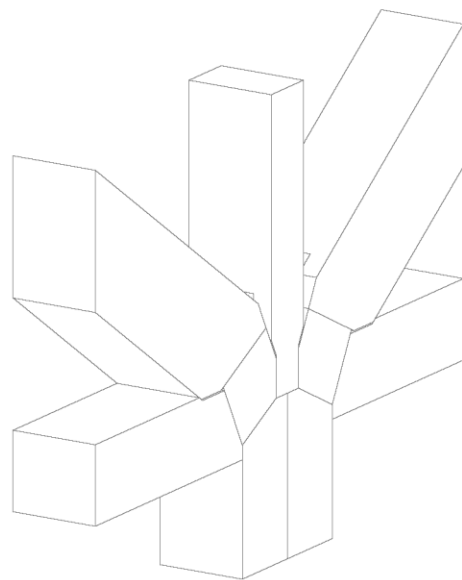


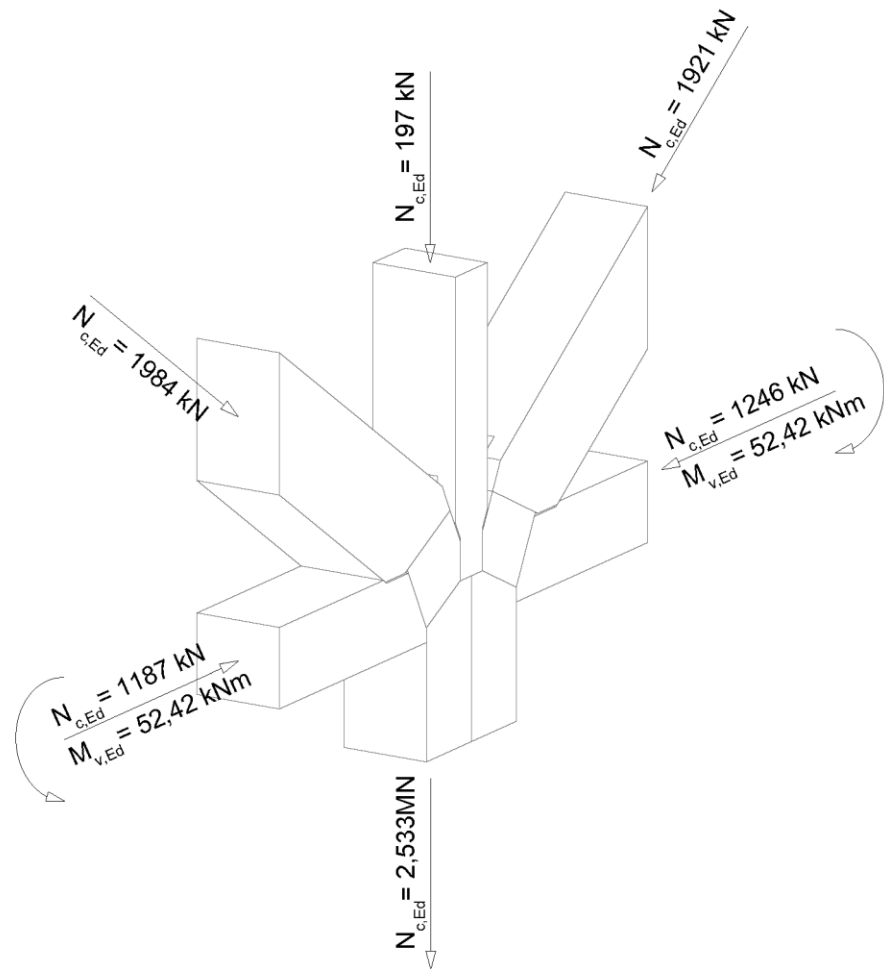


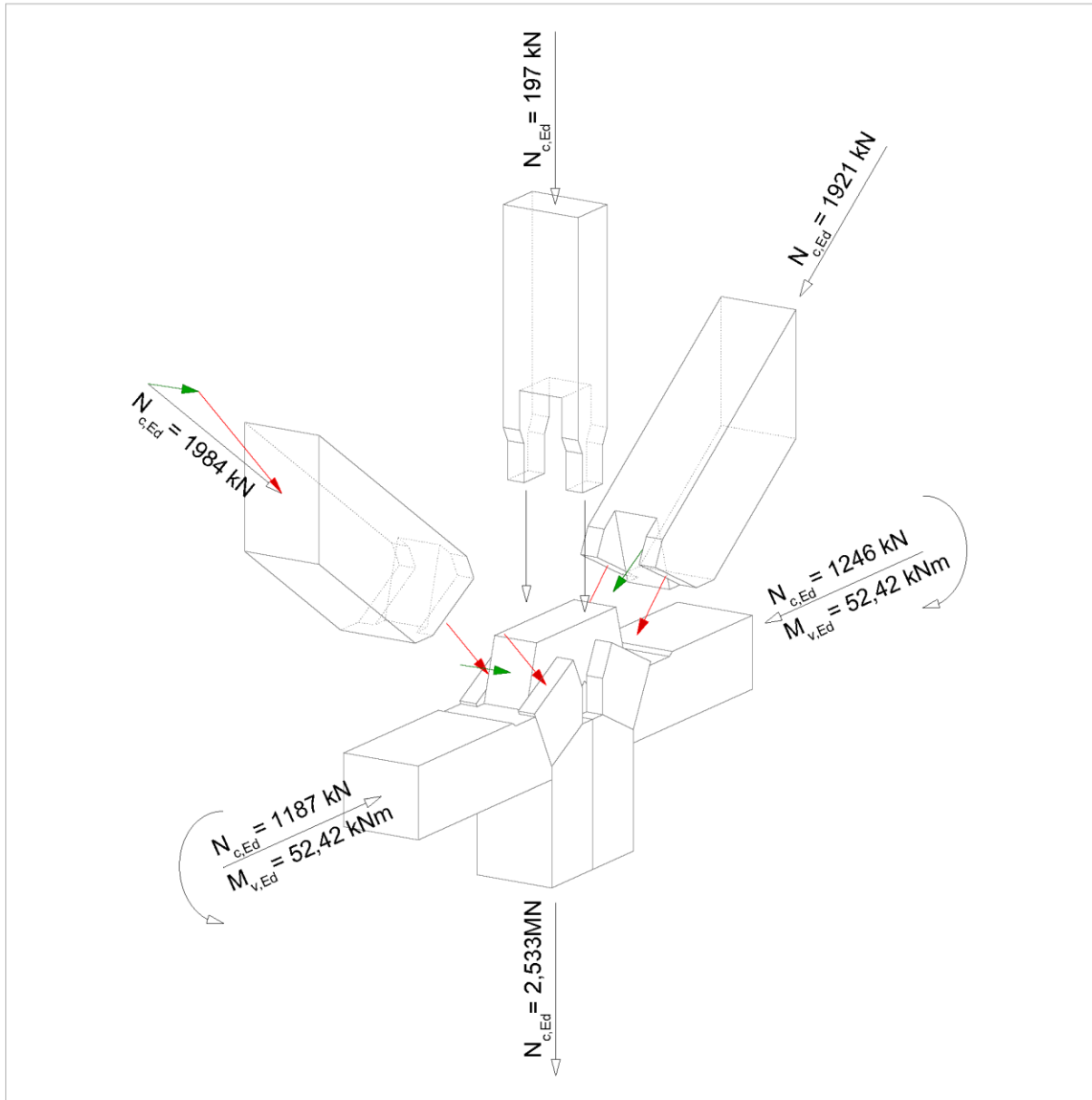


