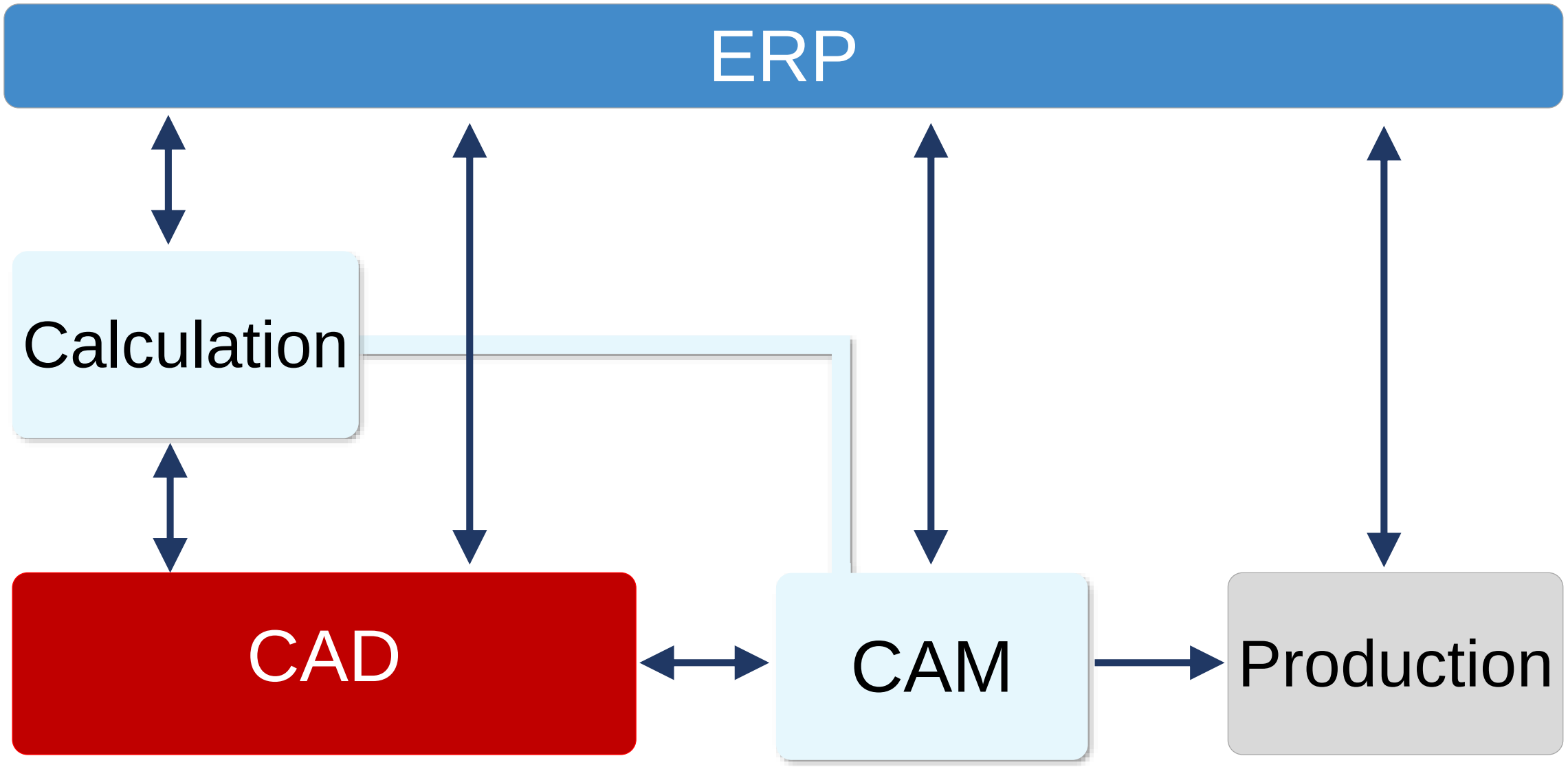
CAD-PLAN

CAD Software for Curtain Wall Design

Alexander Krüger

Head of Sales


ERP
Calculation
CAD
CAM
Production

CAD-PLAN

Headquarter:
CAD-PLAN Frankfurt am Main

Subsidiaries:
CAD-PLAN Netherlands, Belgium / Emmeloord
CAD-PLAN Czech Republic, Slovakia / Prague
CAD-PLAN Polsko / Jaskrów
CAD-PLAN Russia / Moskva
CAD-PLAN Italy/ Brescia
CAD-PLAN China / Wuhan

Partners/Abroad:
Austria/ Grabmayer & Sommer
Bulgaria/ Studio CAD
France/ Acosoft S.A.
Hungaria/ HungaroCAD
India/ Orgadata India
Lituania, Lettland/ AGA-CAD
Malaysia/ IAN Metal Engineering
Middle East/ Orgadata Middle East
Portugal/ Estupe
Romania/ Window & Facade Technologies
S.R.L.Slovenia/ DevASI Projektiranje
South Africa/ fenestration Software Solutions (Pty) Ltd.
South Korea/ LA Curtain Wall
Spain/ MEGA Ingenieras S.L.
Switzerland/ Acosoft S.A.
Turkey/ Orgadata

CAD-PLAN

Software Developer for Curtain Wall design

ATHENA, **ATHENA-Complete**

Reseller of flixo, SJ MEPLA

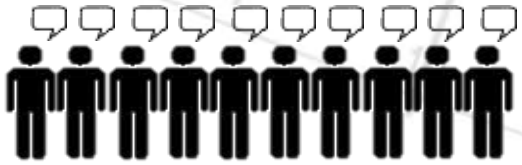
Services

Installation, Training, Support

Autodesk Partner

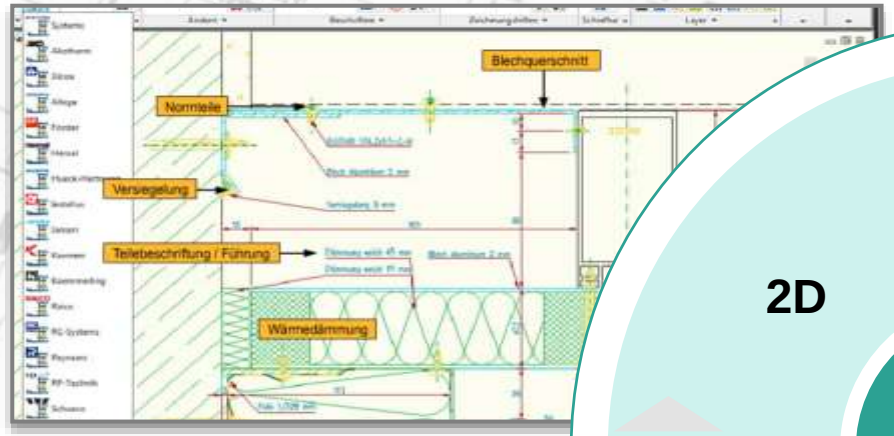
AutoCAD Architecture, (Revit)

