

CORE CONSTRUCTIES

Statische Berekening

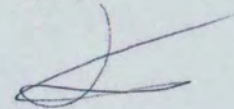
Project: Willemsparkweg 220 Amsterdam
Onderdeel: Funderingsherstel
Opdrachtgever: Structure Engineering
T.a.v. [redacted]
Van L. Stirumplein 18III
1051BE Amsterdam
Projectnummer: 17021
Datum: 26-03-2017
Gewijzigd: 22-09-2017

Behoort bij besluit d.d.:

- 6 APR. 2018

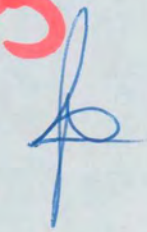
X Gemeente
X Amsterdam
X

Opgesteld:

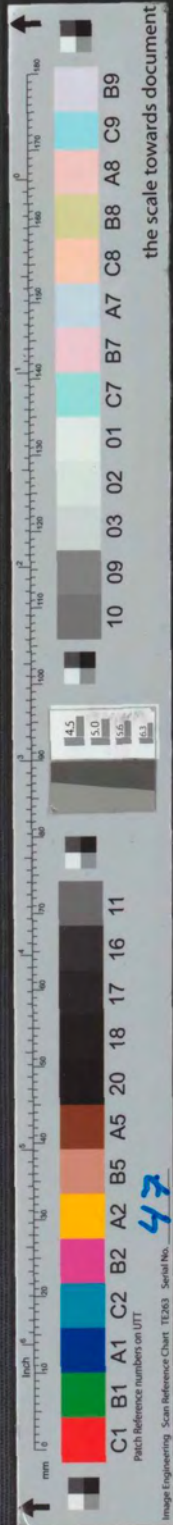


Ir. [redacted]

15 MRT 2018 05
3453599-71

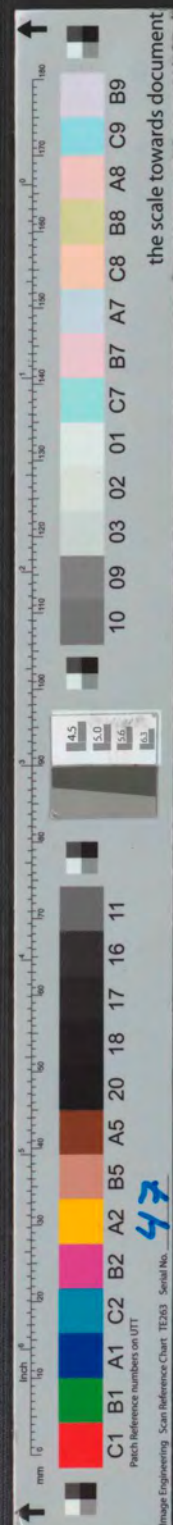


Egelantierstraat 33 Utrecht Tel: [redacted] info@coreconstructies.nl www.coreconstructies.nl

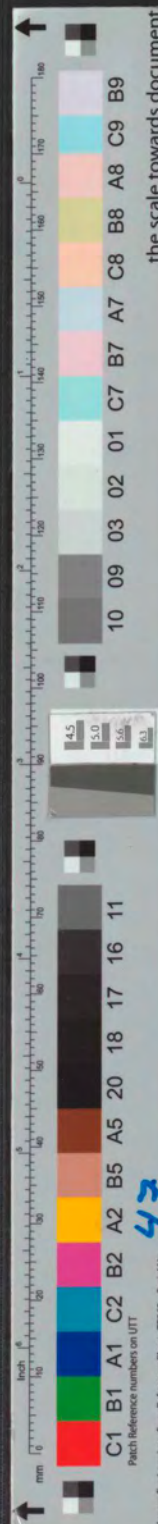


Inhoudsopgave

1	Inleiding	3
1.1	Algemeen	3
1.2	Wijzigingen	3
2	Aangehouden belastingen	3
3	Materialen	3
4	Algemene rekenmethodes	3
5	Uitgangpunten	4
5.1	Willemsparkweg 218 Amsterdam	4
5.2	Koninginneweg 13 Amsterdam	4
5.3	Toe te passen palen	4
6	Beschikbare informatie	5
6.1	Algemeen	5
6.2	Tekeningen	6
6.2.1	House Check bouwkundig adviesbureau	6
6.2.2	Structure Engineering	7
7	Statische berekening	13
7.1	FEM berekening vloer	13
7.1.1	Toegepaste fundering	13
7.1.2	Geometrie	13
7.1.3	Veerconstante palen	13
7.1.4	Belastingen	14
7.1.4.1	Plattegrond met belastingen	14
7.1.4.2	Overzicht belastingen	14
7.1.4.3	Permanente belasting	18
7.1.4.4	Veranderlijke belasting	18
7.1.4.5	Hoogste GWS	19
7.1.4.6	Wind 1	20
7.1.4.7	Wind 2	20
7.2	Standaard wapening	21
7.2.1	Wapening vloer	21
7.2.2	Wapening kelderwanden	21
7.2.2.1	Verticale wapening kelderwand gedeelde bouwmuur nr 220-218 (q6)	21
7.2.2.2	Verticale wapening kelderwand zijgevel (q1, q2)	21
7.2.2.3	Verticale wapening overige kelderwanden	21
7.2.2.4	Horizontale wapening kelderwanden	21
7.2.3	Dwarskracht naast bouwmuren	22
7.2.3.1	Dwarskracht naast bouwmuren	22
7.2.4	Dwarskracht t.p.v. F1, F2	23
7.2.5	Dwarskracht t.p.v. kolom F5	24
7.2.6	Dwarskracht t.p.v. kolom F8, F9	25
7.2.7	Dwarskracht t.p.v. kolom F6, F7	26



7.2.8	Inkassingen	27
7.2.8.1	Standaard inkassingen	27
7.2.8.2	Inkassingen en kelderwand t.p.v. F1, F2	28
7.3	<i>Extra wapening in plint</i>	29
7.3.1	Extra wapening	29
7.3.2	X-richting onder	29
7.3.3	X-richting boven	29
7.3.4	Y-richting onder	30
7.3.5	Y-richting boven	30
7.4	<i>Extra wapening in kelderwanden</i>	31
7.4.1	Extra verticale wapening kelderwand t.p.v. F8	31
7.4.2	Extra verticale wapening kelderwand t.p.v. F9	32
7.4.3	Extra verticale wapening kelderwand t.p.v. F1	33
7.4.4	Extra verticale wapening kelderwand t.p.v. F2	33
7.4.5	Extra wapening	34
7.4.6	Overzicht MatrixFrame berekening	34
7.4.6.1	X-richting onder	34
7.4.6.2	X-richting boven	34
7.4.6.3	Y-richting onder	35
7.4.6.4	Y-richting boven	35
7.5	<i>Extra wapening vloer</i>	36
7.5.1	X-richting onder	36
7.5.2	X-richting boven	36
7.5.3	Y-richting onder	37
7.5.4	Y-richting boven	37
7.6	<i>Palen</i>	38
7.6.1	Uitgangspunten	38
7.6.2	Overzicht maximaal optredende paalbelastingen	38
7.6.3	Overzicht maximaal toelaatbare paalbelastingen	38
7.7	<i>Pons</i>	39
7.7.1	Hoekpaal 1	39
7.7.2	Hoekpaal 2	41
7.7.3	Overige hoekpalen	42
7.7.4	Randpalen	43
8	Bijlagen	44
8.1	<i>Bijlage uitdraai AxisVM berekening</i>	44



1 Inleiding

1.1 Algemeen

Het pand aan Willemsparkweg 220 Amsterdam wordt verbouwd.

Het pand wordt voorzien van een funderingsherstel. De gehele dragende tussenmuur wordt op alle verdiepingen vervangen door een staalconstructie. Op het bestaande dak wordt een dakterras met dakhuisje geplaatst. Er worden een aantal nieuwe badkamers geplaatst op verschillende verdiepingen, een deel van de begane grondvloer wordt vervangen.

In dit document worden de constructieve aspecten van het funderingsherstel beschouwd.

1.2 Wijzigingen

- Rev1 Diverse wijzigingen
 Rev2 De inkassingen zitten hoger in de muur, de fundering wordt als kelderbak uitgevoerd. Muur Koninginneweg 13 Amsterdam wordt niet opgevangen. Belastingen uit stabiliteitsportaal t.p.v. Koninginneweg 13 toegevoegd.

2 Aangehouden belastingen

<i>permanent</i>	
vloeren (gemiddeld)	= 1,00kN/m ²
badkamers	= 1,50kN/m ²
plat dak	= 0,60kN/m ²
schuin dak	= 0,80kN/m ²
dak+dakterras	= 0,90kN/m ²
HSB	= 1,00kN/m ²
balustrade	= 0,50kN/m ¹
mw	= 20,0kN/m ³
beton	= 25,0kN/m ³
<i>veranderlijk</i>	
vloeren	= 2,55kN/m ² (incl 0,80kN/m ² lichte scheidingswanden)
dakterras	= 2,50kN/m ²

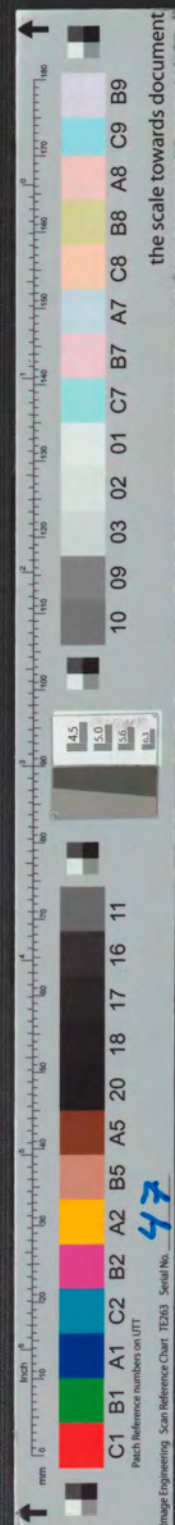
3 Materialen

hout binnen	C18
hout buiten	C24 geïmpregneerd
staal	S235
bouten	8.8
beton	C20/25
wapening	B500A

4 Algemene rekenmethodes

Berekeningen conform Eurocodes.

Gevolklasse CC2



5 Uitgangpunten

5.1 Willemsparkweg 218 Amsterdam

De Willemsparkweg 218 Amsterdam heeft een gedeelde bouwmuur met de Willemsparkweg 220 Amsterdam. De Willemsparkweg 218 Amsterdam heeft geen funderingsherstel gehad. De volgende belastingen worden hierdoor opgenomen in de berekening:

- Gedeelde bouwmuur
- Vloeren en dak op de bouwmuur
- Voorgevel tot helft eerste opening
- Achtergevel tot helft eerste opening

5.2 Koninginneweg 13 Amsterdam

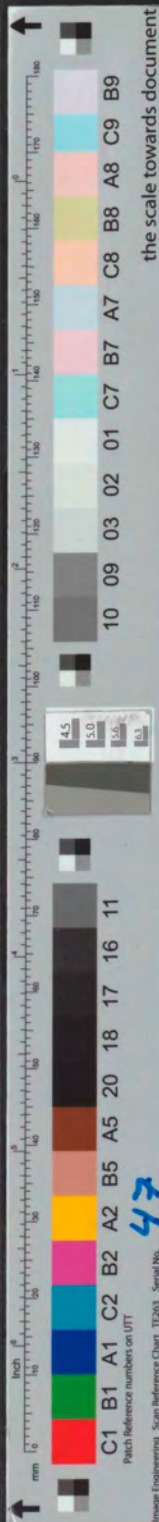
De Koninginneweg 13 Amsterdam heeft een gedeelde bouwmuur met de Willemsparkweg 220 Amsterdam. De Koninginneweg 13 Amsterdam heeft geen funderingsherstel gehad. De muur is echter losgescheurd van de overige bouwmuren en er liggen geen vloeren op van Willemsparkweg 220. I.o.m. EversPartners wordt deze muur niet opgevangen en wordt er een stabiliteitsportaal geplaatst naast deze muur.

De volgende belastingen worden hierdoor opgenomen in de berekening:

- Geen

5.3 Toe te passen palen

Er worden schroefinjectiepalen toegepast. De definitieve paalberekening dient door derden minimaal 3 weken voor aanvang van de werkzaamheden te worden geleverd.

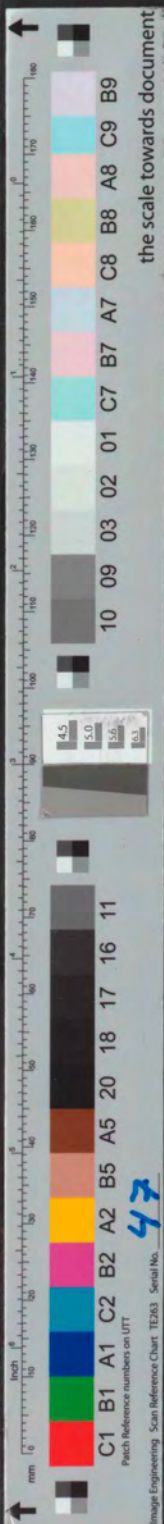


6 Beschikbare informatie

6.1 Algemeen

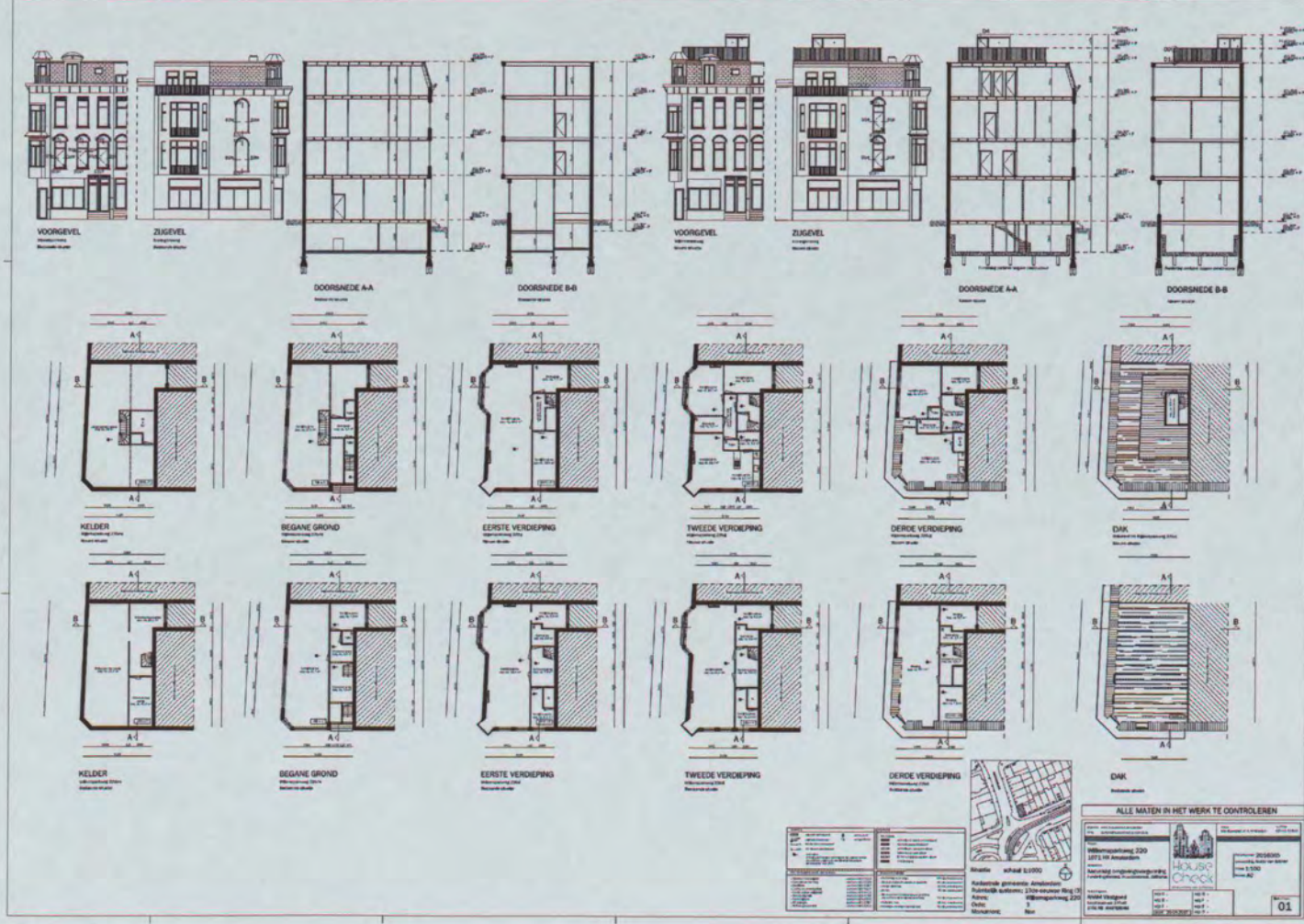
Voor het bepalen van de statische berekening is gebruik gemaakt van de volgende informatie:

- Tekeningen House Check bouwkundig adviesbureau 2016065 d.d. 20-04-2016
- Principe tekeningen Structure Engineering CO-17014-rev5
- Inmetingen/locatiebezoek/foto's Structure Engineering
- Overleg EversPartners (opvangen muur Koninginneweg 13 en belastingen uit stabiliteitsportaal naast deze muur)
- Geotechnisch advies Hektec PB 17.0436-1 d.d. 28 maart 2017

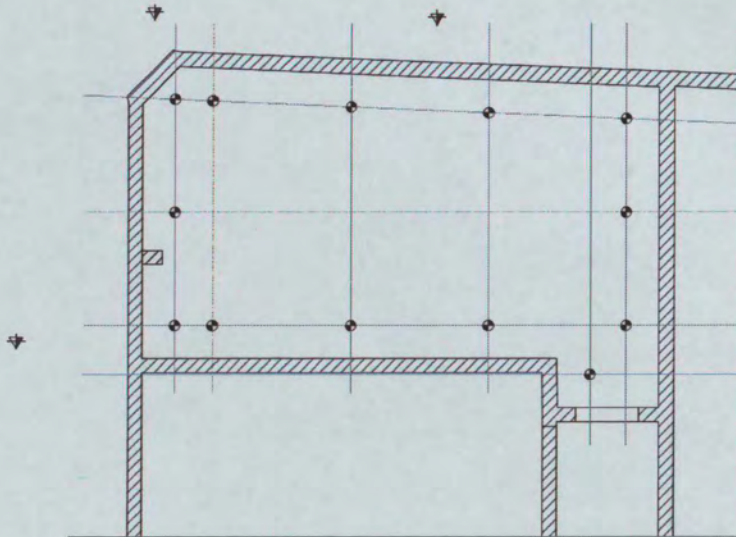


6.2 Tekeningen

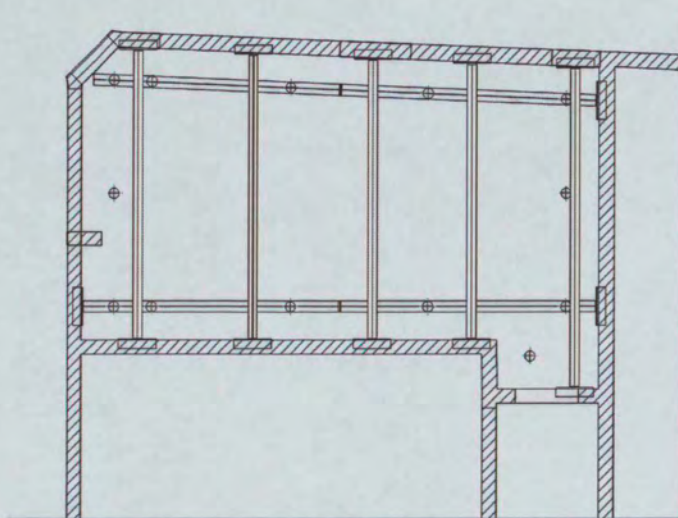
6.2.1 House Check bouwkundig adviesbureau



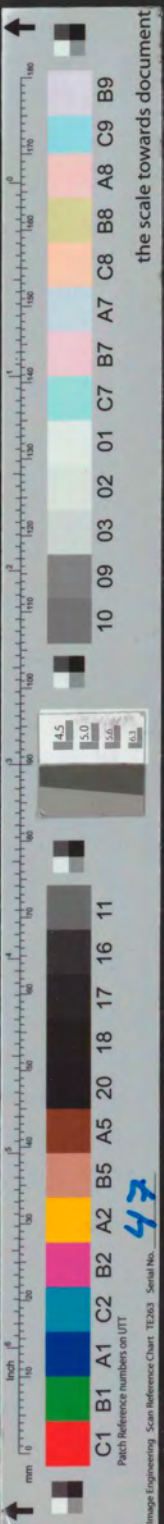
6.2.2 Structure Engineering

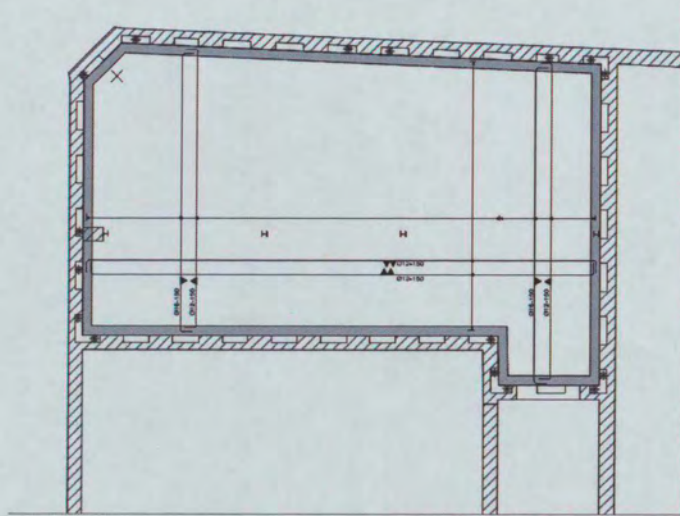


Palenplan

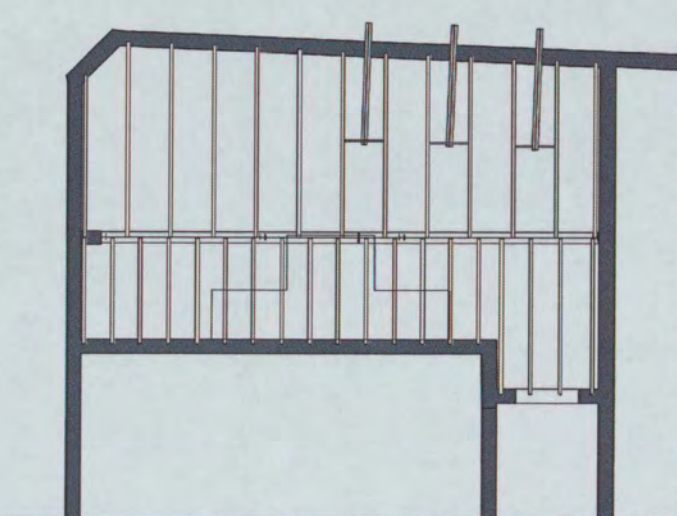


Tafelconstructie





Betonvloer

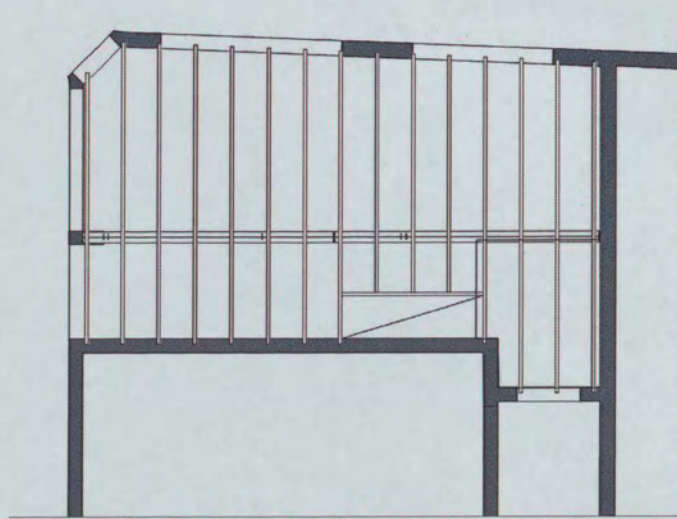


Begane grondvloer

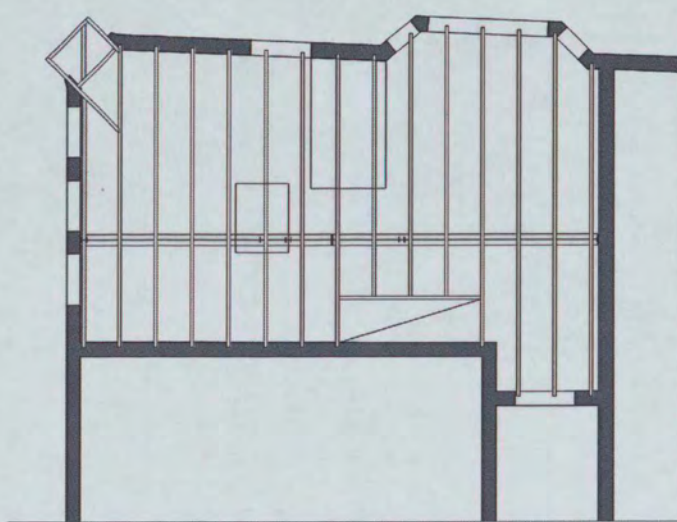


47

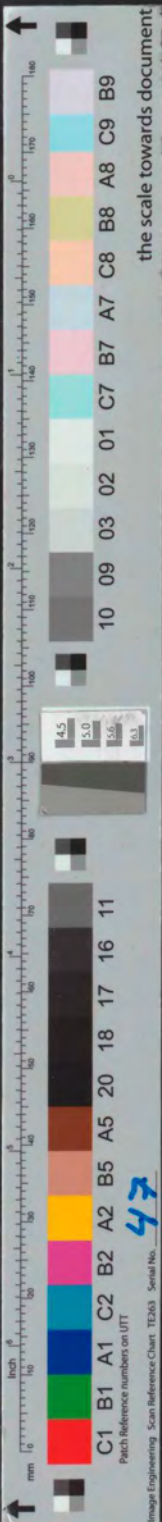
Image Engineering Scan Reference Chart TE263 Serial No.



1^e verdieping

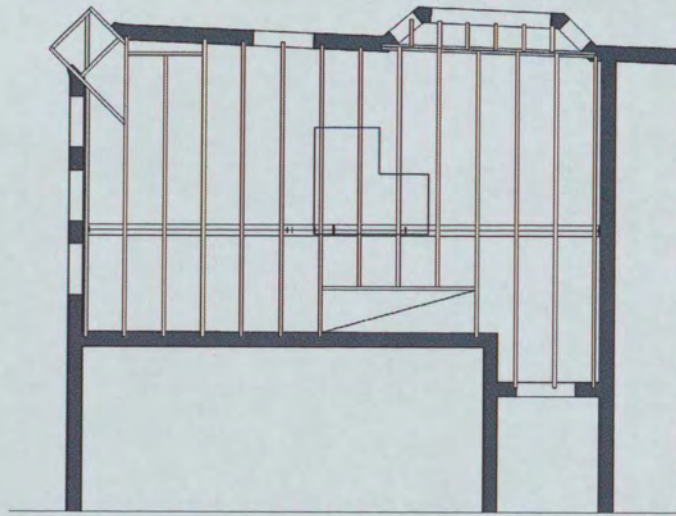


2^e verdieping

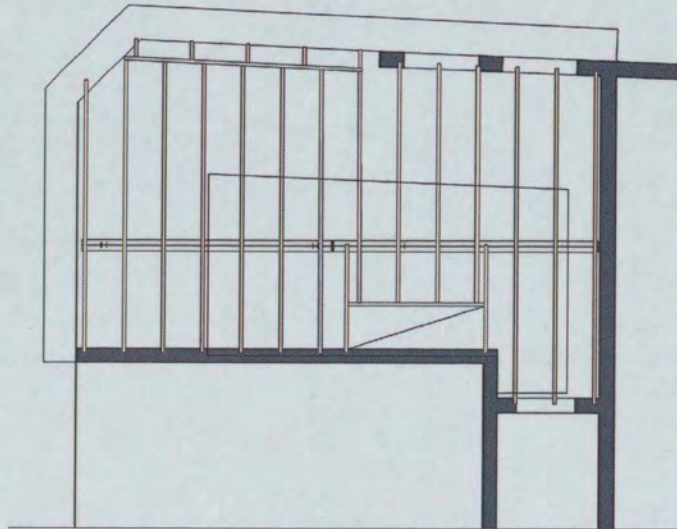


CORE CONSTRUCTIES

Project: Willemsparkweg 220 Amsterdam
Onderdeel: Funderingsherstel
Opdrachtgever: Structure Engineering
Projectnummer: 17021
Versie: 22-09-2017



3^e verdieping



Daklaag

↑

mm 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

inch 0 1 2 3 4 5 6 7 8 9 10

Color Reference Chart:

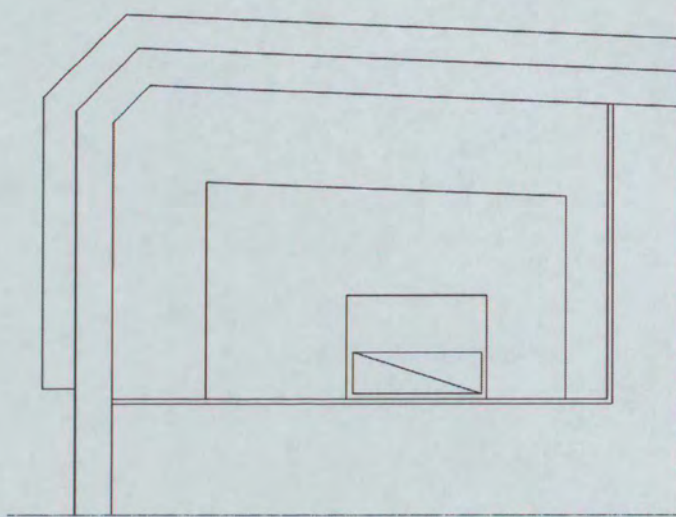
- C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11
- 10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

↑

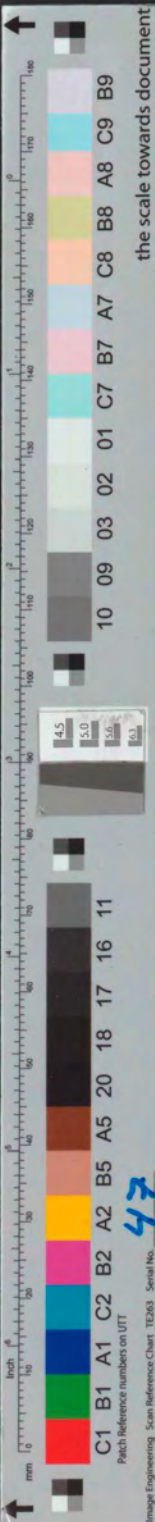
the scale towards document

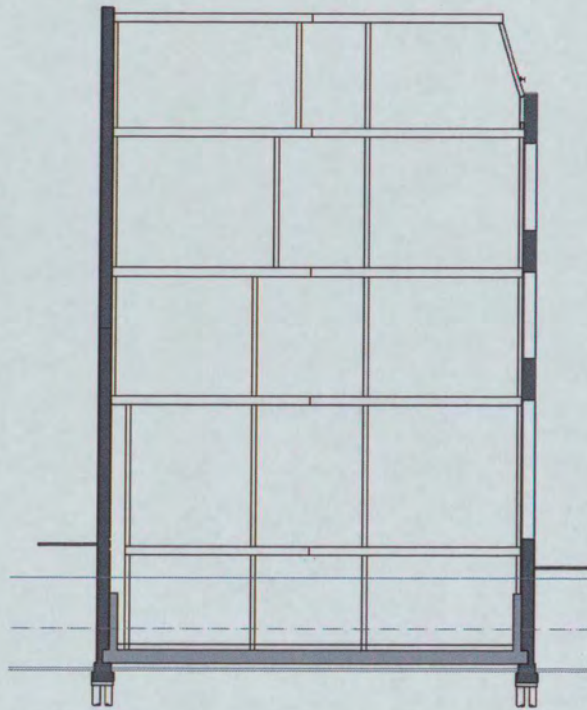
47

Image Engineering Scan Reference Chart TE263 Serial No.

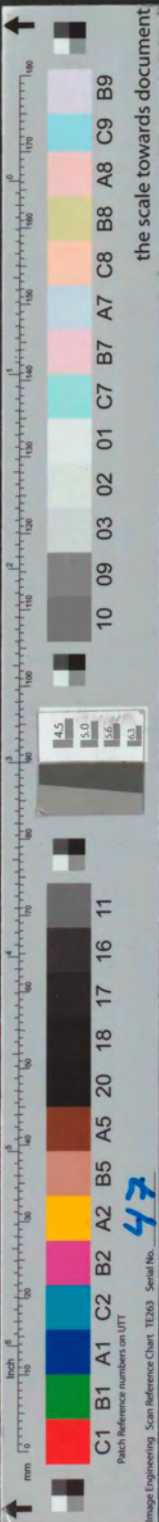


Dakterras met dakhuisje





Doorsnede

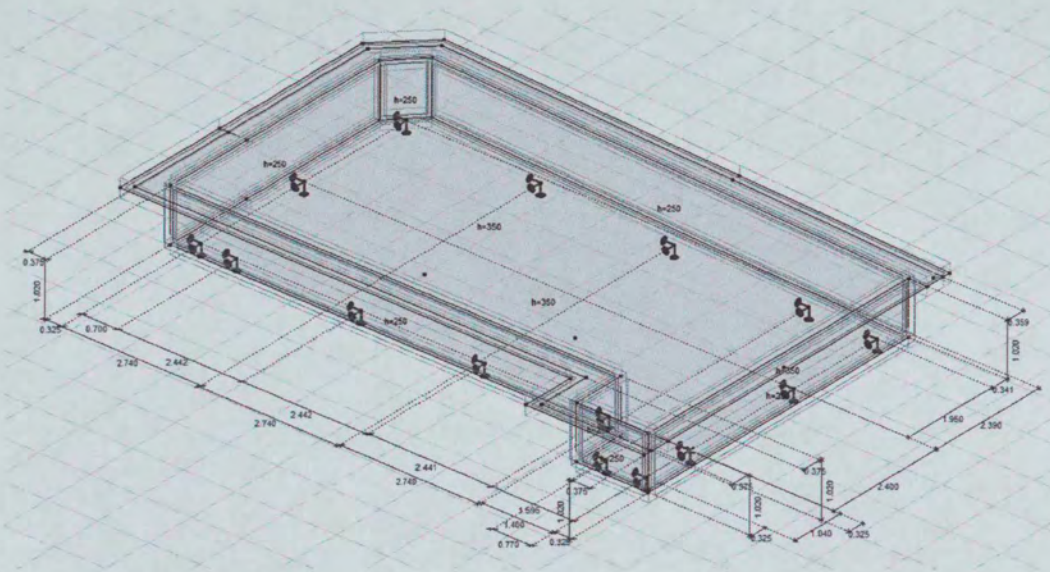


7 Statische berekening

7.1 FEM berekening vloer

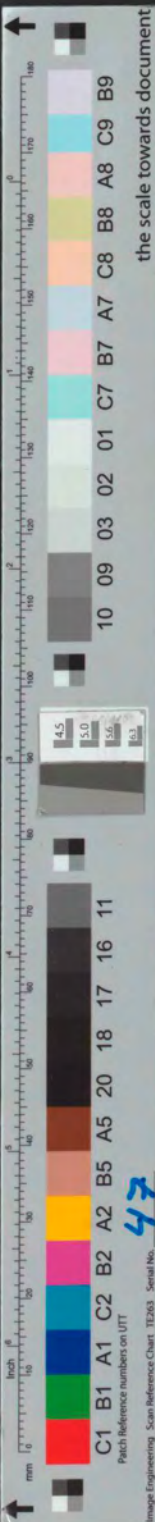
7.1.1 Toegepaste fundering
 Vloer, d=350mm, C30/37
 Wanden, d=250mm, C30/37

7.1.2 Geometrie



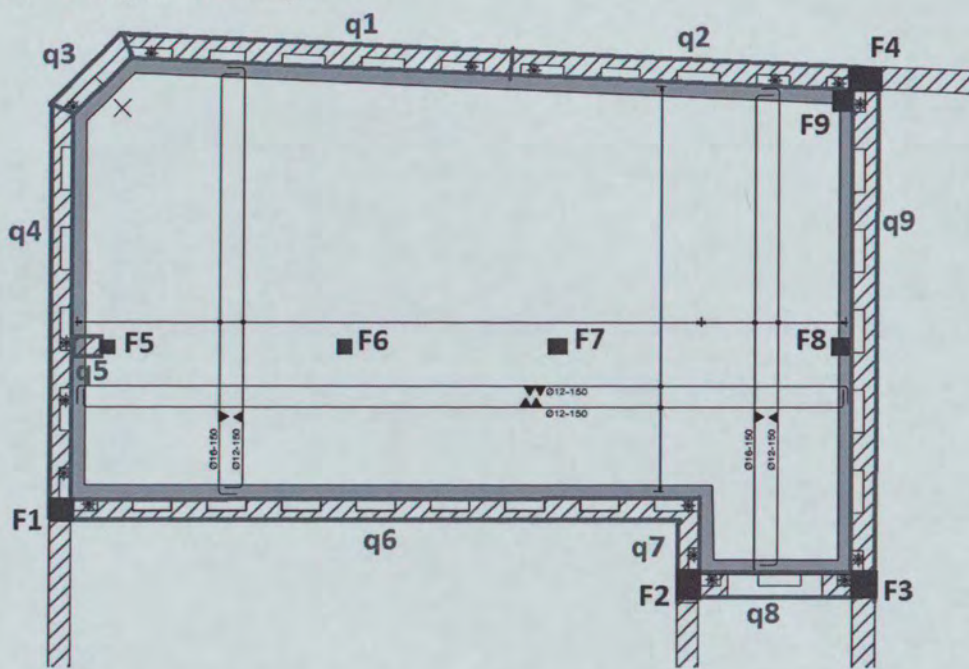
7.1.3 Veerconstante palen

De aangehouden veerconstante is $2,0 \times 10^4$ kN/m



7.1.4 Belastingen

7.1.4.1 Plattegrond met belastingen



7.1.4.2 Overzicht belastingen

p	aantal	L	b	h	PB		VB	
Onderdeel	stuks	m	m	m	kN/m3	kN/m2	kN/m2	kN/m2
afwerking vloer	1			0.05	25	1.25		2.55
hoogste GWS omgeving peilbuizen				0.95			-10	-9.5

q1	aantal	L	b	h	PB			VB			
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25	11.6%	13.8	20		61.02			
betonnen kelderwand	1	1	0.15		1.2	25		4.50			
schuin dak	1	3	1				0.8	2.40			
vloeren BG tm 3e	4	1	2				1	8.00	2.8	2.55	14.28
dak+dakterras	1	1	2				1	2.00	0.4	2.5	2.00
TOTAAL								77.92			16.28

2 extreem, 2 momentaan momentaan

q2	aantal	L	b	h	PB			VB			
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25	35.0%	16	20		52.03			
betonnen kelderwand	1	1	0.15		1.2	25		4.50			
vloeren BG tm 3e	4	1	2				1	8.00	2.8	2.55	14.28
dak+dakterras	1	1	2				1	2.00	0.4	2.5	2.00
TOTAAL								66.53			16.28

2 extreem, 2 momentaan momentaan

the scale towards document

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9 A9
 10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9 A9
 4.5 5.0 5.5

Image Engineering Scan Reference Chart TE263 Serial No. 47

CORE CONSTRUCTIES

Project: Willemsparkweg 220 Amsterdam
 Onderdeel: Funderingsherstel
 Opdrachtgever: Structure Engineering
 Projectnummer: 17021
 Versie: 22-09-2017

q3	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25	33.0%	13.8	20		46.23			
betonnen kelderwand	1	1	0.15		1.2	25		4.50			
schuin dak/overig	1	3	1				0.8	2.40			
vloeren BG tm 3e	4	1	2				1	8.00	2.8	2.55	14.28
dak+dakterras	1	1	2				1	2.00	0.4	2.5	2.00
TOTAAL								63.13			16.28

2 extreem, 2 momentaan
momentaan

q4	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25	28.8%	13.8	20		49.11			
betonnen kelderwand	1	1	0.15		1.2	25		4.50			
schuin dak/overig	1	3	1				0.8	2.40			
TOTAAL								56.01			0.00

q5	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25		2.7	20		13.50			
vloer BG	1	1	2.9				1	2.90	1	2.55	7.40
TOTAAL								16.40			7.40

extreem

q6	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25		16	20		80.00			
betonnen kelderwand	1	1	0.15		1.2	25		4.50			
vloeren BG tm 3e nr 220	4	1	1.1				1	4.40	2.8	2.55	7.85
dak+dakterras nr 220	1	1	1.1				1	1.10	0.4	2.5	1.10
vloeren BG tm 3e nr 218	4	1	1.1				1	4.40	2.8	2.55	7.85
dak(evt) dakterras nr 218	1	1	1.1				1	1.10	0.4	2.5	1.10
TOTAAL								95.50			17.91

2 extreem, 2 momentaan
momentaan
2 extreem, 2 momentaan
momentaan

q7	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25		16	20		80.00			
betonnen kelderwand	1	1	0.15		1.2	25		4.50			
TOTAAL								84.50			0.00

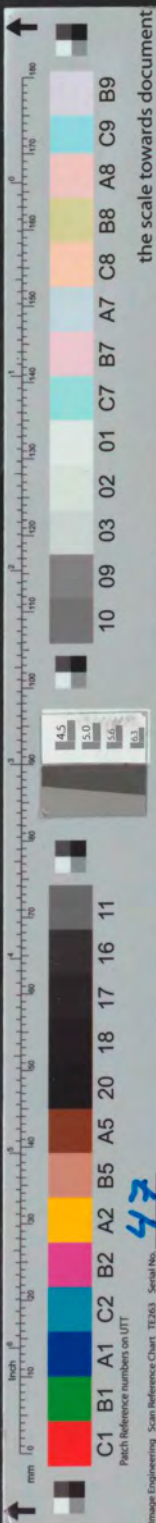
q8	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25		16	20		80.00			
betonnen kelderwand	1	1	0.15		1.2	25		4.50			
vloeren BG tm 3e	4	1	1.65				1	6.60	2.8	2.55	11.78
dak+dakterras	1	1	1.65				1	1.65	0.4	2.5	1.65
TOTAAL								92.75			13.43

2 extreem, 2 momentaan
momentaan

q9	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
betonnen kelderwand	1	1	0.15		1.2	25		4.50			
TOTAAL								4.50			0.00

F1	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN	stuks	kN/m1	kN
mw voorgevel nr 218								100.00			
TOTAAL								100.00			0.00

Conservatief aangehouden op basis van foto's



CORE CONSTRUCTIES

Project: Willemsparkweg 220 Amsterdam
 Onderdeel: Funderingsherstel
 Opdrachtgever: Structure Engineering
 Projectnummer: 17021
 Versie: 22-09-2017

F2	aantal	L	b	h	PB			VB			
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m1	kN	stuks	kN/m1	kN
mw achtergevel nr 218	1	1	0.25		17.1	20		85.50			
TOTAAL								85.50			0.00

1 meter gevel meegenomen
 PB = 100kN aangehouden in berekening

F3	aantal	L	b	h	PB			VB			
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m1	kN	stuks	kN/m1	kN
VERVALLEN											
TOTAAL								0.00			0.00

F4	aantal	L	b	h	PB			VB			
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m1	kN	stuks	kN/m1	kN
VERVALLEN											
TOTAAL								0.00			0.00

F5	aantal	A	b	h	PB			VB			
Onderdeel	stuks	m2	m	% raam	m	kN/m3	kN/m1	kN	stuks	kN	kN
uit SB-CC17021-doorbraken-rev0 Pos 1								45.70			
VB dak									0.4	24.20	9.68
VB 3e									1	23.60	23.6
VB 2e									0.4	21.10	8.44
VB 1e									1	22.20	22.2
VB BG									0.4	17.70	7.08
TOTAAL								45.70			71.00

momentaan
 extreem
 momentaan
 extreem
 momentaan

F6	aantal	A	b	h	PB			VB			
Onderdeel	stuks	m2	m	% raam	m	kN/m3	kN/m1	kN	stuks	kN	kN
uit SB-CC17021-doorbraken-rev0 Pos 1								69.50			
VB dak									0.4	26.40	10.56
VB 3e									0.4	29.70	11.88
VB 2e									1	34.60	34.6
VB 1e									0.4	31.80	12.72
VB BG									1	32.20	32.2
TOTAAL								69.50			101.96

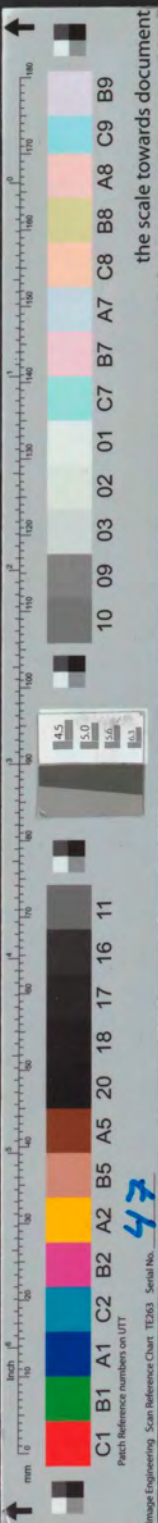
momentaan
 momentaan
 extreem
 momentaan
 extreem

F7	aantal	A	b	h	PB			VB			
Onderdeel	stuks	m2	m	% raam	m	kN/m3	kN/m1	kN	stuks	kN	kN
uit SB-CC17021-doorbraken-rev0 Pos 1								74.10			
VB dak									0.4	31.70	12.68
VB 3e									1	36.40	36.4
VB 2e									0.4	34.40	13.76
VB 1e									0.4	36.10	14.44
VB BG									1	36.80	36.8
TOTAAL								74.10			114.08

momentaan
 extreem
 momentaan
 momentaan
 extreem

F8	aantal	A	b	h	PB			VB			
Onderdeel	stuks	m2	m	% raam	m	kN/m3	kN/m1	kN	stuks	kN	kN
uit SB-CC17021-doorbraken-rev0 Pos 1								35.80			
VB dak									0.4	3.50	1.4
VB 3e									1	20.10	20.1
VB 2e									1	19.70	19.7
VB 1e									0.4	19.70	7.88
VB BG									0.4	18.70	7.48
stab.portaal		wind +/- 165,0kN						10.00			
TOTAAL								45.80			56.56

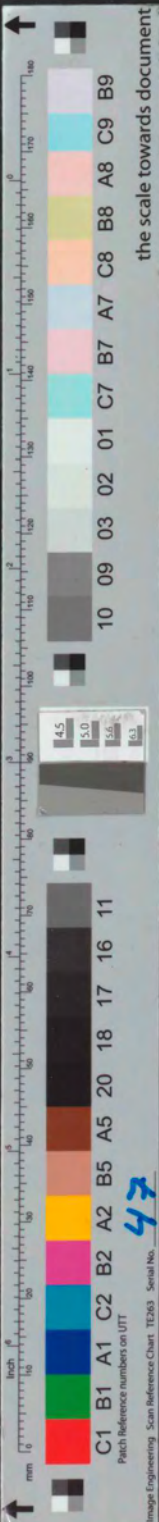
momentaan
 extreem
 extreem
 momentaan
 momentaan



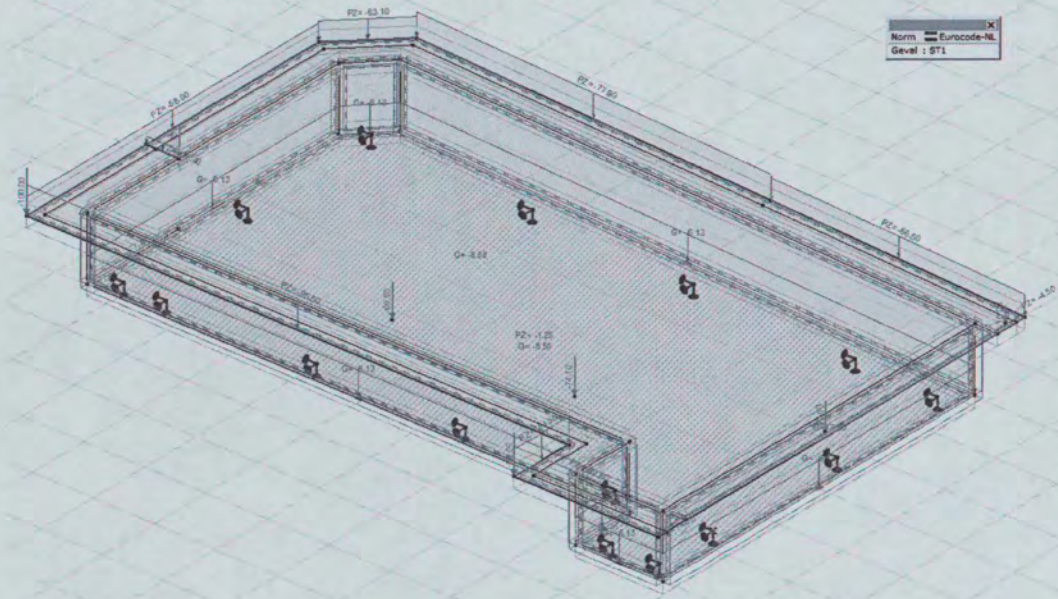
CORE CONSTRUCTIES

Project: Willemsparkweg 220 Amsterdam
 Onderdeel: Funderingsherstel
 Opdrachtgever: Structure Engineering
 Projectnummer: 17021
 Versie: 22-09-2017

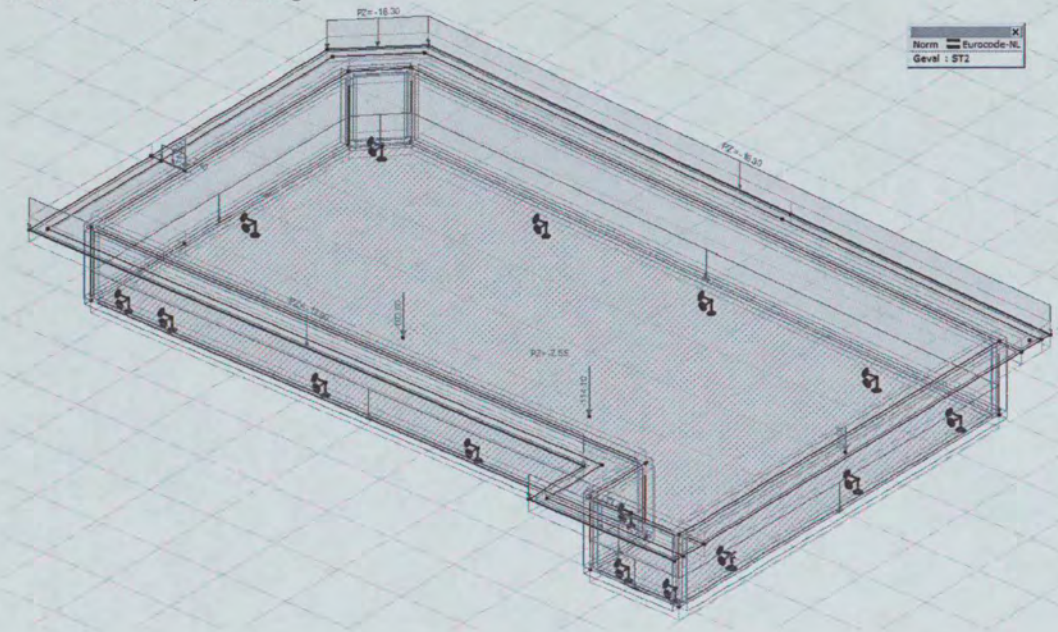
F9	aantal	A	b	h	PB			VB			
Onderdeel	stuks	m2	m	% raam	m	kN/m3	kN/m1	kN	stuks	kN	kN
stab.portaal	wind +/-	165,0	kN					10,00			
TOTAAL								10,00			



7.1.4.3 Permanente belasting



7.1.4.4 Veranderlijke belasting



↑

mm

100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5

C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11

↑

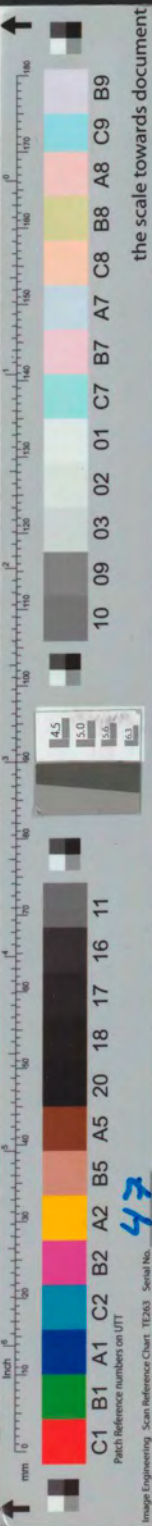
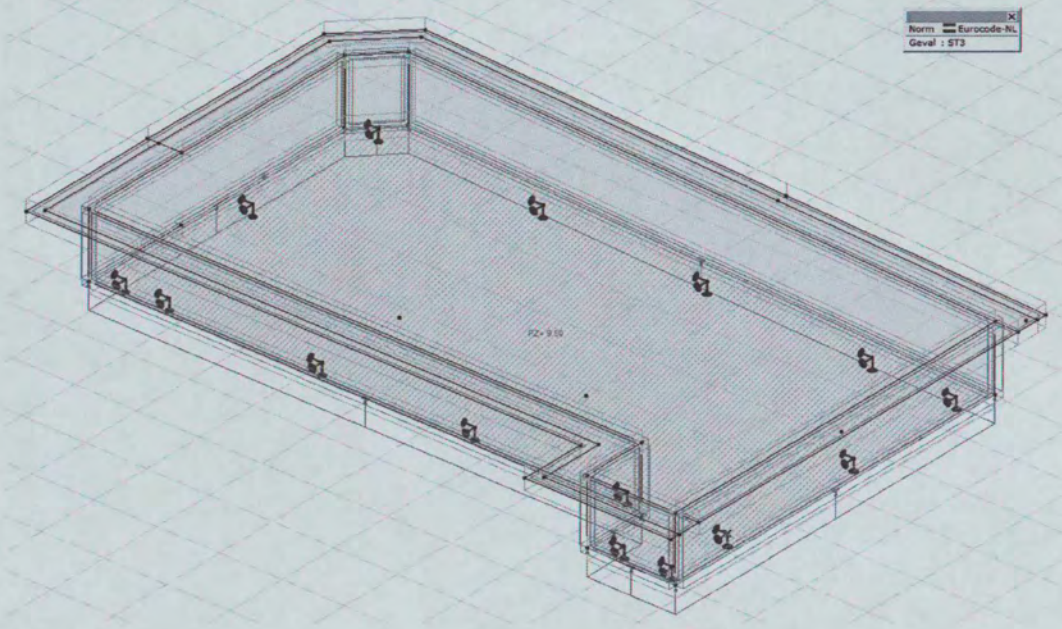
mm

100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000

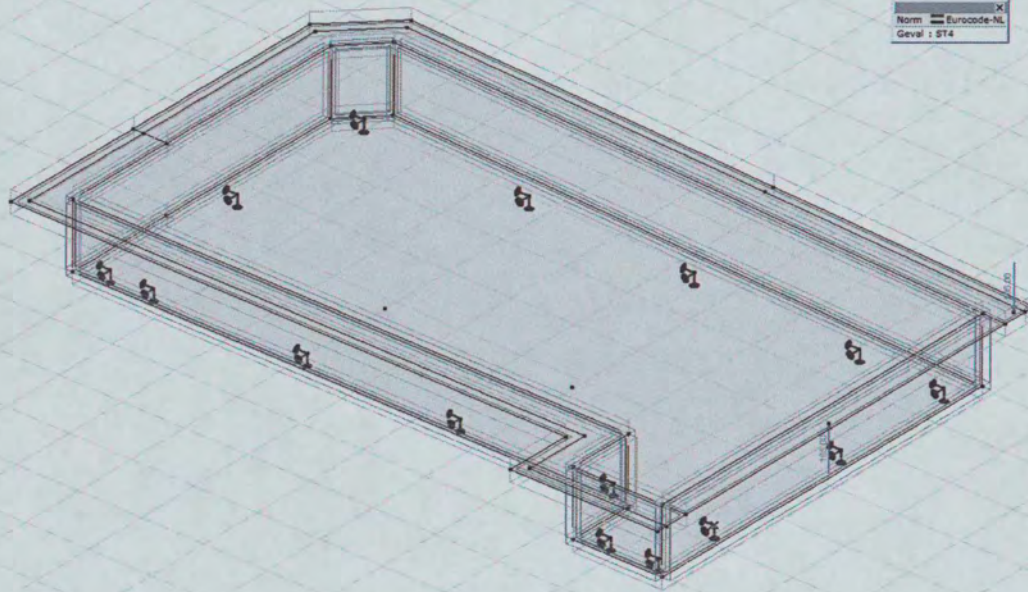
Image Engineering Scan Reference Chart TE263 Serial No. 47

the scale towards document

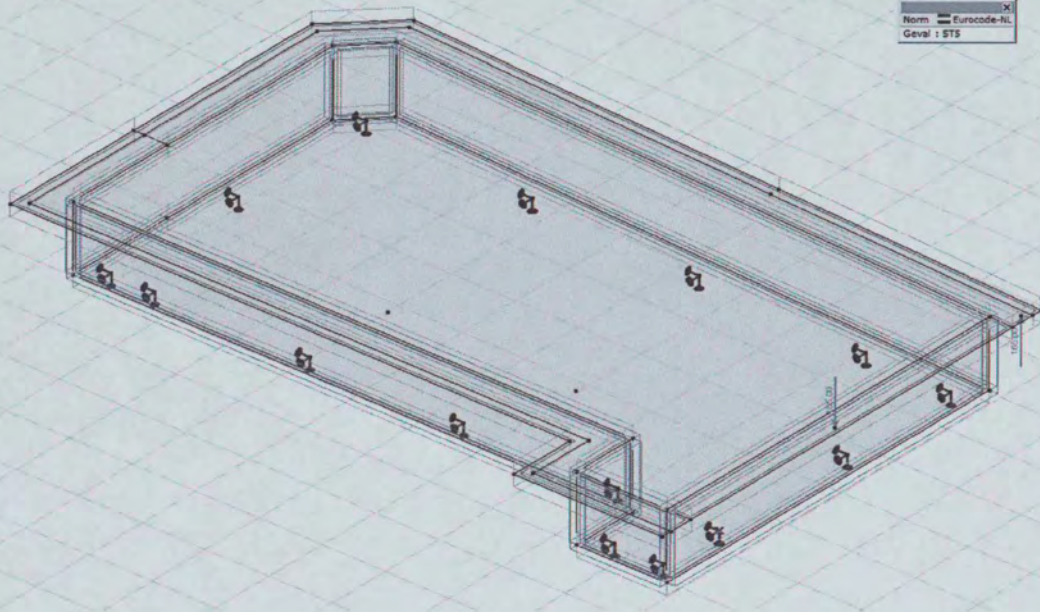
7.1.4.5 Hoogste GWS



7.1.4.6 Wind 1



7.1.4.7 Wind 2



↑

mm 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

ft 0 1 2 3 4 5 6 7 8 9 10

Norm Eurocode-NL
Geval: ST4

Norm Eurocode-NL
Geval: ST5

4.5 5.0 5.5 6.0 6.5

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

11 16 17 18 20

↑

mm 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

ft 0 1 2 3 4 5 6 7 8 9 10

Image Engineering Scan Reference Chart TE263 Serial No. 47

the scale towards document

7.2 Standaard wapening

7.2.1 Wapening vloer

In AxisVM is de onder- en boven wapening als volgt gedefinieerd:

X-richting (Loodrecht op bouwmuren)

Boven Ø16-150, dekking 20mm

Onder Ø12-150, dekking 35mm

Y-richting (Evenwijdig aan bouwmuren)

Boven Ø16-150, dekking 36mm

Onder Ø12-150, dekking 47mm

7.2.2 Wapening kelderwanden

7.2.2.1 Verticale wapening kelderwand gedeelde bouwmuur nr 220-218 (q6)

Buiten Ø12-150, dekking 35mm

Binnen Ø12-100, dekking 20mm

7.2.2.2 Verticale wapening kelderwand zijgevel (q1, q2)

Buiten Ø12-150, dekking 35mm

Binnen Ø12-125, dekking 20mm

7.2.2.3 Verticale wapening overige kelderwanden

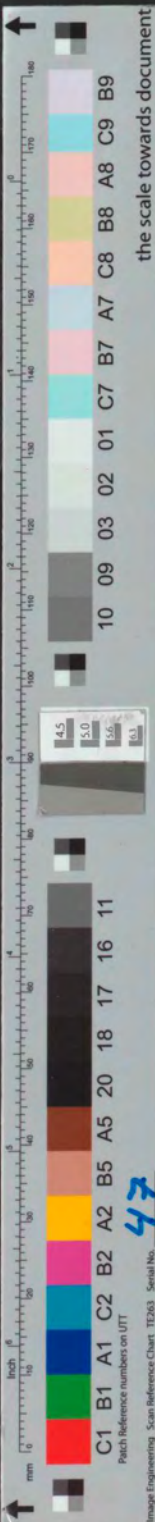
Buiten Ø12-150, dekking 35mm

Binnen Ø12-150, dekking 20mm

7.2.2.4 Horizontale wapening kelderwanden

Minimaal aan te houden 0,7x1000x250/100/2 = 875mm²/m

Toepassen Ø12-125 = 905mm²/m



7.2.3 Dwarskracht naast bouwmuren

7.2.3.1 Dwarskracht naast bouwmuren

$$q_d = 1,2 \times (95,5 + 1,02 \times 0,25 \times 25,0) + 1,5 \times 17,9 = 149,1 \text{ kN/m (q6)}$$

Dwarskracht vloer zonder wap		
V _d	149.1	kN
b _w	1000	mm
h	350	mm
c	20	mm
z	297	mm
f _{ck}	30	N/mm ²
A _{sl}	d	16 mm
	hoh	150 mm
	A _s	1340 mm ² /m
σ _{cp}	0	N/mm ²
N _{ed}	0	kN
C _{Rd,c}	0.12	
k	1.778	
pl	0.0041	
k ₁	0.15	
v _{min}	0.455	N/mm ²
v _{Rdc}	0.491	N/mm ²
v _{Rdc}	162.0	kN/m
Dsn	AKKOORD	



7.2.4 Dwarskracht t.p.v. F1, F2

$$q_d = 1,2 \times (95,5 + 1,02 \times 0,25 \times 25,0 + 100) + 1,5 \times 17,9 = 269,1 \text{ kN/m (} q_6 + F_1 \text{)}$$

Dwarskracht vloer zonder wap		
V _d	269.1	kN
b _w	1000	mm
h	350	mm
c	20	mm
z	297	mm
f _{ck}	30	N/mm ²
A _{sl}	d	16 mm
	hoh	150 mm
A _s	1340	mm ² /m
σ _{cp}	0	N/mm ²
N _{ed}	0	kN
C _{Rd,c}	0.12	
k	1.778	
pl	0.0041	
k ₁	0.15	
V _{min}	0.455	N/mm ²
V _{Rdc}	0.491	N/mm ²
VR _{dc}	162.0	kN/m
D _{sn}	NIET AKKOORD	

Dwarskracht vloer met wap		
V _d	269.1	kN
b _w	1000	mm
h	350	mm
c	20	mm
z	297	mm
f _{ck}	30	N/mm ²
f _{cd}	20	N/mm ²
v ₁	0.552	
θ	4.73	graden
cotθ	12.102	
A _{sw}	0.17	mm ² /mm
A _{s,TOE}	d	10 mm
	hoh	300 mm
	A _{s/mm}	0.52 mm ² /mm
UC	AKKOORD	
Toepassen Ø10-300 over L=B		
H.o.h. MAX + Muur	330	mm
H.o.h. MAX //		
Muur	495	mm



7.2.5 Dwarskracht t.p.v. kolom F5

$$q_d = 1,2 \times (56,0 + 0,5 \times 16,4 + 45,7 + 1,02 \times 0,25 \times 25,0) + 1,5 \times (0,5 \times 7,4 + 71,0) = 259,6 \text{ kN/m (} q_4 + 0,5m \text{ } q_5 + F_5)$$

Dwarskracht vloer zonder wap	
V _d	251.58 kN
b _w	1000 mm
h	350 mm
c	20 mm
z	297 mm
f _{ck}	30 N/mm ²
A _{sl} d	16 mm
hoh	150 mm
A _s	1340 mm ² /m
σ _{cp}	0 N/mm ²
N _{ed}	0 kN
C _{Rd,c}	0.12
k	1.778
pl	0.0041
k ₁	0.15
V _{min}	0.455 N/mm ²
V _{Rdc}	0.491 N/mm ²
VR _{dc}	162.0 kN/m
D _{sn}	NIET AKKOORD

Dwarskracht vloer met wap	
V _d	251.58 kN
b _w	1000 mm
h	350 mm
c	20 mm
z	297 mm
f _{ck}	30 N/mm ²
f _{cd}	20 N/mm ²
v ₁	0.552
θ	4.42 graden
cotθ	12.956
A _{sw}	0.15 mm ² /mm
A _{s,TOE} d	10 mm
hoh	300 mm
A _{s/mm}	0.52 mm ² /mm
UC	AKKOORD
Toepassen Ø10-300 over L=B	
H.o.h. MAX ⊥ Muur	330 mm
H.o.h. MAX //	
Muur	495 mm

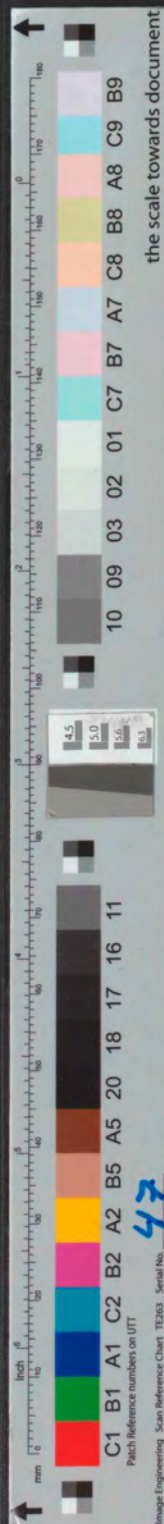


7.2.6 Dwarskracht t.p.v. kolom F8, F9

$$q_d = 1,2 \times (4,5 + 45,8 + 1,02 \times 0,25 \times 25,0) + 1,5 \times 165,0 = 315,5 \text{ kN/m (q9+F8)}$$

Dwarskracht vloer zonder wap		
V _d	315.51	kN
b _w	1000	mm
h	350	mm
c	20	mm
z	297	mm
f _{ck}	30	N/mm ²
A _{sl}	d	16 mm
	hoh	150 mm
	A _s	1340 mm ² /m
σ _{cp}	0	N/mm ²
N _{ed}	0	kN
C _{Rd,c}	0.12	
k	1.778	
pl	0.0041	
k ₁	0.15	
v _{min}	0.455	N/mm ²
V _{Rdc}	0.491	N/mm ²
VR _{dc}	162.0	kN/m
D _{sn}	NIET AKKOORD	

Dwarskracht vloer met wap		
V _d	315.51	kN
b _w	1000	mm
h	350	mm
c	20	mm
z	297	mm
f _{ck}	30	N/mm ²
f _{cd}	20	N/mm ²
v ₁	0.552	
θ	5.55	graden
cotθ	10.295	
A _{sw}	0.24	mm ² /mm
A _{s;TOE}	d	10 mm
	hoh	300 mm
	A _{s/mm}	0.52 mm ² /mm
UC	AKKOORD	
Toepassen	Ø10-300	over L=B
H.o.h. MAX ⊥ Muur	330	mm
H.o.h. MAX //		
Muur	495	mm



7.2.7 Dwarskracht t.p.v. kolom F6, F7

Smalle beuk

$$q_d = 1,2x(0,4x25,0+67\%74,2)+1,5x(2,55+67\%114,1) = 190,2\text{kN/m (F7)}$$

Dwarskracht vloer zonder wap	
V _d	190.1523 kN
b _w	1000 mm
h	350 mm
c	20 mm
z	297 mm
f _{ck}	30 N/mm ²
A _{sl} d	16 mm
hoh	150 mm
A _s	1340 mm ² /m
σ _{cp}	0 N/mm ²
N _{ed}	0 kN
C _{Rd,c}	0.12
k	1.778
pl	0.0041
k ₁	0.15
V _{min}	0.455 N/mm ²
V _{Rdc}	0.491 N/mm ²
VR _d	162.0 kN/m
Dsn	NIET AKKOORD

Dwarskracht vloer met wap	
V _d	190.1523 kN
b _w	1000 mm
h	350 mm
c	20 mm
z	297 mm
f _{ck}	30 N/mm ²
f _{cd}	20 N/mm ²
v ₁	0.552
θ	3.33 graden
cotθ	17.185
A _{sw}	0.09 mm ² /mm
A _{s,TOE} d	10 mm
hoh	300 mm
A _{s/mm}	0.52 mm ² /mm
UC	AKKOORD
Toepassen	Ø10-300 over L=B
H.o.h. MAX ⊥ Muur	330 mm
H.o.h. MAX //	
Muur	495 mm

LET OP: Dubbele beugels toepassen en beugels doorzetten tot over palen!

