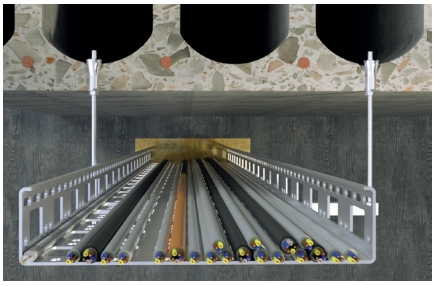
Hulldekkeanker FHY

Spesialanker for betonghulldekke

Aircondition i forspente hulldekker



Kabelføringer i forspente hulldekker

Applikasjon

- Rørledninger
- Kabelføringer
- Luftledninger
- Sprinkleranlegg
- Himlinger
- Konsoller
- Stålkonstruksjoner
- Trekonstruksjoner

Fordeler

- Gjennom virkningsprinsippet til ankeret kan FHY settes inn i hulrommet eller i det fullstendige byggematerialet inntil 5 cm til spennlissen. Dette sørger for høyeste fleksibilitet og monteringsvennlighet.
- Den pregede kanten forhindrer en dypere rutsjing av ankerhylsen inn i hulrommet og gjør det mulig med en problemfri montering.
- Den metriske innvendige gjengen gjør at du kan bruke vanlige skruer eller gjengestenger for ideell tilpasning til anvendelsen.
- Ekstern rapport for bruk av FHY under seismiske forhold.
- FHY A4 egnet for utendørs festing.
- ETA godkjenningen gir en ekstra sikkerhet.

Sertifikater

CE

aBG Z-21.1-1711

ETA-21/0857, for flerpunkt-sinnfesting i ikke bærende konstruksjoner

R 120

Inox Stainless Steel

fra M8

Byggematerialer

Godkjent for:

- Forspent hulldekke ≥ C45/55
- Betong C20/25 til C50/60

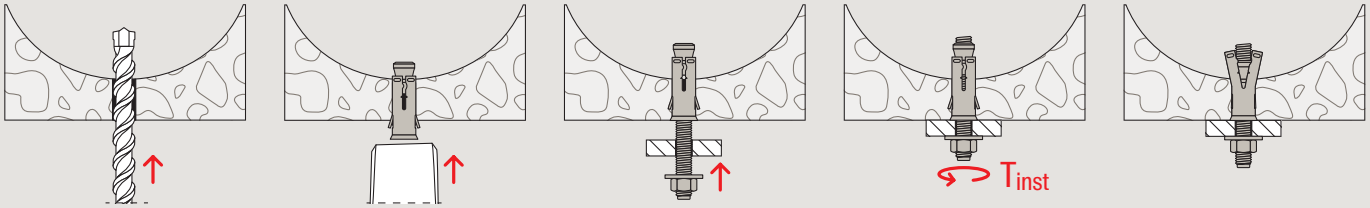
Versjoner

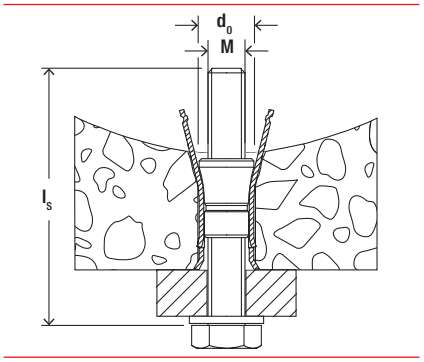
- Elforsinket
- Syrefast A4

Funksjon

- FHY er egnet for planmontasje.
- FHY hulldekkeanker slåes inn i borehullet med en hammer til den flukter med overflaten.
- Det formonterte FHY ankeret må kunne støttes på festeemnet for ekspansjon.
- Ved tilspenning trekkes ankerets konus opp i hylsen som ekspanderer og spenner seg fast i borhullet (i massive materialer), eller formtilpasser seg (i hullrom).

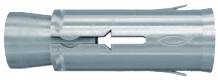
Montering FHY





Teknisk data

Hulldekkeanker FHY



FHY

	Elforsinket	Syrefast	Godkjenning		Borehull diameter	Lengde	Inv. gjenge	Min. borehulls dybde	Min. bolt penetration	Ant.pr.pak
					d_0	L	M	h_1	$l_{E,min}$	
	Art.nr	Art.nr	ETA	DIBt	[mm]	[mm]		[mm]	[mm]	[stk]
Type	**gvz**	**R**								
FHY M6	**566667**	**566671**	●	●	10	37	M6	50	37	50
FHY M8	**566668**	**566672**	●	●	12	43	M8	60	43	25
FHY M10	**566669**	**566673**	●	●	16	52	M10	65	52	20
FHY M12	**566670**	**566674**	●	–	18	55	M12	70	55	25

Loads

Hollow-ceiling anchor FHY

Permissible loads[1] for multiple use of redundant non-structural applications* in pre-stressed hollow-core concrete slabs of strength class ≥ C45/55.
For the design the complete current assessment ETA-21/0857 of 30.08.2022 has to be considered.