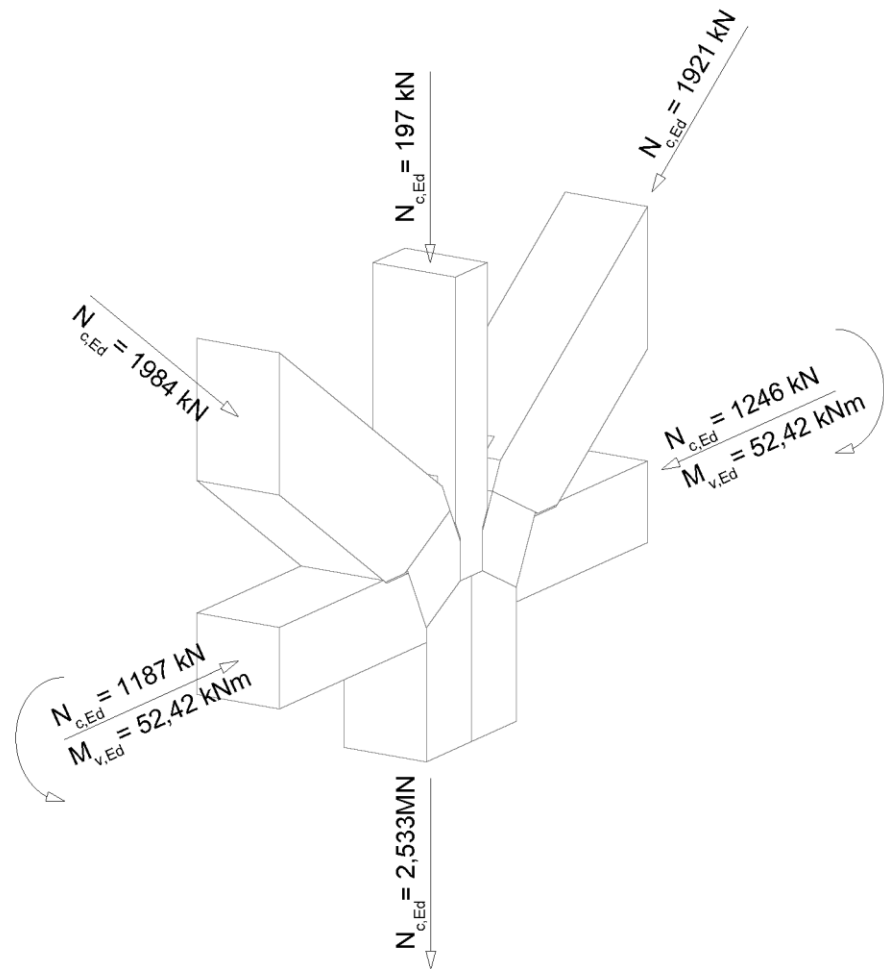


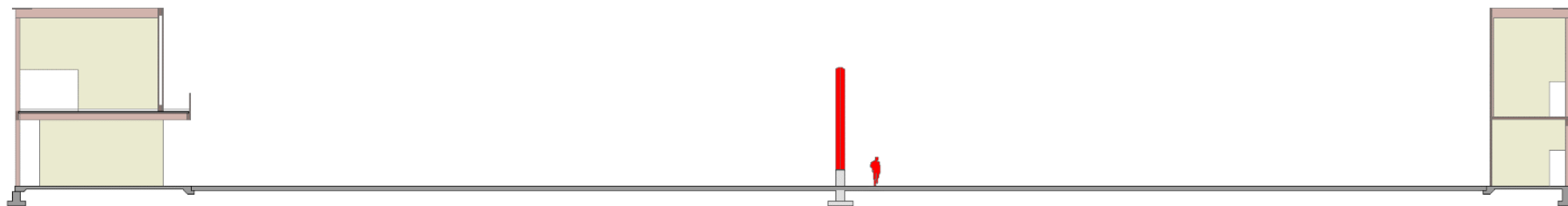


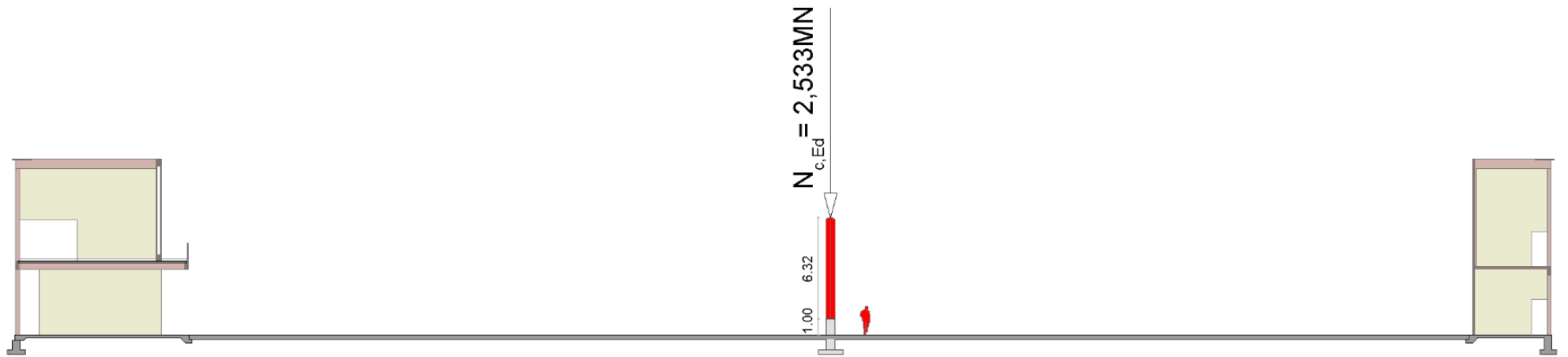






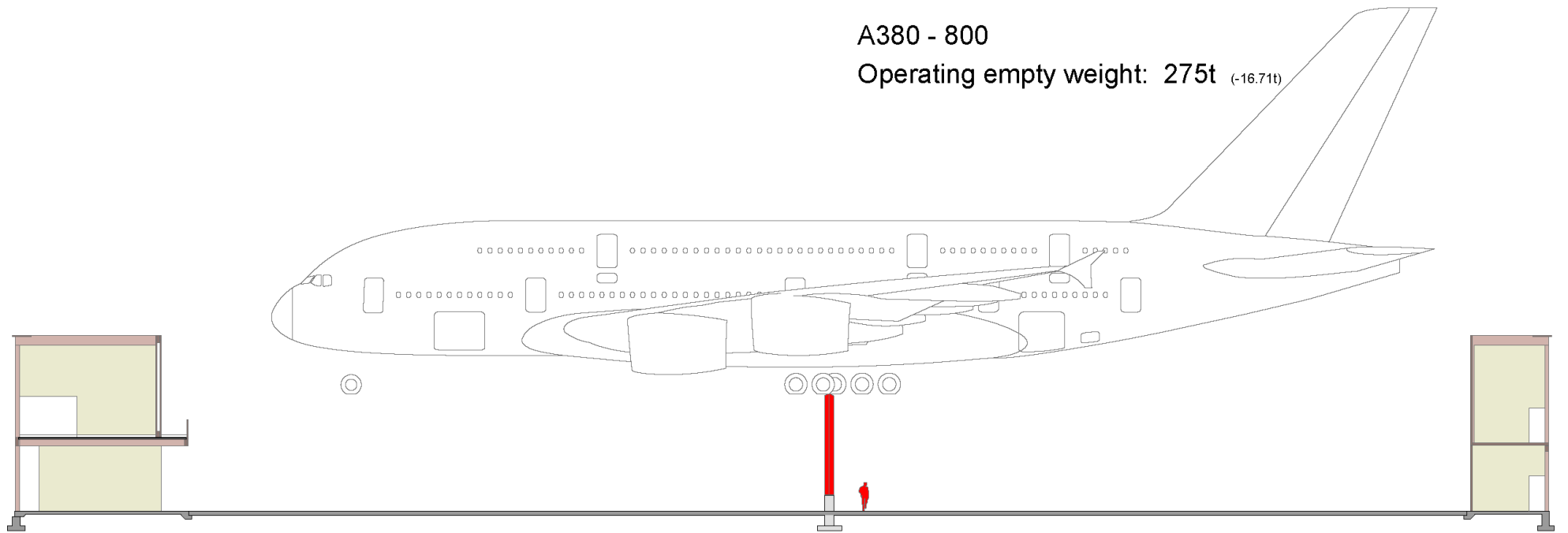


