DESIGN
BUILD
OPERATE
BIM
Building
Information
Modeling

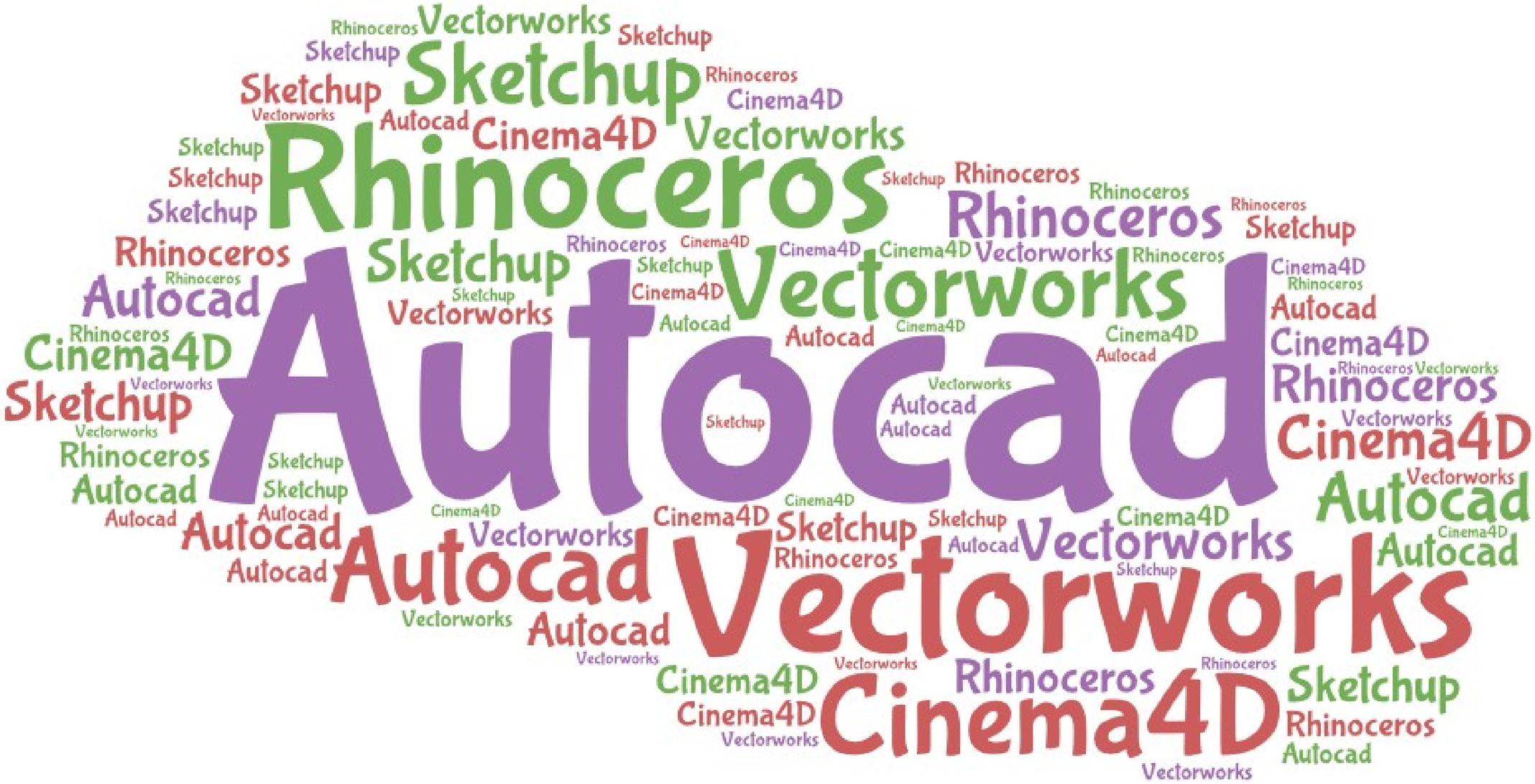
BIM IS DE TOEKOMST

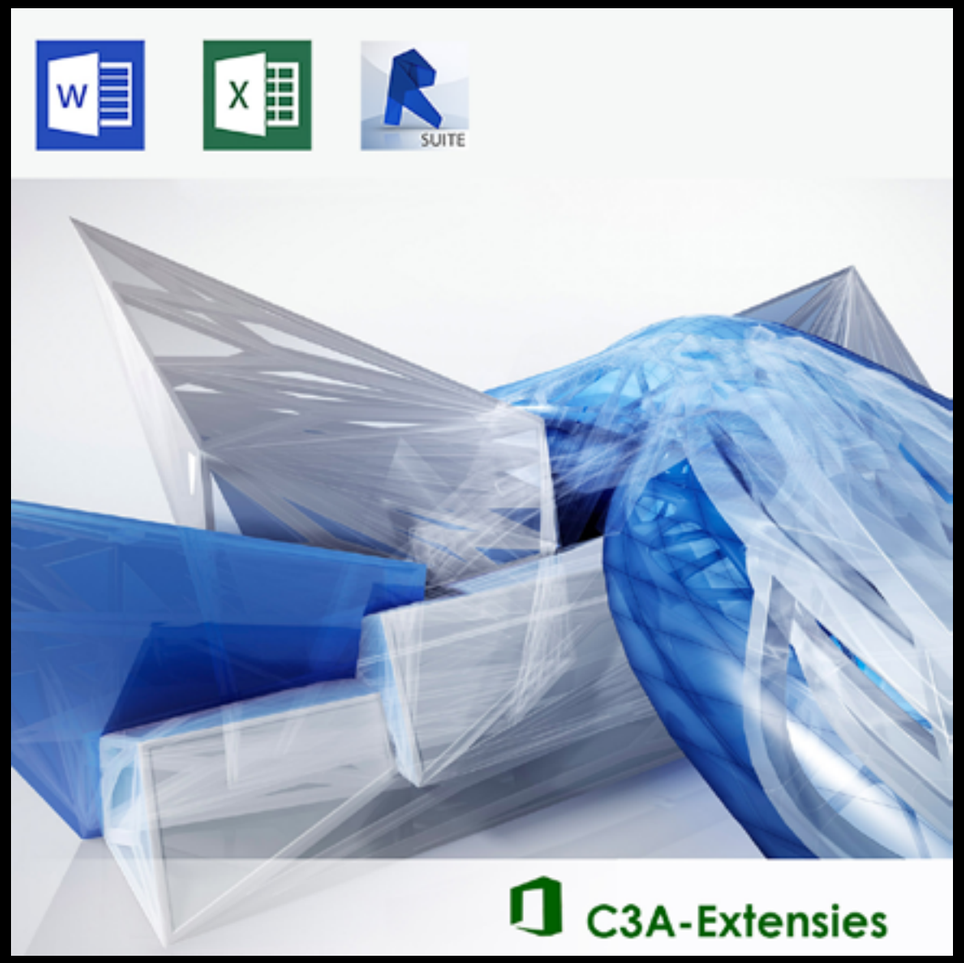
00. KENNISMAKING MET REVIT

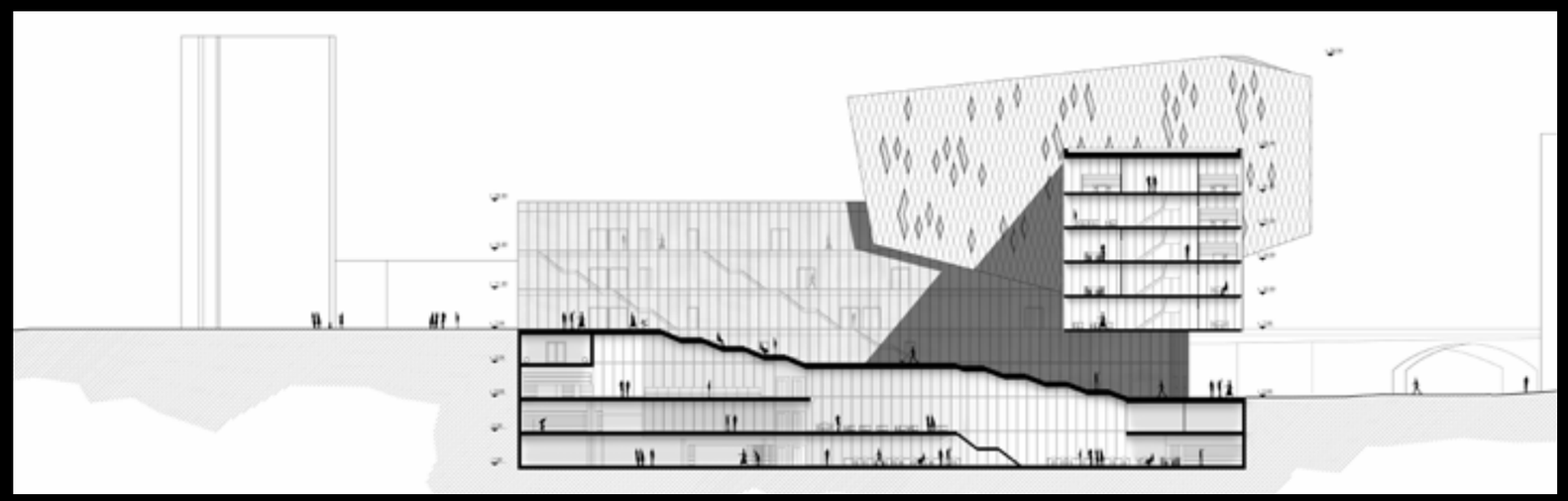
01. ABSCIS ARCHITECTEN

02. BIM BIJ ABSCIS ARCHITECTEN

03. VAN SCHETSONTWERP TOT WERF


Rhinoceros
Vectorworks
Sketchup
Autocad
Cinema4D


W
X
SUITE
C3A-Extensies



RESIDENTIEEL

KANTOREN

ONDERWIJS

CULTUUR

INTERIEUR

LABORATORIA

STEDENBOUW & PUBLIEKE RUIMTE

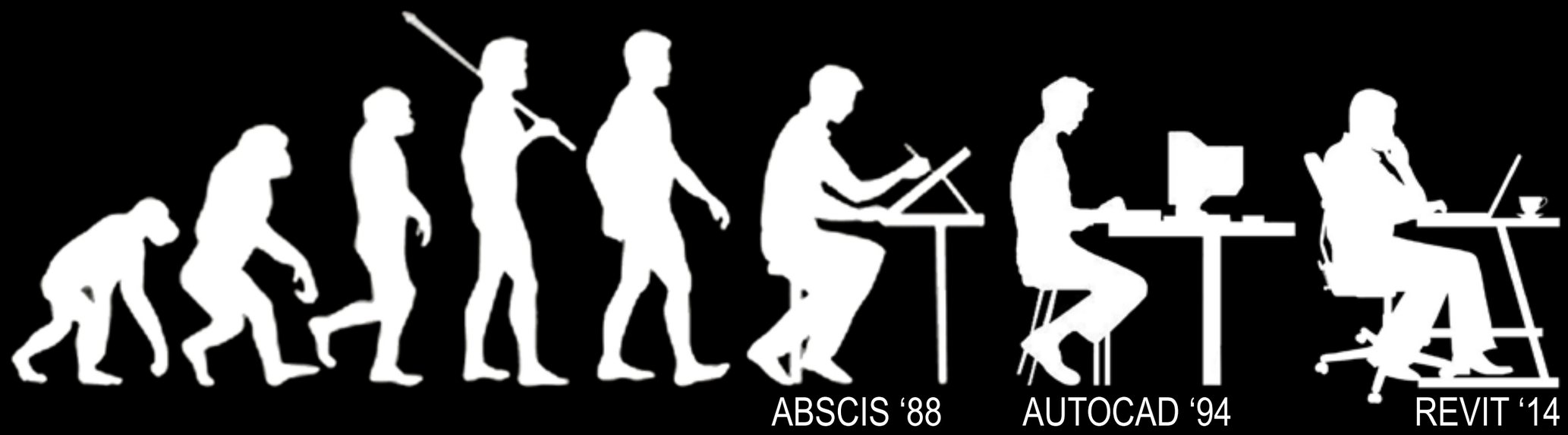
ZORG

HANDEL- & UTILITEITSBOUW

ABSCIS®
ARCHITECTEN

TEAM

ABSCIS ARCHITECTEN


ABSCIS ‘88
AUTOCAD ‘94
REVIT ‘14

“in het originele ontwerp was een hoekraam voorzien op de stompe hoek. Ook na een cursus family-editing zijn we er niet in geslaagd een raam met die juiste stompe hoek te tekenen. Dan maar geen hoekraam.”