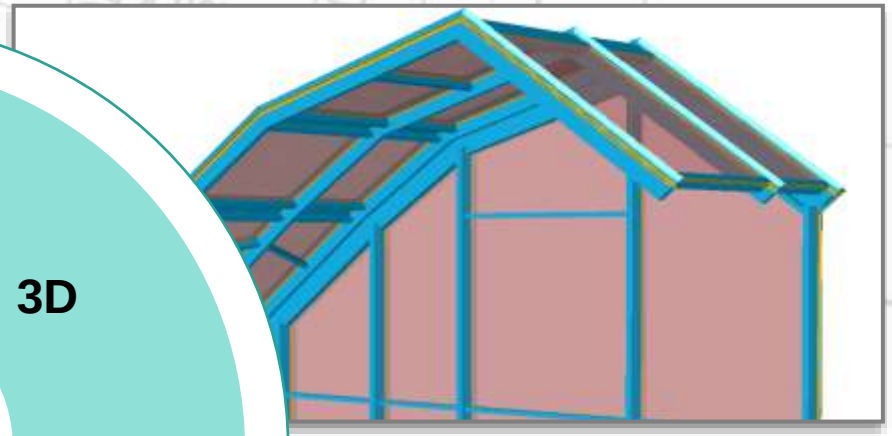
CAD-PLAN



10 Languages **> 70 Countries** **> 2,500 Companies** **> 15,000 Users**

CAD-PLAN





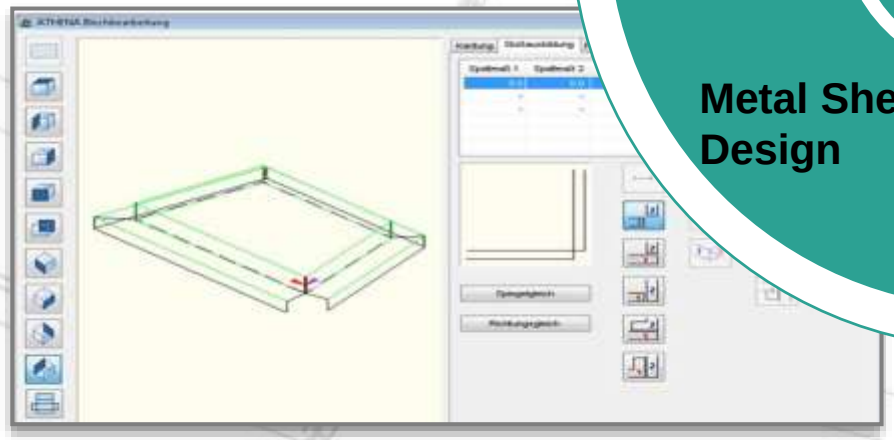
2D

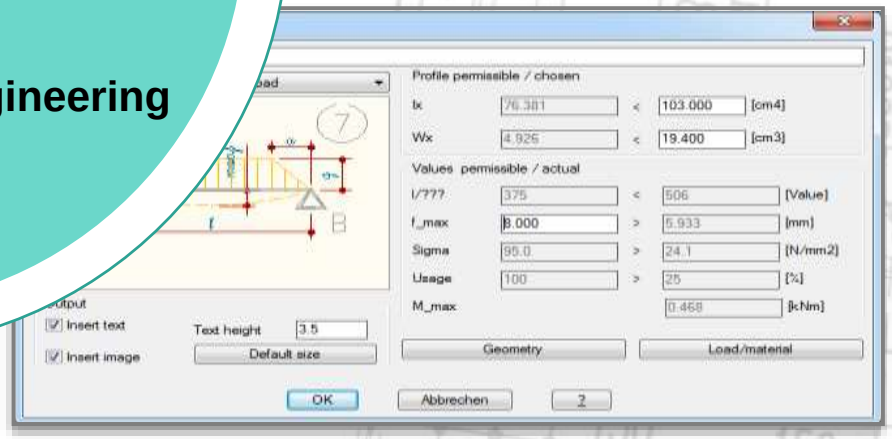
3D

ATHENA

Metal Sheet Design

Engineering





CAD-PLAN

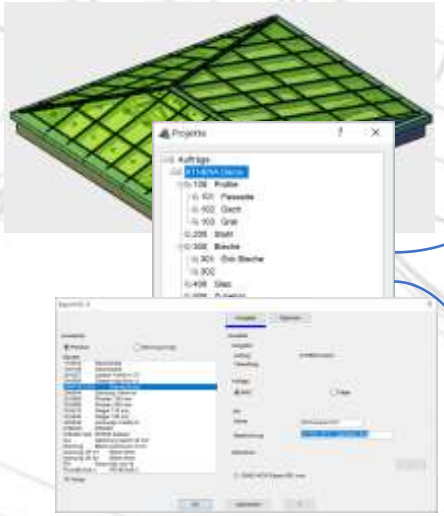
ATHENA

Data Pool

E-R-PLUS®

CAD-PLAN

ATHENA



NCW Export:
Creates a *.ncw from the full model including single *.dxf contours of the profile cross-sections.

For the NCW-Export is a NCW Generator nessesery. This can be included in your eluCad, or it can be purchased separately from CAD-PLAN

SAT Export:
Creates multiple *.sat files from the full model. Each file has positioning characteristics.

post- processor

eluCad:
customer version
without
3D import

eluCad:
customer version
including
3D import

SAT exports, which describe the solid bars including all machining operations, can be read in with various post processors and transferred to the CNC machining:

z.B.:
unilink, FP-CAM, Camprox, etc.

Restrictions of the postprocessor software with the respective machines should be discussed directly with the supplier.

machine

CAD-PLAN

Was 2D before Building Information Modeling?

- 3D working in the Future
- Working in the BIM-Structure
- Interaction of Software Products
- Success Story from Amsterdam