Brede beuk

$$q_d = 1,2x(0,4x25,0+33\%74,2)+1,5x(2,55+33\%114,1) = 101,7\text{kN/m (F7)}$$

Dwarskracht vloer zonder wap	
V _d	101.6877 kN
b _w	1000 mm
h	350 mm
c	20 mm
z	297 mm
f _{ck}	30 N/mm ²
A _{sl} d	16 mm
hoh	150 mm
A _s	1340 mm ² /m
σ _{cp}	0 N/mm ²
N _{ed}	0 kN
C _{Rd,c}	0.12
k	1.778
pl	0.0041
k ₁	0.15
V _{min}	0.455 N/mm ²
V _{Rdc}	0.491 N/mm ²
VR _d	162.0 kN/m
Dsn	AKKOORD



7.2.8 Inkassingen

7.2.8.1 Standaard inkassingen

Kasbreedte is 600mm, h.o.h. 1,1m. Het moment wordt berekend tussen hart muur en hart kelderwand.

$$F_d = 1,1m \times (1,2 \times 95,5 + 1,5 \times 17,9) = 155,6kN (q_6)$$

Wapening inkassing		
V _d	155.595	kN
B	600	mm
arm	500	mm
h	350	mm
c	20	mm
z	297	mm
f _s	435	N/mm ²
M _d	77.80	kNm
A _{s,ben}	669	mm ²
A _{s,TOE}	d	12 mm
	aantal	6 stuks
	A _s	678 mm ²
UC	AKKOORD	
Toepassen	6Ø12	over L=B

Dwarskracht inkassing		
V _d	155.595	kN
b _w	500	mm
h	350	mm
c	20	mm
z	297	mm
f _{ck}	30	N/mm ²
f _{cd}	20	N/mm ²
v ₁	0.552	
θ	5.47	graden
cotθ	10.441	
A _{sw}	0.12	mm ² /mm
A _{s,TOE}	d	10 mm
	aantal	3 stuks
	A _s /mm	1.41 mm ² /mm
UC	AKKOORD	
Toepassen	3Ø10	



7.2.8.2 Inkassingen en kelderwand t.p.v. F1, F2

$F_d = 1,1m \times (1,2 \times 95,5 + 1,5 \times 17,9) + 1,2 \times 100,0 = 286,8 \text{ kN (} q_6 + F_1 \text{)}$

Wapening inkassing		
V _d	275.595	kN
B	600	mm
arm	500	mm
h	350	mm
c	20	mm
z	297	mm
f _s	435	N/mm ²
M _d	137.80	kNm
A _{s,ben}	1185	mm ²
A _{s,TOE}	d	16 mm
	aantal	6 stuks
	A _s	1206 mm ²
UC	AKKOORD	
Toepassen	6Ø16	over L=B

Dwarskracht inkassing		
V _d	275.595	kN
b _w	500	mm
h	350	mm
c	20	mm
z	297	mm
f _{ck}	30	N/mm ²
f _{cd}	20	N/mm ²
v ₁	0.552	
θ	9.83	graden
cotθ	5.776	
A _{sw}	0.37	mm ² /mm
A _{s,TOE}	d	10 mm
	aantal	3 stuks
	A _s /mm	1.41 mm ² /mm
UC	AKKOORD	
Toepassen	3Ø10	

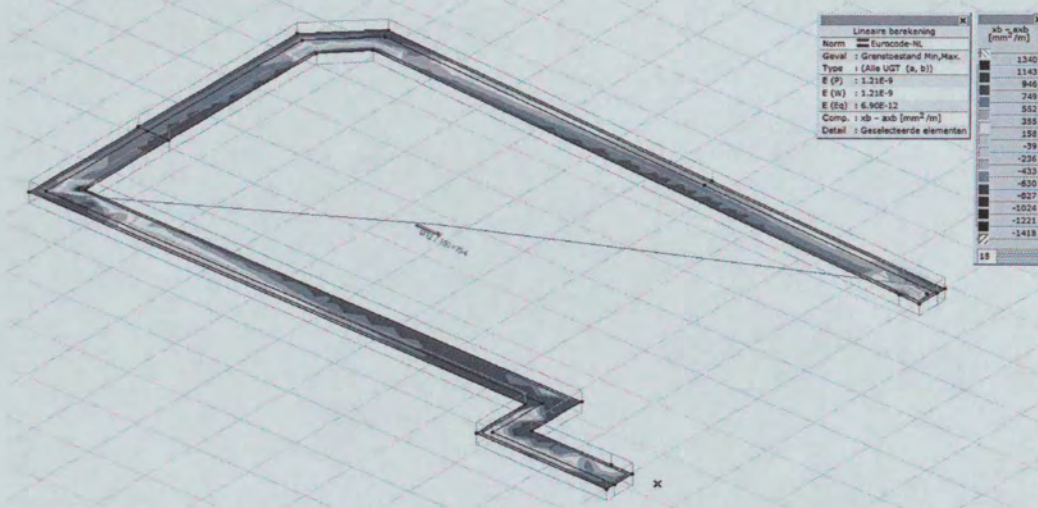


7.3 Extra wapening in plint

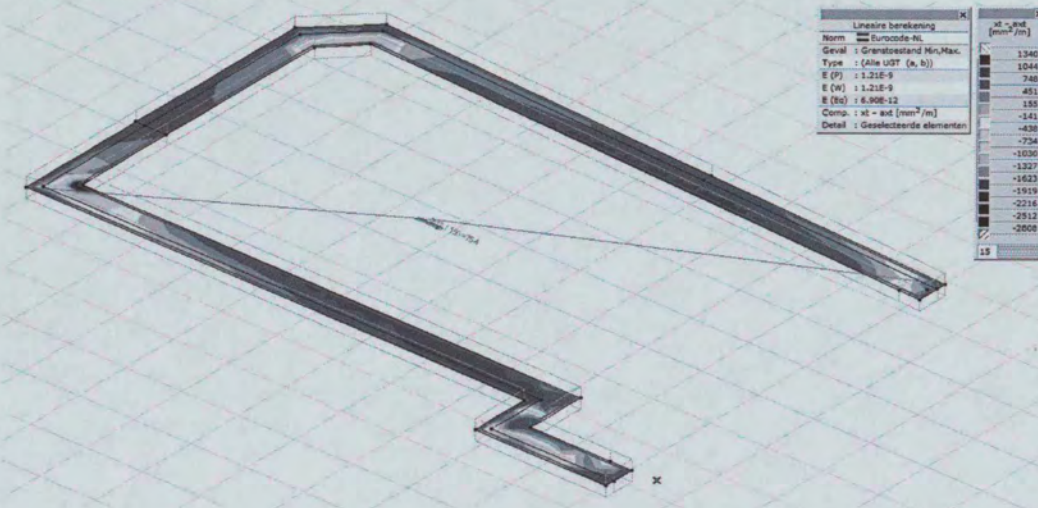
7.3.1 Extra wapening

Evenwijdig aan bouwmuur boven/onder $3\phi 16$

7.3.2 X-richting onder



7.3.3 X-richting boven



the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
 Patch reference numbers on UTT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.0

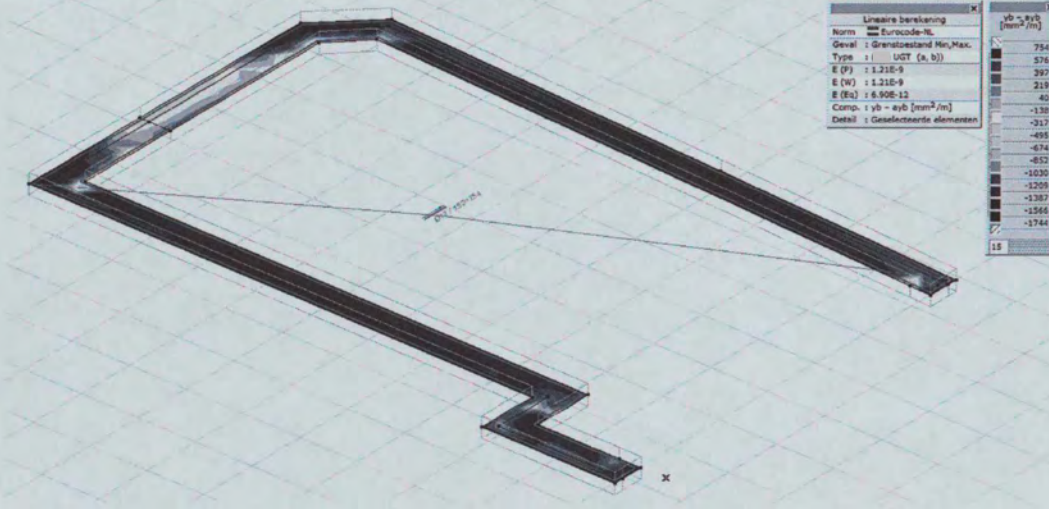
mm 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

inch 0 1 2 3 4 5 6 7 8 9 10

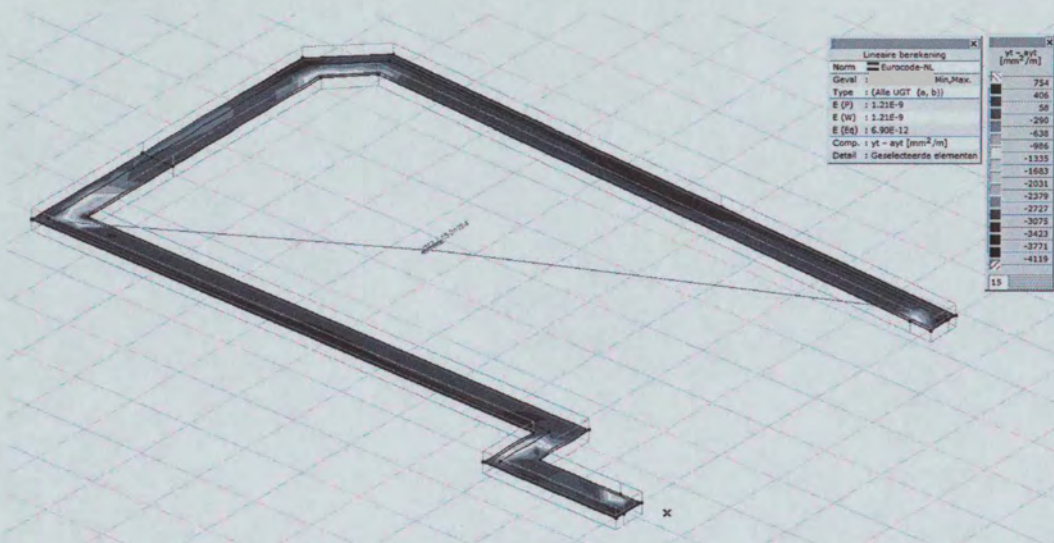
47

Image Engineering Scan Reference Chart T3263 Serial No.

7.3.4 Y-richting onder



7.3.5 Y-richting boven



the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 C7 B7 A7 C8 B8 A8 C9 B9
 Patch Reference numbers on UTT
 Image Engineering Scan Reference Chart TE263 Serial No. 47

7.4 Extra wapening in kelderwanden

7.4.1 Extra verticale wapening kelderwand t.p.v. F8

F8 (horizontale windbelasting) = 28,4kN >> M_d 1,5x1,02x28,4 = 43,45kNm
 F8 (verticale windbelasting) = 165kN >> M_d 1,5x0,25x165 = 61,88kNm (maatgevend)

Extra wapening binnen					
Onderdeel		belasting [kN]	factor	arm [m]	moment [kNm]
q9	PB	4.5	1.2	0.25	1.35
	VB	0	1.5	0.25	0
F8	PB	45.8	1.2	0.25	13.74
	VB	56.6	1.5	0.25	21.23
wind	verticaal	165	1.5	0.25	61.88
TOTAAL					98.2

Extra wapening kelderwand binnen		
B	1000 mm	
h	250 mm	
c	20 mm	
z	207 mm	
f _s	435 N/mm ²	
M _d	98.19 kNm	
A _s ;aanw	d	12 mm
	hoh	150 mm
	A _s /m	754 mm ² /m
A _s ben;TOT	1090 mm ²	
A _s ben;EXTRA	337 mm ²	
A _s ;extra	d	12 mm
	aantal	6 mm
	A _s	678 mm ²
A _s ;TOT	1432 mm ²	
UC	AKKOORD	
Toepassen	6Ø12 over L=B	

Extra wapening buiten					
Onderdeel		belasting [kN]	factor	arm [m]	moment [kNm]
q9	PB	4.5	0.9	0.25	1.01
	VB	0	0	0.25	0
F8	PB	45.8	0.9	0.25	10.31
	VB	56.6	0	0.25	0
wind	verticaal	-165	1.5	0.25	-61.88
TOTAAL					-50.6

Extra wapening kelderwand buiten		
B	1000 mm	
h	250 mm	
c	35 mm	
z	193.5 mm	
f _s	435 N/mm ²	
M _d	50.56 kNm	
A _s ;aanw	d	12 mm
	hoh	150 mm
	A _s /m	754 mm ² /m
A _s ben;TOT	601 mm ²	
A _s ben;EXTRA	-153 mm ²	
A _s ;extra	d	12 mm
	aantal	2 mm
	A _s	mm ²
A _s ;TOT	754 mm ²	
UC	AKKOORD	
Toepassen	2Ø12 over L=B	



7.4.2 Extra verticale wapening kelderwand t.p.v. F9

Extra wapening binnen					
Onderdeel		belasting [kN]	factor	arm [m]	moment [kNm]
q9	PB	4.5	1.2	0.25	1.35
	VB	0	1.5	0.25	0
F9	PB	10	1.2	0.25	3
Wind	Verticaal	165	1.5	0.25	61.88
TOTAAL					66.2

Extra wapening kelderwand binnen		
B		1000 mm
h		250 mm
c		20 mm
z		207 mm
f _s		435 N/mm ²
M _d		66.23 kNm
A _s ;aanw	d	12 mm
	hoh	150 mm
	A _s /m	754 mm ² /m
A _s ben;TOT		735 mm ²
A _s ben;EXTRA		-18 mm ²
A _s ;extra	d	12 mm
	aantal	2 mm
	A _s	226 mm ²
A _s ;TOT		980 mm ²
UC	AKKOORD	
Toepassen	2Ø12	over L=B

Extra wapening buiten					
Onderdeel		belasting [kN]	factor	arm [m]	moment [kNm]
q9	PB	4.5	0.9	0.25	1.01
	VB	0	0	0.25	0
F9	PB	10	0.9	0.25	2.25
Wind	Verticaal	-165	1.5	0.25	-61.88
TOTAAL					-58.6

Extra wapening kelderwand buiten		
B		1000 mm
h		250 mm
c		35 mm
z		193.5 mm
f _s		435 N/mm ²
M _d		58.61 kNm
A _s ;aanw	d	12 mm
	hoh	150 mm
	A _s /m	754 mm ² /m
A _s ben;TOT		696 mm ²
A _s ben;EXTRA		-57 mm ²
A _s ;extra	d	12 mm
	aantal	2 mm
	A _s	mm ²
A _s ;TOT		754 mm ²
UC	AKKOORD	
Toepassen	2Ø12	over L=B

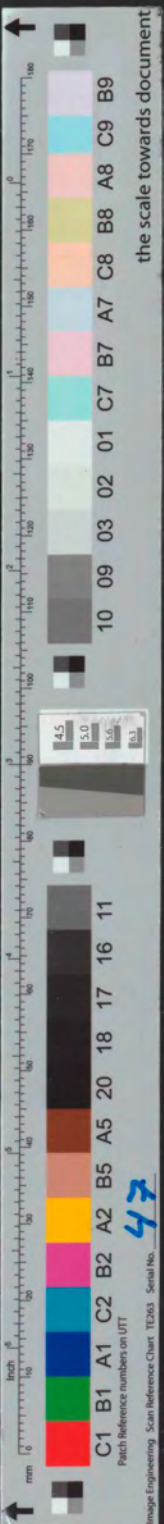


7.4.3 Extra verticale wapening kelderwand t.p.v. F1

Wapening kelderwand		
V _d	261.45	kN
B	1000	mm
h	250	mm
c	20	mm
z	207	mm
f _s	435	N/mm ²
L	500	mm
M _d	130.73	kNm
As;aanw	d	12 mm
	hoh	100 mm
	As/m	1130 mm ² /m
Asben;TOT		1452 mm ²
Asben;EXTRA		321 mm ²
As;extra	d	12 mm
	aantal	4 mm
	As	452 mm ²
As;TOT		1583 mm ²
UC		AKKOORD
		over
Toepassen	4Ø12	L=B

7.4.4 Extra verticale wapening kelderwand t.p.v. F2

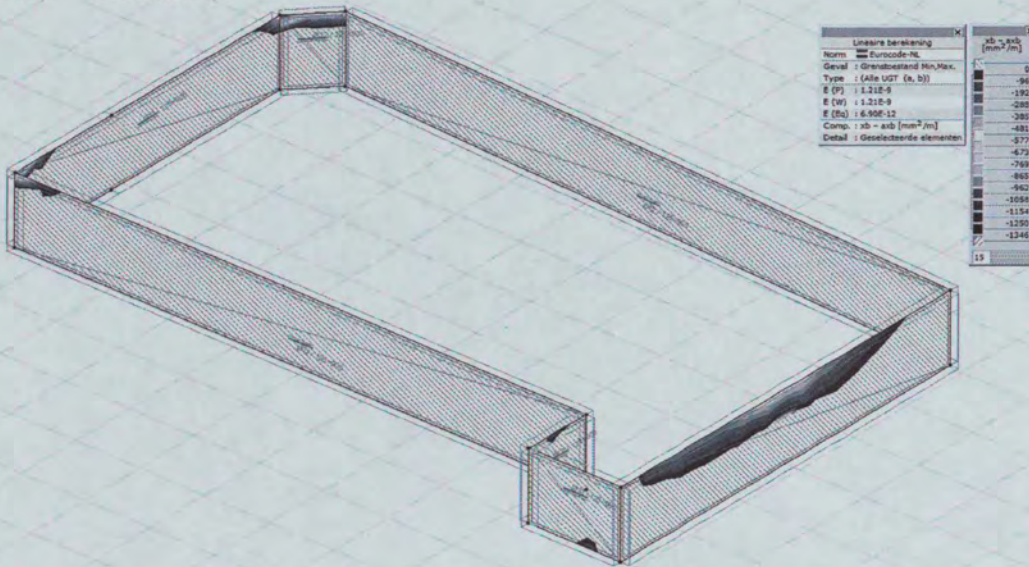
Wapening kelderwand		
V _d	251.46	kN
B	1000	mm
h	250	mm
c	20	mm
z	207	mm
f _s	435	N/mm ²
L	500	mm
M _d	125.73	kNm
As;aanw	d	12 mm
	hoh	150 mm
	As/m	754 mm ² /m
Asben;TOT		1396 mm ²
Asben;EXTRA		643 mm ²
As;extra	d	12 mm
	aantal	6 mm
	As	678 mm ²
As;TOT		1432 mm ²
UC		AKKOORD
		over
Toepassen	6Ø12	L=B



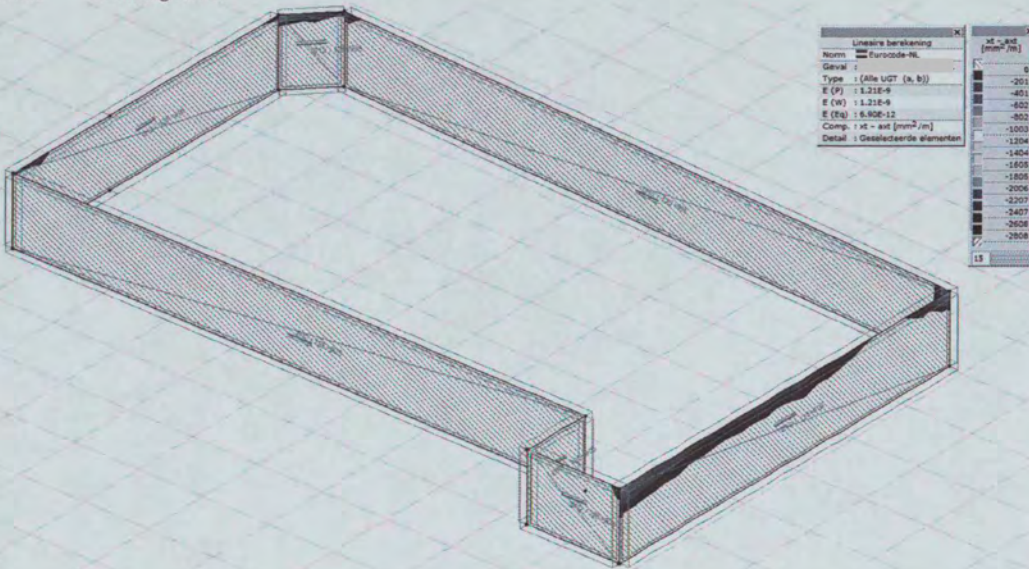
7.4.5 Extra wapening
 Boven in kelderwand evenwijdig aan bouwmuur boven/onder 2Ø16

7.4.6 Overzicht MatrixFrame berekening

7.4.6.1 X-richting onder



7.4.6.2 X-richting boven



↑ mm 0 100 200 300 400 500 600 700 800 900 1000

↑ inch 0 10 20 30 40 50 60 70 80 90 100

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.0

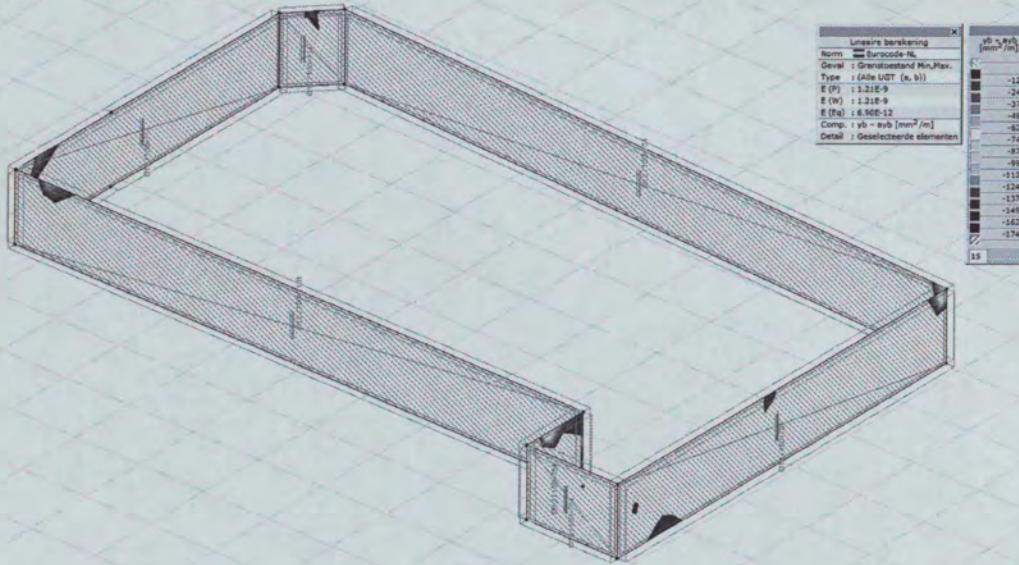
C1 B1 A1 C2 B2 A2 B5 A5 A20 18 17 16 11

Patch Reference numbers on UTT

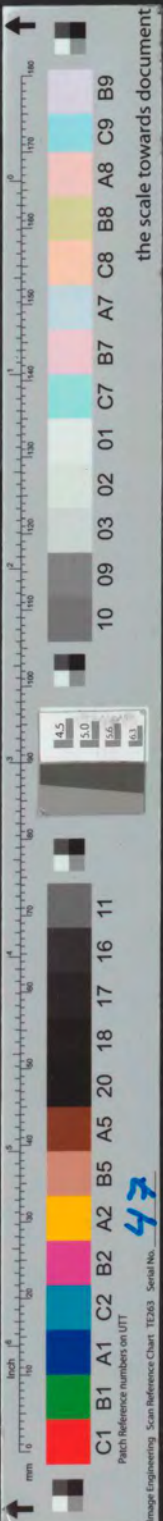
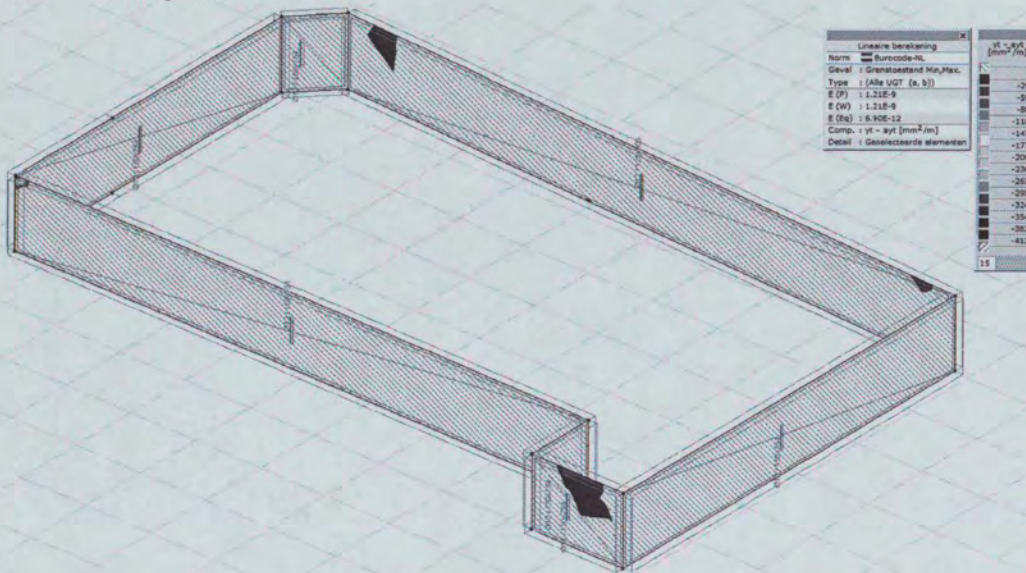
Image Engineering Scan Reference Chart TE263 Serial No. 47

the scale towards document

7.4.6.3 Y-richting onder

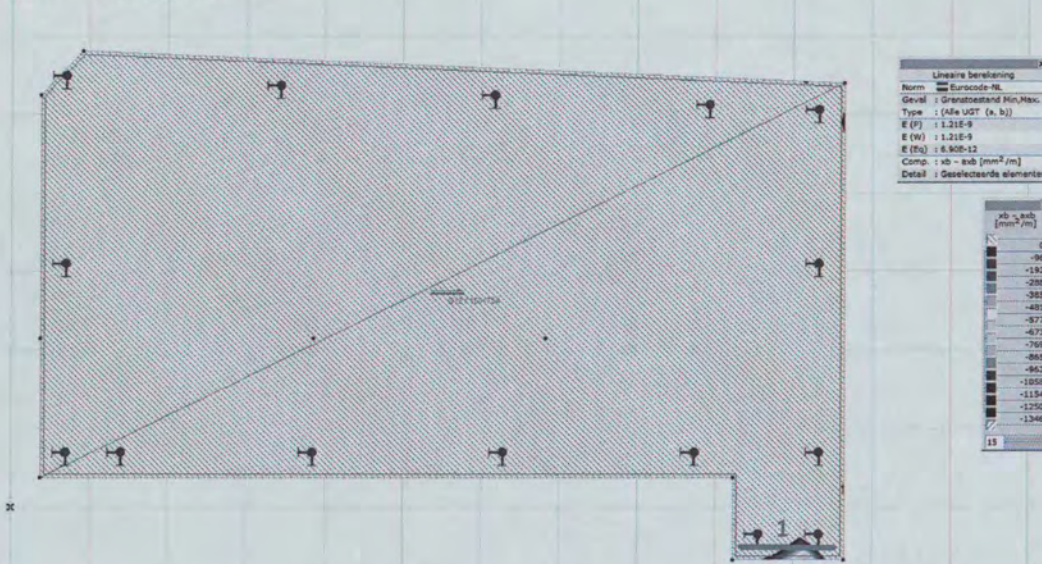


7.4.6.4 Y-richting boven



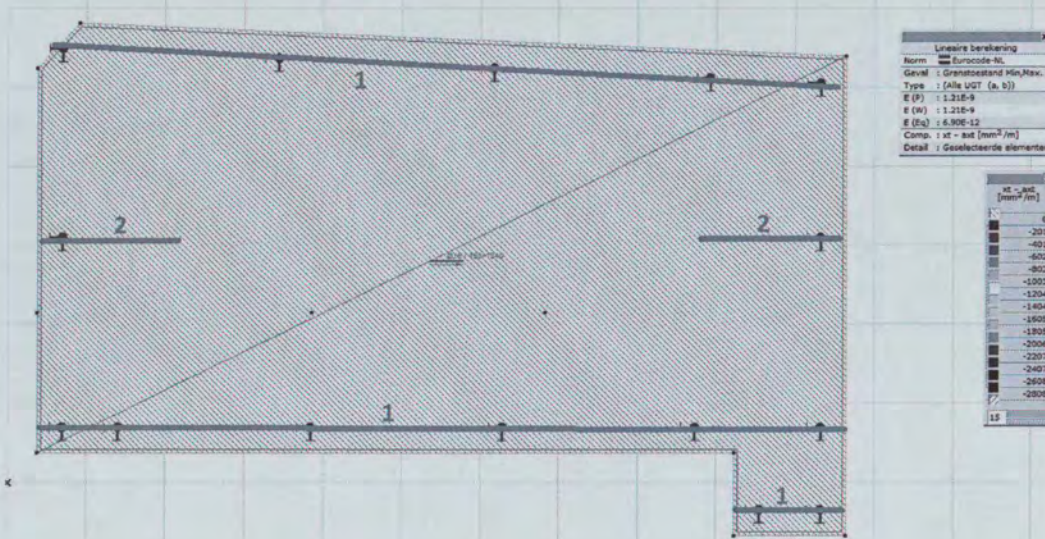
7.5 Extra wapening vloer

7.5.1 X-richting onder

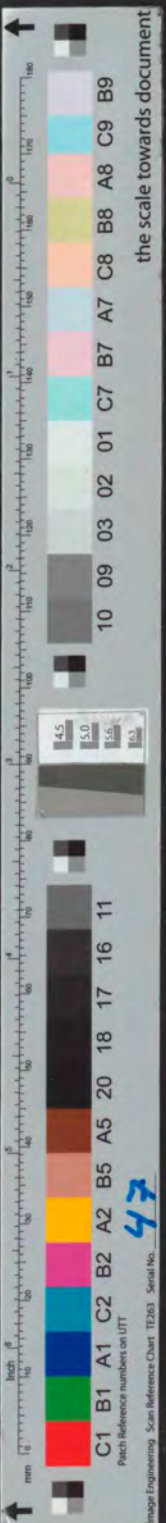


1 2Ø12

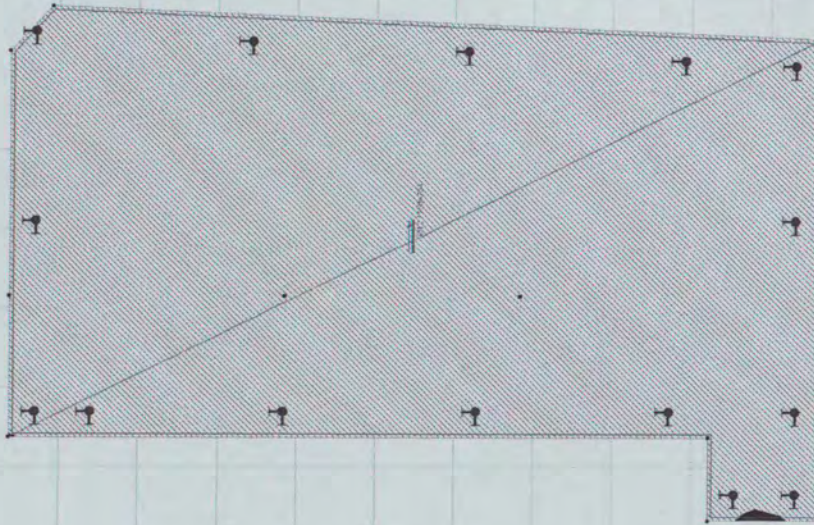
7.5.2 X-richting boven



1 2Ø16
 2 2Ø16, L=2,5m



7.5.3 Y-richting onder



Lineaire berekening

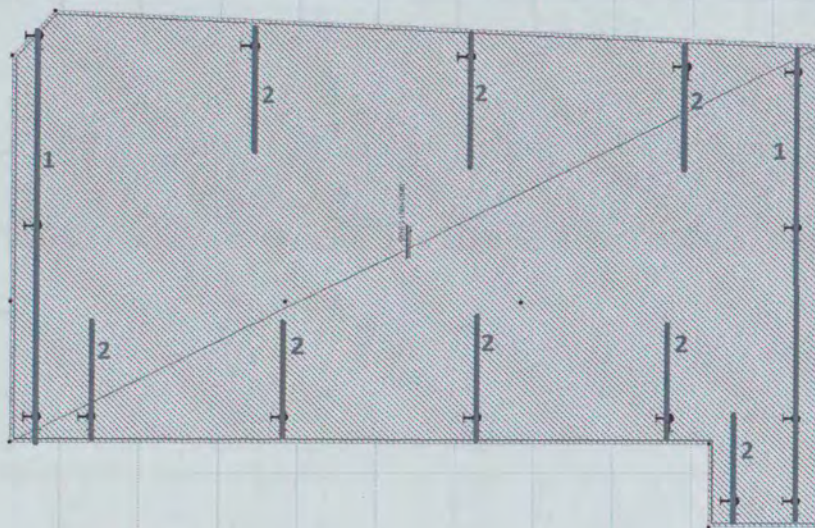
Norm: Eurocode-NL
 Geval: Grenstoestand Min/Max.
 Type: (Alle UGT (a, b))
 E (P) : 1.21E+9
 E (W) : 1.21E+9
 E (Ea) : 6.90E+12
 Comp. : yb - ayb [mm²/m]
 Detail : Geselecteerde elementen

yb - ayb [mm²/m]

0
-125
-249
-374
-498
-623
-748
-872
-997
-1121
-1246
-1371
-1495
-1620
-1744

Geen

7.5.4 Y-richting boven



Lineaire berekening

Norm: Eurocode-NL
 Geval: Grenstoestand Min/Max.
 Type: (Alle UGT (a, b))
 E (P) : 1.21E+9
 E (W) : 1.21E+9
 E (Ea) : 6.90E+12
 Comp. : yt - ayt [mm²/m]
 Detail : Geselecteerde elementen

yt - ayt [mm²/m]

0
-205
-390
-575
-760
-945
-1130
-1315
-1500
-1685
-1870
-2055
-2240
-2425
-2610
-2795
-2980
-3165
-3350
-3535
-3720
-3905
-4090
-4275

- 1 3Ø16
- 2 3Ø16, L=2,5m

↑

mm

100 200 300 400 500 600 700 800 900 1000

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.6 6.3

C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11

Patch Reference numbers on UTT

47

↑

Inch

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Image Engineering - Scan Reference Chart - TE263 - Serial No.

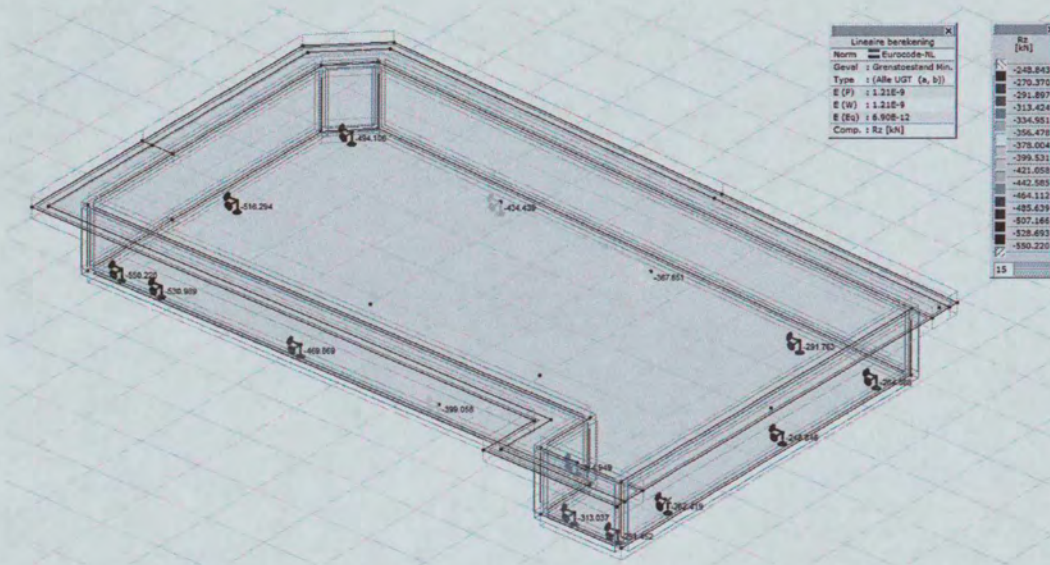
the scale towards document

7.6 Palen

7.6.1 Uitgangspunten

Er worden schroefinjectiepalen toegepast. De paalberekening is door Hektec gedaan (rapport PB 17.0436-1 d.d. 28 maart 2017)

7.6.2 Overzicht maximaal optredende paalbelastingen



7.6.3 Overzicht maximaal toelaatbare paalbelastingen

De maximaal toelaatbare paalbelasting is 590kN (Zie rapport Hektec PB 17.0436-1 d.d. 28 maart 2017)

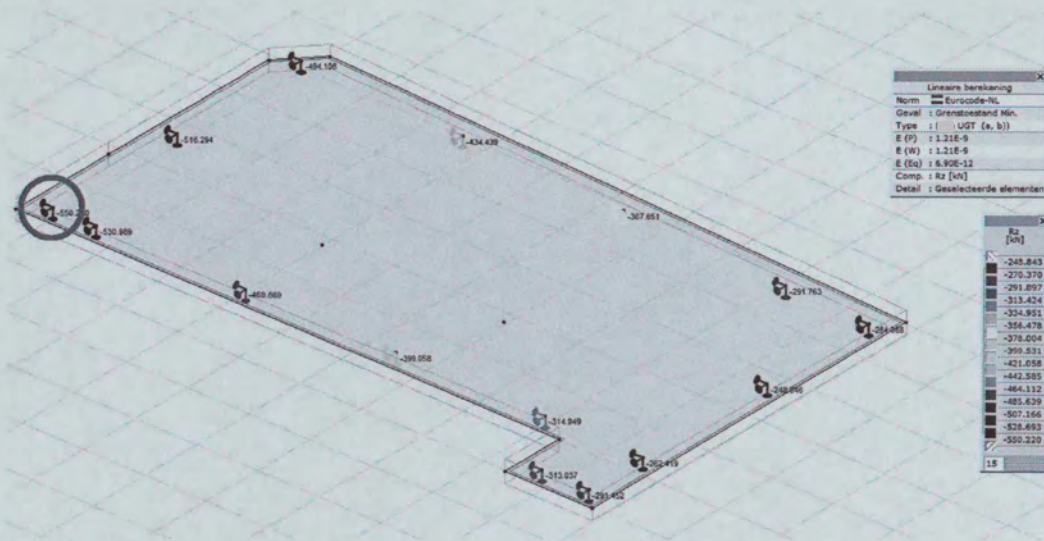
the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 C7 B7 A7 C8 B8 A8 B9 A9 B9

Patch Reference numbers on UTT
 Image Engineering Scan Reference Chart TE263 Serial No. 47

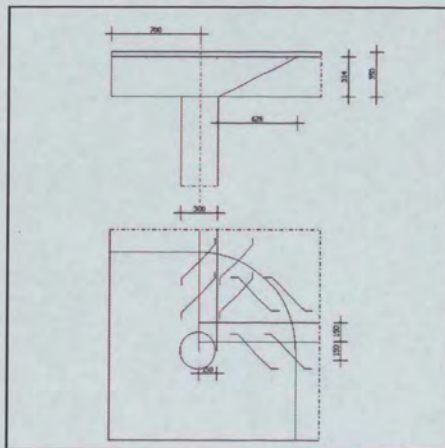
7.7 Pons

7.7.1 Hoekpaal 1



Er wordt een hoekpaal beschouwd. Optredende paalbelasting 550,2kN. Randafstanden 700mm en 700mm.

Aanwezige wapening (minimale bijleg wapening aangehouden)
 x-richting $\varnothing 16-150+3\varnothing 16$ = $\varnothing 16-103$ gemiddeld
 y-richting $\varnothing 16-150+2\varnothing 16$ = $\varnothing 16-115$ gemiddeld



2 opgebogen staven $\varnothing 12$, h.o.h. 300mm op 440mm vanaf hart paal in beide richtingen
 2 opgebogen staven $\varnothing 12$, h.o.h. 300mm op 710mm vanaf hart paal in beide richtingen

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 C7 B7 A7 C8 B8 A8 C9 B9
 Patch Reference numbers on IT7
 4.5 5.0 5.5
 Image Engineering Scan Reference Chart TE263 Serial No. 47

Projectnaam		Projectnummer	
Omschrijving		Constructeur	
Opdrachtgever		Eenheden	m, kN, kNm
Bestand	C:\CC\Werken\17021 Willemsparkweg 220 Amsterdam\Core Constructies\Fundering\Rev2\Pons hoekpaal 1.mxf		

1. Pons (NEN-EN1992-1-1+C2:2010/NB:2011)

PONS

CONSTRUCTIE GEGEVENS

Beton		C30/37	Staal		B500A
Totale plaat hoogte	h	350 mm	Rekensterkte dwarskr. wap.	fyed,ef	329 N/mm ²
Nuttige plaatdikte	d1	322 mm	Nuttige plaatdikte	d2	306 mm
Effectieve plaatdikte	d	314 mm	Hoek ponswapening	Alfa	45°
Breedte lastgebied	C1	300 mm	Diepte lastgebied	C2	300 mm
Afstand hart kolom-rand 1		700 mm	Afstand hart kolom-rand 2		700 mm
Dekking boven		20 mm	Richting 1e wap. net		Y
Wap. net Y-richting		R16-103	Wap. net Z-richting		R16-115
Dekking onder		35 mm	Richting laatste wap. net		Z
Wap. net Y-richting		R12-150	Wap. net Z-richting		R12-150
Verhouding wapening	w0y	0.61 %	Verhouding wapening	w0z	0.57 %
Verhouding wapening	w0	0.59 %			

BELASTINGEN

Normaalkracht	Fd	550.20 kN	Rekenbelasting	p	15.80 kN/m ²
Moment	Md1	0.00 kNm	Moment	Md2	0.00 kNm
Geen excentriciteit			Verhouding excentriciteit	Beta	1.00

BEREKENING VAN HOEKKOLOM - PUNTVORMIGE OPLEGGING

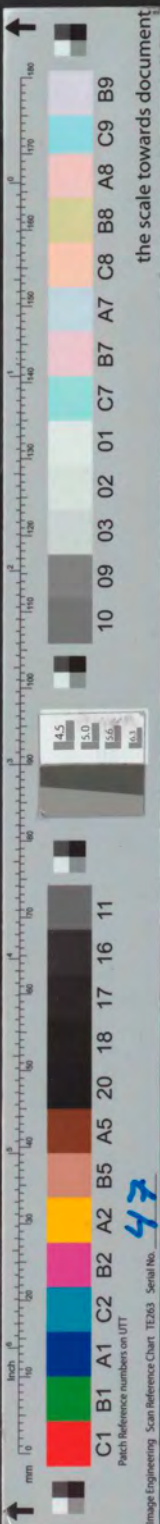
Perimeter	rContY	rContZ	VEd	ul	Beta	vEd	vRd;c	vRd;max	vRd;s	Asw / sr	Controle
u0	150	150	539.98	600	1.00	2.87		4.22			Ok
u1	778	778	518.85	2622	1.00	0.63	0.56	4.22	0.21	1.6	Ok
u ult	953	953	511.21	2898	1.00	0.56	0.56	4.22			Ok
-	mm	mm	kN	mm	-	N/mm ²	N/mm ²	N/mm ²	N/mm ²	mm ² /mm	-

PONSWAPENING MET OPGEBOGEN STAVEN

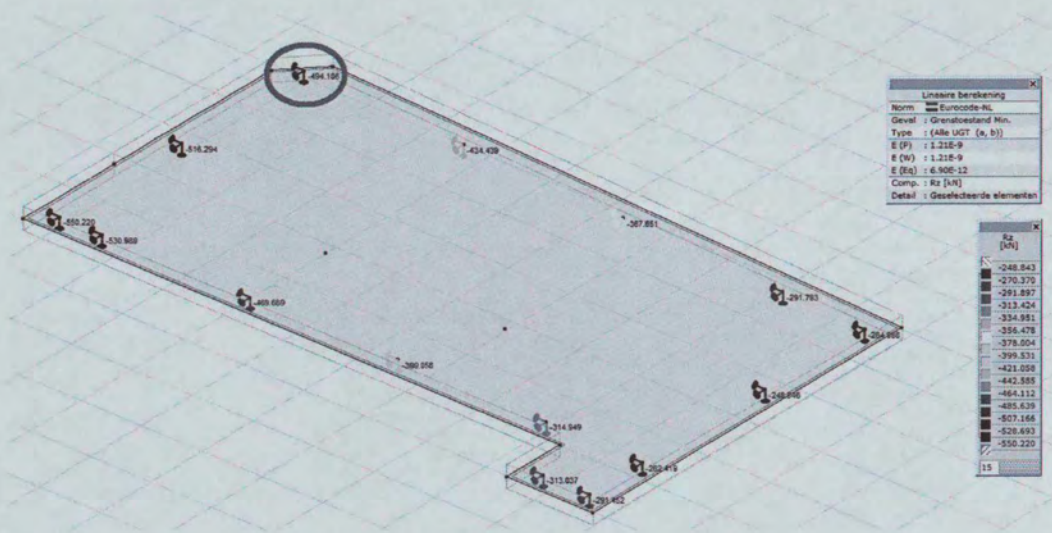
Perimeter	rCont	x	Check rCont	Wapening	Asw;Prov < Asw;Req/4	sr	st	Rik_min < Rdiam
1 Y	442	159 - 424	Volgende	2R12-450	226 > 211	269	450	8.5 < 12
1 Z	440	155 - 424	Volgende	2R12-300	226 > 208	265	300	7.0 < 12
2 Y	711	428 - 693	Stop	2R12-450	226 > 211	269	450	8.5 < 12
2 Z	705	420 - 689	Stop	2R12-300	226 > 208	265	300	7.0 < 12
-	mm	mm	-	-	mm ²	mm	mm	mm

CONTROLE

Perimeter	Xmid	Check rCont	st < st,max	Asw_min < Asw,R
1 X	292	159 < 157 (0.5d)	75 < 79 (0.25d)	60 < 113
		292 > 332 (x out - kd)	450 < 471	
1 Y	290	157 < 157 (0.5d)	0 < 79 (0.25d)	39 < 113
		290 > 332 (x out - kd)	300 < 471	
2 X	561	561 > 332 (x out - kd)	450 < 628	60 < 113
2 Y	555	555 > 332 (x out - kd)	300 < 628	39 < 113
-	mm	-	mm	mm ²

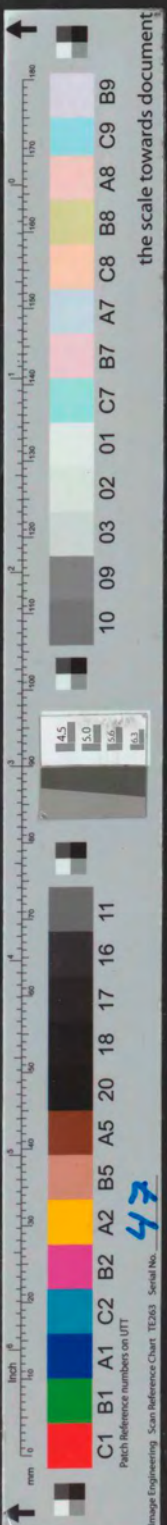


7.7.2 Hoekpaal 2



De hoekpaal staat onder de kelderwand.

Er is geen ponswapening benodigd.



7.7.3 Overige hoekpalen

Er wordt een hoekpaal beschouwd. Optredende paalbelasting 313,0kN. Randafstanden 700mm en 700mm.

Aanwezige wapening (minimale bijleg wapening aangehouden)
 x-richting Ø16-150+2Ø16 = Ø16-79 gemiddeld
 y-richting Ø16-150+2Ø16 = Ø16-79 gemiddeld

Er is geen ponswapening benodigd.

Projectnaam		Projectnummer	
Omschrijving		Construcleur	
Opdrachtgever		Eenheden	m, kN, kNm
Bestand	C:\CC\Werk\17021 Willemsparkweg 220 Amsterdam\Core Constructies\Fundering\Rev2\Pons hoekpaal_3.mxd		

1. Pons (NEN-EN1992-1-1+C2:2010/NB:2011)

PONS

CONSTRUCTIE GEGEVENS

		C30/37	Staal		B500A
Totale plaat hoogte	h	350 mm	Rekensterkte dwarskr. wap.	fyed,el	329 N/mm ²
Nuttige plaatdikte	d1	322 mm	Nuttige plaatdikte	d2	306 mm
Effectieve plaatdikte	d	314 mm	Hoek ponswapening	Alfa	45°
Breedte lastgebied	C1	300 mm	Diepte lastgebied	C2	300 mm
Afstand hart kolom-rand 1		700 mm	Afstand hart kolom-rand 2		700 mm
Dekking boven		20 mm	Fiching 1e wap. net		Y
Wap. net Y-richting		R16-103	Wap. net Z-richting		R16-115
Dekking onder		35 mm	Fiching laatste wap. net		Z
Wap. net Y-richting		R12-150	Wap. net Z-richting		R12-150
Verhouding wapening	w0y	0.61 %	Verhouding wapening	w0z	0.57 %
Verhouding wapening	w0	0.59 %			

BELASTINGEN

Normaalkracht	Fd	313.00 kN	Rekenbelasting	p	15.80 kN/m ²
Moment	Md1	0.00 kNm	Moment	Md2	0.00 kNm
Geen excentriciteit			Verhouding excentriciteit	Beta	1.00

BEREKENING VAN HOEKKOLOM - PUNTVORMIGE OPLEGGING

Perimeter	rContY	rContZ	VEd	ui	Beta	vEd	vEd;c	vEd;max	vEd;s	Asw / sr	Controle
u0	150	150	502.78	600	1.00	1.61		4.22		0.0	Ok
u1	778	778	281.65	2622	1.00	0.34	0.56	4.22	0.00	0.0	Ok
	mm	mm	kN	mm	-	N/mm ²	N/mm ²	N/mm ²	N/mm ²	mm ² /mm	-

PONSWAPENING MET OPGEBOGEN STAVEN

Perimeter	rCont	x	Check rCont	Wapening	Asw;Prov < Asw;Req/4	sr	st	Rkr_min < Rdiam
	mm	mm	-	-	mm ²	mm	mm	mm

CONTROLE

Perimeter	Xmid	Check rCont	st < st,max	Asw_min < Asw_R
	mm	-	mm	mm ²



7.7.4 Randpalen

Er wordt een Randpaal beschouwd. Optredende paalbelasting 531,0kN. Randafstand 700mm.

Aanwezige wapening (minimale bijleg wapening aangehouden)

x-richting $\emptyset 16-150+3\emptyset 16$ = $\emptyset 16-103$ gemiddeld
 y-richting $\emptyset 16-150+2\emptyset 16$ = $\emptyset 16-115$ gemiddeld

Er is geen ponswapening benodigd.

