

# Vandersanden Steenfabrieken

## Prefabrication solutions

Export-team 01/12/2023 - Maasmechelen II



# Introducing myself...

Marcel Ruben – Manager Prefab



# VANDERSANDEN - VISION



Most customer-oriented company for  
facade & street solutions



The reference in innovation and  
sustainability



Leading in Collective Welfare for  
environment, society and our employees

# Sustainable and Innovation partner for facade and street products and solutions



Facade bricks



Pavers



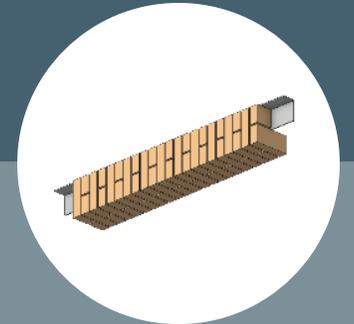
(ECO) Brick slips



E-Board®



RoboBrick®



Prefab



**VANDERSANDEN**

# Prefab components

## Mission

To offer a prefabricated solution, where standard solutions are inadequate.



**VANDERSANDEN**

# Prefab components – Product range

Lintels /  
masonry supports



Custom solutions



Parametric masonry



# Prefab components – Product range

Lintels /  
masonry supports



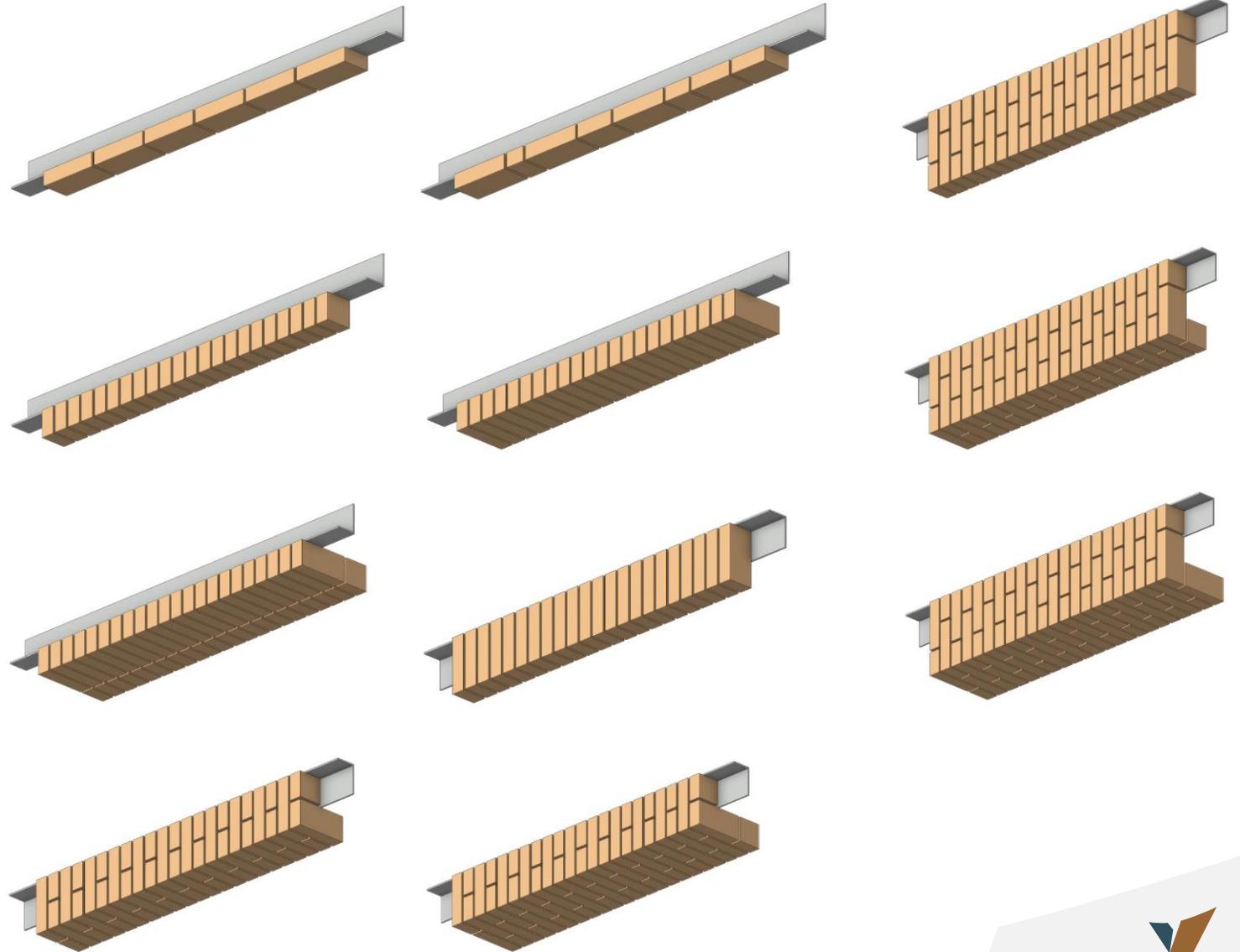
Custom solutions



Parametric masonry



# 11 'standard' types

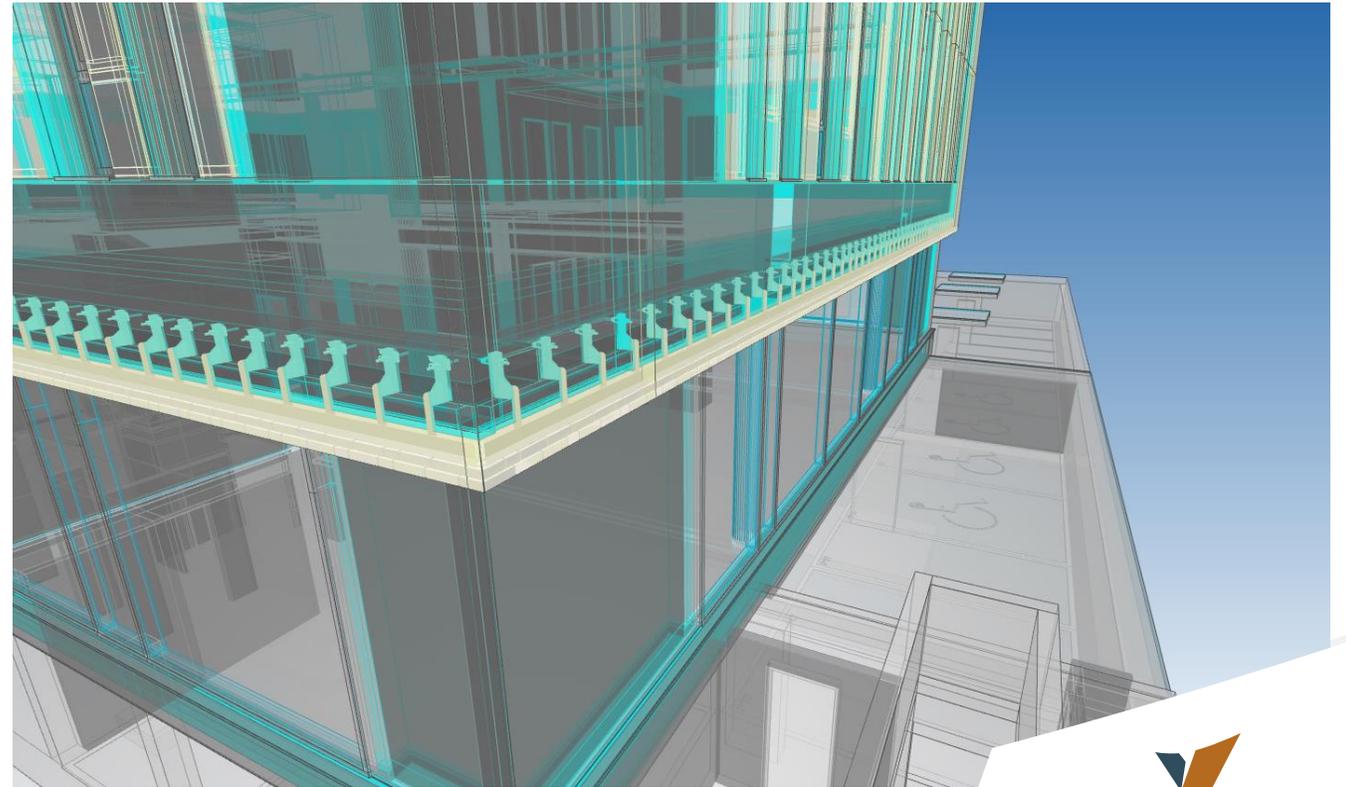


# PROJECT ZEBRA

An architectural rendering of a modern, multi-story building with a light-colored, textured facade. The building features a prominent horizontal band of vertical slats or louvers across its middle section. The structure is set in a landscaped environment with green lawns, hedges, and trees. A white car is parked on the left, and a blue car is driving on a road in the foreground. A person is walking on a path near the building. The sky is blue with light, wispy clouds.

