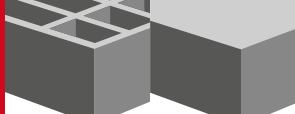


HILTI



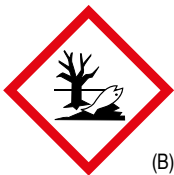
Hilti HIT-HY 270

Käyttöohje

fi



(A, B)



(B)

Warning



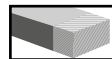
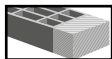
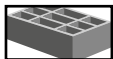
Contains: hydroxypropylmethacrylate, (A)
dibenzoyl peroxide (B)

Causes skin irritation.(A)
May cause an allergic skin reaction. (A,B)
Causes serious eye irritation (A)
Very toxic to aquatic life.(B)
Harmful to aquatic life with long lasting effects.(A)





fi Kiinnitysmassa ankkureiden kiinnittämiseen ontelo- ja umpitiilimateriaaliin. Ennen käyttämistä lue turvallisuusohjeet, käyttöturvallisuustiedote ja tuotetiedot. Ennen lisävarusteen tai tarvikkeen käyttämistä lue turvallisuusohjeet ja tuotetiedot.

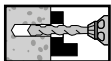


fi Ontelotiili

Umpitiili

Laastipintaiset/ei-kantavat kerrokset ontelotiilissä

Laastipintaiset/ei-kantavat kerrokset umpitiilissä



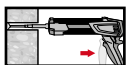
fi Alusmateriaalin lämpötila

Pinnanläpikiinnitys

Kuiva alusmateriaali

Veden kyllästämä alusmateriaali

Tekniset tiedot







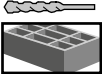








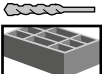
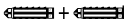





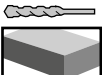





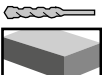





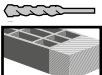
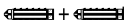






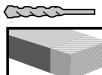
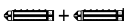






fi Puristuskertamäärä

Poraus ilman iskua

Poraus iskulla

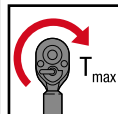
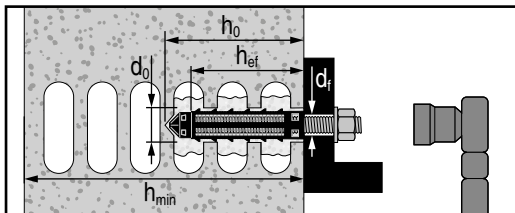
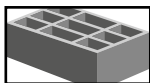
Käsittelyaika

Kovettumisaika

					
1.1	 HIT-SC 	+ HIT-V  + HIT-IC 		  	→ 
1.2	 HIT-SC 	+ HIT-V 		 	→ 
2.1	 -	HIT-V 		 	→ 
2.2	 -	HIT-IC 		 	→ 
3	 HIT-SC 	+ HIT-V 		  	→ 
4	 HIT-SC 	+ HIT-V 		  	→ 



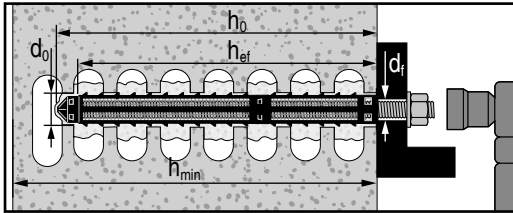
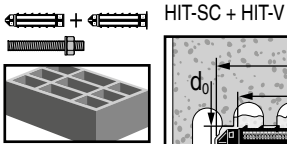
HIT-SC + HIT-V



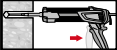
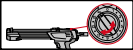
	HIT-SC	d_0 [mm]	h_0 [mm]	h_{ef} [mm]	h_{min} [mm]	HIT-RB	d_f [mm]	T_{max} [Nm]
M6		12 x 85	12	95	80	115	12	7
M8		16 x 50	16	60	50	80	16	9
		16 x 85		95	80	115		
M10		16 x 50	16	60	50	80	16	12
		16 x 85		95	80	115		
M12		18 x 50	18	60	50	80	18	14
		18 x 85		95	80	115		
M16		22 x 50	22	60	50	80	22	18
		22 x 85		90	80	115		

* Parpaing creux

	V [ml]		
HIT-SC		HDM	HDE 500-A
12 x 85	24	5	4
16 x 50	18	4	3
16 x 85	30	6	5
18 x 50	24	4	3
18 x 85	36	8	6
22 x 50	30	6	5
22 x 85	48	10	8

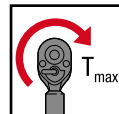
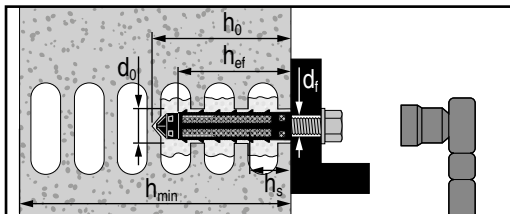
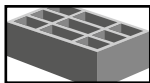