Projectnaam		Projectnummer	
Omschrijving		Constructeur	
Opdrachtgever		Eenheden	m, kN, kNm
Bestand	C:\CC\Werken\17021 Willemsparkweg 220 Amsterdam\Core Constructies\Fundering\Rev2\Pons randpalen.mxf		

1. Pons (NEN-EN1992-1-1+C2:2010/NB:2011)

PONS

CONSTRUCTIE GEGEVENS

Beton		C30/37	Staal		B500A
Totale plaat hoogte	h	350 mm	Rekensterkte dwarskr. wap.	fyed,ef	329 N/mm ²
Nuttige plaatdikte	d1	322 mm	Nuttige plaatdikte	d2	300 mm
Effectieve plaatdikte	d	314 mm	Hoek ponswapening	Alfa	45°
Breedte lastgebied	C1	300 mm	Diepte lastgebied	C2	300 mm
Alstand hart kolom-rand 1		700 mm			
Dekking boven		20 mm	Richting 1e wap. net		Y
Wap. net Y-richting		R16-103	Wap. net Z-richting		R16-115
Dekking onder		35 mm	Richting laatste wap. net		Z
Wap. net Y-richting		R12-150	Wap. net Z-richting		R12-150
Verhouding wapening	w0y	0.81 %	Verhouding wapening	w0z	0.57 %
Verhouding wapening	w0	0.59 %			

BELASTINGEN

Normaalvracht	Fd	531.00 kN	Rekenbelasting	p	15.80 kN/m ²
Moment	Mc1	0.00 kNm	Moment	Mc2	0.00 kNm
Geen excentriciteit			Verhouding excentriciteit	Beta	1.00

BEREKENING VAN RANDKOLOM - PUNTVORMIGE OPLEGGING

Perimeter	rContY	rContZ	VEd	u1	Beta	vEd	vRd;c	vRd;max	vRd;s	Asw / sr	Controle
u0			528.24	900	1.00	1.87		4.22		0.0	Ok
u1	778	778	499.89	3844	1.00	0.41	0.56	4.22	0.00	0.0	Ok
	mm	mm	kN	mm	-	N/mm ²	N/mm ²	N/mm ²	N/mm ²	mm ² /mm	-

PONSWAPENING MET OPGEBOGEN STAVEN

Perimeter	rCont	x	Check rCont	Wapening	Asw,Prov < Asw,Req/4	sr	st	Rk,min < Rdiam
	mm	mm	-	-	mm ²	mm	mm	mm

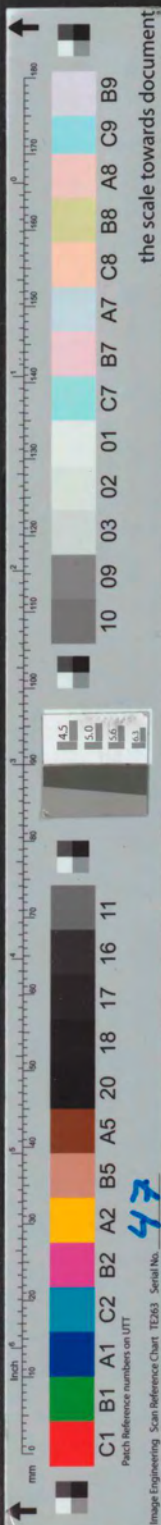
CONTROLE

Perimeter	Xmid	Check rCont	st < st,max	Asw,min < Asw,R
	mm	-	mm	mm ²



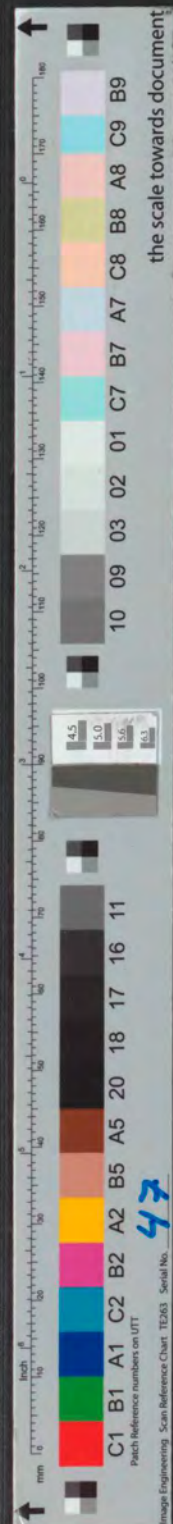
8 Bijlagen

8.1 Bijlage uitdraai AxisVM berekening



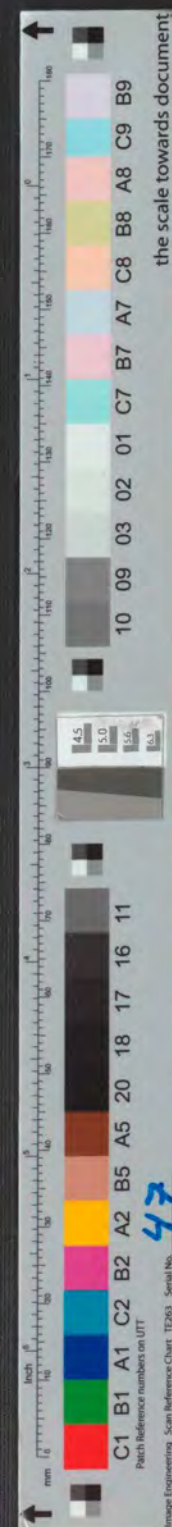
Rapport

Onderdeel	Pagina
Rapport Overzicht	6
Geometrie	6
ST1	7
ST2	7
ST3	8
ST4	8
ST5	9
Berekende maatgevende combinaties uit belastinggevallen	9
[I], Lineair,(Auto) Grenstoestand, Rz (Interne krachten knoopoplegging), Lijnen	12
[I], Lineair,(Auto) Grenstoestand Min., Rz (Interne krachten knoopoplegging), Kleuren 2D	12
[RI], > ~2, Lineair,(Auto) Grenstoestand, xb – axb, Kleuren 2D, Bovenaanzicht	13
[RI], > ~2, Lineair,(Auto) Grenstoestand, xb – axb, Kleuren 2D, Bovenaanzicht 2	13
[RI], Lineair,(Auto) Grenstoestand, axb, Kleuren 2D	14
[RI], Lineair,(Auto) Grenstoestand, xb – axb, Kleuren 2D	14
[RI], Lineair,(Auto) Grenstoestand, xb, Kleuren 2D	15
Wanden xb – axb, Kleuren 2D	15
Wanden xb – axb, Kleuren 2D 2	16
[RI], > ~2, Lineair,(Auto) Grenstoestand, xt – axb, Kleuren 2D, Bovenaanzicht	16
[RI], > ~2, Lineair,(Auto) Grenstoestand, xt – axb, Kleuren 2D, Bovenaanzicht 2	17
[RI], Lineair,(Auto) Grenstoestand, axb, Kleuren 2D	17
[RI], Lineair,(Auto) Grenstoestand, xt – axb, Kleuren 2D	18
[RI], Lineair,(Auto) Grenstoestand, xt, Kleuren 2D	18
Wanden xt – axb, Kleuren 2D	19
Wanden xt – axb, Kleuren 2D 2	19
[RI], > ~2, Lineair,(Auto) Grenstoestand, yb – ayb, Kleuren 2D, Bovenaanzicht	20
[RI], > ~2, Lineair,(Auto) Grenstoestand, yb – ayb, Kleuren 2D, Bovenaanzicht 2	20
[RI], Lineair,(Auto) Grenstoestand, ayb, Kleuren 2D	21
[RI], Lineair,(Auto) Grenstoestand, yb – ayb, Kleuren 2D	21
[RI], Lineair,(Auto) Grenstoestand, yb, Kleuren 2D	22
Wanden yb – ayb, Kleuren 2D	22
Wanden yb – ayb, Kleuren 2D 2	23
[RI], > ~2, Lineair,(Auto) Grenstoestand, yt – ayt, Kleuren 2D, Bovenaanzicht	23
[RI], > ~2, Lineair,(Auto) Grenstoestand, yt – ayt, Kleuren 2D, Bovenaanzicht 2	24
[RI], Lineair,(Auto) Grenstoestand, ayt, Kleuren 2D	24
[RI], Lineair,(Auto) Grenstoestand, yt – ayt, Kleuren 2D	25
[RI], Lineair,(Auto) Grenstoestand, yt, Kleuren 2D	25
Wanden yt – ayt, Kleuren 2D	26
Wanden yt – ayt, Kleuren 2D 2	26
Modelgegevens	26
Materialen	27
Belastinggevallen	27
Belastinggroepen (Eurocode-NL)	27
Knopen	27
Domeinen	28
ST1: Knoopbelastingen	29
ST1: Vlak eigen gewicht	29
ST1: Eigen gewicht van domein	29
ST1: Domein puntlast	29
ST1: Domein vlaklast	29
ST1: Oppervlak lijnlast	30
ST2: Knoopbelastingen	30
ST2: Domein puntlast	30
ST2: Domein vlaklast	30
ST2: Oppervlak lijnlast	30
ST3: Domein vlaklast	31
ST4: Knoopbelastingen	31
ST5: Knoopbelastingen	31



Rapport

Onderdeel	Pagina
Logische onderdelen	31
Platen	31
Domein 1	31
Rapport Domein 1, Bovenaanzicht	32
Rapport Domein 1, ST1, Bovenaanzicht	32
ST1: Knoopbelastingen [Geselecteerd]	32
ST1: Vlak eigen gewicht [Geselecteerd]	33
ST1: Eigen gewicht van domein [Geselecteerd]	33
ST1: Domein puntlast [Geselecteerd]	33
ST1: Oppervlak lijnlast [Geselecteerd]	33
Rapport Domein 1, ST2, Bovenaanzicht	34
ST2: Domein puntlast [Geselecteerd]	34
ST2: Oppervlak lijnlast [Geselecteerd]	34
ST4: Knoopbelastingen [Geselecteerd]	34
ST5: Knoopbelastingen [Geselecteerd]	35
Verplaatsingen	35
Knoopverplaatsingen	35
Grenstoestand Min,Max.	35
Knoopverplaatsingen [Lineair,(BGT Quasi-blijvend) Grenstoestand, Geselecteerd]	35
Rapport [I], > C30/37, Lineair,(BGT Quasi-blijvend) Grenstoestand Min., eZ, Isolijnen, Bovenaanzicht	36
Rapport [I], > C30/37, Lineair,(BGT Quasi-blijvend) Grenstoestand Max., eZ, Isolijnen, Bovenaanzicht	37
Interne krachten	37
Vlakkrachten	37
Grenstoestand Min,Max.	37
Vlakkrachten [Lineair,(Alle UGT (a, b)) Grenstoestand, Geselecteerd]	37
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., nx, Isolijnen, Bovenaanzicht	38
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Max., nx, Isolijnen, Bovenaanzicht	39
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., ny, Isolijnen, Bovenaanzicht	39
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Max., ny, Isolijnen, Bovenaanzicht	40
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., nxy, Isolijnen, Bovenaanzicht	40
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Max., nxy, Isolijnen, Bovenaanzicht	41
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., mx, Isolijnen, Bovenaanzicht	41
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Max., mx, Isolijnen, Bovenaanzicht	42
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., my, Isolijnen, Bovenaanzicht	42
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Max., my, Isolijnen, Bovenaanzicht	43
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., mxy, Isolijnen, Bovenaanzicht	43
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Max., mxy, Isolijnen, Bovenaanzicht	44
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., vEd, Isolijnen, Bovenaanzicht	44
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Max., vEd, Isolijnen, Bovenaanzicht	45
Spanningen	45
Vlakspanningen	45
Grenstoestand Min,Max.	45
Vlakspanningen [Lineair,(Alle UGT (a, b)) Grenstoestand, Geselecteerd]	45
Betonontwerp	46
Wapeningshoeveelheden, Eurocode-NL	46
Grenstoestand Min,Max.	46
Wapeningshoeveelheden, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Geselecteerd]	46
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand, axb, Isolijnen, Bovenaanzicht	47
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand, ayb, Isolijnen, Bovenaanzicht	48
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand, axt, Isolijnen, Bovenaanzicht	48
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand, ayt, Isolijnen, Bovenaanzicht	49
Scheurwijdte, Eurocode-NL	49
Grenstoestand Min,Max.	49
Scheurwijdte, Eurocode-NL [Lineair,(BGT Frequent) Grenstoestand, Geselecteerd]	49
Afschuifweerstand, Eurocode-NL	49
Grenstoestand Min,Max.	49
Afschuifweerstand, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Geselecteerd]	50
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., VRd,c, Isolijnen, Bovenaanzicht	50
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Max., VRd,c, Isolijnen, Bovenaanzicht	51
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., (vEd-vRd,c), Isolijnen, Bovenaanzicht	51
Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Max., (vEd-vRd,c), Isolijnen, Bovenaanzicht	52
Domein 2	52



Rapport

Onderdeel	Pagina
Rapport Domein 2, Boveraanzicht	52
Rapport Domein 2, ST1, Boveraanzicht	53
ST1: Knoopbelastingen [Geselecteerd]	53
ST1: Vlak eigen gewicht [Geselecteerd]	53
ST1: Eigen gewicht van domein [Geselecteerd]	53
ST2: Knoopbelastingen [Geselecteerd]	53
ST4: Knoopbelastingen [Geselecteerd]	54
ST5: Knoopbelastingen [Geselecteerd]	54
Verplaatsingen	54
Knoopverplaatsingen	54
Grenstoestand Min,Max.	54
Knoopverplaatsingen [Lineair,(BGT Quasi-blijvend) Grenstoestand, Geselecteerd]	54
Rapport [I], > 350 mm, Lineair,(BGT Quasi-blijvend) Grenstoestand Min., eZ, Isolijnen, Boveraanzicht	55
Rapport [I], > 350 mm, Lineair,(BGT Quasi-blijvend) Grenstoestand Max., eZ, Isolijnen, Boveraanzicht	56
Interne krachten	56
Vlakkrachten	56
Grenstoestand Min,Max.	56
Vlakkrachten [Lineair,(Alle UGT (a, b)) Grenstoestand, Geselecteerd]	56
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., nx, Isolijnen, Boveraanzicht	57
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., nx, Isolijnen, Boveraanzicht	58
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., ny, Isolijnen, Boveraanzicht	58
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., ny, Isolijnen, Boveraanzicht	59
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., nxy, Isolijnen, Boveraanzicht	59
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., nxy, Isolijnen, Boveraanzicht	60
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., mx, Isolijnen, Boveraanzicht	60
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., mx, Isolijnen, Boveraanzicht	61
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., my, Isolijnen, Boveraanzicht	61
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., my, Isolijnen, Boveraanzicht	62
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., mxy, Isolijnen, Boveraanzicht	62
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., mxy, Isolijnen, Boveraanzicht	63
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., vEd, Isolijnen, Boveraanzicht	63
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., vEd, Isolijnen, Boveraanzicht	64
Spanningen	64
Vlakspanningen	64
Grenstoestand Min,Max.	64
Vlakspanningen [Lineair,(Alle UGT (a, b)) Grenstoestand, Geselecteerd]	64
Betonontwerp	65
Wapeningshoeveelheden, Eurocode-NL	65
Grenstoestand Min,Max.	65
Wapeningshoeveelheden, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Geselecteerd]	65
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand, axb, Isolijnen, Boveraanzicht	66
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand, ayb, Isolijnen, Boveraanzicht	67
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand, axt, Isolijnen, Boveraanzicht	67
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand, ayt, Isolijnen, Boveraanzicht	68
Scheurwijdte, Eurocode-NL	68
Scheurwijdte, Eurocode-NL [Lineair,(BGT Frequent) Grenstoestand, Geselecteerd]	68
Afschuifweerstand, Eurocode-NL	68
Grenstoestand Min,Max.	68
Afschuifweerstand, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Geselecteerd]	69
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., VRd,c, Isolijnen, Boveraanzicht	69
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., VRd,c, Isolijnen, Boveraanzicht	70
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., (vEd-vRd,c), Isolijnen, Boveraanzicht	70
Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., (vEd-vRd,c), Isolijnen, Boveraanzicht	71
Domein 10	71
Rapport Domein 10, Boveraanzicht	71
Rapport Domein 10, ST1, Boveraanzicht	72
ST1: Knoopbelastingen [Geselecteerd]	72
ST1: Vlak eigen gewicht [Geselecteerd]	72
ST1: Eigen gewicht van domein [Geselecteerd]	72
ST1: Domein vlaklast [Geselecteerd]	72
Rapport Domein 10, ST2, Boveraanzicht	73



Rapport

Onderdeel	Pagina
ST2: Knoopbelastingen [Geselecteerd]	73
ST2: Domein vlaklast [Geselecteerd]	73
Rapport Domein 10, ST3, Boveanaanzicht	74
ST3: Domein vlaklast [Geselecteerd]	74
Verplaatsingen	74
Knoopverplaatsingen	74
Grenstoestand Min,Max.	74
Knoopverplaatsingen [Lineair,(BGT Quasi-blijvend) Grenstoestand, Geselecteerd]	74
Rapport [I], >, Lineair,(BGT Quasi-blijvend) Grenstoestand Min., eZ, Isolijnen, Boveanaanzicht	76
Rapport [I], >, Lineair,(BGT Quasi-blijvend) Grenstoestand Max., eZ, Isolijnen, Boveanaanzicht	76
Interne krachten	76
Vlakkrachten	76
Grenstoestand Min,Max.	76
Vlakkrachten [Lineair,(Alle UGT (a, b)) Grenstoestand, Geselecteerd]	77
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., nx, Isolijnen, Boveanaanzicht	78
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., nx, Isolijnen, Boveanaanzicht	78
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., ny, Isolijnen, Boveanaanzicht	79
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., ny, Isolijnen, Boveanaanzicht	79
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., nxy, Isolijnen, Boveanaanzicht	80
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., nxy, Isolijnen, Boveanaanzicht	80
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., mx, Isolijnen, Boveanaanzicht	81
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., mx, Isolijnen, Boveanaanzicht	81
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., my, Isolijnen, Boveanaanzicht	82
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., my, Isolijnen, Boveanaanzicht	82
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., mxy, Isolijnen, Boveanaanzicht	83
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., mxy, Isolijnen, Boveanaanzicht	83
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., vEd, Isolijnen, Boveanaanzicht	84
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., vEd, Isolijnen, Boveanaanzicht	84
Spanningen	84
Vlakspanningen	84
Grenstoestand Min,Max.	84
Vlakspanningen [Lineair,(Alle UGT (a, b)) Grenstoestand, Geselecteerd]	85
Betonontwerp	85
Wapeningshoeveelheden, Eurocode-NL	85
Grenstoestand Min,Max.	85
Wapeningshoeveelheden, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Geselecteerd]	86
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand, axb, Isolijnen, Boveanaanzicht	86
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand, ayb, Isolijnen, Boveanaanzicht	87
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand, axt, Isolijnen, Boveanaanzicht	87
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand, ayt, Isolijnen, Boveanaanzicht	88
Scheurwijdte, Eurocode-NL	88
Grenstoestand Min,Max.	88
Scheurwijdte, Eurocode-NL [Lineair,(BGT Frequent) Grenstoestand, Geselecteerd]	88
Afschuifweerstand, Eurocode-NL	88
Grenstoestand Min,Max.	88
Afschuifweerstand, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Geselecteerd]	89
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., VRd,c, Isolijnen, Boveanaanzicht	89
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., VRd,c, Isolijnen, Boveanaanzicht	90
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., (vEd-vRd,c), Isolijnen, Boveanaanzicht	90
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., (vEd-vRd,c), Isolijnen, Boveanaanzicht	91



the scale towards document

Image Engineering Scan Reference Chart T2363 Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

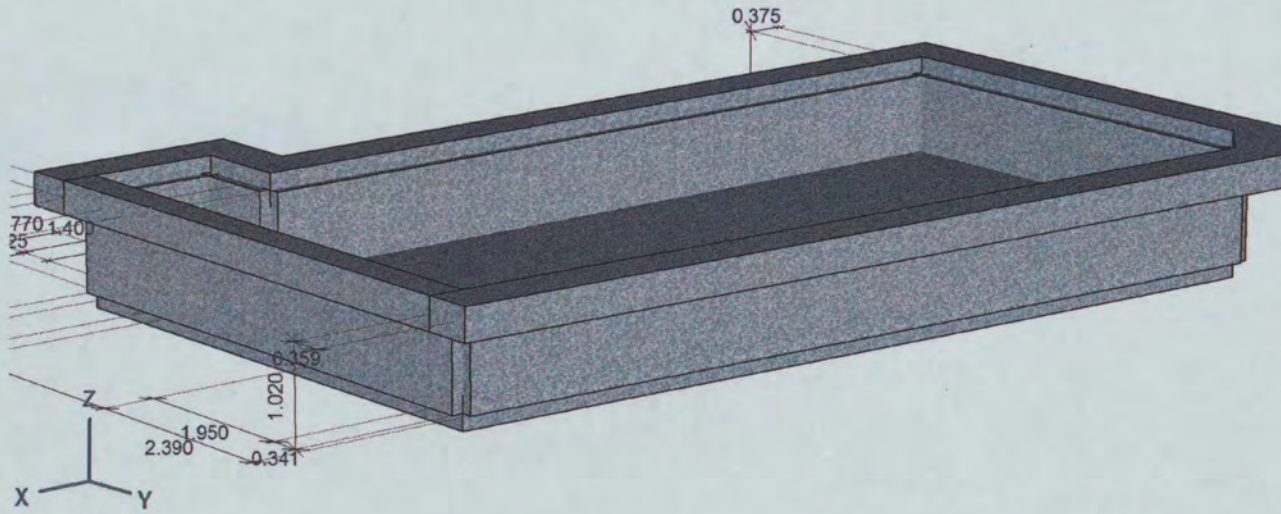
Constructeur: Core Constructies

Model: 17021-rev2.axs

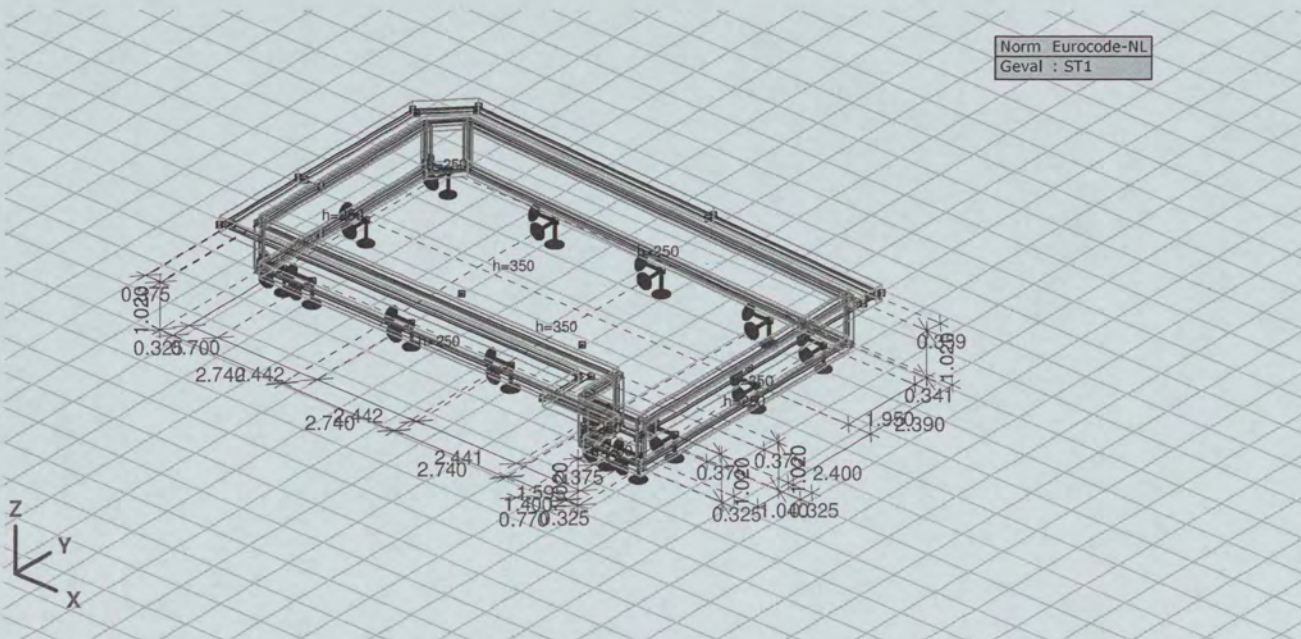
9/22/2017

Pag. 6

Norm Eurocode-NL
Geval : ST2



Rapport Overzicht



Geometrie

Norm Eurocode-NL
Geval : ST1

the scale towards document

A vertical color calibration chart and scale bar. The chart includes a grayscale ramp and various color patches labeled C1 through B9. Below the chart is a scale bar with markings in millimeters (mm) and centimeters (cm). The scale bar is labeled 'mm' and 'cm'.

47

Image Engineering Scan Reference Chart TE263 Serial No.

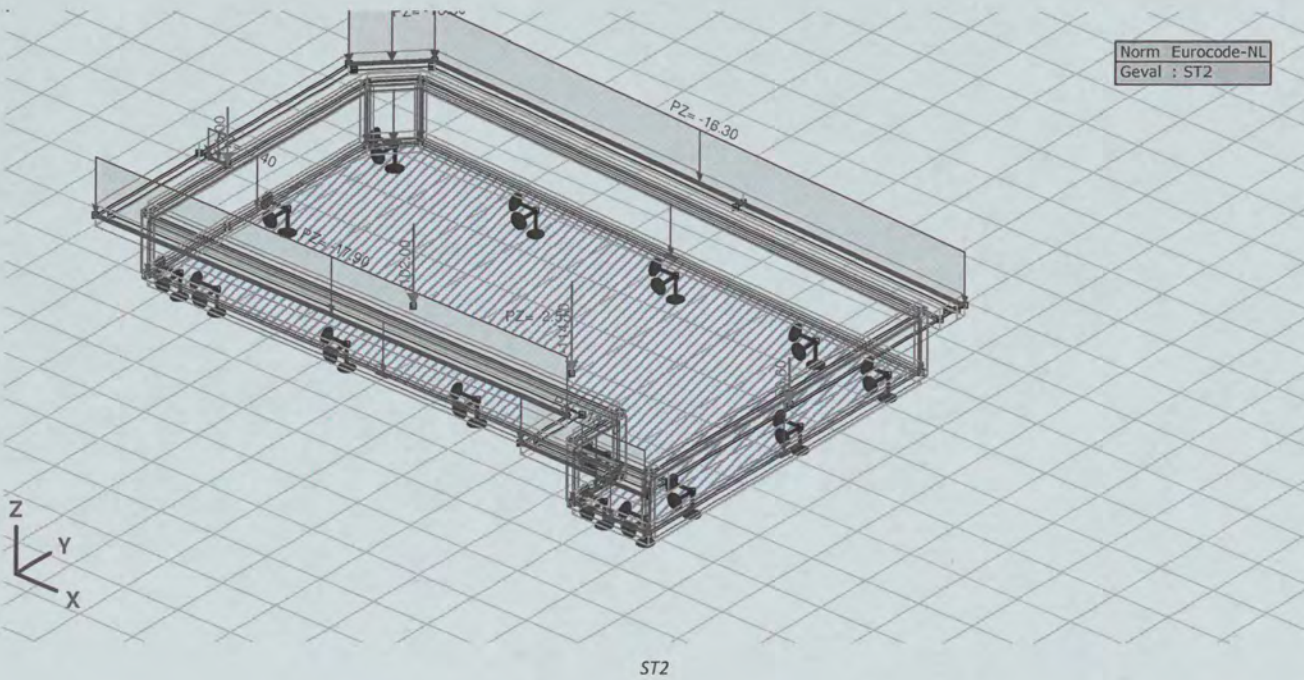
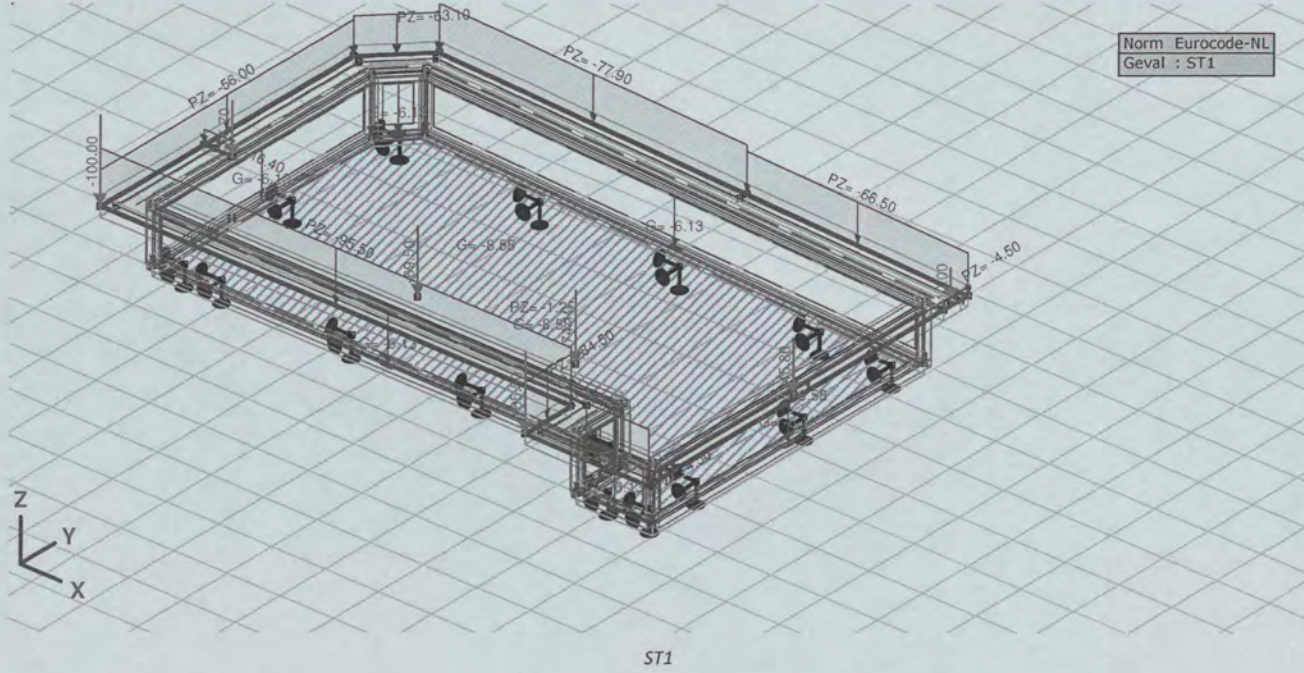
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

Pag. 7



↑

mm (0 100 200 300 400 500 600 700 800 900 1000)

inch (0 10 20 30 40 50 60 70 80 90 100)

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5

C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11

Patch reference numbers on UTT

Image Engineering · Scan Reference Chart · TEX363 · Serial No. 47

the scale towards document

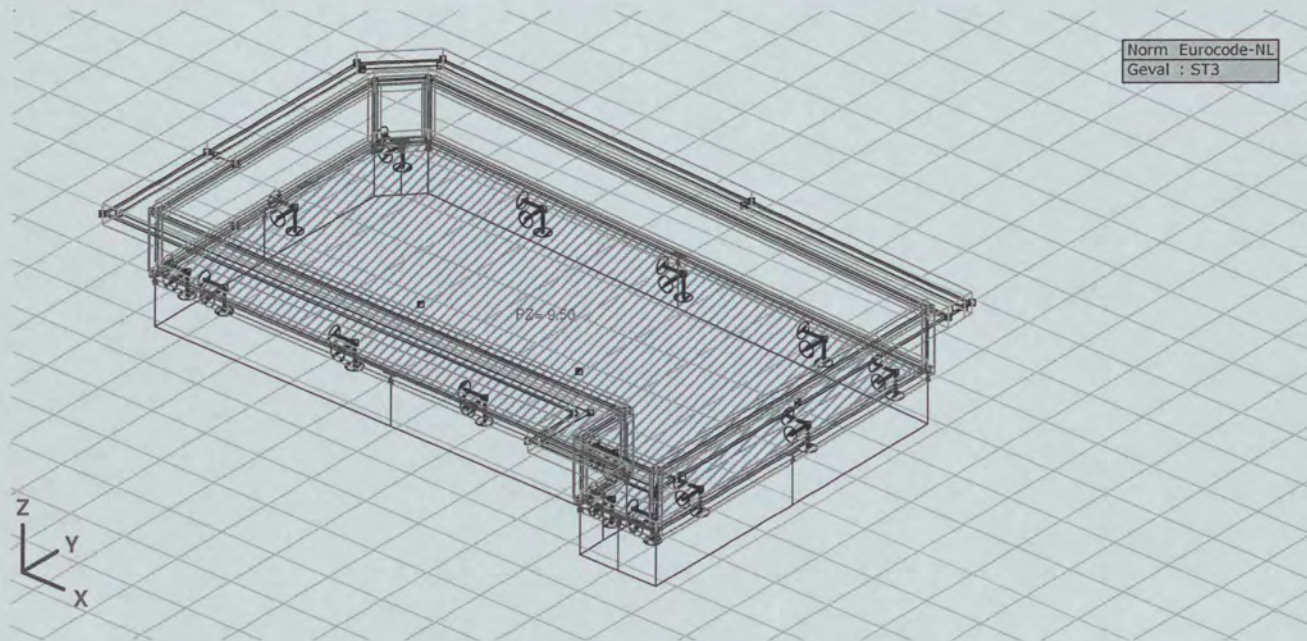
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

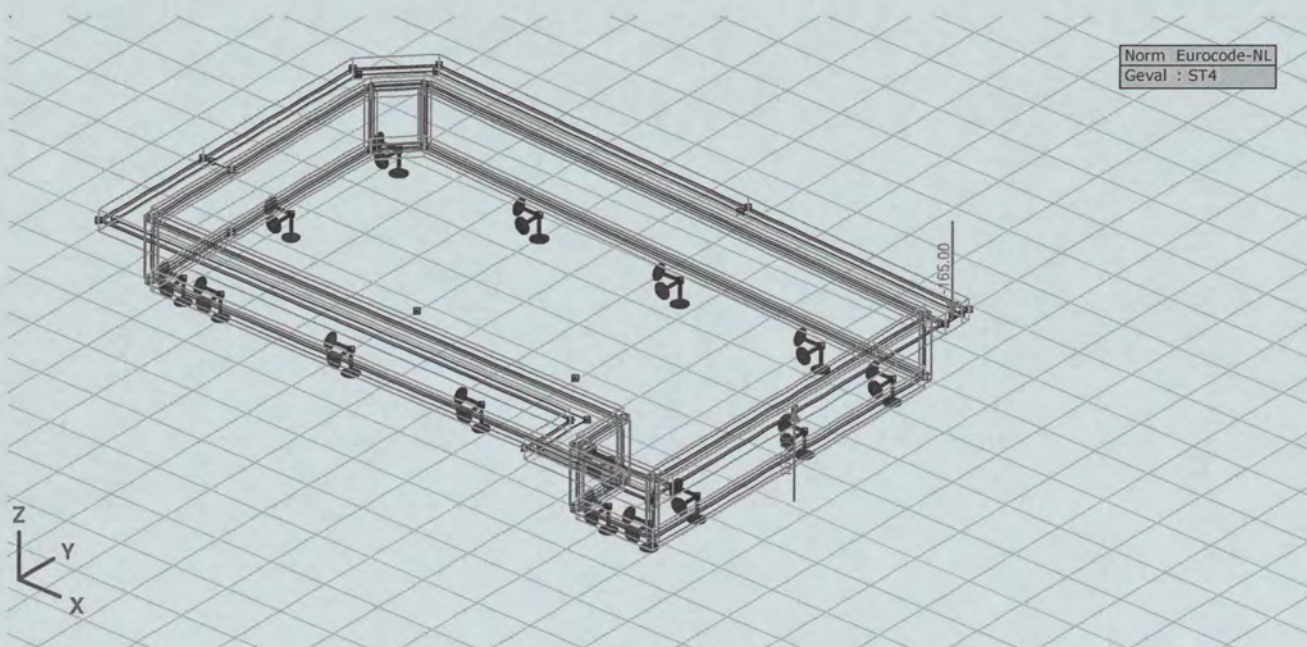
Model: 17021-rev2.axs

9/22/2017

Pag. 8



ST3



ST4

↑

mm 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

inch 1 2 3 4 5 6 7 8 9 10

↑

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.0

C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11

Patch Reference numbers on UTT

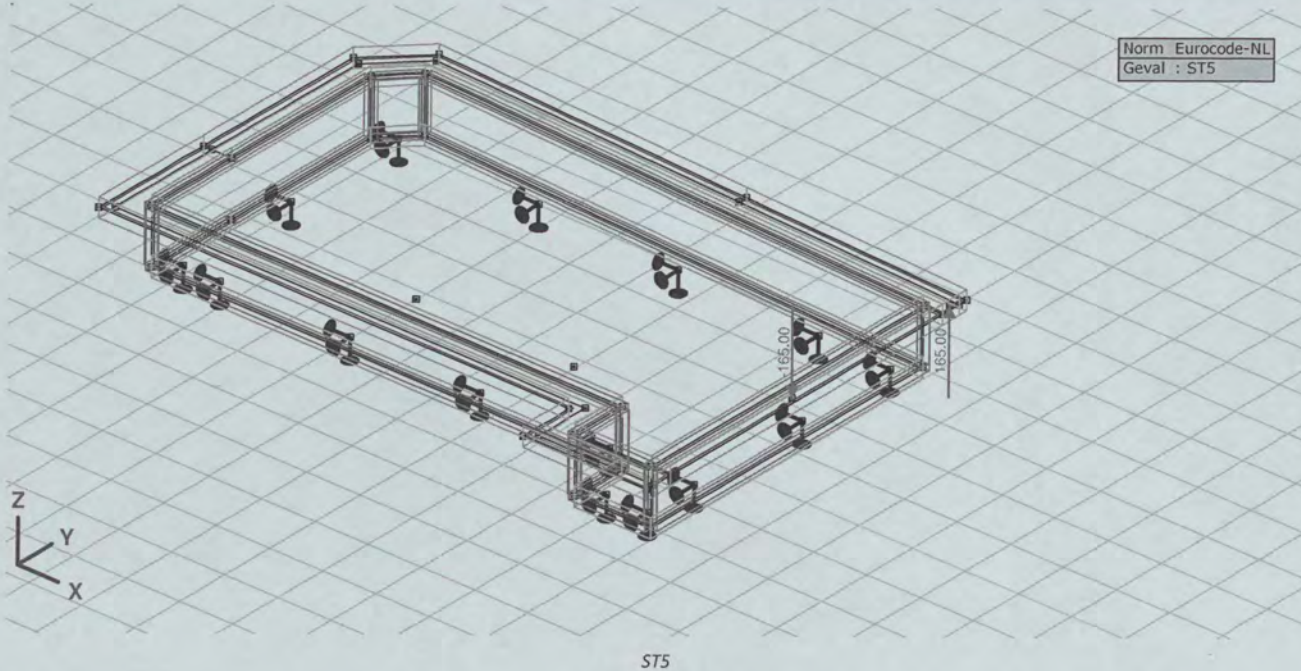
Image Engineering · Scan Reference Chart · TE263 · Serial No. 47

the scale towards document

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies
 Model: 17021-rev2.axs

9/22/2017 Pag. 9



Berekende maatgevende combinaties uit belastinggevallen

	Kritische combinatie	Type
1	[0.9*ST1]	UGT (a, b)
2	[0.9*ST1] {0.6*ST2}	UGT (a, b)
3	[0.9*ST1] {0.6*ST2} (0.6*ST3)	UGT (a, b)
4	[0.9*ST1] {0.6*ST3}	UGT (a, b)
5	[0.9*ST1] {0.6*ST3} (0.6*ST2)	UGT (a, b)
6	[0.9*ST1]	UGT (a, b)
7	[0.9*ST1] (0.6*ST2)	UGT (a, b)
8	[0.9*ST1] (0.6*ST3)	UGT (a, b)
9	[0.9*ST1] (0.6*ST2+0.6*ST3)	UGT (a, b)
10	[1.35*ST1]	UGT (a, b)
11	[1.35*ST1] {0.6*ST2}	UGT (a, b)
12	[1.35*ST1] {0.6*ST2} (0.6*ST3)	UGT (a, b)
13	[1.35*ST1] {0.6*ST3}	UGT (a, b)
14	[1.35*ST1] {0.6*ST3} (0.6*ST2)	UGT (a, b)
15	[1.35*ST1]	UGT (a, b)
16	[1.35*ST1] (0.6*ST2)	UGT (a, b)
17	[1.35*ST1] (0.6*ST3)	UGT (a, b)
18	[1.35*ST1] (0.6*ST2+0.6*ST3)	UGT (a, b)
19	[0.9*ST1] {1.5*ST2}	UGT (a, b)
20	[0.9*ST1] {1.5*ST2} (0.6*ST3)	UGT (a, b)
21	[0.9*ST1] {1.5*ST3}	UGT (a, b)
22	[0.9*ST1] {1.5*ST3} (0.6*ST2)	UGT (a, b)
23	[0.9*ST1] {1.5*ST4}	UGT (a, b)
24	[0.9*ST1] {1.5*ST4} (0.6*ST2)	UGT (a, b)
25	[0.9*ST1] {1.5*ST4} (0.6*ST3)	UGT (a, b)
26	[0.9*ST1] {1.5*ST4} (0.6*ST2+0.6*ST3)	UGT (a, b)
27	[0.9*ST1] {1.5*ST5}	UGT (a, b)
28	[0.9*ST1] {1.5*ST5} (0.6*ST2)	UGT (a, b)
29	[0.9*ST1] {1.5*ST5} (0.6*ST3)	UGT (a, b)
30	[0.9*ST1] {1.5*ST5} (0.6*ST2+0.6*ST3)	UGT (a, b)
31	[1.2*ST1]	UGT (a, b)

the scale towards document

mm
Inch

4.5
5.0
5.6
6.3

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9

Patch Reference numbers on IUT

Image Engineering · Scan Reference Chart · TE263 · Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

Pag. 10

Berekende maatgevende combinaties uit belastinggevallen

	<i>Kritische combinatie</i>	<i>Type</i>
32	[1.2*ST1] {1.5*ST2}	UGT (a, b)
33	[1.2*ST1] {1.5*ST2} (0.6*ST3)	UGT (a, b)
34	[1.2*ST1] {1.5*ST3}	UGT (a, b)
35	[1.2*ST1] {1.5*ST3} (0.6*ST2)	UGT (a, b)
36	[1.2*ST1] {1.5*ST4}	UGT (a, b)
37	[1.2*ST1] {1.5*ST4} (0.6*ST2)	UGT (a, b)
38	[1.2*ST1] {1.5*ST4} (0.6*ST3)	UGT (a, b)
39	[1.2*ST1] {1.5*ST4} (0.6*ST2+0.6*ST3)	UGT (a, b)
40	[1.2*ST1] {1.5*ST5}	UGT (a, b)
41	[1.2*ST1] {1.5*ST5} (0.6*ST2)	UGT (a, b)
42	[1.2*ST1] {1.5*ST5} (0.6*ST3)	UGT (a, b)
43	[1.2*ST1] {1.5*ST5} (0.6*ST2+0.6*ST3)	UGT (a, b)
44	[ST1]	BGT Karakteristiek
45	[ST1] {ST2}	BGT Karakteristiek
46	[ST1] {ST2} (0.4*ST3)	BGT Karakteristiek
47	[ST1] {ST3}	BGT Karakteristiek
48	[ST1] {ST3} (0.4*ST2)	BGT Karakteristiek
49	[ST1] {ST4}	BGT Karakteristiek
50	[ST1] {ST4} (0.4*ST2)	BGT Karakteristiek
51	[ST1] {ST4} (0.4*ST3)	BGT Karakteristiek
52	[ST1] {ST4} (0.4*ST2+0.4*ST3)	BGT Karakteristiek
53	[ST1] {ST5}	BGT Karakteristiek
54	[ST1] {ST5} (0.4*ST2)	BGT Karakteristiek
55	[ST1] {ST5} (0.4*ST3)	BGT Karakteristiek
56	[ST1] {ST5} (0.4*ST2+0.4*ST3)	BGT Karakteristiek
57	[ST1]	BGT Frequent
58	[ST1] {0.5*ST2}	BGT Frequent
59	[ST1] {0.5*ST2} (0.3*ST3)	BGT Frequent
60	[ST1] {0.5*ST3}	BGT Frequent
61	[ST1] {0.5*ST3} (0.3*ST2)	BGT Frequent
62	[ST1] {0.2*ST4}	BGT Frequent
63	[ST1] {0.2*ST4} (0.3*ST2)	BGT Frequent
64	[ST1] {0.2*ST4} (0.3*ST3)	BGT Frequent
65	[ST1] {0.2*ST4} (0.3*ST2+0.3*ST3)	BGT Frequent
66	[ST1] {0.2*ST5}	BGT Frequent
67	[ST1] {0.2*ST5} (0.3*ST2)	BGT Frequent
68	[ST1] {0.2*ST5} (0.3*ST3)	BGT Frequent
69	[ST1] {0.2*ST5} (0.3*ST2+0.3*ST3)	BGT Frequent
70	[ST1]	BGT Quasi-blijvend
71	[ST1] (0.3*ST2)	BGT Quasi-blijvend
72	[ST1] (0.3*ST3)	BGT Quasi-blijvend
73	[ST1] (0.3*ST2+0.3*ST3)	BGT Quasi-blijvend
74	[ST1]	A1(a,b)
75	[ST1] {0.6*ST2}	A1(a,b)
76	[ST1] {0.6*ST2} (0.6*ST3)	A1(a,b)
77	[ST1] {0.6*ST3}	A1(a,b)
78	[ST1] {0.6*ST3} (0.6*ST2)	A1(a,b)
79	[ST1]	A1(a,b)
80	[ST1] (0.6*ST2)	A1(a,b)
81	[ST1] (0.6*ST3)	A1(a,b)
82	[ST1] (0.6*ST2+0.6*ST3)	A1(a,b)
83	[1.35*ST1]	A1(a,b)
84	[1.35*ST1] {0.6*ST2}	A1(a,b)
85	[1.35*ST1] {0.6*ST2} (0.6*ST3)	A1(a,b)
86	[1.35*ST1] {0.6*ST3}	A1(a,b)
87	[1.35*ST1] {0.6*ST3} (0.6*ST2)	A1(a,b)
88	[1.35*ST1]	A1(a,b)



Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

Pag. 11

Berekende maatgevende combinaties uit belastinggevallen

	<i>Kritische combinatie</i>	<i>Type</i>
89	[1.35*ST1] (0.6*ST2)	A1(a,b)
90	[1.35*ST1] (0.6*ST3)	A1(a,b)
91	[1.35*ST1] (0.6*ST2+0.6*ST3)	A1(a,b)
92	[ST1] {1.5*ST2}	A1(a,b)
93	[ST1] {1.5*ST2} (0.6*ST3)	A1(a,b)
94	[ST1] {1.5*ST3}	A1(a,b)
95	[ST1] {1.5*ST3} (0.6*ST2)	A1(a,b)
96	[ST1] {1.5*ST4}	A1(a,b)
97	[ST1] {1.5*ST4} (0.6*ST2)	A1(a,b)
98	[ST1] {1.5*ST4} (0.6*ST3)	A1(a,b)
99	[ST1] {1.5*ST4} (0.6*ST2+0.6*ST3)	A1(a,b)
100	[ST1] {1.5*ST5}	A1(a,b)
101	[ST1] {1.5*ST5} (0.6*ST2)	A1(a,b)
102	[ST1] {1.5*ST5} (0.6*ST3)	A1(a,b)
103	[ST1] {1.5*ST5} (0.6*ST2+0.6*ST3)	A1(a,b)
104	[1.2*ST1]	A1(a,b)
105	[1.2*ST1] {1.5*ST2}	A1(a,b)
106	[1.2*ST1] {1.5*ST2} (0.6*ST3)	A1(a,b)
107	[1.2*ST1] {1.5*ST3}	A1(a,b)
108	[1.2*ST1] {1.5*ST3} (0.6*ST2)	A1(a,b)
109	[1.2*ST1] {1.5*ST4}	A1(a,b)
110	[1.2*ST1] {1.5*ST4} (0.6*ST2)	A1(a,b)
111	[1.2*ST1] {1.5*ST4} (0.6*ST3)	A1(a,b)
112	[1.2*ST1] {1.5*ST4} (0.6*ST2+0.6*ST3)	A1(a,b)
113	[1.2*ST1] {1.5*ST5}	A1(a,b)
114	[1.2*ST1] {1.5*ST5} (0.6*ST2)	A1(a,b)
115	[1.2*ST1] {1.5*ST5} (0.6*ST3)	A1(a,b)
116	[1.2*ST1] {1.5*ST5} (0.6*ST2+0.6*ST3)	A1(a,b)
117	[ST1]	A2(a,b)
118	[ST1] {1.3*ST2}	A2(a,b)
119	[ST1] {1.3*ST2} (0.52*ST3)	A2(a,b)
120	[ST1] {1.3*ST3}	A2(a,b)
121	[ST1] {1.3*ST3} (0.52*ST2)	A2(a,b)
122	[ST1] {1.3*ST4}	A2(a,b)
123	[ST1] {1.3*ST4} (0.52*ST2)	A2(a,b)
124	[ST1] {1.3*ST4} (0.52*ST3)	A2(a,b)
125	[ST1] {1.3*ST4} (0.52*ST2+0.52*ST3)	A2(a,b)
126	[ST1] {1.3*ST5}	A2(a,b)
127	[ST1] {1.3*ST5} (0.52*ST2)	A2(a,b)
128	[ST1] {1.3*ST5} (0.52*ST3)	A2(a,b)
129	[ST1] {1.3*ST5} (0.52*ST2+0.52*ST3)	A2(a,b)
130	[0.889*ST1]	A2(a,b)
131	[0.889*ST1] {1.3*ST2}	A2(a,b)
132	[0.889*ST1] {1.3*ST2} (0.52*ST3)	A2(a,b)
133	[0.889*ST1] {1.3*ST3}	A2(a,b)
134	[0.889*ST1] {1.3*ST3} (0.52*ST2)	A2(a,b)
135	[0.889*ST1] {1.3*ST4}	A2(a,b)
136	[0.889*ST1] {1.3*ST4} (0.52*ST2)	A2(a,b)
137	[0.889*ST1] {1.3*ST4} (0.52*ST3)	A2(a,b)
138	[0.889*ST1] {1.3*ST4} (0.52*ST2+0.52*ST3)	A2(a,b)
139	[0.889*ST1] {1.3*ST5}	A2(a,b)
140	[0.889*ST1] {1.3*ST5} (0.52*ST2)	A2(a,b)
141	[0.889*ST1] {1.3*ST5} (0.52*ST3)	A2(a,b)
142	[0.889*ST1] {1.3*ST5} (0.52*ST2+0.52*ST3)	A2(a,b)

Type: Combinatietype;



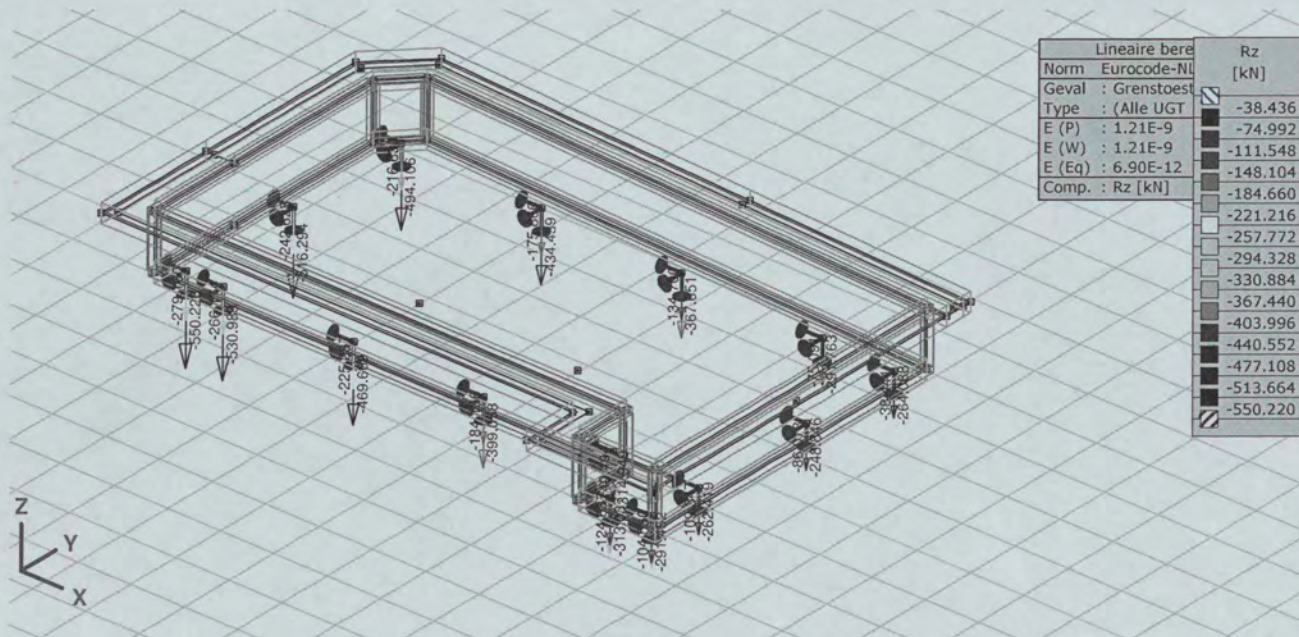
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

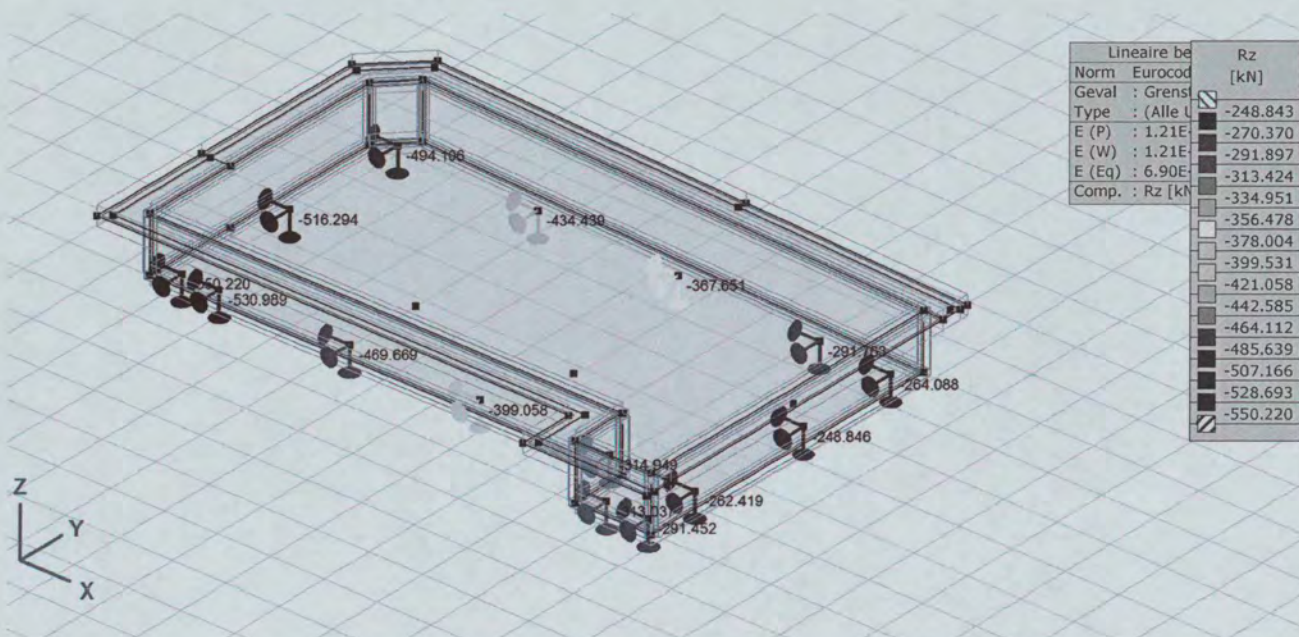
Model: 17021-rev2.axs

9/22/2017

Pag. 12



[I], Linear,(Auto) Grenstoestand, Rz (Interne krachten knooppogging), Lijnen



[I], Linear,(Auto) Grenstoestand Min., Rz (Interne krachten knooppogging), Kleuren 2D

the scale towards documents

mm 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 C7 B7 A7 C8 B8 A8 C9 B9

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

45 1.0 1.5 2.0

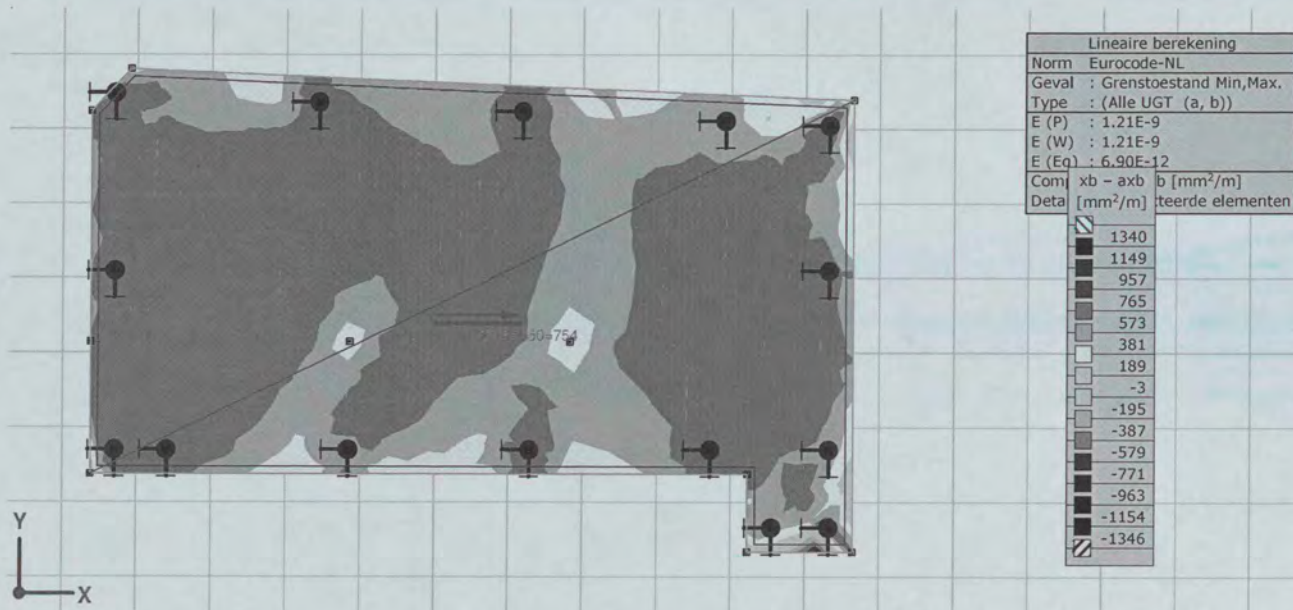
47

Image Engineering Scan Reference Chart TE263 Serial No.

