

POLY-GPG

Hars voor multimaterialen

Dit chemische verankeringsysteem is geschikt voor alle courante toepassingen (bevestigingen van rolluiken, luiken, waterverwarmers, ...). Het kan veilig binnen gebruikt worden (COV A+) en met het gewone afval weggegooid worden.

Features

Materiaal

- Methacrylaathars,
- Draadstang LMAS : elektrolytisch verzinkt en roestvrij staal.

Voordelen

- Peeler-systeem : eenvoudig en snel te gebruiken,
- Vrij van gevaarlijke bestanddelen, zonder styreen en reukloos,
- Zonder waarschuwingssymbolen en veiligheidswaarschuwingen,
- Opslag in ruimte voor onbrandbare producten,
- Het (al dan niet gebruikte) harspatroon kan weggegooid worden met ongevaarlijk afval.

Applications

Ondergrond

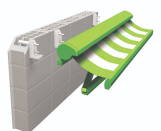
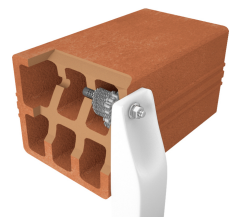
- Baksteen,
- Bouwsteen,
- Cellenbeton.

Toepassingsgebieden

- Rolluiken, scharnieren voor luiken/ poorten, antennes,
- Sanitair, radiatoren, airconditioners,
- Leuningen/hekwerk.



Railing fastening



Blinds fastening



Railing fastening

POLY-GPG
Hars voor multimaterialen

Technische gegevens

Références

Referentie	Chemical fixings dimensions						
	Info product						
	Tun / DB nr.[mm]	NOBB nr.	Grey color	Beige color	Inhoud[m]	Gewicht[kg]	Verpakkingshoeveelheid[pcs]
POLYGPG300G-FR	-	-	x	-	300	0.579	12
POLYGPG300B-FR	-	-	-	x	300	0.579	12

Design resistance – Tension – NRd [kN] – Carbon steel 5.8

Referentie	Chemical fixings Loads							
	Design resistance – NRd – Carbon steel 5.8[kN]							
	Non-cracked concrete							
	hef = 8d				hef = 12d			
	C20/25	C30/37	C40/50	C50/60	C20/25	C30/37	C40/50	C50/60
POLY-GPG + LMAS M8	6.3	6.3	6.3	6.3	9.4	9.4	9.4	9.4
POLY-GPG + LMAS M10	9.8	9.8	9.8	9.8	14.7	14.7	14.7	14.7
POLY-GPG + LMAS M12	13.1	13.1	13.1	13.1	19.6	19.6	19.6	19.6
POLY-GPG + LMAS M16	19.9	19.9	19.9	19.9	29.9	29.9	29.9	29.9
POLY-GPG + LMAS M20	28.7	28.7	28.7	28.7	43.1	43.1	43.1	43.1
POLY-GPG + LMAS M24	37.9	37.9	37.9	37.9	56.8	56.8	56.8	56.8

Concrete :

1. The design loads have been calculated using the partial safety factors for resistances stated in ETA-approval(s). The loading figures are valid for unreinforced concrete and reinforced concrete with a rebar spacing $s \geq 15$ cm (any diameter) or with a rebar spacing $s \geq 10$ cm, if the rebar diameter is 10mm or smaller.
2. The figures for shear are based on a single anchor without influence of concrete edges. For anchorages close to edges ($c \leq \max [10 \text{ hef}; 60d]$) the concrete edge failure shall be checked per ETAG 001, Annex C, design method A.
3. Concrete is considered non-cracked when the tensile stress within the concrete is $\sigma_L + \sigma_R \leq 0$. In the absence of detailed verification $\sigma_R = 3 \text{ N/mm}^2$ can be assumed (σ_L equals the tensile stress within the concrete induced by external loads, anchors loads included).