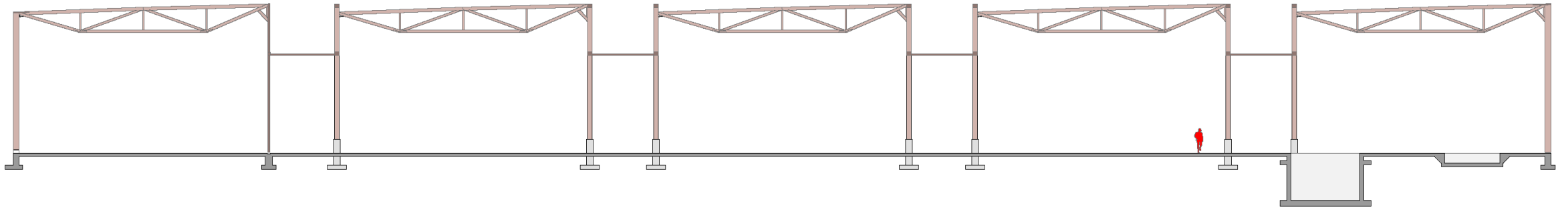




A380 - 800

Operating empty weight: 275t (-16.71t)

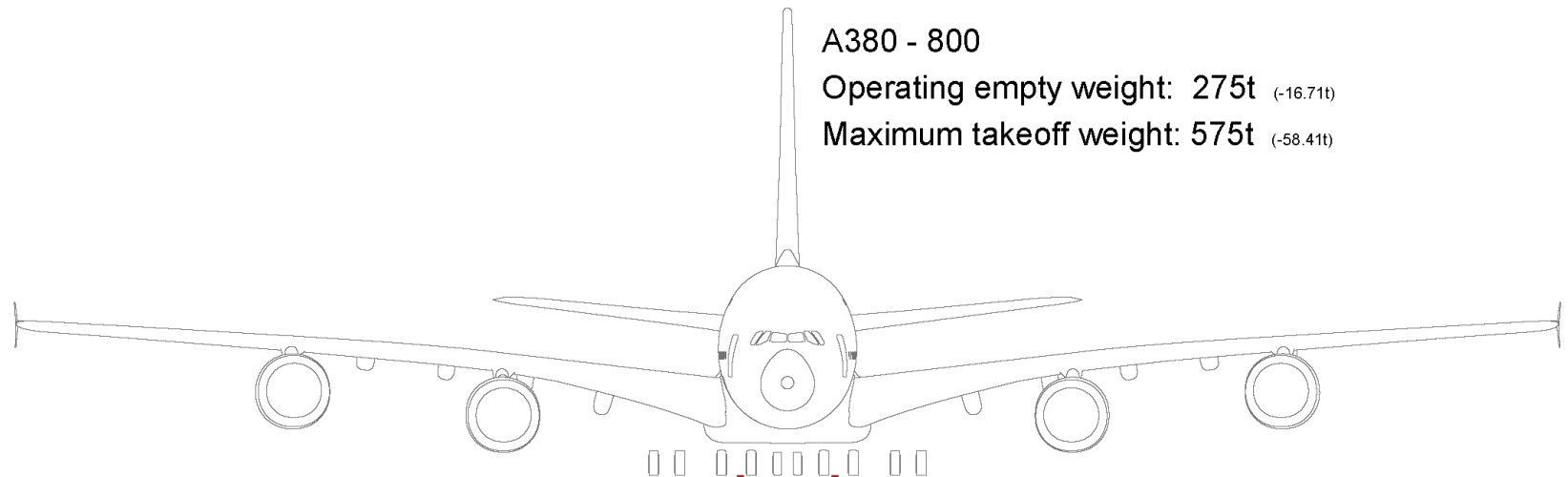




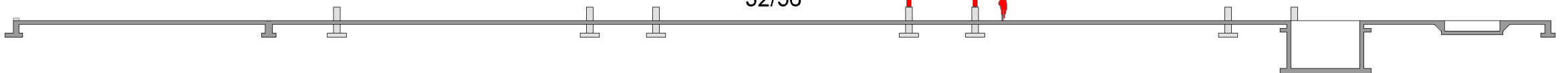
A380 - 800

Operating empty weight: 275t (-16.71t)

Maximum takeoff weight: 575t (-58.41t)