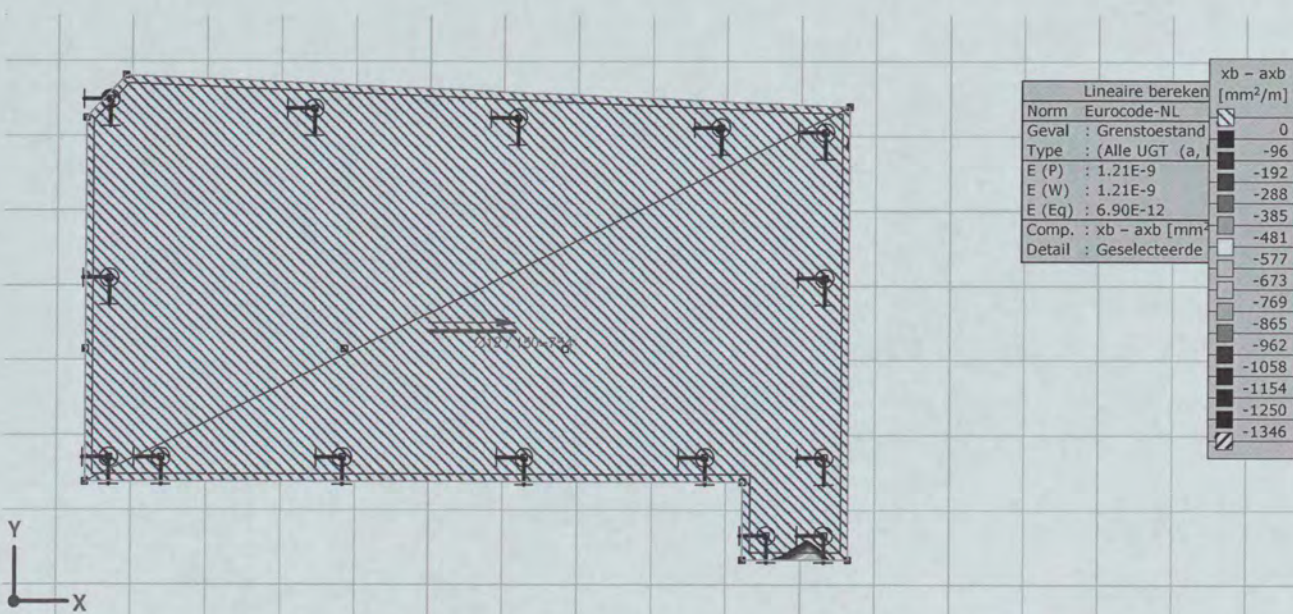
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs



[RI], > ~2, Lineair,(Auto) Grenstoestand, xb - axb, Kleuren 2D, Bovenaanzicht



[RI], > ~2, Lineair,(Auto) Grenstoestand, xb - axb, Kleuren 2D, Bovenaanzicht 2

the scale towards document

mm 100 200 300 400 500 600 700 800 900 1000

inch 4 6 8 10 12 14 16 18 20

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

Patch Reference numbers on IUT

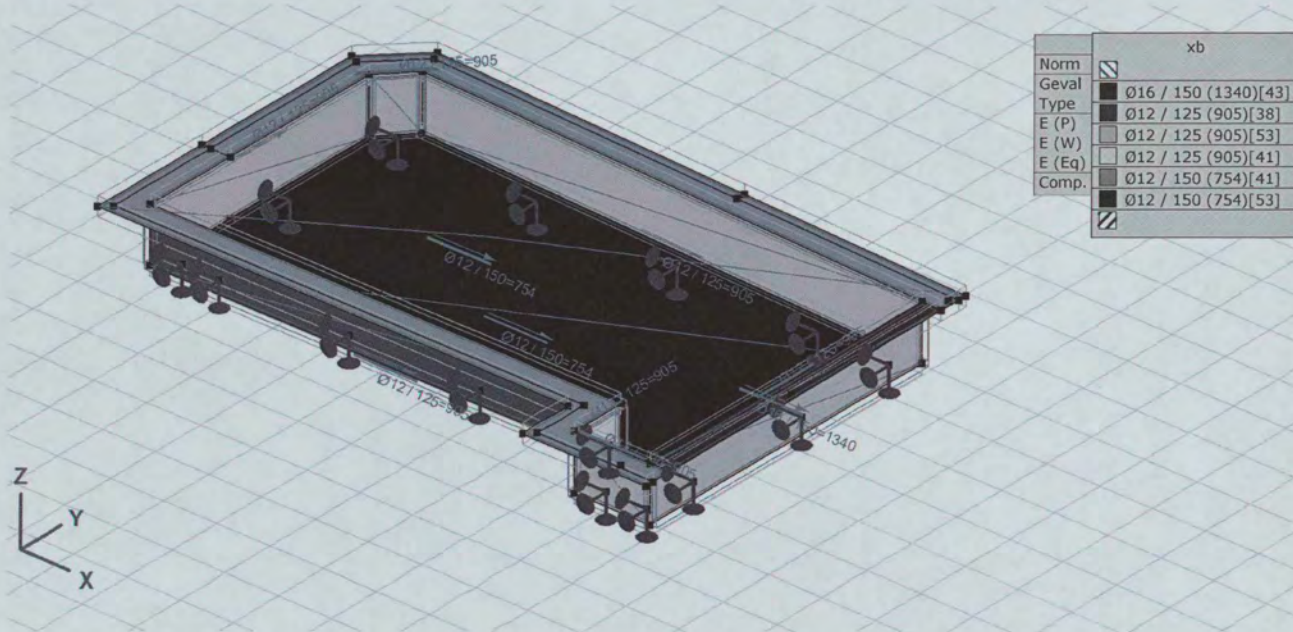
Image Engineering Scan Reference Chart TE263 Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

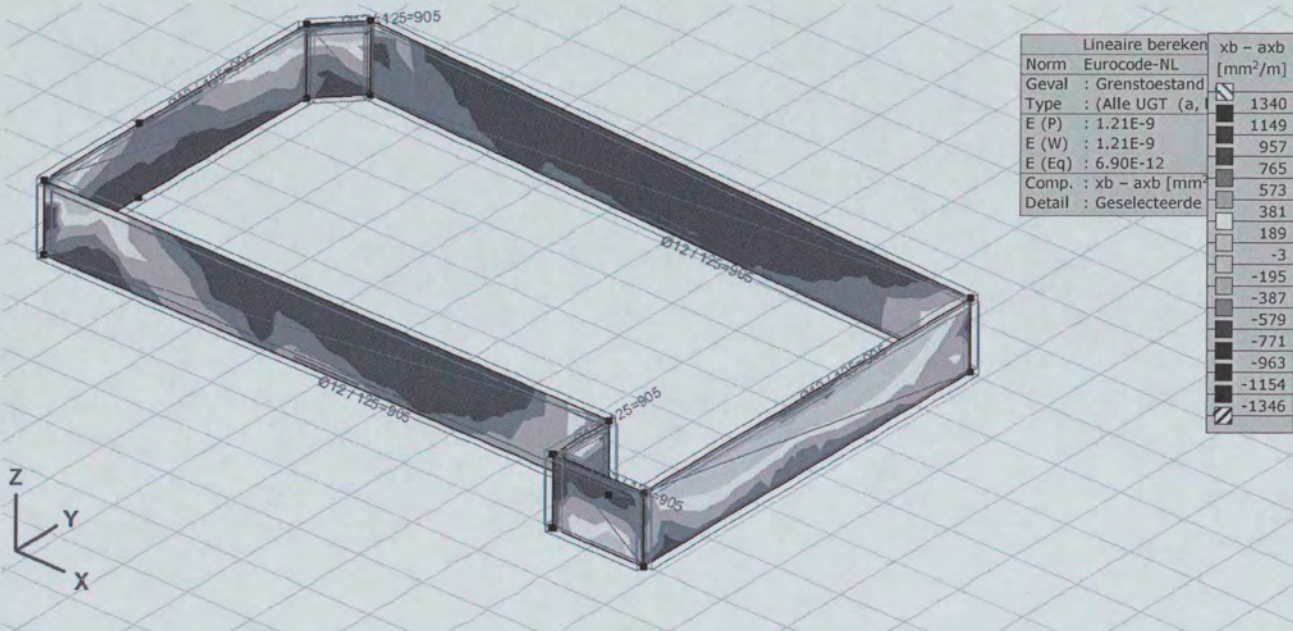
Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017 Pag. 15



[R], Lineair,(Auto) Grenstoestand, xb, Kleuren 2D



Wanden xb - axb, Kleuren 2D

the scale towards document

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5

47

Image Engineering · Scan Reference Chart · TE263 · Serial No.

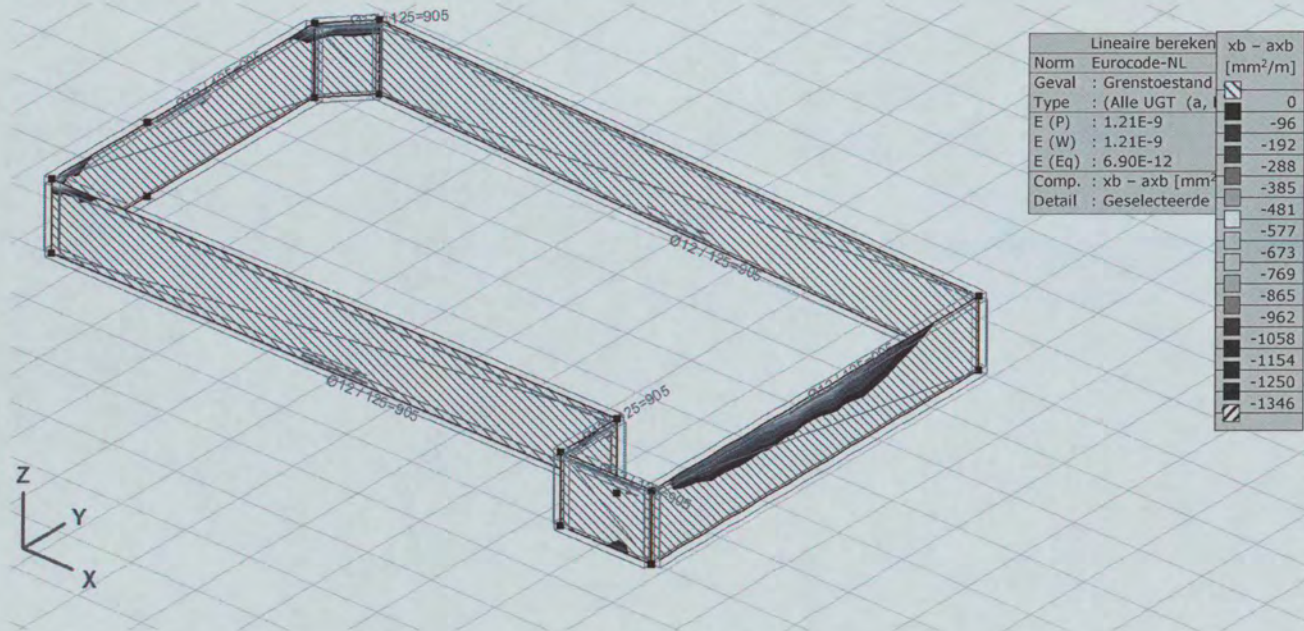
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

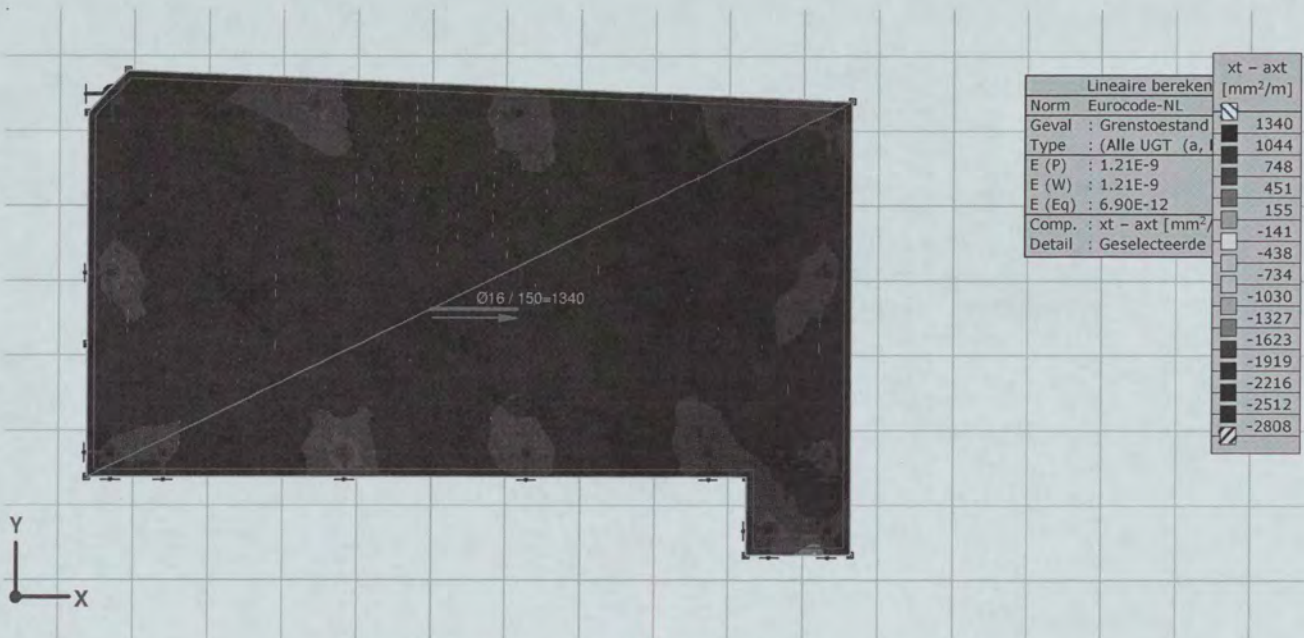
9/22/2017

Pag. 16



Lineaire bereken		xb - axb
Norm	Eurocode-NL	[mm ² /m]
Geval	: Grenstoestand	
Type	: (Alle UGT (a, b, c))	0
E (P)	: 1.21E-9	-96
E (W)	: 1.21E-9	-192
E (Eq)	: 6.90E-12	-288
Comp.	: xb - axb [mm ² /m]	-385
Detail	: Geselecteerde	-481
		-577
		-673
		-769
		-865
		-962
		-1058
		-1154
		-1250
		-1346

Wanden xb - axb, Kleuren 2D 2



Lineaire bereken		xt - axt
Norm	Eurocode-NL	[mm ² /m]
Geval	: Grenstoestand	1340
Type	: (Alle UGT (a, b, c))	1044
E (P)	: 1.21E-9	748
E (W)	: 1.21E-9	451
E (Eq)	: 6.90E-12	155
Comp.	: xt - axt [mm ² /m]	-141
Detail	: Geselecteerde	-438
		-734
		-1030
		-1327
		-1623
		-1919
		-2216
		-2512
		-2808

[R], > ~2, Lineair,(Auto) Grenstoestand, xt - axt, Kleuren 2D, Bovenaanzicht

the scale towards document

4.5	5.0	5.5	6.0
-----	-----	-----	-----

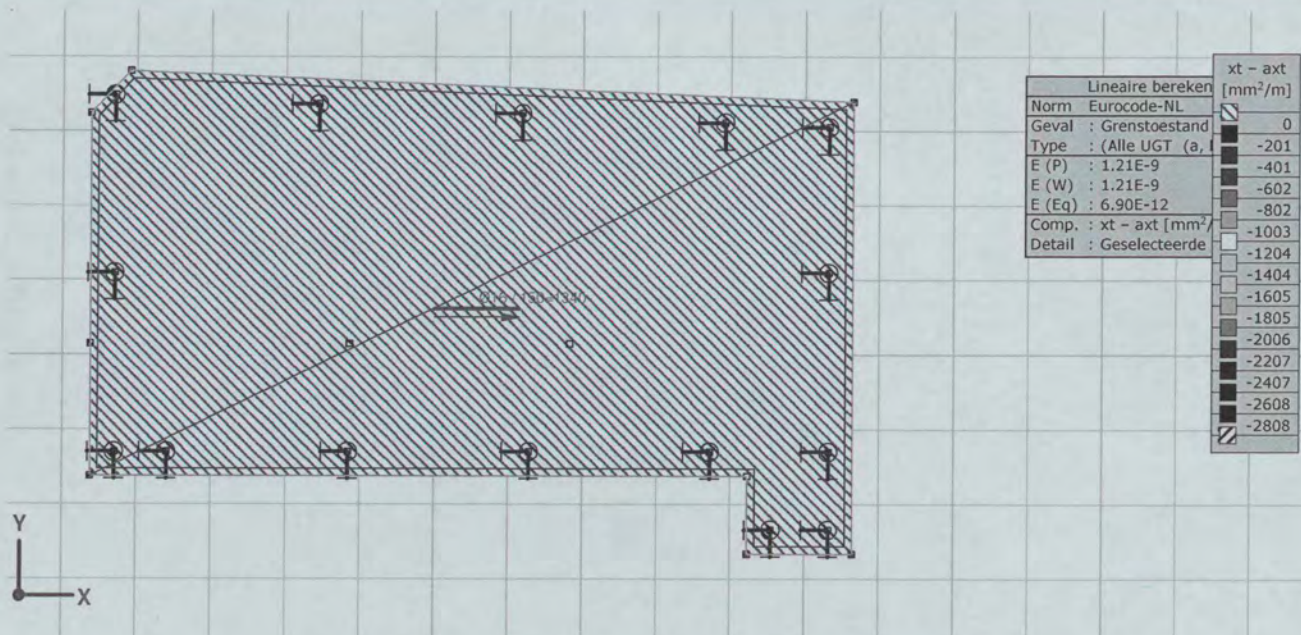
C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

Patch Reference numbers on UTT

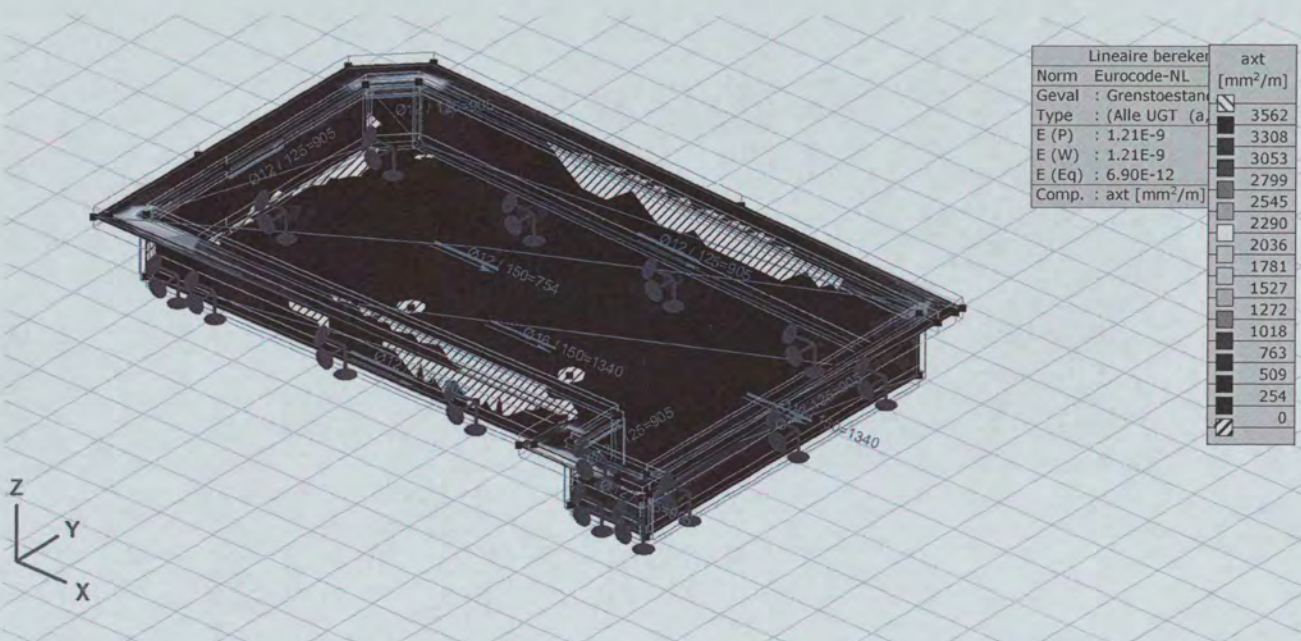
Image Engineering Scan Reference Chart TE263 Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies
 Model: 17021-rev2.axs



[RI], >~2, Lineair,(Auto) Grenstoestand, xt - axt, Kleuren 2D, Bovenaanzicht 2



[RI], Lineair,(Auto) Grenstoestand, axt, Kleuren 2D

↑

mm 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

↑

Inch 1/2 1 1 1/2 2 2 1/2 3 3 1/2 4 4 1/2 5 5 1/2 6 6 1/2 7 7 1/2 8 8 1/2 9 9 1/2 10

4.5 5.0 5.5 6.0

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9 C9 B9

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

↑

mm 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

↑

Inch 1/2 1 1 1/2 2 2 1/2 3 3 1/2 4 4 1/2 5 5 1/2 6 6 1/2 7 7 1/2 8 8 1/2 9 9 1/2 10

4.5 5.0 5.5 6.0

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9 C9 B9

Patch reference numbers on IUT

Image Engineering · Scan Reference Chart · T3263 · Serial No. 47

the scale towards document

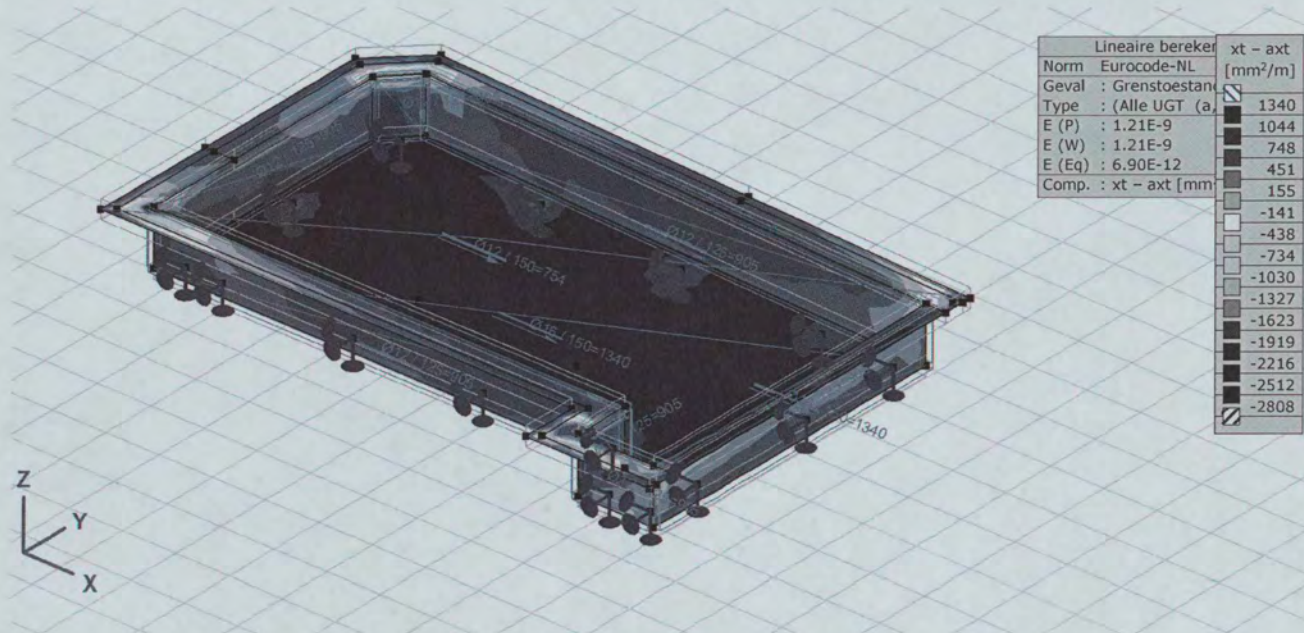
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

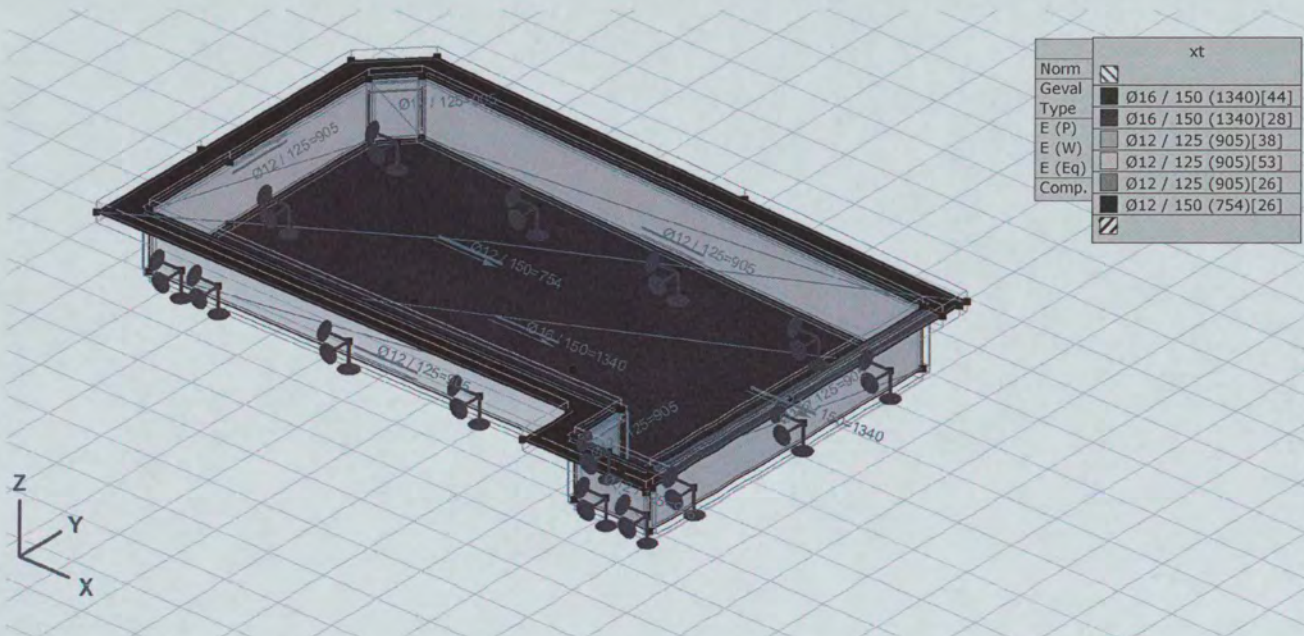
9/22/2017

Pag. 18



Lineaire bereiker		xt - axt
Norm	Eurocode-NL	[mm ² /m]
Geval	: Grenstoestan	
Type	: (Alle UGT (a	1340
E (P)	: 1.21E-9	1044
E (W)	: 1.21E-9	748
E (Eq)	: 6.90E-12	451
Comp.	: xt - axt [mm	155
		-141
		-438
		-734
		-1030
		-1327
		-1623
		-1919
		-2216
		-2512
		-2808

[RI], Linear,(Auto) Grenstoestand, xt - axt, Kleuren 2D



xt	
Norm	
Geval	Ø16 / 150 (1340)[44]
Type	Ø16 / 150 (1340)[28]
E (P)	Ø12 / 125 (905)[38]
E (W)	Ø12 / 125 (905)[53]
E (Eq)	Ø12 / 125 (905)[26]
Comp.	Ø12 / 150 (754)[26]

[RI], Linear,(Auto) Grenstoestand, xt, Kleuren 2D

the scale towards document

mm 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

Patch Reference numbers on UTT

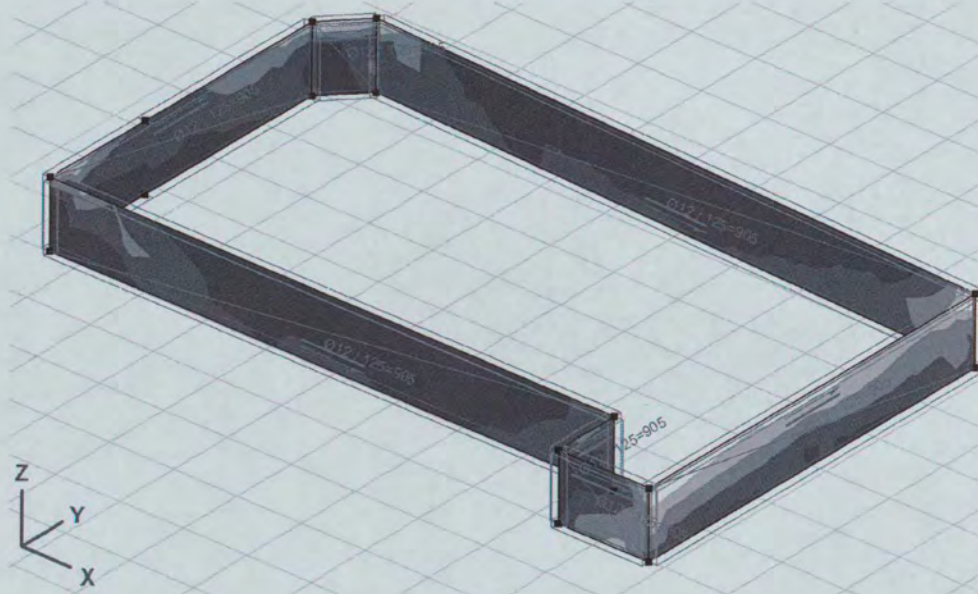
Image Engineering Scan Reference Chart TE263 Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

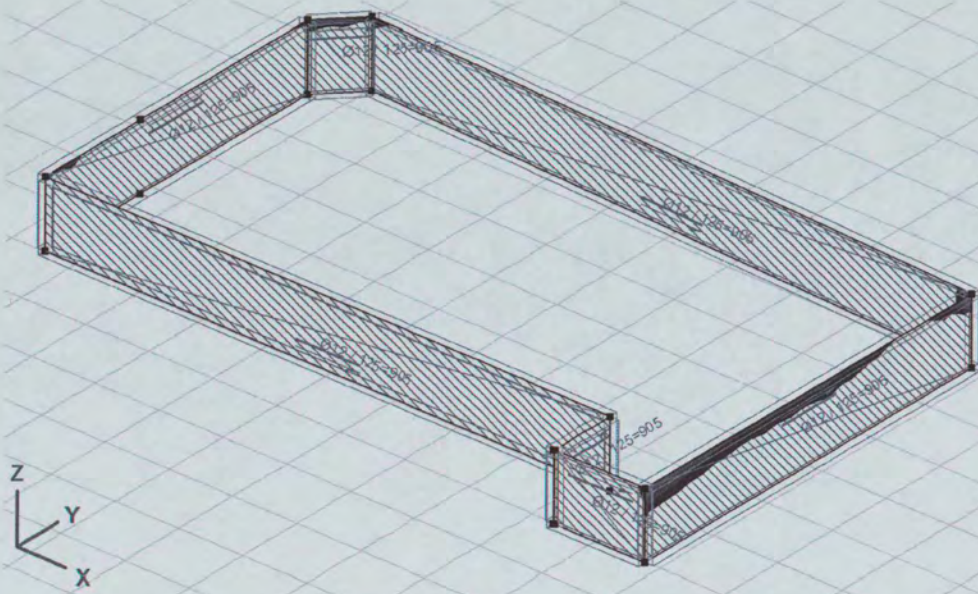
Model: 17021-rev2.axs

9/22/2017 Pag. 19



Lineaire bereken	xt - axt
Norm Eurocode-NL	[mm ² /m]
Geval : Grenstoestand	
Type : (Alle UGT (a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z))	1340
E (P) : 1.21E-9	1044
E (W) : 1.21E-9	748
E (Eq) : 6.90E-12	451
Comp. : xt - axt [mm ² /m]	155
Detail : Geselecteerde	-141
	-438
	-734
	-1030
	-1327
	-1623
	-1919
	-2216
	-2512
	-2808

Wanden xt - axt, Kleuren 2D



Lineaire bereken	xt - axt
Norm Eurocode-NL	[mm ² /m]
Geval : Grenstoestand	
Type : (Alle UGT (a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z))	0
E (P) : 1.21E-9	-201
E (W) : 1.21E-9	-401
E (Eq) : 6.90E-12	-602
Comp. : xt - axt [mm ² /m]	-802
Detail : Geselecteerde	-1003
	-1204
	-1404
	-1605
	-1805
	-2006
	-2207
	-2407
	-2608
	-2808

Wanden xt - axt, Kleuren 2D 2

↑ mm ↓

↑ Inch ↓

100 200 300 400 500 600 700 800 900 1000

100 200 300 400 500 600 700 800 900 1000

↑

4.5 5.0 5.5

C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11

Patch Reference numbers on UTT

Image Engineering Scan Reference Chart TE263 Serial No. 47

the scale towards document

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

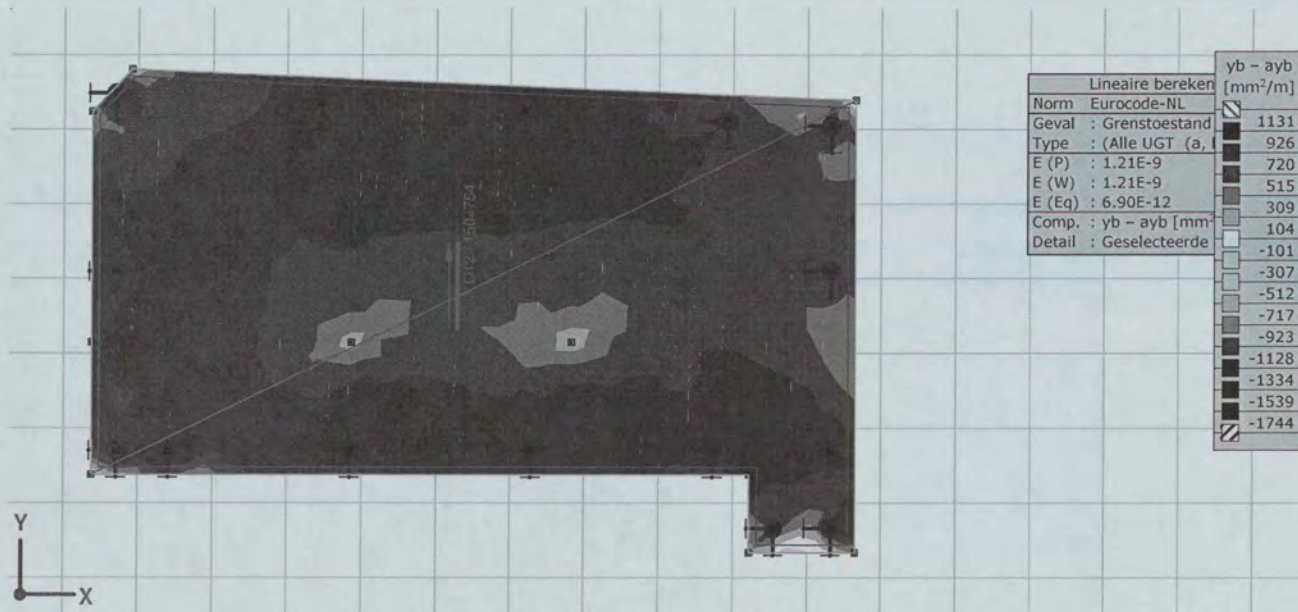
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

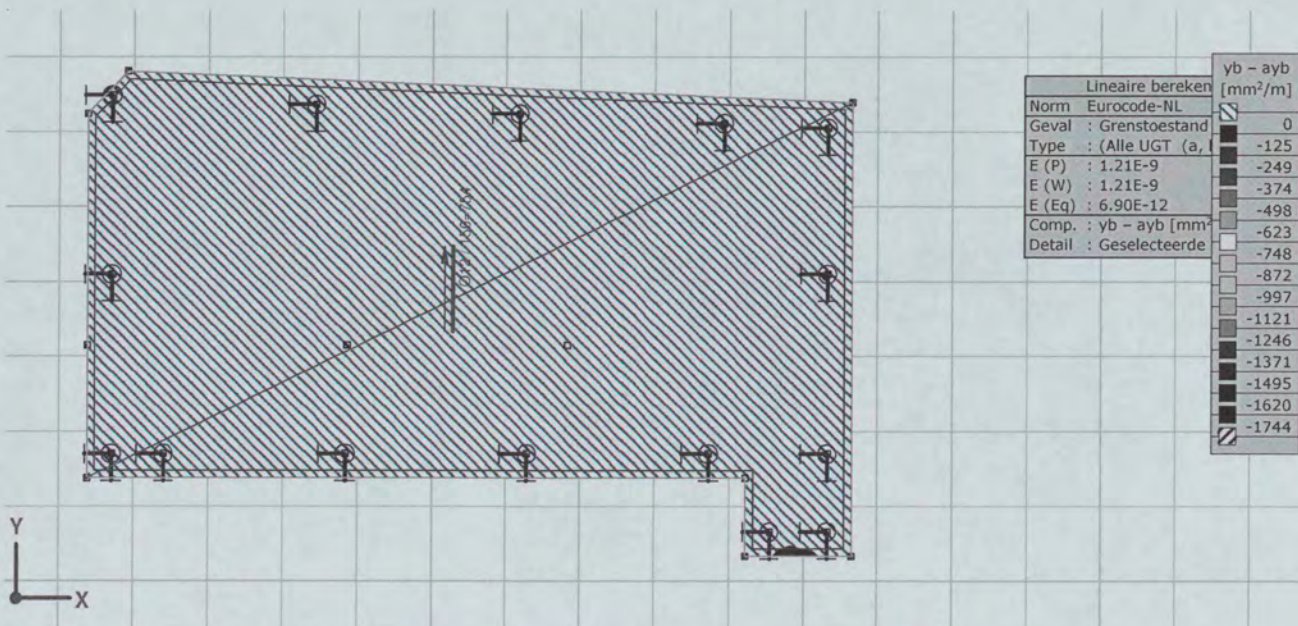
Model: 17021-rev2.axs

9/22/2017

Pag. 20



[Ri], > ~2, Linear,(Auto) Grenstoestand, yb - ayb, Kleuren 2D, Bovenaanzicht



[Ri], > ~2, Linear,(Auto) Grenstoestand, yb - ayb, Kleuren 2D, Bovenaanzicht 2

↑

mm 180 160 140 120 100 80 60 40 20 0

↑

the scale towards document

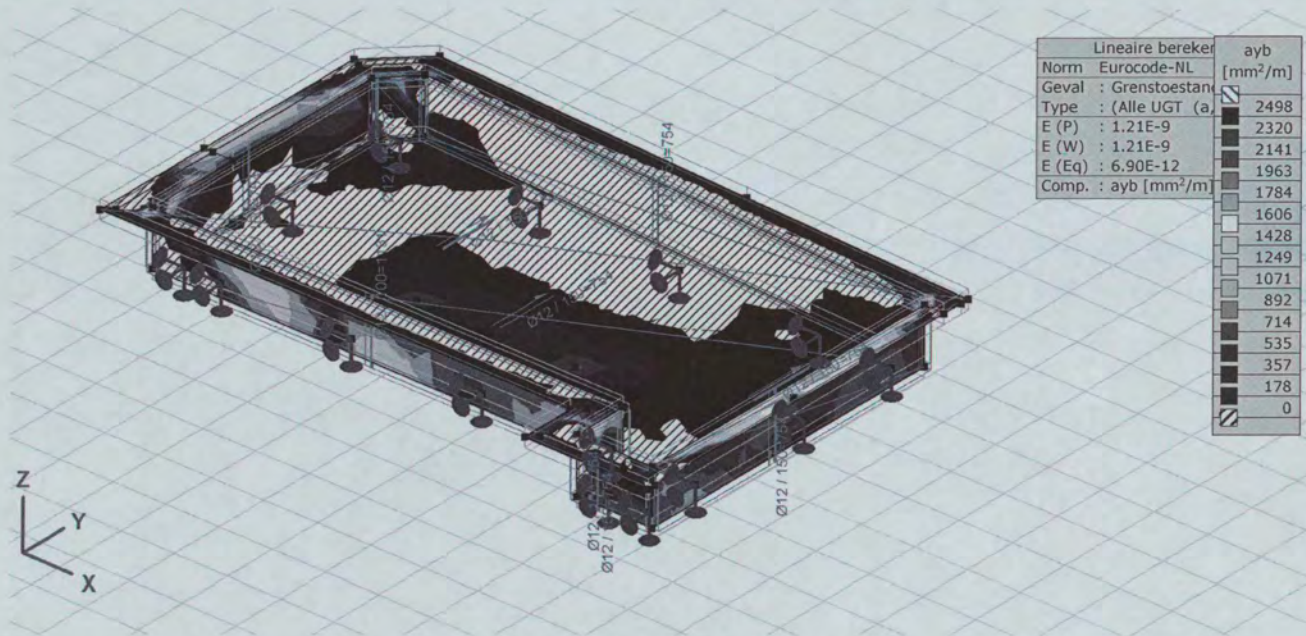
C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

Patch Reference numbers on IUT

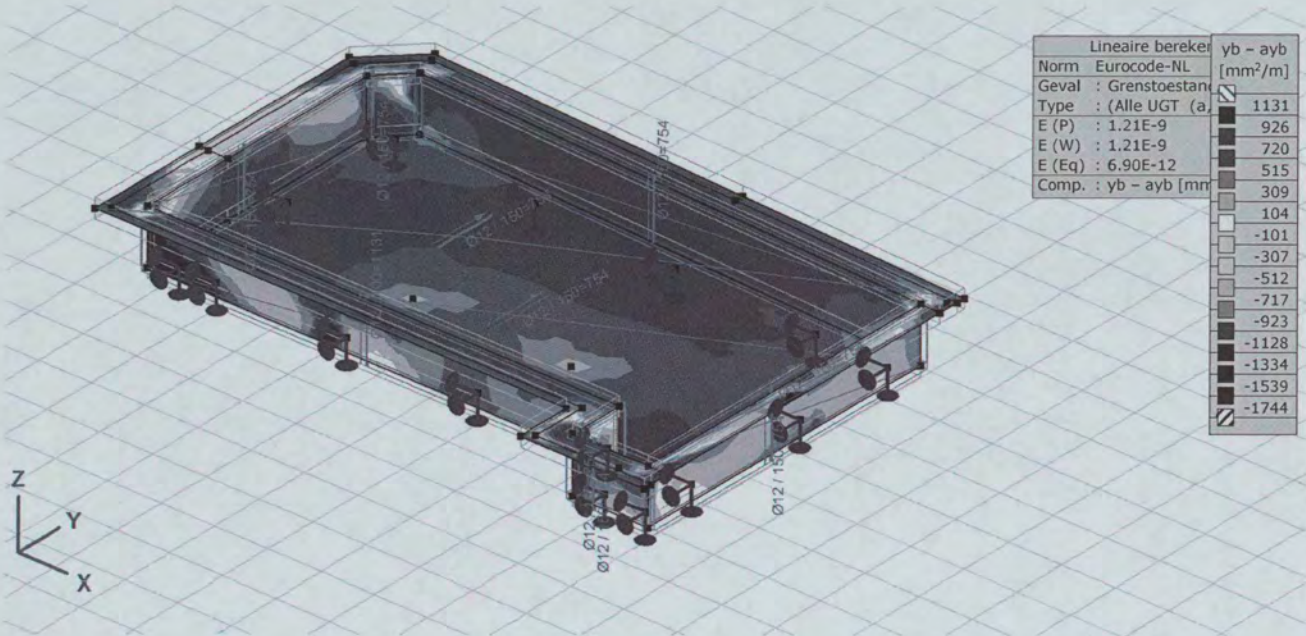
Image Engineering Scan Reference Chart TE263 Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies
 Model: 17021-rev2.axs



[RI], Lineair,(Auto) Grenstoestand, ayb, Kleuren 2D



[RI], Lineair,(Auto) Grenstoestand, yb - ayb, Kleuren 2D

the scale towards document

mm 0 10 20 30 40 50 60 70 80 90 100
 Inch 0 1 2 3 4

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
 Patch Reference numbers on IUT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.0

47

Image Engineering · Scan Reference Chart · TE263 · Serial No.

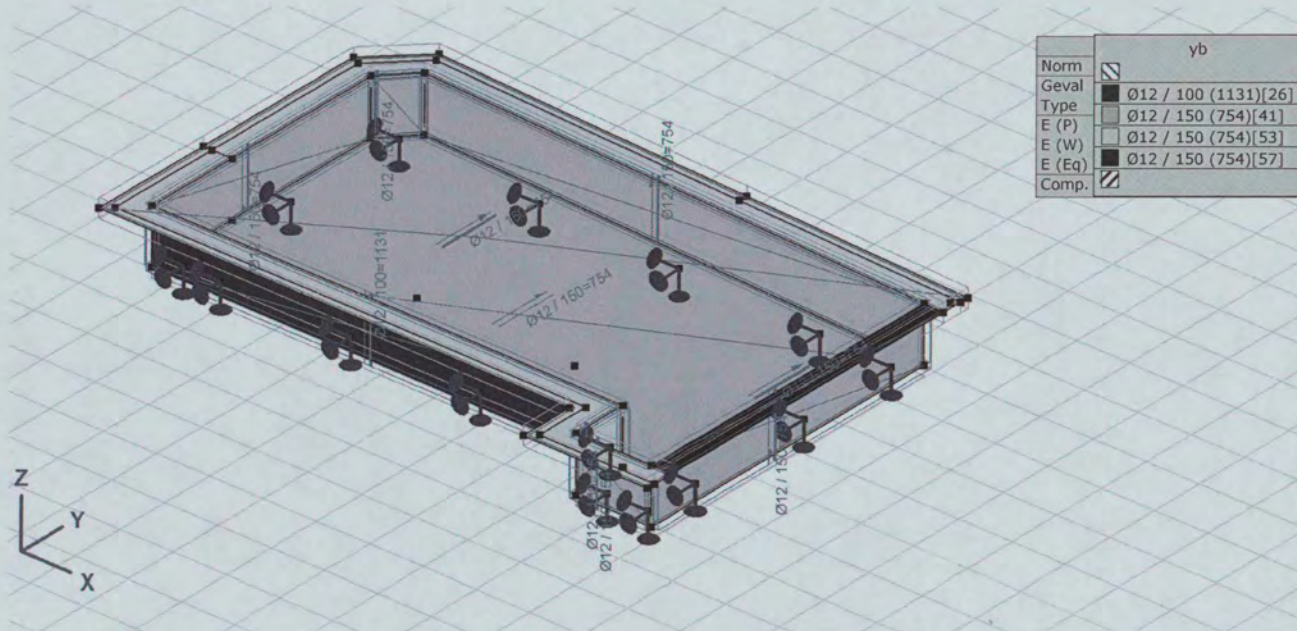
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

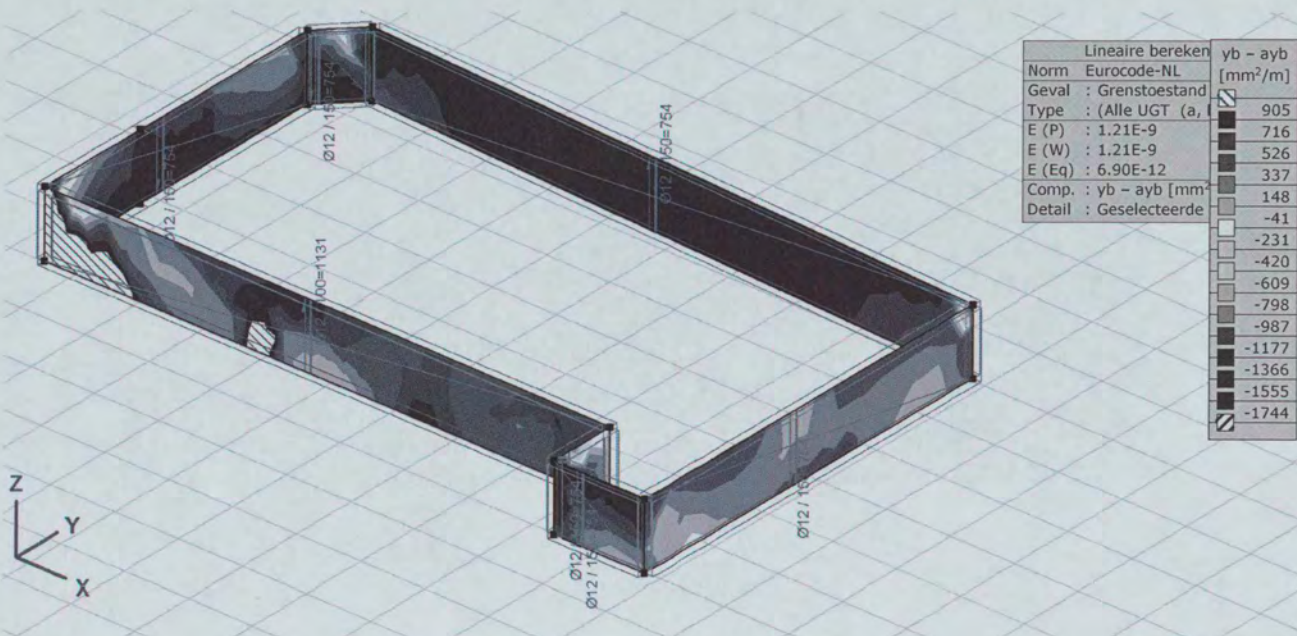
9/22/2017

Pag. 22



yb	
Norm	
Geval	Ø12 / 100 (1131)[26]
Type	Ø12 / 150 (754)[41]
E (P)	Ø12 / 150 (754)[53]
E (W)	Ø12 / 150 (754)[57]
E (Eq)	
Comp.	

[RI], Lineair,(Auto) Grenstoestand, yb, Kleuren 2D



Lineaire bereken	yb - ayb
Norm Eurocode-NL	[mm ² /m]
Geval : Grenstoestand	
Type : (Alle UGT (a,	905
E (P) : 1.21E-9	716
E (W) : 1.21E-9	526
E (Eq) : 6.90E-12	337
Comp. : yb - ayb [mm ²	148
Detail : Geselecteerde	-41
	-231
	-420
	-609
	-798
	-987
	-1177
	-1366
	-1555
	-1744

Wanden yb - ayb, Kleuren 2D

the scale towards document

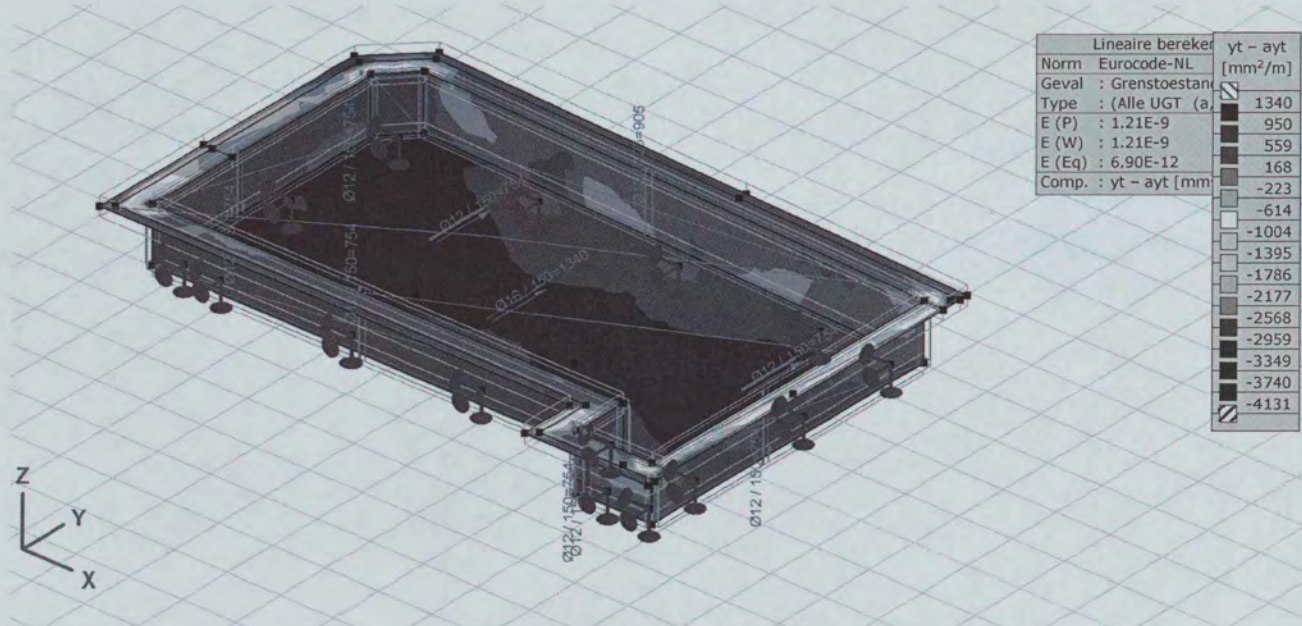
mm 0 100 200 300 400 500 600 700 800 900 1000
 inch 0 10 20 30 40 50 60 70 80 90 100

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9
 10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5
 47
 Image Engineering · Scan Reference Chart · TE263 · Serial No.

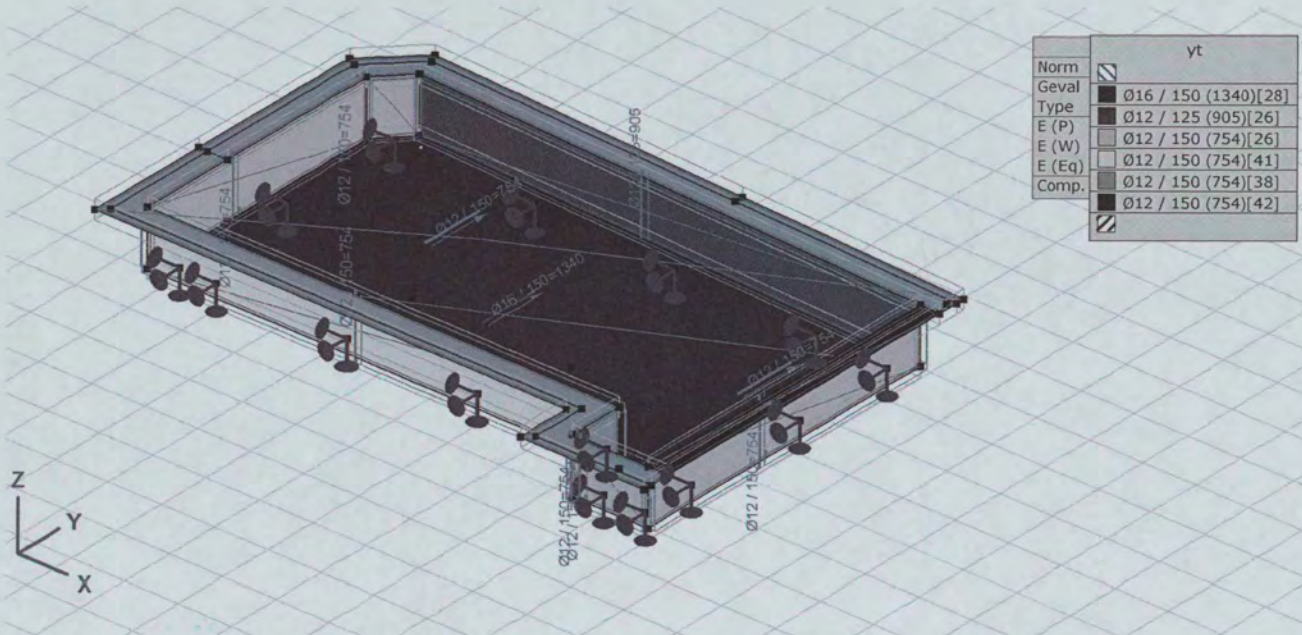
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies
 Model: 17021-rev2.axs



Lineaire bereker	yt - ayt
Norm Eurocode-NL	[mm ² /m]
Geval : Grenstoestand	
Type : (Alle UGT (a	1340
E (P) : 1.21E-9	950
E (W) : 1.21E-9	559
E (Eq) : 6.90E-12	168
Comp. : yt - ayt [mm	-223
	-614
	-1004
	-1395
	-1786
	-2177
	-2568
	-2959
	-3349
	-3740
	-4131

[RI], Lineair,(Auto) Grenstoestand, yt - ayt, Kleuren 2D



	yt
Norm	
Geval	Ø16 / 150 (1340)[28]
Type	Ø12 / 125 (905)[26]
E (P)	Ø12 / 150 (754)[26]
E (W)	Ø12 / 150 (754)[41]
E (Eq)	Ø12 / 150 (754)[38]
Comp.	Ø12 / 150 (754)[42]

[RI], Lineair,(Auto) Grenstoestand, yt, Kleuren 2D

↑

the scale towards document

4.5 5.0 5.5

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9

Patch Reference numbers on UTT

Image Engineering · Scan Reference Chart · TE263 · Serial No. 47

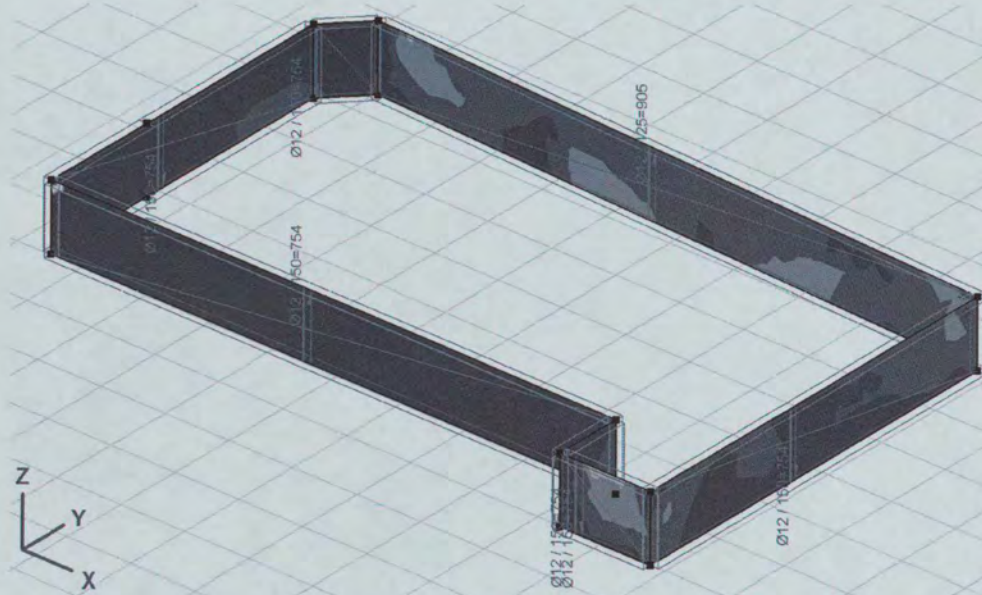
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

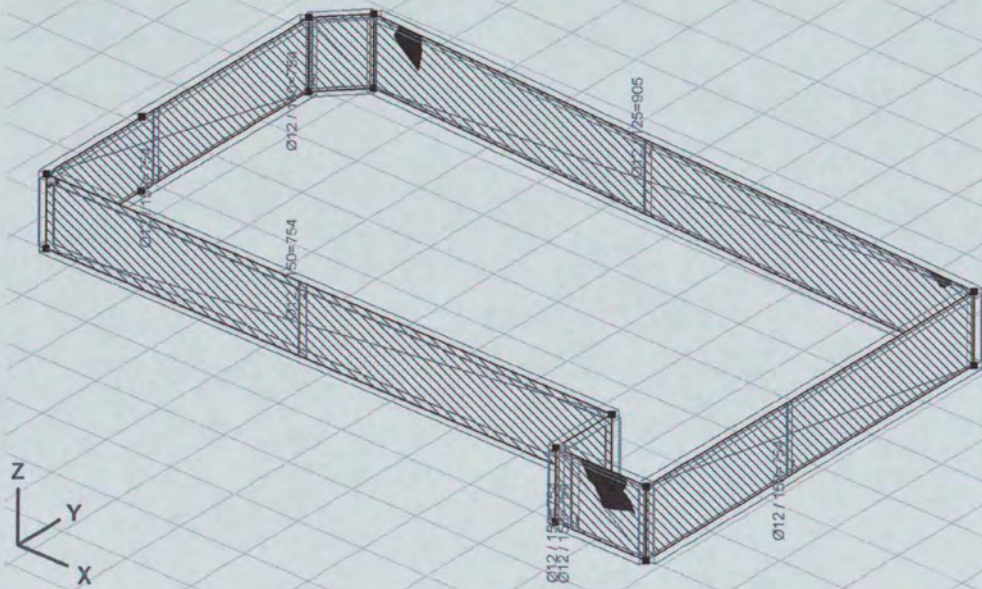
9/22/2017

Pag. 26



Lineaire bereken	yt - ayt
Norm Eurocode-NL	[mm ² /m]
Geval : Grenstoestand	
Type : (Alle UGT (a, b, c))	1340
E (P) : 1.21E-9	950
E (W) : 1.21E-9	559
E (Eq) : 6.90E-12	168
Comp. : yt - ayt [mm ²]	-223
Detail : Geselecteerde	-614
	-1004
	-1395
	-1786
	-2177
	-2568
	-2959
	-3349
	-3740
	-4131

Wanden yt - ayt, Kleuren 2D



Lineaire bereken	yt - ayt
Norm Eurocode-NL	[mm ² /m]
Geval : Grenstoestand	
Type : (Alle UGT (a, b, c))	0
E (P) : 1.21E-9	-295
E (W) : 1.21E-9	-590
E (Eq) : 6.90E-12	-885
Comp. : yt - ayt [mm ²]	-1180
Detail : Geselecteerde	-1475
	-1770
	-2066
	-2361
	-2656
	-2951
	-3246
	-3541
	-3836
	-4131

Wanden yt - ayt, Kleuren 2D 2

Modelgegevens

the scale towards document

mm 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.3

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

Patch Reference numbers on UTT

Image Engineering Scan Reference Chart TE263 Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

Pag. 27

Materialen

	Naam	Type	Nationale norm	Materiaalnorm	Model	E_x [N/mm ²]	E_y [N/mm ²]	ν	α_T [1/°C]	ρ [kg/m ³]
1	C30/37	Beton	Eurocode-NL	EN 206	Lineair	32800	32800	0.20	1E-5	2500

	Naam	Materiaal kleur	Contour kleur	Structuur	P_1	P_2	P_3	P_4	P_5	P_6	P_7
1	C30/37			Concrete A	f_{ck} [N/mm ²] = 30.00	$\gamma_c = 1.500$	$\alpha_{cc} = 1.00$	$\varphi_t = 2.00$			

	Naam	P_8	P_9	P_{10}	P_{11}	P_{12}
1	C30/37					

Naam: Materiaalnaam; Type: Type materiaal; Model: Materiaal model; E_x : Elasticiteitsmodulus in lokale x richting; E_y : Elasticiteitsmodulus in lokale y richting; ν : Poisson's verhouding; α_T : Warmteuitzettingscoëfficiënt; ρ : Dichtheid; Materiaal kleur: Materiaalkleur; Contour kleur: Contourkleur; $P_1, P_2, P_3, P_4, P_5, P_6, P_7, P_8, P_9, P_{10}, P_{11}, P_{12}$: Ontwerpparameter;

Belastinggevallen

	Naam	Groep	Groepstype
1	ST1	PERM1	Permanent
2	ST2	VER1	Veranderlijk
3	ST3	VER2	Veranderlijk
4	ST4	VER3	Veranderlijk
5	ST5	VER3	Veranderlijk

Naam: Naam belastinggeval; Groep: Belastinggroep; Groepstype: Belastinggroep type;

Belastinggroepen (Eurocode-NL)

	Groep	Type	$\gamma_{G,sup}$	$\gamma_{G,inf}$	ξ	γ	Ψ_0	Ψ_1	Ψ_2	Additive
1	PERM1	Permanent	1.350	0.900	0.889					1
2	VER1	Veranderlijk				1.500	0.400	0.500	0.300	0
3	VER2	Veranderlijk				1.500	0.400	0.500	0.300	0
4	VER3	Veranderlijk				1.500	0	0.200	0	0