CAD-PLAN

3D Working in the Future

3D Working in the Future

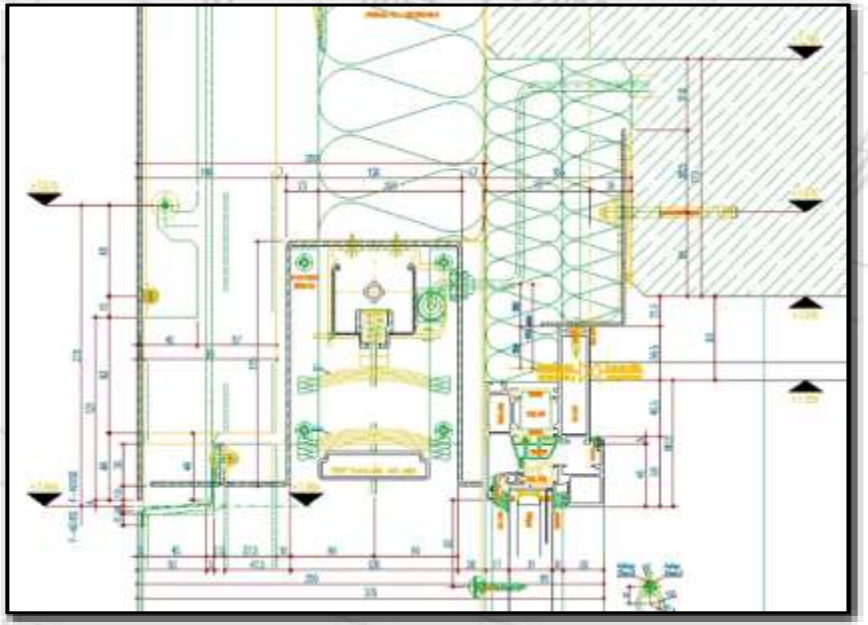
Working in the BIM-Structure

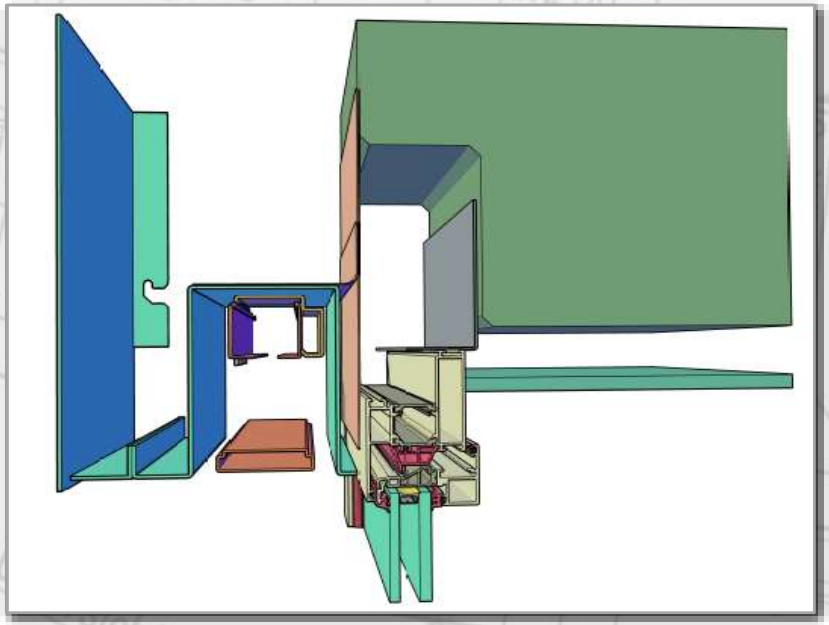
Interaction of Software Products

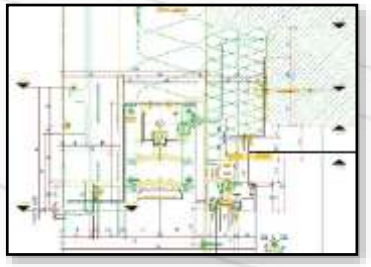
Success Story from Amsterdam

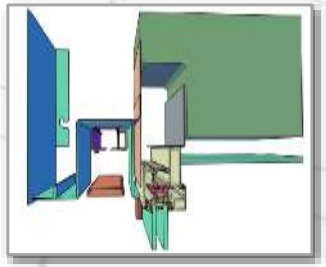
CAD-PLAN

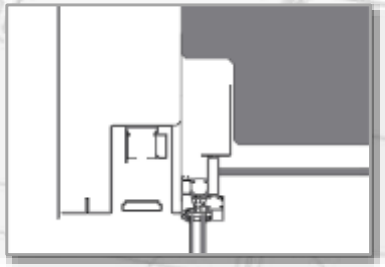
3D Working in the Future











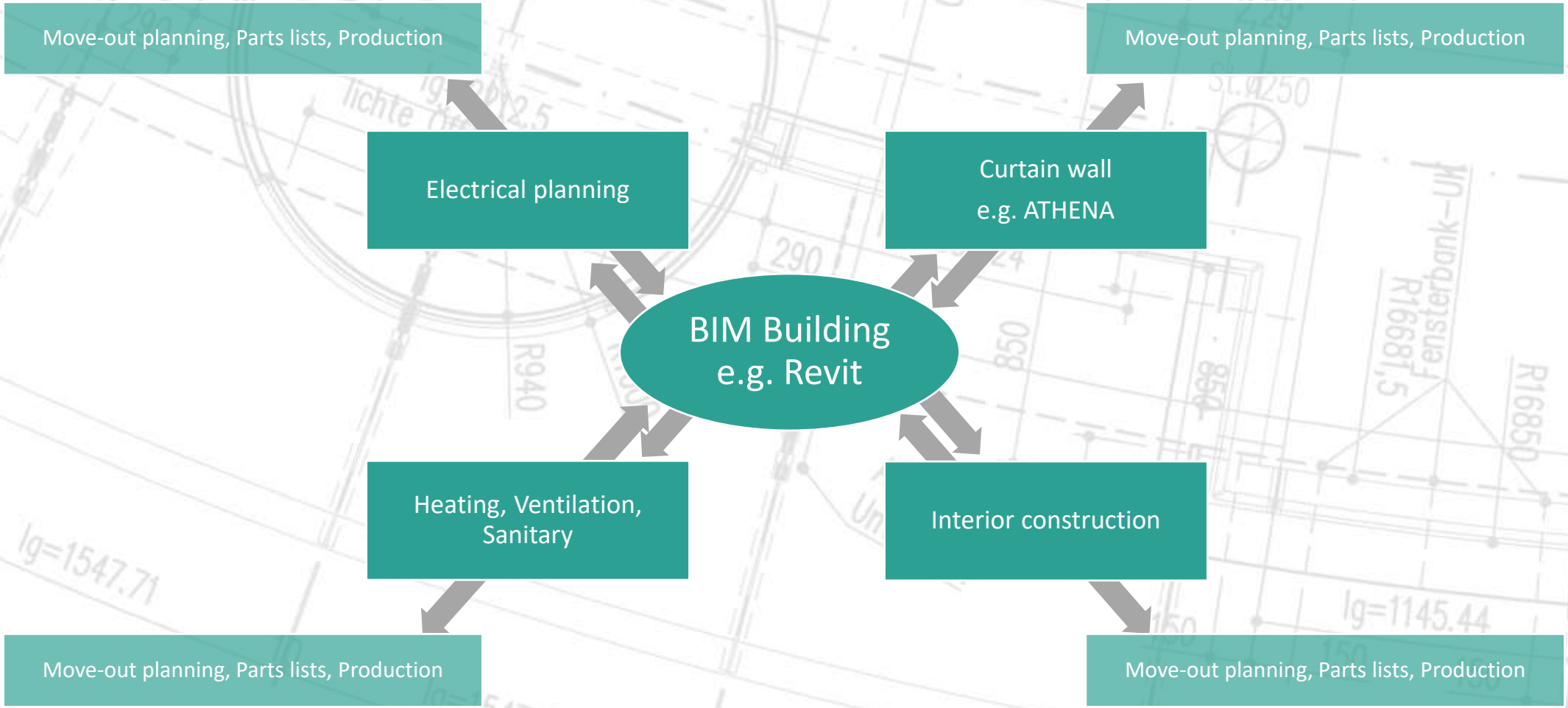
CAD-PLAN

Working in the BIM-Structure

- 3D Working in the Future
- **Working in the BIM-Structure**
- Interaction of Software Products
- Success Story from Amsterdam