2006 - Arcadis Merelbeke

“ik weet dat ik dit project zal moeten combineren met een aantal andere projecten, als ik er dan ’s morgens aan begin, wil ik kunnen inschatten waar ik ’s avonds zal staan. Bij een nieuw computerprogramma is het moeilijk dat in te schatten. Dan tekenen we het maar in Autocad

'ALLE PROJECTEN IN REVIT'

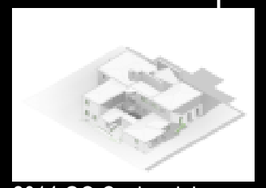
2013 - Sterre S5

2014 KUL Ter Groene Poorte

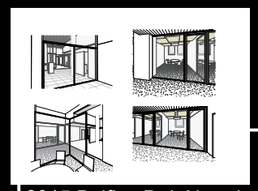
2014 Fribourg

2014 KA Ninove

2014 Scheldekop

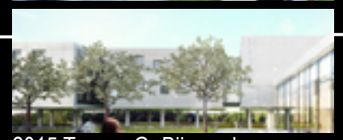


2014 GO Casinoplein

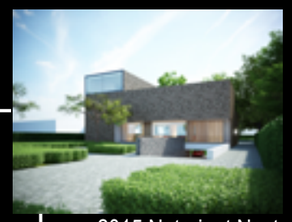


2015 Belfius Dok Noord

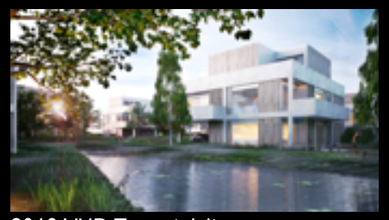
2015 Volvo Zottegem



2015 Texaco Gr Bijgaarden


2015 Notariaat Nest

2016- VHD Wisselbeke


2016 VHD Tramstelsite

2016- Constructis Kuurne

2016- Nieuw Kortrijk

2016- Arcadis Oosterzele

2015 O&N1 Gasthuisberg

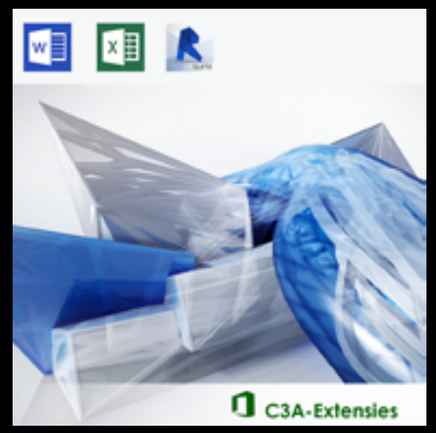
2015 Trivium

2015 Howest

2016 Theresianenklooster

2016- Herkenrode

CURSUSSEN: INTERN - EXTERN



C3A-Revit workshop meetstaatextractie

ABSCIS Werkmethodiek

C3A-Revit update-workshops

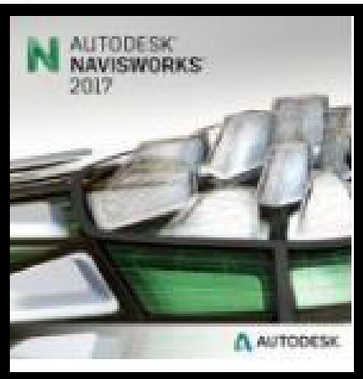
C3A-Revit Worksharing workshop

C3A-cursus BIM met Revit voor project- en werfleiders

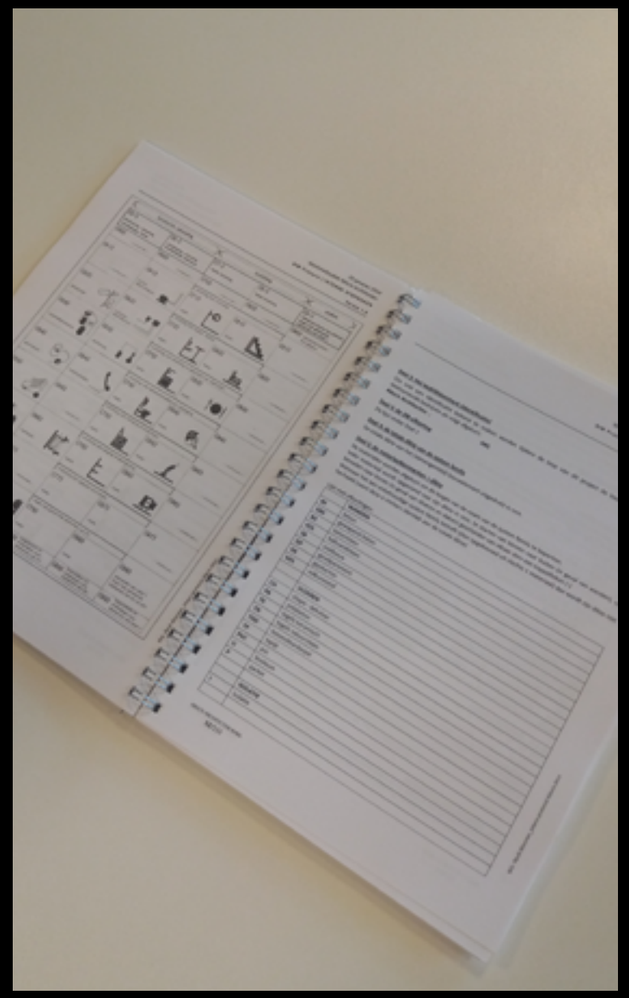
C3A-Navisworks kennismakings-infosessie

C3A-zesdaagse basiscursus Revit

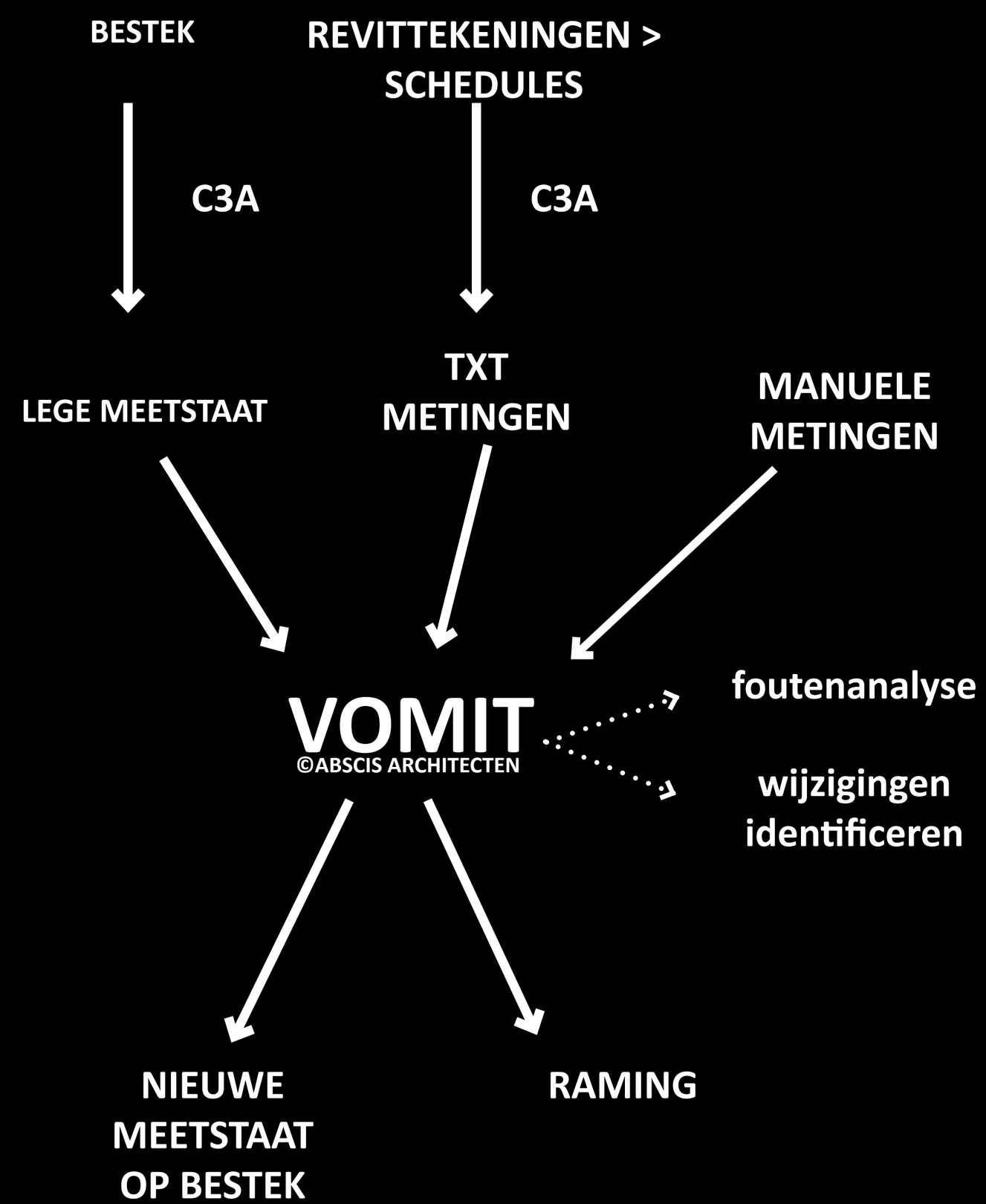
C3A-tweedaagse cursus Revit Family Editing



WERKMETHODIEK



‘EEN DRUK OP DE KNOP’