Groep: Belastinggroep; $\gamma_{G,sup}$: Veiligheidsfactor bovengrens; $\gamma_{G,inf}$: Veiligheidsfactor ondergrens; ξ : Veiligheidsfactor; γ : Veiligheidsfactor; Ψ_0, Ψ_1, Ψ_2 : Psi factor; Additive: Gelijkijdige belastinggevallen;

Knopen

	X [m]	Y [m]	Z [m]	e_x	e_y	e_z	θ_x	θ_y	θ_z
1	-0.165	5.480	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
2	-0.165	-0.165	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
3	0.710	6.355	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
4	11.020	5.915	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
5	11.020	5.375	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
6	0.910	5.808	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
7	0.375	5.240	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
8	0.375	0.375	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
9	9.225	0.375	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
10	9.225	-0.665	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
11	11.020	-0.665	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
12	11.020	-1.205	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
13	8.685	-1.205	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
14	8.685	-0.165	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
15	10.645	-0.665	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
16	10.645	5.391	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij



Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017 Pag. 28

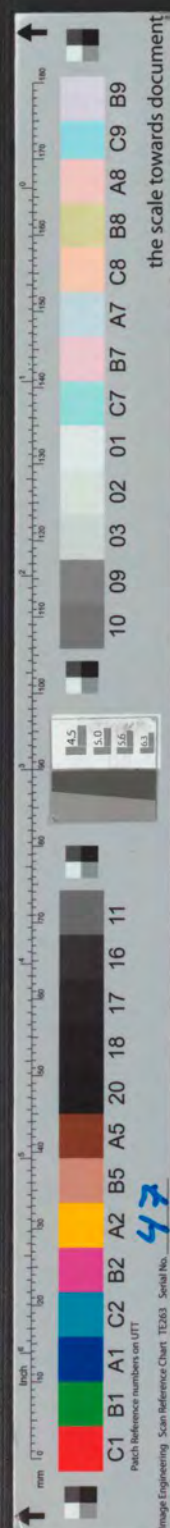
Knopen

	X [m]	Y [m]	Z [m]	e_x	e_y	e_z	θ_x	θ_y	θ_z
17	-0.165	2.150	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
18	10.920	2.150	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
19	0.375	2.150	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
20	0	0	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
21	8.850	0	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
22	8.850	-1.040	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
23	0	5.395	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
24	0.795	6.190	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
25	11.020	5.750	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
26	11.020	-1.040	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
27	0	5.400	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
28	0	2.150	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
29	10.920	5.650	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
30	0.375	0.375	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
31	0.375	5.240	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
32	0.910	5.808	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
33	10.645	5.391	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
34	10.645	-0.665	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
35	9.225	-0.665	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
36	9.225	0.375	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
37	3.860	2.150	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
38	6.832	2.150	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
39	0.700	0.700	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
40	1.400	0.700	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
41	3.842	0.700	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
42	6.284	0.700	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
43	8.725	0.700	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
44	10.320	3.100	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
45	9.550	-0.340	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
46	10.320	-0.340	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
47	0.700	3.100	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
48	0.700	5.490	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
49	3.440	5.365	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
50	6.180	5.239	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
51	8.920	5.114	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
52	10.320	5.050	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
53	0.375	2.150	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
54	6.718	6.099	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
55	6.718	5.935	0	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij
56	10.320	0.700	-1.020	Vrij	Vrij	Vrij	Vrij	Vrij	Vrij

 e_x : Knoopvrijheidsgraden (Verplaatsingsbeperking X); e_y : Knoopvrijheidsgraden (Verplaatsingsbeperking Y); e_z : Knoopvrijheidsgraden (Verplaatsingsbeperking Z); θ_x : Knoopvrijheidsgraden (Rotatiebeperking rond X-as); θ_y : Knoopvrijheidsgraden (Rotatiebeperking rond Y-as); θ_z : Knoopvrijheidsgraden (Rotatiebeperking rond Z-as);

Domeinen

	Type	Materiaal	Ref _x	Ref _z	Dikte [mm]	k [l]	Oppervlakte [m ²]	Gat	Mesh
1	⊕ Schaal	1	Auto	Auto	350	1	15.343	-	1
2	⊕ Schaal	1	Auto	Auto	350	1	2.268	-	1
3	⊕ Schaal	1	Auto	Auto	250	1	4.962	-	1
4	⊕ Schaal	1	Auto	Auto	250	1	0.796	-	1
5	⊕ Schaal	1	Auto	Auto	250	1	9.939	-	1
6	⊕ Schaal	1	Auto	Auto	250	1	6.177	-	1
7	⊕ Schaal	1	Auto	Auto	250	1	1.448	-	1
8	⊕ Schaal	1	Auto	Auto	250	1	1.061	-	1
9	⊕ Schaal	1	Auto	Auto	250	1	9.027	-	1



Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017 Pag. 29

Domeinen

	Type	Materiaal	Ref _x	Ref _z	Dikte [mm]	k []	Oppervlakte [m ²]	Gat	Mesh
10	⊕ Schaal	1	Auto	Auto	350	1	55.092	-	1

Type: Plaateltype; Ref_x: Referentie voor lokale X-richting; Ref_z: Referentie voor lokale Z-richting; k: Stijfheids reductie; Oppervlakte: Domein oppervlak; Gat: Aantal gaten in domein; Mesh: Gegeneerde mesh;

ST1: Knoopbelastingen

	Richting	F _x [kN]	F _y [kN]	F _z [kN]	M _x [kNm]	M _y [kNm]	M _z [kNm]
18	Globaal	0	0	-45.80	0	0	0
29	Globaal	0	0	-10.00	0	0	0
37	Globaal	0	0	-69.50	0	0	0
38	Globaal	0	0	-74.10	0	0	0

F_x, F_y, F_z: Belastingkracht component; M_x, M_y, M_z: Belastingsmoment component;

ST1: Vlak eigen gewicht

	Σ [kg]
1-1164	84497.125
Totaal	84497.125

Σ: Totale massa;

ST1: Eigen gewicht van domein

	Σ [kg]
1-10	84497.125
Totaal	84497.125

Σ: Totale massa;

ST1: Domein puntlast

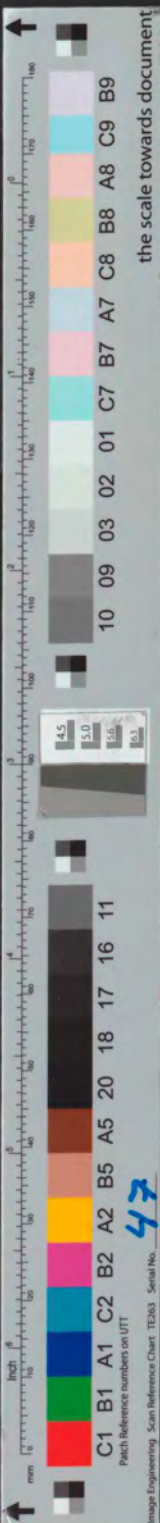
	Richting	F _x [kN]	F _y [kN]	F _z [kN]	M _x [kNm]	M _y [kNm]	M _z [kNm]	X [m]	Y [m]	Z [m]
1	Globaal	0	0	-45.70	0	0	0	0.375	2.150	0
1	Globaal	0	0	-85.50	0	0	0	8.685	-1.205	0
1	Globaal	0	0	-100.00	0	0	0	-0.165	-0.165	0

F_x, F_y, F_z: Belastingkracht component; M_x, M_y, M_z: Belastingsmoment component; X: Belasting in X-richting; Y: Belasting in Y-richting; Z: Belasting in Z-richting;

ST1: Domein vlaklast

	Domein	Richting	Type	In gaten	Comp.	Waarde [kN/m ²]
	10	Globaal	Constant	nee	pX =	0
					pY =	0
					pZ =	-1.25

In gaten: Belasting op openingen toestaan; Comp.: Resultaatonderdeel; Waarde: waarde van de lastcomponent;



Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

Pag. 30

ST1: Oppervlak lijnlast

	Richting	p_x [kN/m]	p_y [kN/m]	p_z [kN/m]	p_m [kNm/m]	X [m]	Y [m]	Z [m]	Richting	dL [m]
12	Globaal	0	0	-77.90	0	0.710	6.355	0	-	0
		0	0	-77.90	0	6.718	6.099	0	-	6.013
13	Globaal	0	0	-66.50	0	6.718	6.099	0	-	0
		0	0	-66.50	0	11.020	5.915	0	-	4.306
14	Globaal	0	0	-63.10	0	-0.165	5.480	0	-	0
		0	0	-63.10	0	0.710	6.355	0	-	1.237
15	Globaal	0	0	-56.00	0	-0.165	-0.165	0	-	0
		0	0	-56.00	0	-0.165	5.480	0	-	5.645
16	Globaal	0	0	-16.40	0	-0.165	2.150	0	-	0
		0	0	-16.40	0	0.375	2.150	0	-	0.540
17	Globaal	0	0	-95.50	0	-0.165	-0.165	0	-	0
		0	0	-95.50	0	8.685	-0.165	0	-	8.850
18	Globaal	0	0	-84.50	0	8.685	-1.205	0	-	0
		0	0	-84.50	0	8.685	-0.165	0	-	1.040
19	Globaal	0	0	-92.80	0	8.685	-1.205	0	-	0
		0	0	-92.80	0	11.020	-1.205	0	-	2.335
42	Globaal	0	0	-4.50	0	11.020	-1.205	0	-	0
		0	0	-4.50	0	11.020	5.915	0	-	7.120

p_x , p_y , p_z : Belastingkracht component; p_m : Belastingsmoment component; X : Belasting in X-richting; Y : Belasting in Y-richting; Z : Belasting in Z-richting;

ST2: Knooppbelastingen

	Richting	F_x [kN]	F_y [kN]	F_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
18	Globaal	0	0	-56.60	0	0	0
37	Globaal	0	0	-102.00	0	0	0
38	Globaal	0	0	-114.10	0	0	0

F_x , F_y , F_z : Belastingkracht component; M_x , M_y , M_z : Belastingsmoment component;

ST2: Domein puntlast

	Richting	F_x [kN]	F_y [kN]	F_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	X [m]	Y [m]	Z [m]
1	Globaal	0	0	-71.00	0	0	0	0.375	2.150	0

F_x , F_y , F_z : Belastingkracht component; M_x , M_y , M_z : Belastingsmoment component; X : Belasting in X-richting; Y : Belasting in Y-richting; Z : Belasting in Z-richting;

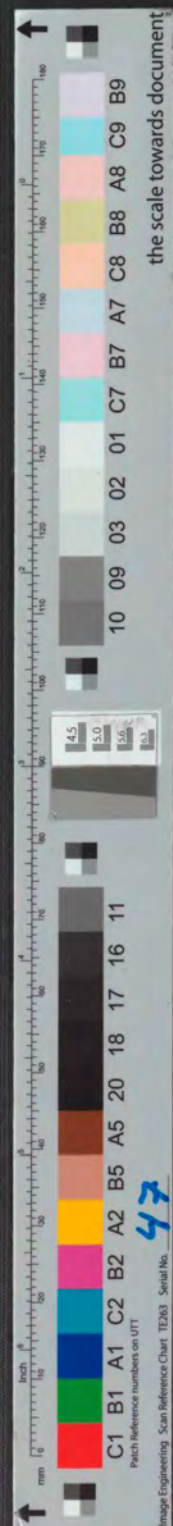
ST2: Domein vlaklast

	Domein	Richting	Type	In gaten	Comp.	Waarde [kN/m ²]
	10	Globaal	Constant	nee	pX =	0
					pY =	0
					pZ =	-2.55

In gaten: Belasting op openingen toestaan; Comp.: Resultaatterdeel; Waarde: waarde van de lastcomponent;

ST2: Oppervlak lijnlast

	Richting	p_x [kN/m]	p_y [kN/m]	p_z [kN/m]	p_m [kNm/m]	X [m]	Y [m]	Z [m]	Richting	dL [m]
28	Globaal	0	0	-16.30	0	0.710	6.355	0	-	0



Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

Pag. 31

ST2: Oppervlak lijnlast

	Richting	p_x [kN/m]	p_y [kN/m]	p_z [kN/m]	p_m [kNm/m]	X [m]	Y [m]	Z [m]	Richting	dL [m]
29	Globaal	0	0	-16.30	0	11.020	5.915	0	-	10.319
		0	0	-16.30	0	-0.165	5.480	0	-	0
30	Globaal	0	0	-16.30	0	0.710	6.355	0	-	1.237
		0	0	-7.40	0	0	2.150	0	-	0
31	Globaal	0	0	-7.40	0	0.375	2.150	0	-	0.375
		0	0	-17.90	0	-0.165	-0.165	0	-	0
32	Globaal	0	0	-17.90	0	8.685	-0.165	0	-	8.850
		0	0	-13.40	0	8.685	-1.205	0	-	0
		0	0	-13.40	0	11.020	-1.205	0	-	2.335

p_x, p_y, p_z : Belastingkracht component; p_m : Belastingmoment component; X: Belasting in X-richting; Y: Belasting in Y-richting; Z: Belasting in Z-richting;

ST3: Domein vlaklast

	Domein	Richting	Type	In gaten	Comp.	Waarde [kN/m ²]
	10	Globaal	Constant	nee	pX =	0
					pY =	0
					pZ =	9.50

In gaten: Belasting op openingen toestaan; Comp.: Resultaatonderdeel; Waarde: waarde van de lastcomponent;

ST4: Knoopbelastingen

	Richting	F_x [kN]	F_y [kN]	F_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
18	Globaal	0	0	165.00	0	0	0
29	Globaal	0	0	-165.00	0	0	0

F_x, F_y, F_z : Belastingkracht component; M_x, M_y, M_z : Belastingmoment component;

ST5: Knoopbelastingen

	Richting	F_x [kN]	F_y [kN]	F_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
18	Globaal	0	0	-165.00	0	0	0
29	Globaal	0	0	165.00	0	0	0

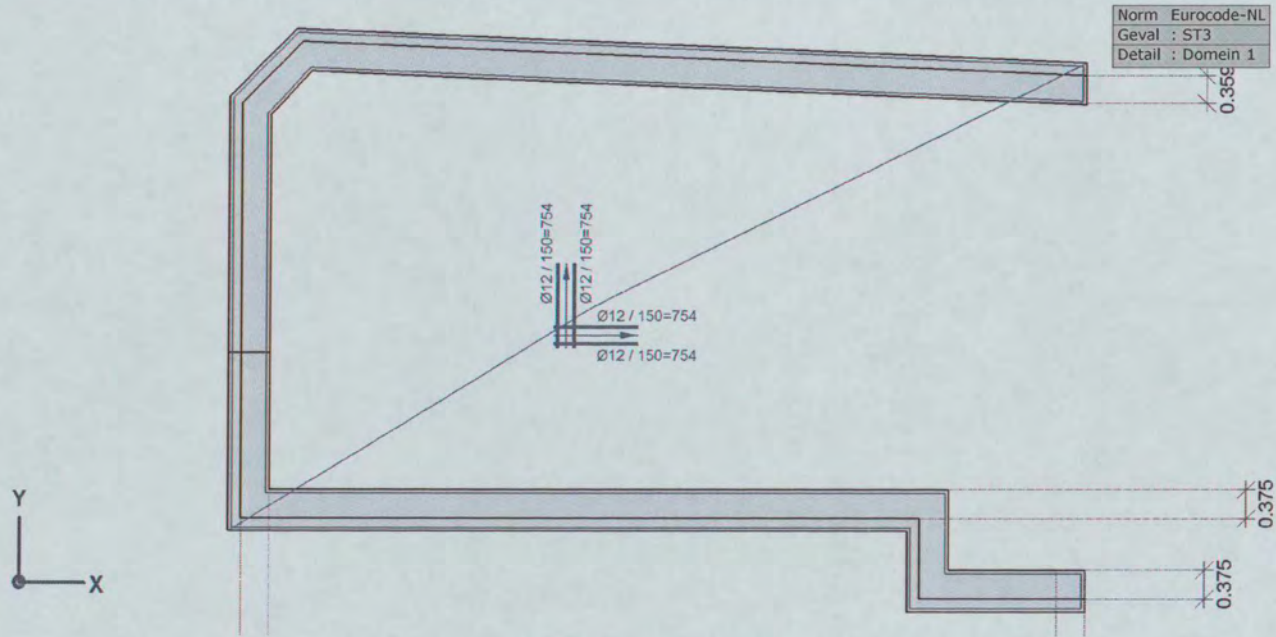
F_x, F_y, F_z : Belastingkracht component; M_x, M_y, M_z : Belastingmoment component;

Logische onderdelen**Platen****Domein 1**

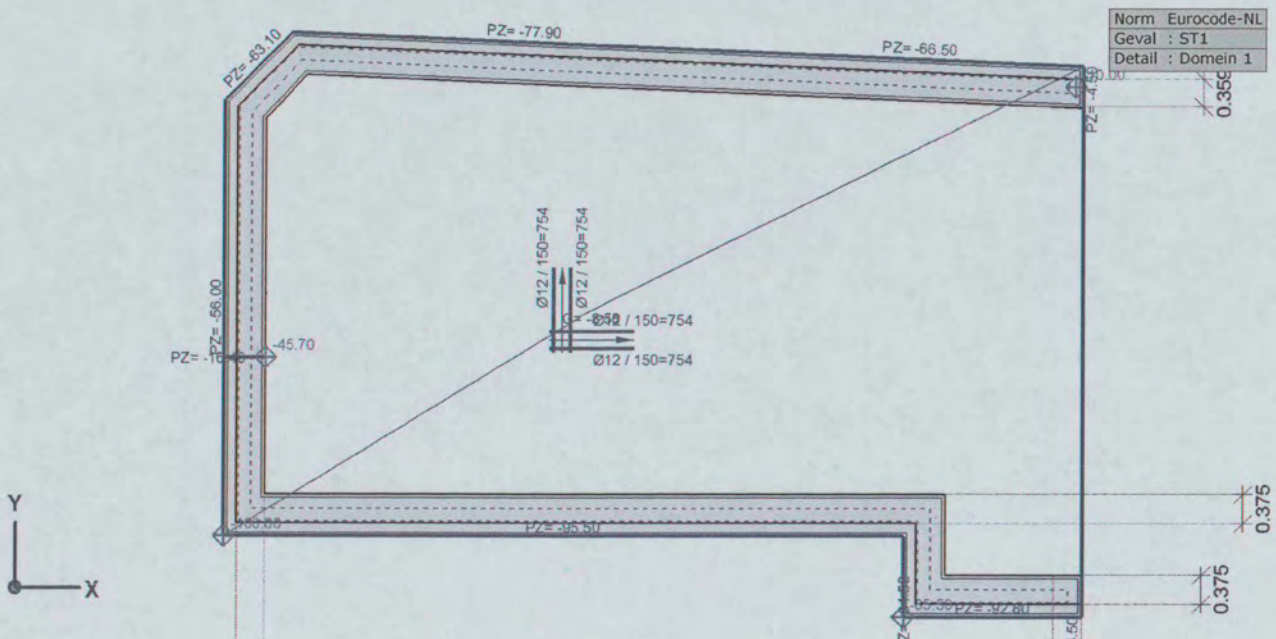
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs



Rapport Domein 1, Bovenaanzicht



Rapport Domein 1, ST1, Bovenaanzicht

ST1: Knoopbelastingen [Domein 1]

	Richting	F_x [kN]	F_y [kN]	F_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
29	Globaal	0	0	-10.00	0	0	0

F_x, F_y, F_z : Belastingkracht component; M_x, M_y, M_z : Belastingsmoment component;

the scale towards document

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

Pag. 33

ST1: Vlak eigen gewicht [Domein 1]

	Σ [kg]
1-250	13425.350
Totaal	13425.350

Σ: Totale massa;

ST1: Eigen gewicht van domein [Domein 1]

	Σ [kg]
1	13425.350
Totaal	13425.350

Σ: Totale massa;

ST1: Domein puntlast [Domein 1]

	Richting	F_x [kN]	F_y [kN]	F_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	X [m]	Y [m]	Z [m]
1	Globaal	0	0	-45.70	0	0	0	0.375	2.150	0
1	Globaal	0	0	-85.50	0	0	0	8.685	-1.205	0
1	Globaal	0	0	-100.00	0	0	0	-0.165	-0.165	0

Fx, Fy, Fz: Belastingkracht component; Mx, My, Mz: Belastingmoment component; X: Belasting in X-richting; Y: Belasting in Y-richting; Z: Belasting in Z-richting;

ST1: Oppervlak lijnlast [Domein 1]

	Richting	p_x [kN/m]	p_y [kN/m]	p_z [kN/m]	p_m [kNm/m]	X [m]	Y [m]	Z [m]	Richting	dL [m]
12	Globaal	0	0	-77.90	0	0.710	6.355	0	-	0
		0	0	-77.90	0	6.718	6.099	0	-	6.013
13	Globaal	0	0	-66.50	0	6.718	6.099	0	-	0
		0	0	-66.50	0	11.020	5.915	0	-	4.306
14	Globaal	0	0	-63.10	0	-0.165	5.480	0	-	0
		0	0	-63.10	0	0.710	6.355	0	-	1.237
15	Globaal	0	0	-56.00	0	-0.165	-0.165	0	-	0
		0	0	-56.00	0	-0.165	5.480	0	-	5.645
16	Globaal	0	0	-16.40	0	-0.165	2.150	0	-	0
		0	0	-16.40	0	0.375	2.150	0	-	0.540
17	Globaal	0	0	-95.50	0	-0.165	-0.165	0	-	0
		0	0	-95.50	0	8.685	-0.165	0	-	8.850
18	Globaal	0	0	-84.50	0	8.685	-1.205	0	-	0
		0	0	-84.50	0	8.685	-0.165	0	-	1.040
19	Globaal	0	0	-92.80	0	8.685	-1.205	0	-	0
		0	0	-92.80	0	11.020	-1.205	0	-	2.335
42	Globaal	0	0	-4.50	0	11.020	-1.205	0	-	0
		0	0	-4.50	0	11.020	5.915	0	-	7.120

px, py, pz: Belastingkracht component; pm: Belastingmoment component; X: Belasting in X-richting; Y: Belasting in Y-richting; Z: Belasting in Z-richting;



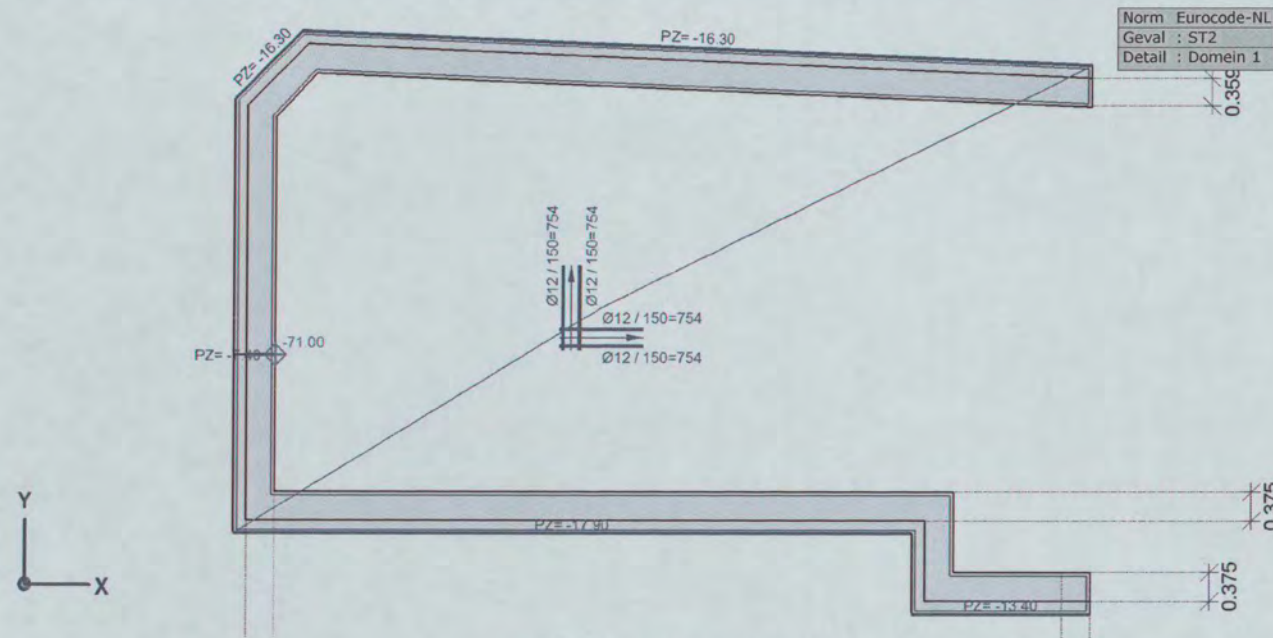
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

Pag. 34



Rapport Domein 1, ST2, Bovenaanzicht

ST2: Domein puntlast [Domein 1]

	Richting	F_x [kN]	F_y [kN]	F_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	X [m]	Y [m]	Z [m]
1	Globaal	0	0	-71.00	0	0	0	0.375	2.150	0

F_x, F_y, F_z : Belastingkracht component; M_x, M_y, M_z : Belastingsmoment component; X: Belasting in X-richting; Y: Belasting in Y-richting; Z: Belasting in Z-richting;

ST2: Oppervlak lijnlast [Domein 1]

	Richting	p_x [kN/m]	p_y [kN/m]	p_z [kN/m]	p_m [kNm/m]	X [m]	Y [m]	Z [m]	Richting	dL [m]
28	Globaal	0	0	-16.30	0	0.710	6.355	0	-	0
		0	0	-16.30	0	11.020	5.915	0	-	10.319
29	Globaal	0	0	-16.30	0	-0.165	5.480	0	-	0
		0	0	-16.30	0	0.710	6.355	0	-	1.237
30	Globaal	0	0	-7.40	0	0	2.150	0	-	0
		0	0	-7.40	0	0.375	2.150	0	-	0.375
31	Globaal	0	0	-17.90	0	-0.165	-0.165	0	-	0
		0	0	-17.90	0	8.685	-0.165	0	-	8.850
32	Globaal	0	0	-13.40	0	8.685	-1.205	0	-	0
		0	0	-13.40	0	11.020	-1.205	0	-	2.335

p_x, p_y, p_z : Belastingkracht component; p_m : Belastingsmoment component; X: Belasting in X-richting; Y: Belasting in Y-richting; Z: Belasting in Z-richting;

ST4: Knoopbelastingen [Domein 1]

	Richting	F_x [kN]	F_y [kN]	F_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
29	Globaal	0	0	-165.00	0	0	0

F_x, F_y, F_z : Belastingkracht component; M_x, M_y, M_z : Belastingsmoment component;

the scale towards document

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9
C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11
Patch Reference numbers on UTT
Image Engineering Scan Reference Chart TE263 Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies
 Model: 17021-rev2.axs

ST5: Knoopbelastingen [Domein 1]

	Richting	F _x [kN]	F _y [kN]	F _z [kN]	M _x [kNm]	M _y [kNm]	M _z [kNm]
29	Globaal	0	0	165.00	0	0	0

F_x, F_y, F_z: Belastingkracht component; M_x, M_y, M_z: Belastingsmoment component;

Verplaatsingen

Knoopverplaatsingen

Grenstoestand Min,Max.

Knoopverplaatsingen [Linear,(BGT Quasi-blijvend) Grenstoestand, Domein 1]

	C	min. max.	e _X [mm]	e _Y [mm]	e _Z [mm]	e _R [mm]	f _X [rad]	f _Y [rad]	f _Z [rad]
Ext.									
62	eX	min	-1.389	-0.765	-10.216	10.338	0.00112	-0.00150	0.00035
93		max	-0.818	0.021	-14.368	14.392	-0.00037	-0.00068	0.00031
677		max	-0.818	0.108	-14.183	14.207	-0.00045	-0.00068	0.00029
152	eY	min	-1.091	-1.709	-16.611	16.734	0.00232	-0.00102	0.00001
741		min	-1.094	-1.708	-16.859	16.980	0.00232	-0.00100	-0.00002
762		min	-1.091	-1.710	-16.307	16.433	0.00231	-0.00101	0
851		min	-1.092	-1.709	-16.583	16.707	0.00232	-0.00101	-0.00001
852		min	-1.091	-1.708	-16.333	16.458	0.00232	-0.00103	0.00002
903		min	-1.088	-1.709	-15.932	16.060	0.00227	-0.00101	-0.00002
129		max	-0.965	0.780	-13.490	13.547	-0.00131	-0.00093	0
206		max	-0.948	0.780	-12.637	12.696	-0.00129	-0.00091	0
1016		max	-0.949	0.780	-12.714	12.773	-0.00130	-0.00091	0
2	eZ	min	-1.181	-0.561	-21.948	21.986	0.00166	-0.00176	-0.00018
5		max	-1.085	-0.390	-5.670	5.786	0	-0.00111	-0.00021
5	eR	min	-1.085	-0.390	-5.670	5.786	0	-0.00111	-0.00021
627		min	-1.034	-0.399	-5.680	5.788	-0.00009	-0.00111	-0.00029
2		max	-1.181	-0.561	-21.948	21.986	0.00166	-0.00176	-0.00018
129	fX	min	-0.965	0.780	-13.490	13.547	-0.00131	-0.00093	0

	C	min. max.	f _R [rad]	Maatgevende combinatie
Ext.				
62	eX	min	0.00191	[ST1] {0.3*ST2}
93		max	0.00083	[ST1] {0.3*ST3}
677		max	0.00087	[ST1] {0.3*ST3}
152	eY	min	0.00254	[ST1] {0.3*ST2} (0.3*ST3)
741		min	0.00252	[ST1] {0.3*ST2} (0.3*ST3)
762		min	0.00252	[ST1] {0.3*ST2} (0.3*ST3)
851		min	0.00253	[ST1] {0.3*ST2} (0.3*ST3)
852		min	0.00254	[ST1] {0.3*ST2} (0.3*ST3)
903		min	0.00248	[ST1] {0.3*ST2} (0.3*ST3)
129		max	0.00161	[ST1] {0.3*ST2}
206		max	0.00158	[ST1] {0.3*ST2} (0.3*ST3)
1016		max	0.00159	[ST1] {0.3*ST2} (0.3*ST3)
2	eZ	min	0.00242	[ST1] {0.3*ST2}
5		max	0.00113	[ST1] {0.3*ST3}
5	eR	min	0.00113	[ST1] {0.3*ST3}
627		min	0.00115	[ST1] {0.3*ST3}
2		max	0.00242	[ST1] {0.3*ST2}
129	fX	min	0.00161	[ST1] {0.3*ST2}



Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

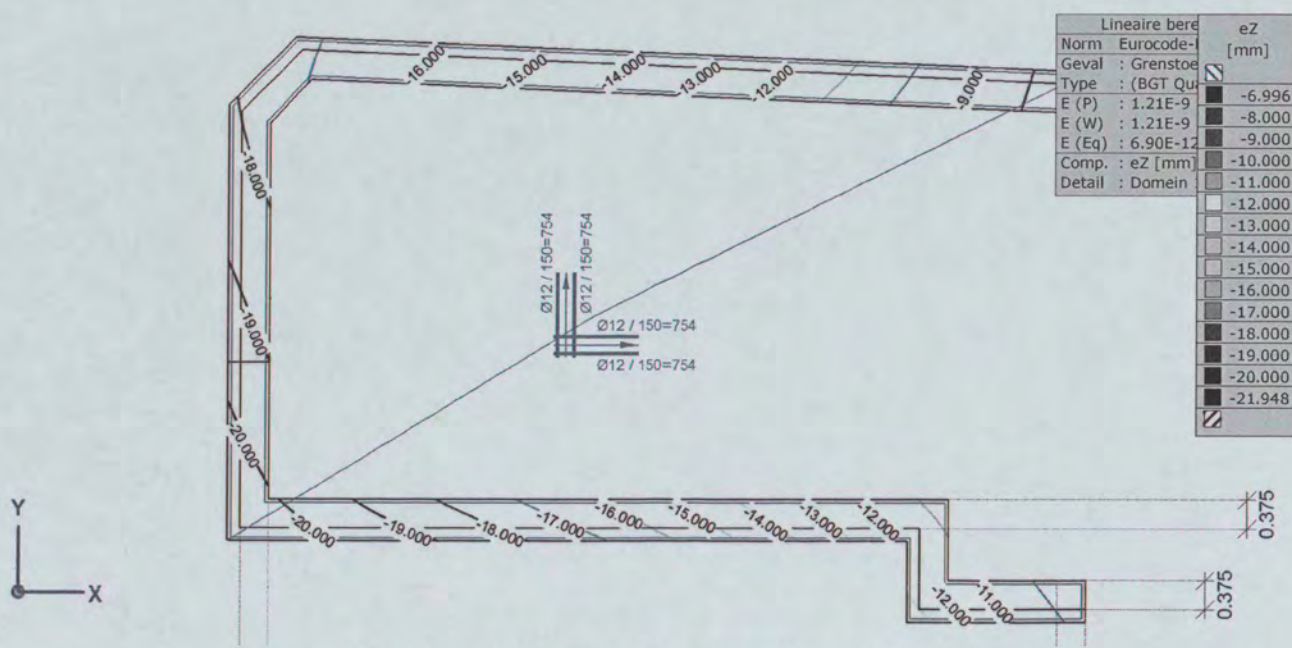
9/22/2017 Pag. 36

Knoopverplaatsingen [Lineair,(BGT Quasi-blijvend) Grenstoestand, Domein 1]

	C	min. max.	eX [mm]	eY [mm]	eZ [mm]	eR [mm]	fX [rad]	fY [rad]	fZ [rad]
152		max	-1.091	-1.709	-16.611	16.734	0.00232	-0.00102	0.00001
13	fY	min	-1.279	-1.080	-13.714	13.816	0.00186	-0.00213	0.00005
1029		max	-0.975	0.128	-14.386	14.419	-0.00055	-0.00062	0.00035
1032		max	-0.982	0.041	-14.536	14.569	-0.00047	-0.00062	0.00036
914	fZ	min	-1.075	-1.073	-18.841	18.903	0.00159	-0.00089	-0.00038
58		max	-1.074	-0.909	-10.245	10.342	0.00136	-0.00145	0.00041
676	fR	min	-0.821	-0.069	-14.552	14.575	-0.00029	-0.00068	0.00032
13		max	-1.279	-1.080	-13.714	13.816	0.00186	-0.00213	0.00005

	C	min. max.	fR [rad]	Maatgevende combinatie
152		max	0.00254	[ST1] {0.3*ST2} {0.3*ST3}
13	fY	min	0.00283	[ST1] {0.3*ST2}
1029		max	0.00090	[ST1] {0.3*ST3}
1032		max	0.00086	[ST1] {0.3*ST3}
914	fZ	min	0.00186	[ST1] {0.3*ST2} {0.3*ST3}
58		max	0.00202	[ST1] {0.3*ST3}
676	fR	min	0.00081	[ST1] {0.3*ST3}
13		max	0.00283	[ST1] {0.3*ST2}

C: Extreme component; min. max.: Extreme type; eX: Verplaatsing in X-richting; eY: Verplaatsing in Y-richting; eZ: Verplaatsing in Z-richting; eR: Resulterende verplaatsing; fX: Rotatie in X-richting; fY: Rotatie in Y-richting; fZ: Rotatie in Z-richting; fR: Resulterende rotatie;



Rapport [I], > C30/37, Lineair,(BGT Quasi-blijvend) Grenstoestand Min., eZ, Isolijnen, Bovenaanzicht

the scale towards document

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9 A9

mm 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000

4.5 5.0 5.5 6.0 6.5

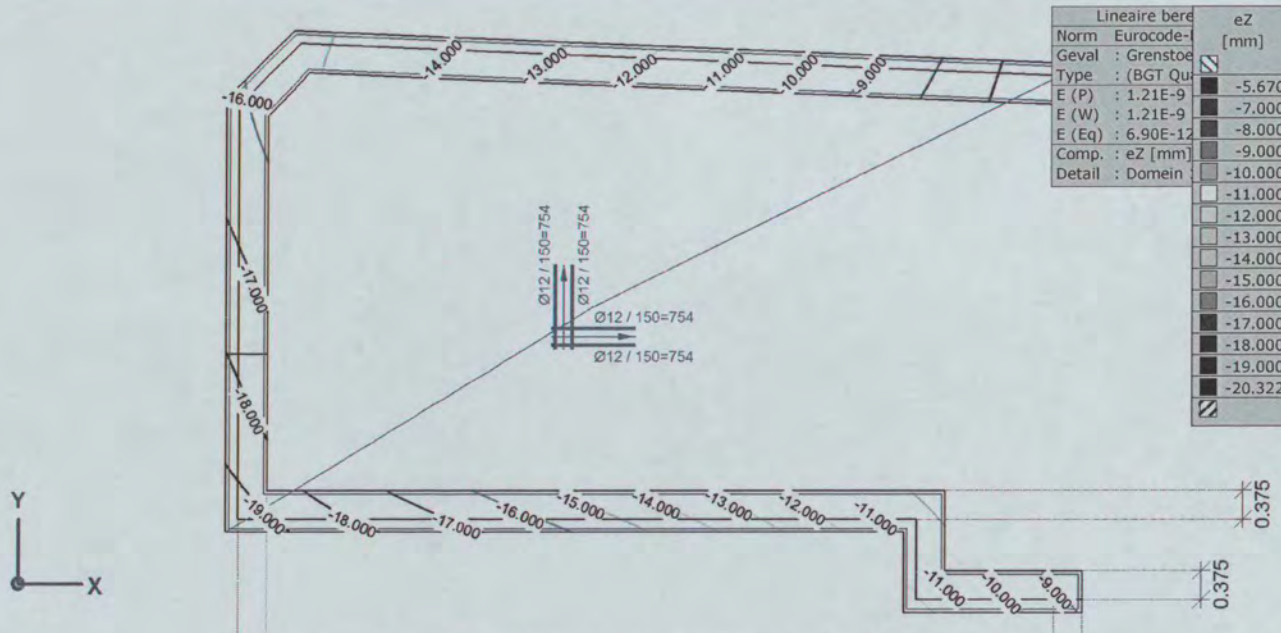
47

Image Engineering Scan Reference Chart TE263 Serial No.

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies
 Model: 17021-rev2.axs

9/22/2017 Pag. 37



Rapport [I], > C30/37, Lineair,(BGT Quasi-blijvend) Grenstoestand Max., eZ, Isolijnen, Bovenaanzicht

Interne krachten

Vlakkrachten

Grenstoestand Min,Max.

Vlakkrachten [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 1]

Knoop	C	min. max.	Oppervlak	nx [kN/m]	ny [kN/m]	nxy [kN/m]	mx [kNm/m]	my [kNm/m]	mxy [kNm/m]	vSz [kN/m]
Ext.										
14	nx	min	Sch 17	-2261.160	-1008.842	822.306	-47.923	-7.611	34.216	345.438
59		max	Sch 6	1539.742	15.079	61.826	61.511	0.419	7.921	360.198
5	ny	min	Sch 1	106.700	-1791.838	77.975	3.243	37.526	-20.392	612.983
82		max	Sch 85	-208.496	1384.733	-152.814	68.432	112.592	24.525	577.044
8	nxy	min	Sch 84	1101.241	1193.552	-611.035	177.661	236.304	-24.109	591.533
183		max	Sch 16	-217.795	-18.268	851.746	12.963	73.939	75.644	184.060
14	mx	min	Sch 17	-1697.681	-609.934	599.645	-57.595	-2.670	35.853	344.093
8		max	Sch 84	1101.241	1193.552	-611.035	177.661	236.304	-24.109	591.533
29	my	min	Sch 1	0.415	126.531	-73.035	-13.174	-15.790	8.237	190.906

Knoop	C	min. max.	Oppervlak	Maatgevende combinatie
Ext.				
14	nx	min	Sch 17	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2)
59		max	Sch 6	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2)
5	ny	min	Sch 1	[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST2+1.5*0.4*ST3)
82		max	Sch 85	[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST2+1.5*0.4*ST3)
8	nxy	min	Sch 84	[1.35*ST1] {1.5*0.4*ST2} (1.5*0.4*ST3)
183		max	Sch 16	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2)
14	mx	min	Sch 17	[1.35*ST1]
8		max	Sch 84	[1.35*ST1] {1.5*0.4*ST2} (1.5*0.4*ST3)
29	my	min	Sch 1	[0.9*ST1] {1.5*ST4}

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 C7 B7 A7 C8 B8 A8 B9 A9 C9 B9

10 09 03 02 01 C7 B7 A7 C8 B8 A8 B9

47

Image Engineering · Scan Reference Chart · TE263 · Serial No.

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

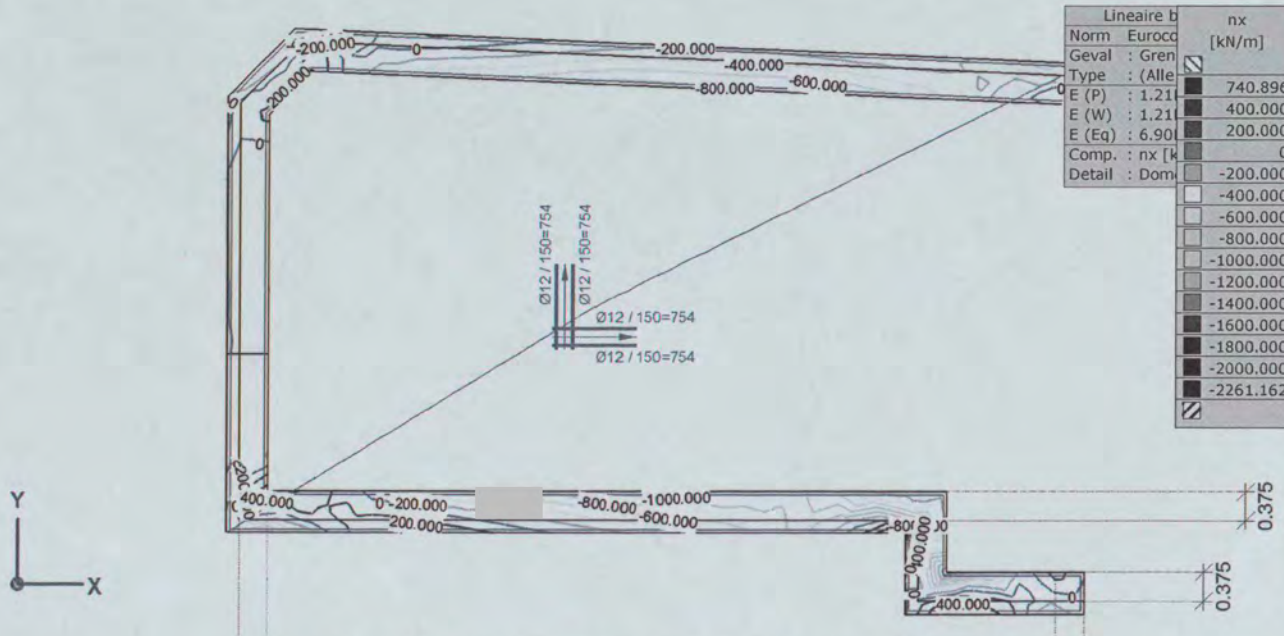
Pag. 38

Vlakkrachten [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 1]

Knoop	C	min. max.	Oppervlak	n_x [kN/m]	n_y [kN/m]	n_{xy} [kN/m]	m_x [kNm/m]	m_y [kNm/m]	m_{xy} [kNm/m]	v_{S_z} [kN/m]
8		max	Sch 84	1101.241	1193.552	-611.035	177.661	236.304	-24.109	591.533
209	mxy	min	Sch 144	-260.636	-19.024	-122.479	-24.629	16.617	-66.209	129.860
183		max	Sch 16	-156.136	119.295	689.678	12.141	80.760	83.610	185.086
11	vSz	min	Sch 248	35.301	-915.276	-108.595	-4.406	75.860	-1.472	11.680
2		max	Sch 43	-57.233	-23.008	94.737	12.094	16.458	27.090	1500.493
14	nxD	min	Sch 17	-2261.160	-1008.842	822.306	-47.923	-7.611	34.216	345.438
8		max	Sch 84	1177.314	1264.871	-557.976	164.491	217.790	-26.592	550.359
5	nyD	min	Sch 1	106.700	-1791.838	77.975	3.243	37.526	-20.392	612.983
7		max	Sch 123	596.586	1317.466	529.891	58.967	88.033	11.261	216.525

Knoop	C	min. max.	Oppervlak	Maatgevende combinatie
8		max	Sch 84	[1.35*ST1] {1.5*0.4*ST2} (1.5*0.4*ST3)
209	mxy	min	Sch 144	[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST2+1.5*0.4*ST3)
183		max	Sch 16	[1.35*ST1]
11	vSz	min	Sch 248	[0.9*ST1] {1.5*ST5} (1.5*0.4*ST2+1.5*0.4*ST3)
2		max	Sch 43	[1.35*ST1] {1.5*0.4*ST2} (1.5*0.4*ST3)
14	nxD	min	Sch 17	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2)
8		max	Sch 84	[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST2+1.5*0.4*ST3)
5	nyD	min	Sch 1	[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST2+1.5*0.4*ST3)
7		max	Sch 123	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)

Knoop: Index; C: Extreme component; min. max.: Extreme type; Oppervlak: Vlak behorend bij knoop; n_x : Normalkracht in lokale X-richting; n_y : Normalkracht in lokale Y-richting; n_{xy} : Membraan afschuifkracht; m_x : Specifiek buigmoment om de lokale y-as; m_y : Specifiek buigmoment om de lokale x-as; m_{xy} : Specifiek draaimoment; v_{S_z} : Resulterende specifieke afschuivingskracht;



Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., n_x , Isolijnen, Bovenaanzicht

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
Patch Reference numbers on UTT
Image Engineering Scan Reference Chart TEX33 Serial No. 47

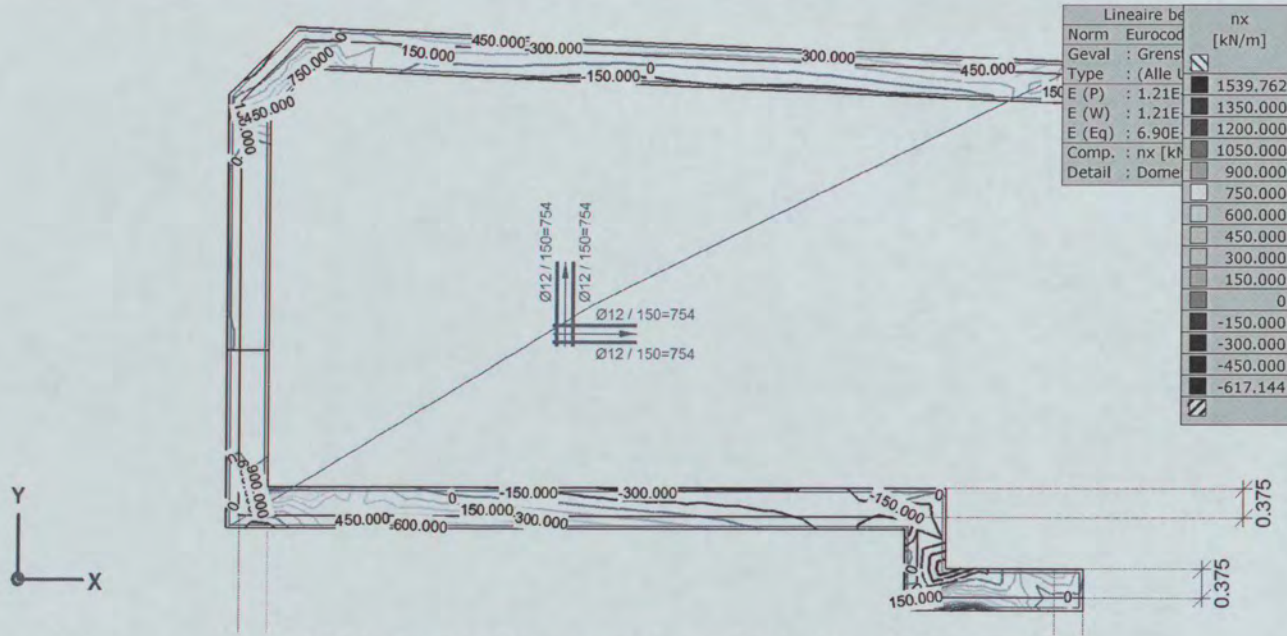
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

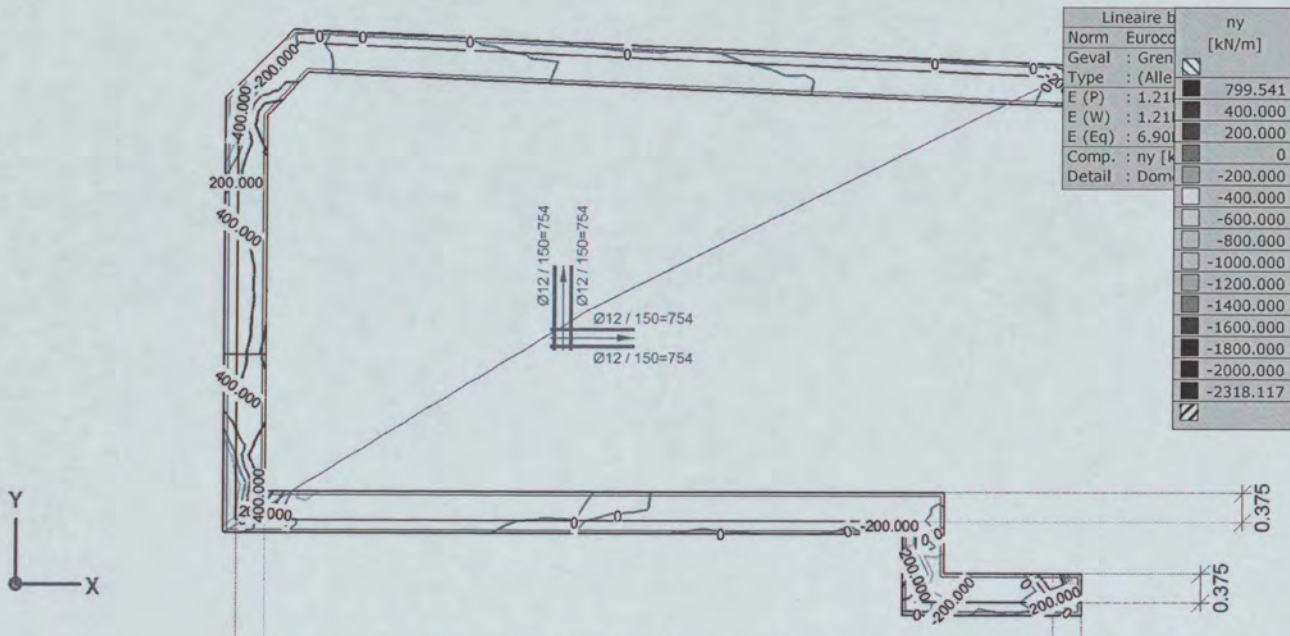
Model: 17021-rev2.axs

9/22/2017

Pag. 39



Rapport [I], > C30/37, Lineair, (Alle UGT (a, b)) Grenstoestand Max., nx, Isolijnen, Bovenaanzicht



Rapport [I], > C30/37, Lineair, (Alle UGT (a, b)) Grenstoestand Min., ny, Isolijnen, Bovenaanzicht

the scale towards document

mm 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

Inch 0 1 2 3 4 5 6 7 8 9 10

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

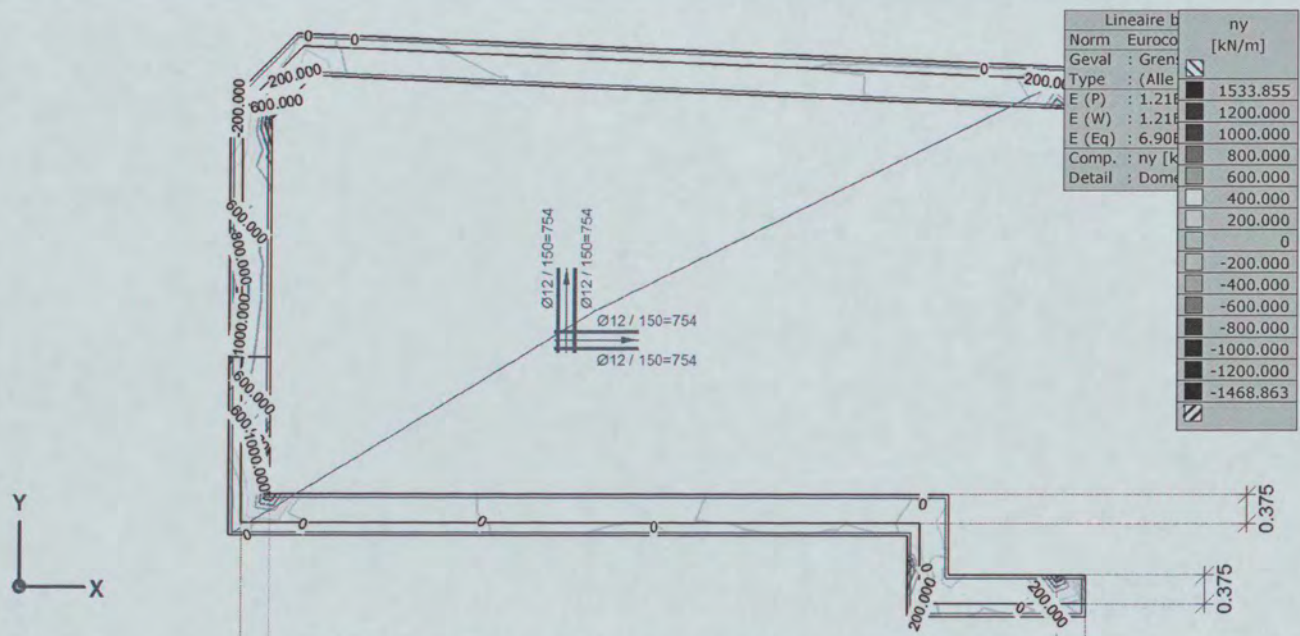
Patch reference numbers on IUT

Image Engineering Scan Reference Chart TE263 Serial No. 47

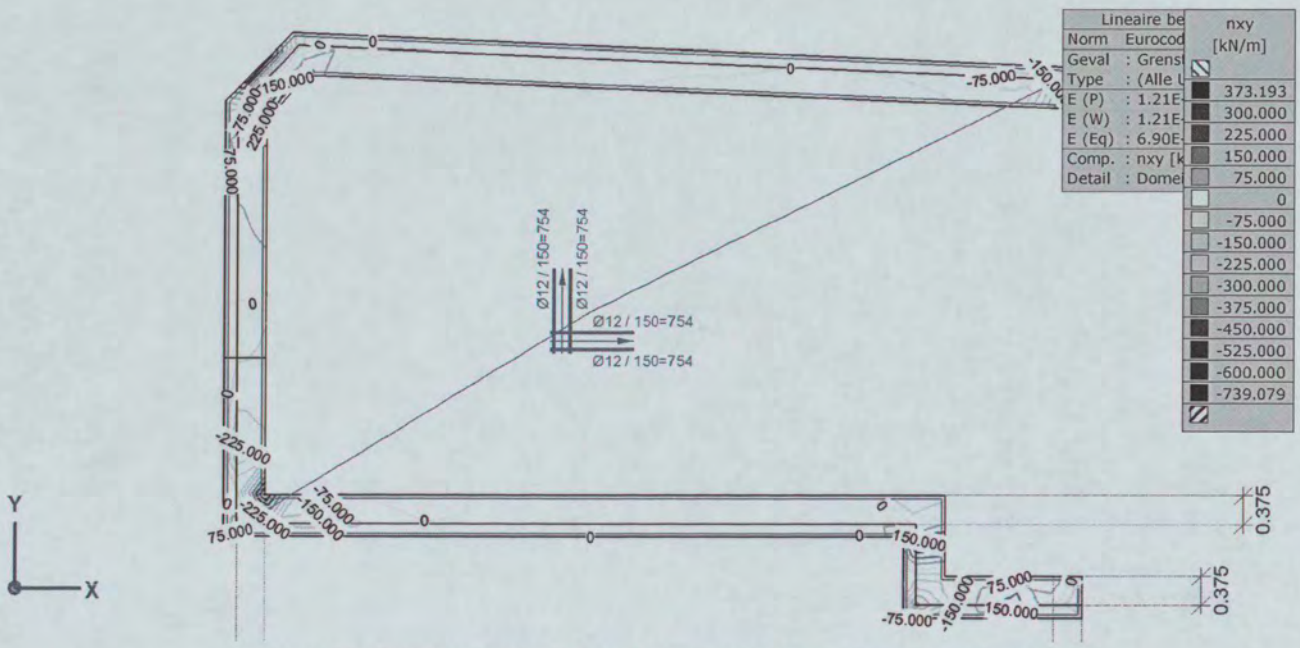
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs



Rapport [I], > C30/37, Lineair, (Alle UGT (a, b)) Grenstoestand Max., ny, Isolijnen, Bovenaanzicht



Rapport [I], > C30/37, Lineair, (Alle UGT (a, b)) Grenstoestand Min., nxy, Isolijnen, Bovenaanzicht

the scale towards document

mm 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

inches 1 2 3 4 5 6 7 8 9 10

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.0

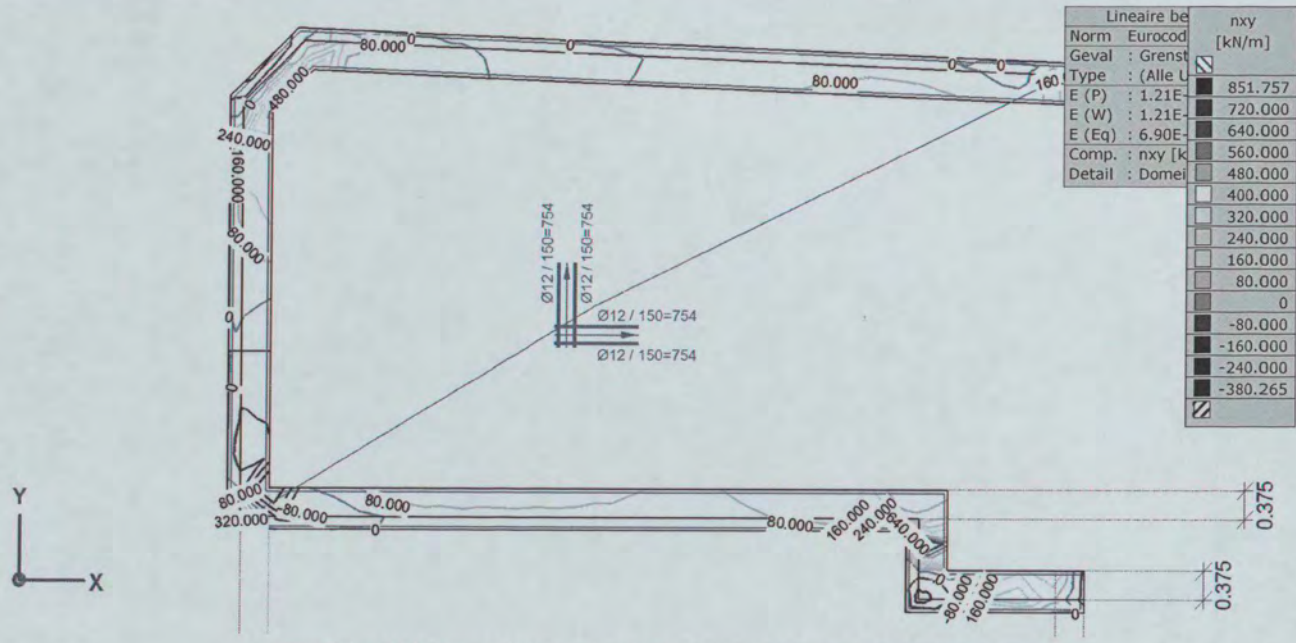
47

Image Engineering Scan Reference Chart TE263 Serial No.