POLY-GPG Hars voor multimaterialen

Design resistance – Tension – NRd [kN] – Stainless steel A4-70

Referentie	Chemical fixings Loads							
	Design resistance – NRd – Stainless steel A4-70[kN]							
	Non-cracked concrete							
	hef = 8d				hef = 12d			
	C20/25	C30/37	C40/50	C50/60	C20/25	C30/37	C40/50	C50/60
POLY-GPG + LMAS M8	6.3	6.3	6.3	6.3	9.4	9.4	9.4	9.4
POLY-GPG + LMAS M10	9.8	9.8	9.8	9.8	14.7	14.7	14.7	14.7
POLY-GPG + LMAS M12	13.1	13.1	13.1	13.1	19.6	19.6	19.6	19.6
POLY-GPG + LMAS M16	19.9	19.9	19.9	19.9	29.9	29.9	29.9	29.9
POLY-GPG + LMAS M20	28.7	28.7	28.7	28.7	43.1	43.1	43.1	43.1
POLY-GPG + LMAS M24	37.9	37.9	37.9	37.9	56.8	56.8	56.8	56.8

Concrete :

1. The design loads have been calculated using the partial safety factors for resistances stated in ETA-approval(s). The loading figures are valid for unreinforced concrete and reinforced concrete with a rebar spacing $s \geq 15$ cm (any diameter) or with a rebar spacing $s \geq 10$ cm, if the rebar diameter is 10mm or smaller.
2. The figures for shear are based on a single anchor without influence of concrete edges. For anchorages close to edges ($c \leq \max [10 \text{ hef}; 60d]$) the concrete edge failure shall be checked per ETAG 001, Annex C, design method A.
3. Concrete is considered non-cracked when the tensile stress within the concrete is $\sigma_L + \sigma_R \leq 0$. In the absence of detailed verification $\sigma_R = 3 \text{ N/mm}^2$ can be assumed (σ_L equals the tensile stress within the concrete induced by external loads, anchors loads included).

Design resistance – Shear – VRd [kN] – Carbon steel 5.8

Referentie	Chemical fixings Loads							
	Design resistance – VRd – Carbon steel 5.8[kN]							
	Non-cracked concrete							
	hef = 8d				hef = 12d			
	C20/25	C30/37	C40/50	C50/60	C20/25	C30/37	C40/50	C50/60
POLY-GPG + LMAS M8	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
POLY-GPG + LMAS M10	12	12	12	12	12	12	12	12
POLY-GPG + LMAS M12	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
POLY-GPG + LMAS M16	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
POLY-GPG + LMAS M20	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8
POLY-GPG + LMAS M24	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4

Concrete :

1. The design loads have been calculated using the partial safety factors for resistances stated in ETA-approval(s). The loading figures are valid for unreinforced concrete and reinforced concrete with a rebar spacing $s \geq 15$ cm (any diameter) or with a rebar spacing $s \geq 10$ cm, if the rebar diameter is 10mm or smaller.
2. The figures for shear are based on a single anchor without influence of concrete edges. For anchorages close to edges ($c \leq \max [10 \text{ hef}; 60d]$) the concrete edge failure shall be checked per ETAG 001, Annex C, design method A.
3. Concrete is considered non-cracked when the tensile stress within the concrete is $\sigma_L + \sigma_R \leq 0$. In the absence of detailed verification $\sigma_R = 3 \text{ N/mm}^2$ can be assumed (σ_L equals the tensile stress within the concrete induced by external loads, anchors loads included).

POLY-GPG

Hars voor multimaterialen

Design resistance – Shear – VRd [kN] – Stainless steel A4-70

Referentie	Chemical fixings Loads							
	Design resistance – VRd – Stainless steel A4-70[kN]							
	Non-cracked concrete							
	hef = 8d				hef = 12d			
	C20/25	C30/37	C40/50	C50/60	C20/25	C30/37	C40/50	C50/60
POLY-GPG + LMAS M8	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
POLY-GPG + LMAS M10	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
POLY-GPG + LMAS M12	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
POLY-GPG + LMAS M16	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
POLY-GPG + LMAS M20	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1
POLY-GPG + LMAS M24	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5

Concrete :

1. The design loads have been calculated using the partial safety factors for resistances stated in ETA-approval(s). The loading figures are valid for unreinforced concrete and reinforced concrete with a rebar spacing $s \geq 15$ cm (any diameter) or with a rebar spacing $s \geq 10$ cm, if the rebar diameter is 10mm or smaller.
2. The figures for shear are based on a single anchor without influence of concrete edges. For anchorages close to edges ($c \leq \max [10 \text{ hef}; 60d]$) the concrete edge failure shall be checked per ETAG 001, Annex C, design method A.
3. Concrete is considered non-cracked when the tensile stress within the concrete is $\sigma_L + \sigma_R \leq 0$. In the absence of detailed verification $\sigma_R = 3 \text{ N/mm}^2$ can be assumed (σ_L equals the tensile stress within the concrete induced by external loads, anchors loads included).