BauBuche
32/56



ABBUND HAUPTFACHWERK

PRE-PRODUCTION MAIN TRUSS

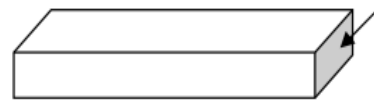








Hirnholzflächen



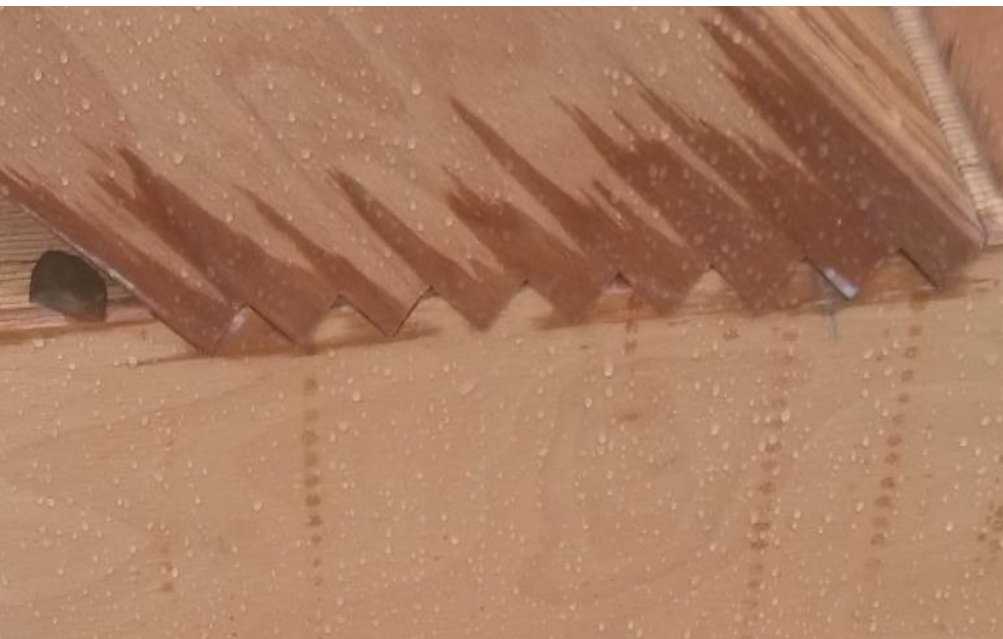
2 x LIGNOPRO **879** BauBuche-Primer plus
2 x (nass in nass) LIGNOPRO **882** BauBuche-Varnish HydroX

Behandlung der einzelnen Bauteile

Treppenversatz



2 x LIGNOPRO **879** BauBuche-Primer plus
2 x (nass in nass) LIGNOPRO **882** BauBuche-Varnish HydroX



Restliche Flächen

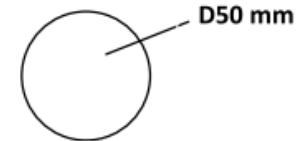


1 x LIGNOPRO **879** BauBuche-Primer plus
1 x LIGNOPRO **882** BauBuche-Varnish HydroX

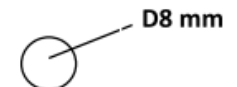
Kanten

2 x LIGNOPRO **879** BauBuche-Primer plus!!!

Bohrungen



1 x LIGNOPRO **879** BauBuche-Primer plus
1 x LIGNOPRO **882** BauBuche-Varnish HydroX