	HIT-SC	d_0 [mm]	h_0 [mm]	h_{ef} [mm]	h_{min} [mm]	HIT-RB	d_f [mm]	T_{max} [Nm]
M8	16x50 + 16x85	16	145	130	195	16	9	≤ 3
	16x85 + 16x85		180	160	230			
	16x85 + 16x85							
M10	16x50 + 16x85	16	145	130	195	16	12	≤ 4
	16x85 + 16x85		180	160	230			
	16x85 + 16x85							
M12	18x50 + 18x85	18	145	130	195	18	14	≤ 6
	18x85 + 18x85		180	160	230			
	18x85 + 18x85							
M16	22x50 + 22x85	22	145	130	195	22	18	≤ 8
	22x85 + 22x85		180	160	230			
	22x85 + 22x85							

	V [ml]		
HIT-SC		HDM	HDE 500-A
16 x 50 + 16 x 85	18 + 30	4 + 6	3 + 5
16 x 85 + 16 x 85	30 + 30	6 + 6	5 + 5
18 x 50 + 18 x 85	24 + 36	4 + 8	3 + 6
18 x 85 + 18 x 85	36 + 36	8 + 8	6 + 6
22 x 50 + 22 x 85	30 + 48	6 + 10	5 + 8
22 x 85 + 22 x 85	48 + 48	10 + 10	8 + 8



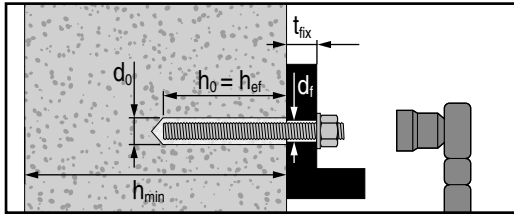
HIT-SC + HIT-IC




	HIT-SC	d_0 [mm]	h_0	h_{min}	HIT-RB	d_f	h_s	T_{max}
			[mm]	[mm]		[mm]	[mm]	[Nm]
M8 x 80	16 x 85	16	95	115	16	9	8...75	≤ 3
M10 x 80	18 x 85	18	95	115	18	12	10...75	≤ 4
M12 x 80	22 x 85	22	95	115	22	14	12...75	≤ 6

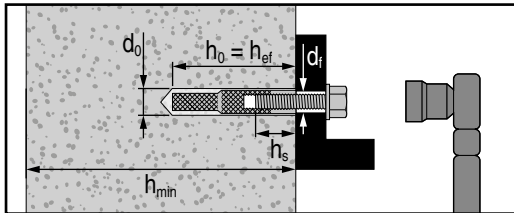
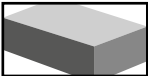
	V [ml]		
HIT-SC		HDM	HDE 500-A
16 x 85	30	6	5
18 x 85	36	8	6
22 x 85	48	10	8

HIT-V

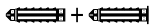


	d_0 [mm]	$h_0 = h_{ef}$ [mm]	h_{min} [mm]	HIT-RB	d_f [mm]	T_{max} [Nm]
M8	10	50...300	$h_0 + 30$		9	≤ 5
M10	12	50...300	$h_0 + 30$	12	12	≤ 8
M12	14	50...300	$h_0 + 30$	14	14	≤ 10
M16	18	50...300	$h_0 + 36$	18	18	≤ 10

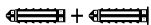
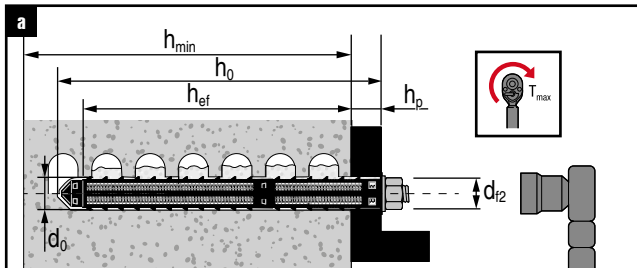
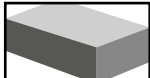
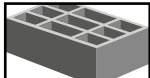
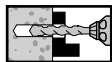
HIT-IC



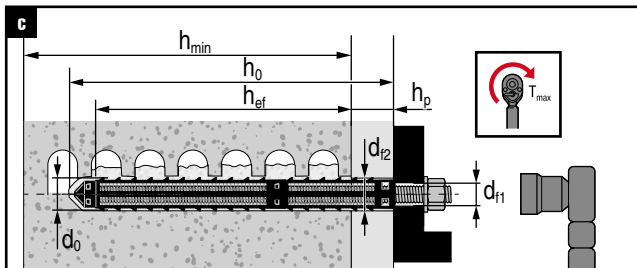
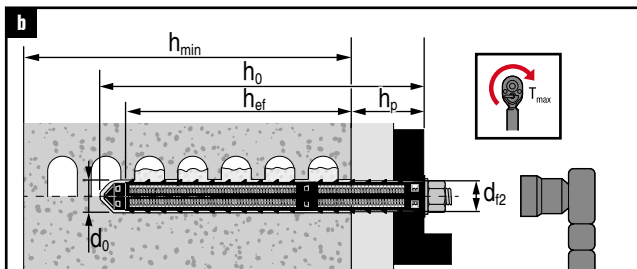
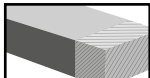
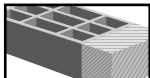
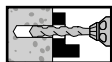
	d_0 [mm]	$h_0 = h_{ef}$ [mm]	h_{min} [mm]	HIT-RB	d_f [mm]	h_s [mm]	T_{max} [Nm]
M8 x 80	14	80	115	14	9	8...75	≤ 5
M10 x 80	16	80		16	12	10...75	≤ 8
M12 x 80	18	80		18	14	12...75	≤ 10
