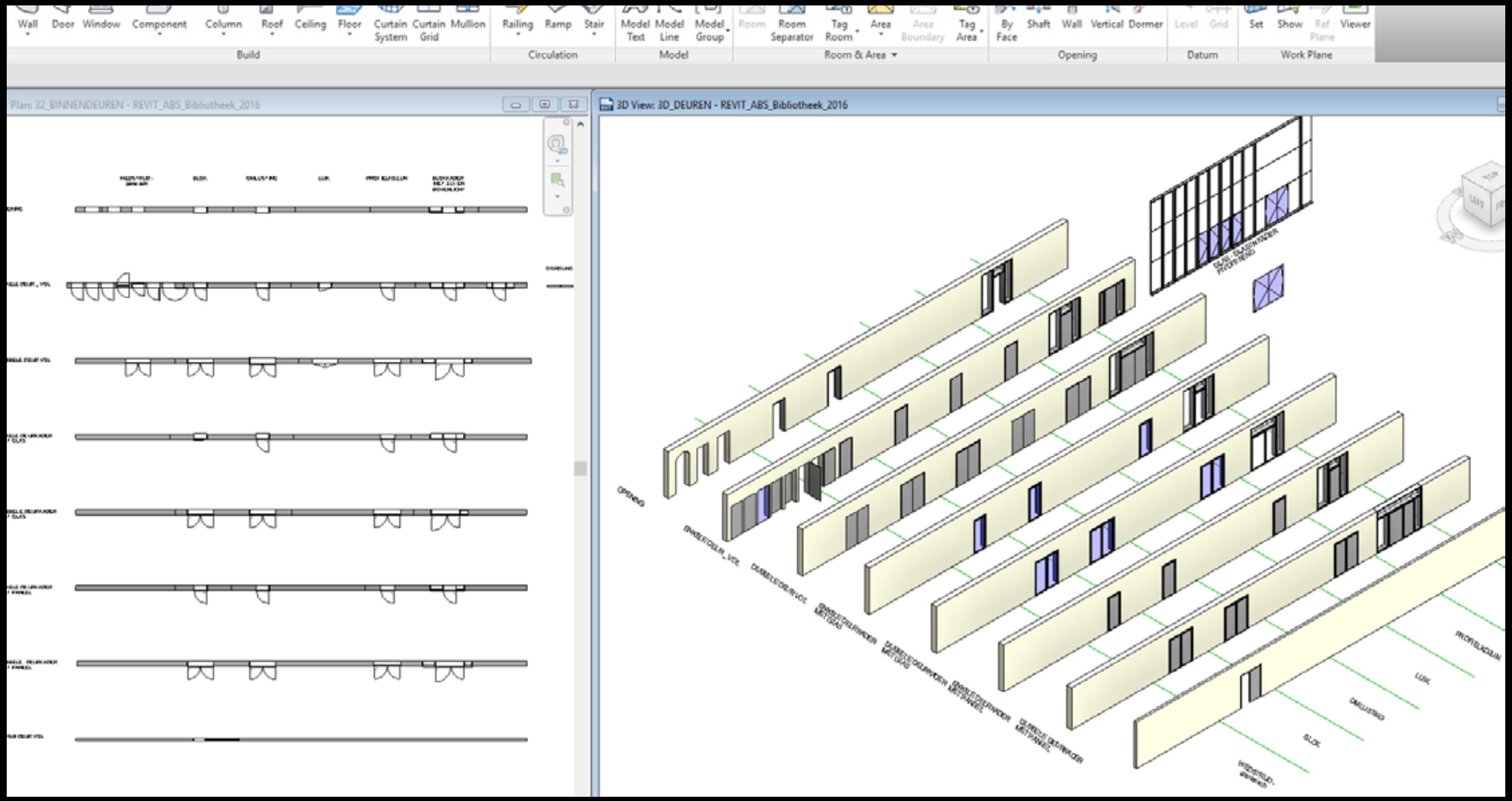


						0,00	TOTAAL				
Artikel	Titel	Eenheid	Hoeveelh.	EH prijs	Totaal		Vomit	§	(Titel)	(Eenheid)	(Hoeveelh.)

						0,00	TOTAAL				
Artikel	Titel	Eenheid	Hoeveelh.	EH prijs	Totaal		Vomit	§	(Titel)	(Eenheid)	(Hoeveelh.)
33..	PLAT DAK / DAKVLOER						nieuw				
33.00.	plat dak / dakvloer - algemeen						nieuw				
33.20.	dakbeschot op bestaande dakstructuur - algemeen						nieuw				
33.21.	dakbeschot op bestaande dakstructuur - beplating						nieuw				
33.21.101	dakbeschot op bestaande dakstructuur - beplating met randregel inkomluifel	FH	m2	49,82		0,00	nieuw				
33.50.	hellingsbeton - algemeen						nieuw				
33.51.	hellingsbeton op betonnen draagvloer - niet isolerend						nieuw				
33.51.101	hellingsbeton op betonnen draagvloer - niet isolerend - horizontale opvulling	FH	m3	0,911		0,00	nieuw				
33.51.102	hellingsbeton op betonnen draagvloer - niet isolerend - verticale opvulling	FH	m3	3,349		0,00	nieuw				
34..	PLAT DAK / THERMISCHE ISOLATIE						nieuw				
34.00.	plat dak / thermische isolatie - algemeen						nieuw				
34.10.	isolatieplaten - algemeen						nieuw				
34.14.	isolatieplaten - minerale wol (MW)						nieuw				
34.14.101	isolatieplaten - minerale wol (MW) / dikte 10cm	FH	m2	350,95		0,00	nieuw				
34.15.	isolatieplaten - cellenglas (CG)						nieuw				
34.15.101	isolatieplaten - cellenglas (CG) dikte 12 cm - vlakke platen	FH	m2	53,61		0,00	nieuw				

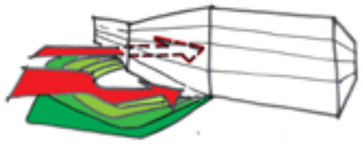
51.25.102	voorzetwanden - gipskarton – isolerende binnenwand tegen gevel – dikte +-41 cm					
	omschrijving	lengte	breedte		aantal	totaal
BIM	gk-90.westgevel		2,56	m^2		2,56
BIM	gk-100.westgevel		2,46	m^2		2,46
BIM	gk-100.westgevel		2,53	m^2		2,53

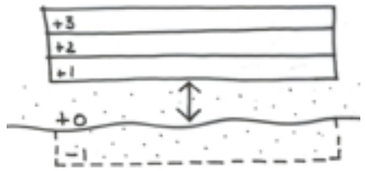
FAMILY BIBLIOTHEEK



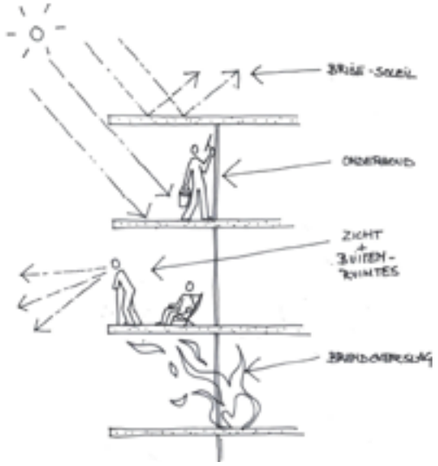
VAN SCHETSONTWERP TOT WERF

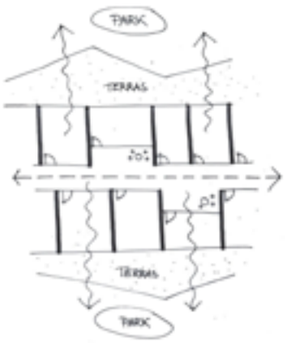
REVIT TOEPASSING: VANAF WEDSTRIJDONTWERP (NIET WEERHOUDEN)

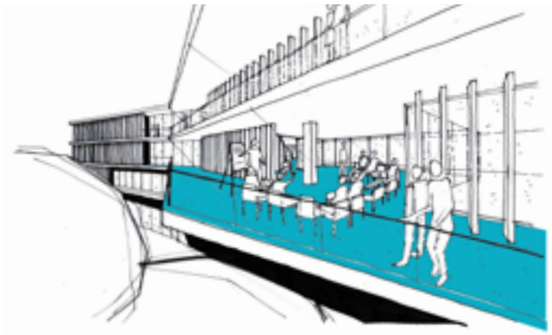




PRINCIPE DOORLOPENDE BETONPLATEN



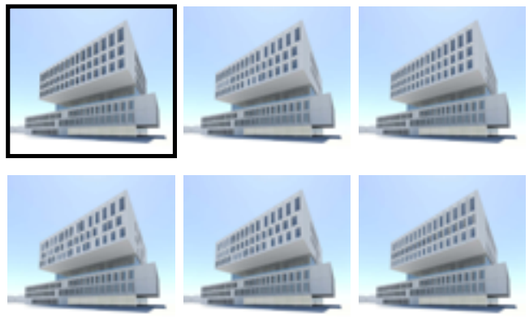




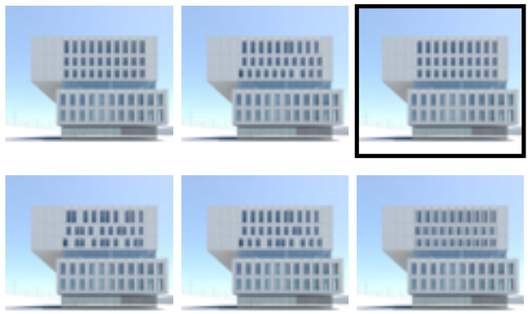
EXTERIOR DESIGN: FACADE MOCK-UPS

BIM MAKES IT POSSIBLE FOR THE DESIGNTEAM TO MAKE SERIES OF DIGITAL MUCK-UPS DURING THE DESIGN PROCES TO CREATE THE FINAL FACADE.

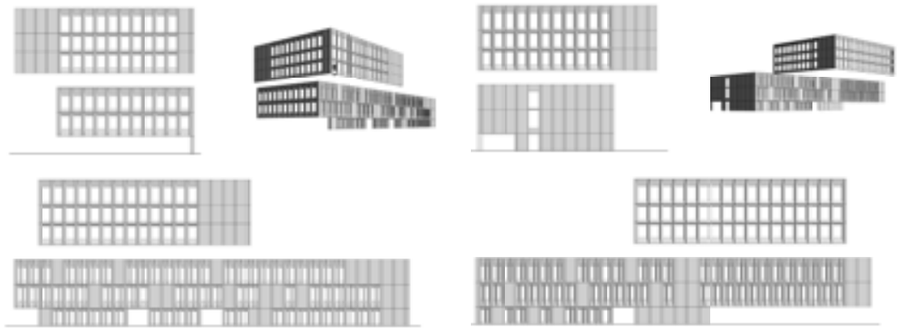
MOCK-UP OF WINDOW OPENINGS
NORTH WEST SIDE



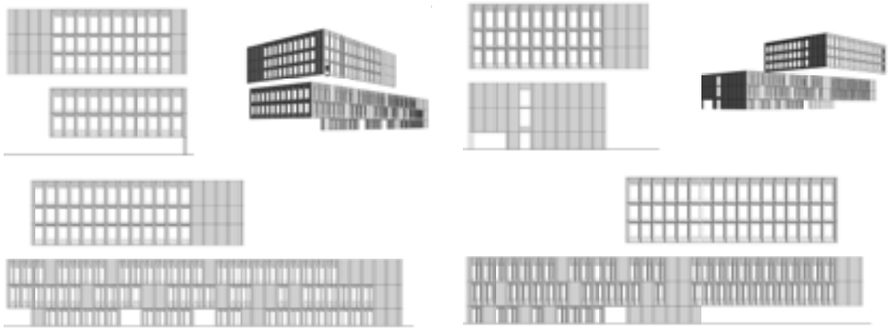
MOCK-UP OF WINDOW OPENINGS
NORTH EAST SIDE