Working in the BIM-Structure

CAD-PLAN



Working in the BIM-Structure

CAD-PLAN

Level of Development

LOD 100

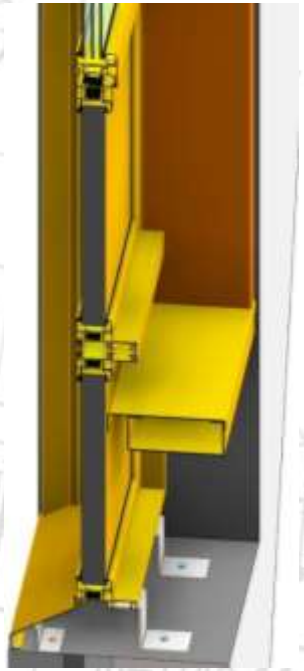
LOD 200

LOD 300

LOD 350

LOD 400

LOD 500



Working in the BIM-Structure

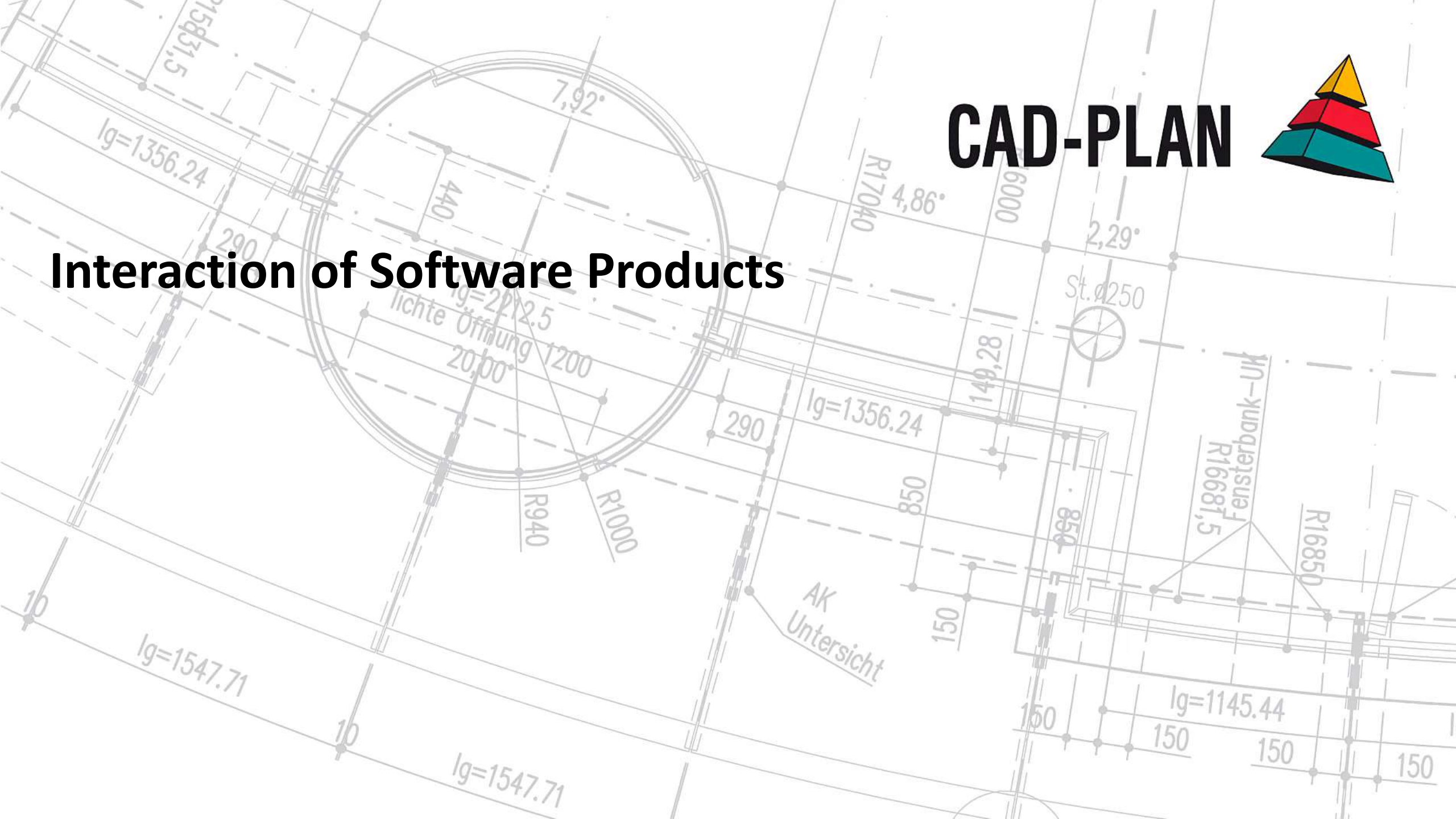
CAD-PLAN

construction module	Source / Software	Target / Implementation
✓ ground-plans	Revit	planning basis for 2D section drawing
✓ 2D section	ATHENA	basis for 3D bar generation
✓ window dummy	Revit	template for intelligent 3D element
✓ intelligent window element	LogiKal / SchüCAL	part of intelligent 3D element
✓ 3D profile	ATHENA	part of intelligent 3D element
✓ intelligent 3D element	ATHENA	association of all information

CAD-PLAN

Interaction of Software Products

- 3D Working in the Future
- Working in the BIM-Structure
- **Interaction of Software Products**
- Success Story from Amsterdam



Interaction of Software Products

CAD-PLAN

Interaction of Software Products

- 3D Working in the Future
- Working in the BIM-Structure
- Interaction of Software Products
- **Success Story from Amsterdam**