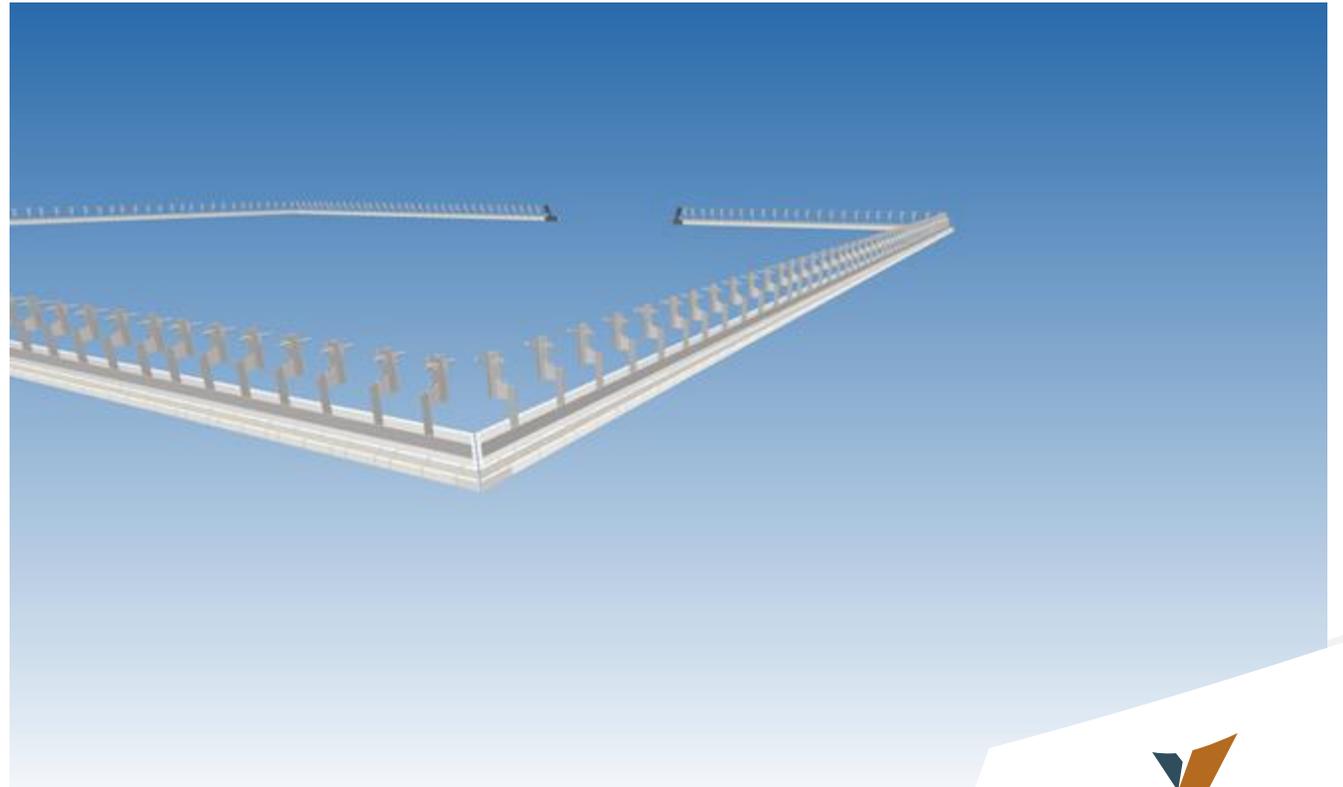


# BIM engineering



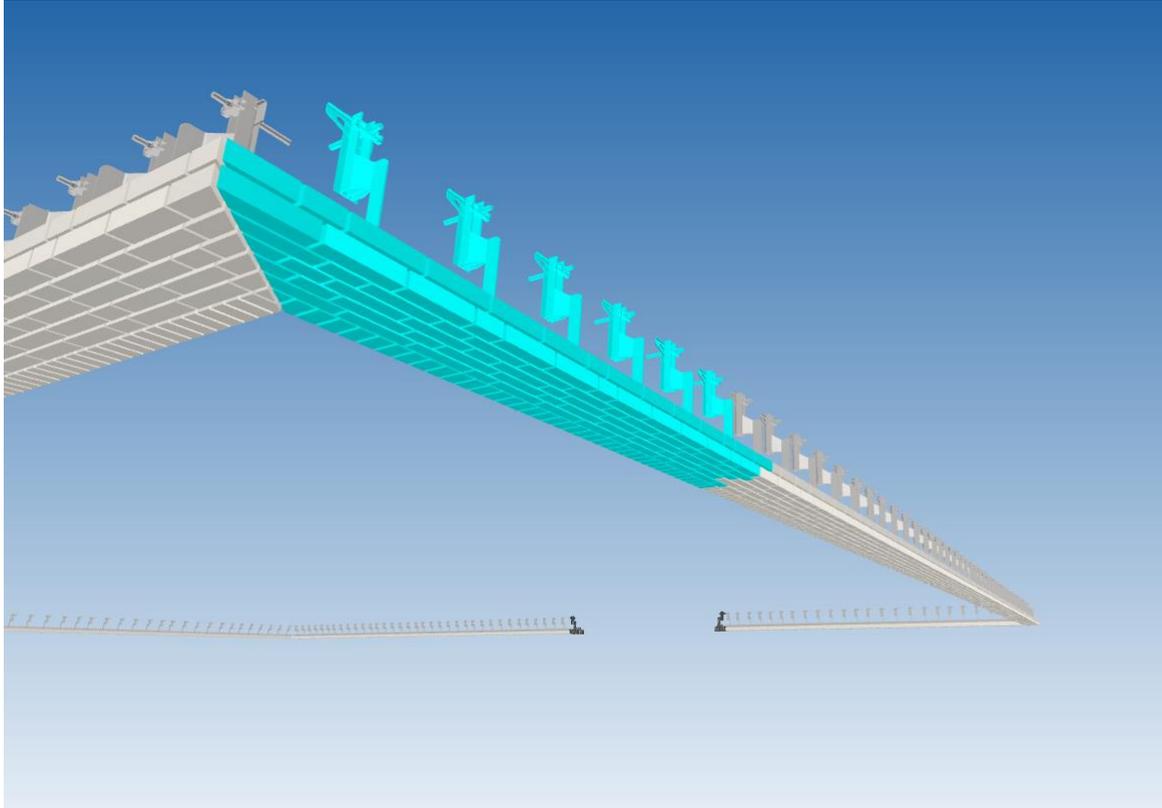


# BIM engineering





# BIM engineering



**Bovenaanzicht**  
Schaf. 13

**Vooranzicht**  
Schaf. 13

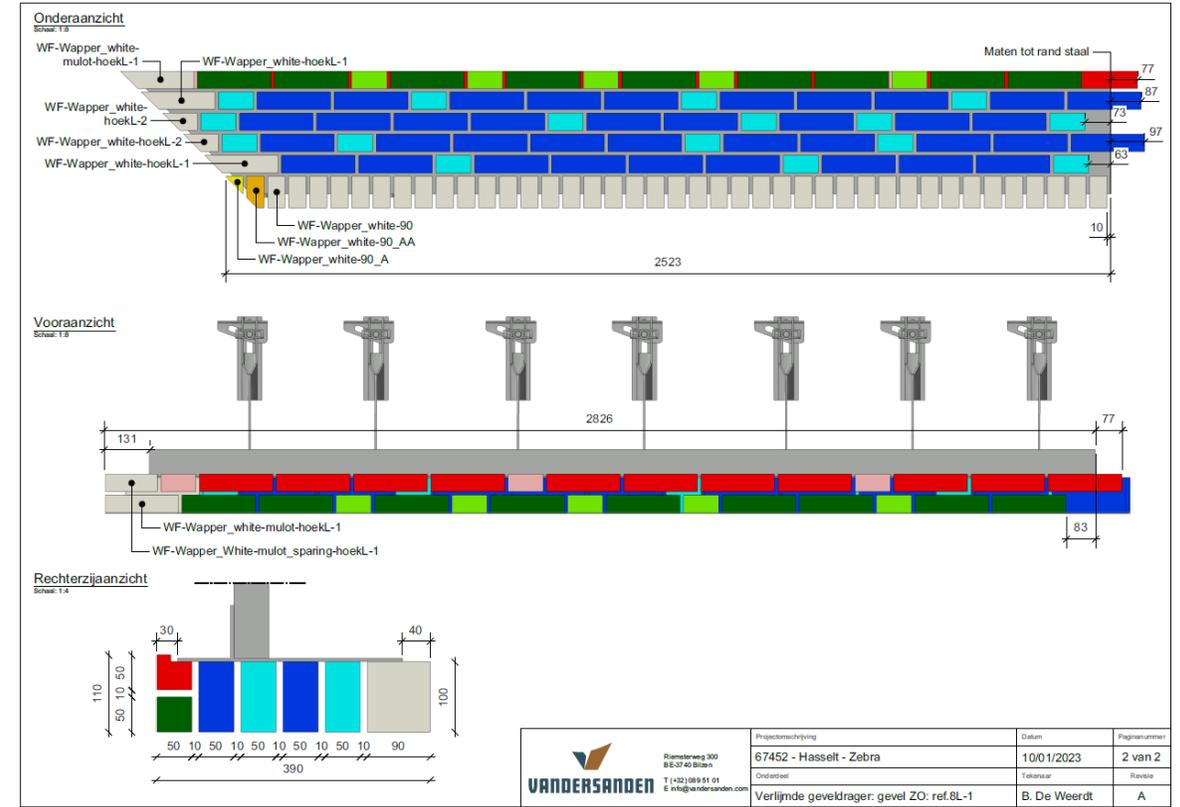
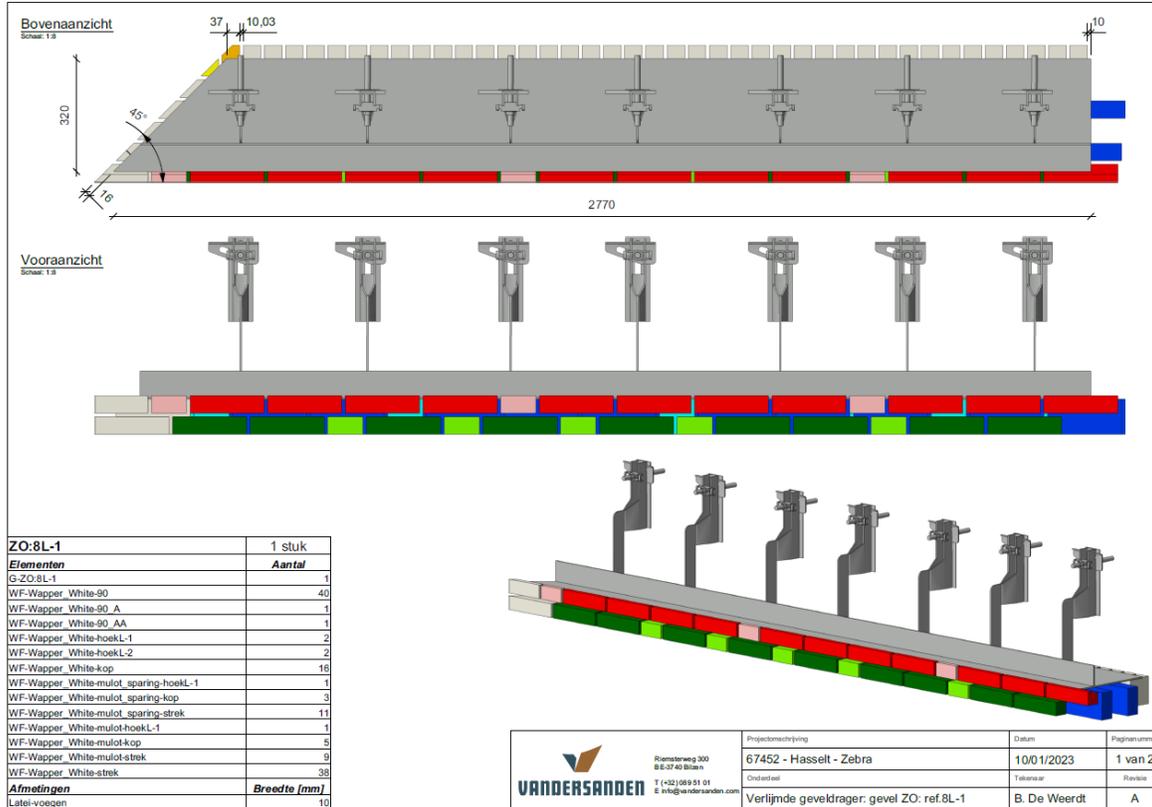
**ZO:8L-1** 1 stuk

Elementen	Aantal
S-ZO:8L-1	1
WF-Wapper_White-90	40
WF-Wapper_White-90_A	1
WF-Wapper_White-90_AA	1
WF-Wapper_White-hoekL-1	2
WF-Wapper_White-hoekL-2	2
WF-Wapper_White-kop	18
WF-Wapper_White-mulot_sparing-hoekL-1	1
WF-Wapper_White-mulot_sparing-kop	3
WF-Wapper_White-mulot_sparing-strek	11
WF-Wapper_White-mulot-hoekL-1	1
WF-Wapper_White-mulot-kop	5
WF-Wapper_White-mulot-strek	9
WF-Wapper_White-strek	38
<b>Afmetingen</b>	<b>Breedte [mm]</b>
Latel-voegen	10

 <small>Ruimersweg 300 6527 HJ Bisschop T (+31) 049 51 01 E info@vandersanden.com</small>	Projectomschrijving	Datum	Paginaummer
	67452 - Hasselt - Zebra	10/01/2023	1 van 2
	Coördinator	Tekenaar	Revisie
	Verlijnde geveldrager: gevel ZO: ref.8L-1	B. De Weerd	A



# BIM engineering





# Production technology





# Production technology





# New housing project – 3000 homes Weespersluis (NL)





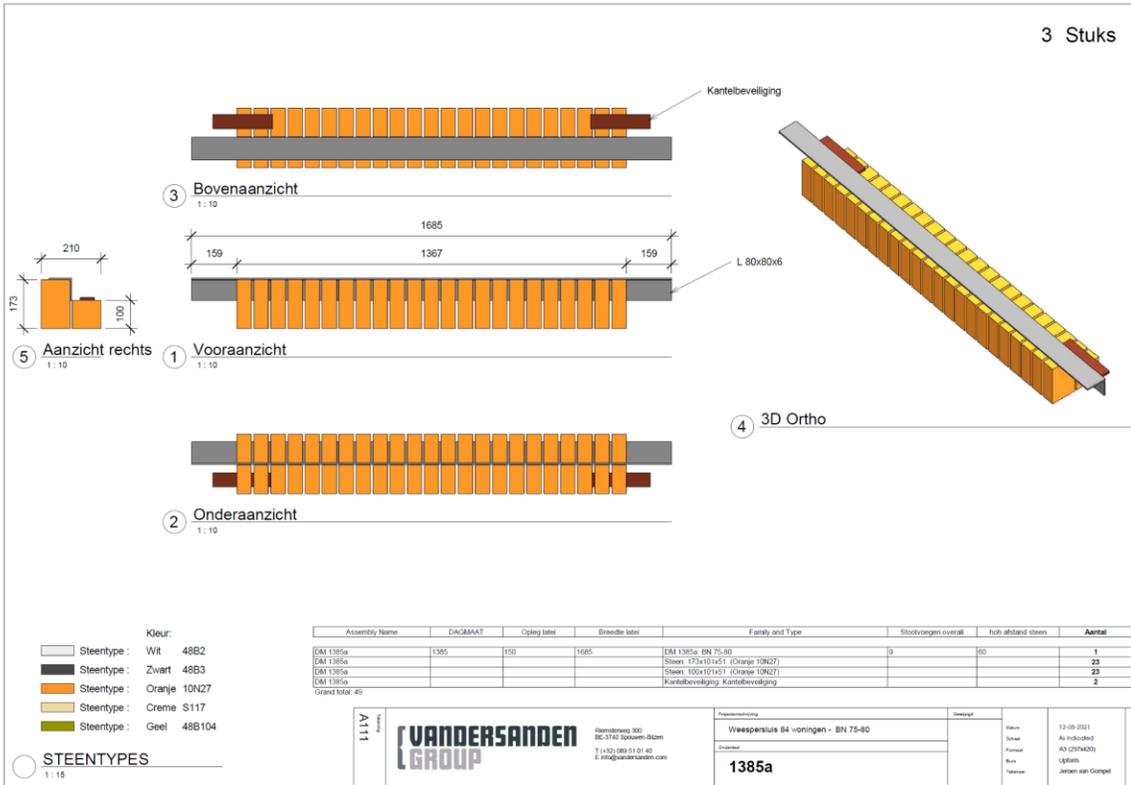
## New construction – 3000 houses Weespersluis (NL)





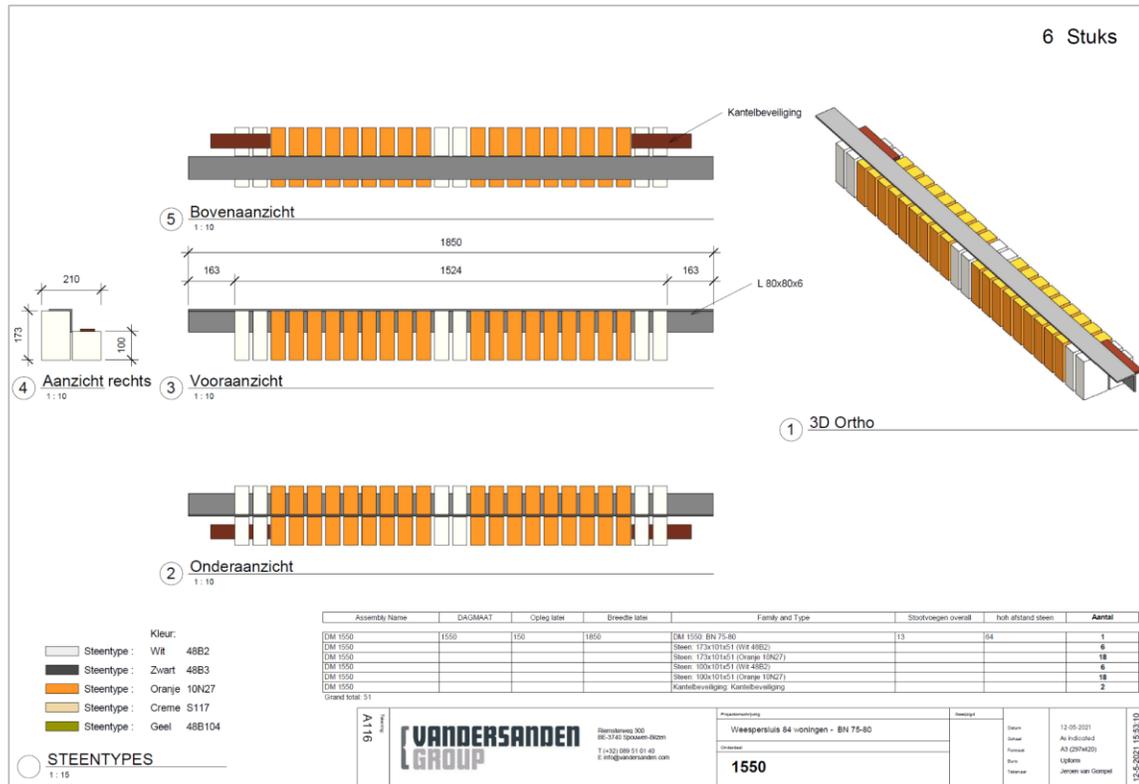
# New construction – 3000 houses Weespersluis (NL)

3 Stuks





# New construction – 3000 houses Weespersluis (NL)





# New construction – 3000 houses Weespersluis (NL)

1 Stuks

4 Aanzicht rechts  
1:10

2 Bovenaanzicht  
1:10

1 Vooraanzicht  
1:10

3 Onderaanzicht  
1:10

5 3D Ortho

Assembly Name	DAG/MAAT	Opleg later	Breedte later	Family and Type	Stoelvoegen overall	hvh afstand steen	Aantal
DM 670a (R100mm opleg)	670	150	900	DM 670a - (R100mm opleg) BN 75-80	9	90	1
DM 670a (R100mm opleg)				Steen: 173x101x51 (Zwart 48B3)			2
DM 670a (R100mm opleg)				Steen: 173x101x51 (Wt 48B2)			5
DM 670a (R100mm opleg)				Steen: 173x100x50 (Geel 48B 104)			4
DM 670a (R100mm opleg)				Steen: 100x101x51 (Zwart 48B3)			2
DM 670a (R100mm opleg)				Steen: 100x101x51 (Wt 48B2)			5
DM 670a (R100mm opleg)				Steen: 100x100x50 (Geel 48B 104)			4
DM 670a (R100mm opleg)				Kantebeveiliging: Kantebeveiliging			2
Grand totaal: 25							