HIT-SC + HIT-V

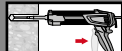








HIT-SC + HIT-V







	HIT-SC	d_0 [mm]	h_0 [mm]	h_{ef} [mm]	$h_{p \max}$ [mm]	h_{min} [mm]	HIT-RB	d_{f1} [mm]	d_{f2} [mm]	T_{max} [Nm]	
M8	 16x50 + 16x85	16	145	≥ 80	≤ 50	$h_{ef}+65$		16	9	17	≤ 3 [$\leq 2^*$]
	 16x85 + 16x85		180	≥ 80	≤ 80	$h_{ef}+70$					
	 16x85 + 16x85										
M10	 16x50 + 16x85	16	145	≥ 80	≤ 50	$h_{ef}+65$	16	12	17	≤ 4 [$\leq 2^*$]	
	 16x85 + 16x85		180	≥ 80	≤ 80	$h_{ef}+70$					
	 16x85 + 16x85										
M12	 18x50 + 18x85	18	145	≥ 80	≤ 50	$h_{ef}+65$	18	14	19	≤ 6 [$\leq 3^*$]	
	 18x85 + 18x85		180	≥ 80	≤ 80	$h_{ef}+70$					
	 18x85 + 18x85										
M16	 22x50 + 22x85	22	145	≥ 80	≤ 50	$h_{ef}+65$	22	18	23	≤ 8 [$\leq 6^*$]	
	 22x85 + 22x85		180	≥ 80	≤ 80	$h_{ef}+70$					
	 22x85 + 22x85										

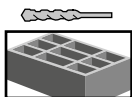
* Parpaing creux

	V [ml]		
 HIT-SC		HDM	HDE 500-A
16 x 50 + 16 x 85	18 + 30	4 + 6	3 + 5
16 x 85 + 16 x 85	30 + 30	6 + 6	5 + 5
18 x 50 + 18 x 85	24 + 36	4 + 8	3 + 6
18 x 85 + 18 x 85	36 + 36	8 + 8	6 + 6
22 x 50 + 22 x 85	30 + 48	6 + 10	5 + 8
22 x 85 + 22 x 85	48 + 48	10 + 10	8 + 8

			
°C	°F	 t_{work}	 t_{cure}
-5...-1	23...30	10 min	6h
0...4	32... 39	10 min	4h
5...9	41... 48	10 min	2.5h
10...19	50... 66	7 min	1.5h
20...29	68... 84	4 min	30 min
30...39	86... 102	2 min	20 min
40	104	1 min	15 min

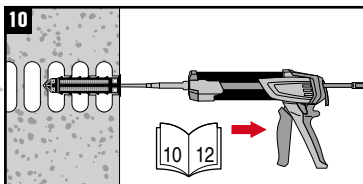
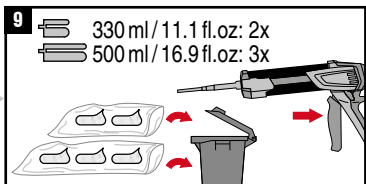
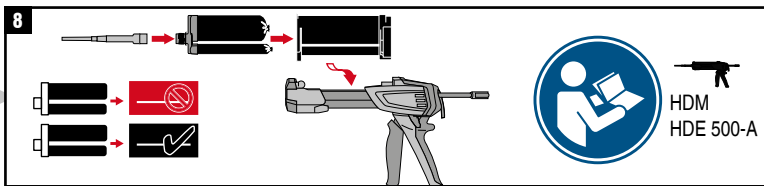
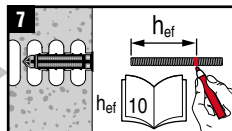
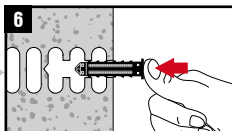
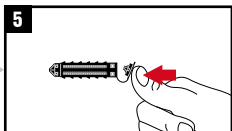
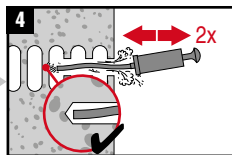
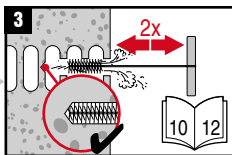
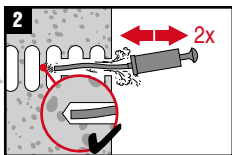
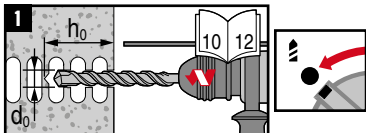
			
°C	°F	 t_{work}	 t_{cure}
5...9	41...48	10 min	2.5 h
10...19	50...66	7 min	1.5 h
20...29	68...84	4 min	30 min
30...39	86...102	2 min	20 min
40	104	1 min	15 min