Design resistance – Bending moment – MRd [Nm] – Concrete

Referentie	Chemical fixings Loads	
	Design resistance – Bending moment – MRd[Nm]	
	Koolstofstaal 5,8	Stainless steel A4-70
POLY-GPG + LMAS M8	15.2	16.7
POLY-GPG + LMAS M10	29.6	33.3
POLY-GPG + LMAS M12	52	60.9
POLY-GPG + LMAS M16	132.8	148.7
POLY-GPG + LMAS M20	259.2	291
POLY-GPG + LMAS M24	448	502.6

Concrete :

1. The design loads have been calculated using the partial safety factors for resistances stated in ETA-approval(s). The loading figures are valid for unreinforced concrete and reinforced concrete with a rebar spacing $s \geq 15$ cm (any diameter) or with a rebar spacing $s \geq 10$ cm, if the rebar diameter is 10mm or smaller.
2. The figures for shear are based on a single anchor without influence of concrete edges. For anchorages close to edges ($c \leq \max [10 \text{ hef}; 60d]$) the concrete edge failure shall be checked per ETAG 001, Annex C, design method A.
3. Concrete is considered non-cracked when the tensile stress within the concrete is $\sigma_L + \sigma_R \leq 0$. In the absence of detailed verification $\sigma_R = 3 \text{ N/mm}^2$ can be assumed (σ_L equals the tensile stress within the concrete induced by external loads, anchors loads included).

POLY-GPG
Hars voor multimaterialen

Design resistance – hef = 80 mm ($\leq$ M8) or 85 mm ($\geq$ M10) – Carbon steel $\geq$ 4.6 /
Stainless steel $\geq$ A2-70

Referentie	Chemical fixings Loads			
	Design resistance – Carbon steel $\geq$ 4.6 / stainless steel $\geq$ A2-70			
	hef = 80 mm ($\leq$ M8) or 85 mm ($\geq$ M10)			
	Tension - NRd[kN]		Shear - VRd[kN]	
	Solid Clay Masonry	Hollow Masonry	Solid Clay Masonry	Hollow Masonry
POLY-GPG + LMAS M8	1.6	0.3	0.8	0.6
POLY-GPG + LMAS M10	2	0.6	2.4	0.6
POLY-GPG + LMAS M12	2	0.6	2.4	0.6
POLY-GPG + LMAS M16	-	-	-	-
POLY-GPG + LMAS M20	-	-	-	-
POLY-GPG + LMAS M24	-	-	-	-

Masonry :

	Compressive strength f_b [N/mm ²]	Bulk density ρ [kg/m ³]
Solid clay masonry	≥ 18	≥ 1600
Hollow masonry	≥ 6	≥ 900

1. The design resistances have been calculated using the partial safety factors for resistances stated in ETA-approval(s).
2. The recommended loads have been calculated using the partial safety factors for resistances stated in ETA-approval(s) and with a partial safety factor for actions of $\gamma_F=1.4$.
3. For combined tension and shear loads or anchor groups and/or in case of edge influence, a calculation acc. TR 054, design method A shall be performed. For details see ETA - assessment(s)
4. Temperature range: -40°C/+40°C (T_{mlp} = +24°C)
5. Coefficient factor β for in situ tests acc. ETAG 029 see ETA-19/XXXX; Annex C2
6. Displacements under service load see ETA-19/0420; Annex C2 & C3

POLY-GPG

Hars voor multimaterialen

Design resistance – Bending moment – MRd [Nm] – Masonry

Referentie	Chemical fixings Loads		
	Design resistance – Bending moment – MRd - Masonry[Nm]		
	Koolstofstaal 5,8	Koolstofstaal 8,8	Stainless steel ≥ A2-70
POLYGPG300G-FR	-	-	-
POLYGPG300B-FR	-	-	-
POLY-GPG + LMAS M6	6.4	9.6	7.1
POLY-GPG + LMAS M8	15.2	24	16.7
POLY-GPG + LMAS M10	29.6	48	33.3
POLY-GPG + LMAS M12	52.8	84	59
POLY-GPG + LMAS M16	-	-	-
POLY-GPG + LMAS M20	-	-	-
POLY-GPG + LMAS M24	-	-	-
POLY-GPG + Ø8	-	-	-
POLY-GPG + Ø10	-	-	-
POLY-GPG + Ø12	-	-	-
POLY-GPG + Ø16	-	-	-
POLY-GPG + Ø20	-	-	-
POLY-GPG + Ø25	-	-	-

Masonry :