Kleur:  
 Steentype: Wit 48B2  
 Steentype: Zwart 48B3  
 Steentype: Oranje 10N27  
 Steentype: Creme S117  
 Steentype: Geel 48B104

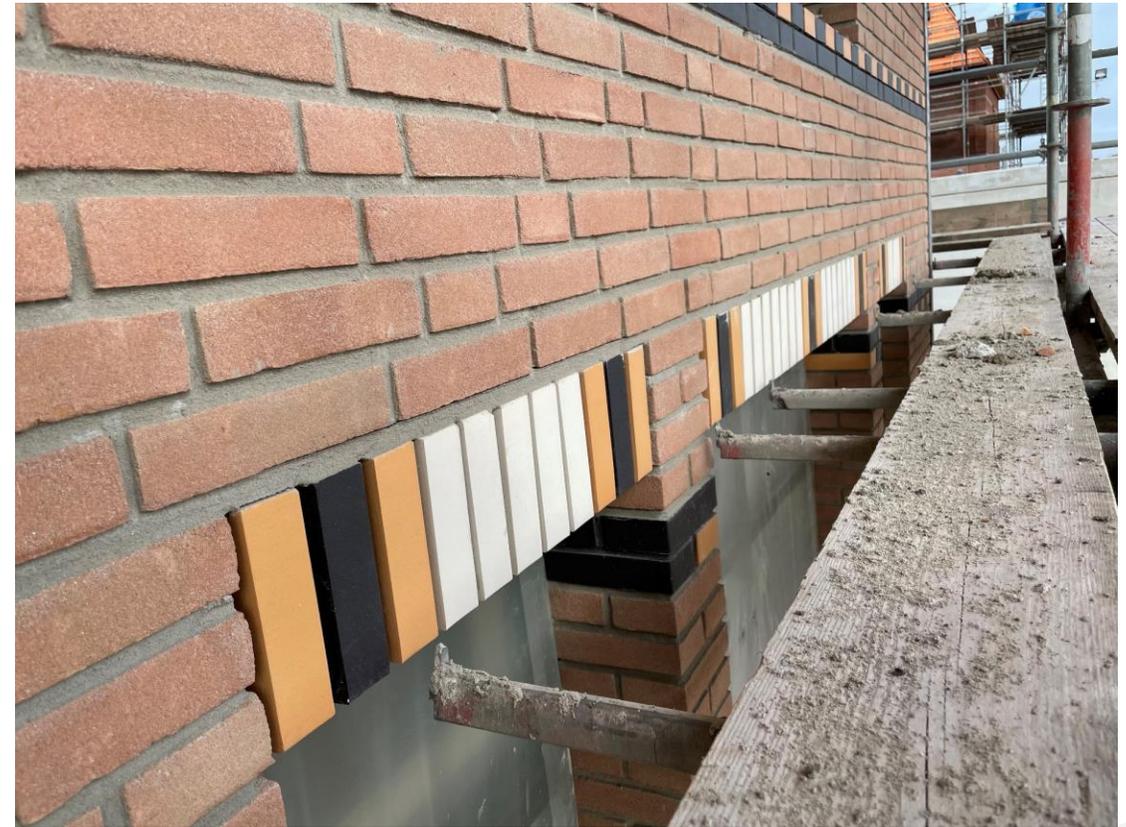
STEENTYPES  
1:15

**VANDERSANDEN GROUP**  
 Samenwerk 300  
 BE-3740 Spawen Bldm  
 T: +31 (0) 30 81 81 40  
 E: info@vandersanden.com

Projectnaam: Weespersluis 84-voringen - BN 75-80  
 Datum: 12-05-2021  
 Status: Aankondigd  
 Project: A012014283  
 Fase: Lijsten  
 Tekenaar: Jansen van Gompel

14-5-2021 15:52:59

M.U-21005 - Weespersluis - VDS/Tekentoon/BLOK 20201-05-12 - blok 2 BN 75-80 - /2021 Livt





# New construction – 3000 houses Weespersluis (NL)

1 STUKS

5 Bovenaanzicht  
1:10

3 Rechter aanzicht  
1:10

2 Vooraanzicht  
1:10

4 Onderaanzicht  
1:10

3D Ortho

Kantelbeveiliging

L 80x80x6

Assembly Name	DA/GMAAT	Opleg latten	Breedte latten	Family and Type	Stoelsteegen overall	hvh afstand steen	Count
DM 1495	1495	150	1795	Latten steen: BN 72-73 (dm 1495)	11		1
DM 1495				Steen: 17,2x10x21 (steentype B)			12
DM 1495				Steen: 17,2x10x21 (steentype A)			12
DM 1495				Steen: 100x10x21 (steentype B)			12
DM 1495				Steen: 100x10x21 (steentype A)			12
DM 1495				Kantelbeveiliging: Kantelbeveiliging (130x30x10)			2
Grand totaal: 51							

Steencode: Kleur:  
 Steentype A : ..... Witte steen 48B2  
 Steentype B : ..... g2\_Creme keimwerk S117 rollaag

**VANDERSANDEN GROUP**  
 Kijksterweg 300  
 82,2190 Spijkenisse-Bilzen  
 T (+31) 089 51 81 40  
 E info@vandersanden.com

Projectnaam: Weespersluis 84 woningen p - BN 72-73  
 Datum: 10-05-2021  
 1495

14-05-2021 10:44:29





# New construction – 3000 houses Weespersluis (NL)

1 Stuks

**4 Bovenaanzicht** 1:10

**5 Aanzicht rechts** 1:10

**1 Vooraanzicht** 1:10

**2 3D Ortho**

**3 Onderaanzicht** 1:10

Assembly Name	DAGMAAT	Opleg later	Breedte later	Family and Type	Stoedroegen overall	hoh afstand steen	Aantal
DM 1440 (100mm opleg)	1440	190	1640	DM 1440 (100mm opleg) BN 75-80	11	02	1
DM 1440 (100mm opleg)				Steen 173x101x51 (Zwart 48B3)			3
DM 1440 (100mm opleg)				Steen 173x101x51 (Oranje 48B2)			14
DM 1440 (100mm opleg)				Steen 173x100x50 (Geel 48B 104)			6
DM 1440 (100mm opleg)				Steen 100x101x51 (Zwart 48B3)			3
DM 1440 (100mm opleg)				Steen 100x101x51 (Oranje 48B2)			14
DM 1440 (100mm opleg)				Steen 100x100x50 (Geel 48B 104)			6
DM 1440 (100mm opleg)				Kantelbeveiliging Kantelbeveiliging			2
Grand total 49							

**Kleur:**  
 Steentype: Wit 48B2  
 Steentype: Zwart 48B3  
 Steentype: Oranje 10N27  
 Steentype: Creme S117  
 Steentype: Geel 48B104

**STEENTYPES** 1:15

<b>VANDERSANDEN GROUP</b> Industrieweg 303 8634AD Spouwen-Rijen T +31(0) 266 51 01 40 E info@vandersanden.com	Projectnaam <b>Weespersluis 84 woningen - BN 75-80</b>	Datum 12-05-2021
	Overzet <b>1440 (100mm opleg)</b>	Status Aanvullend

M:U-21005 - Weespersluis - VDS/TekeningenBLOK 2020-05-12 - blok 2 BN 75-80 - (2021).rvt