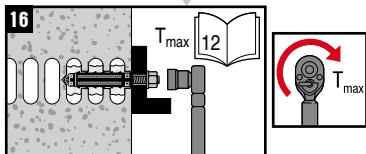
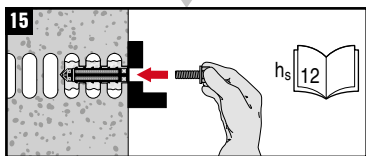
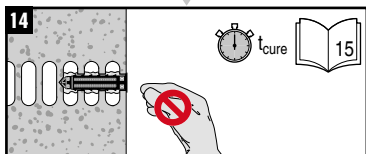
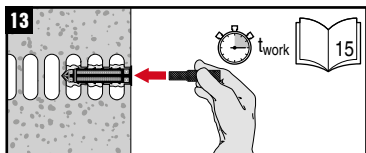
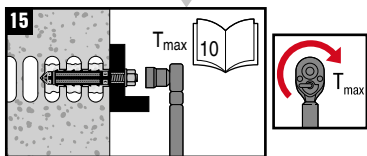
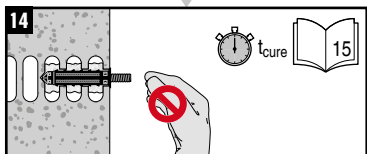
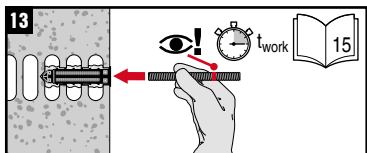
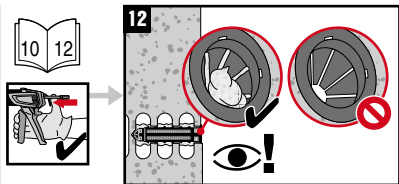
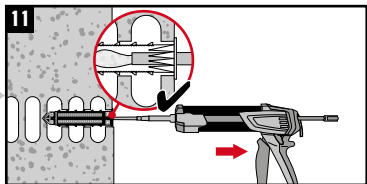
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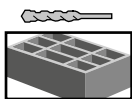
HIT-SC

+ HIT-V
+ HIT-IC



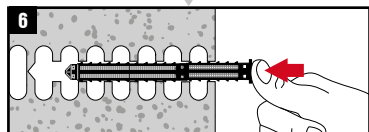
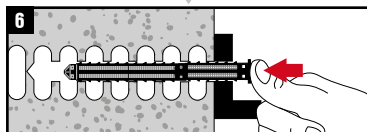
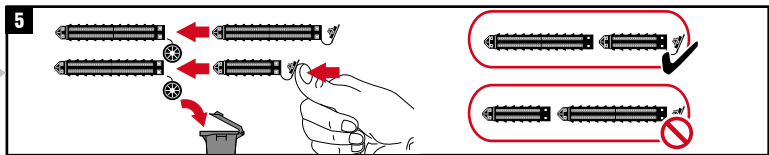
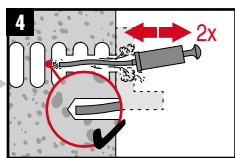
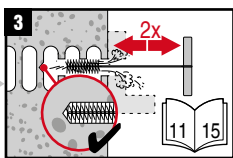
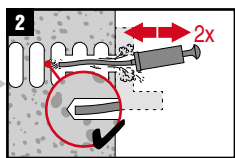
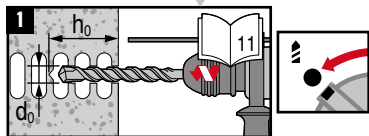
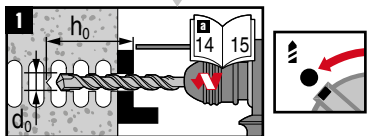
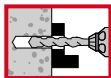
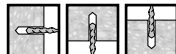


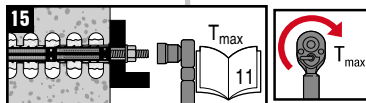
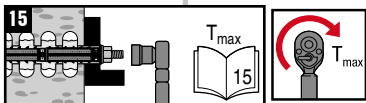
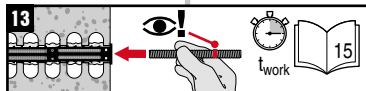
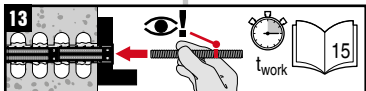
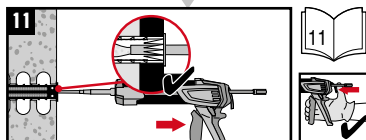
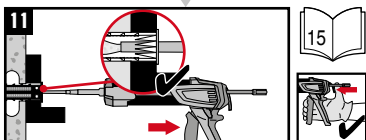
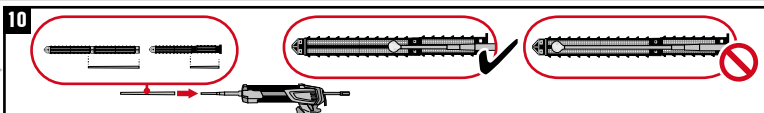
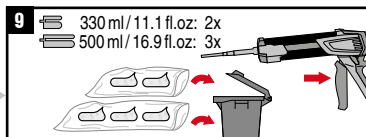
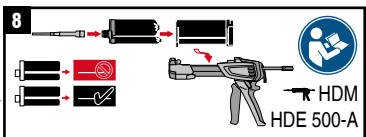
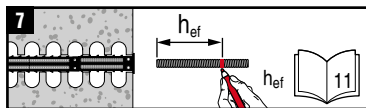
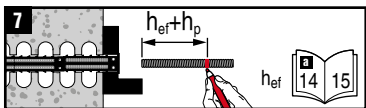
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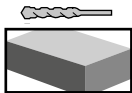
HIT-SC
+ HIT-V