CAD-PLAN

Beethovenstreet 400 in Amsterdam

DE GROOT VISSER BUILDING HUMAN ENERGY

syntek

UNS UNSTUDIO

CAD-PLAN

Success Story from Amsterdam

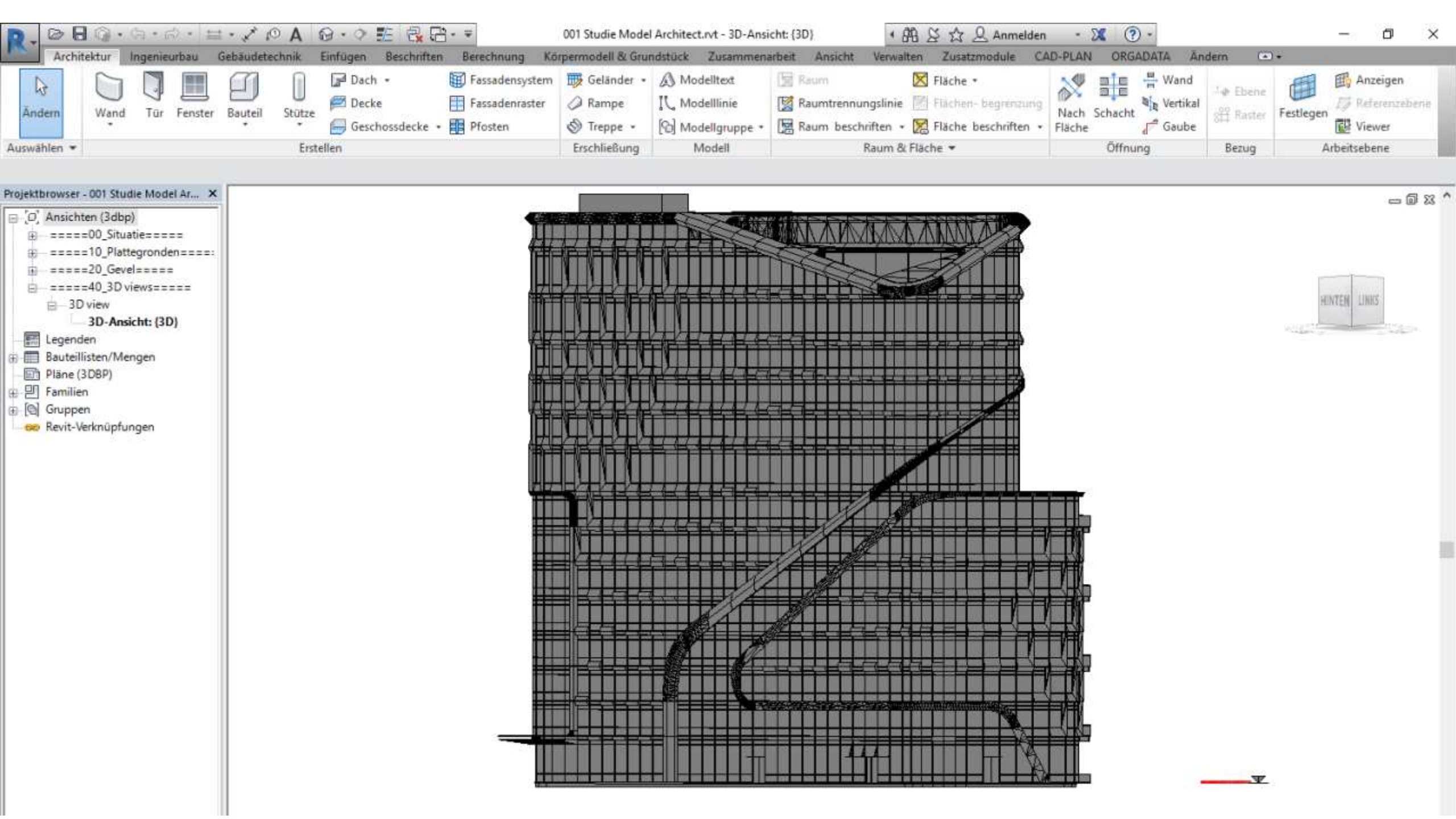
Beethovenstreet 400 in Amsterdam

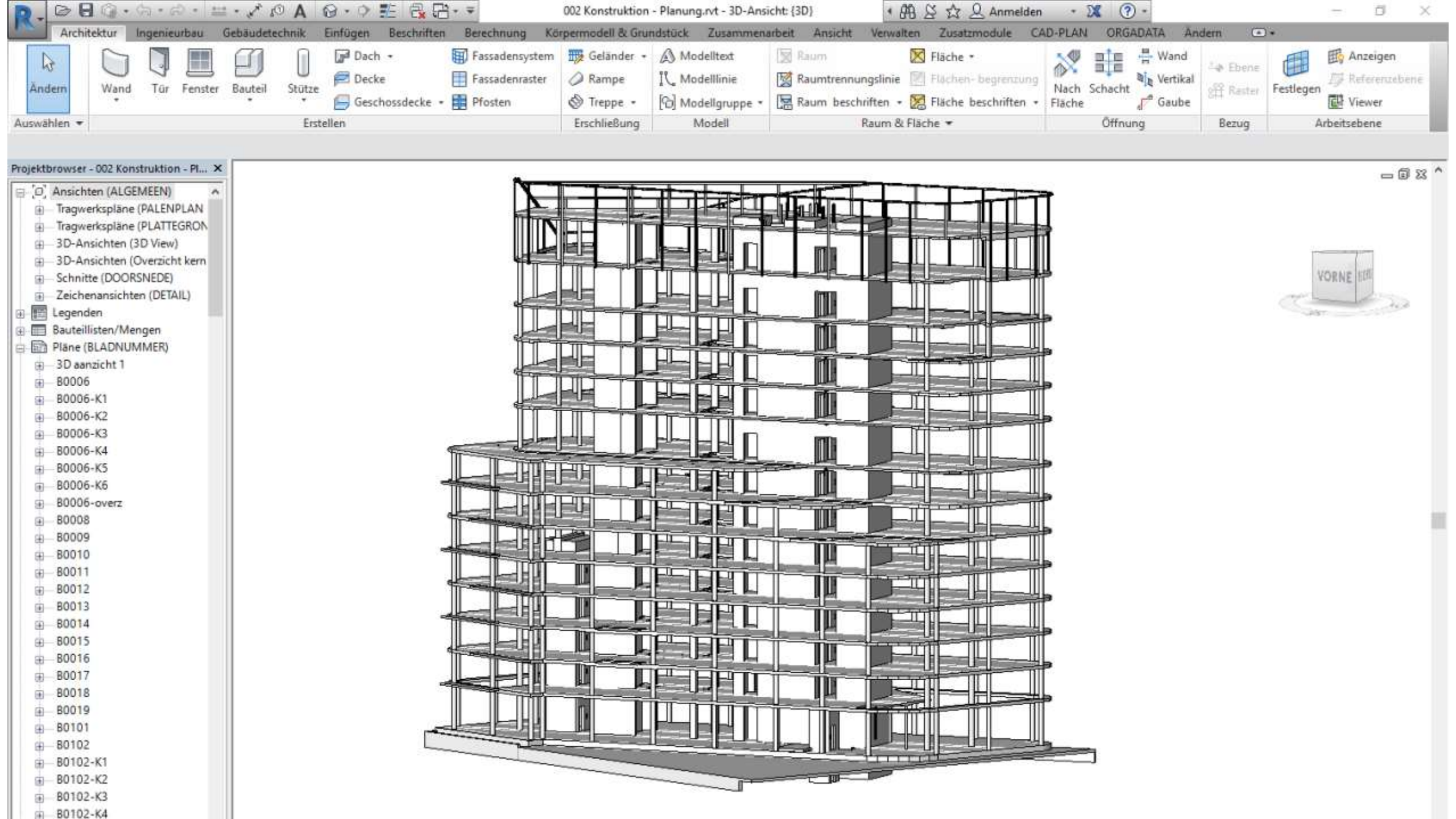
Project Overview & Building Process

Technical Implementation

Sheet Metall Construction

Natura Pacific


001 Studie Model Architect.rvt - 3D-Ansicht: {3D}
Anmelden
Architektur
Ingenieurbau
Gebäudetechnik
Einfügen
Beschriften
Berechnung
Körpermodell & Grundstück
Zusammenarbeit
Ansicht
Verwalten
Zusatzmodule
CAD-PLAN
ORGADATA
Ändern
Ändern
Wand
Tür
Fenster
Bauteil
Stütze
Dach
Decke
Geschossdecke
Fassadensystem
Fassadenraster
Pfosten
Geländer
Rampe
Treppe
Modelltext
Modelllinie
Modellgruppe
Raum
Raumtrennungslinie
Raum beschriften
Fläche
Flächen- begrenzung
Fläche beschriften
Nach Fläche
Schacht
Wand
Vertikal
Gaube
Ebene
Raster
Festlegen
Anzeigen
Referenzebene
Viewer
Auswählen
Erstellen
Erschließung
Modell
Raum & Fläche
Öffnung
Bezug
Arbeitsebene
Projektbrowser - 001 Studie Model Ar...
Ansichten (3dbp)
=====00_Situatie=====
=====10_Plattegronden====
=====20_Gevel=====
=====40_3D views=====
3D view
3D-Ansicht: {3D}
Legenden
Bauteillisten/Mengen
Pläne (3DBP)
Familien
Gruppen
Revit-Verknüpfungen
HINTEN
LINKS


002 Konstruktion - Planung.rvt - 3D-Ansicht: {3D}
Anmelden
Architektur
Ingenieurbau
Gebäudetechnik
Einfügen
Beschriften
Berechnung
Körpermodell & Grundstück
Zusammenarbeit
Ansicht
Verwalten
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Geschossdecke
Fassadensystem
Fassadenraster
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Modellgruppe
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Raum beschriften
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Flächen- begrenzung
Fläche beschriften
Nach Fläche
Schacht
Wand
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Gaube
Ebene
Raster
Festlegen
Anzeigen
Referenzebene
Viewer
Auswählen
Erstellen
Erschließung
Modell
Raum & Fläche
Öffnung
Bezug
Arbeitsebene
Projektbrowser - 002 Konstruktion - Pl...
Ansichten (ALGEMEEN)
Tragwerkspläne (PALENPLAN
Tragwerkspläne (PLATTEGRON
3D-Ansichten (3D View)
3D-Ansichten (Overzicht kern
Schnitte (DOORSNEDE)
Zeichenansichten (DETAIL)
Legenden
Bauteillisten/Mengen
Pläne (BLADNUMMER)
3D aanzicht 1
B0006
B0006-K1
B0006-K2
B0006-K3
B0006-K4
B0006-K5
B0006-K6
B0006-overz
B0008
B0009
B0010
B0011
B0012
B0013
B0014
B0015
B0016
B0017
B0018
B0019
B0101
B0102
B0102-K1
B0102-K2
B0102-K3
B0102-K4
VORNE

Autodesk Revit 2015 - P36405_DGV_A_400BHS_ankerplan_1-13_2014-10-06 - 3D View: 3D transparant

Type a keyword or phrase

Sign In

Architecture | Structure | Systems | Insert | Annotate | Analyze | Massing & Site | Collaborate | View | Manage | Add-Ins | BIM One | Modify

Build: Wall, Door, Window, Component, Column, Roof, Ceiling, Floor, Curtain System, Curtain Grid, Mullion

Circulation: Railing, Ramp, Stair

Model: Model Text, Model Line, Model Group

Room & Area: Room, Room Separator, Tag Room, Area, Area Boundary, Tag Area

Opening: By Face, Shaft, Wall, Vertical, Dormer

Datum: Level, Grid

Work Plane: Set, Show, Ref Plane, Viewer

Properties

3D View

ew: 3D transpar | Edit Type

Scale	1 : 100
Value 1:	100
Level	Fine
Visibility	Show Original
ility/Graphic...	Edit...
hic Display ...	Edit...
pline	Architectural
Hidden Lin...	By Discipline
ult Analysis ...	None
Path	
Template	<None>
Name	3D transparant
ndency	Independent
on Sheet	
d_map	01_werkviews
map	3D
View	
Region Visi...	
otation Crop	
Clip Active	
on Box	
lering Settings	Edit...
ed Orientati...	
pective	
Elevation	98453,375
et Elevation	22525,154
era Position	Adjusting
e Filter	2.3 gewijzigde ...
e	2. nieuwbouw

rties help | Apply

Project Browser - P36405_DGV_A_400...