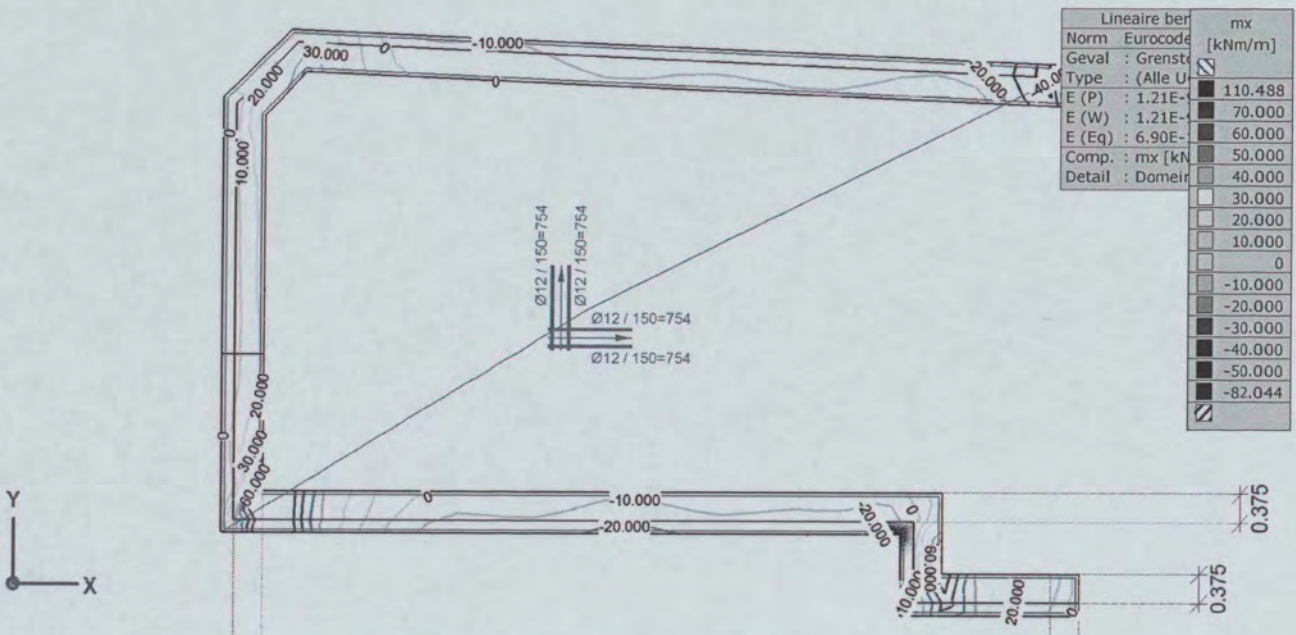
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs



Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Max., nxy, Isolijnen, Bovenaanzicht



Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., mx, Isolijnen, Bovenaanzicht

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
Patch reference numbers on UTT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.0

47

Image Engineering Scan Reference Chart TE263 Serial No.

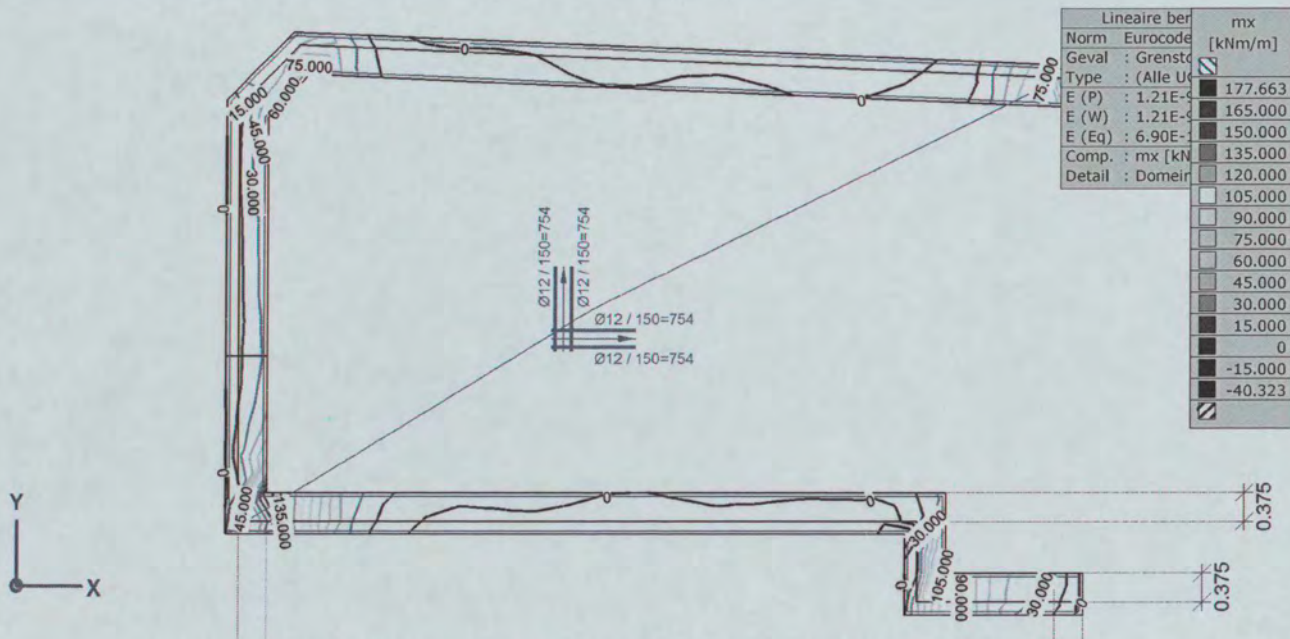
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

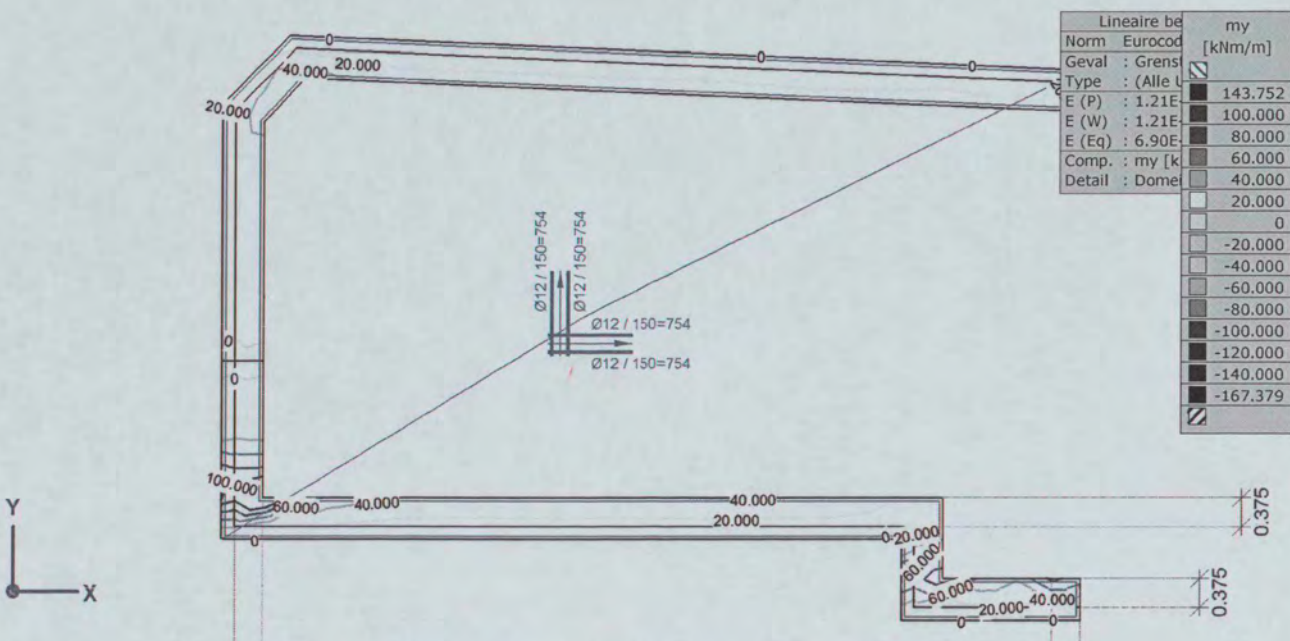
Model: 17021-rev2.axs

9/22/2017

Pag. 42



Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Max., mx, Isolijnen, Bovenaanzicht



Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., my, Isolijnen, Bovenaanzicht

the scale towards document

45 4.5 0.45

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

11 16 17 18 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

mm inch

Image Engineering Scan Reference Chart TE263 Serial No. 47

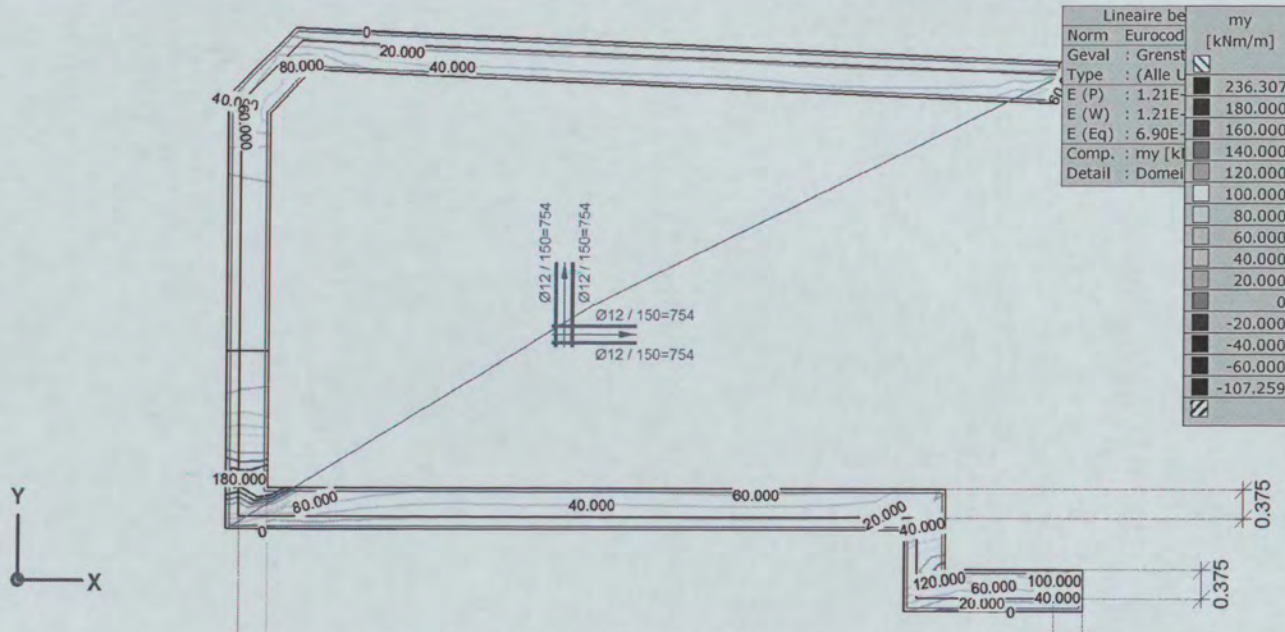
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

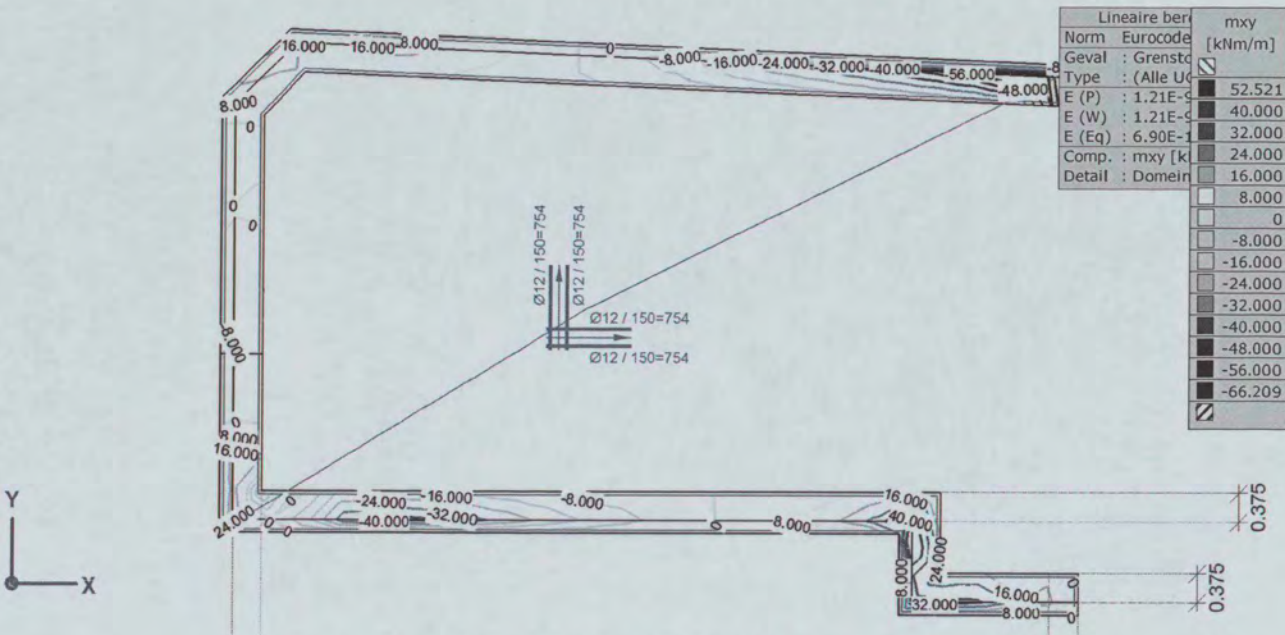
Model: 17021-rev2.axs

9/22/2017

Pag. 43



Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Max., my, Isolijnen, Bovenaanzicht



Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., mxy, Isolijnen, Bovenaanzicht

the scale towards document

4.5 5.0 5.5 6.0 6.5

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

Patch Reference numbers on UTT

Image Engineering Scan Reference Chart TE263 Serial No. 47

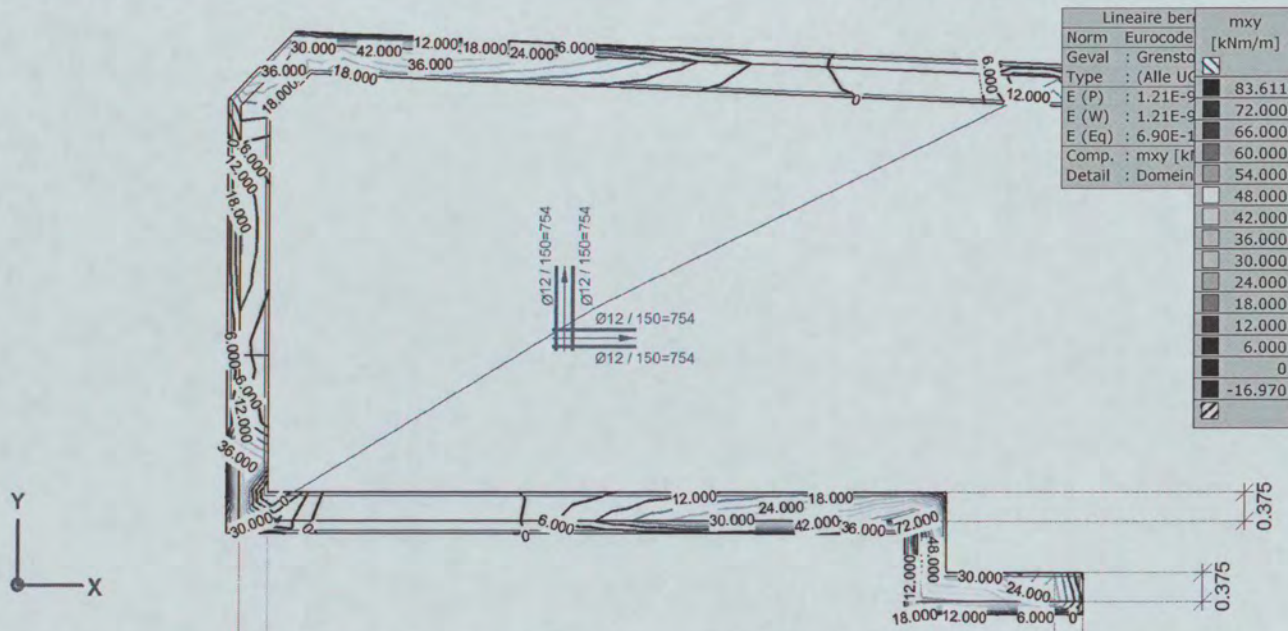
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

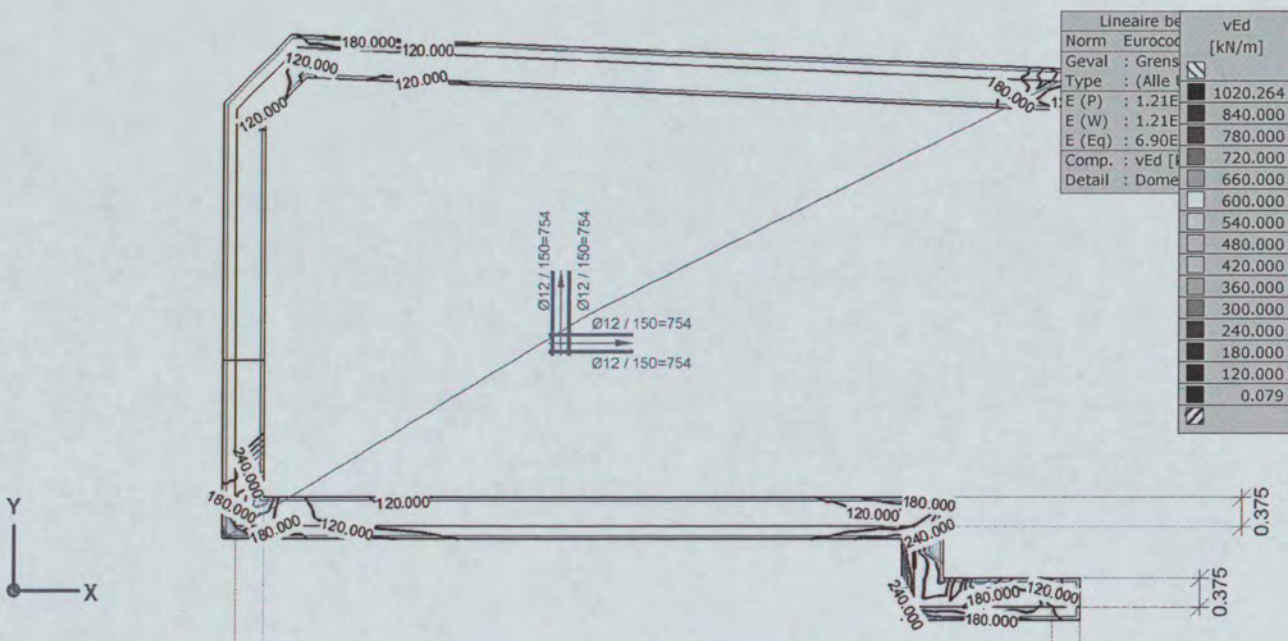
Model: 17021-rev2.axs

9/22/2017

Pag. 44



Rapport [I], > C30/37, Lineair, (Alle UGT (a, b)) Grenstoestand Max., mxy, Isolijnen, Bovenaanzicht



Rapport [I], > C30/37, Lineair, (Alle UGT (a, b)) Grenstoestand Min., vEd, Isolijnen, Bovenaanzicht

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
Patch Reference numbers on IUT

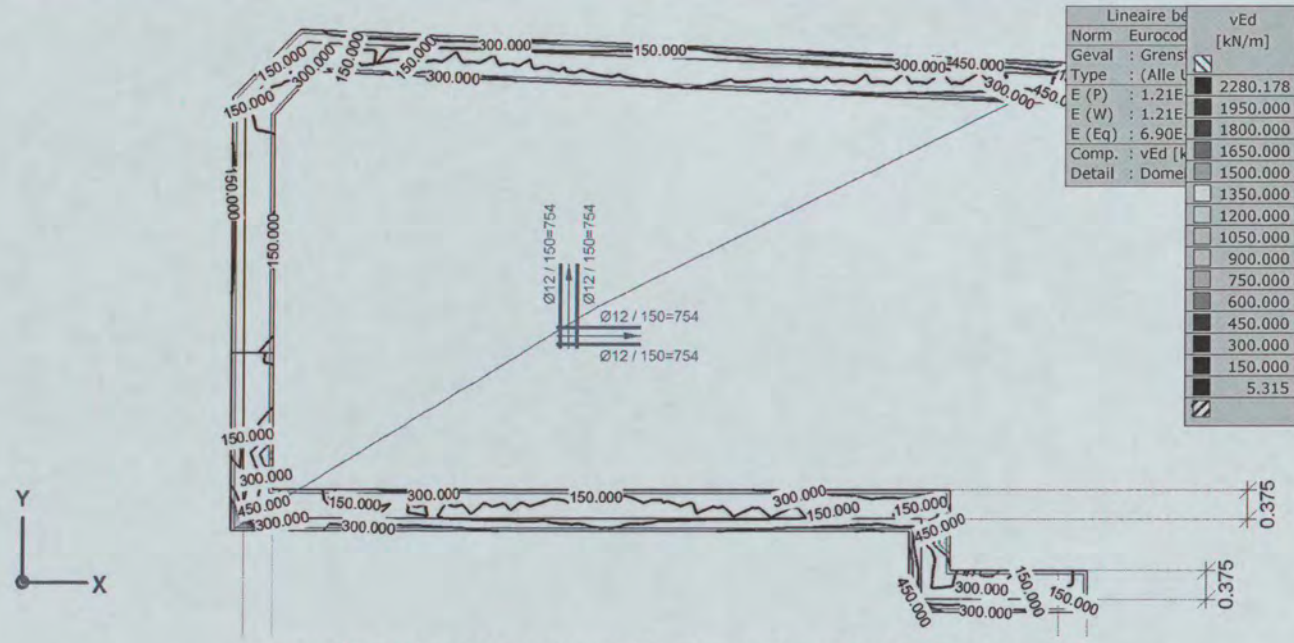
10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9
16 17 18 19 20 A9 B9 A9 B9 A9 B9

47

Image Engineering Scan Reference Chart TE263 Serial No.

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies
 Model: 17021-rev2.axs



Rapport [I], > C30/37, Lineair, (Alle UGT (a, b)) Grenstoestand Max., vEd, Isolijnen, Bovenaanzicht

Spanningen

Vlakspanningen

Grenstoestand Min,Max.

Vlakspanningen [Lineair, (Alle UGT (a, b)) Grenstoestand, Domein 1]

Knoop	C	min. max.	Oppervlak	Pos.	Sxx [N/mm ²]	Syy [N/mm ²]	Sxy [N/mm ²]	Sxz [N/mm ²]	Syz [N/mm ²]	SVM [N/mm ²]
Ext.										
10	Sxx	min	Sch 66	B	-10.55	-9.29	-1.51	0	0	10.32
8		max	Sch 84	T	11.85	14.98	-2.93	0	0	14.60
139	Syy	min	Sch 36	B	0.42	-10.46	0.16	0	0	10.68
8		max	Sch 84	T	11.85	14.98	-2.93	0	0	14.60
22	Sxy	min	Sch 5	B	-1.60	-1.65	-3.95	0	0	7.03

Knoop	C	min. max.	Oppervlak	Pos.	Sxx [N/mm ²]	S1 [N/mm ²]	S2 [N/mm ²]	aS [°]
Ext.								
10	Sxx	min	Sch 66	B	-10.55	-8.29	-11.56	-56.38
8		max	Sch 84	T	11.85	16.74	10.10	-59.09
139	Syy	min	Sch 36	B	0.42	0.42	-10.47	0.82
8		max	Sch 84	T	11.85	16.74	10.10	-59.09
22	Sxy	min	Sch 5	B	-1.60	2.32	-5.57	-44.80

Knoop	C	min. max.	Oppervlak	Pos.	Sxx [N/mm ²]	Maatgevende combinatie
Ext.						
10	Sxx	min	Sch 66	B	-10.55	{1.35*ST1} {1.5*0.4*ST2} (1.5*0.4*ST3)
8		max	Sch 84	T	11.85	{1.35*ST1} {1.5*0.4*ST2} (1.5*0.4*ST3)
139	Syy	min	Sch 36	B	0.42	{1.35*ST1} {1.5*0.4*ST2} (1.5*0.4*ST3)
8		max	Sch 84	T	11.85	{1.35*ST1} {1.5*0.4*ST2} (1.5*0.4*ST3)
22	Sxy	min	Sch 5	B	-1.60	{1.35*ST1} {1.5*0.4*ST3}

the scale towards document

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5

C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11

Patch reference numbers on IUT

Image Engineering Scan Reference Chart TE263 Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

Pag. 46

Vlakspanningen [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 1]

Knoop	C	min. max.	Oppervlak	Pos.	Sxx [N/mm ²]	Syy [N/mm ²]	Sxy [N/mm ²]	Sxz [N/mm ²]	Syz [N/mm ²]	SVM [N/mm ²]
183		max	Sch 16	T	0.15	4.34	6.14	0	0	11.46
110	Sxz	min	Sch 144	C	0.58	-0.31	-0.03	-2.53	-0.21	4.46
2		max	Sch 43	C	-0.16	-0.06	0.26	4.31	4.73	11.09
64	Syz	min	Sch 67	C	-0.81	0.47	1.56	0.89	-3.72	7.25
2		max	Sch 43	C	-0.16	-0.07	0.27	4.29	4.79	11.15
1	SVM	min	Sch 201	T	-0.01	0	0	0	0	0.01
8		max	Sch 84	T	11.85	14.98	-2.93	0	0	14.60

Knoop	C	min. max.	Oppervlak	Pos.	Sxx [N/mm ²]	S1 [N/mm ²]	S2 [N/mm ²]	aS [°]
183		max	Sch 16	T	0.15	8.73	-4.25	54.41
110	Sxz	min	Sch 144	C	0.58	0.58	-0.31	-1.62
2		max	Sch 43	C	-0.16	0.15	-0.37	50.04
64	Syz	min	Sch 67	C	-0.81	1.52	-1.86	56.17
2		max	Sch 43	C	-0.16	0.16	-0.39	50.12
1	SVM	min	Sch 201	T	-0.01	0	-0.01	61.33
8		max	Sch 84	T	11.85	16.74	10.10	-59.09

Knoop	C	min. max.	Oppervlak	Pos.	Sxx [N/mm ²]	Maatgevende combinatie
183		max	Sch 16	T	0.15	{1.35*ST1} {1.5*0.4*ST2}
110	Sxz	min	Sch 144	C	0.58	{1.35*0.889*ST1} {1.5*ST5} (1.5*0.4*ST2+1.5*0.4*ST3)
2		max	Sch 43	C	-0.16	{1.35*ST1}
64	Syz	min	Sch 67	C	-0.81	{1.35*ST1} {1.5*0.4*ST2}
2		max	Sch 43	C	-0.16	{1.35*ST1} {1.5*0.4*ST2} (1.5*0.4*ST3)
1	SVM	min	Sch 201	T	-0.01	{0.9*ST1} {1.5*ST5} (1.5*0.4*ST2)
8		max	Sch 84	T	11.85	{1.35*ST1} {1.5*0.4*ST2} (1.5*0.4*ST3)

Knoop: Index; C: Extreme component; min. max.: Extreme type; Oppervlak: Vlak behorend bij knoop; Pos.: Punt voor spanningsberekening; Sxx: Normaalspanning in lokale X-richting; Syy: Normaalspanning in lokale Y-richting; Sxy: Torsie-/Schuifspanning; Sxz, Syz: Draai-/afschuivingsspanning; SVM: Von Mises spanning; S1: Primaire spanning 1; S2: Primaire spanning 2; aS: Richting primaire spanning;

Betonontwerp**Wapeningshoeveelheden, Eurocode-NL****Grenstoestand Min,Max.**

Wapeningshoeveelheden, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 1]

Knoop	C	min. max.	Oppervlak	axb [mm ² /m]	ayb [mm ² /m]
Ext.					
8	axb	max	Sch 84	2100	
16	ayb	max	Sch 2		1496
8	axt	max	Sch 84		

Knoop	C	min. max.	Oppervlak	axt [mm ² /m]	ayt [mm ² /m]	Maatgevende combinatie
Ext.						
8	axb	max	Sch 84			{1.35*0.889*ST1} {1.5*ST5} (1.5*0.4*ST2+1.5*0.4*ST3)
16	ayb	max	Sch 2			{1.35*0.889*ST1} {1.5*ST5} (1.5*0.4*ST3)
8	axt	max	Sch 84	3562		{1.35*ST1} {1.5*0.4*ST2} (1.5*0.4*ST3)



Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

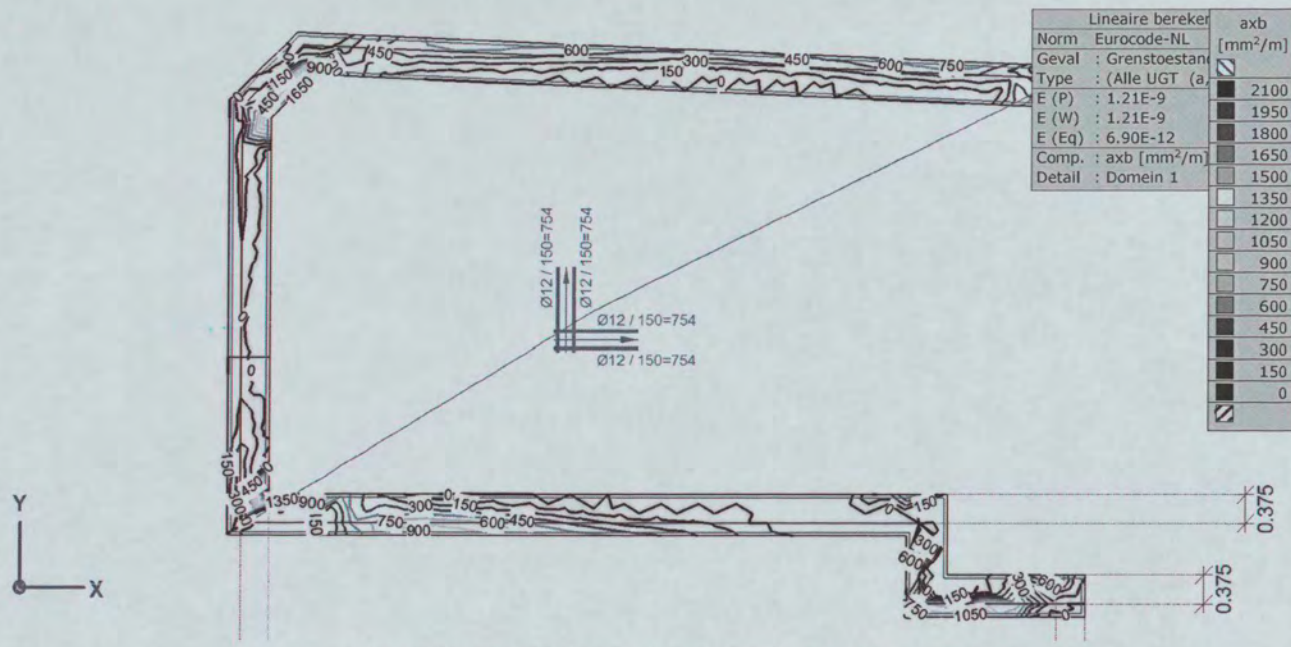
Pag. 47

Wapeningshoeveelheden, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 1]

Knoop	C	min. max.	Oppervlak	axb [mm ² /m]	ayb [mm ² /m]
8	ayt	max	Sch 84		

Knoop	C	min. max.	Oppervlak	axt [mm ² /m]	ayt [mm ² /m]	Maatgevende combinatie
8	ayt	max	Sch 84		4246	[1.35*ST1] {1.5*0.4*ST2} {1.5*0.4*ST3}

Knoop: Index; C: Extreme component; min. max.: Extreme type; Oppervlak: Vlak behorend bij knoop; axb: Onderwapening in lokale X-richting; ayb: Onderwapening in lokale Y-richting; axt: Bovenwapening in lokale X-richting; ayt: Bovenwapening in lokale Y-richting;



Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand, axb, Isolijnen, Bovenaanzicht

the scale towards document

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11

4.5 5.0 5.5 6.0

47

Image Engineering · Scan Reference Chart · TE263 · Serial No.

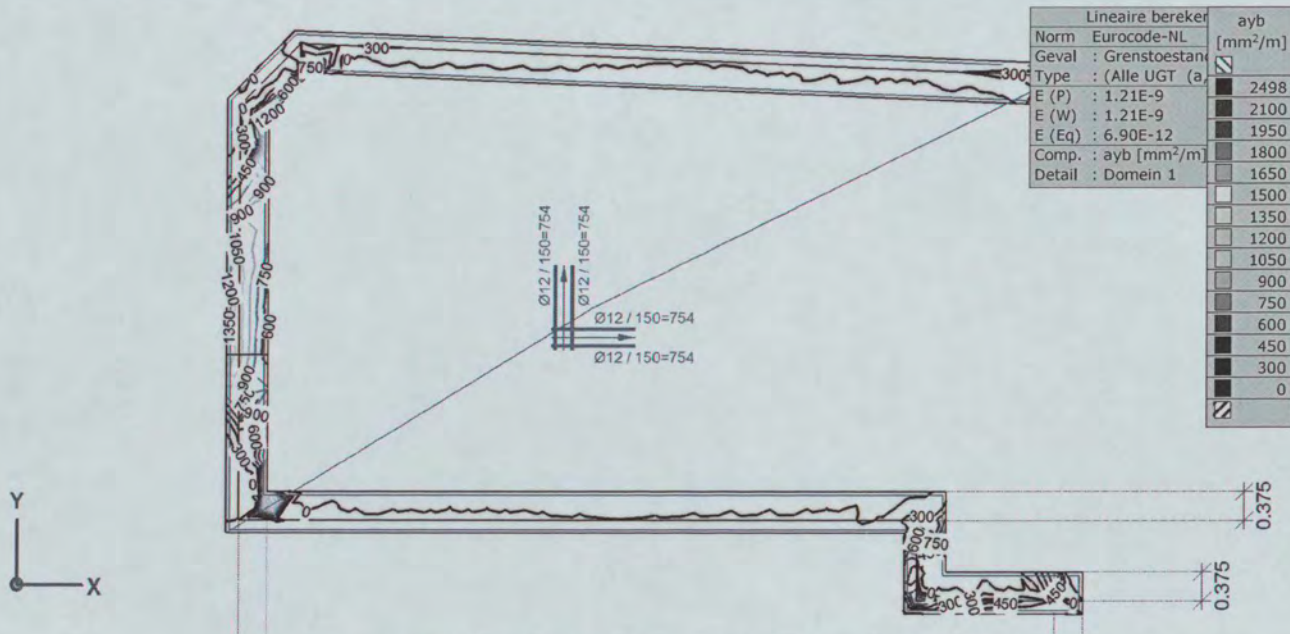
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

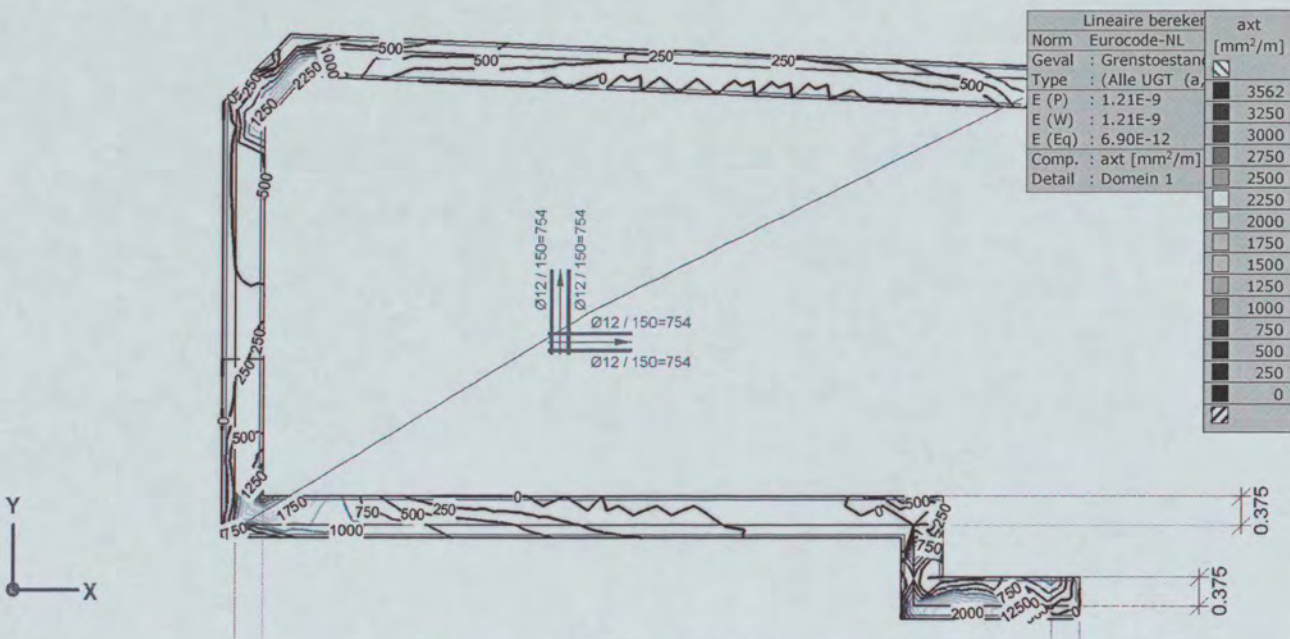
Model: 17021-rev2.axs

9/22/2017

Pag. 48



Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand, ayb, Isolijnen, Bovenaanzicht



Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand, axt, Isolijnen, Bovenaanzicht

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
Patch Reference numbers on UTT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9
10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.0 6.5

mm 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

Image Engineering Scan Reference Chart TE263 Serial No. 47

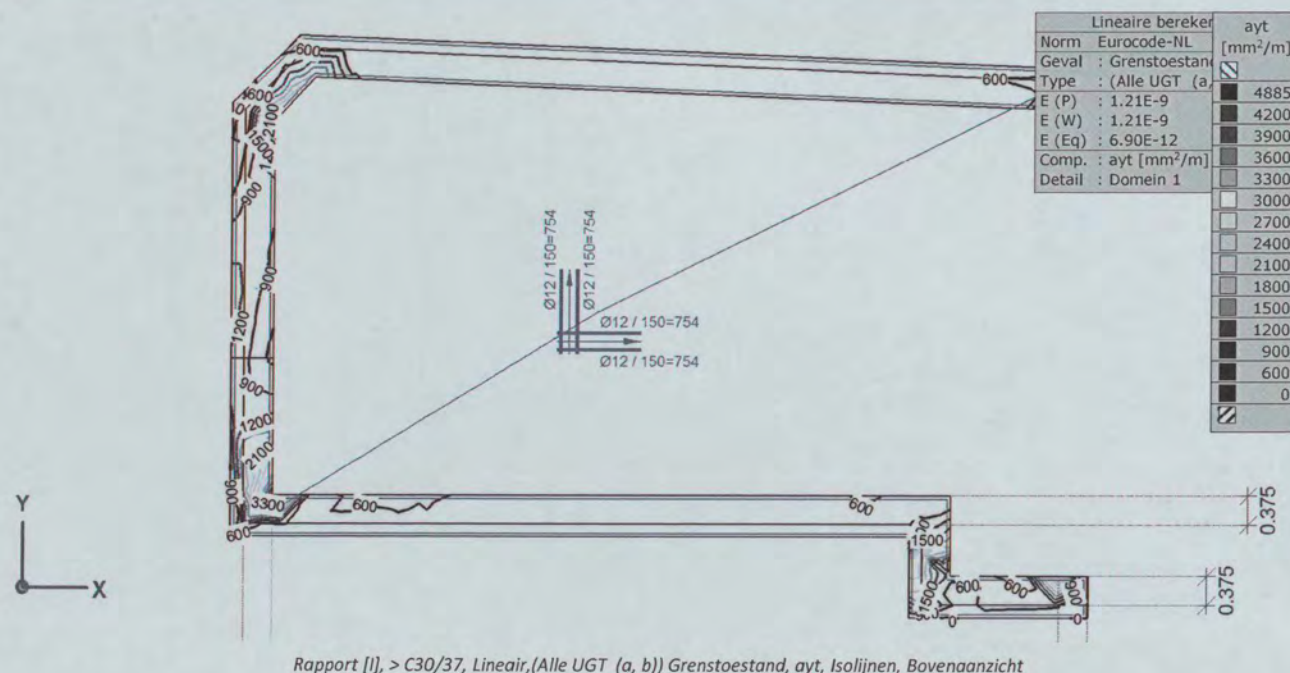
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

Pag. 49



Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand, ayt, Isolijnen, Bovenaanzicht

Scheurwijdte, Eurocode-NL

Grenstoestand Min,Max.

Scheurwijdte, Eurocode-NL [Lineair,(BGT Frequent) Grenstoestand, Domein 1]

Knoop	C	min. max.	Oppervlak	Pos.	Aax [mm²/m]	Aay [mm²/m]	wk [mm]	wk2 [mm]	x _{s2} [mm]	σ _{s2} [N/mm²]	wR [°]
Ext.											
8	wk	max	Sch 84	↑	754	754	2.41	2.70	24	1669.17	31.48
8	wk2	max	Sch 84	↑	754	754	2.41	2.70	24	1669.17	31.48

Knoop	C	min. max.	Oppervlak	nx [kN/m]	ny [kN/m]	nxy [kN/m]
Ext.						
8	wk	max	Sch 84	830.450	893.453	-448.919
8	wk2	max	Sch 84	830.450	893.453	-448.919

Knoop	C	min. max.	Oppervlak	mx [kNm/m]	my [kNm/m]	mxy [kNm/m]	Maatgevende combinatie
Ext.							
8	wk	max	Sch 84	131.829	173.277	-18.024	[ST1] {0.2*ST5} (0.3*ST2+0.3*ST3)
8	wk2	max	Sch 84	131.829	173.277	-18.024	[ST1] {0.2*ST5} (0.3*ST2+0.3*ST3)

Knoop: Index; C: Extreme component; min. max.: Extreme type; Oppervlak: Vlak behorend bij knoop; Pos.: Punt voor spanningberekening; Aax: Toegepaste wapening in X-richting; Aay: Toegepaste wapening in Y-richting; wk: Scheurwijdte ter plaatse van hart wapeningsstaaf; wk2: Scheurwijdte ter plaatse van het betonoppervlak; x_{s2}: Afstand tussen neutrale as en uiterste gedrukte vezel; σ_{s2}: Spanning in wapeningsstaaf; wR: Scheur hoek; nx: Normaalcracht in lokale X-richting; ny: Normaalcracht in lokale Y-richting; nxy: Membraam afschuifcracht; mx: Specifiek buigmoment om de lokale x-as; my: Specifiek buigmoment om de lokale y-as; mxy: Specifiek draaimoment;

Afschuifweerstand, Eurocode-NL

Grenstoestand Min,Max.

the scale towards document

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

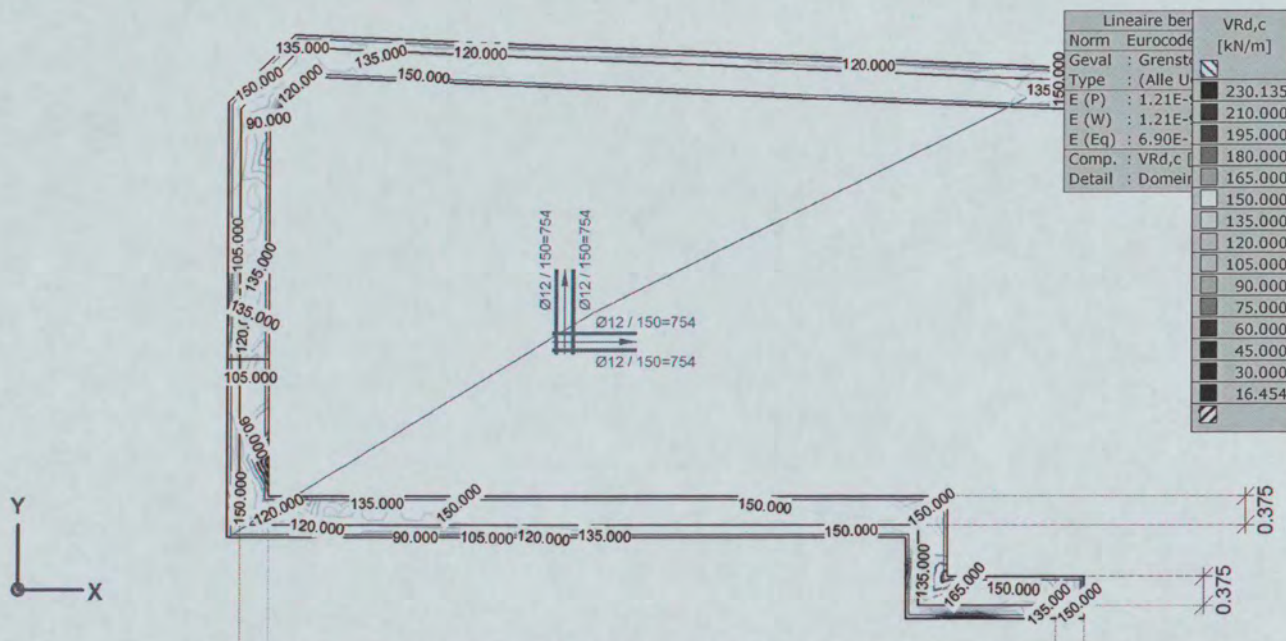
9/22/2017

Pag. 50

Afschuifweerstand, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 1]

Knoop	C	min. max.	Oppervlak	VRd,c [kN/m]	(vEd-vRd,c) [kN/m]	Maatgevende combinatie
Ext.						
11	(vEd-vRd,c)	min	Sch 248	189.878	-219.398	[1.35*0.889*ST1] {1.5*ST3} {1.5*0.4*ST2}
2		max	Sch 43	144.404	1359.205	[1.35*ST1] {1.5*0.4*ST2} {1.5*0.4*ST3}

Knoop: Index; C: Extreme component; min. max.: Extreme type; Oppervlak: Vlak behorend bij knoop; VRd,c: Afschuifweerstand;



Rapport [I], > C30/37, Lineair,(Alle UGT (a, b)) Grenstoestand Min., VRd,c, Isolijnen, Bovenaanzicht

the scale towards document

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

45 15.0 1.5 0.3

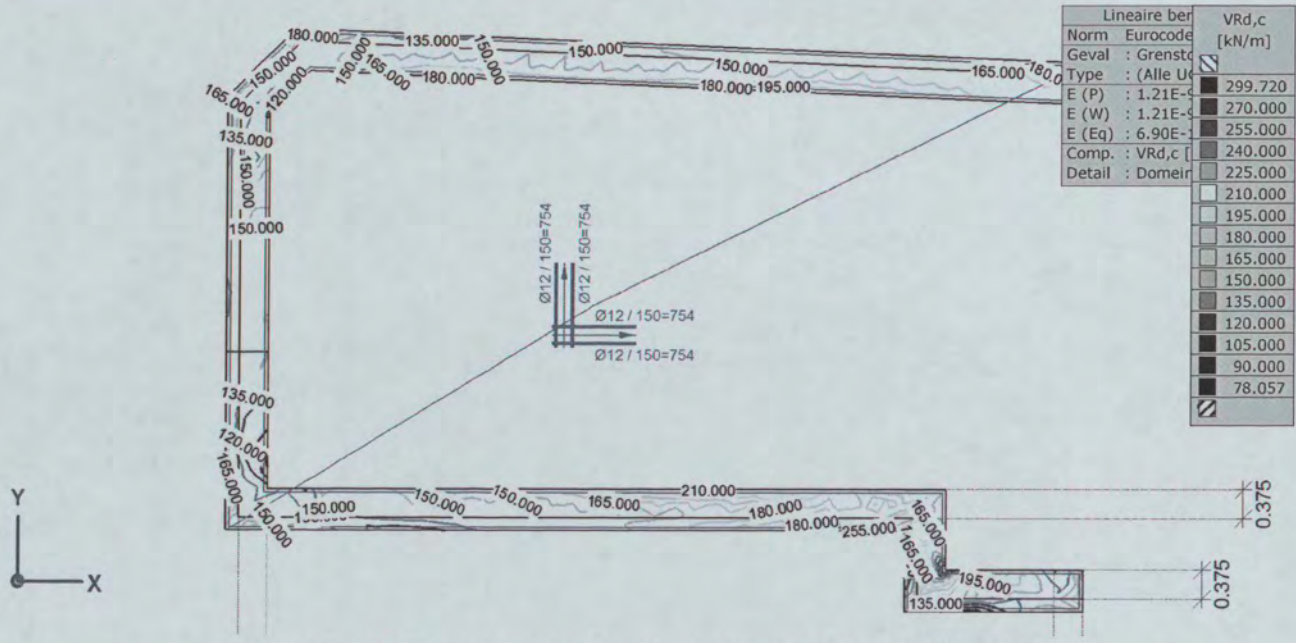
C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11

Patch Reference numbers on IUT

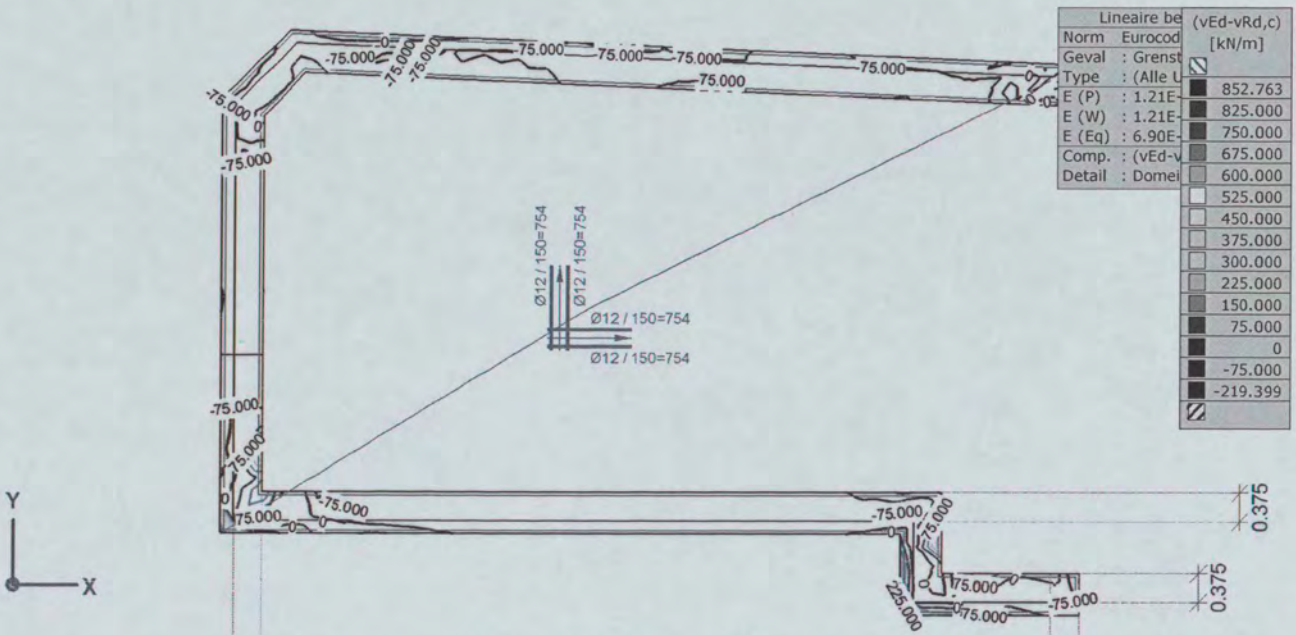
Image Engineering Scan Reference Chart TE263 Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies
 Model: 17021-rev2.axs



Rapport [I], > C30/37, Lineair, (Alle UGT (a, b)) Grenstoestand Max., VRd,c, Isolijnen, Bovenaanzicht



Rapport [I], > C30/37, Lineair, (Alle UGT (a, b)) Grenstoestand Min., (vEd-vRd,c), Isolijnen, Bovenaanzicht

the scale towards document

mm 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200
 inch 1 2 3 4 5 6 7 8 9 10

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
 Patch reference numbers on UTT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9
 10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

47

Image Engineering Scan Reference Chart TE263 Serial No.

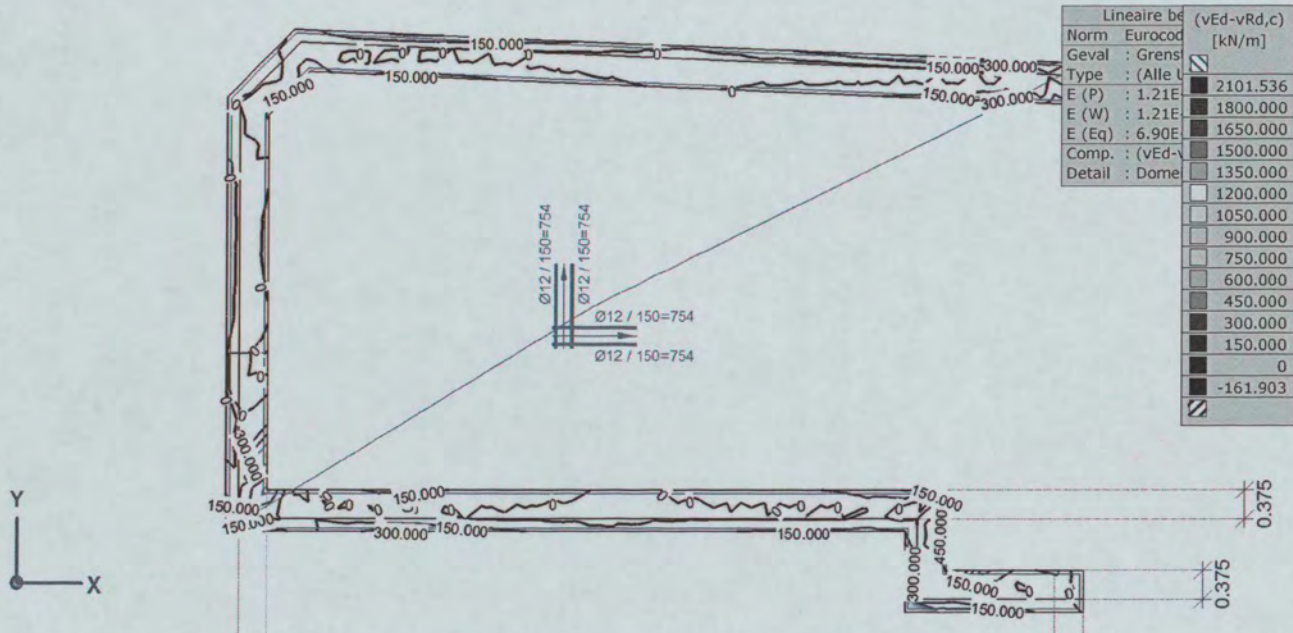
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

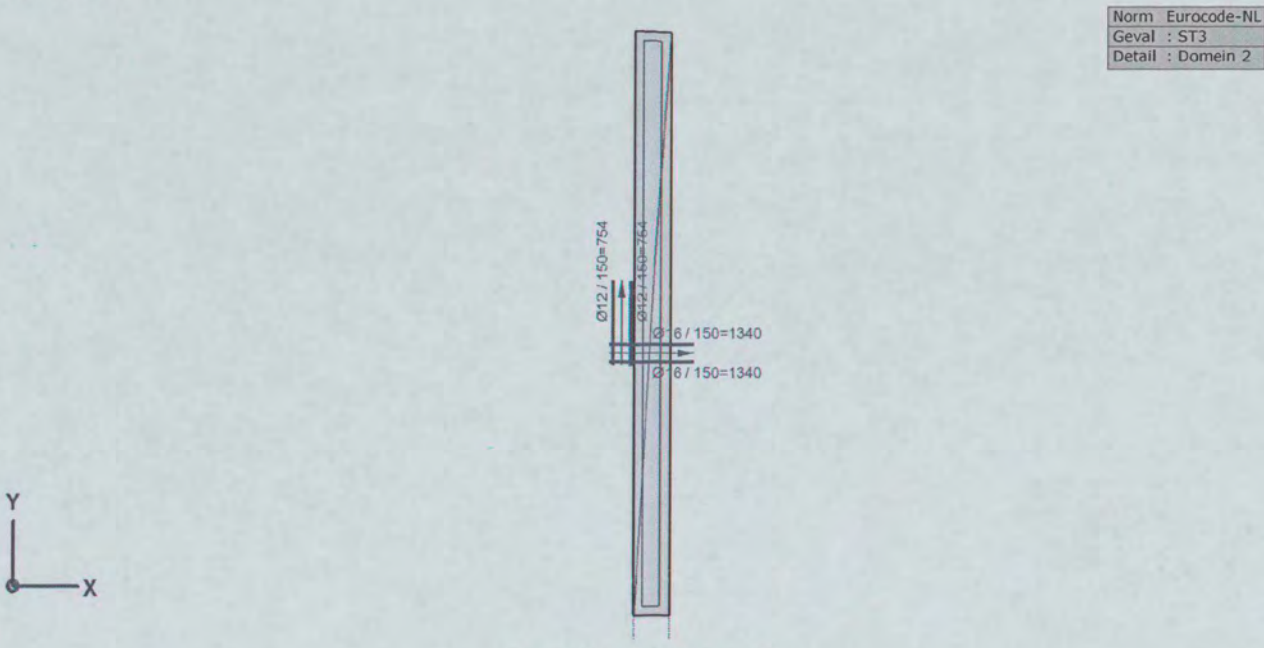
9/22/2017

Pag. 52



Rapport [I], > C30/37, Lineair, (Alle UGT (a, b) Grenstoestand Max., (vEd-vRd,c), Isolijnen, Bovenaanzicht

Domein 2



Rapport Domein 2, Bovenaanzicht

the scale towards document

mm 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000

4.5 5.0 5.5 6.0

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

11 16 17 18 20

47

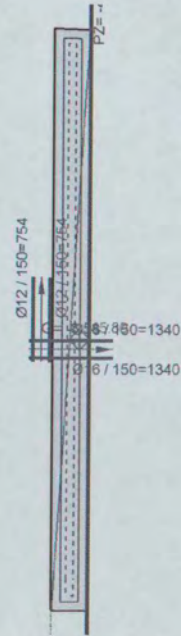
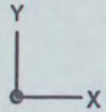
Image Engineering Scan Reference Chart TE263 Serial No.

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

Norm	Eurocode-NL
Geval	: ST1
Detail	: Domein 2



Rapport Domein 2, ST1, Bovenaanzicht

ST1: Knoopbelastingen [Domein 2]

	Richting	F_x [kN]	F_y [kN]	F_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
18	Globaal	0	0	-45.80	0	0	0

F_x, F_y, F_z : Belastingkracht component; M_x, M_y, M_z : Belastingsmoment component;

ST1: Vlak eigen gewicht [Domein 2]

	Σ [kg]
251-278	1984.510
Totaal	1984.510

Σ : Totale massa;

ST1: Eigen gewicht van domein [Domein 2]

	Σ [kg]
2	1984.510
Totaal	1984.510

Σ : Totale massa;

ST2: Knoopbelastingen [Domein 2]

	Richting	F_x [kN]	F_y [kN]	F_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
18	Globaal	0	0	-56.60	0	0	0

F_x, F_y, F_z : Belastingkracht component; M_x, M_y, M_z : Belastingsmoment component;

the scale towards document

mm
Inch

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
Patch reference numbers on UTT

45 50 55 60

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

47

Image Engineering · Scan Reference Chart · TE263 · Serial No.