+ HIT-V

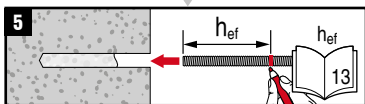
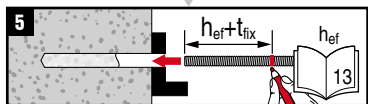
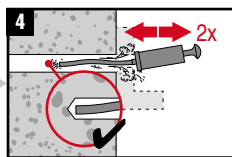
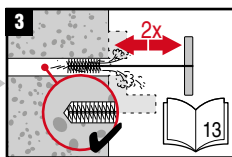
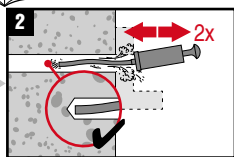
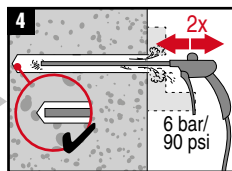
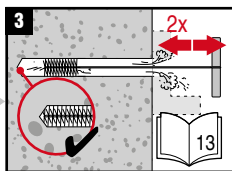
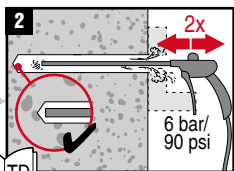
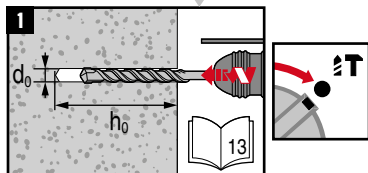
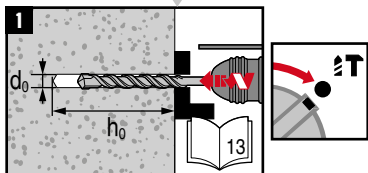
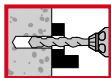
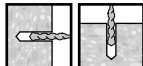


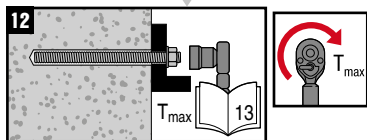
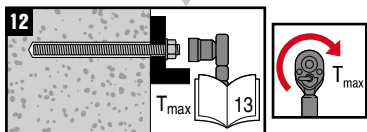
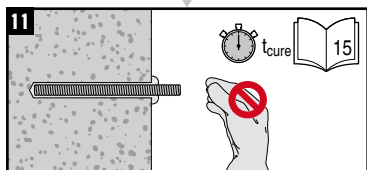
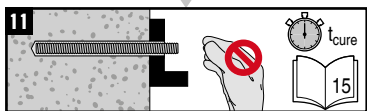
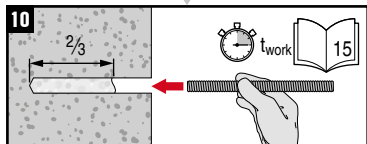
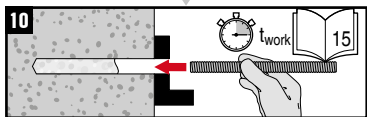
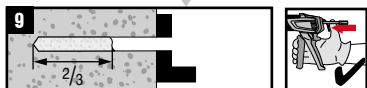
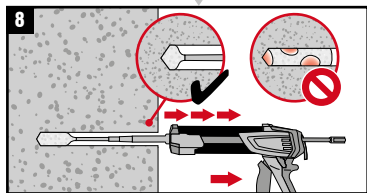
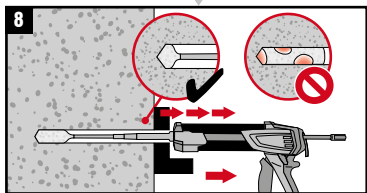
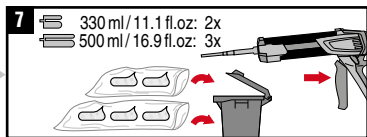
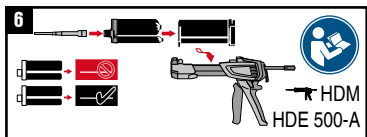


2.1

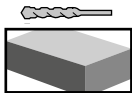


HIT-V

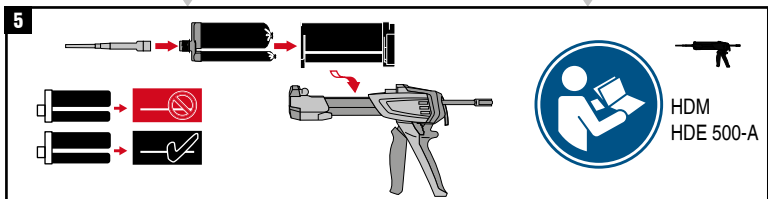
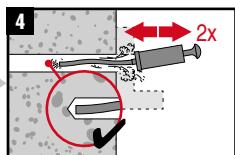
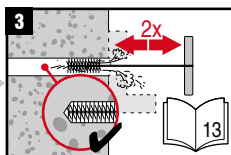
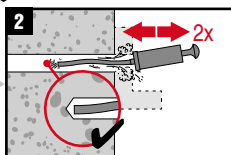
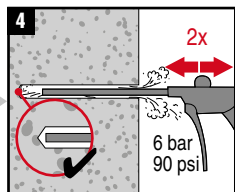
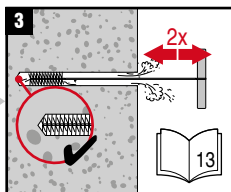
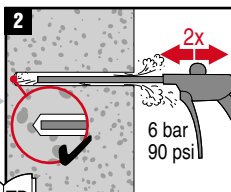
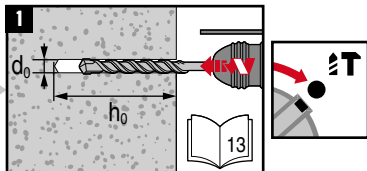
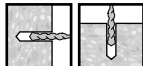