Nur 1 x LIGNOPRO **879** BauBuche-Primer plus
Fluten / Tränken

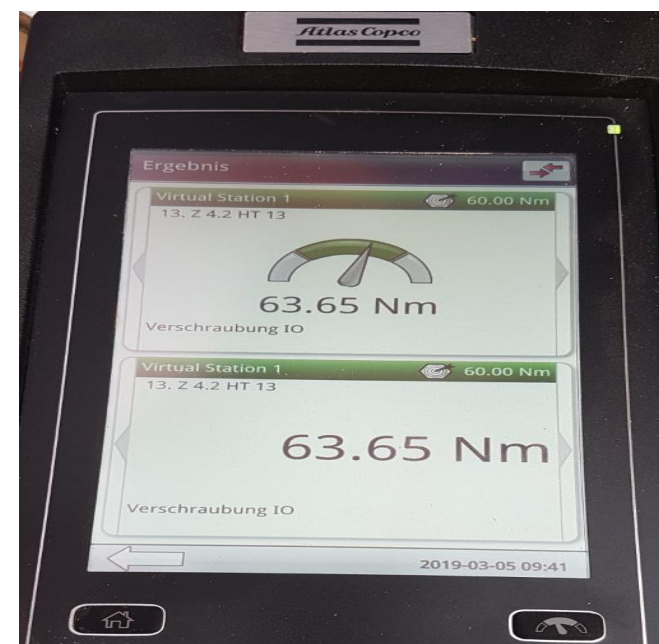


















ABBUND NEBENTRÄGER

PRE-PRODUCTION SECONDARY TRUSS







Aufrichten ASSEMBLY























