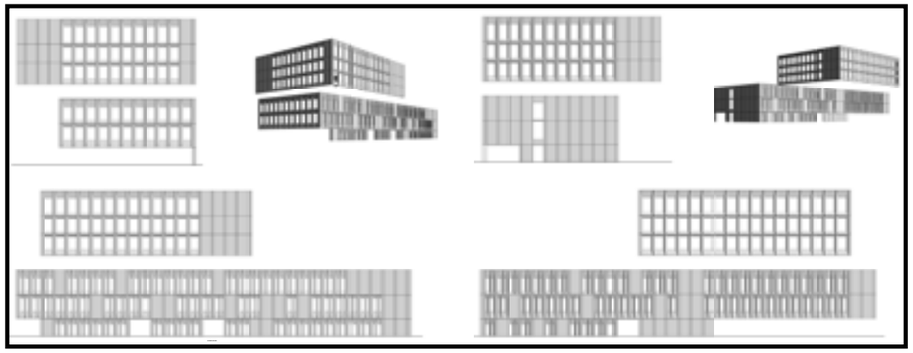
MOCK-UP OF WINDOW OPENINGS
NORTH FACADE



DESIGN TOOL
STUDY OF ENTIRE FACADE
TEST 1



DESIGN TOOL
STUDY OF ENTIRE FACADE
TEST 2



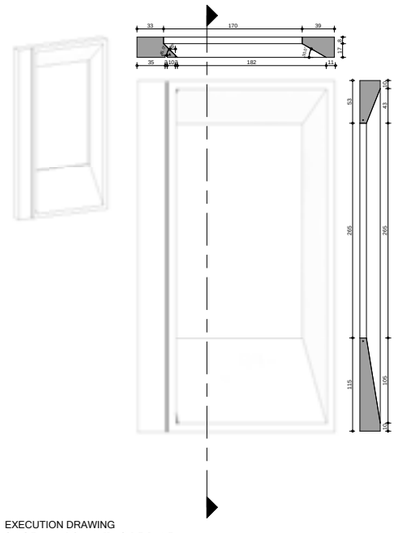
DESIGN TOOL
STUDY OF ENTIRE FACADE
TEST 3

DESIGN TOOL
DETAILED MOCK-UP
OF WINDOW OPENINGS

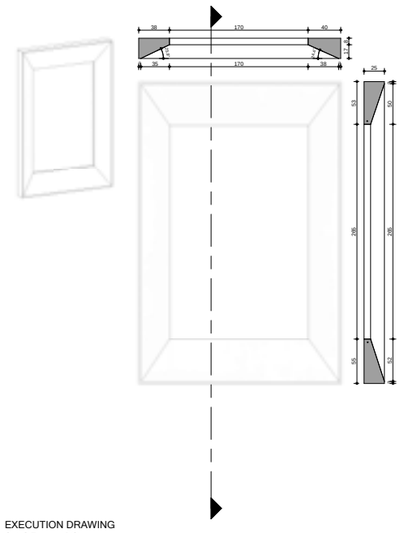
TESTING OF WINDOW OPENINGS
IMPRESSION IN SITU

FACADE ELEMENTS: CONCEPTS - MANIFACTURING

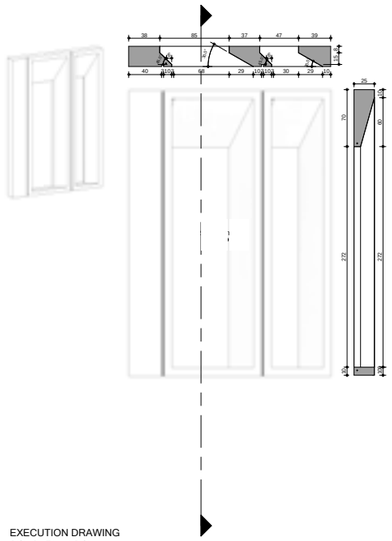
DETAILED DRAWINGS OF EACH FACADE PANEL IS NECESSARY FOR MANUFACTURING THE PANELS.



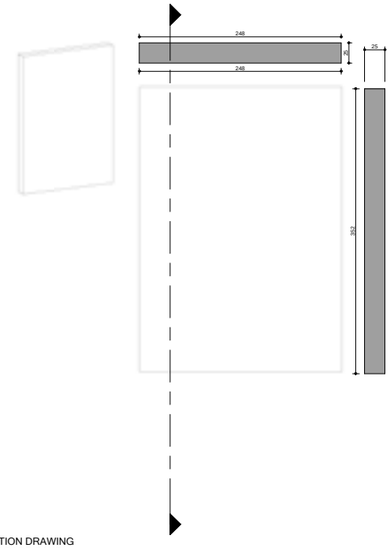
EXECUTION DRAWING
SINGEL WINDOW WITH SIDE PANEL
FOURTH FLOOR, SOUTH FACADE



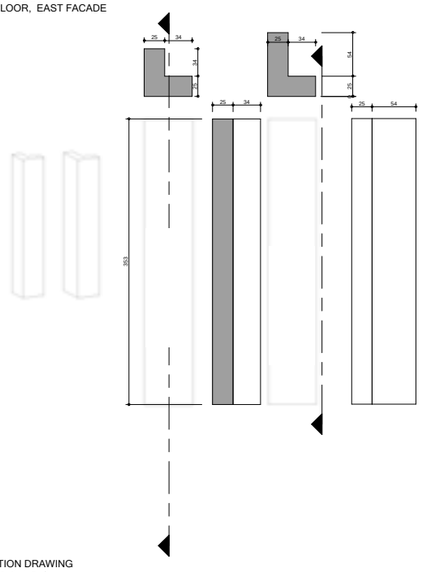
EXECUTION DRAWING
SINGEL WINDOW
FIFTH FLOOR, EAST FACADE



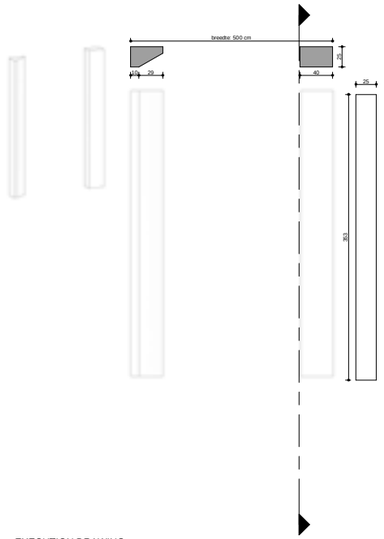
EXECUTION DRAWING
DOUBLE WINDOW
GROUND FLOOR, EAST FACADE



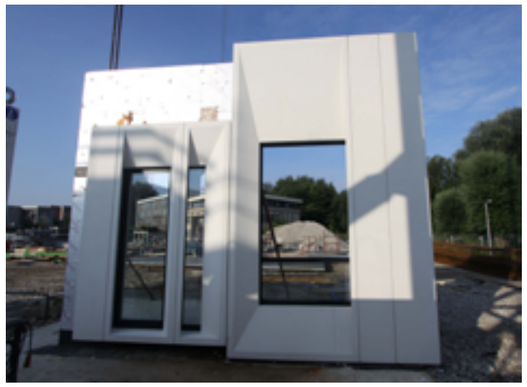
EXECUTION DRAWING
FULL FACADE PANEL
GROUND FLOOR, EAST FACADE



EXECUTION DRAWING
CORNER PANELS
GROUND FLOOR



EXECUTION DRAWING
FITTING PIECES
GROUND FLOOR, GATES



MOCK UP AND INSTALLATION OF FACADE
ON CONSTRUCTION SITE

RAMING EN HOEVEELHEDEN ONDERZOEKEN

RAMING EN HOEVEELHEDEN ONDERZOEKEN

21_ABS_WA_450_generic wall				terrein	30930	15039332	676479167	19
22_ABS_WA_70_generic wall				A2	431	74323	514029	6
22_ABS_WA_200_generic wall		GE		terrein	1293	296551	5896193	3
uitpandige terrassen				A2	0	23954	3911653	1
uitpandige terrassen				A2	0	24187	3939172	1
21_ABS_WA_150_KZS150	00.00.				138328	26666847	396787828	267
22_ABS_WA_100_GB100 appscheidend	00.00.				32638	8815457	87559650	94
RAAM erker	00.00.			A2	1320	336578	0	2
RAAM gelijk	00.00.			A2	2640	600743	0	4
21_ABS_WA_75_GP75 claustra_EI00	21.01.			A1	204	34750	259857	2
21_ABS_WA_315_I200-LS40-GP75_EI00 1	21.01.				9691	4201819	129055644	19
21_ABS_WA_265_KZ150-LS40-GP75_EI00 var 4	21.02.			A2	114	6154	130212	1
21_ABS_WA_315_I200-LS40-GP75_EI00 2	21.02.				60630	12657620	386874440	85
21_ABS_WA_315_I200-LS40-GP75_EI00 3	21.03.				20319	7149669	219885686	37
21_ABS_WA_270_I200-LS50-H20_EI00 2	21.11.				1704	550936	14615664	3
21_ABS_WA_315_I200-LS40-HL25_EI00	21.11.				12540	3483492	107370233	25
21_ABS_WA_240_I200-LS30-Alu10	21.21.			A2	1530	425185	10204451	8
21_ABS_WA_240_I200-LS30-Alu10_EI00 2	21.21.			A2	1774	70032	1439295	2
21_ABS_WA_270_I200-LS50-H20_EI00 test	21.21.			A2	2568	326160	7655122	6
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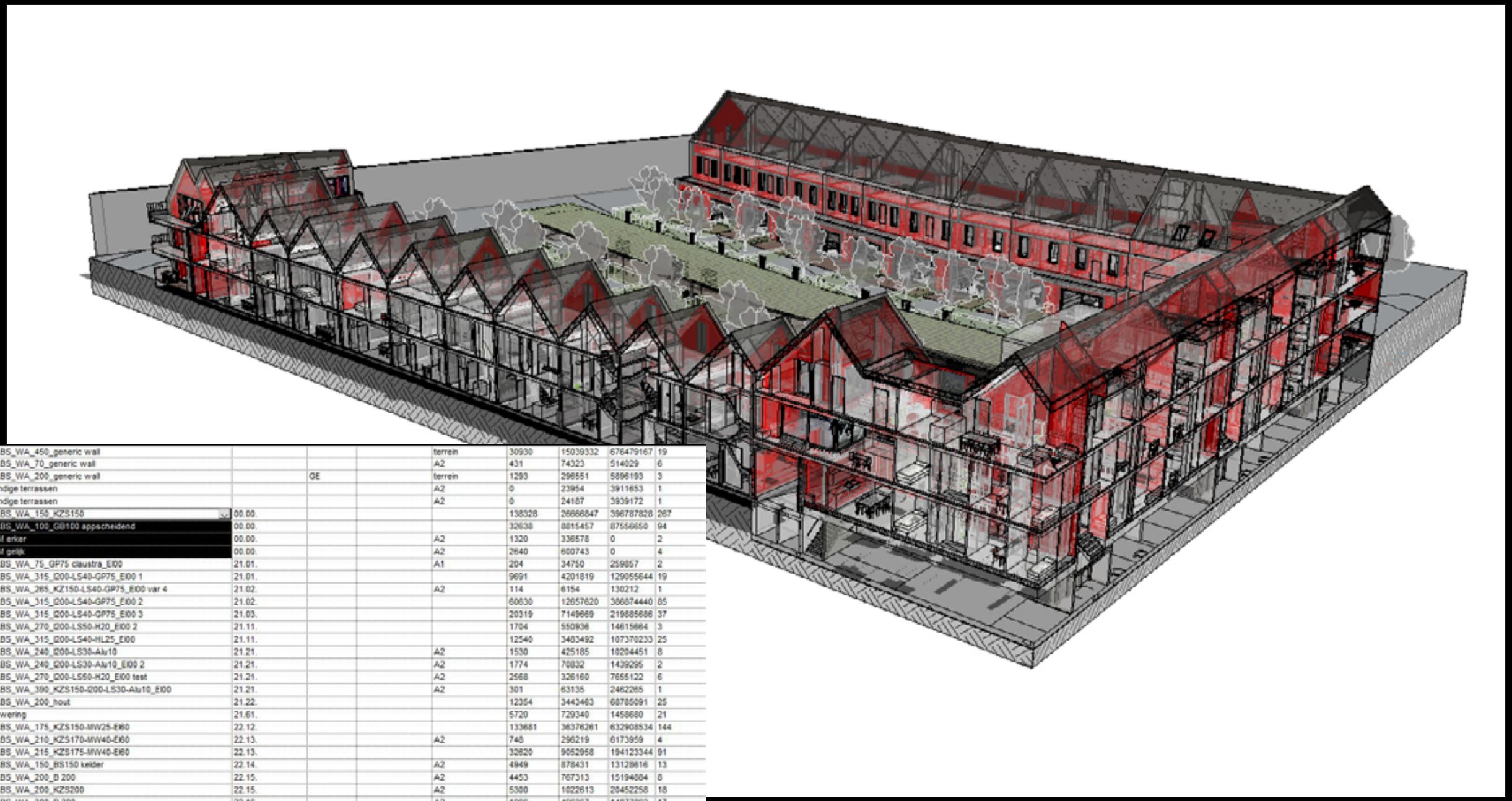
21_ABS_WA_200_hout	21.22.				12354	3443463	68785091	25
borstwering	21.61.				5720	729340	1458680	21
22_ABS_WA_175_KZS150-MW25-EI60	22.12.				133681	36376261	632908534	144
22_ABS_WA_210_KZS170-MW40-EI60	22.13.			A2	748	296219	6173959	4
22_ABS_WA_215_KZS175-MW40-EI60	22.13.				32620	9652958	194123344	91
22_ABS_WA_150_BS150 kelder	22.14.			A2	4949	878431	13128616	13
21_ABS_WA_200_B 200	22.15.			A2	4453	767313	15194604	8
21_ABS_WA_200_KZS200	22.15.			A2	5380	1022613	20452258	18
21_ABS_WA_300_B 300	22.16.			A2	1966	496367	14877862	17
21_ABS_WA_400_B 400	22.16.				16759	3880148	154291803	8
22_ABS_WA_150_KZS150	22.17.				34218	7839106	117296393	271
22_ABS_WA_100_CB	22.31.			A2	310	7741	77406	1
22_ABS_WA_100_GB100	22.31.				157652	33327712	331773032	848
22_ABS_WA_150_CB	22.31.				1203	29659	443244	3
22_ABS_WA_190_SA190	22.32.				7854	1749021	33228299	75
21_ABS_WA_40_SR40	22.33.			A2	6933	1085729	4341157	21
glazen wand	22.41.			W2	261	70207	140413	2
Doos raam penthouses	31.31.41		0		1320	316800	0	2
21_ABS_WA_150_GP75_GP75	xx.xx.				7650	755841	11322638	19
21_ABS_WA_200_GP75_50_GP75 2	xx.xx.			A1	500	22220	443220	2