2.2

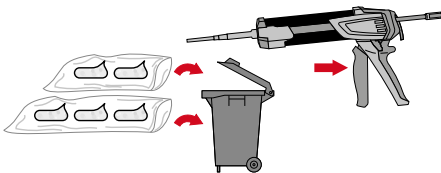
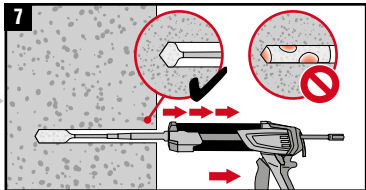
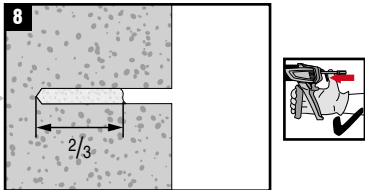
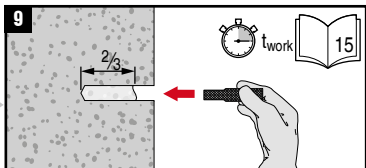
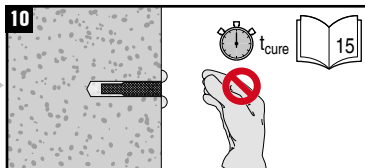
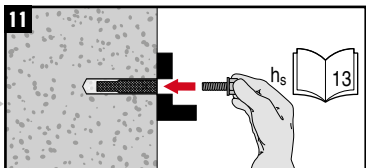
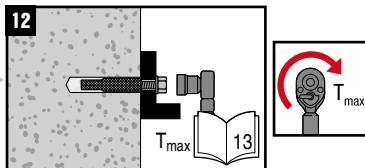


HIT-IC 

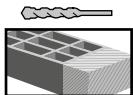


6

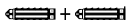
 330 ml / 11.1 fl.oz.: 2x
 500 ml / 16.9 fl.oz.: 3x

**7****8****9****10****11****12**

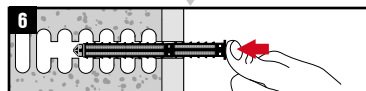
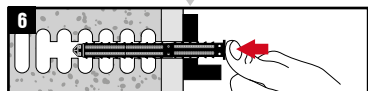
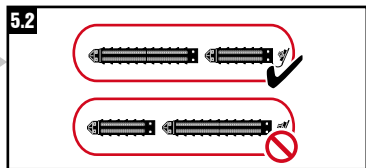
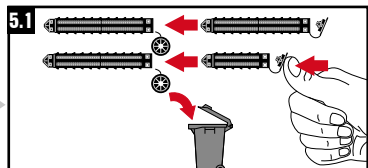
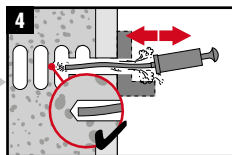
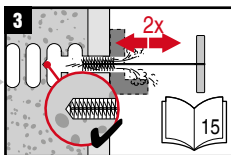
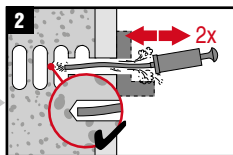
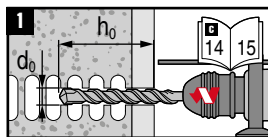
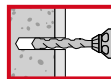
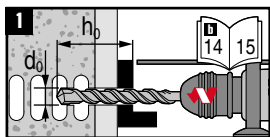
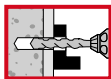
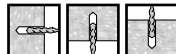
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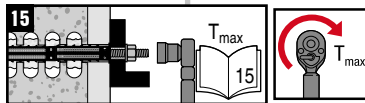
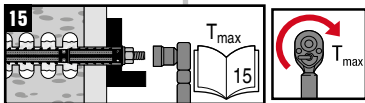
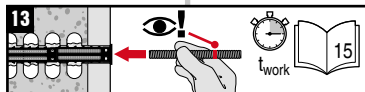
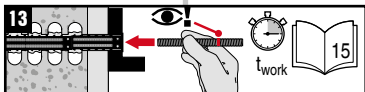
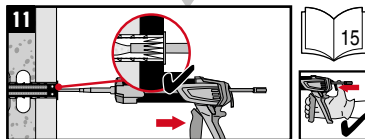
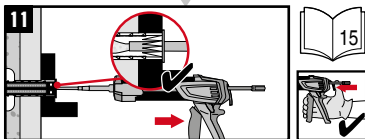
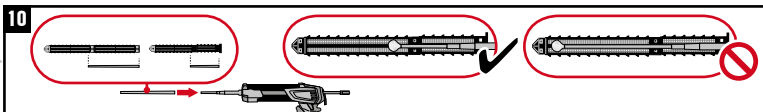
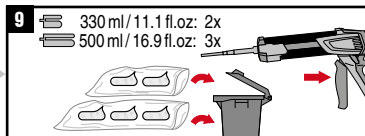
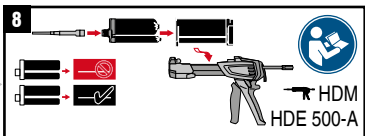
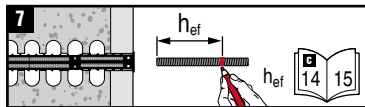
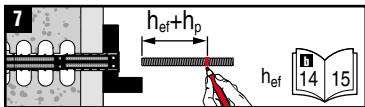