Brücke Bridge



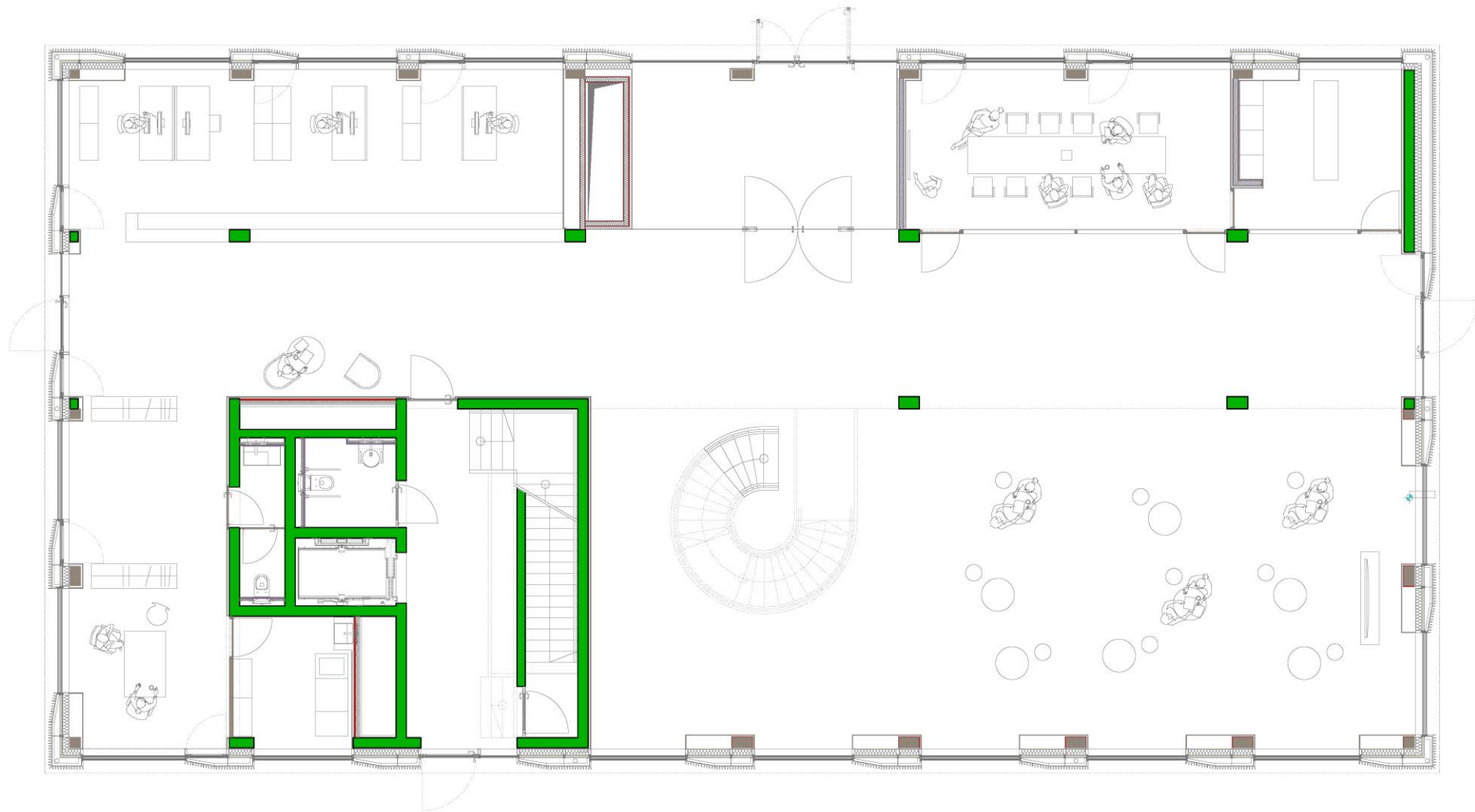


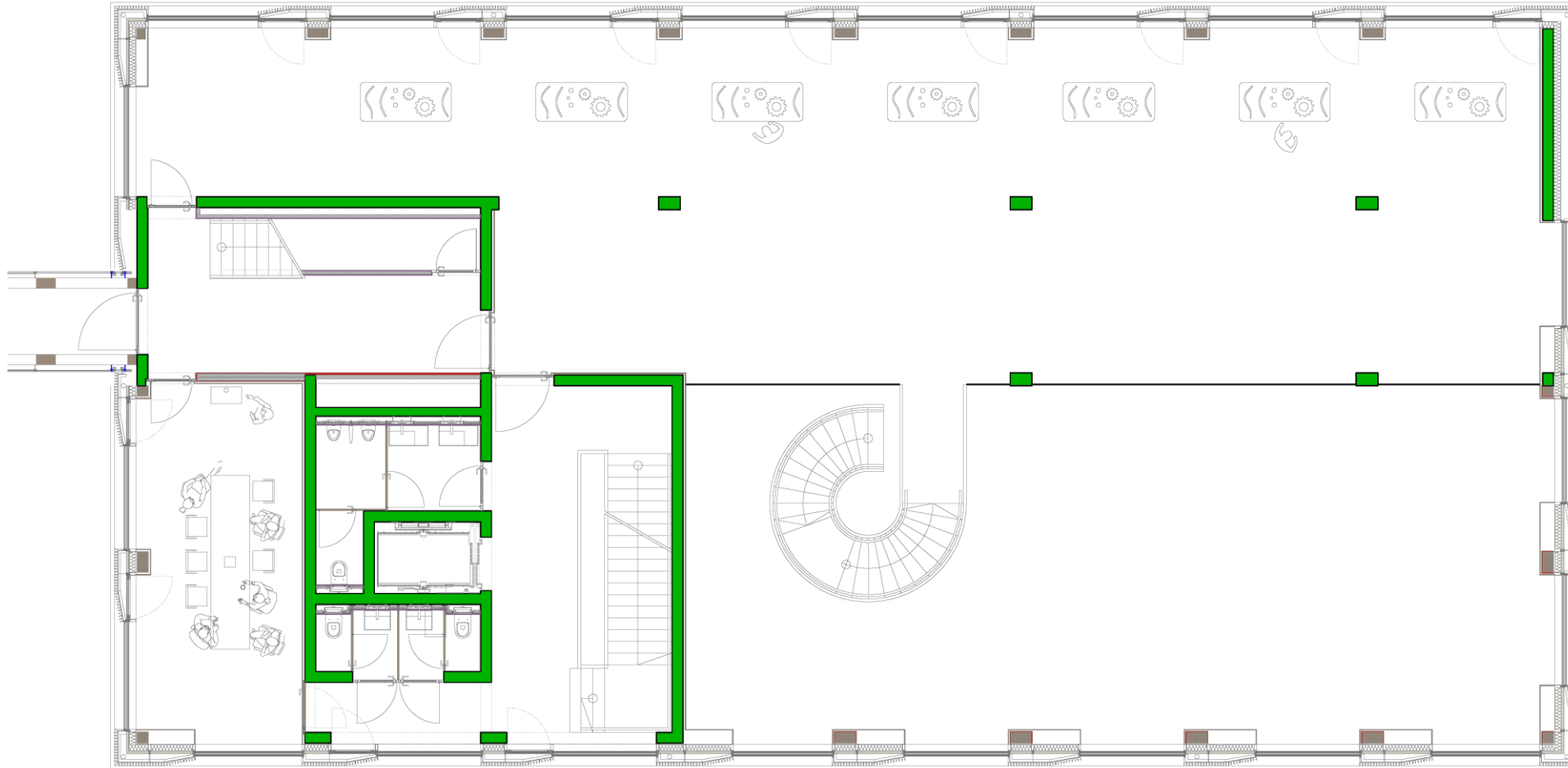




PAVILLON



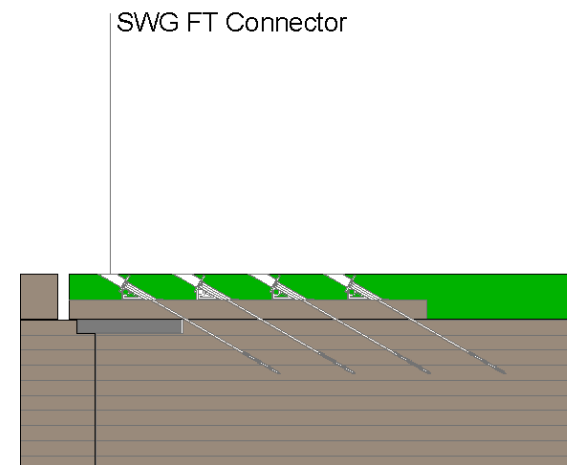
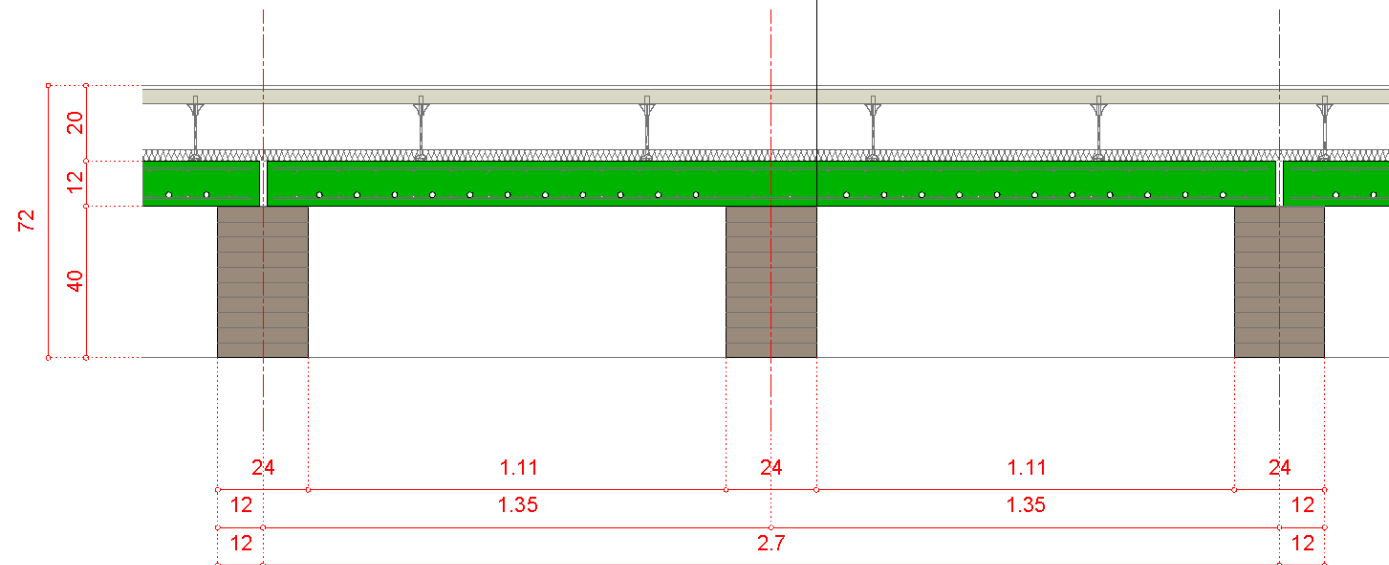