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017 Pag. 54

ST4: Knoopbelastingen [Domein 2]

	Richting	F_x [kN]	F_y [kN]	F_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
18	Globaal	0	0	165.00	0	0	0

Fx, Fy, Fz: Belastingkracht component; Mx, My, Mz: Belastingmoment component;

ST5: Knoopbelastingen [Domein 2]

	Richting	F_x [kN]	F_y [kN]	F_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
18	Globaal	0	0	-165.00	0	0	0

Fx, Fy, Fz: Belastingkracht component; Mx, My, Mz: Belastingmoment component;

Verplaatsingen**Knoopverplaatsingen****Grenstoestand Min,Max.**

Knoopverplaatsingen [Linear,(BGT Quasi-blijvend) Grenstoestand, Domein 2]

	C	min. max.	eX [mm]	eY [mm]	eZ [mm]	eR [mm]	fX [rad]	fY [rad]	fZ [rad]
Ext.									
227	eX	min	-1.427	-0.496	-8.701	8.831	0.00063	-0.00145	0.00001
1096		min	-1.427	-0.502	-8.970	9.097	0.00062	-0.00143	0.00003
234		max	-1.063	-0.450	-6.955	7.050	0.00044	-0.00105	0
15	eY	min	-1.271	-0.666	-8.794	8.910	0.00102	-0.00130	0.00028
16		max	-1.151	-0.202	-7.426	7.517	-0.00015	-0.00114	-0.00024
15	eZ	min	-1.379	-0.561	-9.554	9.669	0.00092	-0.00141	0.00027
5		max	-1.085	-0.390	-5.670	5.786	0	-0.00111	-0.00021
5	eR	min	-1.085	-0.390	-5.670	5.786	0	-0.00111	-0.00021
15		max	-1.379	-0.561	-9.554	9.669	0.00092	-0.00141	0.00027
16	fX	min	-1.151	-0.202	-7.426	7.517	-0.00015	-0.00114	-0.00024
15		max	-1.271	-0.666	-8.794	8.910	0.00102	-0.00130	0.00028
227	fY	min	-1.427	-0.496	-8.701	8.831	0.00063	-0.00145	0.00001
1068		max	-1.072	-0.472	-6.672	6.774	0.00045	-0.00104	-0.00003
1089		max	-1.071	-0.470	-6.718	6.819	0.00045	-0.00104	-0.00003

	C	min. max.	fR [rad]	Maatgevende combinatie
Ext.				
227	eX	min	0.00158	[ST1] {0.3*ST2}
1096		min	0.00156	[ST1] {0.3*ST2}
234		max	0.00114	[ST1] {0.3*ST3}
15	eY	min	0.00168	[ST1] {0.3*ST3}
16		max	0.00118	[ST1] {0.3*ST2}
15	eZ	min	0.00170	[ST1] {0.3*ST2}
5		max	0.00113	[ST1] {0.3*ST3}
5	eR	min	0.00113	[ST1] {0.3*ST3}
15		max	0.00170	[ST1] {0.3*ST2}
16	fX	min	0.00118	[ST1] {0.3*ST2}
15		max	0.00168	[ST1] {0.3*ST3}
227	fY	min	0.00158	[ST1] {0.3*ST2}
1068		max	0.00113	[ST1] {0.3*ST3}
1089		max	0.00113	[ST1] {0.3*ST3}



Project: 17021 Willemsparkweg 220 Amsterdam

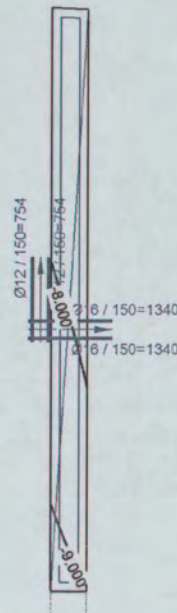
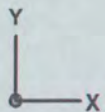
Constructeur: Core Constructies
 Model: 17021-rev2.axs

Knoopverplaatsingen [Lineair,(BGT Quasi-blijvend) Grenstoestand, Domein 2]

	C	min. max.	eX [mm]	eY [mm]	eZ [mm]	eR [mm]	fX [rad]	fY [rad]	fZ [rad]
1094		max	-1.068	-0.464	-6.910	7.008	0.00044	-0.00104	-0.00003
625	fZ	min	-1.129	-0.302	-6.634	6.736	-0.00006	-0.00113	-0.00025
15		max	-1.271	-0.666	-8.794	8.910	0.00102	-0.00130	0.00028
1087	fR	min	-1.124	-0.320	-6.094	6.205	0.00012	-0.00109	-0.00011
11		max	-1.370	-0.464	-9.039	9.154	0.00088	-0.00144	0.00024
15		max	-1.379	-0.561	-9.554	9.669	0.00092	-0.00141	0.00027

	C	min. max.	fR [rad]	Maatgevende combinatie
1094		max	0.00113	[ST1] {0.3*ST3}
625	fZ	min	0.00116	[ST1] {0.3*ST2} (0.3*ST3)
15		max	0.00168	[ST1] {0.3*ST3}
1087	fR	min	0.00110	[ST1] {0.3*ST3}
11		max	0.00170	[ST1] {0.3*ST2}
15		max	0.00170	[ST1] {0.3*ST2}

C: Extreme component; min. max.: Extreme type; eX: Verplaatsing in X-richting; eY: Verplaatsing in Y-richting; eZ: Verplaatsing in Z-richting; eR: Resulterende verplaatsing; fX: Rotatie in X-richting; fY: Rotatie in Y-richting; fZ: Rotatie in Z-richting; fR: Resulterende rotatie;



Lineaire bereik	eZ [mm]
Norm Eurocode-	
Geval : Grenstoe	
Type : (BGT Quasi-blijvend)	
E (P) : 1.21E-9	-6.996
E (W) : 1.21E-9	-8.000
E (Eq) : 6.90E-12	-9.000
Comp. : eZ [mm]	-10.000
Detail : Domein 2	-11.000
	-12.000
	-13.000
	-14.000
	-15.000
	-16.000
	-17.000
	-18.000
	-19.000
	-20.000
	-21.948

Rapport [I], > 350 mm, Lineair,(BGT Quasi-blijvend) Grenstoestand Min., eZ, Isolijnen, Bovenaanzicht

the scale towards document

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9 A9

4.5 5.0 5.6 6.3

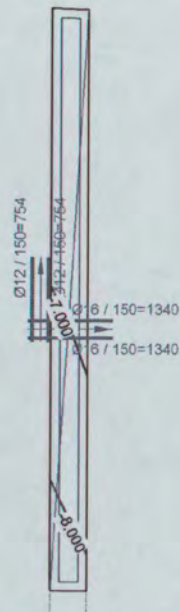
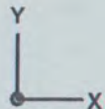
Image Engineering Scan Reference Chart TE263 Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017 Pag. 56



Lineaire bere	eZ
Norm Eurocode-I	[mm]
Geval : Grenstoe	
Type : (BGT Quasi)	
E (P) : 1.21E-9	-5.670
E (W) : 1.21E-9	-7.000
E (Eq) : 6.90E-12	-8.000
Comp. : eZ [mm]	-9.000
Detail : Domein	-10.000
	-11.000
	-12.000
	-13.000
	-14.000
	-15.000
	-16.000
	-17.000
	-18.000
	-19.000
	-20.322

Rapport [I], > 350 mm, Lineair, (BGT Quasi-blijvend) Grenstoestand Max., eZ, Isolijnen, Bovenaanzicht

Interne krachten

Vlakkrachten

Grenstoestand Min,Max.

Vlakkrachten [Lineair, (Alle UGT (a, b)) Grenstoestand, Domein 2]

Knoop	C	min. max.	Oppervlak	nx [kN/m]	ny [kN/m]	nxy [kN/m]	mx [kNm/m]	my [kNm/m]	mxy [kNm/m]	vSz [kN/m]
Ext.										
227	nx	min	Sch 257	-92.712	-805.657	125.294	-4.533	57.046	-9.323	63.346
16		max	Sch 271	668.837	1093.406	106.074	-31.048	50.970	-55.221	137.997
5	ny	min	Sch 270	106.700	-1791.838	77.975	3.243	37.526	-20.392	612.983
233		max	Sch 254	13.793	1533.827	19.639	-36.076	59.571	2.382	281.336
16	nxy	min	Sch 271	182.528	477.712	-399.193	84.993	160.357	16.030	556.691
228		max	Sch 257	-31.625	1330.384	288.553	3.011	45.681	-6.122	173.688
233	mx	min	Sch 254	18.814	1394.860	22.598	-38.366	61.066	1.980	286.472
16		max	Sch 271	182.528	477.712	-399.193	84.993	160.357	16.030	556.691
18	my	min	Sch 251	-17.169	809.833	-11.931	-25.974	-105.027	-2.937	127.002

Knoop	C	min. max.	Oppervlak	Maatgevende combinatie
Ext.				
227	nx	min	Sch 257	[1.35*ST1] {1.5*0.4*ST2} (1.5*0.4*ST3)
16		max	Sch 271	[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST3)
5	ny	min	Sch 270	[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST2+1.5*0.4*ST3)
233		max	Sch 254	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST3)
16	nxy	min	Sch 271	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
228		max	Sch 257	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST3)
233	mx	min	Sch 254	[0.9*ST1] {1.5*ST4} (1.5*0.4*ST3)
16		max	Sch 271	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
18	my	min	Sch 251	[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST2)

the scale towards document

mm 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11

4.5 5.0 5.5 6.0 6.5

47

Image Engineering · Scan Reference Chart · TE263 · Serial No.

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

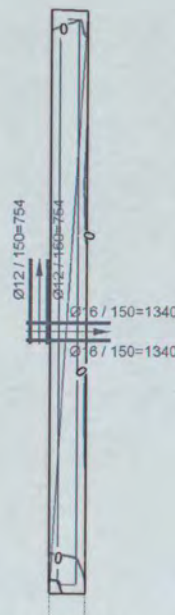
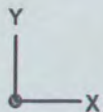
Pag. 57

Vlakkrachten [Linear,(Alle UGT (a, b)) Grenstoestand, Domein 2]

Knoop	C	min. max.	Oppervlak	n_x [kN/m]	n_y [kN/m]	n_{xy} [kN/m]	m_x [kNm/m]	m_y [kNm/m]	m_{xy} [kNm/m]	v_{Sz} [kN/m]
16		max	Sch 271	182.528	477.712	-399.193	84.993	160.357	16.030	556.691
16	mxy	min	Sch 271	667.341	1114.552	96.226	-29.296	59.548	-56.433	148.684
239		max	Sch 270	-61.337	867.999	-147.126	28.167	86.152	40.579	784.906
225	vSz	min	Sch 258	1.038	522.592	9.127	0.240	13.044	-0.380	5.311
239		max	Sch 270	-61.337	867.999	-147.126	28.167	86.152	40.579	784.906
227	nxD	min	Sch 257	-92.712	-805.657	125.294	-4.533	57.046	-9.323	63.346
16		max	Sch 271	668.837	1093.406	106.074	-31.048	50.970	-55.221	137.997
5	nyD	min	Sch 270	106.700	-1791.838	77.975	3.243	37.526	-20.392	612.983
228		max	Sch 257	-42.005	1393.298	273.370	7.160	55.320	-1.912	125.244

Knoop	C	min. max.	Oppervlak	Maatgevende combinatie
16		max	Sch 271	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
16	mxy	min	Sch 271	[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST2+1.5*0.4*ST3)
239		max	Sch 270	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2)
225	vSz	min	Sch 258	[0.9*ST1] {1.5*ST4}
239		max	Sch 270	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2)
227	nxD	min	Sch 257	[1.35*ST1] {1.5*0.4*ST2} (1.5*0.4*ST3)
16		max	Sch 271	[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST3)
5	nyD	min	Sch 270	[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST2+1.5*0.4*ST3)
228		max	Sch 257	[1.35*ST1] {1.5*0.4*ST2} (1.5*0.4*ST3)

Knoop: Index; C: Extreme component; min, max.: Extreme type; Oppervlak: Vlak behorend bij knoop; n_x : Normalkracht in lokale X-richting; n_y : Normalkracht in lokale Y-richting; n_{xy} : Membraam afschuifkracht; m_x : Specifiek buigmoment om de lokale y-as; m_y : Specifiek buigmoment om de lokale x-as; m_{xy} : Specifiek draaimoment; v_{Sz} : Resulterende specifieke afschuivingskracht;



Lineaire b	n_x [kN/m]
Norm Eurocc	
Geval : Gren	
Type : (Alle)	
E (P) : 1.21	740.896
E (W) : 1.21	400.000
E (Eq) : 6.90	200.000
Comp. : nx [k	0
Detail : Dom	-200.000
	-400.000
	-600.000
	-800.000
	-1000.000
	-1200.000
	-1400.000
	-1600.000
	-1800.000
	-2000.000
	-2261.162

Rapport [I], > 350 mm, Linear,(Alle UGT (a, b)) Grenstoestand Min., n_x Isolijnen, Bovenanzicht

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
Patch reference numbers on UTT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

mm 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
Inch 1 2 3 4 5 6 7 8 9 10 11 12

47

Image Engineering Scan Reference Chart TZ363 Serial No.

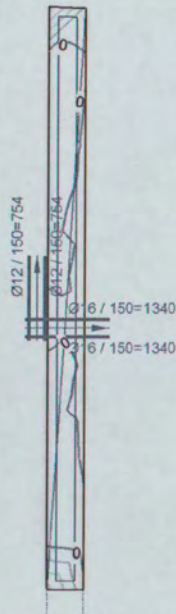
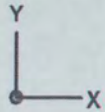
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

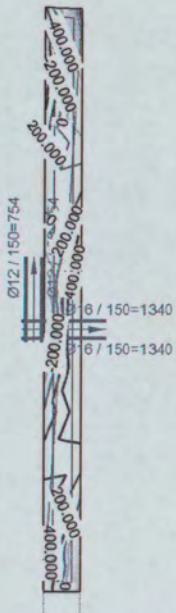
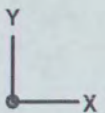
9/22/2017

Pag. 58



Lineaire be	nx
Norm Eurocod	[kN/m]
Geval : Grens	
Type : (Alle U	
E (P) : 1.21E	1539.762
E (W) : 1.21E	1350.000
E (Eq) : 6.90E	1200.000
Comp. : nx [kN	1050.000
Detail : Dome	900.000
	750.000
	600.000
	450.000
	300.000
	150.000
	0
	-150.000
	-300.000
	-450.000
	-617.144

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., nx, Isolijnen, Bovenaanzicht



Lineaire be	ny
Norm Eurocod	[kN/m]
Geval : Gren	
Type : (Alle	
E (P) : 1.21E	799.541
E (W) : 1.21E	400.000
E (Eq) : 6.90E	200.000
Comp. : ny [k	0
Detail : Dom	-200.000
	-400.000
	-600.000
	-800.000
	-1000.000
	-1200.000
	-1400.000
	-1600.000
	-1800.000
	-2000.000
	-2318.117

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., ny, Isolijnen, Bovenaanzicht

the scale towards document

mm 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

4.5 5.0 5.5 6.0 6.5

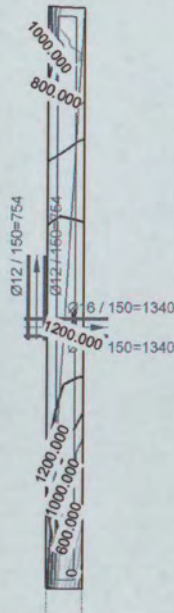
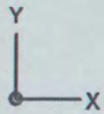
C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

Image Engineering Scan Reference Chart TE263 Serial No. 47

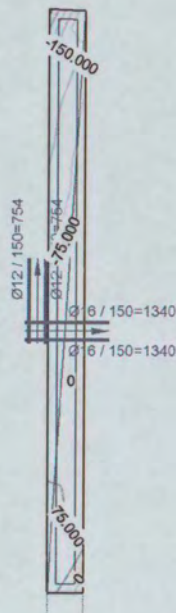
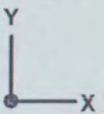
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies
 Model: 17021-rev2.axs



Lineaire be	ny
Norm Eurocod	[kN/m]
Geval : Grens	
Type : (Alle	
E (P) : 1.21E	1533.855
E (W) : 1.21E	1200.000
E (Eq) : 6.90E	1000.000
Comp. : ny [k	800.000
Detail : Dome	600.000
	400.000
	200.000
	0
	-200.000
	-400.000
	-600.000
	-800.000
	-1000.000
	-1200.000
	-1468.863

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., ny, Isolijnen, Bovenaanzicht



Lineaire be	nxy
Norm Eurocod	[kN/m]
Geval : Grens	
Type : (Alle L	
E (P) : 1.21E	373.193
E (W) : 1.21E	300.000
E (Eq) : 6.90E	225.000
Comp. : nxy [k	150.000
Detail : Dome	75.000
	0
	-75.000
	-150.000
	-225.000
	-300.000
	-375.000
	-450.000
	-525.000
	-600.000
	-739.079

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., nxy, Isolijnen, Bovenaanzicht

the scale towards document

mm
Inch

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
 Patch Reference numbers on IUT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9
 Patch Reference numbers on IUT

4.5 5.0 5.5
 Patch Reference numbers on IUT

47
 Image Engineering Scan Reference Chart TE263 Serial No.

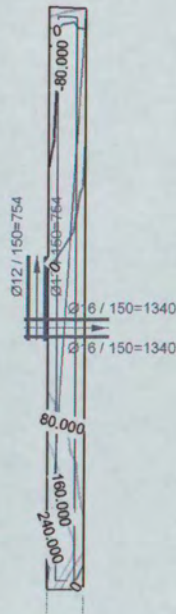
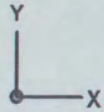
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

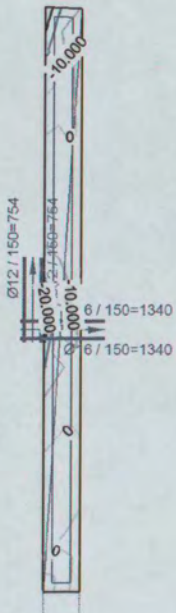
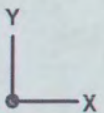
9/22/2017

Pag. 60



Lineaire be	nxy [kN/m]
Norm Eurocod	
Geval : Grenst	
Type : (Alle U	
E (P) : 1.21E-	851.757
E (W) : 1.21E-	720.000
E (Eq) : 6.90E-	640.000
Comp. : nxy [k	560.000
Detail : Domeir	480.000
	400.000
	320.000
	240.000
	160.000
	80.000
	0
	-80.000
	-160.000
	-240.000
	-380.265

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., nxy, Isolijnen, Bovenaanzicht



Lineaire be	mx [kNm/m]
Norm Eurocode	
Geval : Grenst	
Type : (Alle U	
E (P) : 1.21E-	110.488
E (W) : 1.21E-	70.000
E (Eq) : 6.90E-	60.000
Comp. : mx [kN	50.000
Detail : Domeir	40.000
	30.000
	20.000
	10.000
	0
	-10.000
	-20.000
	-30.000
	-40.000
	-50.000
	-82.044

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., mx, Isolijnen, Bovenaanzicht

the scale towards document

mm 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

mm 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

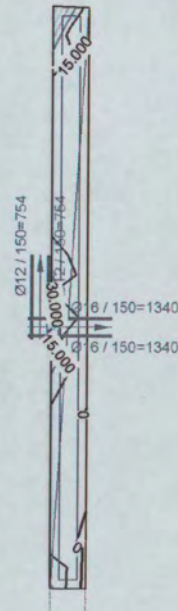
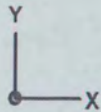
4.5 5.0 5.5 6.0

47

Image Engineering Scan Reference Chart TE263 Serial No.

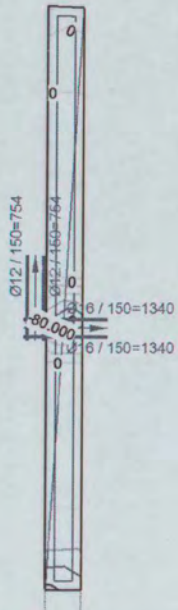
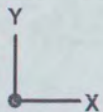
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies
 Model: 17021-rev2.axs



Lineaire ber		mx
Norm	Eurocode	[kNm/m]
Geval	: Grenst	
Type	: (Alle U	
E (P)	: 1.21E-	177.663
E (W)	: 1.21E-	165.000
E (Eq)	: 6.90E-	150.000
Comp.	: mx [kN	135.000
Detail	: Domeir	120.000
		105.000
		90.000
		75.000
		60.000
		45.000
		30.000
		15.000
		0
		-15.000
		-40.323

Rapport [I], > 350 mm, Linear,(Alle UGT (a, b)) Grenstoestand Max., mx, Isolijnen, Bovenaanzicht



Lineaire be		my
Norm	Eurocod	[kNm/m]
Geval	: Grenst	
Type	: (Alle U	
E (P)	: 1.21E	143.752
E (W)	: 1.21E	100.000
E (Eq)	: 6.90E	80.000
Comp.	: my [k	60.000
Detail	: Dome	40.000
		20.000
		0
		-20.000
		-40.000
		-60.000
		-80.000
		-100.000
		-120.000
		-140.000
		-167.379

Rapport [I], > 350 mm, Linear,(Alle UGT (a, b)) Grenstoestand Min., my, Isolijnen, Bovenaanzicht

the scale towards document

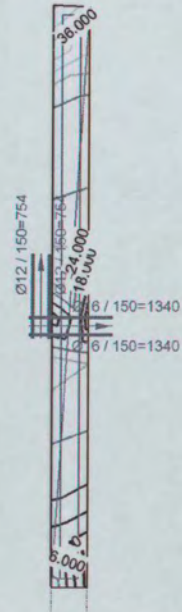
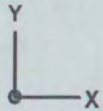
mm 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200
 inch 0 1 2 3 4 5 6 7 8 9 10

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9
 Patch Reference numbers on IUT

Image Engineering Scan Reference Chart TEX33 Serial No. 47

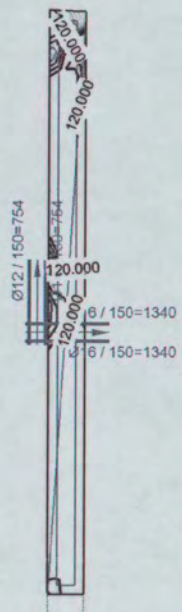
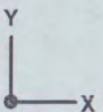
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies
 Model: 17021-rev2.axs



Lineaire ber		mxy
Norm	Eurocode	[kNm/m]
Geval	: Grensto	
Type	: (Alle UGT)	
E (P)	: 1.21E-9	83.611
E (W)	: 1.21E-9	72.000
E (Eq)	: 6.90E-1	66.000
Comp.	: mxy [k	60.000
Detail	: Domein	54.000
		48.000
		42.000
		36.000
		30.000
		24.000
		18.000
		12.000
		6.000
		0
		-16.970

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., mxy, Isolijnen, Bovenaanzicht



Lineaire be		vEd
Norm	Eurocod	[kN/m]
Geval	: Grens	
Type	: (Alle UGT)	
E (P)	: 1.21E-9	1020.264
E (W)	: 1.21E-9	840.000
E (Eq)	: 6.90E-1	780.000
Comp.	: vEd [k	720.000
Detail	: Domein	660.000
		600.000
		540.000
		480.000
		420.000
		360.000
		300.000
		240.000
		180.000
		120.000
		0.079

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., vEd, Isolijnen, Bovenaanzicht

the scale towards document

mm 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200
 Inch 0 1 2 3 4 5 6 7 8 9 10

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9
 Patch Reference numbers on UTT

45 3.0 1.5 0.5

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

47

Image Engineering Scan Reference Chart TE263 Serial No.

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

Pag. 65

Vlakspanningen [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 2]

Knoop	C	min. max.	Oppervlak	Pos.	Sxx [N/mm ²]	Syy [N/mm ²]	Sxy [N/mm ²]	Sxz [N/mm ²]	Syz [N/mm ²]	SVM [N/mm ²]
16		max	Sch 271	B	3.34	0.27	3.04	0	0	6.17
16	Sxz	min	Sch 271	C	0.52	1.36	-1.14	-2.24	-0.81	4.73
233		max	Sch 254	C	0.05	3.99	0.06	1.05	0.63	4.50
5	Syz	min	Sch 270	C	0.08	0.16	0.02	-0.82	-3.11	5.58
239		max	Sch 270	C	-0.18	2.48	-0.42	0.09	3.36	6.41
217	SVM	min	Sch 268	B	-0.02	-0.23	-0.03	0	0	0.23
15		max	Sch 277	T	3.00	10.39	1.82	0	0	9.78

Knoop	C	min. max.	Oppervlak	Pos.	Sxx [N/mm ²]	S1 [N/mm ²]	S2 [N/mm ²]	aS [°]
16		max	Sch 271	B	3.34	5.21	-1.60	31.59
16	Sxz	min	Sch 271	C	0.52	2.16	-0.27	-55.15
233		max	Sch 254	C	0.05	3.99	0.05	89.06
5	Syz	min	Sch 270	C	0.08	0.17	0.08	77.65
239		max	Sch 270	C	-0.18	2.54	-0.24	-81.22
217	SVM	min	Sch 268	B	-0.02	-0.02	-0.23	-8.91
15		max	Sch 277	T	3.00	10.81	2.57	76.93

Knoop	C	min. max.	Oppervlak	Pos.	Sxx [N/mm ²]	Maatgevende combinatie
16		max	Sch 271	B	3.34	[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST2+1.5*0.4*ST3)
16	Sxz	min	Sch 271	C	0.52	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
233		max	Sch 254	C	0.05	[0.9*ST1] {1.5*ST4} (1.5*0.4*ST3)
5	Syz	min	Sch 270	C	0.08	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2)
239		max	Sch 270	C	-0.18	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2)
217	SVM	min	Sch 268	B	-0.02	[0.9*ST1]
15		max	Sch 277	T	3.00	[1.35*ST1] {1.5*0.4*ST2} (1.5*0.4*ST3)

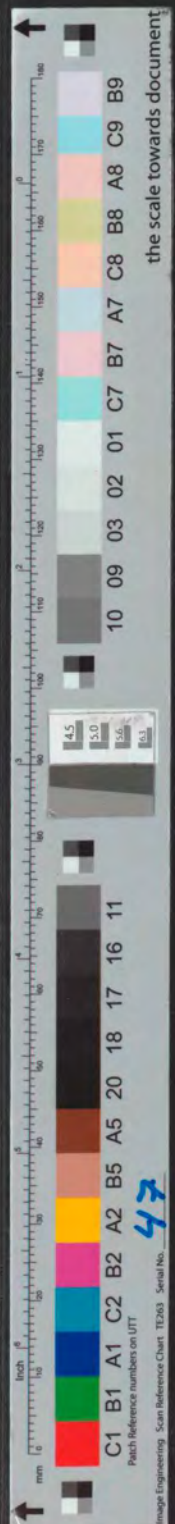
Knoop: Index; C: Extreme component; min. max.: Extreme type; Oppervlak: Vlak behorend bij knoop; Pos.: Punt voor spanningsberekening; Sxx: Normaalspanning in lokale X-richting; Syy: Normaalspanning in lokale Y-richting; Sxy: Torsie-/Schuifspanning; Sxz, Syz: Draai/afschuivingsspanning; SVM: Von Mises spanning; S1: Primaire spanning 1; S2: Primaire spanning 2; aS: Richting primaire spanning;

Betonontwerp**Wapeningshoeveelheden, Eurocode-NL**

Wapeningshoeveelheden, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 2]

Knoop	C	min. max.	Oppervlak	axb [mm ² /m]	ayb [mm ² /m]
Ext.					
16	axb	max	Sch 271	1651	
222	ayb	max	Sch 251		2498
16	axt	max	Sch 271		

Knoop	C	min. max.	Oppervlak	axt [mm ² /m]	ayt [mm ² /m]	Maatgevende combinatie
Ext.						
16	axb	max	Sch 271			[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST3)
222	ayb	max	Sch 251			[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST2+1.5*0.4*ST3)
16	axt	max	Sch 271	1439		[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)



Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

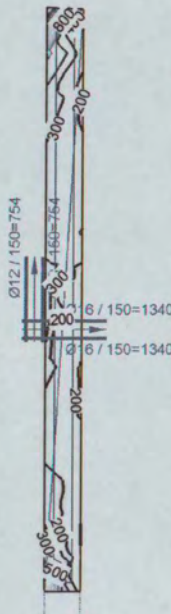
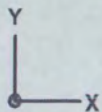
Pag. 66

Wapeningshoeveelheden, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 2]

Knoop	C	min. max.	Oppervlak	axb [mm ² /m]	ayb [mm ² /m]
15	ayt	max	Sch 277		

Knoop	C	min. max.	Oppervlak	axt [mm ² /m]	ayt [mm ² /m]	Maatgevende combinatie
15	ayt	max	Sch 277		3075	[1.35*ST1] {1.5*0.4*ST2} (1.5*0.4*ST3)

Knoop: Index; C: Extreme component; min. max.: Extreme type; Oppervlak: Vlak behorend bij knoop; axb: Onderwapening in lokale X-richting; ayb: Onderwapening in lokale Y-richting;
axt: Bovenwapening in lokale X-richting; ayt: Bovenwapening in lokale Y-richting;



Lineaire bereken	axb [mm ² /m]
Norm Eurocode-NL	
Geval : Grenstoestand	
Type : (Alle UGT (a, b))	
E (P) : 1.21E-9	1651
E (W) : 1.21E-9	1400
E (Eq) : 6.90E-12	1300
Comp. : axb [mm ² /m]	1200
Detail : Domein 2	1100
	1000
	900
	800
	700
	600
	500
	400
	300
	200
	0

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand, axb, Isolijnen, Bovenaanzicht

the scale towards document

mm 0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
01 02 03 04 05 06 07 08 09 10 11

4.5 5.0 5.5

Image Engineering Scan Reference Chart TE263 Serial No. 47

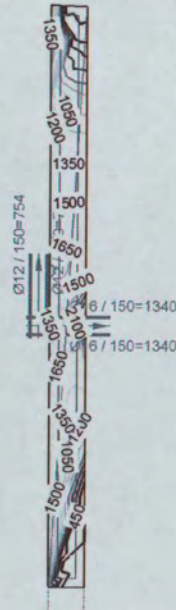
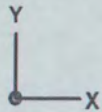
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

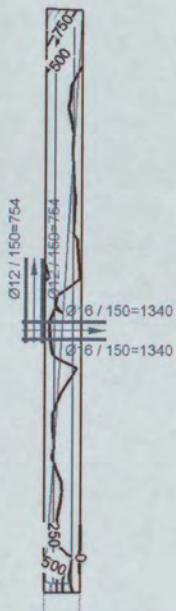
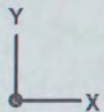
9/22/2017

Pag. 67



Lineaire bereker		ayb [mm ² /m]
Norm	Eurocode-NL	
Geval	: Grenstoestan	
Type	: (Alle UGT (a	
E (P)	: 1.21E-9	2498
E (W)	: 1.21E-9	2100
E (Eq)	: 6.90E-12	1950
Comp.	: ayb [mm ² /m]	1800
Detail	: Domein 2	1650
		1500
		1350
		1200
		1050
		900
		750
		600
		450
		300
		0

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand, ayb, Isolijnen, Bovenaanzicht



Lineaire bereker		axt [mm ² /m]
Norm	Eurocode-NL	
Geval	: Grenstoestan	
Type	: (Alle UGT (a	
E (P)	: 1.21E-9	3562
E (W)	: 1.21E-9	3250
E (Eq)	: 6.90E-12	3000
Comp.	: axt [mm ² /m]	2750
Detail	: Domein 2	2500
		2250
		2000
		1750
		1500
		1250
		1000
		750
		500
		250
		0

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand, axt, Isolijnen, Bovenaanzicht

the scale towards document

mm 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

inch 0 1 2 3 4 5 6 7 8 9 10

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.0

47

Image Engineering · Scan Reference Chart · T3263 · Serial No.

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

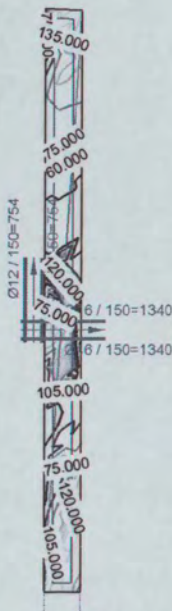
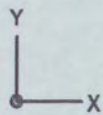
9/22/2017

Page 69

Afschuifweerstand, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 2]

Knoop	C	min. max.	Oppervlak	VRd,c [kN/m]	(vEd-vRd,c) [kN/m]	Maatgevende combinatie
Ext.						
11	(vEd-vRd,c)	min	Sch 278	188.507	-217.383	[1.35*0.889*ST1] {1.5*ST3} (1.5*0.4*ST2)
239		max	Sch 270	92.567	721.560	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)

Knoop: Index; C: Extreme component; min. max.: Extreme type; Oppervlak: Vlak behorend bij knoop; VRd,c: Afschuifweerstand;



Lineaire ber	VRd,c [kN/m]
Norm Eurocode	
Geval : Grenst	
Type : (Alle U	
E (P) : 1.21E-	230.135
E (W) : 1.21E-	210.000
E (Eq) : 6.90E-	195.000
Comp. : VRd,c	180.000
Detail : Domein	165.000
	150.000
	135.000
	120.000
	105.000
	90.000
	75.000
	60.000
	45.000
	30.000
	16.454

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., VRd,c, Isolijnen, Bovenaanzicht

the scale towards document

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.5

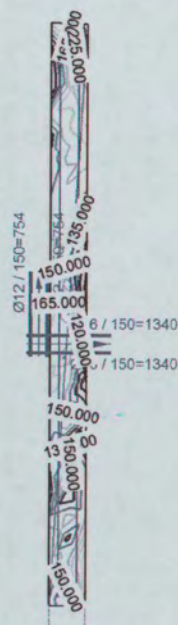
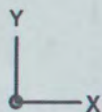
C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11

Image Engineering Scan Reference Chart TE263 Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

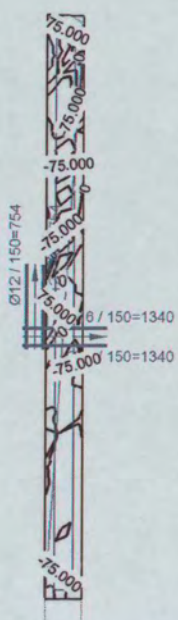
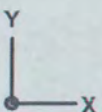
Constructeur: Core Constructies

Model: 17021-rev2.axs



Lineaire be	VRd,c
Norm Eurocode	[kN/m]
Geval : Grenst	299.720
Type : (Alle U	270.000
E (P) : 1.21E-	255.000
E (W) : 1.21E-	240.000
E (Eq) : 6.90E-	225.000
Comp. : VRd,c	210.000
Detail : Domeir	195.000
	180.000
	165.000
	150.000
	135.000
	120.000
	105.000
	90.000
	78.057

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Max., VRd,c, Isolijnen, Bovenaanzicht



Lineaire be	(vEd-vRd,c)
Norm Eurocod	[kN/m]
Geval : Grenst	852.763
Type : (Alle U	825.000
E (P) : 1.21E-	750.000
E (W) : 1.21E-	675.000
E (Eq) : 6.90E-	600.000
Comp. : (vEd-v	525.000
Detail : Domei	450.000
	375.000
	300.000
	225.000
	150.000
	75.000
	0
	-75.000
	-219.399

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b)) Grenstoestand Min., (vEd-vRd,c), Isolijnen, Bovenaanzicht

the scale towards document

mm 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

Inch 1 2 3 4 5 6 7 8 9 10 11 12

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

Patch Reference numbers on UTT

Image Engineering Scan Reference Chart TE263 Serial No. 47

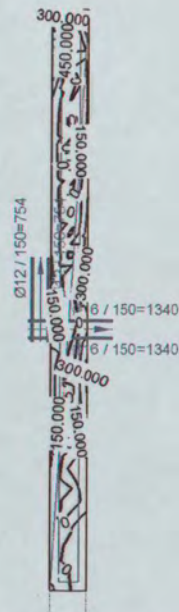
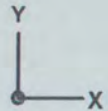
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

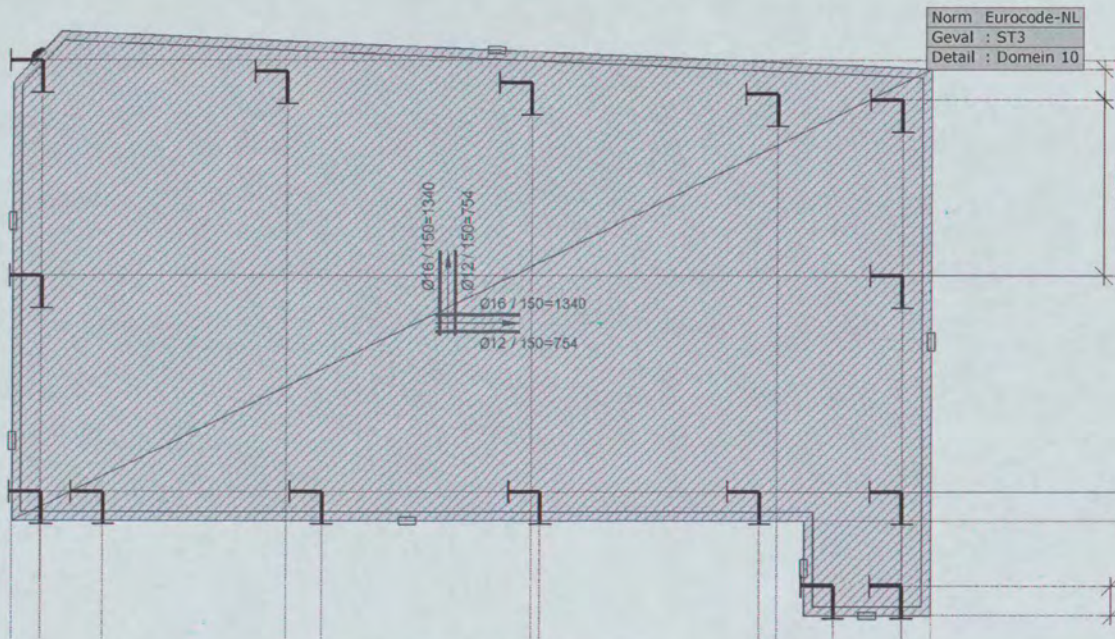
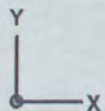
Pag. 71



Lineaire be	(vEd-vRd,c)
Norm Eurocod	[kN/m]
Geval : Grens	
Type : (Alle	
E (P) : 1.21E	2101.536
E (W) : 1.21E	1800.000
E (Eq) : 6.90E	1650.000
Comp. : (vEd-v	1500.000
Detail : Dome	1350.000
	1200.000
	1050.000
	900.000
	750.000
	600.000
	450.000
	300.000
	150.000
	0
	-161.903

Rapport [I], > 350 mm, Lineair,(Alle UGT (a, b) Grenstoestand Max., (vEd-vRd,c), Isolijnen, Bovenaanzicht

Domein 10



Rapport Domein 10, Bovenaanzicht

the scale towards document

47

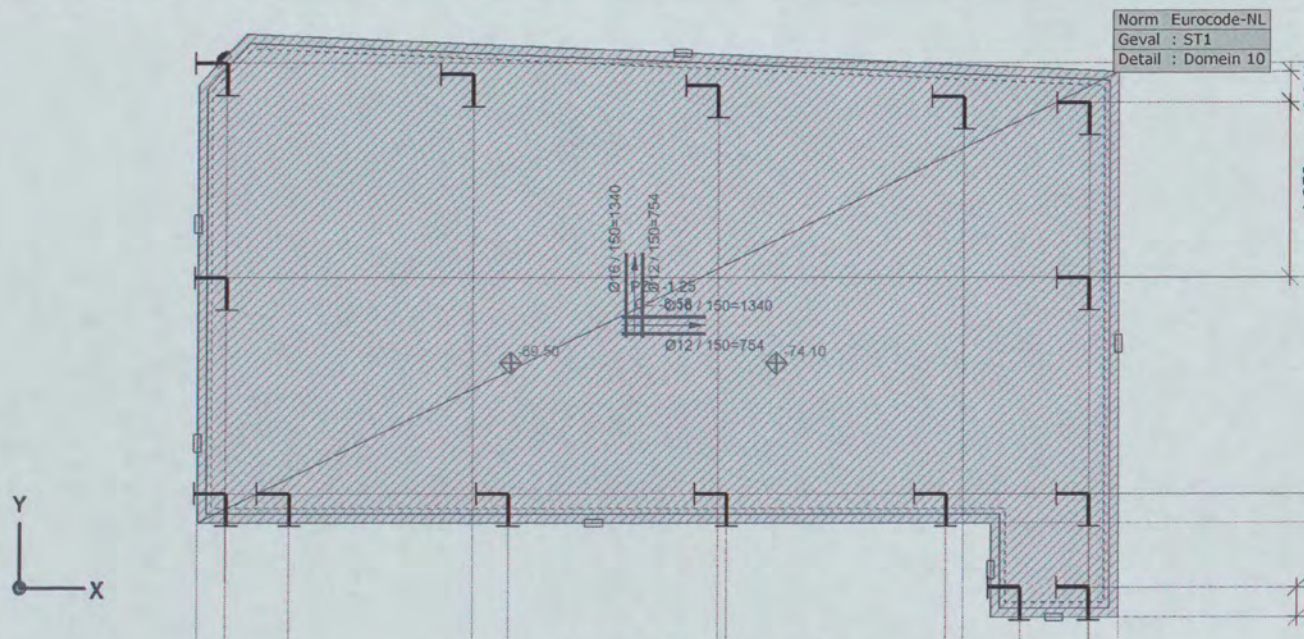
Image Engineering Scan Reference Chart TE263 Serial No.

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017 Pag. 72



Rapport Domein 10, ST1, Bovenaanzicht

ST1: Knoopbelastingen [Domein 10]

	Richting	F_x [kN]	F_y [kN]	F_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
37	Globaal	0	0	-69.50	0	0	0
38	Globaal	0	0	-74.10	0	0	0

F_x, F_y, F_z : Belastingkracht component; M_x, M_y, M_z : Belastingsmoment component;

ST1: Vlak eigen gewicht [Domein 10]

	Σ [kg]
613-1164	48205.778
Totaal	48205.778

Σ: Totale massa;

ST1: Eigen gewicht van domein [Domein 10]

	Σ [kg]
10	48205.778
Totaal	48205.778

Σ: Totale massa;

ST1: Domein vlaklast [Domein 10]

	Domein	Richting	Type	In gaten	Comp.	Waarde [kN/m ²]
	10	Globaal	Constant	nee	pX =	0
					pY =	0

the scale towards document

mm
inch

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
Patch Reference numbers on UTT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

47

Image Engineering · Scan Reference Chart · TE263 · Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

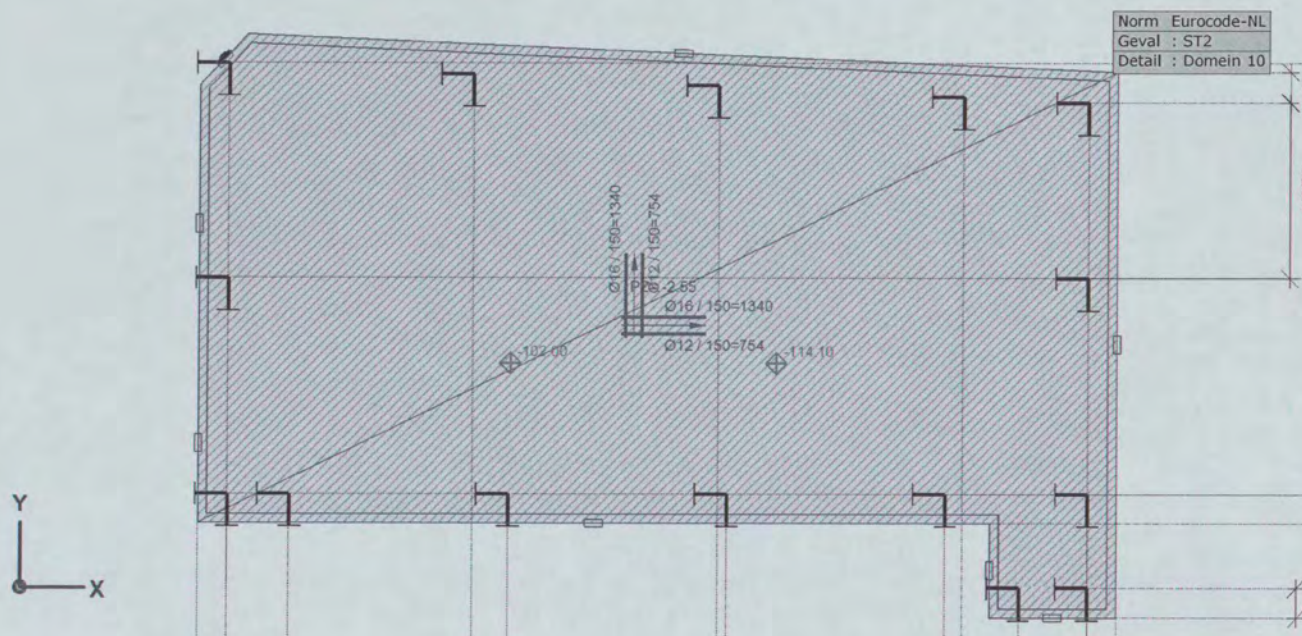
Model: 17021-rev2.axs

9/22/2017 Pag. 73

ST1: Domein vlaklast [Domein 10]

Domein	Richting	Type	In gaten	Comp.	Waarde [kN/m ²]
				pZ =	-1.25

In gaten: Belasting op openingen toestaan; Comp.: Resultaatonderdeel; Waarde: waarde van de lastcomponent;



Rapport Domein 10, ST2, Bovenanzicht

ST2: Knoopbelastingen [Domein 10]

	Richting	F _x [kN]	F _y [kN]	F _z [kN]	M _x [kNm]	M _y [kNm]	M _z [kNm]
37	Globaal	0	0	-102.00	0	0	0
38	Globaal	0	0	-114.10	0	0	0

F_x, F_y, F_z: Belastingkracht component; M_x, M_y, M_z: Belastingsmoment component;

ST2: Domein vlaklast [Domein 10]

Domein	Richting	Type	In gaten	Comp.	Waarde [kN/m ²]
10	Globaal	Constant	nee	pX =	0
				pY =	0
				pZ =	-2.55

In gaten: Belasting op openingen toestaan; Comp.: Resultaatonderdeel; Waarde: waarde van de lastcomponent;

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

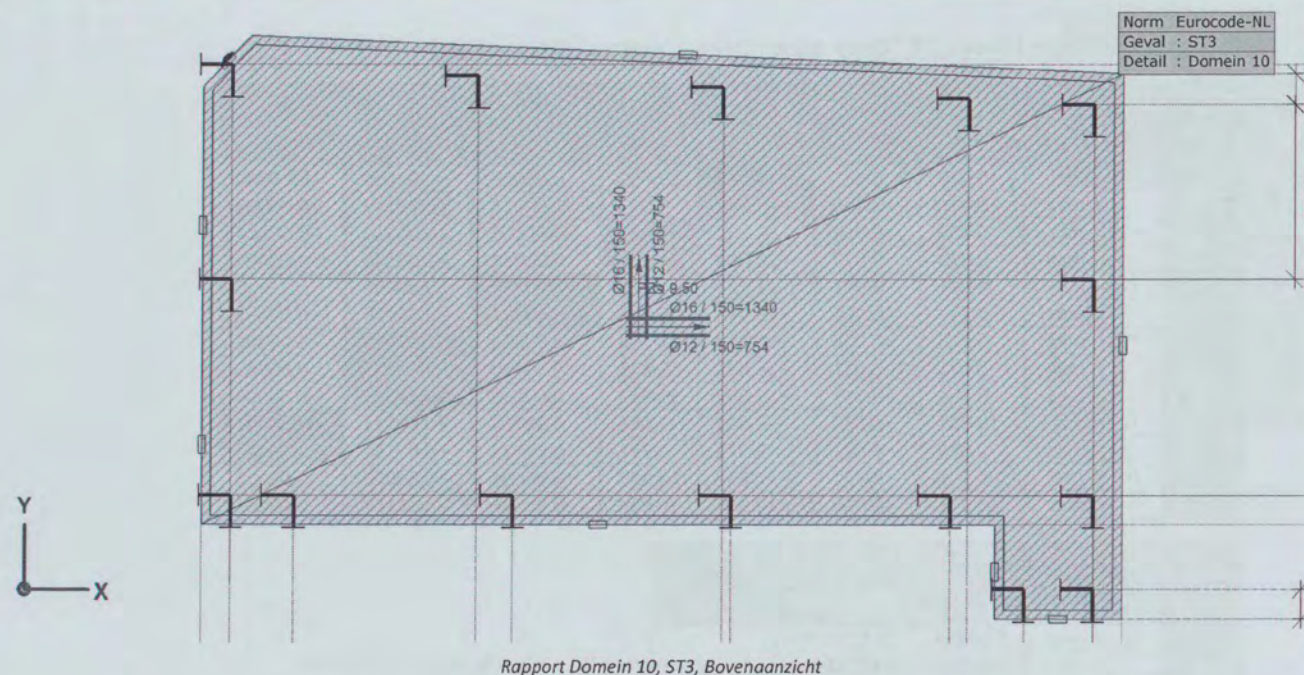
47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017 Pag. 74



Rapport Domein 10, ST3, Bovenaanzicht

ST3: Domein vlaklast [Domein 10]

Domein	Richting	Type	In gaten	Comp.	Waarde [kN/m ²]
10	Globaal	Constant	nee	pX =	0
				pY =	0
				pZ =	9.50

In gaten: Belasting op openingen toestaan; Comp.: Resultaatonderdeel; Waarde: waarde van de lastcomponent;

Verplaatsingen

Knoopverplaatsingen

Grenstoestand Min,Max.

Knoopverplaatsingen [Lineair,(BGT Quasi-blijvend) Grenstoestand, Domein 10]

	C	min. max.	eX [mm]	eY [mm]	eZ [mm]	eR [mm]	fX [rad]	fY [rad]	fZ [rad]
Ext.									
365	eX	min	-0.025	0.002	-18.180	18.180	0.00093	-0.00092	-0.00002
34		max	0.045	0.051	-9.272	9.272	0.00071	-0.00134	0.00011
33	eY	min	0.031	-0.041	-6.802	6.802	0.00019	-0.00115	-0.00008
34		max	0.045	0.051	-9.272	9.272	0.00071	-0.00134	0.00011

	C	min. max.	fR [rad]	Maatgevende combinatie
Ext.				
365	eX	min	0.00131	[ST1] {0.3*ST2}
34		max	0.00152	[ST1] {0.3*ST2} (0.3*ST3)
33	eY	min	0.00117	[ST1] {0.3*ST2} (0.3*ST3)
34		max	0.00152	[ST1] {0.3*ST2} (0.3*ST3)

the scale towards document

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

45 50 55 60 65

mm 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

Inch 1 2 3 4 5 6 7 8 9 10 11 12

Image Engineering Scan Reference Chart TE-83 Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

Knoopverplaatsingen [Lineair,(BGT Quasi-blijvend) Grenstoestand, Domein 10]

	C	min. max.	eX [mm]	eY [mm]	eZ [mm]	eR [mm]	fX [rad]	fY [rad]	fZ [rad]
30	eZ	min	-0.010	0.027	-20.060	20.060	0.00068	-0.00106	-0.00005
33		max	0.030	-0.040	-6.033	6.033	0.00024	-0.00110	-0.00008
33	eR	min	0.030	-0.040	-6.033	6.033	0.00024	-0.00110	-0.00008
30		max	-0.010	0.027	-20.060	20.060	0.00068	-0.00106	-0.00005
281	fX	min	0.001	0.001	-11.623	11.623	-0.00033	-0.00096	0
368		max	-0.017	0.001	-15.276	15.276	0.00121	-0.00095	-0.00002
1701	fY	min	0.016	-0.006	-11.154	11.154	0.00099	-0.00139	0.00006
32		max	-0.021	-0.012	-15.825	15.825	0.00030	-0.00075	0.00003
1201		max	-0.014	-0.011	-15.962	15.962	0.00030	-0.00075	0.00004
1776	fZ	min	0.017	-0.023	-7.602	7.603	0.00011	-0.00115	-0.00010
1713		max	0.024	0.027	-9.371	9.371	0.00075	-0.00131	0.00013
1739	fR	min	-0.005	0.001	-12.837	12.837	-0.00006	-0.00080	0.00001
1701		max	0.017	-0.006	-10.844	10.844	0.00106	-0.00136	0.00006

	C	min. max.	fR [rad]	Maatgevende combinatie
30	eZ	min	0.00126	[ST1] {0.3*ST2}
33		max	0.00113	[ST1] {0.3*ST3}
33	eR	min	0.00113	[ST1] {0.3*ST3}
30		max	0.00126	[ST1] {0.3*ST2}
281	fX	min	0.00101	[ST1] {0.3*ST2} (0.3*ST3)
368		max	0.00153	[ST1] {0.3*ST3}
1701	fY	min	0.00171	[ST1] {0.3*ST2}
32		max	0.00081	[ST1]
1201		max	0.00081	[ST1]
1776	fZ	min	0.00116	[ST1] {0.3*ST2}
1713		max	0.00152	[ST1] {0.3*ST2} (0.3*ST3)
1739	fR	min	0.00080	[ST1] {0.3*ST3}
1701		max	0.00172	[ST1] {0.3*ST2} (0.3*ST3)

C: Extreme component; min. max.: Extreme type; eX: Verplaatsing in X-richting; eY: Verplaatsing in Y-richting; eZ: Verplaatsing in Z-richting; eR: Resulterende verplaatsing; fX: Rotatie in X-richting; fY: Rotatie in Y-richting; fZ: Rotatie in Z-richting; fR: Resulterende rotatie;

the scale towards document

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.0

C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11

Image Engineering · Scan Reference Chart · TE263 · Serial No. 47

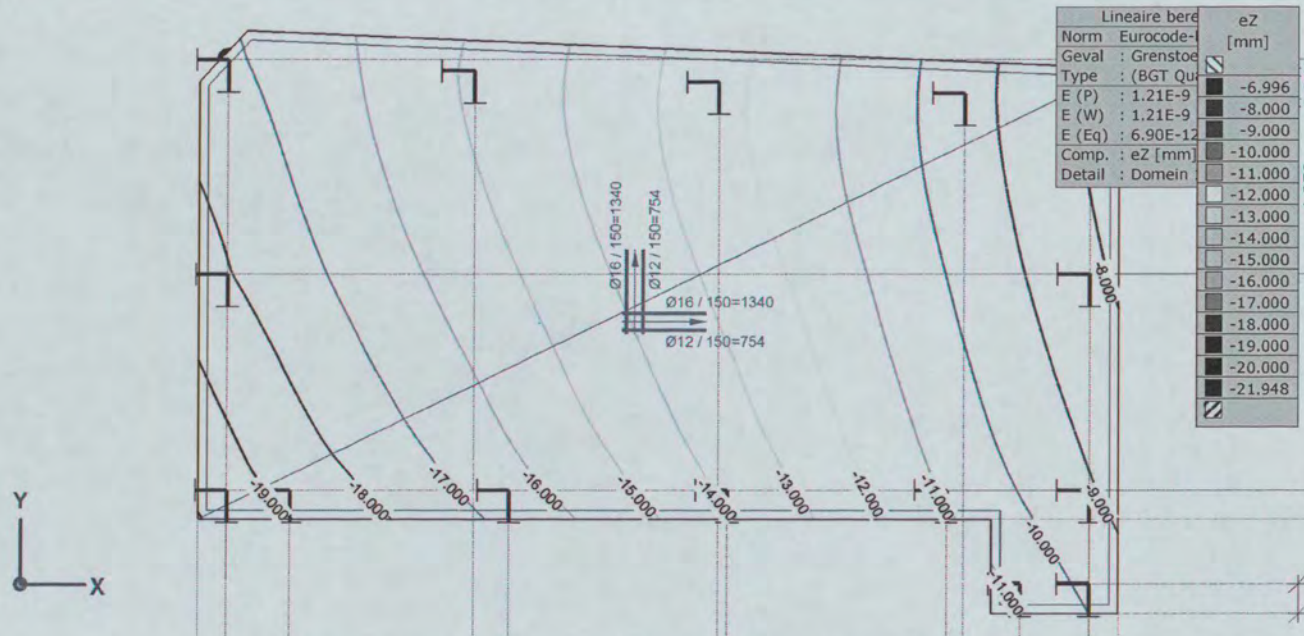
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

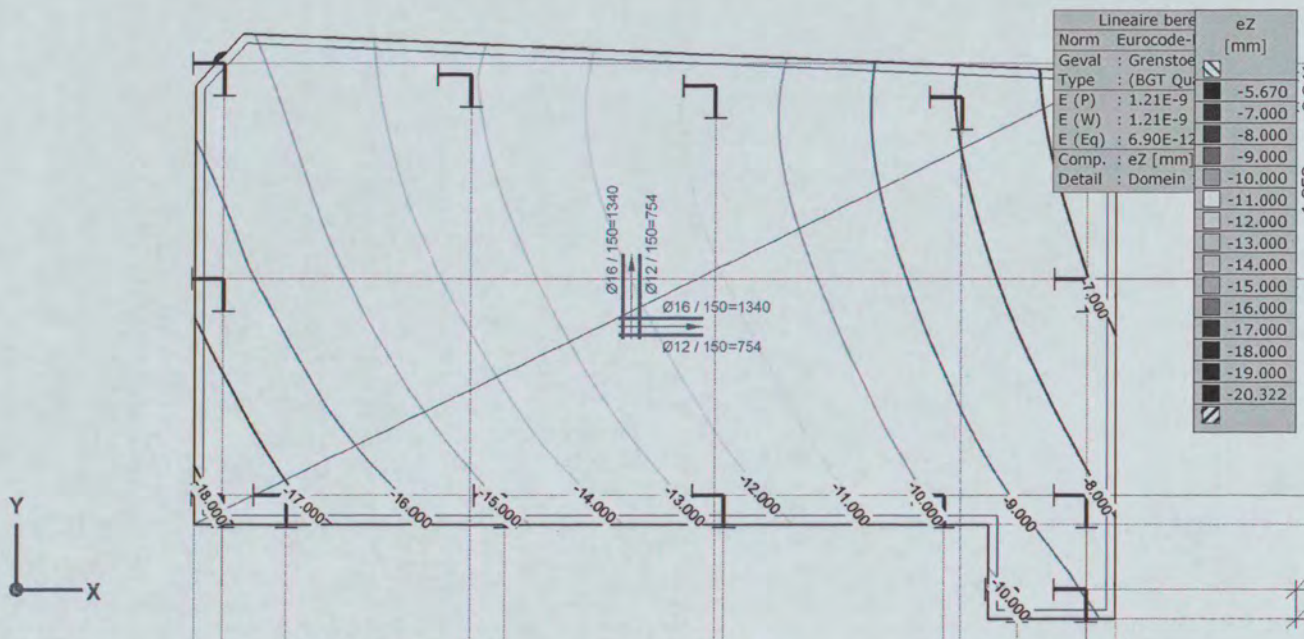
Model: 17021-rev2.axs

9/22/2017

Pag. 76



Rapport [I], >, Lineair,(BGT Quasi-blijvend) Grenstoestand Min., eZ, Isolijnen, Bovenaanzicht



Rapport [I], >, Lineair,(BGT Quasi-blijvend) Grenstoestand Max., eZ, Isolijnen, Bovenaanzicht

Interne krachten
 Vlakkrachten
 Grenstoestand Min,Max.

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 C7 B7 A7 C8 B8 A8 C9 B9
 Patch Reference numbers on UTT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5

47

Image Engineering · Scan Reference Chart · TEX35 · Serial No.

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

Pag. 77

Vlakkrachten [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 10]

Knoop	C	min. max.	Oppervlak	n_x [kN/m]	n_y [kN/m]	n_{xy} [kN/m]	m_x [kNm/m]	m_y [kNm/m]	m_{xy} [kNm/m]	vS_z [kN/m]
Ext.										
363	nx	min	Sch 716	-328.412	-159.724	142.812	48.161	-34.364	-2.258	547.592
343		max	Sch 668	558.239	-262.523	-603.628	-13.671	-36.445	10.135	360.248
268	ny	min	Sch 682	467.537	-961.919	-78.093	26.666	34.449	47.879	1551.377
354		max	Sch 661	-143.870	431.524	-106.703	-29.365	21.313	5.667	342.217
343	nxy	min	Sch 668	558.239	-262.523	-603.628	-13.671	-36.445	10.135	360.248
325		max	Sch 666	81.301	-708.508	521.807	-17.957	23.984	4.243	236.329
38	mx	min	Sch 619	13.247	31.604	-0.186	-76.211	-66.609	2.684	21.851
47		max	Sch 671	-64.011	-170.505	3.740	109.401	99.489	10.127	1067.270
38	my	min	Sch 619	13.247	31.604	-0.186	-76.211	-66.609	2.684	21.851
41		max	Sch 632	54.707	-28.002	138.005	77.605	159.716	4.579	991.919
447	mxy	min	Sch 696	56.657	-47.638	137.245	-8.103	19.340	-35.374	41.317
431		max	Sch 665	-123.116	58.090	-123.599	2.807	45.854	50.658	35.721
554	vSz	min	Sch 931	5.299	14.241	0.539	4.052	17.647	-9.464	0.440
48		max	Sch 683	-30.440	-369.639	-102.358	55.938	70.291	22.481	2280.157
363	nxD	min	Sch 716	-328.412	-159.724	142.812	48.161	-34.364	-2.258	547.592
343		max	Sch 668	558.239	-262.523	-603.628	-13.671	-36.445	10.135	360.248
325	nyD	min	Sch 666	81.301	-708.508	521.807	-17.957	23.984	4.243	236.329
344		max	Sch 660	93.324	75.505	-461.281	-2.145	-17.953	16.684	312.012

Knoop	C	min. max.	Oppervlak	Maatgevende combinatie
Ext.				
363	nx	min	Sch 716	[1.35*0.889*ST1] {1.5*ST2}
343		max	Sch 668	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
268	ny	min	Sch 682	[1.35*0.889*ST1] {1.5*ST2}
354		max	Sch 661	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
343	nxy	min	Sch 668	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
325		max	Sch 666	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
38	mx	min	Sch 619	[1.35*0.889*ST1] {1.5*ST2}
47		max	Sch 671	[1.35*0.889*ST1] {1.5*ST2}
38	my	min	Sch 619	[1.35*0.889*ST1] {1.5*ST2}
41		max	Sch 632	[1.35*0.889*ST1] {1.5*ST2}
447	mxy	min	Sch 696	[1.35*0.889*ST1] {1.5*ST5} (1.5*0.4*ST3)
431		max	Sch 665	[1.35*ST1] {1.5*0.4*ST3}
554	vSz	min	Sch 931	[0.9*ST1] {1.5*ST5} (1.5*0.4*ST3)
48		max	Sch 683	[1.35*0.889*ST1] {1.5*ST2}
363	nxD	min	Sch 716	[1.35*0.889*ST1] {1.5*ST2}
343		max	Sch 668	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
325	nyD	min	Sch 666	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
344		max	Sch 660	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)

Knoop: Index; C: Extreme component; min. max.: Extreme type; Oppervlak: Vlak behorend bij knoop; nx: Normalkracht in lokale X-richting; ny: Normalkracht in lokale Y-richting; nxy: Membraam afschuifkracht; mx: Specifiek buigmoment om de lokale y-as; my: Specifiek buigmoment om de lokale x-as; mxy: Specifiek draaimoment; vSz: Resulterende specifieke afschuivingskracht;

the scale towards document

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.0

C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11

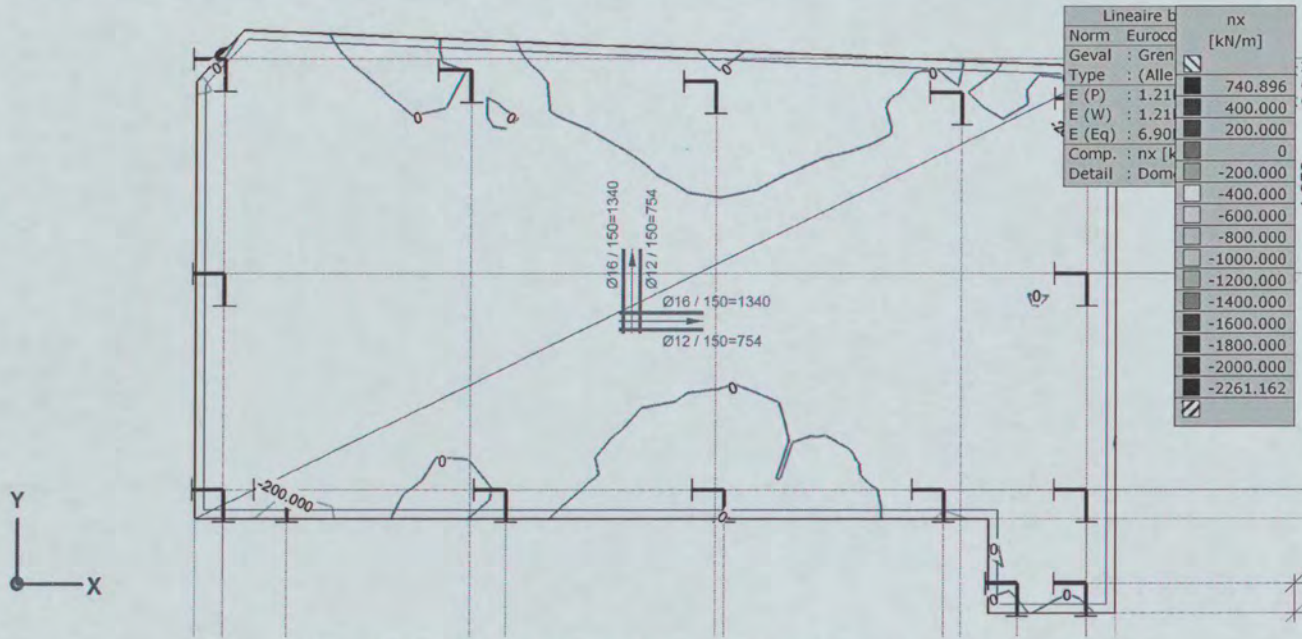
47

Image Engineering Scan Reference Chart TE263 Serial No.