HIT-SC

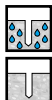
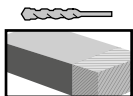


+ HIT-V

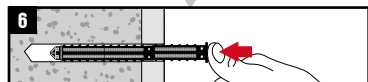
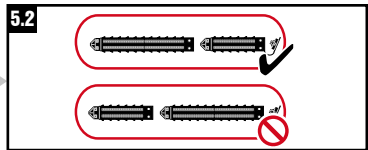
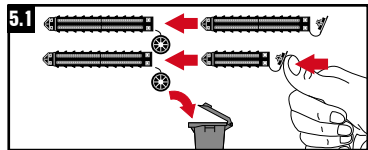
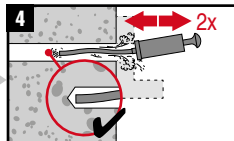
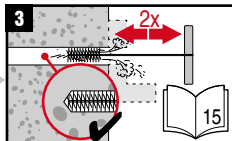
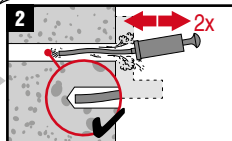
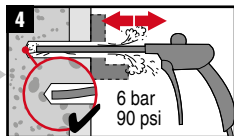
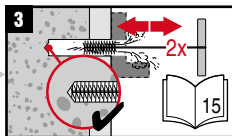
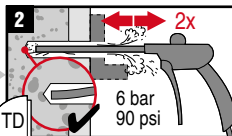
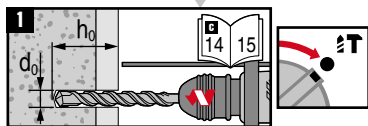
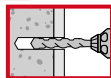
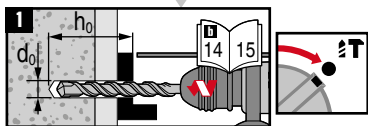
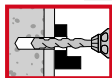


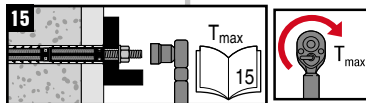
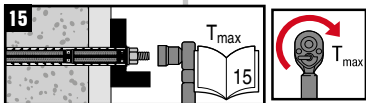
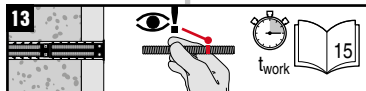
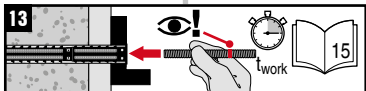
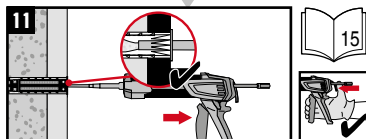
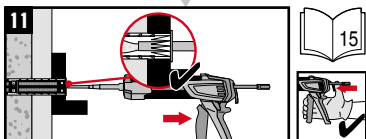
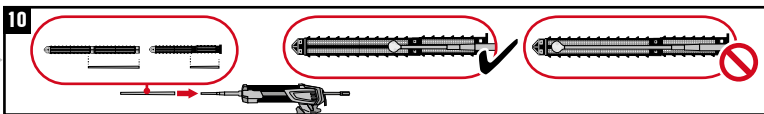
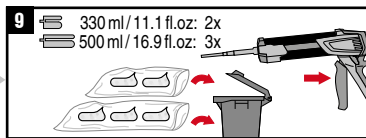
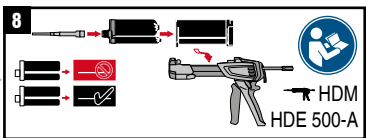
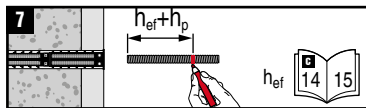
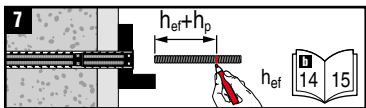


4



HIT-SC + HIT-V





Kiinnitysmassa ankkuri- ja betonikiinnityksiin

Kiinnitysmassa ankkureiden kiinnittämiseen ontelo- ja umpitiilimateriaaliin, kalkkikivimateriaaliin, betoniin, lohko-betoniin, huokoiseen erikoisbetoniin, huokoiseen kevytbetoniin ja luonnonkiveen.