## Linstower – Apartements Antwerpen (BE)



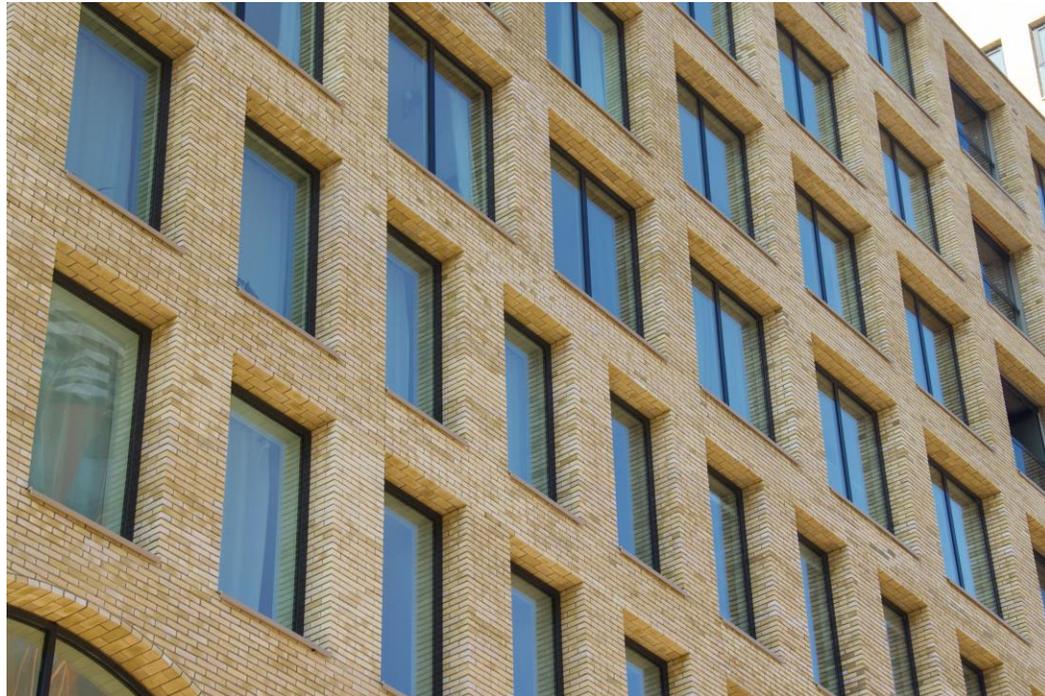


## Westbeat – Office/ Apartements Amsterdam (NL)





## Westbeat – Office/ Apartements Amsterdam (NL)

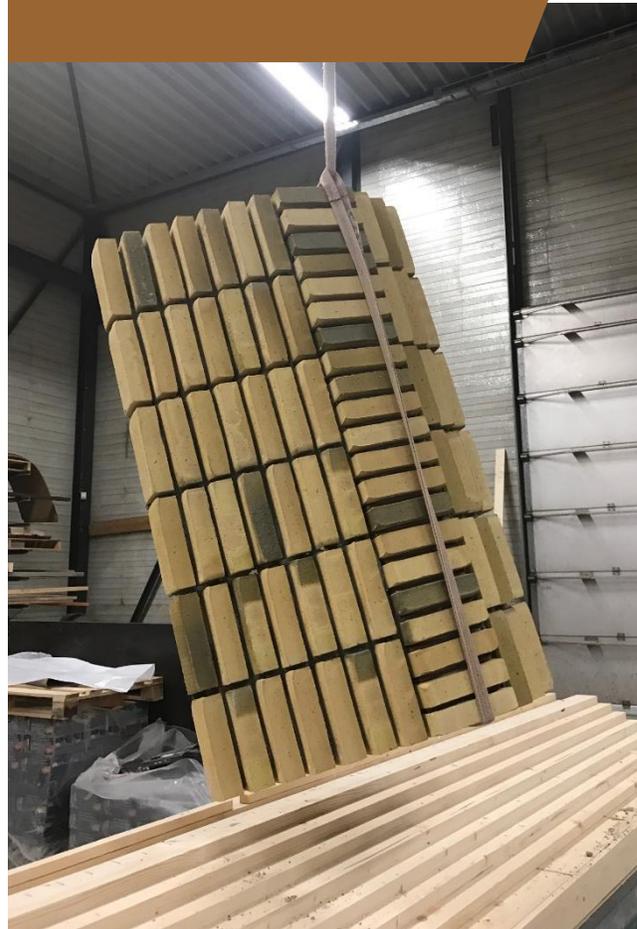


# Prefab components – Product range

Lintels /  
masonry supports



Custom solutions



Parametric masonry



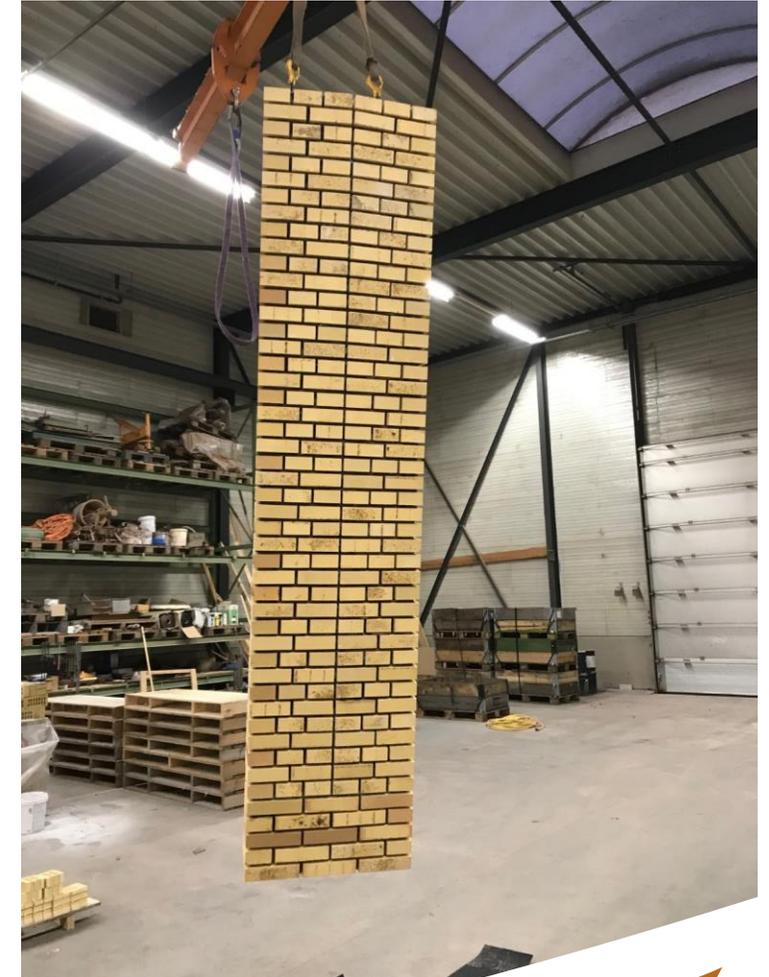


## De Entree – Apartments Haarlem (NL)



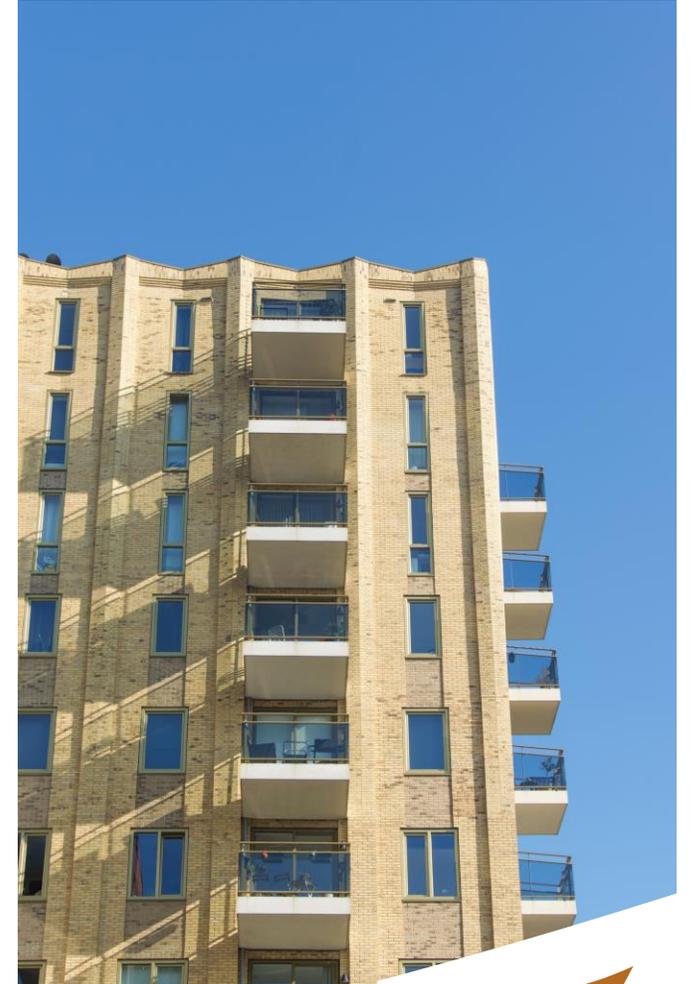
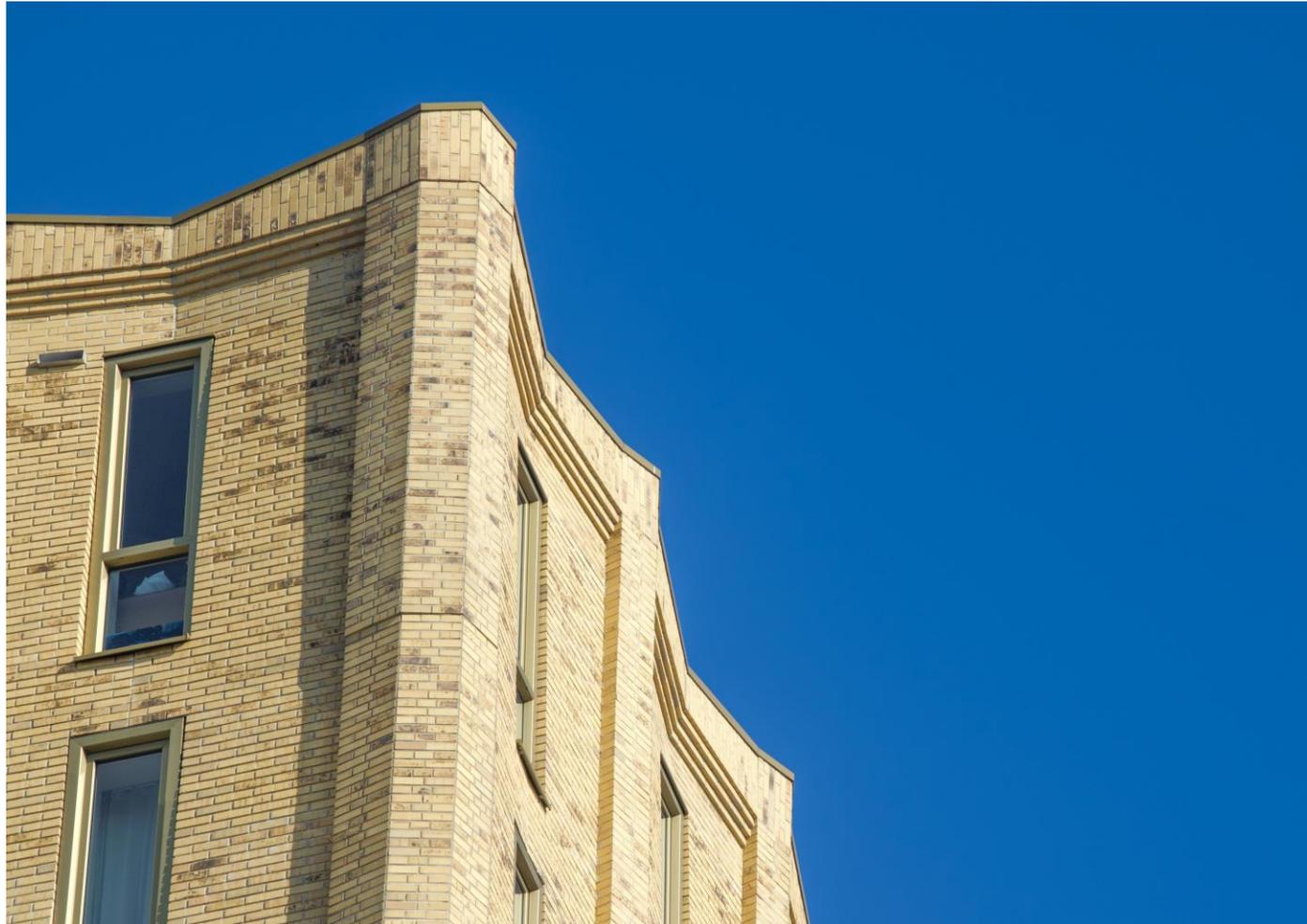


## De Entree – Apartments Haarlem (NL)





## De Entree – Apartments Haarlem (NL)



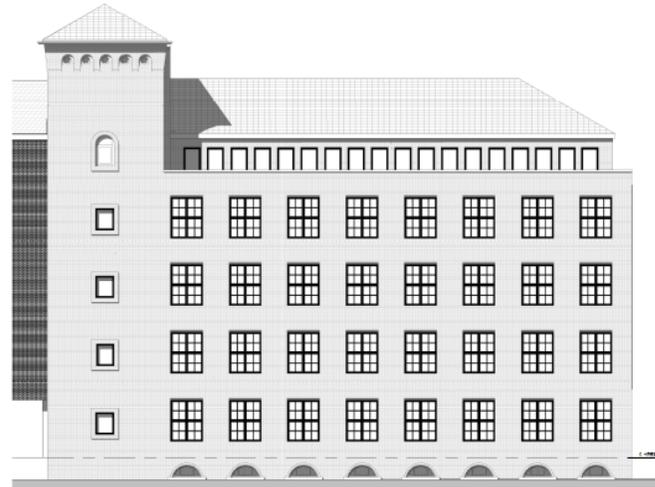




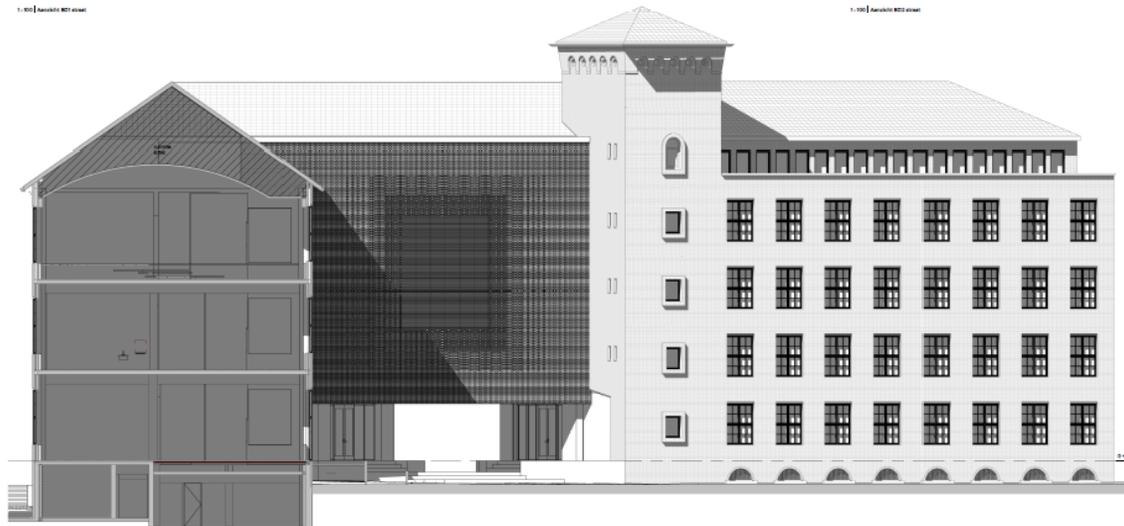
# Commercial building 's-Hertogenbosch (NL)



1:100 | Section 001 (1/2) view



1:100 | Section 002 (1/2) view



1:100 | Section 003 (1/2) view

Alle maten in het werk te controleren

Project	verbouwing/renovatie voormalige KPN telefooncentrale	opdracht	CR 22-10-2020	toetsen	A1
Uitgever	CevisaanZicht	architect		schalen	1:100
				toetsen	06/10/2021
				toetsen	20/10/2021
				toetsen	DO-300
				toetsen	
				toetsen	

Opdrachtgever: Stichting Alani  
Uitgever: Stichting Alani  
Aanvrager: Stichting Alani  
Aanvrager: Stichting Alani

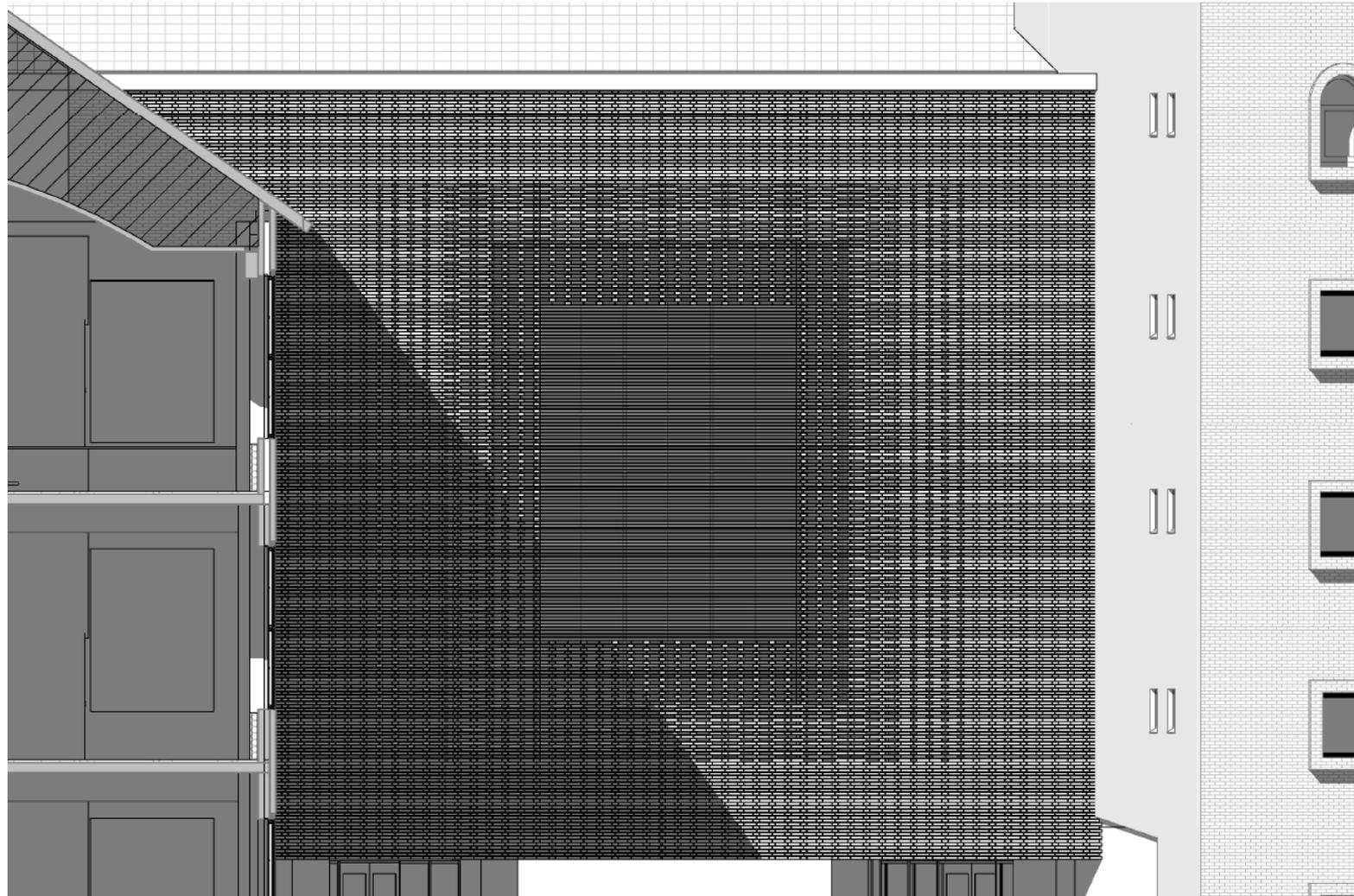
Uitsluitend te gebruiken voor de afgeleverde tekening(en). Het is niet toegestaan de tekening(en) te kopiëren, te verspreiden, te verspreiden of te verspreiden.

Uitsluitend te gebruiken voor de afgeleverde tekening(en). Het is niet toegestaan de tekening(en) te kopiëren, te verspreiden, te verspreiden of te verspreiden.