						Spannbeton-Hohlplattendecke		
	Material/ surface	Screw material[2]	Bottom flange thickness	Installation torque	Required edge distance (with one edge) for max. load	Permissible load (F_{perm}); minimum spacing (s_{min}) and edge distances (c_{min}) with reduced loads		
Type			d_b [mm]	T_{inst} [Nm]	c_{cr} [mm]	F_{perm}[3] [kN]	s_{min}[4] [mm]	c_{min}[4] [mm]
FHY M6	gvz	8.8	25 - 29	8	100	2.4	70	100
	gvz	8.8	30 - 39	8	100	2.4	70	100
	gvz	8.8	≥ 40	8	100	2.4	70	100
FHY M8	gvz	4.6	25 - 29	10	100	3.3	70	100
	gvz	4.6	30 - 39	10	100	3.3	70	100
	gvz	4.6	≥ 40	10	105	3.3	70	100
FHY M10	gvz	4.6	25 - 29	20	100	3.8	80	100
	gvz	4.6	30 - 39	20	100	4.8	80	100
	gvz	4.6	≥ 40	20	120	4.8	80	100
FHY M12	gvz	4.6	25 - 29	30	150	4.3	80	150
	gvz	4.6	30 - 39	30	150	4.3	80	150
	gvz	4.6	≥ 40	30	150	4.8	80	150
FHY M6 R	R	≥ A4-70	25 - 29	15	100	2.4	70	100
	R	≥ A4-70	30 - 39	15	100	2.4	70	100
	R	≥ A4-70	≥ 40	15	100	2.4	70	100
FHY M8 R	R	≥ A4-70	25 - 29	20	100	3.3	70	100
	R	≥ A4-70	30 - 39	20	100	3.3	70	100
	R	≥ A4-70	≥ 40	20	105	3.3	70	100
FHY M10 R	R	≥ A4-70	25 - 29	40	100	3.8	80	100
	R	≥ A4-70	30 - 39	40	100	4.8	80	100
	R	≥ A4-70	≥ 40	40	120	4.8	80	100
FHY M12 R	R	≥ A4-70	25 - 29	50	150	4.3	80	150
	R	≥ A4-70	30 - 39	50	150	4.3	80	150
	R	≥ A4-70	≥ 40	50	150	4.8	80	150

* In addition to the load table above, the following must be considered for multiple fastening of non-structural redundant systems:
A multiple fixing (redundant system) according to EN 1992-4 and CEN/TR 17079 is defined by
- at least 3 fixing points (per attached element) with at least one anchor at each fixing point and a permissible load per fixing point of 1.4 kN
- or by at least 4 fixing points with at least one anchor each fixing point and a permissible load per fixing point of 2.1 kN
- Additionally, it has to be proven that the stiffness of the attached element shall be large enough to ensure that in case of excessive slip or failure of a fastener the load on this fastener or fixing point can be transferred to neighbouring fixing points without significantly violating the requirements on the attached element in the serviceability and ultimate limit state.

For further details see EN 1992-4 section 7.3 and CEN/TR 17079.

[1] The partial safety factors for material resistance as regulated in the ETA as well as a partial safety factor for load actions of $\gamma_L = 1.4$ are considered.
[2] Further steel grades, versions and technical data see ETA.
[3] Maximum load for char. spacing and edge distances. Valid for tensile load, shear load and oblique load under any angle. In the case of shear loads with lever arm (bending) as well as reduced/minimum spacing or edge distances (anchor groups), the design must be carried out in accordance with the provisions of the complete technical permit.
[4] Minimum possible axial spacings resp. edge distance while reducing the permissible load.

Loads

Hollow-ceiling anchor FHY

Permissible loads[1] of a single anchor in pre-stressed hollow-core concrete slabs of strength class ≥ C45/55.
For the design the complete general construction technique permit Z-21.1-1711 from 05.12.2022 has to be considered.

						Spannbeton-Hohlplattendecke		
	Material/ surface	Screw material[2]	Bottom flange thickness	Installation torque	Required edge distance (with one edge) for max. load	Permissible load (F_{perm}); minimum spacing (s_{min}) and edge distances (c_{min}) with reduced loads		
Type			d_b [mm]	T_{inst} [Nm]	c_{cr} [mm]	F_{perm}[3] [kN]	s_{min}[4] [mm]	c_{min}[4] [mm]
FHY M6	gvz	8.8	25 - 29	8	150	0.7	70	100
	gvz	8.8	30 - 39	8	150	0.9	80	100
	gvz	8.8	≥ 40	8	150	2.0	100	100
	R	A4 - 70	25 - 29	15	150	0.7	70	100
	R	A4 - 70	30 - 39	15	150	0.9	80	100
	R	A4 - 70	≥ 40	15	150	2.0	100	100
FHY M8	gvz	4.6	25 - 29	10	150	0.7	70	100
	gvz	4.6	30 - 39	10	150	0.9	80	100
	gvz	4.6	≥ 40	10	150	2.0	100	100
	R	A4 - 70	25 - 29	20	150	0.7	70	100
	R	A4 - 70	30 - 39	20	150	0.9	80	100
	R	A4 - 70	≥ 40	20	150	2.0	100	100
FHY M10	gvz	4.6	30 - 39	20	150	1.2	80	100
	gvz	4.6	≥ 40	20	150	3.0	100	100
	R	A4 - 70	30 - 39	40	150	1.2	80	100
	R	A4 - 70	≥ 40	40	150	3.0	100	100

[1] The partial safety factors for material resistance as regulated in the ETA as well as a partial safety factor for load actions of γ_L = 1.4 are considered.
[2] Further steel grades, versions and technical data see approval.
[3] Maximum load for char. spacing and edge distances. Valid for tensile load, shear load and oblique load under any angle. In the case of shear loads with lever arm (bending) as well as reduced/minimum spacing or edge distances (anchor groups), the design must be carried out in accordance with the provisions of the complete technical permit.
[4] Minimum possible axial spacings resp. edge distance while reducing the permissible load.