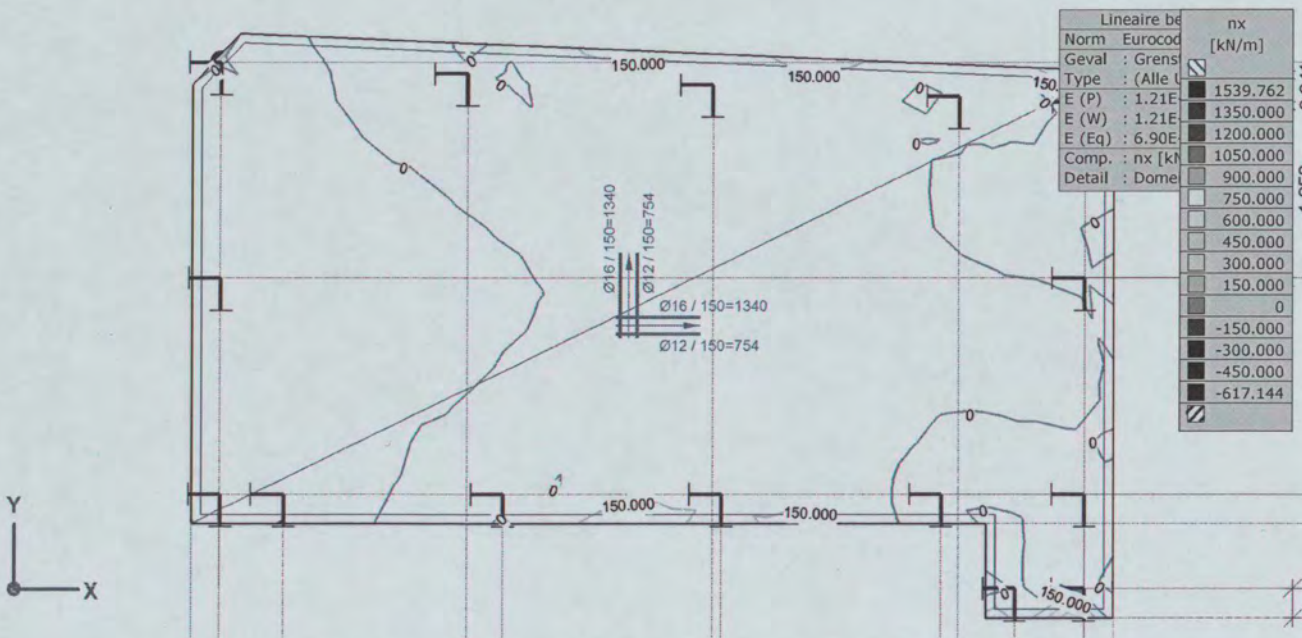
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs



Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., nx, Isolijnen, Bovenaanzicht



Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., nx, Isolijnen, Bovenaanzicht

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
Patch reference numbers on UTT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

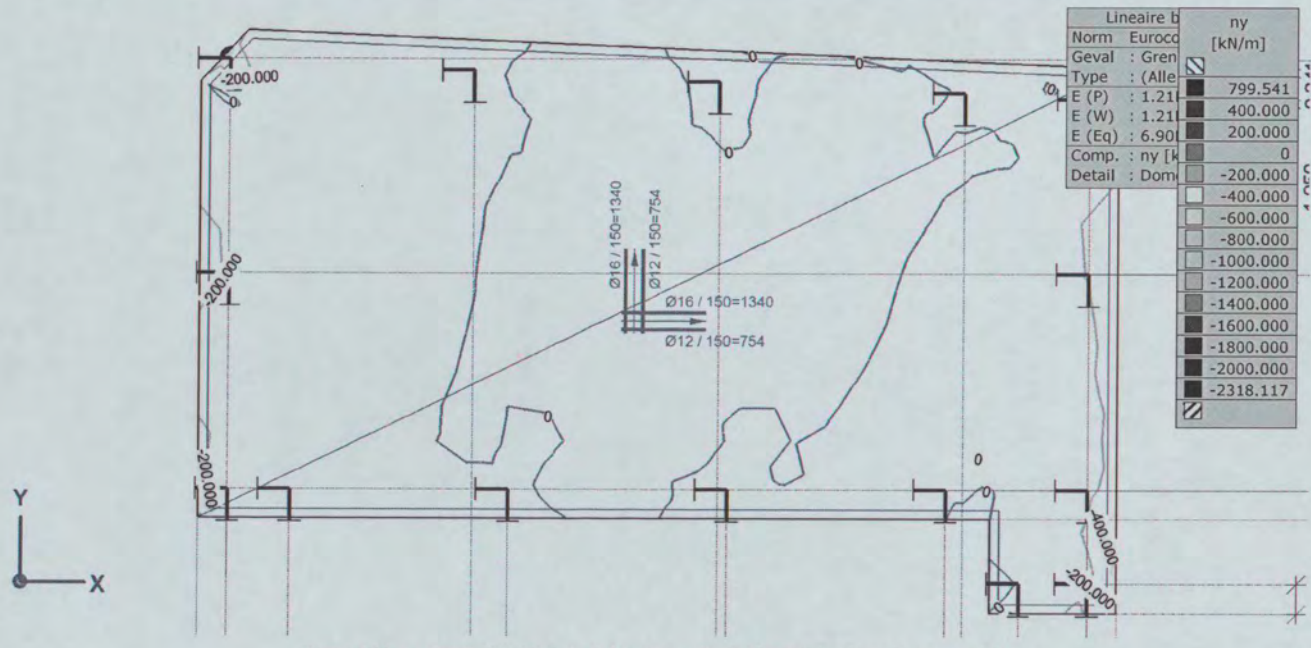
4.5 5.0 5.5 6.0

47

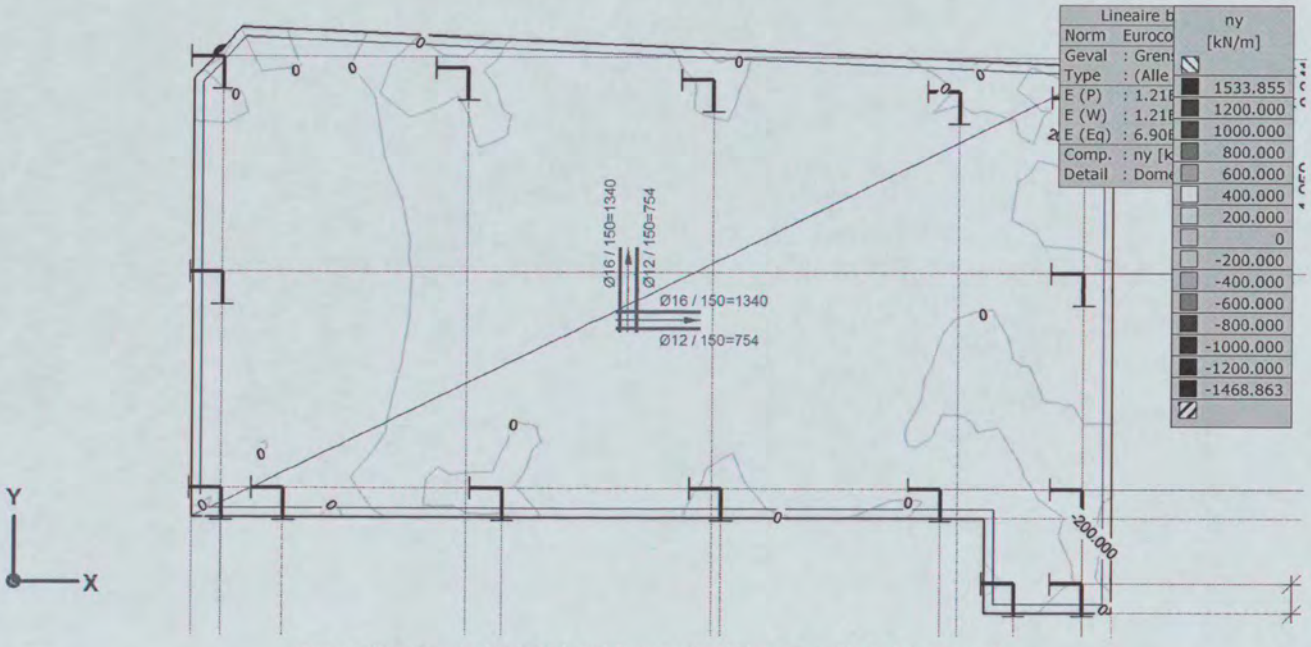
Image Engineering · Scan Reference Chart · TE263 · Serial No.

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies
 Model: 17021-rev2.axs



Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., ny, Isolijnen, Bovenaanzicht



Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., ny, Isolijnen, Bovenaanzicht

the scale towards document

mm
 100
 200
 300
 400
 500
 600
 700
 800
 900
 1000

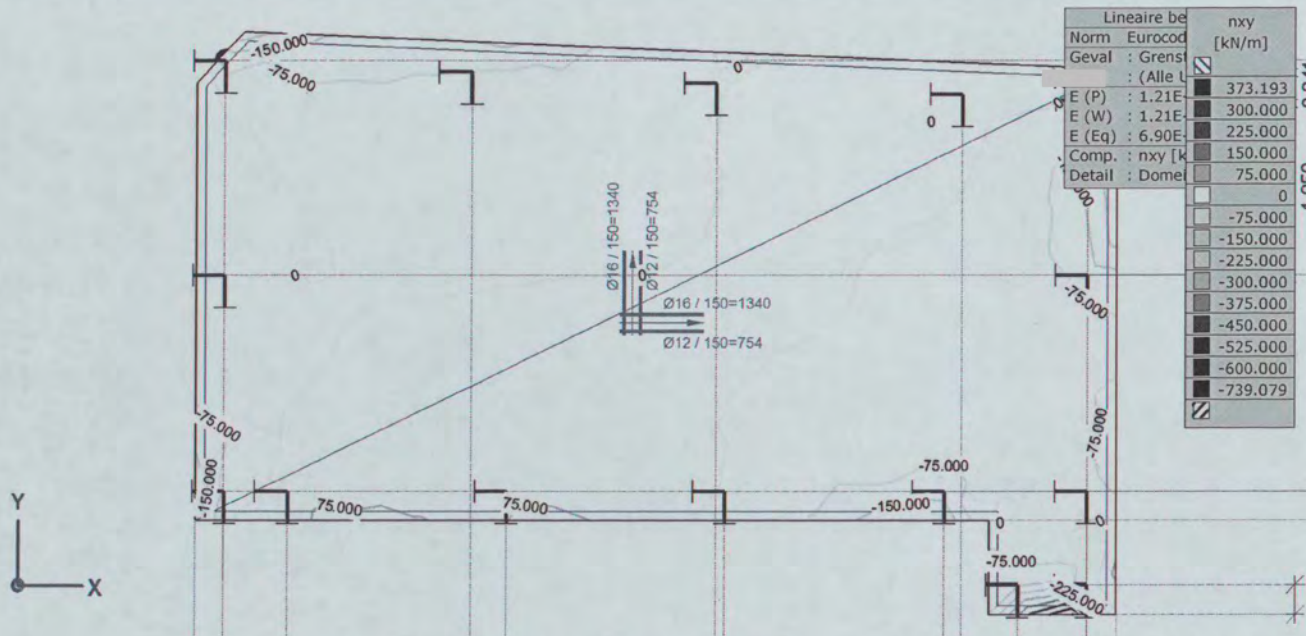
mm
 100
 200
 300
 400
 500
 600
 700
 800
 900
 1000

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 C7 B7 A7 C8 B8 A8 C9 B9
 Patch Reference numbers on UTT
 Image Engineering Scan Reference Chart TE263 Serial No. 47

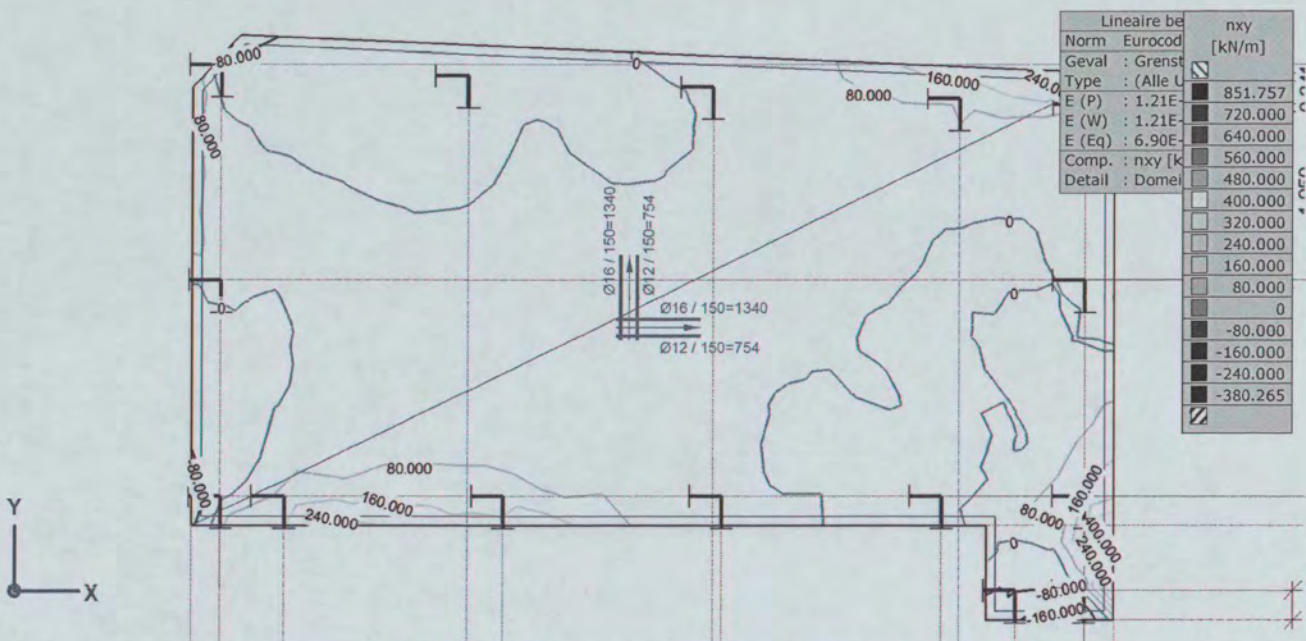
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs



Rapport [I], >, Linear, (Alle UGT (a, b)) Grenstoestand Min., nxy, Isolijnen, Bovenaanzicht



Rapport [I], >, Linear, (Alle UGT (a, b)) Grenstoestand Max., nxy, Isolijnen, Bovenaanzicht

the scale towards document

mm 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50

Inch 1/2 1 1 1/2 2 2 1/2 3 3 1/2 4 4 1/2 5 5 1/2 6

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5
 Patch reference numbers on UTT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.0

47

Image Engineering Scan Reference Chart TE263 Serial No.

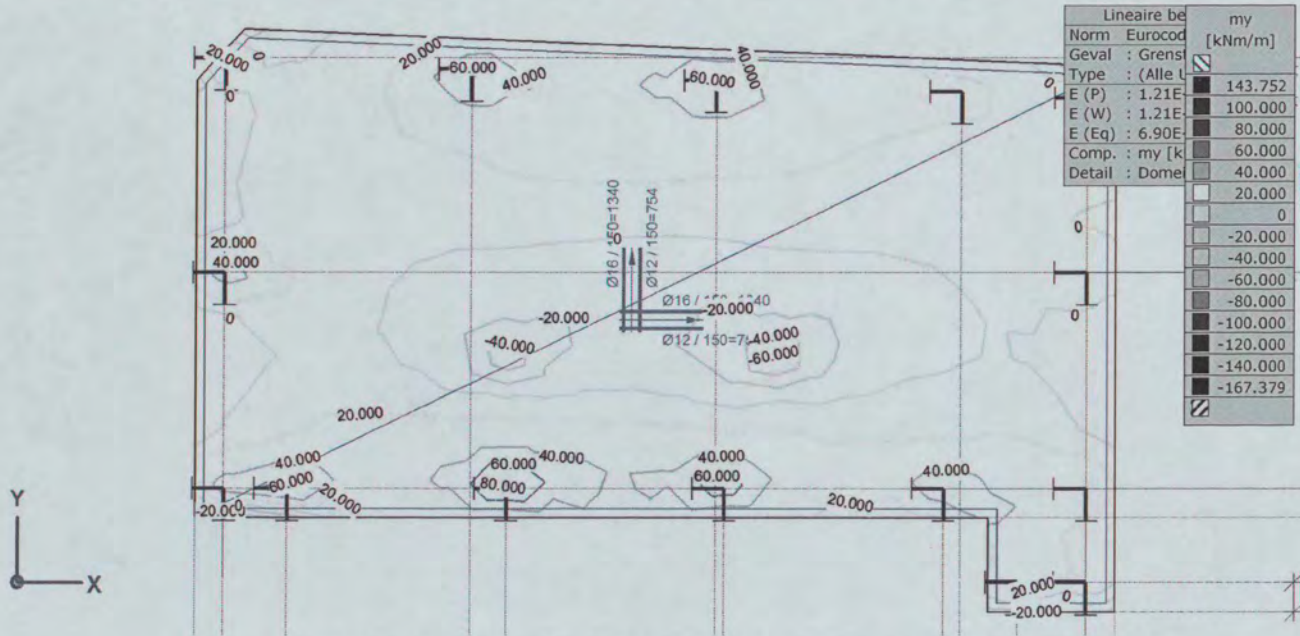
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

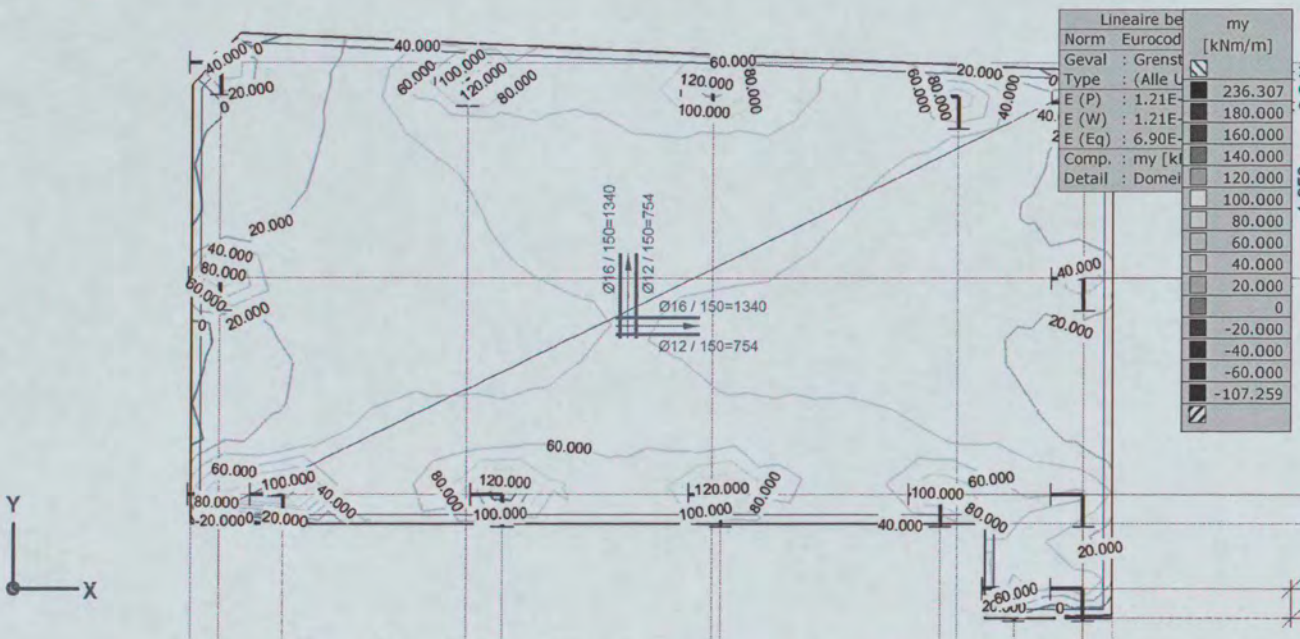
Model: 17021-rev2.axs

9/22/2017

Pag. 82



Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., my, Isolijnen, Bovenaanzicht



Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., my, Isolijnen, Bovenaanzicht

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 C7 B7 A7 C8 B8 A8 C9 B9
Patch Reference numbers on UTT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

4.5 5.0 5.5 6.0

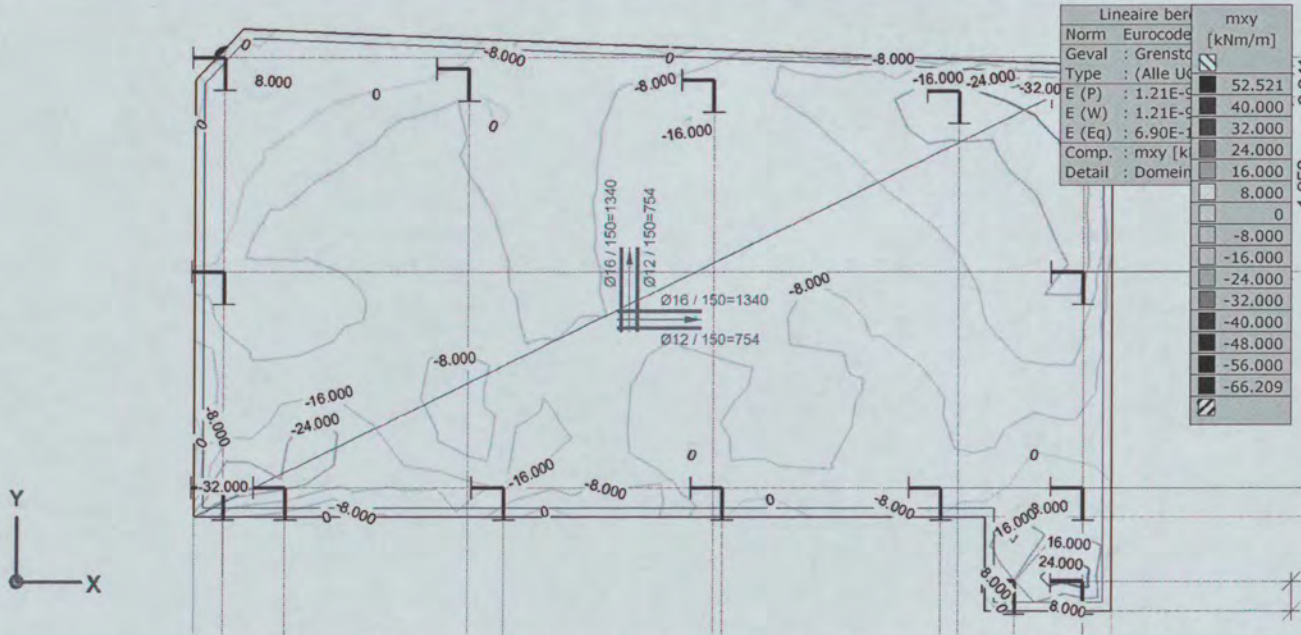
47

Image Engineering · Scan Reference Chart · TEX3 · Serial No.

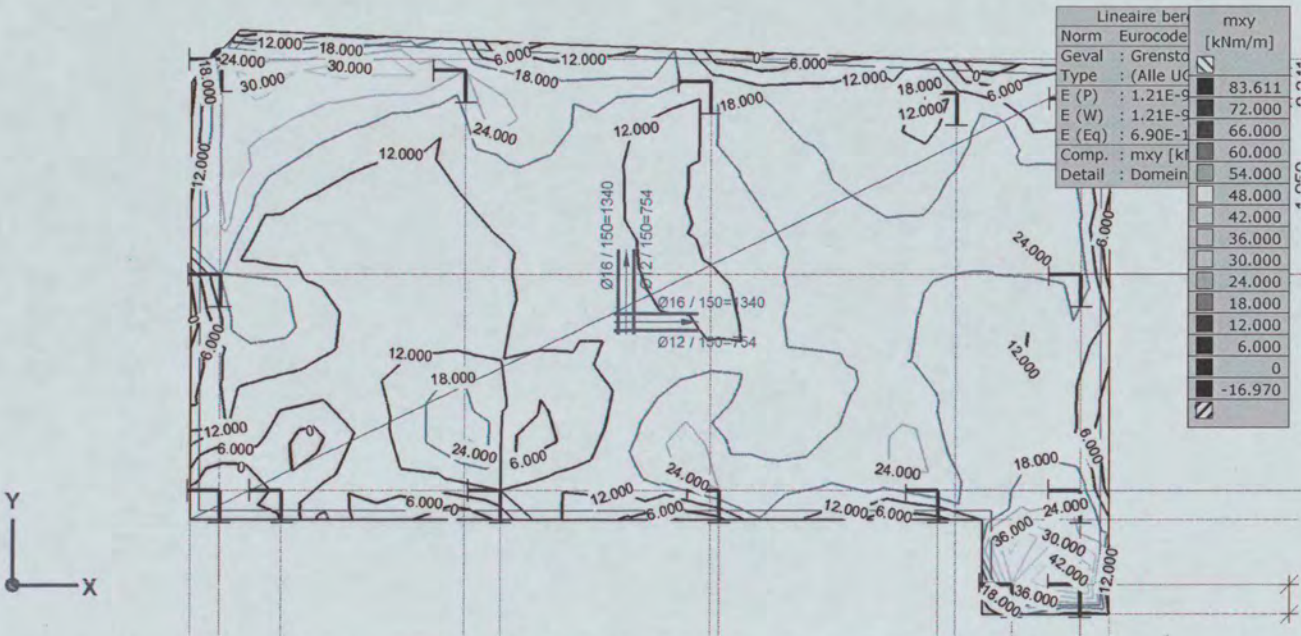
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs



Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., mxy, Isolijnen, Bovenaanzicht



Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., mxy, Isolijnen, Bovenaanzicht

the scale towards document

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

45 5.0 10.0 15.0

47

Image Engineering Scan Reference Chart: TE263 Serial No.

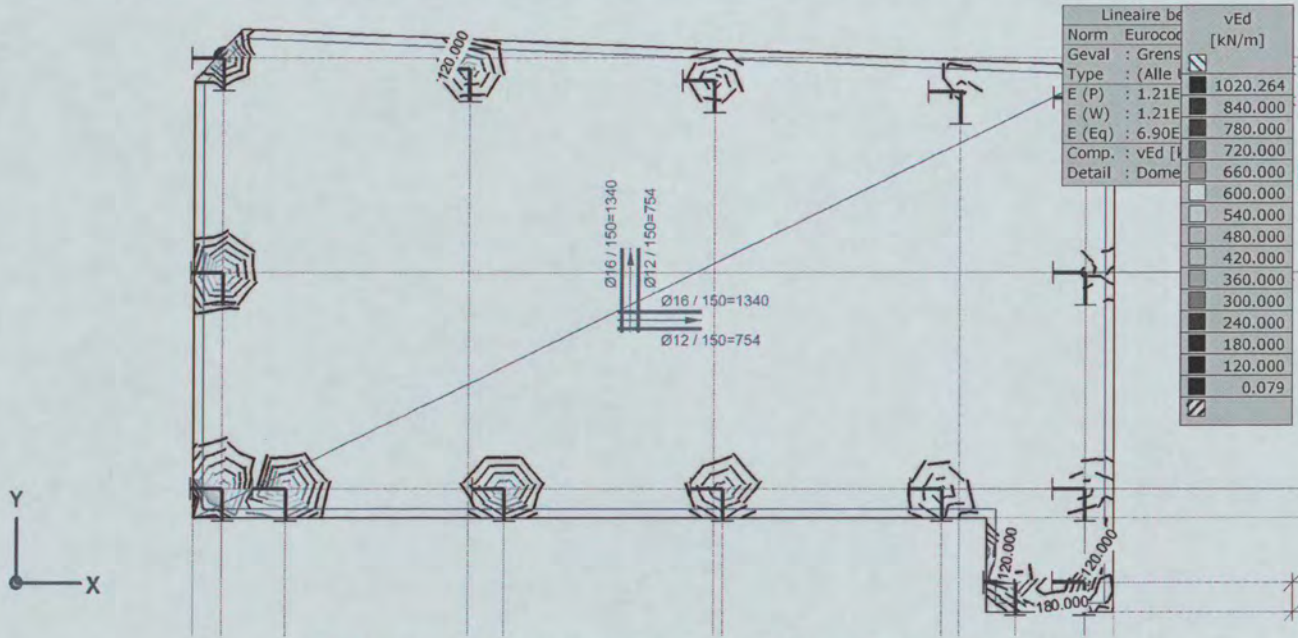
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

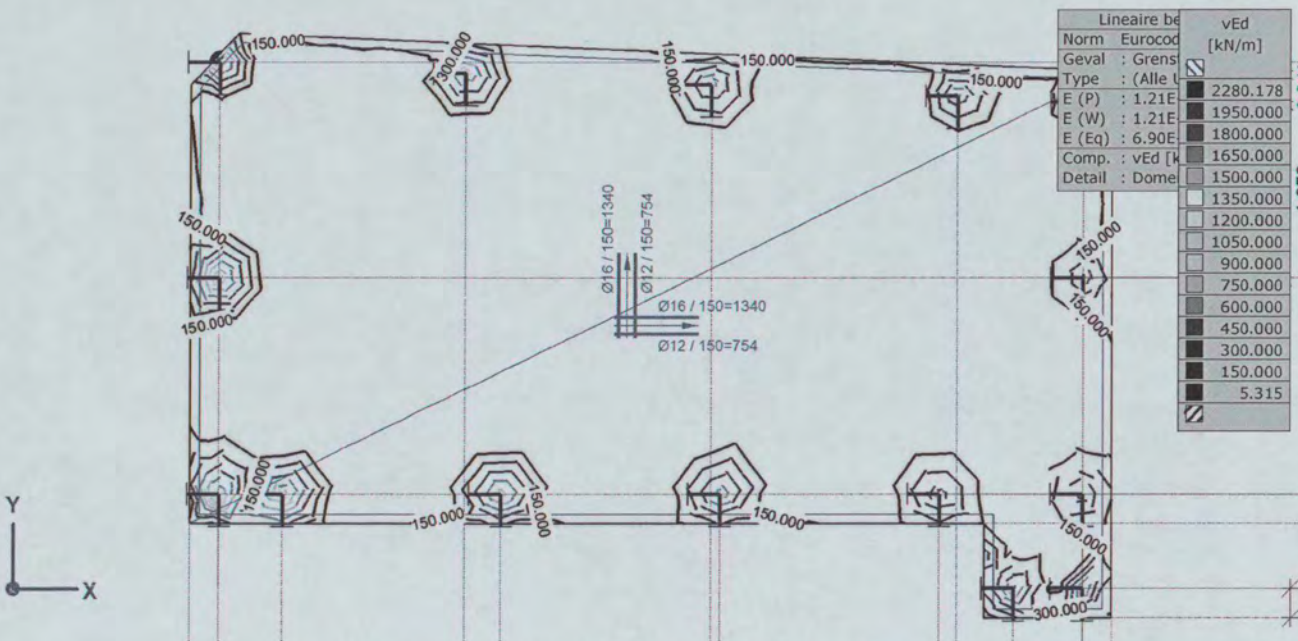
Model: 17021-rev2.axs

9/22/2017

Pag. 84



Rapport [I], >, Linear, (Alle UGT (a, b)) Grenstoestand Min., vEd, Isolijnen, Bovenaanzicht



Rapport [I], >, Linear, (Alle UGT (a, b)) Grenstoestand Max., vEd, Isolijnen, Bovenaanzicht

Spanningen
 Vlakspanningen
 Grenstoestand Min,Max.

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 C7 B7 A7 C8 B8 A8 C9 B9
 Patch Reference numbers on ITT

Image Engineering · Scan Reference Chart · TE263 · Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

Pag. 85

Vlakspanningen [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 10]

Knoop	C	min. max.	Oppervlak	Pos.	Sxx [N/mm ²]	Syy [N/mm ²]	Sxy [N/mm ²]	Sxz [N/mm ²]	Syz [N/mm ²]	SVM [N/mm ²]
Ext.										
47	Sxx	min	Sch 671	B	-5.54	-5.36	-0.49	0	0	5.52
47		max	Sch 671	T	5.18	4.39	0.51	0	0	4.91
41	Syy	min	Sch 632	B	-3.64	-7.90	0.17	0	0	6.86
41		max	Sch 632	T	3.96	7.74	0.62	0	0	6.79
431	Sxy	min	Sch 665	B	-0.49	-2.08	-2.83	0	0	5.26
268		max	Sch 682	T	1.42	-1.15	2.48	0	0	4.85
39	Sxz	min	Sch 631	C	-0.48	-0.16	-0.08	-3.81	0.03	6.62
48		max	Sch 682	C	-0.09	-1.06	-0.29	7.83	-2.32	14.19
48	Syz	min	Sch 683	C	-0.09	-1.06	-0.29	4.06	-8.89	16.96
39		max	Sch 626	C	-0.48	-0.16	-0.08	2.26	5.72	10.66
533	SVM	min	Sch 884	C	-0.02	0	-0.01	-0.01	0.01	0.03
48		max	Sch 683	C	-0.09	-1.06	-0.29	4.06	-8.89	16.96

Knoop	C	min. max.	Oppervlak	Pos.	Sxx [N/mm ²]	S1 [N/mm ²]	S2 [N/mm ²]	aS [°]
Ext.								
47	Sxx	min	Sch 671	B	-5.54	-4.96	-5.94	-50.29
47		max	Sch 671	T	5.18	5.42	4.14	26.03
41	Syy	min	Sch 632	B	-3.64	-3.64	-7.91	2.28
41		max	Sch 632	T	3.96	7.84	3.86	80.95
431	Sxy	min	Sch 665	B	-0.49	1.66	-4.23	-37.16
268		max	Sch 682	T	1.42	2.93	-2.66	31.31
39	Sxz	min	Sch 631	C	-0.48	-0.15	-0.50	-76.40
48		max	Sch 682	C	-0.09	-0.01	-1.14	-15.56
48	Syz	min	Sch 683	C	-0.09	-0.01	-1.14	-15.56
39		max	Sch 626	C	-0.48	-0.15	-0.50	-76.40
533	SVM	min	Sch 884	C	-0.02	0.01	-0.02	-68.32
48		max	Sch 683	C	-0.09	-0.01	-1.14	-15.56

Knoop	C	min. max.	Oppervlak	Pos.	Sxx [N/mm ²]	Maatgevende combinatie
Ext.						
47	Sxx	min	Sch 671	B	-5.54	[1.35*0.889*ST1] {1.5*ST2}
47		max	Sch 671	T	5.18	[1.35*0.889*ST1] {1.5*ST2}
41	Syy	min	Sch 632	B	-3.64	[1.35*0.889*ST1] {1.5*ST2}
41		max	Sch 632	T	3.96	[1.35*0.889*ST1] {1.5*ST2}
431	Sxy	min	Sch 665	B	-0.49	[1.35*ST1] {1.5*0.4*ST3}
268		max	Sch 682	T	1.42	[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
39	Sxz	min	Sch 631	C	-0.48	[1.35*0.889*ST1] {1.5*ST2}
48		max	Sch 682	C	-0.09	[1.35*0.889*ST1] {1.5*ST2}
48	Syz	min	Sch 683	C	-0.09	[1.35*0.889*ST1] {1.5*ST2}
39		max	Sch 626	C	-0.48	[1.35*0.889*ST1] {1.5*ST2}
533	SVM	min	Sch 884	C	-0.02	[0.9*ST1] {1.5*ST3}
48		max	Sch 683	C	-0.09	[1.35*0.889*ST1] {1.5*ST2}

Knoop: Index; C: Extreme component; min. max.: Extreme type; Oppervlak: Vlak behorend bij knoop; Pos.: Punt voor spanningsberekening; Sxx: Normaalspanning in lokale X-richting; Syy: Normaalspanning in lokale Y-richting; Sxy: Torsie-/Schuifspanning; Sxz, Syz: Draai/afschuivingsspanning; SVM: Von Mises spanning; S1: Primaire spanning 1; S2: Primaire spanning 2; aS: Richting primaire spanning;

Betonontwerp

Wapeningshoeveelheden, Eurocode-NL

Grenstoestand Min,Max.



Project: 17021 Willemsparkweg 220 Amsterdam

Construteur: Core Constructies

Model: 17021-rev2.axs

9/22/2017

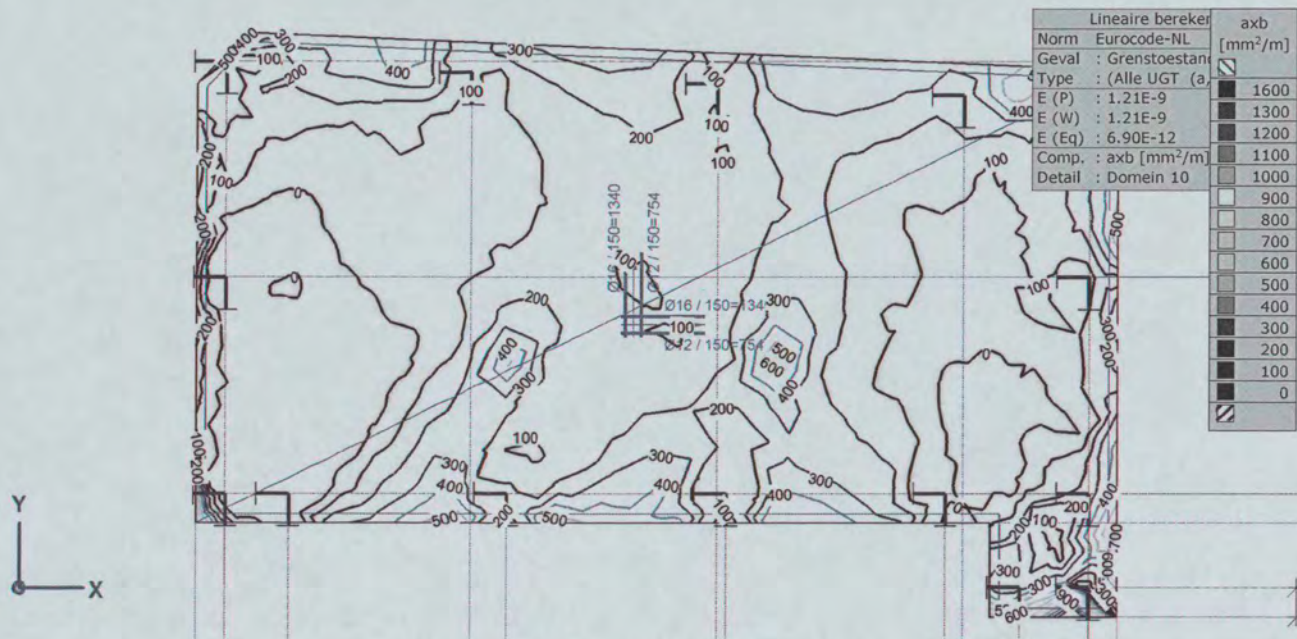
Pag. 86

Wapeningshoeveelheden, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 10]

Knoop	C	min. max.	Oppervlak	axb [mm ² /m]	ayb [mm ² /m]
Ext.					
343	axb	max	Sch 668	1600	
344	ayb	max	Sch 660		960
343	axt	max	Sch 668		
41	ayt	max	Sch 632		

Knoop	C	min. max.	Oppervlak	axt [mm ² /m]	ayt [mm ² /m]	Maatgevende combinatie
Ext.						
343	axb	max	Sch 668			[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
344	ayb	max	Sch 660			[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
343	axt	max	Sch 668	1265		[1.35*0.889*ST1] {1.5*ST4} (1.5*0.4*ST2+1.5*0.4*ST3)
41	ayt	max	Sch 632		1398	[1.35*0.889*ST1] {1.5*ST2}

Knoop: Index; C: Extreme component; min. max.: Extreme type; Oppervlak: Vlak behorend bij knoop; axb: Onderwapening in lokale X-richting; ayb: Onderwapening in lokale Y-richting;
axt: Bovenwapening in lokale X-richting; ayt: Bovenwapening in lokale Y-richting;



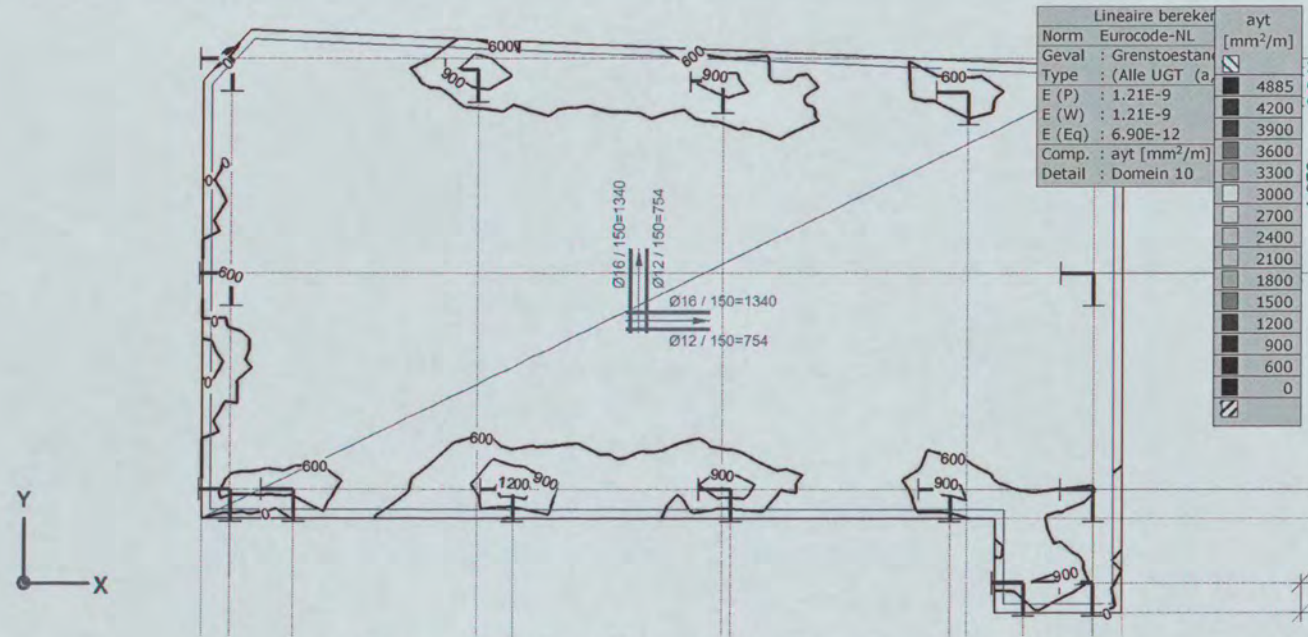
Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand, axb, Isolijnen, Bovenaanzicht

the scale towards document

mm
Inch
C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
Patch reference numbers on UTT
Image Engineering · Scan Reference Chart · TE263 · Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies
 Model: 17021-rev2.axs



Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand, ayt, Isolijnen, Bovenaanzicht

Scheurwijdte, Eurocode-NL

Grenstoestand Min,Max.

Scheurwijdte, Eurocode-NL [Lineair,(BGT Frequent) Grenstoestand, Domein 10]

Knoop	C	min. max.	Oppervlak	Pos.	Aax [mm²/m]	Aay [mm²/m]	wk [mm]	wk2 [mm]	x _{s2} [mm]	σ _{s2} [N/mm²]	wR [°]
Ext.											
343	wk	max	Sch 668	↓	754	754	0.52	0.60	-49	464.52	48.55
343	wk2	max	Sch 668	↓	754	754	0.52	0.60	-49	464.52	48.55

Knoop	C	min. max.	Oppervlak	n _x [kN/m]	n _y [kN/m]	n _{xy} [kN/m]
Ext.						
343	wk	max	Sch 668	327.941	-186.851	-403.057
343	wk2	max	Sch 668	327.941	-186.851	-403.057

Knoop	C	min. max.	Oppervlak	m _x [kNm/m]	m _y [kNm/m]	m _{xy} [kNm/m]	Maatgevende combinatie
Ext.							
343	wk	max	Sch 668	-6.650	-29.024	7.179	[ST1] {0.2*ST4} (0.3*ST2+0.3*ST3)
343	wk2	max	Sch 668	-6.650	-29.024	7.179	[ST1] {0.2*ST4} (0.3*ST2+0.3*ST3)

Knoop: Index; **C:** Extreme component; **min. max.:** Extreme type; **Oppervlak:** Vlak behorend bij knoop; **Pos.:** Punt voor spanningsberekening; **Aax:** Toegepaste wapening in X-richting; **Aay:** Toegepaste wapening in Y-richting; **wk:** Scheurwijdte ter plaatse van hart wapeningsstaaf; **wk2:** Scheurwijdte ter plaatse van het betonoppervlak; **x_{s2}:** Afstand tussen neutrale as en uiterste gedrukte vezel; **σ_{s2}:** Spanning in wapeningsstaal; **wR:** Scheur hoek; **n_x:** Normalkracht in lokale X-richting; **n_y:** Normalkracht in lokale Y-richting; **n_{xy}:** Membraan afschuifkracht; **m_x:** Specifiek buigmoment om de lokale y-as; **m_y:** Specifiek buigmoment om de lokale x-as; **m_{xy}:** Specifiek draaimoment;

Afschuifweerstand, Eurocode-NL

Grenstoestand Min,Max.

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 C8 B8 A8 C9 B9
 Patch Reference numbers on IUT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9
 Patch Reference numbers on IUT

4.5 5.0 5.5
 Image Engineering · Scan Reference Chart · TE263 · Serial No. 47

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs

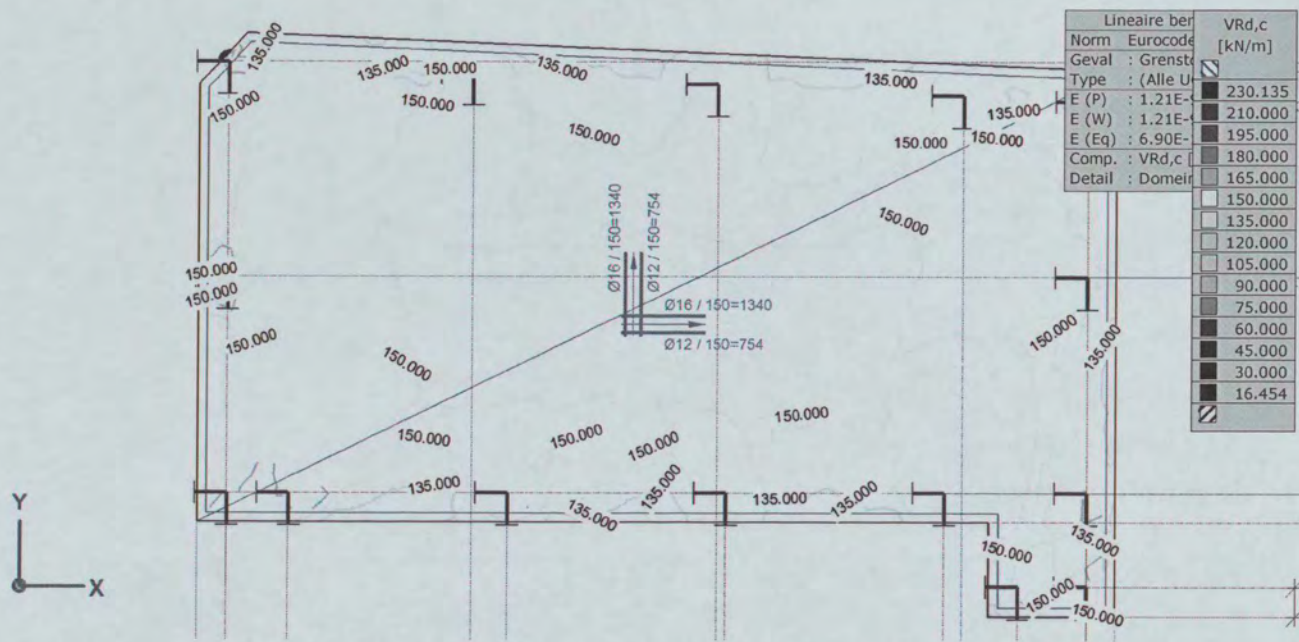
9/22/2017

Pag. 89

Afschuifweerstand, Eurocode-NL [Lineair,(Alle UGT (a, b)) Grenstoestand, Domein 10]

Knoop	C	min. max.	Oppervlak	VRd,c [kN/m]	(vEd-vRd,c) [kN/m]	Maatgevende combinatie
Ext.						
452	(vEd-vRd,c)	min	Sch 704	137.602	-164.623	[0.9*ST1] {1.5*ST5} (1.5*0.4*ST2)
48		max	Sch 683	178.642	2101.515	[1.35*0.889*ST1] {1.5*ST2}

Knoop: Index; C: Extreme component; min. max.: Extreme type; Oppervlak: Vlak behorend bij knoop; VRd,c: Afschuifweerstand;



Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Min., VRd,c, Isolijnen, Bovenaanzicht

the scale towards document

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

15 1.0 1.5 2.0

C1 B1 A1 C2 B2 A2 B5 A5 20 18 17 16 11

Image Engineering Scan Reference Chart TE263 Serial No. 47

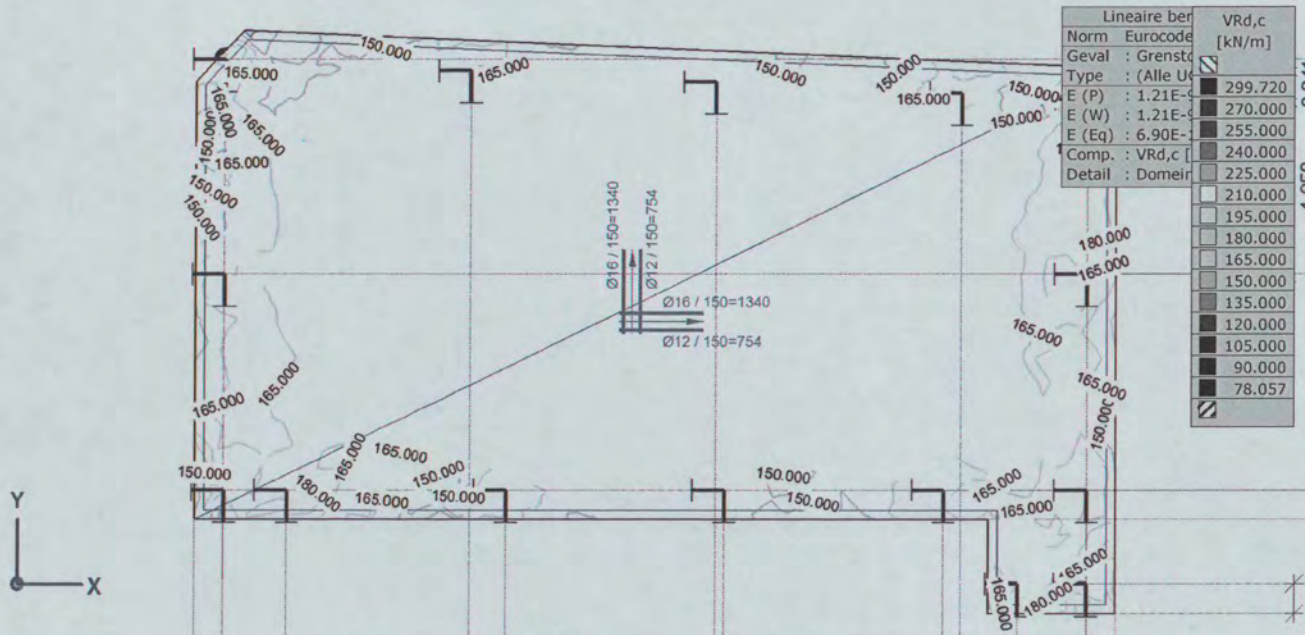
Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

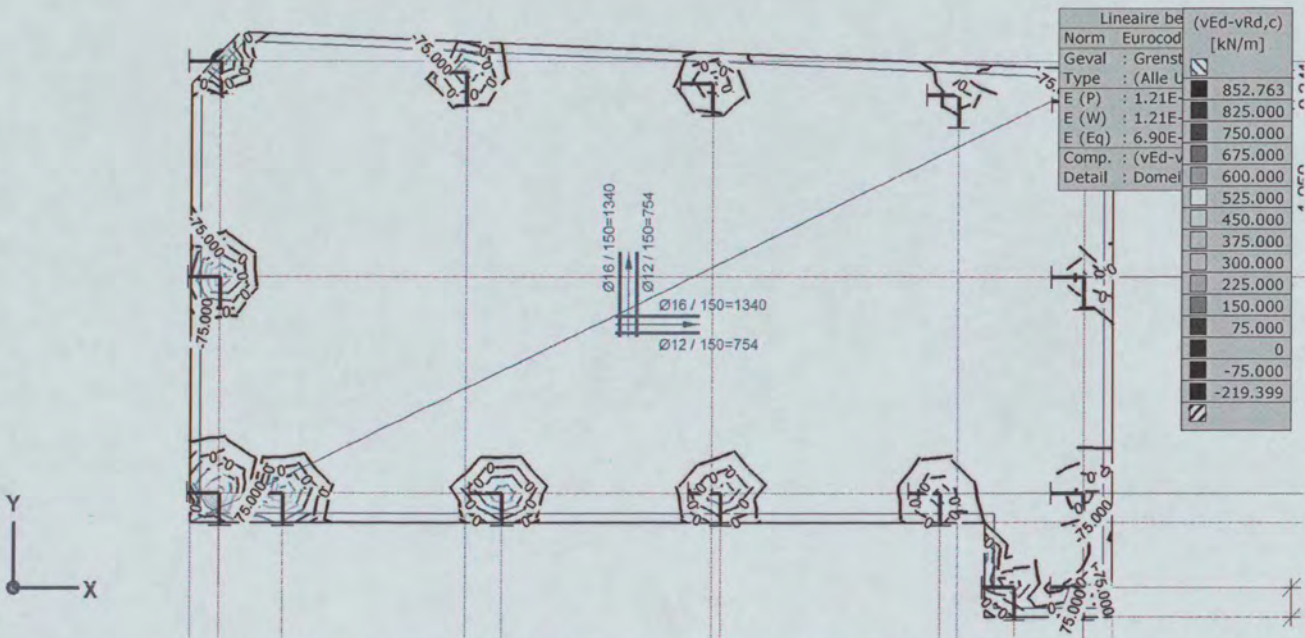
Model: 17021-rev2.axs

9/22/2017

Pag. 90



Rapport [I], >, Lineair, (Alle UGT (a, b)) Grenstoestand Max., VRd,c, Isolijnen, Bovenaanzicht



Rapport [I], >, Lineair, (Alle UGT (a, b)) Grenstoestand Min., (vEd-vRd,c), Isolijnen, Bovenaanzicht

the scale towards document

C1 B1 A1 C2 B2 A2 B3 A3 B4 A4 B5 A5 B6 A6 B7 A7 B8 A8 B9
Patch reference numbers on UTT

10 09 03 02 01 C7 B7 A7 C8 B8 A8 C9 B9

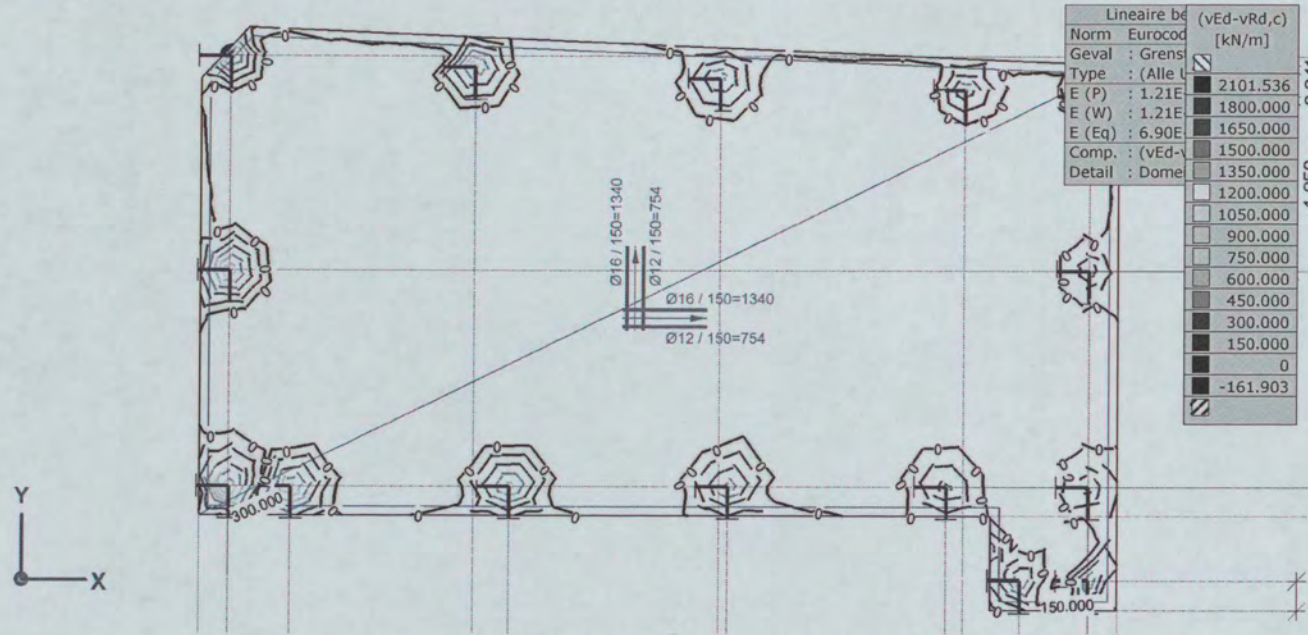
47

Image Engineering Scan Reference Chart TE283 Serial No.

Project: 17021 Willemsparkweg 220 Amsterdam

Constructeur: Core Constructies

Model: 17021-rev2.axs



Rapport [I], >, Lineair,(Alle UGT (a, b)) Grenstoestand Max., (vEd-vRd,c), Isolijnen, Bovenaanzicht

the scale towards document

mm 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

inch 0 1 2 3 4 5

C1 B1 A1 C2 B2 A2 C3 B3 A3 C4 B4 A4 C5 B5 A5 C6 B6 A6 C7 B7 A7 C8 B8 A8 C9 B9

01 02 03 04 05 06 07 08 09 10

45 5.0 1.5 1.3

47

Image Engineering Scan Reference Chart TEX3 Serial No.