# Commercial building 's-Hertogenbosch (NL)





## Commercial building 's-Hertogenbosch (NL)





## Commercial building 's-Hertogenbosch (NL)



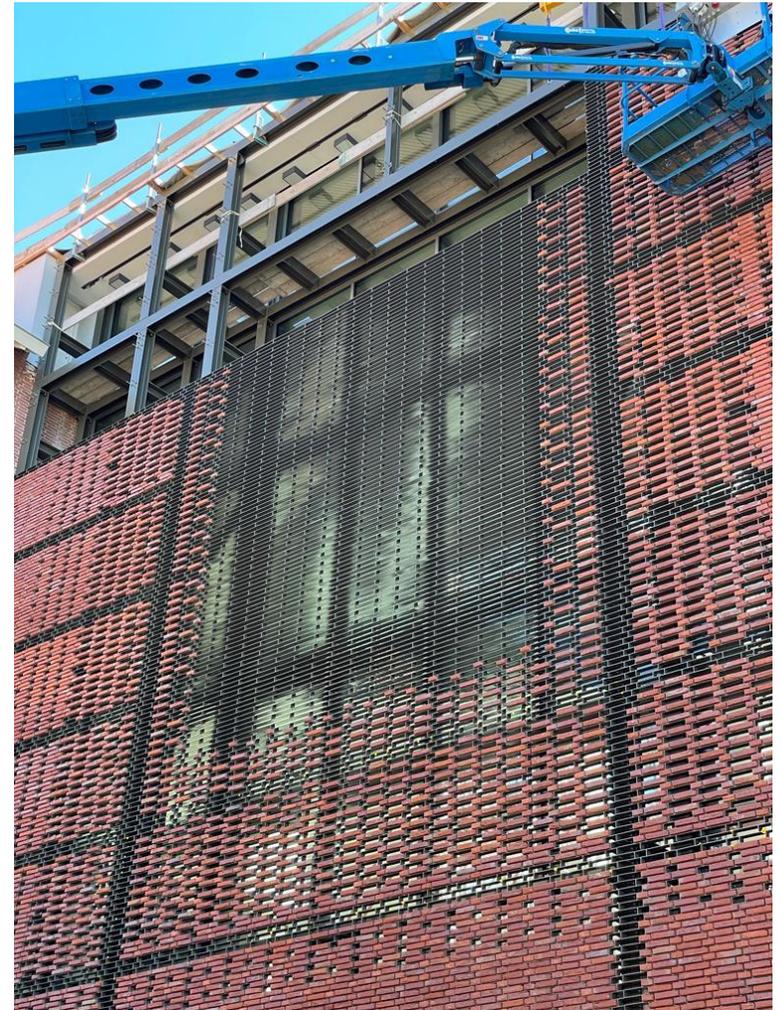
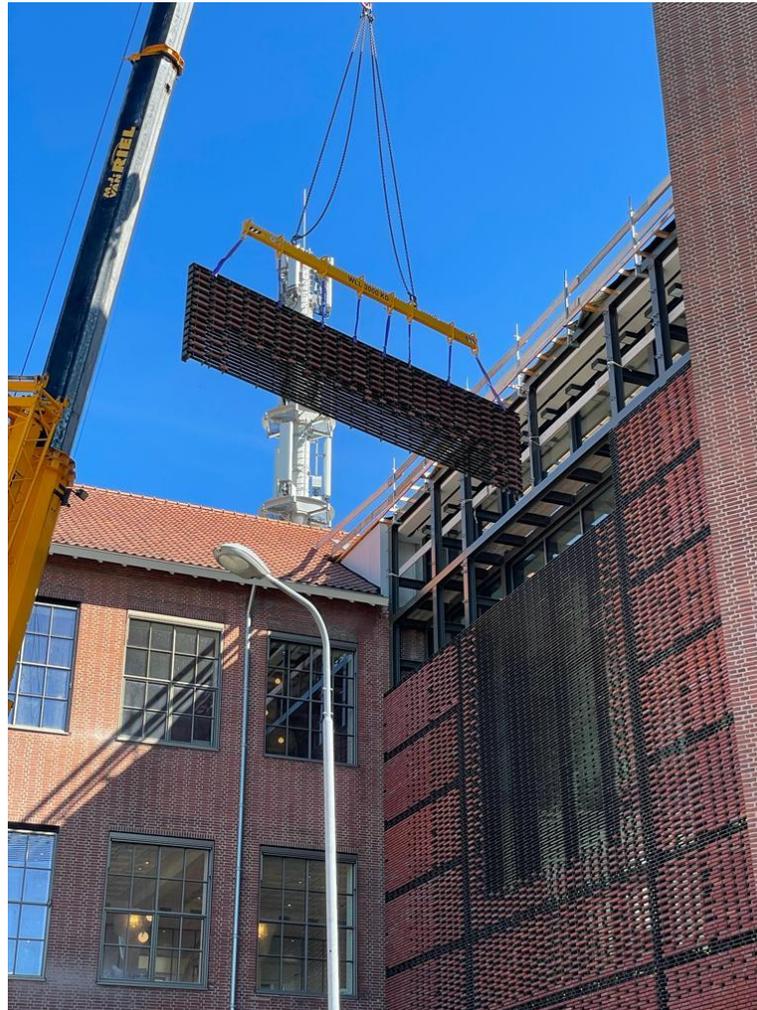
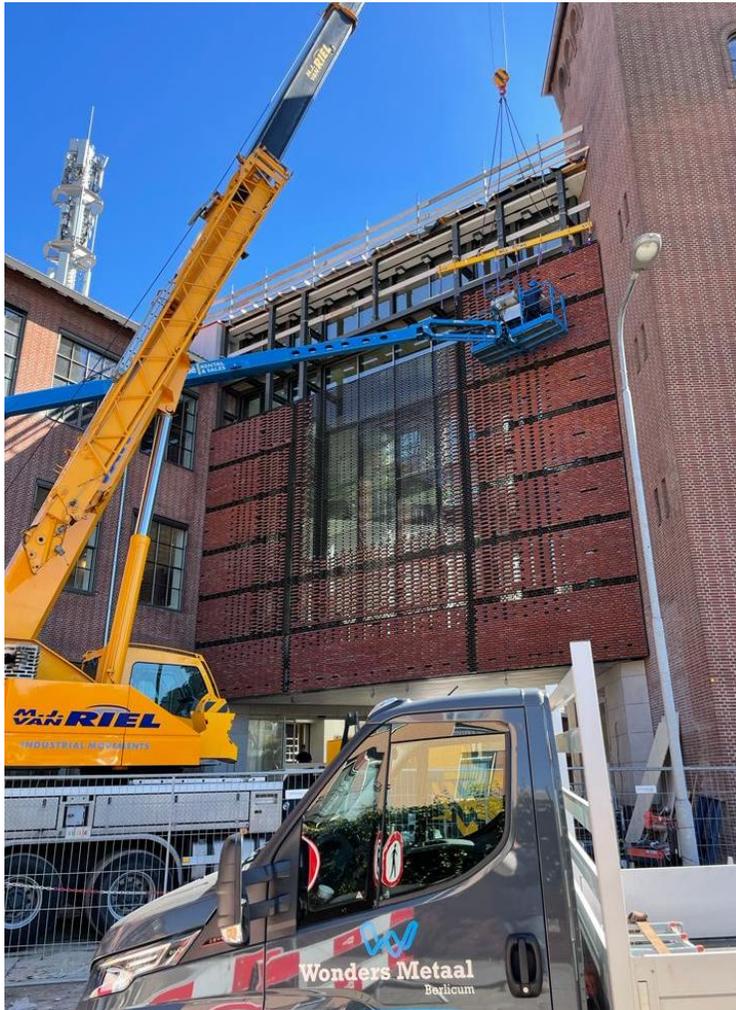


# Commercial building 's-Hertogenbosch (NL)





# Amadeiro – Claustra 's-Hertogenbosch (NL)



# Prefab components – Product range

Lintels /  
masonry supports



Custom solutions



Parametric masonry





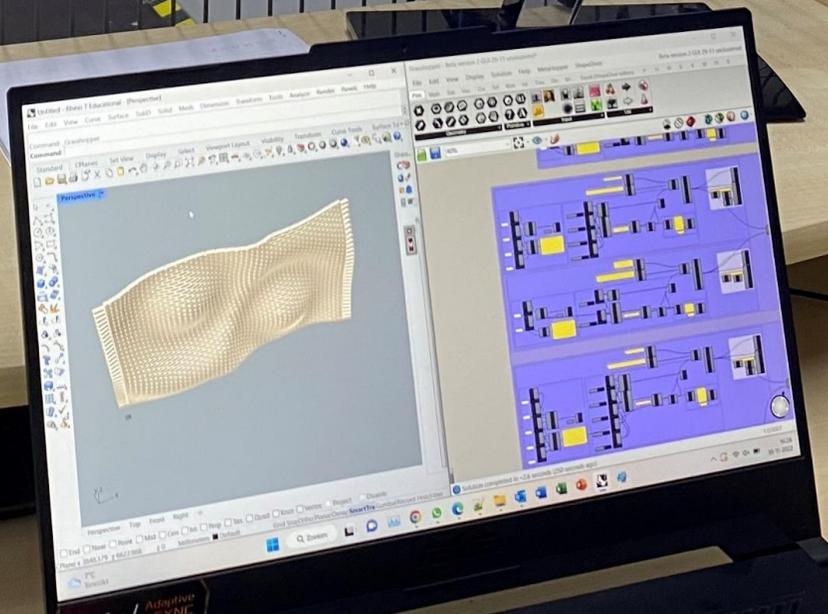
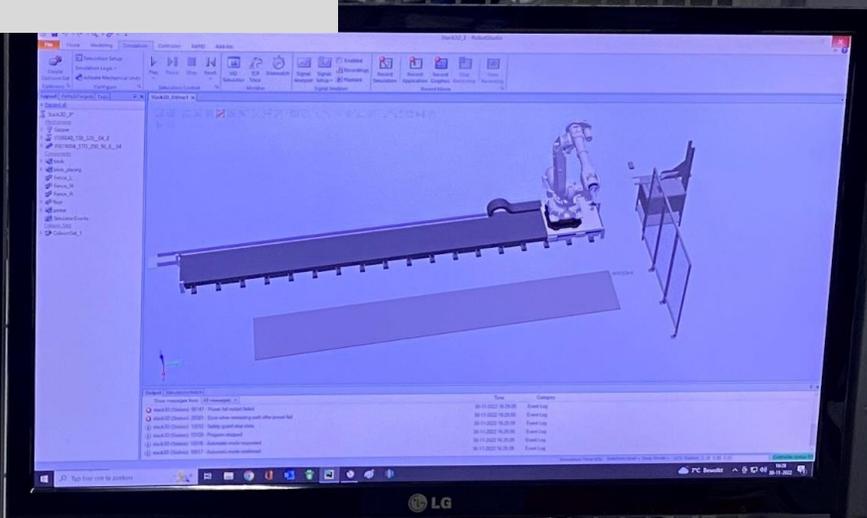
from digital design  
to digital production

```
FLATRON 2000
robotic_workshop
goodepy

def get_offset(poly, offset):
    res = None
    seq = [(p.x, p.y) for p in poly]
    pcc = PolylineOffset()
    pcc.AddPath(scale_to_clipper(seq), JT_ROUND, 0.1, 0.2, 0.1, 0.1)
    subtraction = scale_from_clipper(pcc.Extrude(scale_to_clipper(offset)))
    if subtraction:
        res = [Vector2(p.x, p.y) for p in subtraction]
    return res

# = featurize_mixin_mixin_of_extrusion
class GCouplerExport:
    def __init__(self, brick, z=2.0, w=8, offset=0, min_line_length=0, job_id=0, cell_id=0):
        self.job = job_id
        self.cell = cell_id
        self.z = z
        self.w = w
        self.offset = offset
        self.min_line_length = min_line_length
        self.press = Vector2(150.0, 250.0) # center of brick (150.0, 250.0 = normal)
        self.position = 0.0
        self.rotation = 45.0
        self.featurize = 0.588844282 # factor=0.588844282 is valid correct
        self.factor = 0.588844282
        self.brick = brick
        self.name = brick.cell_name
        self.time = 0

    def reduce_offset_cut_scut:
        paths = []
        off = self.offset - self.w / 2. + 1
```