	Compressive strength f_b [N/mm ²]	Bulk density ρ [kg/m ³]
Solid clay masonry	≥ 18	≥ 1600
Hollow masonry	≥ 6	≥ 900

1. The design resistances have been calculated using the partial safety factors for resistances stated in ETA-approval(s).
2. The recommended loads have been calculated using the partial safety factors for resistances stated in ETA-approval(s) and with a partial safety factor for actions of $\gamma_F=1.4$.
3. For combined tension and shear loads or anchor groups and/or in case of edge influence, a calculation acc. TR 054, design method A shall be performed. For details see ETA - assessment(s)
4. Temperature range: -40°C/+40°C ($T_{mlp} = +24^\circ\text{C}$)
5. Coefficient factor β for in situ tests acc. ETAG 029 see ETA-19/XXXX; Annex C2
6. Displacements under service load see ETA-19/0420; Annex C2 & C3

Design resistance – Tension – NRd [kN] – Rebar

Referentie	Chemical fixings Loads							
	Design resistance – NRd – Rebar[kN]							
	Non-cracked concrete							
	hef = 8d				hef = 12d			
	C20/25	C30/37	C40/50	C50/60	C20/25	C30/37	C40/50	C50/60
POLY-GPG + Ø8	4.9	4.9	4.9	4.9	7.4	7.4	7.4	7.4
POLY-GPG + Ø10	7.7	7.7	8.4	8.4	11.5	11.5	12.7	12.7
POLY-GPG + Ø12	11.1	12.2	12.2	13.3	16.6	18.2	18.2	19.9
POLY-GPG + Ø16	15.3	16.8	16.8	18.4	23	25.3	25.3	27.6
POLY-GPG + Ø20	23.9	26.3	26.3	28.7	35.9	39.5	39.5	43.1
POLY-GPG + Ø25	37.4	41.1	44.9	48.6	53.8	59.2	64.6	70

POLY-GPG

Hars voor multimaterialen

Design resistance – Shear – VRd [kN] – Rebar

Referentie	Chemical fixings Loads							
	Design resistance – VRd – Rebar[kN]							
	Non-cracked concrete							
	hef = 8d				hef = 12d			
	C20/25	C30/37	C40/50	C50/60	C20/25	C30/37	C40/50	C50/60
POLY-GPG + Ø8	9	9	9	9	9	9	9	9
POLY-GPG + Ø10	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
POLY-GPG + Ø12	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3
POLY-GPG + Ø16	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2
POLY-GPG + Ø20	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5
POLY-GPG + Ø25	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4

Design resistance – Bending moment – MRd [Nm] – Rebar

Referentie	Chemical fixings Loads
	Design resistance – Bending moment – MRd - Rebar[Nm]
POLY-GPG + Ø8	21.6
POLY-GPG + Ø10	42.3
POLY-GPG + Ø12	73.5
POLY-GPG + Ø16	173.7
POLY-GPG + Ø20	339.1
POLY-GPG + Ø25	662.7

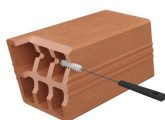
Plaatsing

Plaatsingstijd

Temperatuur [°C]	-5	0	5	10	20	30
Verwerkingstijd	2.15	1.15	25min	12min	6min	2min
Belastbaar na	4.00	2.00	1.30	40min	20min	15min



1. Gat boren.



2. Schoonborstelen.



3. Zeefhuls insteken.



4. Vullen vanaf bodemgat naar buiten door bij het pompen telkens één maatstreep op de spuitmond achteruit te gaan.



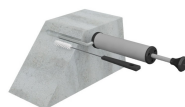
5. Ankerstang licht draaiend insteken.



Once set, full load capacity is reached.



1. Gat boren.



2. Boorgat reinigen door uitborstelen en uitblazen zoals aangegeven op de patroon.



3. Gat voor de helft tot twee derde vullen vanaf het bodemgat naar buiten door bij het pompen telkens één maatstreep op de spuitmond achteruit te gaan.



4. Draadstang insteken door langzaam van links naar rechts te draaien. U kunt de draadstang verplaatsen of hars toevoegen zolang de verwerkingstijd niet bereikt is.