RAMING EN HOEVEELHEDEN ONDERZOEKEN

21_ABS_WA_450_generic wall				terrein	30930	15039332	676479167	19
22_ABS_WA_70_generic wall				A2	431	74323	514029	6
22_ABS_WA_200_generic wall		GE		terrein	1293	296551	5896193	3
uitpandige terrassen				A2	0	23954	3911653	1
uitpandige terrassen				A2	0	24187	3939172	1
21_ABS_WA_150_KZS150	00.00.				138328	26666847	396787828	267
22_ABS_WA_100_GB100 appscheidend	00.00.				32638	8815457	87556850	94
RAAM erker	00.00.			A2	1320	336578	0	2
RAAM gelijk	00.00.			A2	2640	600743	0	4
21_ABS_WA_75_GP75 claustra_EI00	21.01.			A1	204	34750	259857	2
21_ABS_WA_315_I200-LS40-GP75_EI00 1	21.01.				9691	4201819	129055644	19
21_ABS_WA_265_KZ150-LS40-GP75_EI00 var 4	21.02.			A2	114	6154	130212	1
21_ABS_WA_315_I200-LS40-GP75_EI00 2	21.02.				60630	12657620	386874440	85
21_ABS_WA_315_I200-LS40-GP75_EI00 3	21.03.				20319	7149669	219885686	37
21_ABS_WA_270_I200-LS50-H20_EI00 2	21.11.				1704	550936	14615664	3
21_ABS_WA_315_I200-LS40-HL25_EI00	21.11.				12540	3403492	107370233	25
21_ABS_WA_240_I200-LS30-Alu10	21.21.			A2	1530	425185	10204451	8
21_ABS_WA_240_I200-LS30-Alu10_EI00 2	21.21.			A2	1774	70032	1439295	2
21_ABS_WA_270_I200-LS50-H20_EI00 test	21.21.			A2	2568	326160	7655122	6
21_ABS_WA_390_KZS150-I200-LS30-Alu10_EI00	21.21.			A2	301	63135	2462265	1
21_ABS_WA_200_hout	21.22.				12354	3443463	68785091	25
borstwering	21.61.				5720	729340	1458680	21
22_ABS_WA_175_KZS150-MW25-EI60	22.12.				133681	36376261	632908534	144
22_ABS_WA_210_KZS170-MW40-EI60	22.13.			A2	748	296219	6173959	4
22_ABS_WA_215_KZS175-MW40-EI60	22.13.				32620	9652958	194123344	91
22_ABS_WA_150_BS150 kelder	22.14.			A2	4949	878431	13128616	13
21_ABS_WA_200_B 200	22.15.			A2	4453	767313	15194604	8
21_ABS_WA_200_KZS200	22.15.			A2	5300	1022613	20452258	18
21_ABS_WA_300_B 300	22.16.			A2	1966	490367	14877862	17
21_ABS_WA_400_B 400	22.16.				16759	3880148	154291803	8
22_ABS_WA_150_KZS150	22.17.				34218	7639106	117296393	271
22_ABS_WA_100_CB	22.31.			A2	310	7741	77406	1
22_ABS_WA_100_GB100	22.31.				157652	33327712	331773032	848
22_ABS_WA_150_CB	22.31.				1203	29659	443244	3
22_ABS_WA_190_SA190	22.32.				7854	1749021	33228299	75
21_ABS_WA_40_SR40	22.33.			A2	6933	1685729	4341157	21
glazen wand	22.41.			W2	261	70207	140413	2
Doos raam penthouses	31.31.41		0		1320	316800	0	2
21_ABS_WA_150_GP75_GP75	xx.xx.				7650	755841	11322638	19
21_ABS_WA_200_GP75_50_GP75 2	xx.xx.			A1	508	22220	443228	2

RAMING EN HOEVEELHEDEN ONDERZOEKEN



21_ABS_WA_450_generic wall				terrein	30930	15039332	676479167	19
22_ABS_WA_70_generic wall				A2	431	74323	514029	6
22_ABS_WA_200_generic wall		GE		terrein	1293	296551	5896193	3
uitpandige terrassen				A2	0	23954	3911653	1
uitpandige terrassen				A2	0	24187	3939172	1
21_ABS_WA_150_KZS150	00.00.				138328	26666847	396787828	267
22_ABS_WA_100_GB100 appscheidend	00.00.				32638	8815457	87556850	94
RAAM erker	00.00.			A2	1320	336578	0	2
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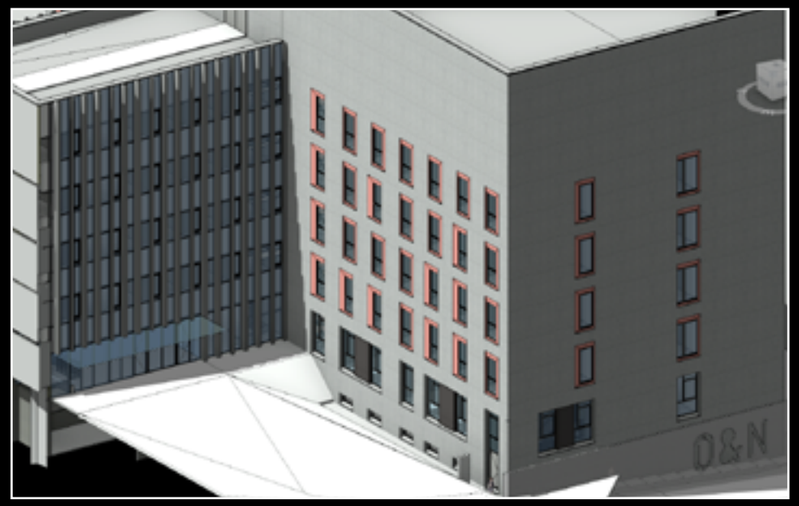
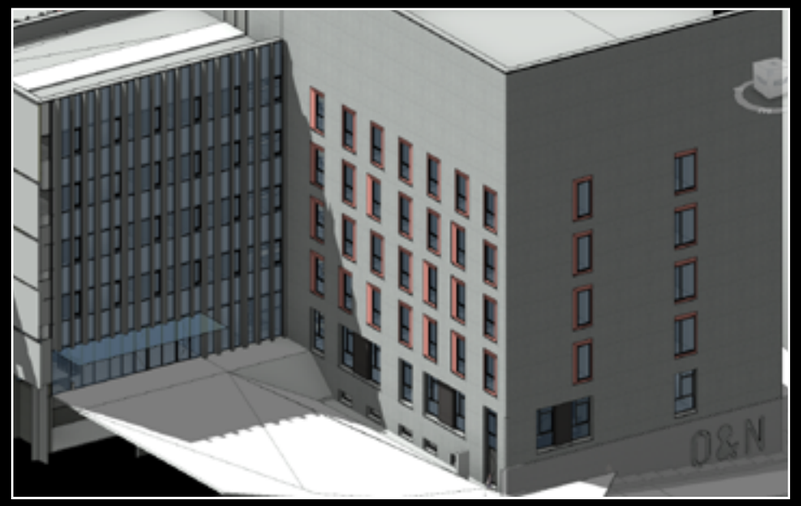
21_ABS_WA_75_GP75 claustra_EI00	21.01.			A1	204	34750	259857	2
21_ABS_WA_315_I200-LS40-GP75_EI00 1	21.01.				9691	4201819	129055644	19
21_ABS_WA_265_KZ150-LS40-GP75_EI00 var 4	21.02.			A2	114	6154	130212	1
21_ABS_WA_315_I200-LS40-GP75_EI00 2	21.02.				60630	12657620	386874440	85
21_ABS_WA_315_I200-LS40-GP75_EI00 3	21.03.				20319	7149669	219885686	37
21_ABS_WA_270_I200-LS50-H20_EI00 2	21.11.				1704	550936	14615664	3
21_ABS_WA_315_I200-LS40-HL25_EI00	21.11.				12540	3483492	107370233	25
21_ABS_WA_240_I200-LS30-Alu10	21.21.			A2	1530	425185	10204451	8
21_ABS_WA_240_I200-LS30-Alu10_EI00 2	21.21.			A2	1774	70032	1439295	2
21_ABS_WA_270_I200-LS50-H20_EI00 test	21.21.			A2	2568	326160	7655122	6
21_ABS_WA_390_KZS150-I200-LS30-Alu10_EI00	21.21.			A2	301	63135	2462265	1
21_ABS_WA_200_hout	21.22.				12354	3443463	68785091	25
borstwering	21.61.				5720	729340	1458680	21
22_ABS_WA_175_KZS150-MW25-EI60	22.12.				133681	36376261	632908534	144
22_ABS_WA_210_KZS170-MW40-EI60	22.13.			A2	748	296219	6173959	4
22_ABS_WA_215_KZS175-MW40-EI60	22.13.				32620	9652958	194123344	91
22_ABS_WA_150_BS150 kelder	22.14.			A2	4949	878431	13128616	13
21_ABS_WA_200_B 200	22.15.			A2	4453	767313	15194604	8
21_ABS_WA_200_KZS200	22.15.			A2	5380	1022613	20452258	18
21_ABS_WA_300_B 300	22.16.			A2	1966	490367	14877862	17
21_ABS_WA_400_B 400	22.16.				16759	3880148	154291803	8
22_ABS_WA_150_KZS150	22.17.				34218	7639106	117296393	271
22_ABS_WA_100_CB	22.31.			A2	310	7741	77406	1
22_ABS_WA_100_GB100	22.31.				157652	33327712	331773032	848
22_ABS_WA_150_CB	22.31.				1203	29659	443244	3
22_ABS_WA_190_SA190	22.32.				7854	1749021	33228299	75
21_ABS_WA_40_SR40	22.33.			A2	6933	1685729	4341157	21
glazen wand	22.41.			W2	261	70207	140413	2
Doos raam penthouses	31.31.41		0		1320	316800	0	2
21_ABS_WA_150_GP75_GP75	xx.xx.				7650	755841	11322638	19
21_ABS_WA_200_GP75_50_GP75 2	xx.xx.			A1	508	22220	443220	2