- Views (mappenstructuur)
  - Architectural
    - 01_werkviews
      - 3D
        - 3D View: 3D trans
      - doorsneden
        - Elevation: Elevatio
        - Elevation: Elevatio
        - Elevation: Elevatio
        - Elevation: Elevatio
        - Section: Section 1
        - Section: Section 2
        - Section: Section 3
        - Section: Section 4
        - Section: Section 5
        - Section: Section 7
        - Section: Section 8
        - Section: Section 9
        - Section: Section 1
        - Section: Section 1
        - Section: Section 1
      - plafondaanzichten
      - plattegronden
        - Floor Plan: -01 kel
        - Floor Plan: 00 beg
        - Floor Plan: 00a me
        - Floor Plan: 01 eers
        - Floor Plan: 02 twe
        - Floor Plan: 03 derc
        - Floor Plan: 04 vier
        - Floor Plan: 05 vijfc
        - Floor Plan: 06 zesc
        - Floor Plan: 07 zeve
        - Floor Plan: 08 acht
        - Floor Plan: 09 neg
        - Floor Plan: 10 tien
        - Floor Plan: 11 elfd
        - Floor Plan: 12 twa
        - Floor Plan: 13 dert
        - Floor Plan: 14 dak
      - 02_plotviews
      - 03_gebieden
      - 04_details
      - 05_elemententekeningen
      - 06_deeltekeningen

1 : 100

o select, TAB for alternates, CTRL adds, SHIFT unselects.

Main Model

CAD-PLAN

Success Story from Amsterdam

- Beethovenstreet 400 in Amsterdam
- Project Overview & Building Process
- **Technical Implementation**
- Sheet Metall Construction

Autodesk AutoCAD 2019 113A.dwg

Type a keyword or phrase | Sign In

Home | ATHENA | ATHENA modeleren | LogiKal koppeling | 3D Tools | Insert | Annotate | Parametric | View | Manage | Output | Add-ins | Collaborate | Featured Apps | Express Tools | ATH User

Line | Polyline | Circle | Arc | Move | Copy | Stretch | Rotate | Mirror | Scale | Trim | Fillet | Array | Text | Dimension | Linear | Leader | Table | Layer Properties | Make Current | Match Layer | Insert | Create | Edit | Edit Attributes | Match Properties | ByLayer | Group | Measure | Paste | Base

Draw | Modify | Annotation | Layers | Block | Properties | Groups | Utilities | Clipboard | View

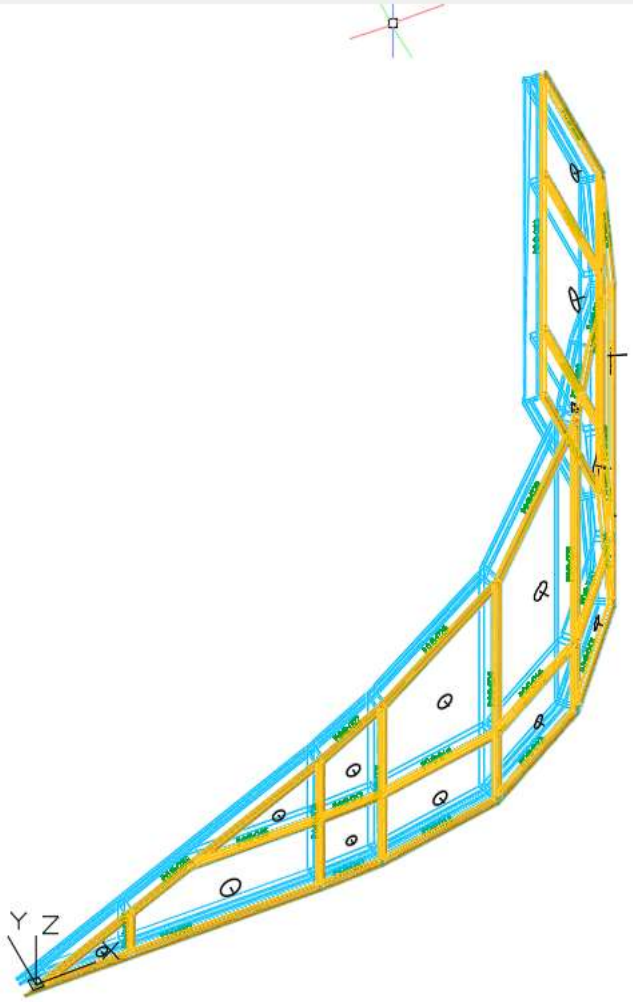
Start | Drawing1* | 190226_AK_0_TGK_Z...ONTEN_2019-00-00* | ROL_000000000_A_...TEKST_2017-00-00* | 011710259_kavel 3N...GK_3N4_2019-03-00* | 113A*

PROPERTIES

No selection

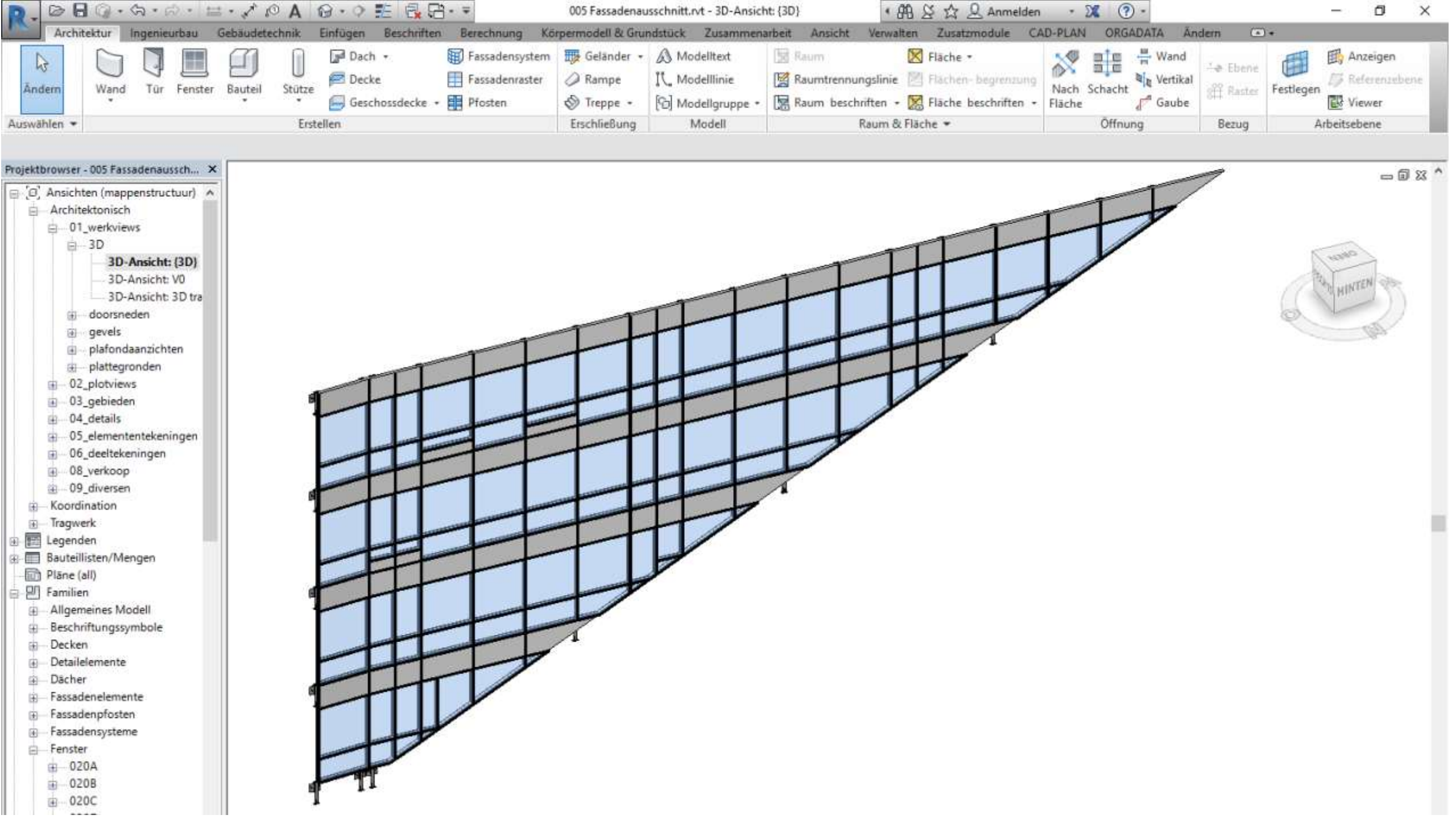
General	
Color	ByLayer
Layer	70
Linetype	ByLayer
Linetype scale	1
Lineweight	ByLayer
Transparency	ByLayer
Thickness	0
3D Visualization	
Material	ByLayer
Plot style	
Plot style	ByColor
Plot style table	None
Plot table attached to	Model
Plot table type	Not available
View	
Center X	4794.541
Center Y	2682.366
Center Z	0
Height	9307.874
Width	51520.018
Misc	
Annotation scale	1:1
UCS icon On	Yes
UCS icon at origin	Yes
UCS per viewport	Yes
UCS Name	
Visual Style	2D Wireframe