## Bouwlab – Construction innovation hub Haarlem (NL)



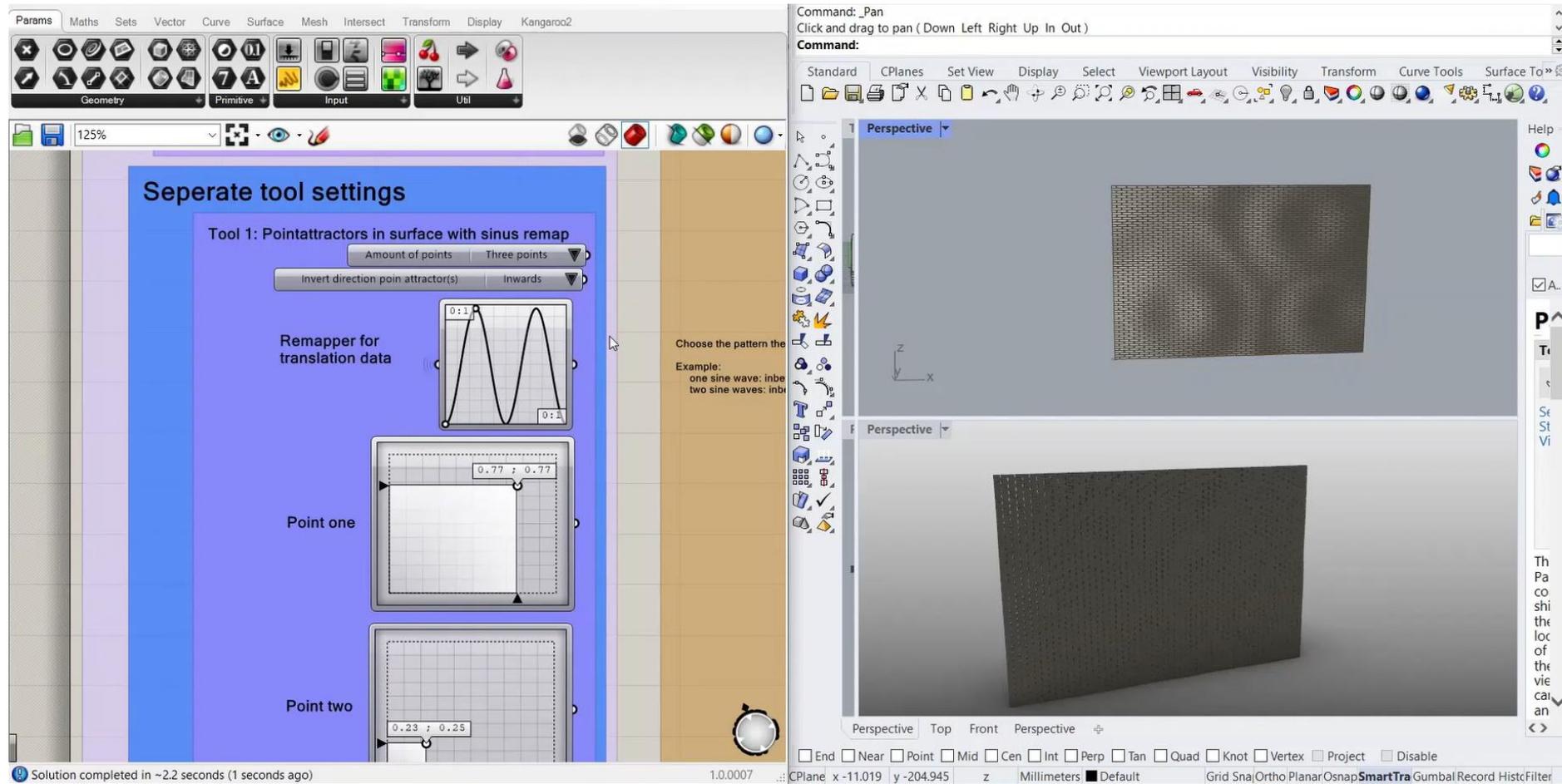




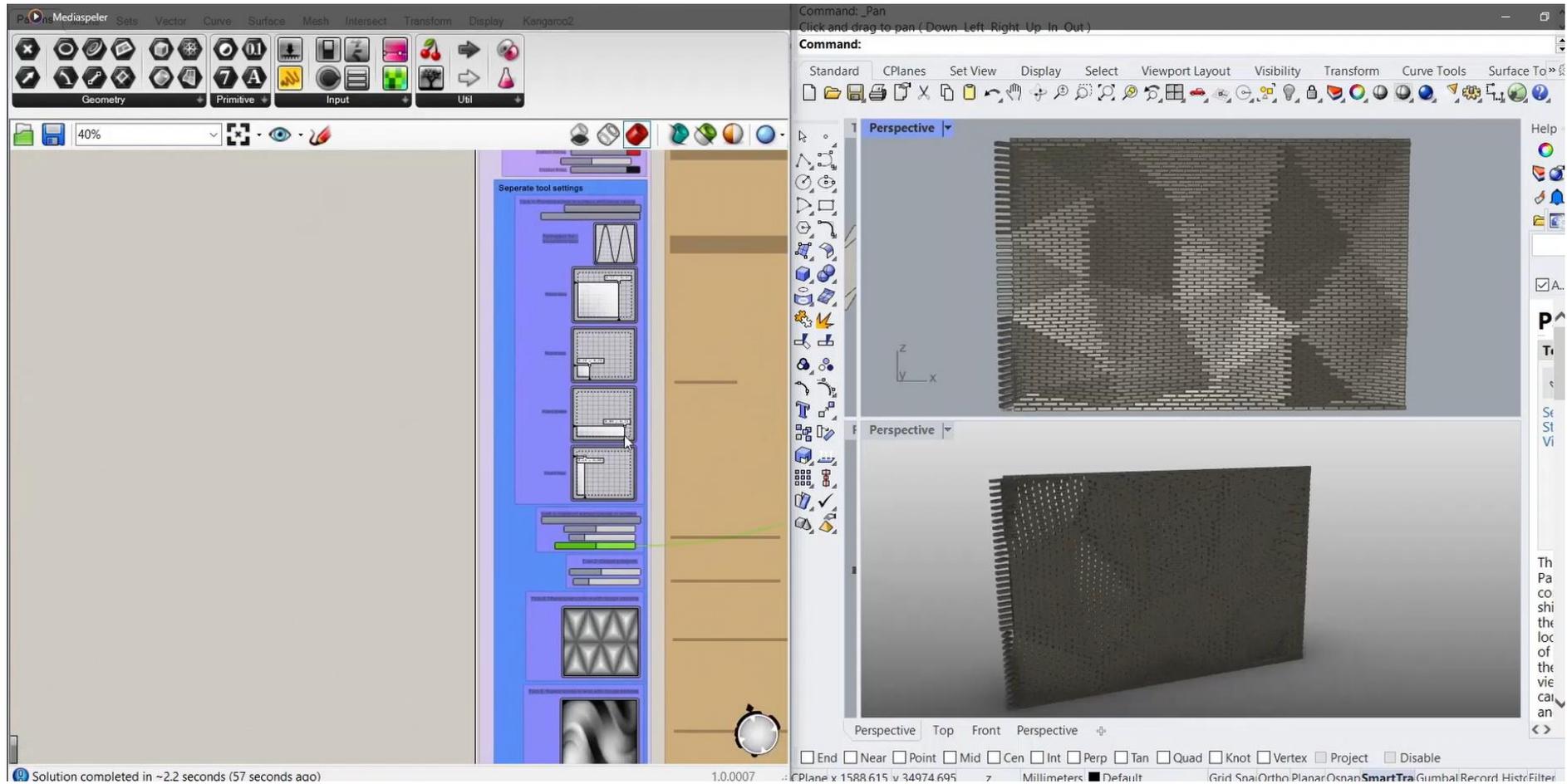
# Bouwlab – Construction innovation hub Haarlem (NL)