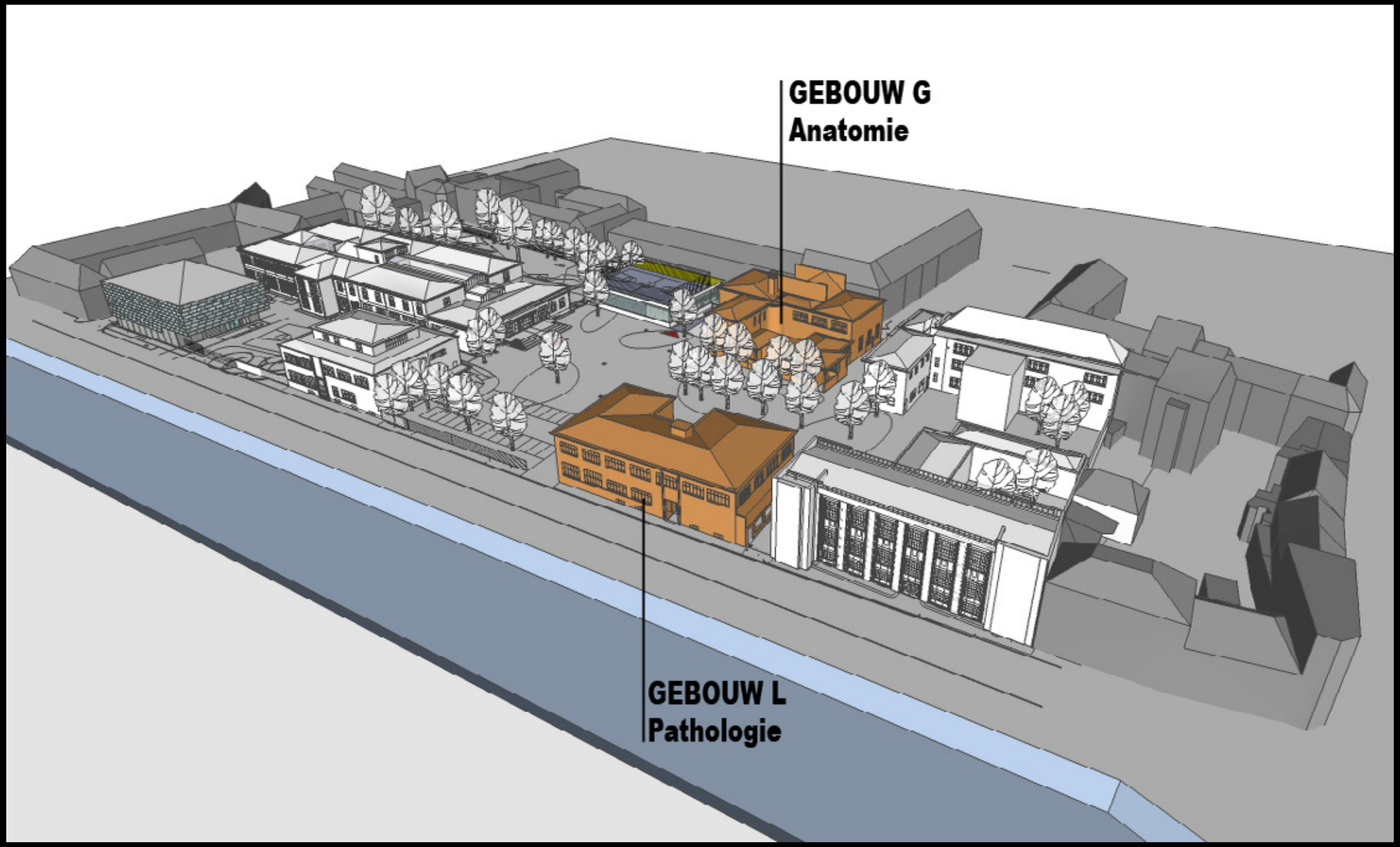
BIJPRODUCT: EEN 3D MODEL

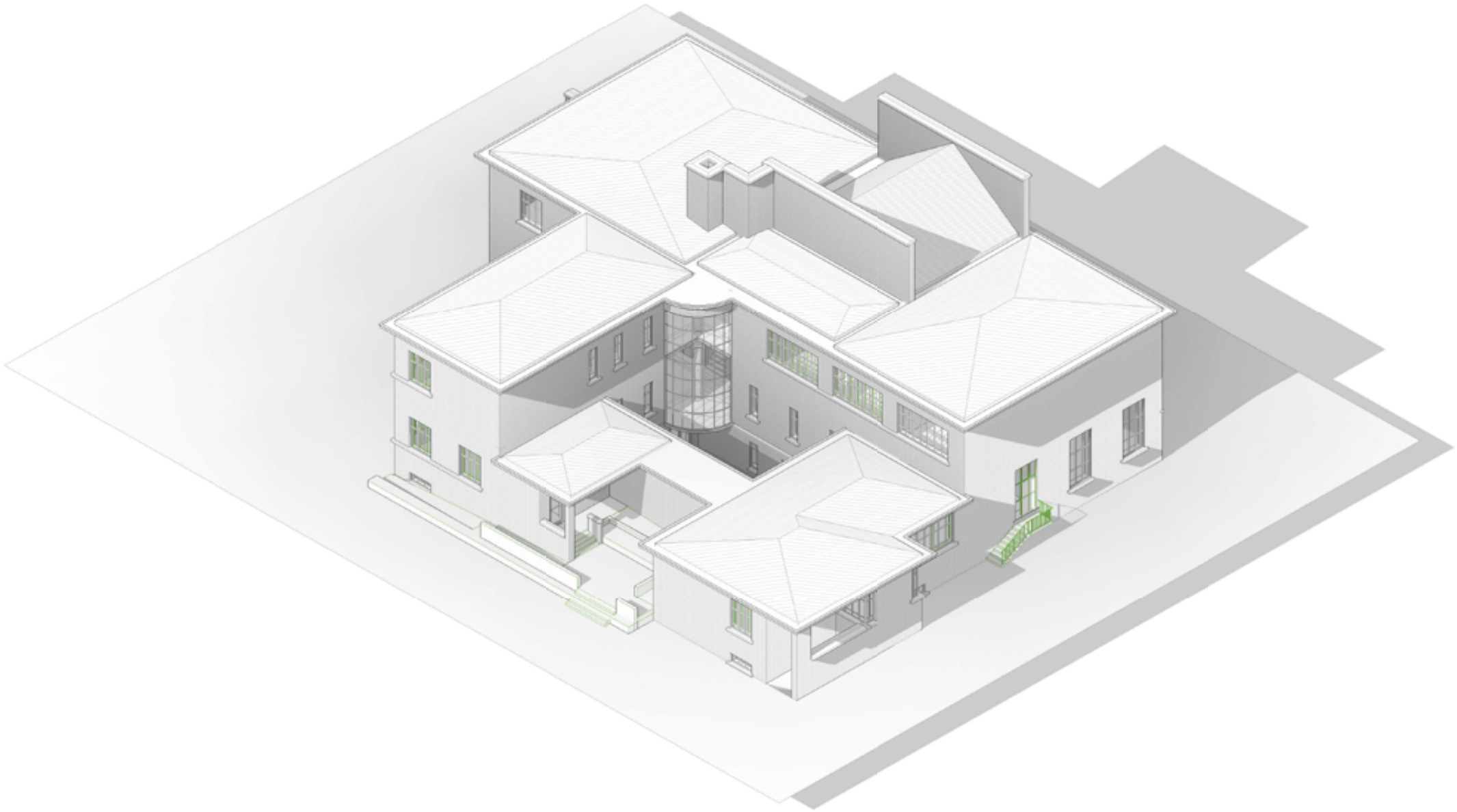
ZONNESTUDIE

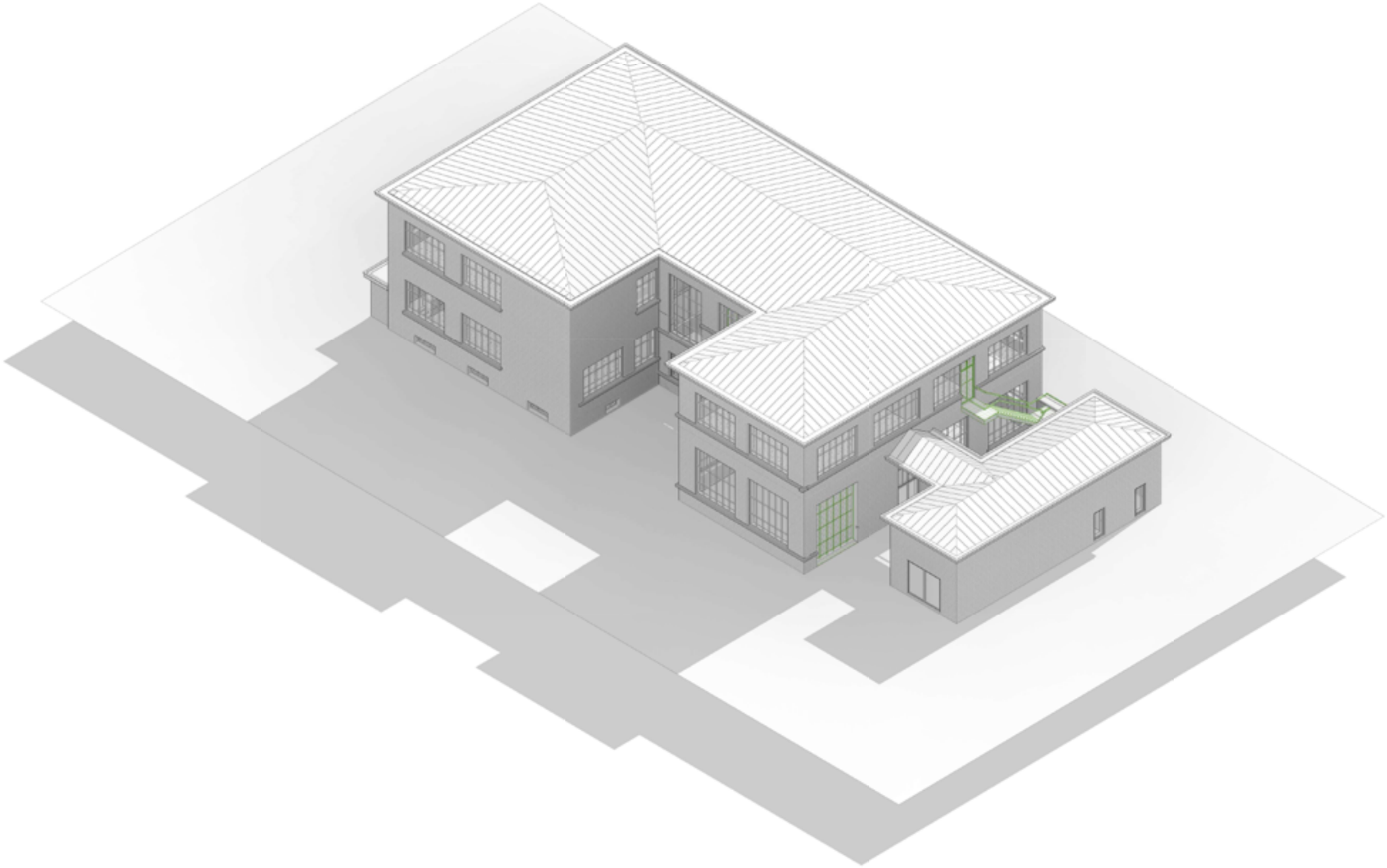




FASERING

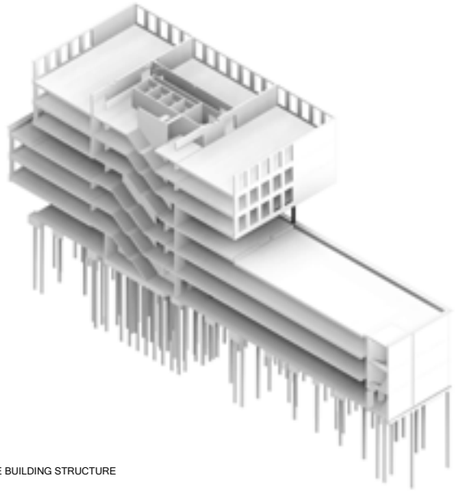




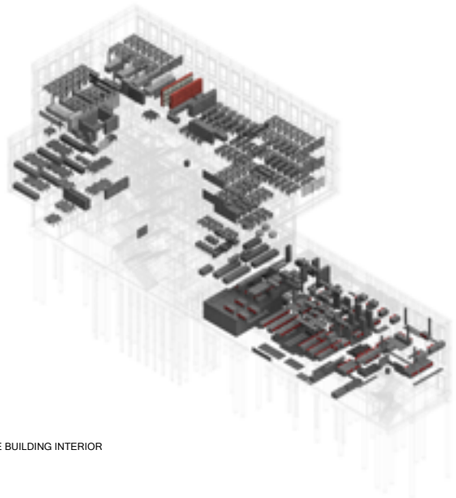


VENTILATION SYSTEM

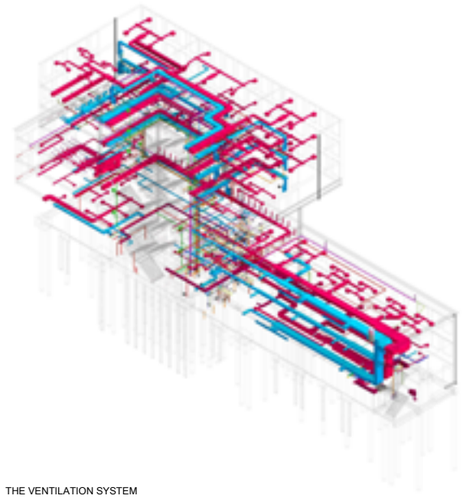
COMMUNICATION TOOLS BETWEEN ARCHITECT AND THE PUBLIC.