[−][Custom View][2D Wireframe]



TOP | FRONT | W | E | S | WCS

Type a command


005 Fassadenausschnitt.rvt - 3D-Ansicht: {3D}
Anmelden
Architektur
Ingenieurbau
Gebäudetechnik
Einfügen
Beschriften
Berechnung
Körpermodell & Grundstück
Zusammenarbeit
Ansicht
Verwalten
Zusatzmodule
CAD-PLAN
ORGADATA
Ändern
Ändern
Wand
Tür
Fenster
Bauteil
Stütze
Dach
Decke
Geschossdecke
Fassadensystem
Fassadenraster
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Geländer
Rampe
Treppe
Modelltext
Modelllinie
Modellgruppe
Raum
Raumtrennungslinie
Raum beschriften
Fläche
Flächen- begrenzung
Fläche beschriften
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Viewer
Auswählen
Erstellen
Erschließung
Modell
Raum & Fläche
Öffnung
Bezug
Arbeitsebene
Projektbrowser - 005 Fassadenaussch...
Ansichten (mappenstructuur)
Architektonisch
01_werkviews
3D
3D-Ansicht: {3D}
3D-Ansicht: V0
3D-Ansicht: 3D tra
doorsneden
gevels
plafondaanzichten
plattegronden
02_plotviews
03_gebieden
04_details
05_elemententekeningen
06_deeltekeningen
08_verkoop
09_diversen
Koordination
Tragwerk
Legenden
Bauteillisten/Mengen
Pläne (all)
Familien
Allgemeines Modell
Beschriftungssymbole
Decken
Detailelemente
Dächer
Fassadenelemente
Fassadenpfosten
Fassadensysteme
Fenster
020A
020B
020C
HINTEN

Coffee Bar

CAD-PLAN

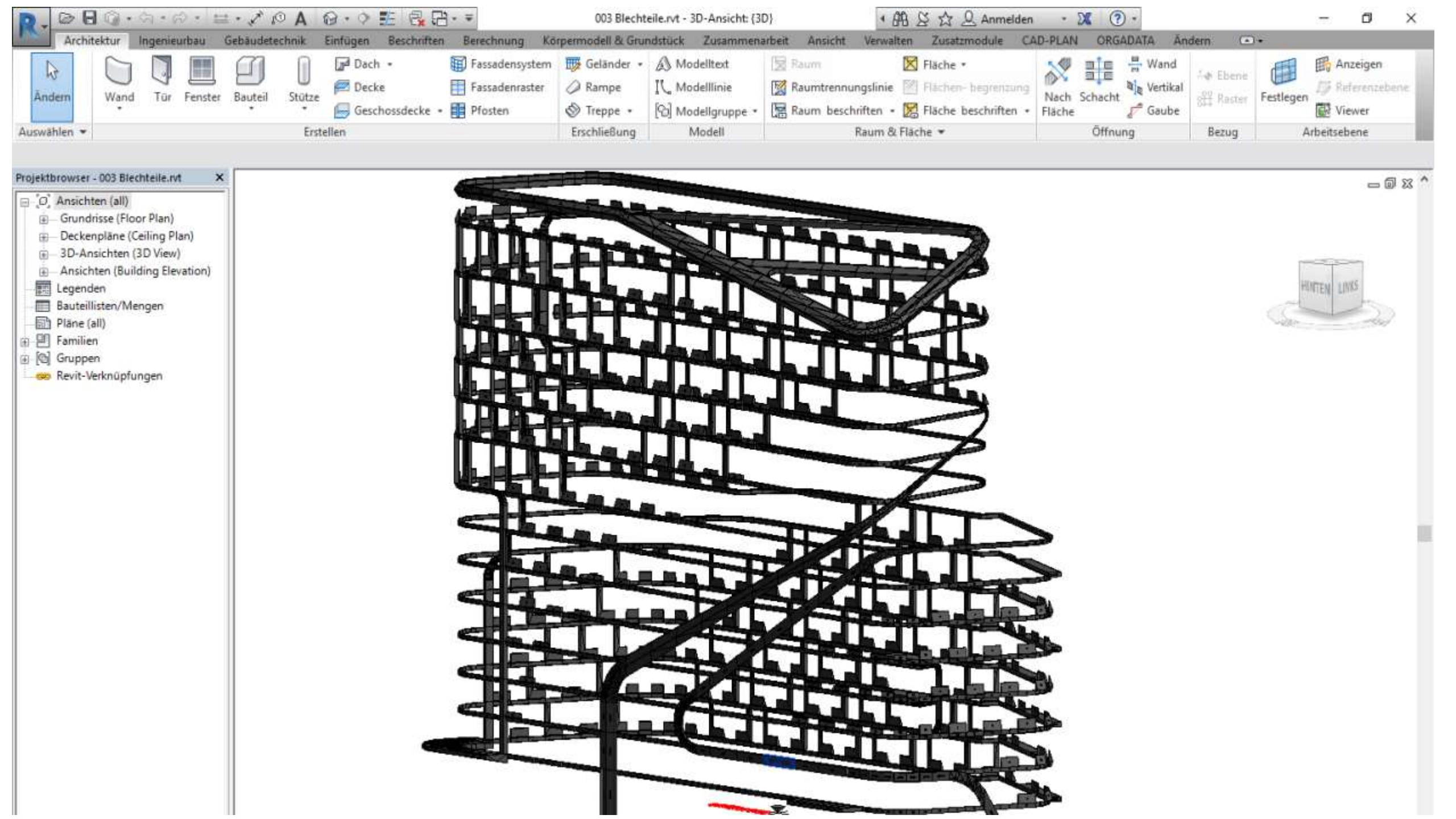
Success Story from Potsdam

Beethovenstreet 400 in Amsterdam

Project Overview & Building Process

Technical Implementation

Sheet Metall Construction


003 Blechteile.rvt - 3D-Ansicht: {3D}
Anmelden
Architektur
Ingenieurbau
Gebäudetechnik
Einfügen
Beschriften
Berechnung
Körpermodell & Grundstück
Zusammenarbeit
Ansicht
Verwalten
Zusatzmodule
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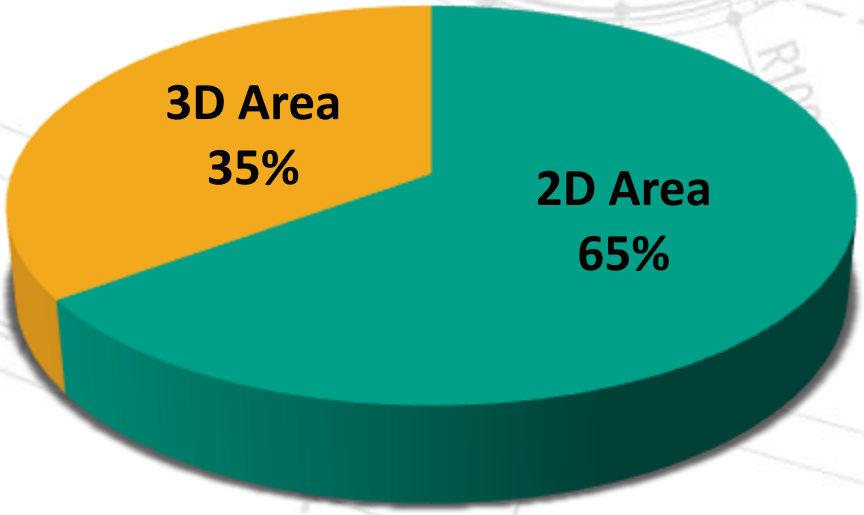
Fenster
Bauteil
Stütze
Dach
Decke
Geschossdecke
Fassadensystem
Fassadenraster
Pfosten
Erstellen
Geländer
Rampe
Treppe
Erschließung
Modelltext
Modelllinie
Modellgruppe
Modell
Raum
Raumtrennungslinie
Raum beschriften
Fläche
Flächen- begrenzung
Fläche beschriften
Raum & Fläche
Nach Fläche
Schacht
Wand
Vertikal
Gaube
Öffnung
Ebene
Raster
Bezug
Festlegen
Anzeigen
Referenzebene
Viewer
Arbeitsebene
Projektbrowser - 003 Blechteile.rvt
Ansichten (all)
Grundrisse (Floor Plan)
Deckenpläne (Ceiling Plan)
3D-Ansichten (3D View)
Ansichten (Building Elevation)
Legenden
Bauteillisten/Mengen
Pläne (all)
Familien
Gruppen
Revit-Verknüpfungen
HINTEN
LINKS