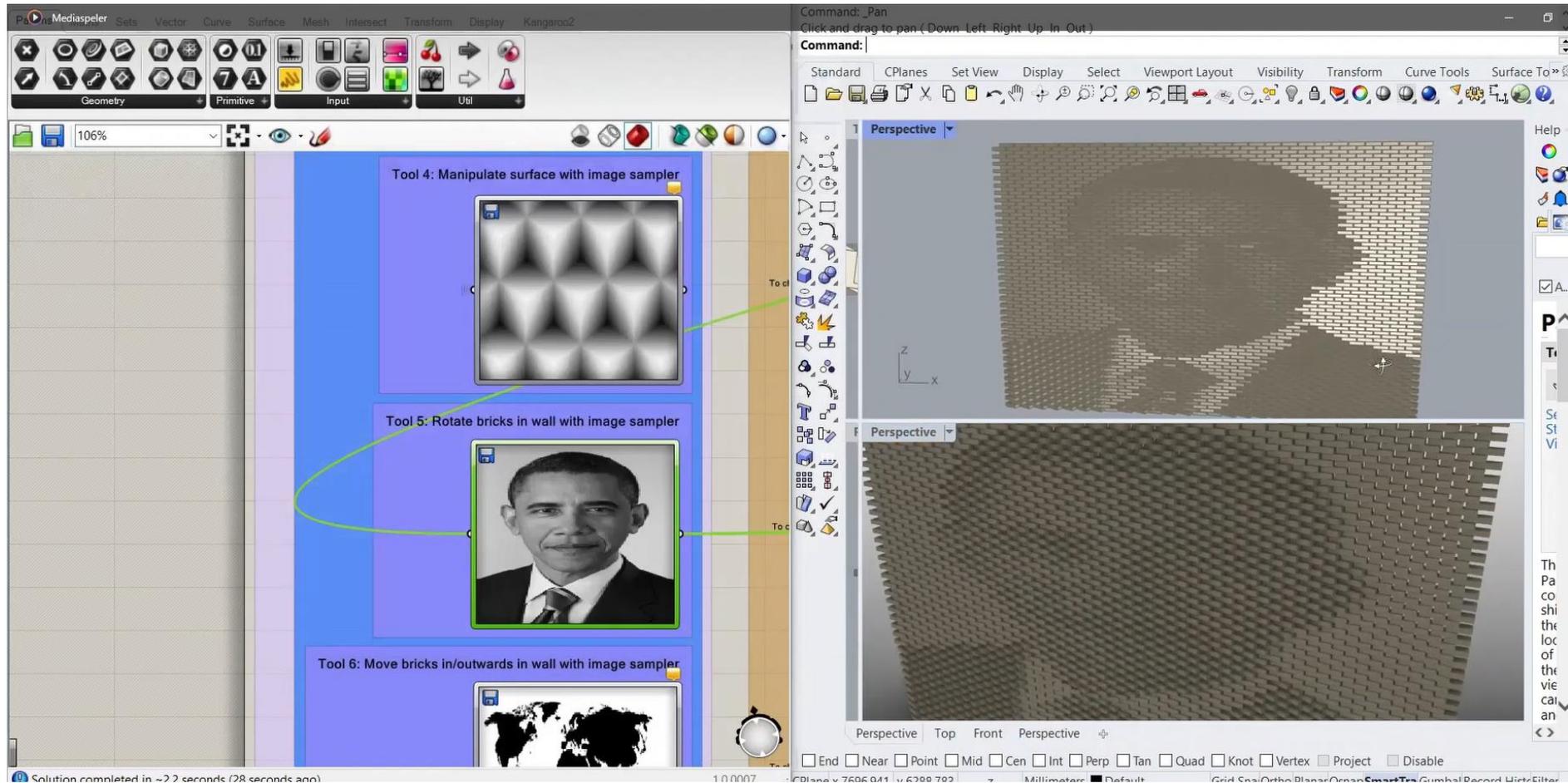
# Parametric brick generator



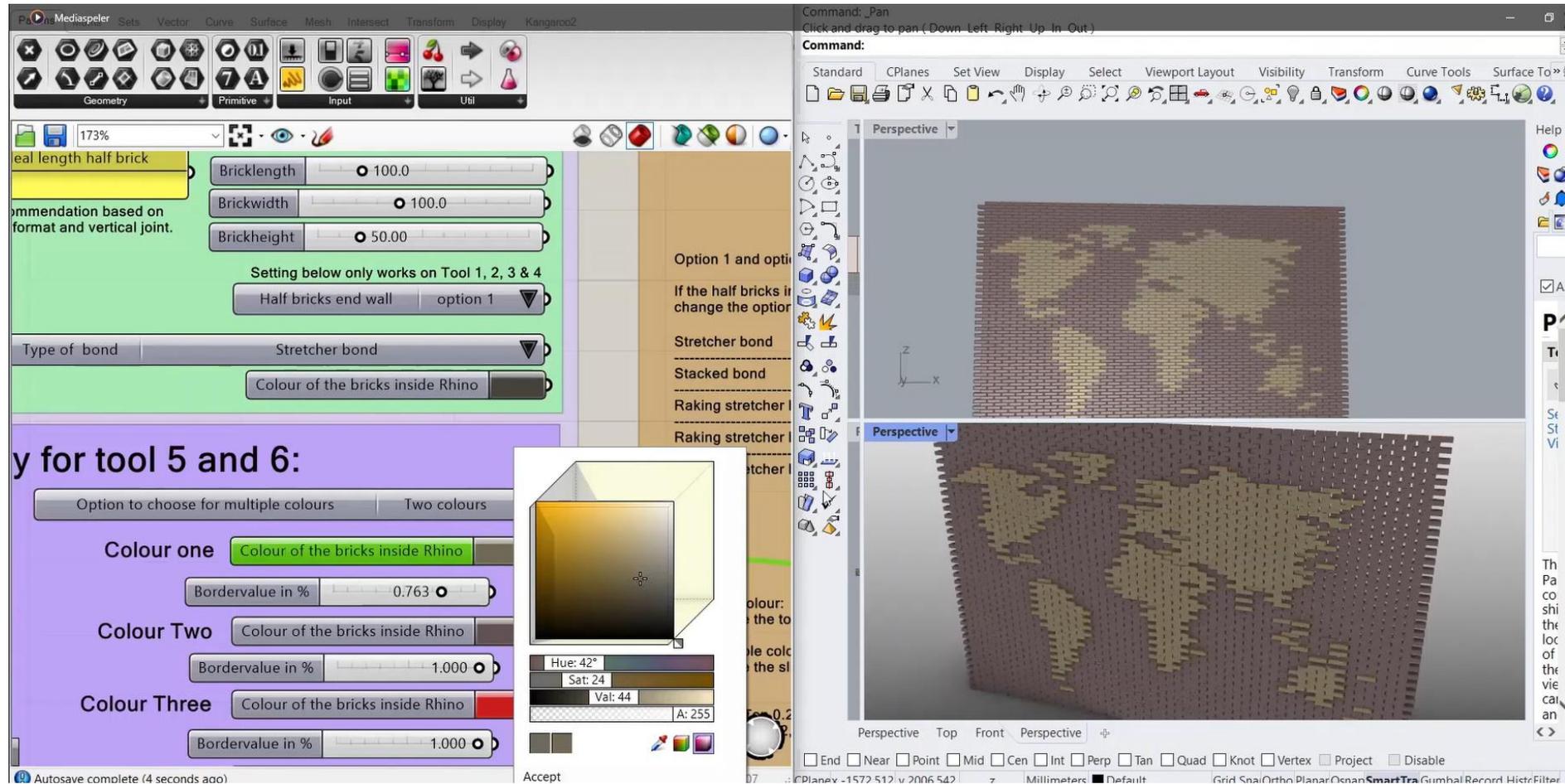
# Parametric brick generator



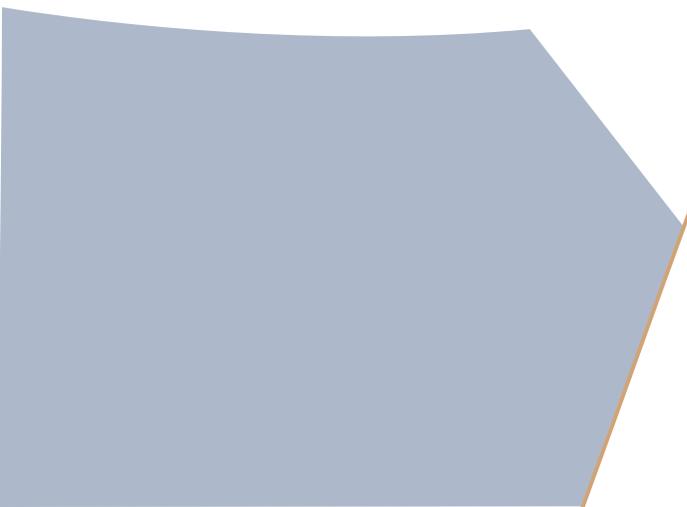
# Parametric brick generator



# Parametric brick generator

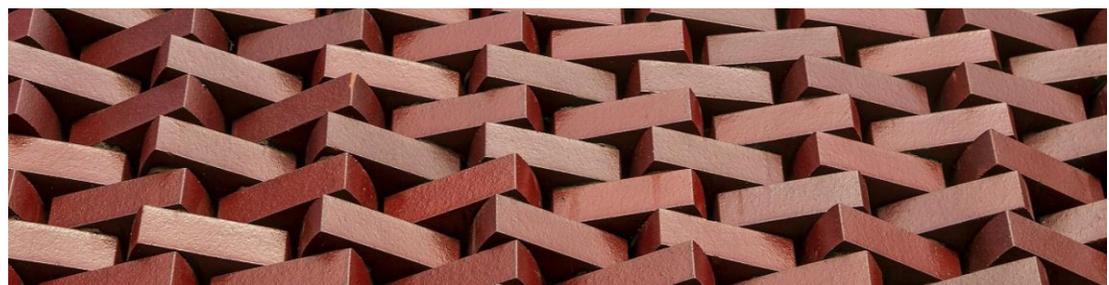
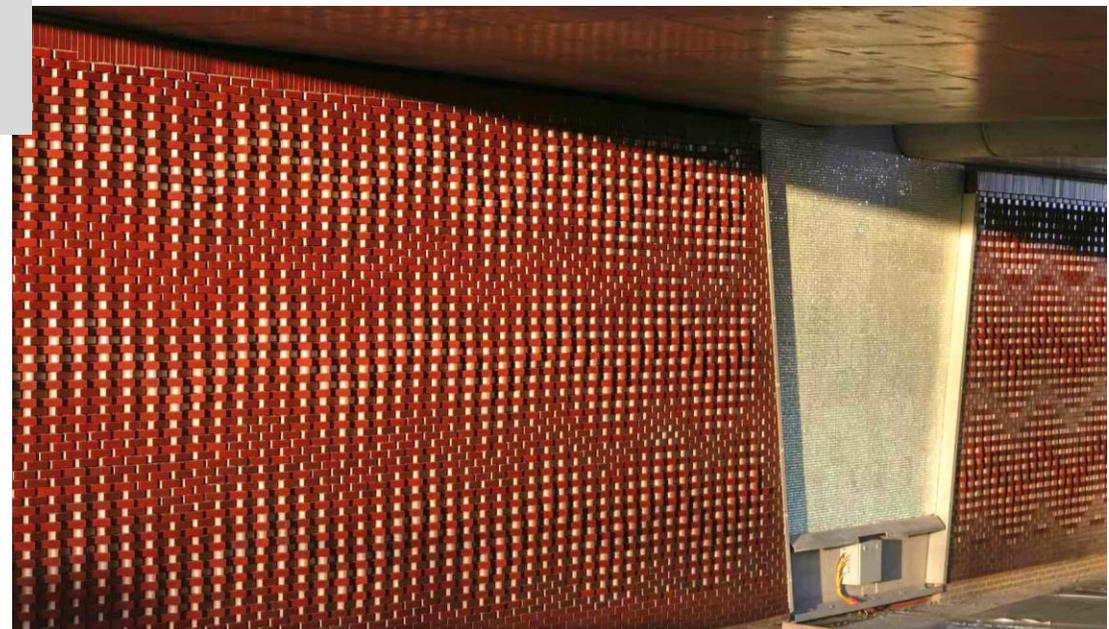
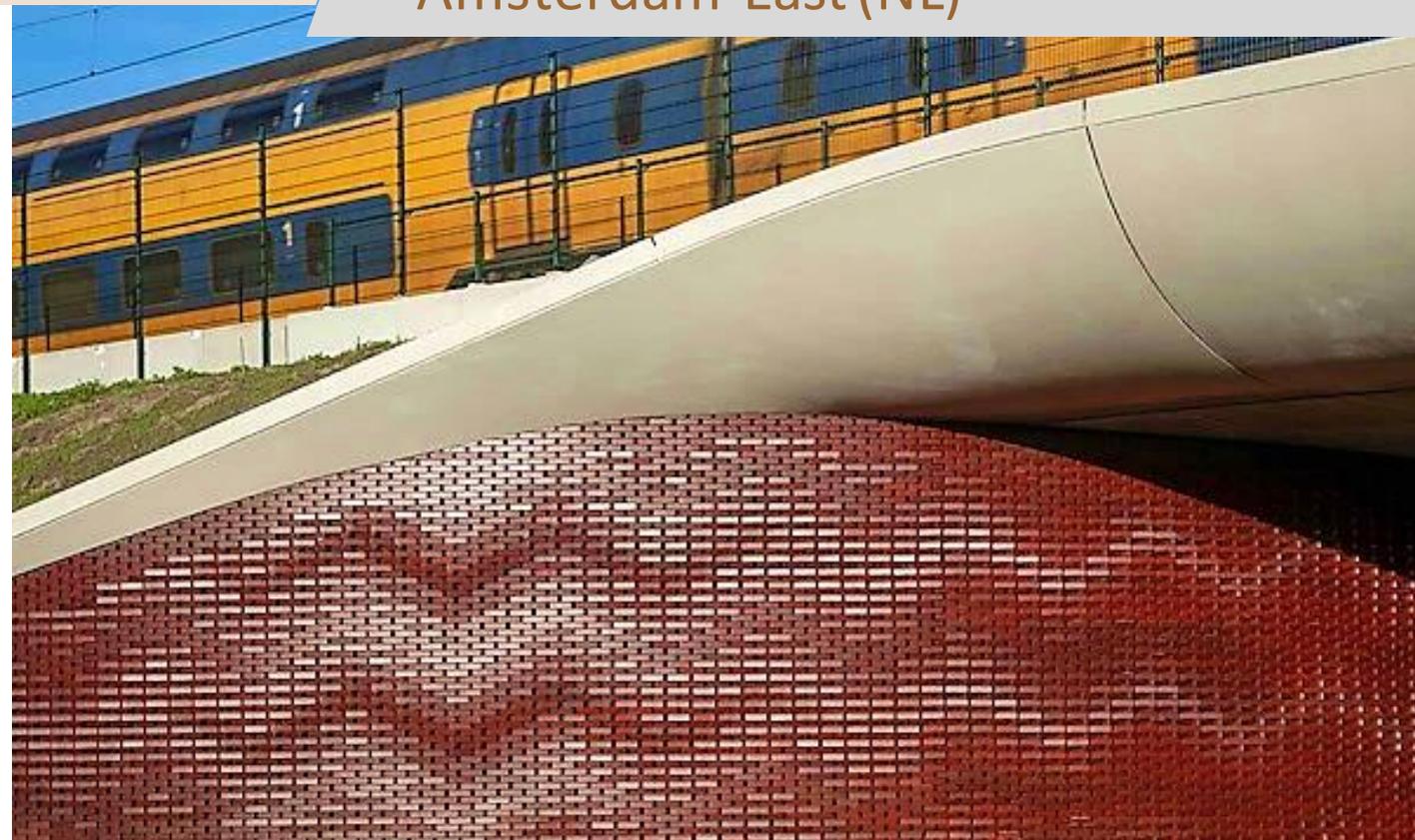


# inspiration





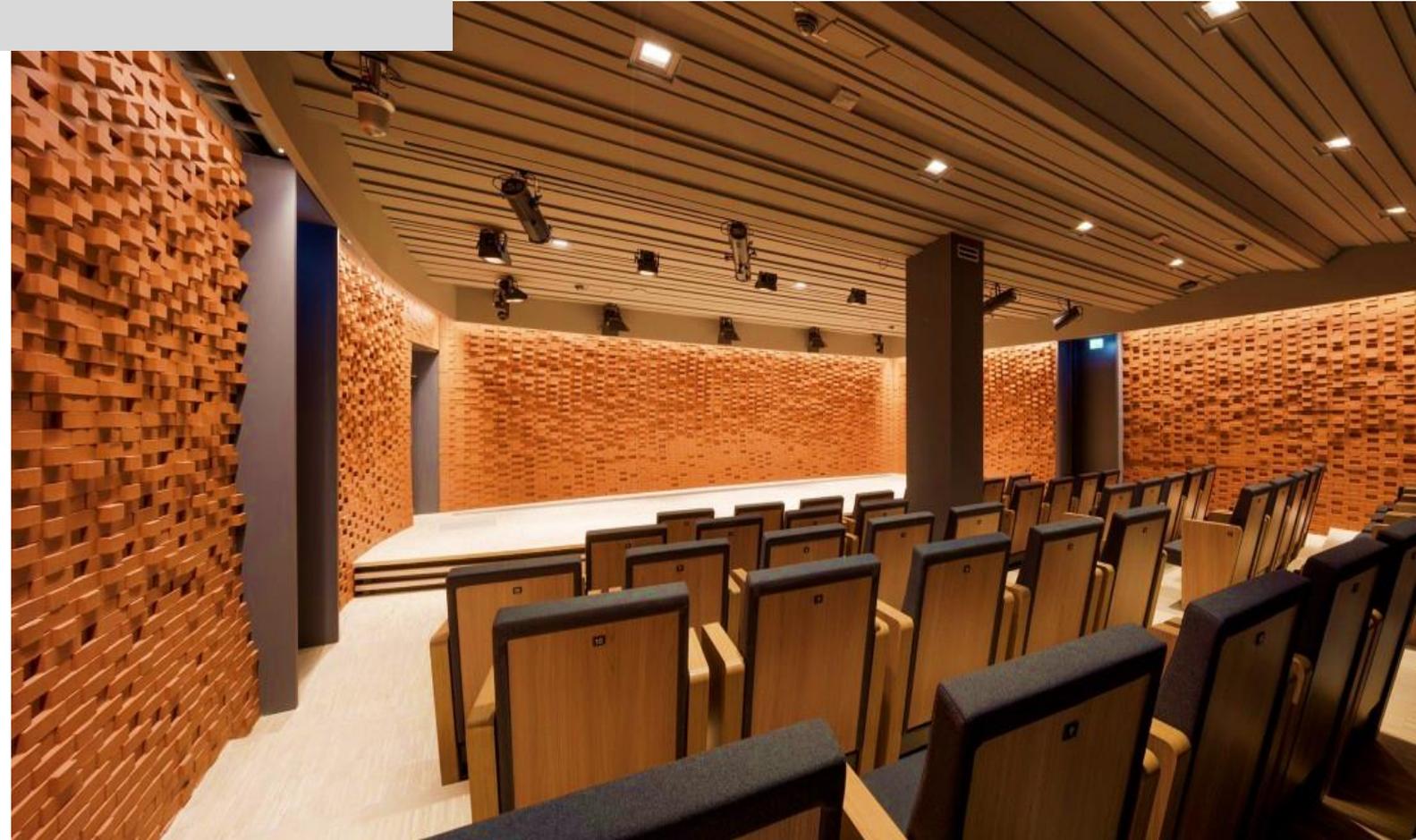
# Overpass Amstelstroomlaan Amsterdam-East (NL)



A&E Architecten



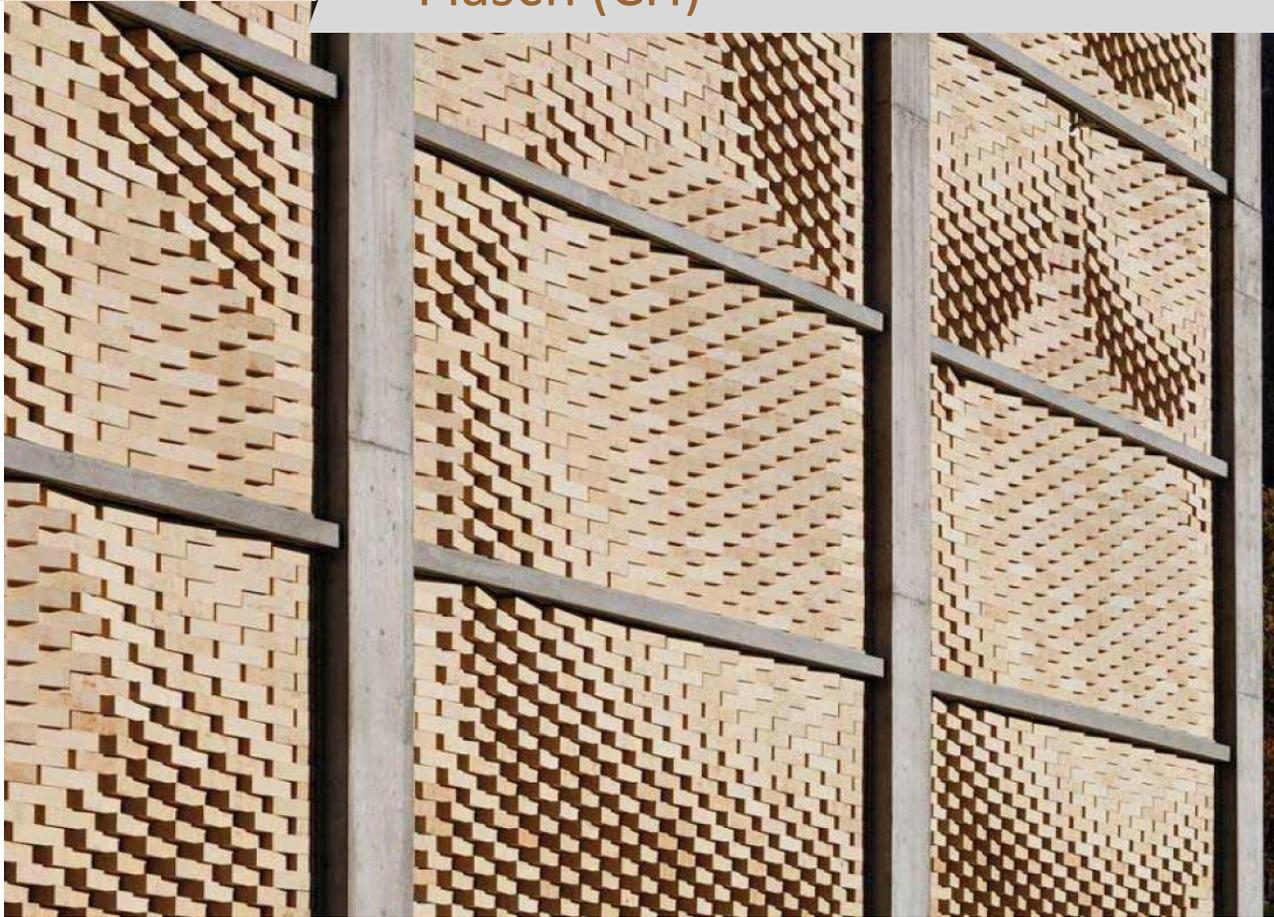
# MPI Concerthall - interior Frankfurt (D)