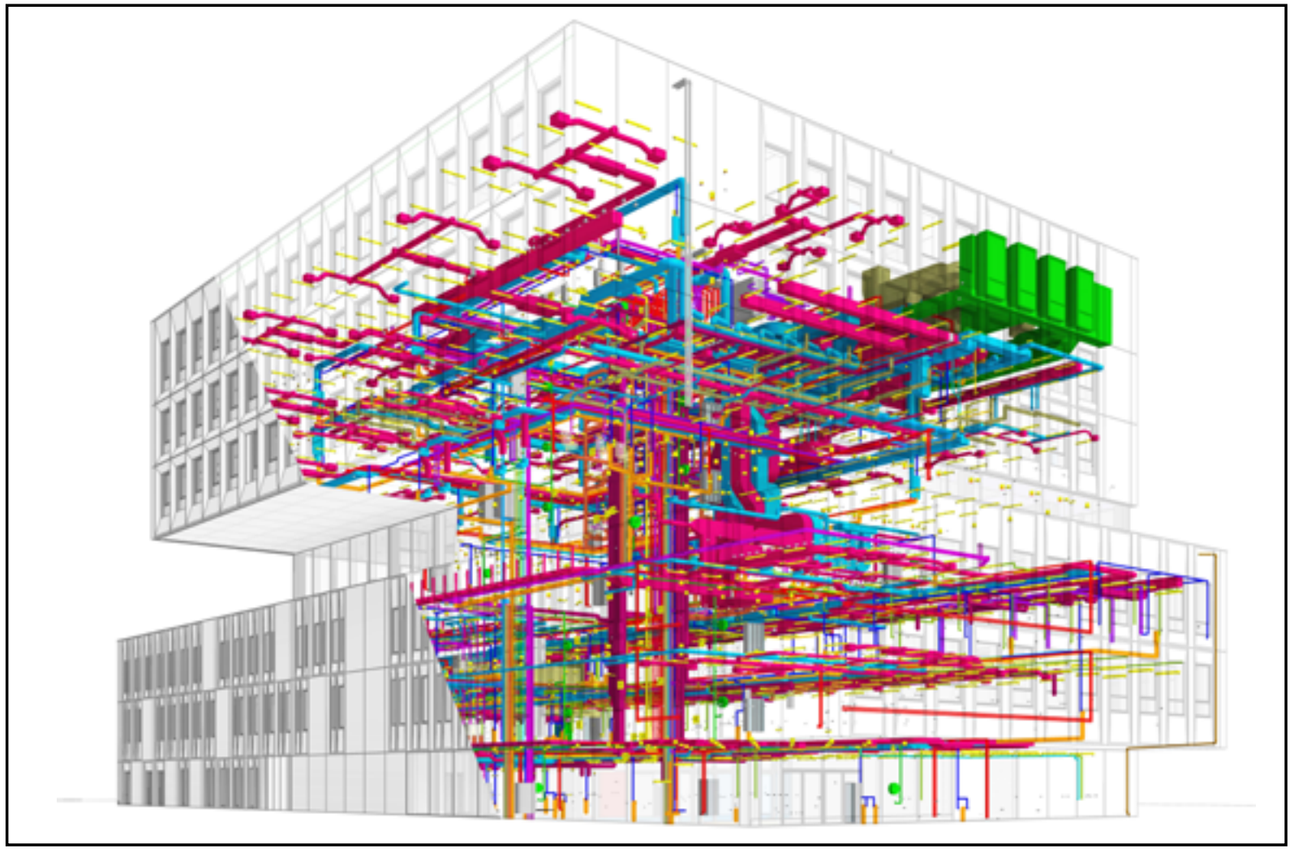
THE BUILDING STRUCTURE

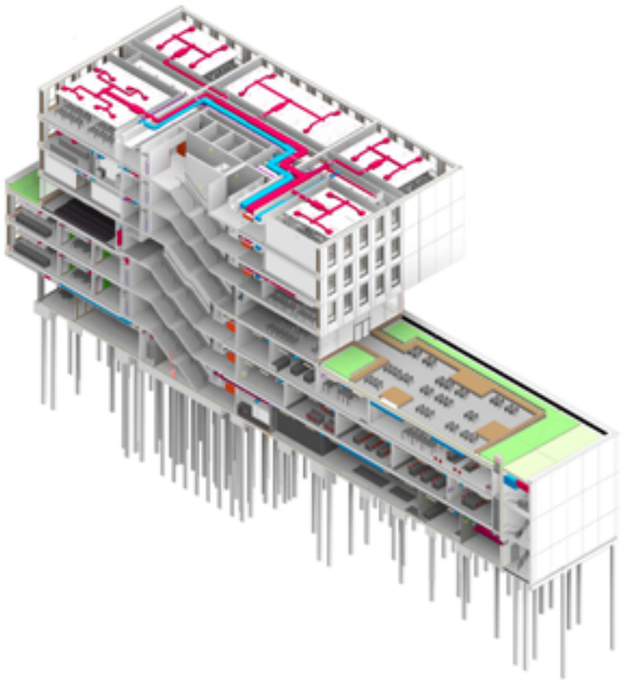


THE BUILDING INTERIOR



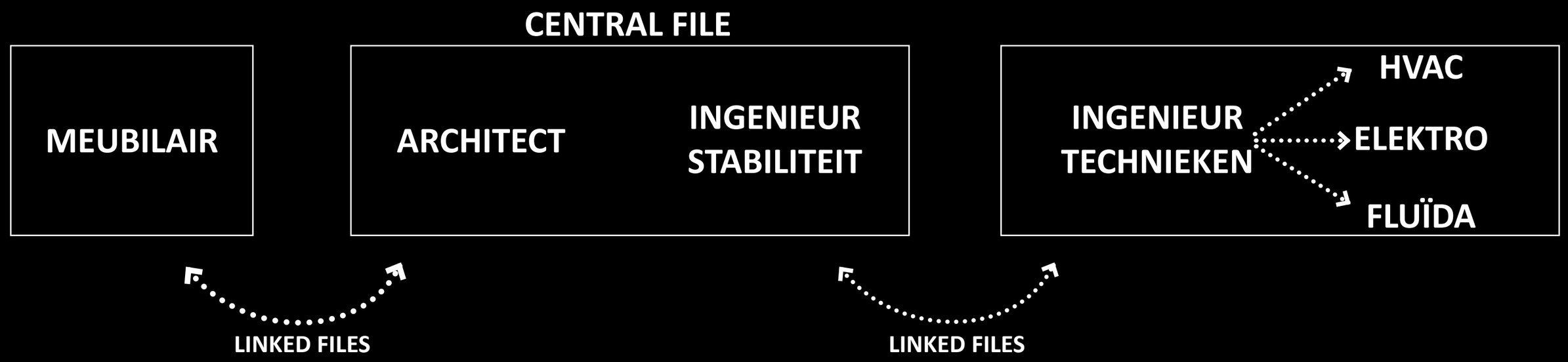
THE VENTILATION SYSTEM



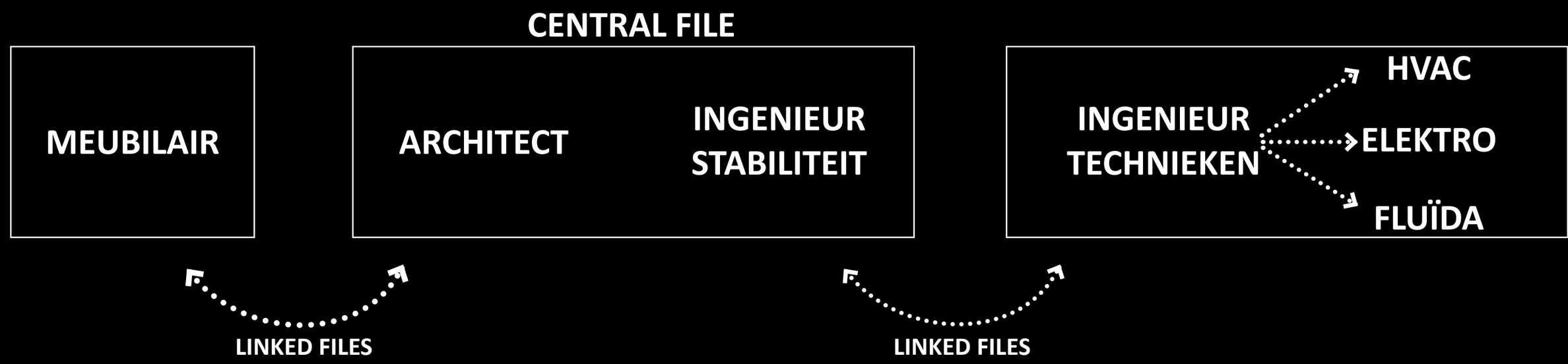


INTEGRATION OF STRUCTURE TECHNIQUES
AND ARCHITECTURE

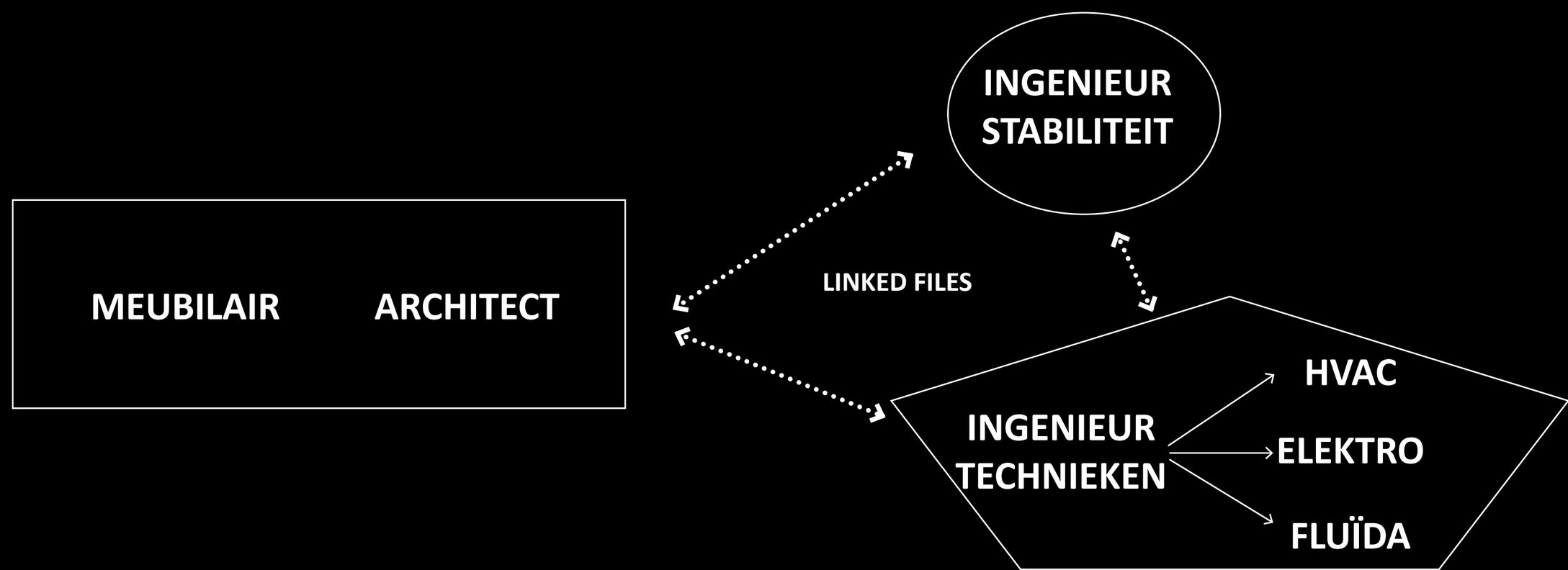
SIMULTAAN BIMMEN: MODEL ‘TER GROENE POORTE’



SIMULTAAN BIMMEN: MODEL ‘TER GROENE POORTE’



ALTERNATIEF: STUDIEBUREAUS BIMMEN NIET



BIM IN DE WERFKEET

verschillende ontwerpopties
uitproberen...

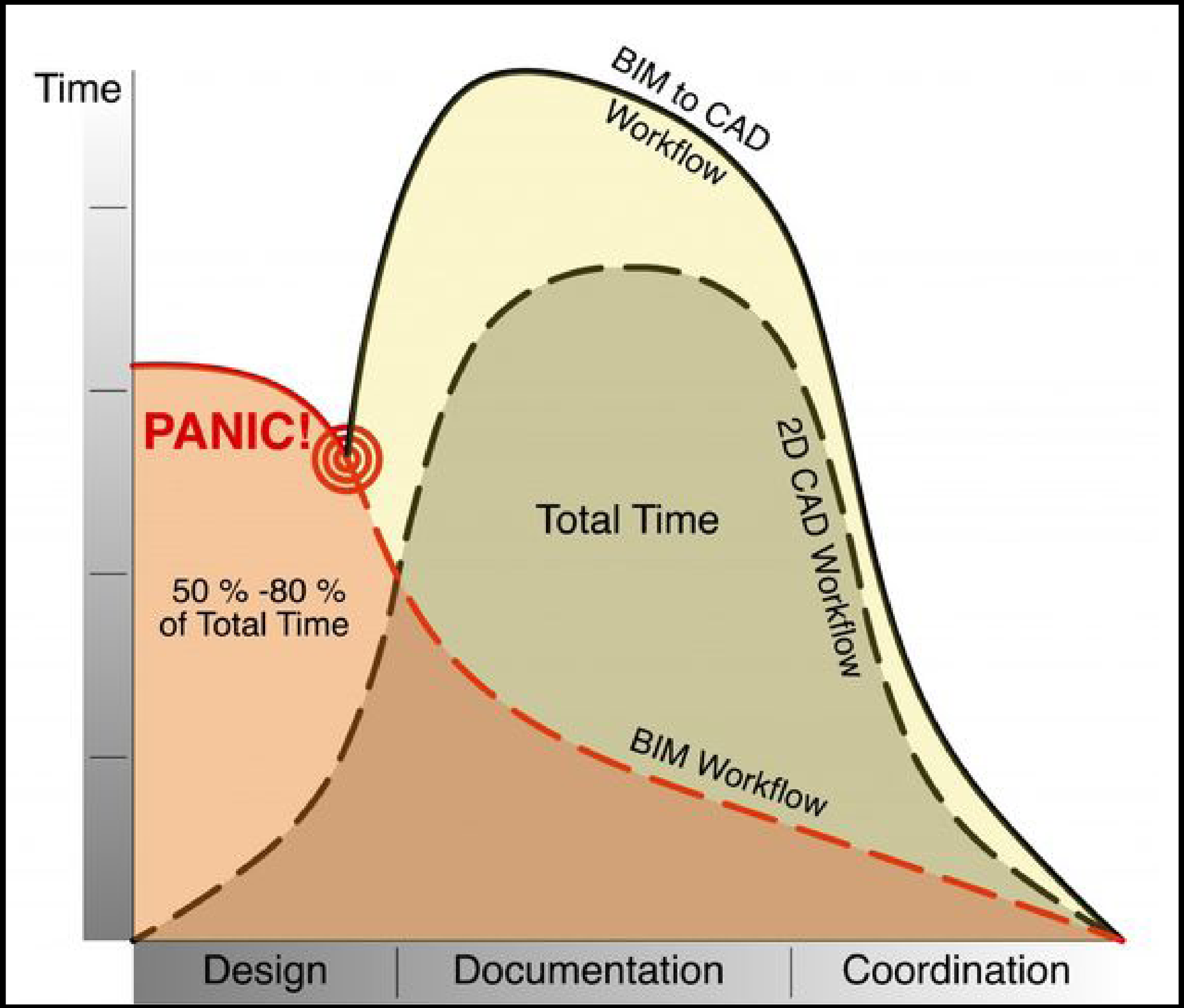
het is maar een druk op de knop...
als alles eerst juist ingesteld staat

what you see is what you get!

zeker voor ervaren/gedreven
autocad-tekenaars is het even een
stap terug, een frusturerende stap
omdat ze véél sneller werken in
autocad

een tekening bevat zeer veel
informatie.