5. Vastzetten na het bereiken van de uithardingstijd.

POLY-GPG

Hars voor multimaterialen

Installation parameters – Concrete

Referentie	Chemical fixings Installation data					
	Installation parameters – Concrete					
	Boorgat- Ø[mm]	Maximum diameter te bevestigen bouwdeel[mm]	Drilling depth (8d) [mm]	Drilling depth (12d) [mm]	Sleutelwijdte	Aandraaimoment[Nm]
POLY-GPG + LMAS M8	10	9	64	96	13	10
POLY-GPG + LMAS M10	12	12	80	120	17	12
POLY-GPG + LMAS M12	14	14	96	144	19	20
POLY-GPG + LMAS M16	18	18	128	196	24	40
POLY-GPG + LMAS M20	24	22	160	240	30	70
POLY-GPG + LMAS M24	28	26	192	288	36	90

Spacing, edge distances and member thickness – Concrete

Referentie	Chemical fixings Installation data					
	Spacing, edge distance and member thickness - Concrete					
	Effective embedment depth (8d) [mm]	Spacing, edge distances and member thickness – Concrete				Min. stand[mm]
POLY-GPG + LMAS M8	64	 Spacing, edge distances and member thickness – Concrete See full table online →				40.0
POLY-GPG						40.0

Installation parameters – Masonry – Solid clay masonry

Referentie	Chemical fixings Installation data				
	Installation parameters – Solid clay masonry				
	Boorgat- Ø[mm]	Maximum diameter te bevestigen bouwdeel[mm]	Verankeringsdiepte[mm]	Verankeringsdiepte[mm]	Aandraaimoment[Nm]
POLY-GPG + LMAS M6	8	7	85	80	1
POLY-GPG + LMAS M8	10	9	85	80	1
POLY-GPG + LMAS M10	12	12	90	85	1
POLY-GPG + LMAS M12	14	14	90	85	1

POLY-GPG

Hars voor multimaterialen

Installation parameters – Masonry – Hollow masonry

Referentie	Chemical fixings Installation data				
	Installation parameters - Hollow masonry				
	Boorgat-Ø[mm]	Maximum diameter te bevestigen bouwdeel[mm]	Verankeringsdiepte[mm]	Verankeringsdiepte[mm]	Aandraaimoment[Nm]
POLY-GPG + LMAS M6	12	7	85	80	2
POLY-GPG + LMAS M8	12	9	85	80	2
POLY-GPG + LMAS M10	16	12	90	85	2
POLY-GPG + LMAS M12	16	14	90	85	2

Spacing, edge distances and member thickness – Masonry – Solid clay masonry

Referentie	Chemical fixings Installation data			
	Spacing, edge distance and member thickness – Solid clay masonry			
	Min. hartafstand[mm]			Min. randafstand[mm]
	scr,N = smin[mm]	scr,N II = smin II[mm]	scr,N T = smin T[mm]	ccr,N = cmin[mm]
POLY-GPG + LMAS M6	240	-	-	120
POLY-GPG + LMAS M8	240	-	-	120
POLY-GPG + LMAS M10	255	-	-	127.5
POLY-GPG + LMAS M12	255	-	-	127.5

Spacing, edge distances and member thickness – Masonry – Hollow masonry

Referentie	Chemical fixings Installation data			
	Spacing, edge distance and member thickness – Hollow masonry			
	Min. hartafstand[mm]			Min. randafstand[mm]
	scr,N = smin[mm]	scr,N II = smin II[mm]	scr,N T = smin T[mm]	ccr,N = cmin[mm]
POLY-GPG + LMAS M6	-	250	120	100
POLY-GPG + LMAS M8	-	250	120	100
POLY-GPG + LMAS M10	-	250	120	100
POLY-GPG + LMAS M12	-	250	120	100

Installation parameters – Rebar

Referentie	Chemical fixings Installation data		
	Installation parameters – Rebar		
	Boorgat-Ø[mm]	Drilling depth (8d)[mm]	Drilling depth (12d)[mm]
POLY-GPG + Ø8	12	64	96
POLY-GPG + Ø10	14	80	120
POLY-GPG + Ø12	16	96	144
POLY-GPG + Ø16	20	128	192
POLY-GPG + Ø20	25	160	240
POLY-GPG + Ø25	32	200	288

POLY-GPG

Hars voor multimaterialen

Spacing, edge distances and member thickness – Rebar

Referentie	Chemical fixings Installation data									
	Spacing, edge distance and member thickness – Rebar									
	Effective embedment depth (8d) [mm]								Min. stand [mm]	Min. randafstand
POLY-GPG + Ø8	64								40	40
POLY-GPG + Ø10	80	240	120	110	120	360	180	150	50	50

Spacing, edge distances and member thickness – Rebar

See full table online →