mtp architekten GmbH



## Gantenbein Winery – Fermentation hal Fläsch (CH)



Bearth & Deplazes Architekten



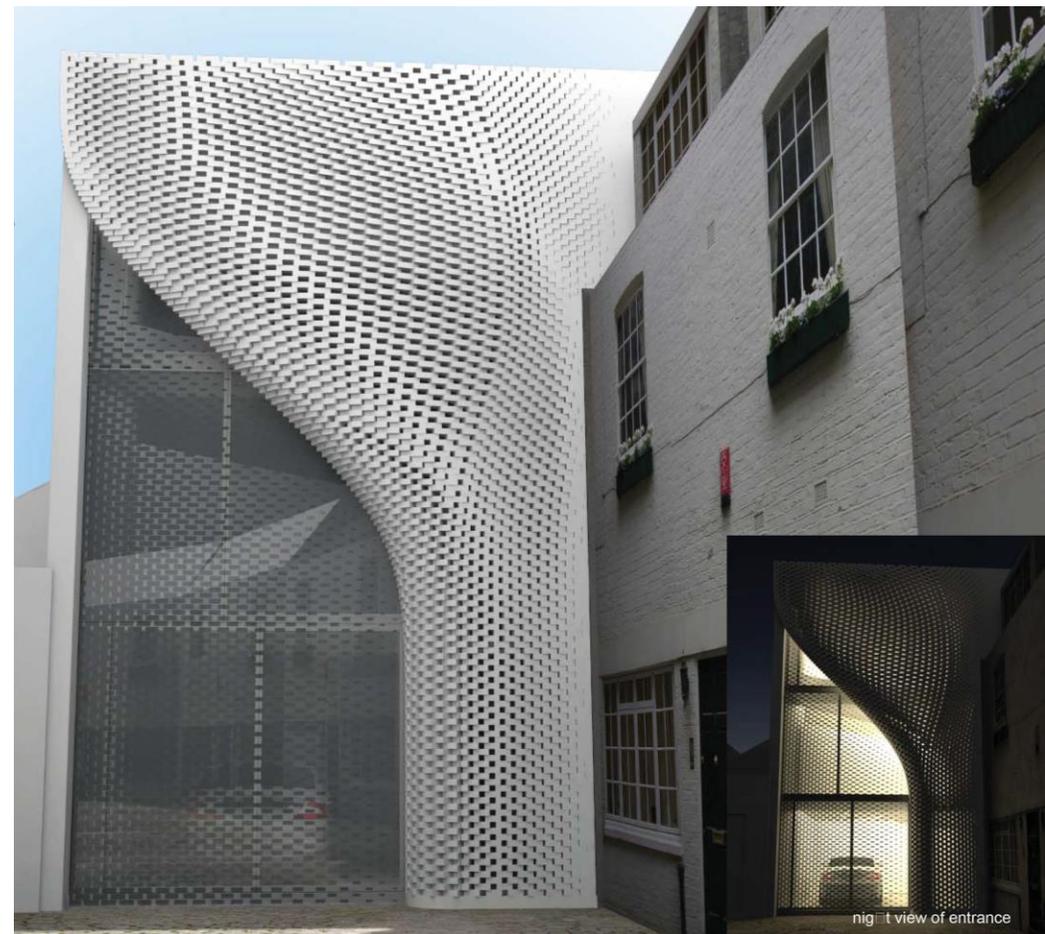
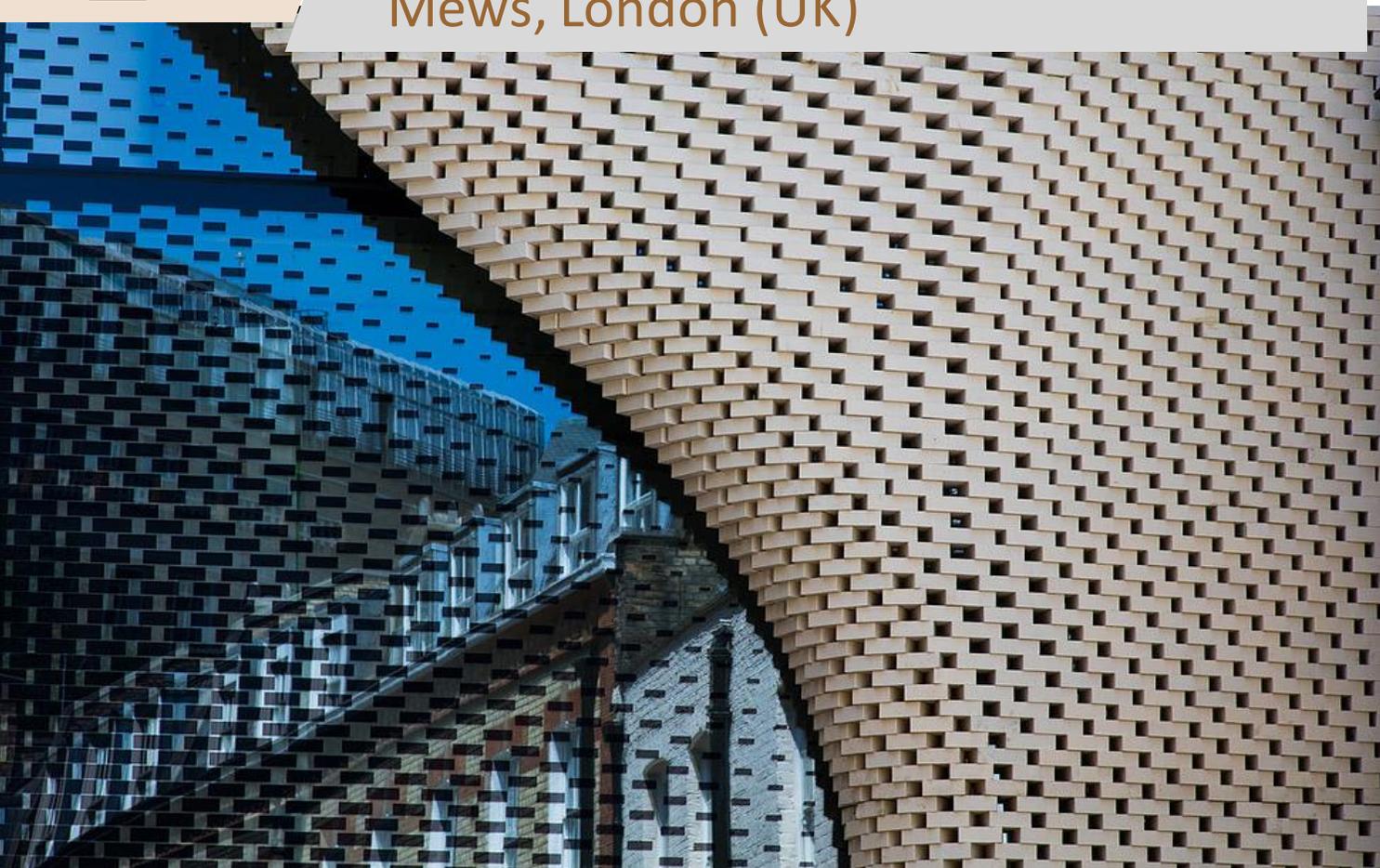
## Gantenbein Winery – Fermentation hal Fläsch (CH)



Bearth & Deplazes Architekten



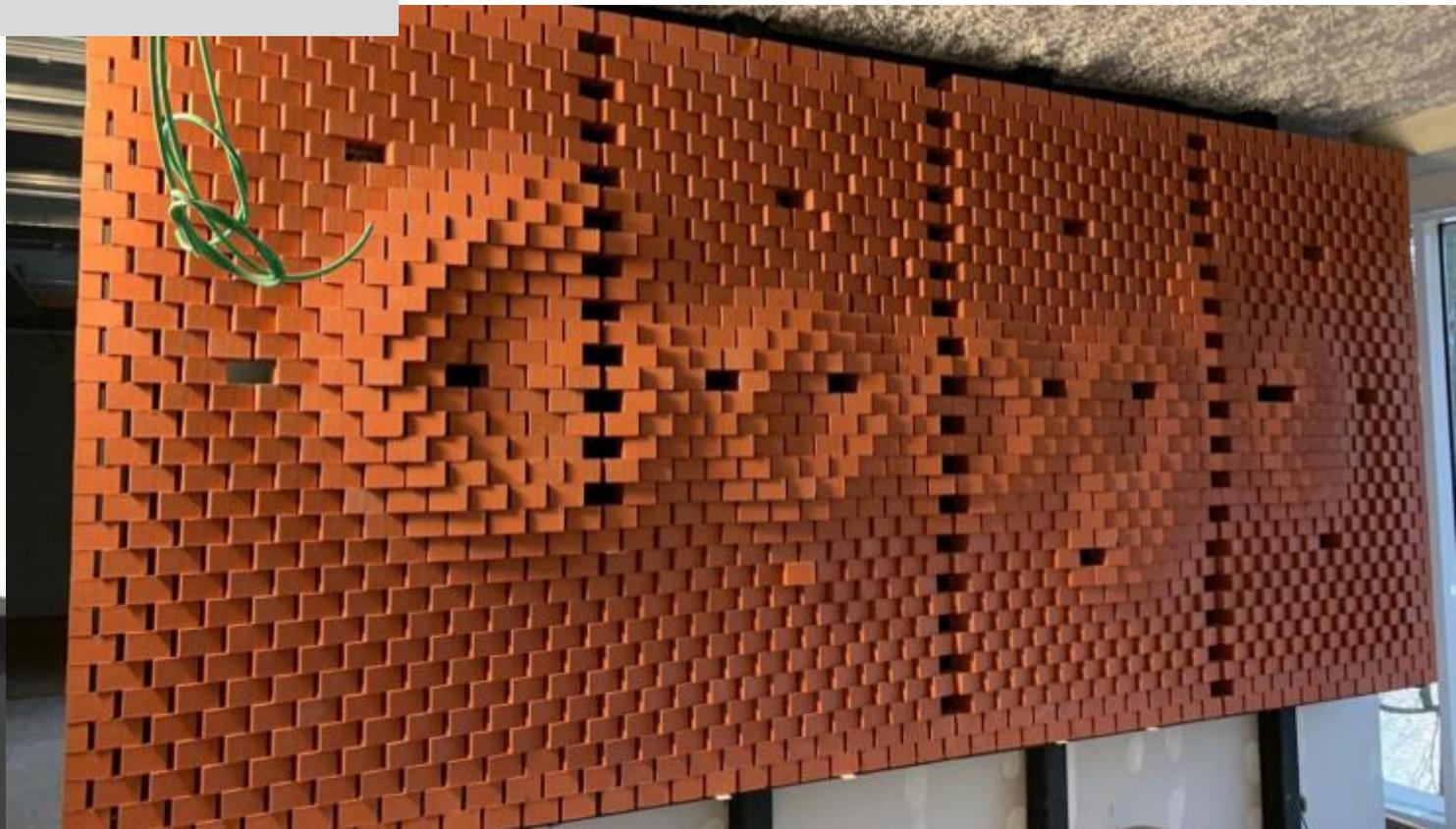
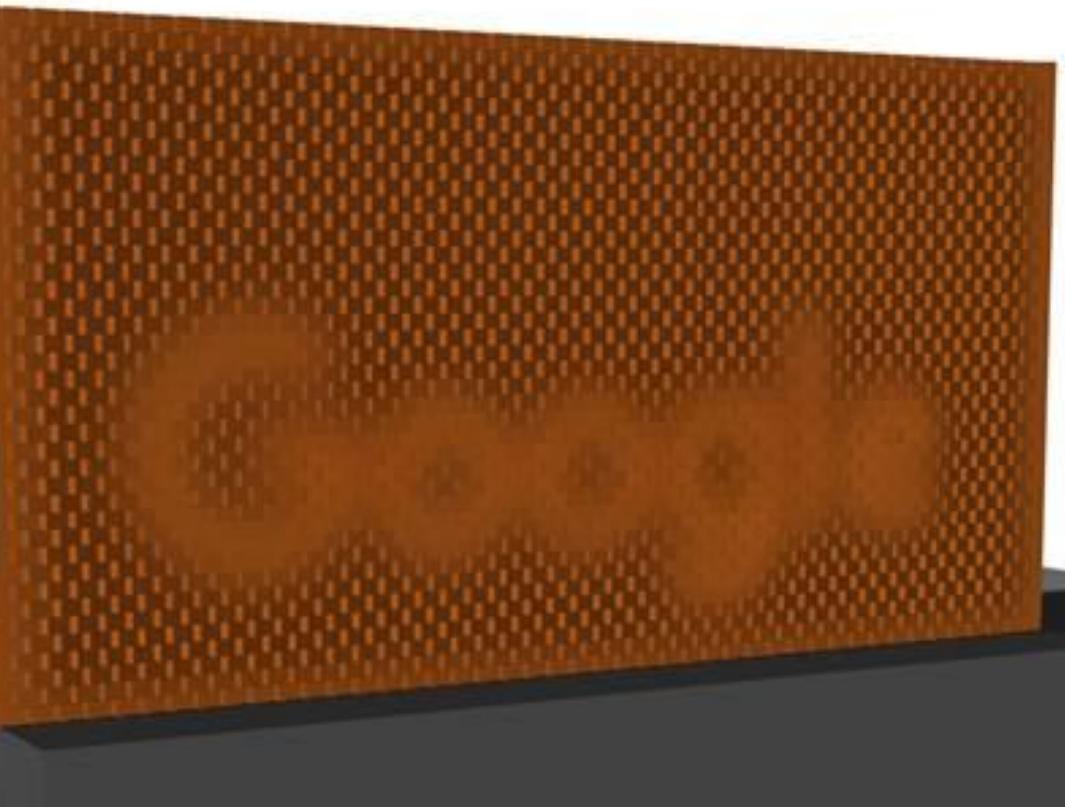
# Privé residence Grosvenor Crescent Mews, London (UK)



Zaha Hadid Architects



## Google EU headquarters Brussel



PUUR



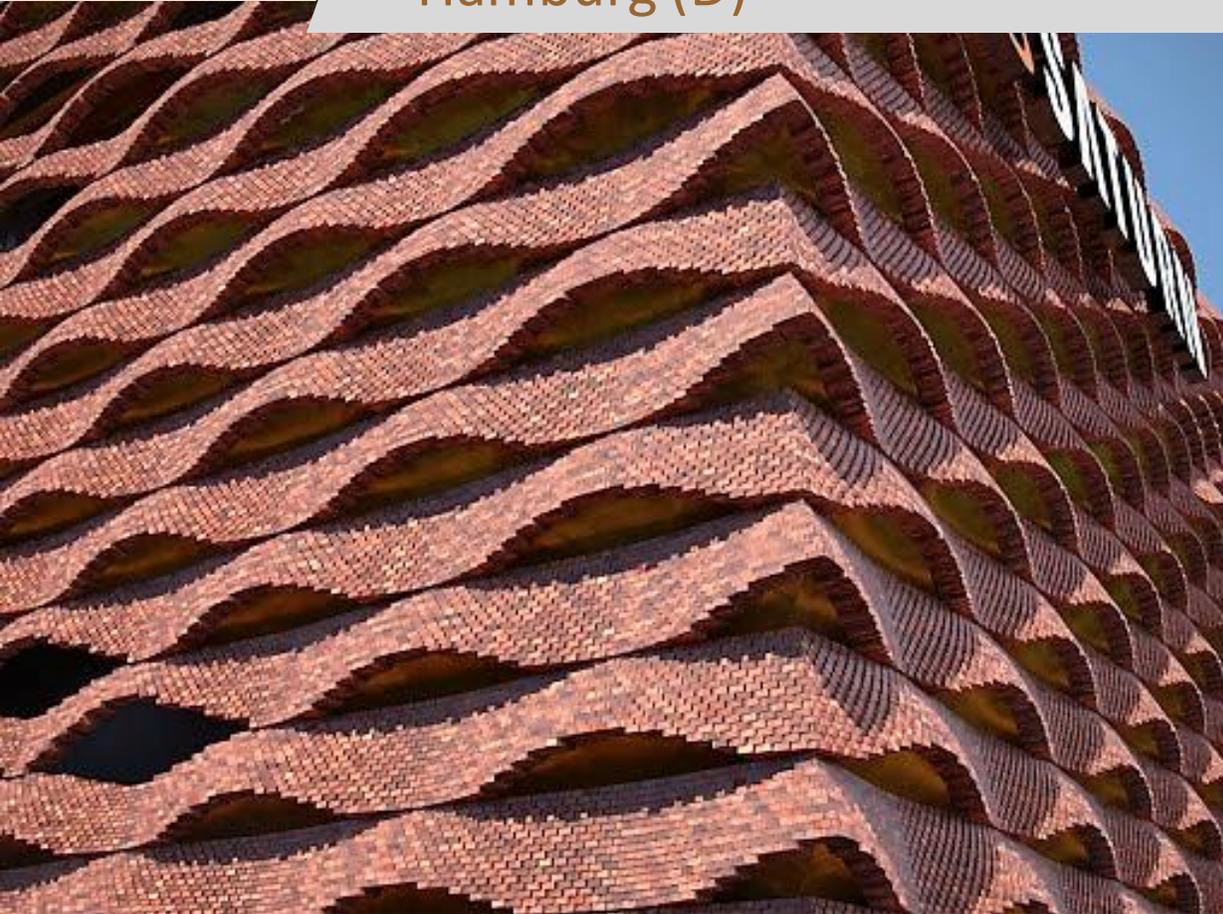
# Google EU headquarters Brussel



PUUR



## Saturn – winning design in competition Hamburg (D)



Heine Architekten



## Saturn – realisation Hamburg (D)



Heine Architekten



## Render – impression





# MIND – UNIMI winning design Milano (I)



CRA – Carlo Ratti Architects

NOT JUST  
ANOTHER  
BRICK IN  
THE WALL