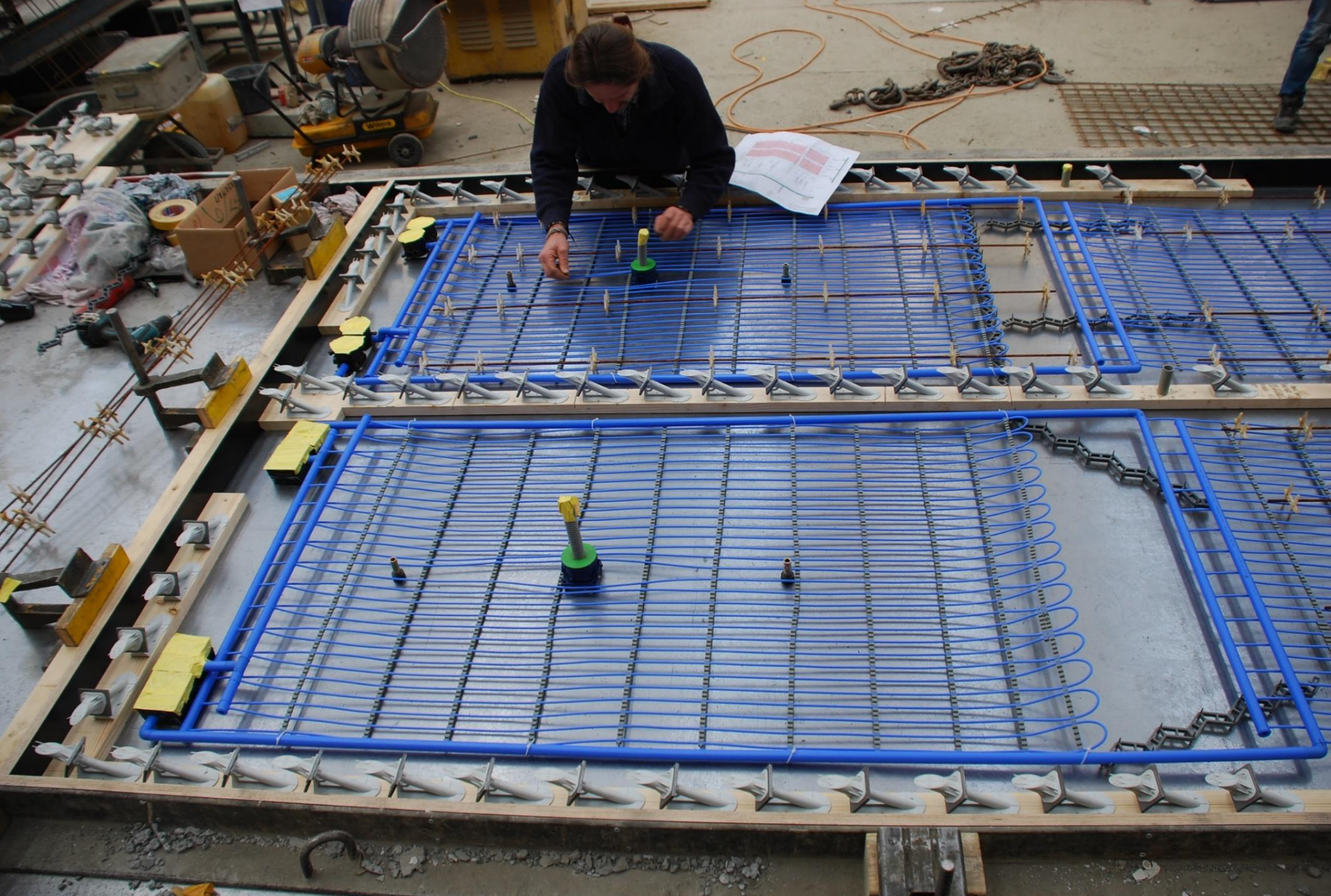






10 MM TEPPICH
 38 MM HOHLRAUMBODEN
 122 MM INSTALLATIONSEBENE
 30 MM MINERALFASER
 120 MM BETON FERTIGTEIL
 B = 270 CM / SPANNWEITE = 790 CM
 400 MM BSH FICHTE





















VIELEN DANK FÜR IHRE AUFMERKSAMKEIT Thank you for your attention