dat houdt ook een risico in.

het oog wil ook wat. de plannen
moeten er grafisch goed uit zien.


Time
BIM to CAD
Workflow
PANIC!
Total Time
2D CAD Workflow
50 % -80 %
of Total Time
BIM Workflow
Design
Documentation
Coordination

'ALLE PROJECTEN IN REVIT'

2006 - Arcadis Merelbeke

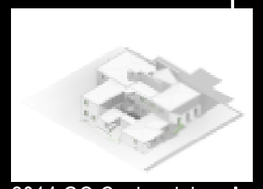
2013 - Sterre S5

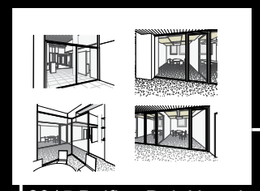
2014 KUL Ter Groene Poorte

2014 Fribourg

2014 KA Ninove

2014 Scheldekop


2014 GO Casinoplein

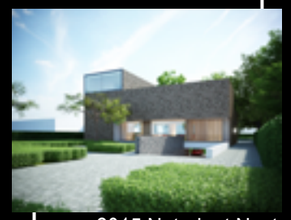

2015 Belfius Dok Noord

2015 Volvo Zottegem

2015 Texaco Gr Bijgaarden

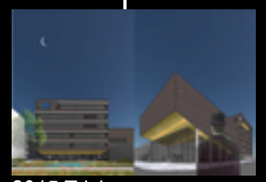
2016 VHD Tramstelsite

2016- VHD Wisselbeke


2015 Notariaat Nest

2016- Arcadis Oosterzele

2015 O&N1 Gasthuisberg


2015 Trivium

2015 Howest

2016 Theresianenklooster

2016- Constructis Kuurne

2016- Nieuw Kortrijk

2016- Herkenrode