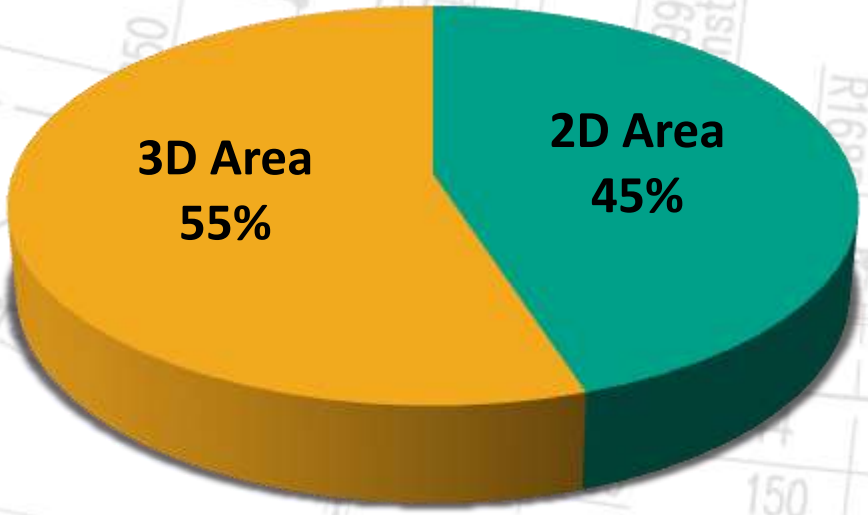
CAD-PLAN

Was 2D before Building Information Modeling?

Today



2030



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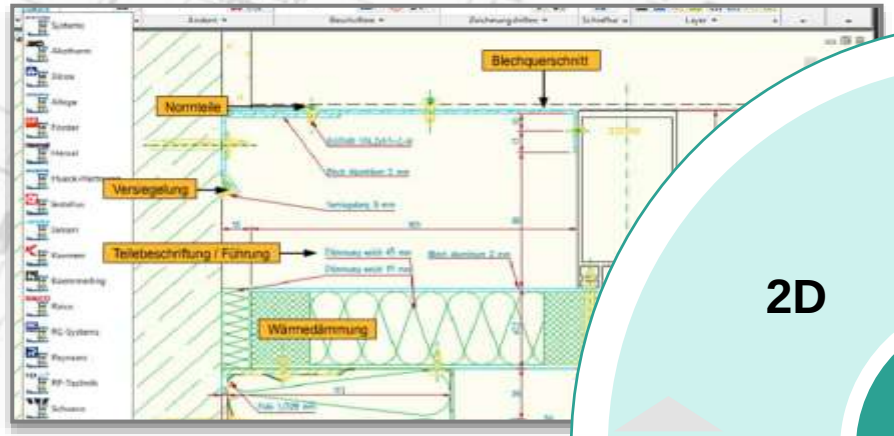
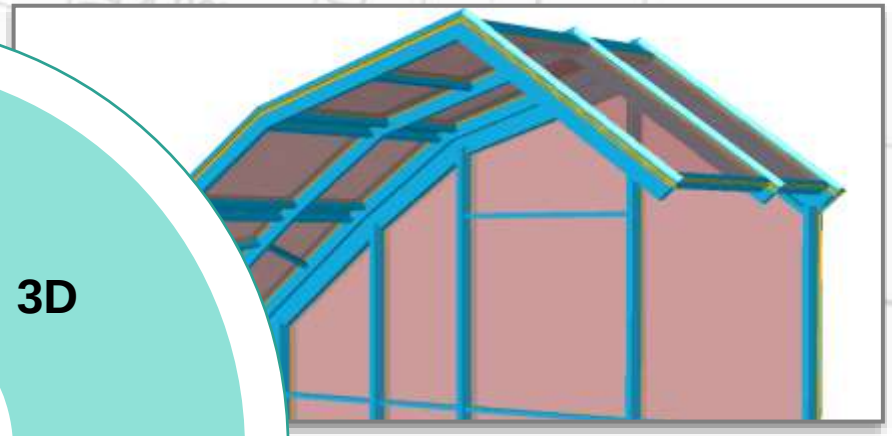




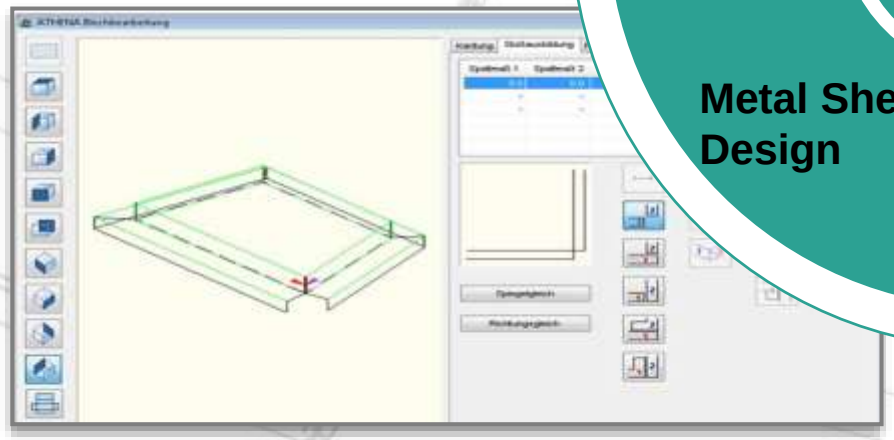
2D

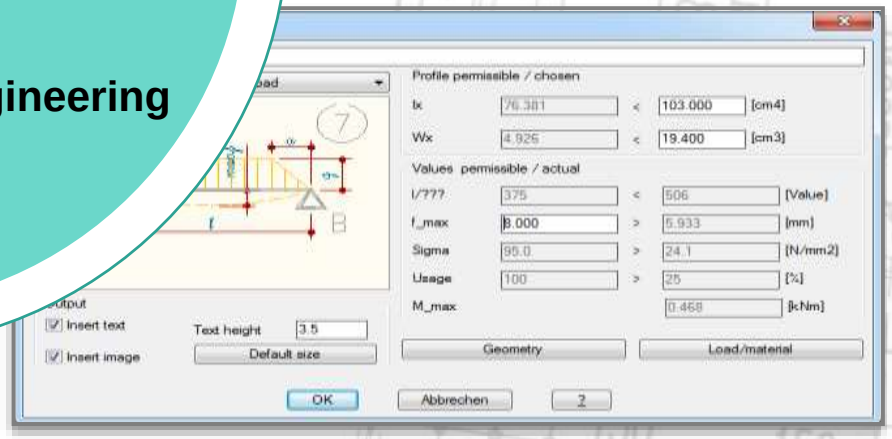
3D

ATHENA

Metal Sheet Design

Engineering





Many thanks for your attention!

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WINDOW & FACADE TECHNOLOGIES

CAD Software for Curtain Wall Design

Alexander Krüger

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