Hilti HIT-HY 270

Sisältää: hydroksipropyylimeta-akrylaattia(A), dibentsoyyliperoksidi(B)



(A, B)



(B)



Varoitus

- H315 Ärsyttää ihoa. (A)
H317 Voi aiheuttaa allergisen ihoreaktion.(A,B)
H319 Ärsyttää voimakkaasti silmiä.(A)
H400 Erittäin myrkyllistä vesieläöille.(B)
H412 Haitallista vesieläöille, pitkäaikaisia haittavaikutuksia.(A)

P262 Varo kemikaalin joutumista silmiin, iholle tai vaatteisiin.

P280 Käytä suojakäsineitä/suojavaatetusta/silmiensuojainta/kasvonsuojainta.

P302+P352 JOS KEMIKAALIA JOUTUU IHOLLE: Pese runsaalla vedellä ja saippualla.

P305+P351+P338 JOS KEMIKAALIA JOUTUU SILMIIN: Huuhto huolellisesti vedellä usean minuutin ajan. Poista piilolinssit, edical voi tehdä helposti. Jatka huuhtomista.

P333+P313 Jos ilmenee ihoärsytystä tai ihottumaa: Hakeudu lääkäriin.

P337+P313 Jos silmä-ärsytys jatkuu: Hakeudu lääkäriin.

Hävittämisohjeita

Tyhjä pakkaus:

► Jätteenkeräyspisteet  tai EAK-jätekoodi: 150102 sekamateriaalipakkaukset.

Täysin tai osittain tyhjentyneet pakkaus

► on hävitettävä voimassa olevien ongelmajättemääräysten mukaisesti.

EAK-jätekoodi: 200127* Maalit, painovärit, liimat ja keinohartsit, jotka sisältävät vaarallisia aineita. Tai EAK-080409* Liima- ja tiivistysmassajätteet, jotka sisältävät orgaanisia liuotinaineita tai muita vaarallisia aineita.

Sisältö: 330 ml/11.1 fl.oz. 500 ml/16.9 fl. oz **Paino:** 540 g/19.0 oz 820 g/28.9 oz

Hilti ei vastaa vahingoista, joiden syynä on:

- varastointi- tai kuljetusohjeiden noudattamatta jättäminen
- käyttöohjeen ja ankkurointiohjeiden noudattamatta jättäminen, käyttövirhe
- ankkuroinnin riittämätön mitoitus, alusmateriaalin riittämätön lujuus
- muu syy, joka on ollut Hiltille tuntematon tai Hiltin vaikutuspiiriin kuulumaton, kuten esimerkiksi muiden valmistajien tuotteiden käyttö samassa yhteydessä.

Tuotetiedot

- Säilytä tämä käyttöohje aina yhdessä tuotteen kanssa, myös jos luovutat tuotteen toiselle henkilölle.
- **Tarkasta viimeinen käyttöpäivä** (kuukausi/vuosi) kantaosassa. Tuotetta ei enää saa käyttää viimeisen käyttöpäivän jälkeen!
- Pakkauksen lämpötila käytön aikana: välillä +5 °C ja 40 °C/41 °F ja 104 °F.
- Alusmateriaalin lämpötila kiinnityksen aikana: välillä –5 °C ja 40 °C/23 °F ja 104 °F.
- **Poikkeuksena täyssavitili** välillä +5 °C ja 40 °C/41 °F ja 104 °F.
- Kuljetus ja varastointi: Viileässä, kuivassa ja pimeässä, lämpötila välillä 5 °C ja 25 °C/41 °F ja 77 °F.
- Jos aiot käyttää tuotetta tavalla tai tarkoitukseen, jota ei ole kuvattu tässä käyttöohjeessa tai joka ei ole mainittujen spesifikaatioiden mukainen, ota yhteys Hiltiin.
- **Osittain tyhjentyneen patruunan on annettava olla kasetissa**, ja patruuna on käytettävä neljän viikon kuluessa. Anna sekoitinkärjen olla paikallaan kiinniruvattuna, ja varastoi patruuna ohjeiden mukaisesti **kasetissa**. Kun jatkat patruunan käyttämistä, kierrä uusi sekoitinkärki kiinni patruunaan ja hävitä ensimmäinen kiinnitysmassamäärä.

⚠ HUOMAUTUS**⚠ Virheellisen käsittelyn ja toiminnan seurauksena kiinnitysmassaa voi roiskua.**

- Kun teet työtä, käytä silmiensuojainta, suojakäsineitä ja suojavaatetusta!
- Älä koskaan aloita kiinnitysmassan puristamista ilman sekoitinkärkeä!
- Ennen uuden patruunan puristamista kiinnitä uusi sekoitinkärki. Varmista kunnollinen kiinnitys.
- Käytä vain kiinnitysmassan mukana toimitettua sekoitinkärkityyppiä (HIT-RE-M). Sekoitinkärkeä ei missään tapauksessa saa muuttaa.
- Älä koskaan käytä vahingoittunutta patruunaa ja/tai vaurioitunutta tai likaantunutta kasettia.

⚠ Porareian likeys tai huono sijoitus aiheuttaa huonon pysymisen tai kiinnityksen pettämisen.

- Porareikiin ei saa jäädä porausjätettä, pölyä, vettä, jäätä, rasvaa/öljyä tai muita epäpuhtauksia.
- Puhalla porareikä öljyttömällä paineilmalla puhtaaksi, kunnes reiästä tuleva ilma on pölytöntä.
- Puhdista porareikä harjaamalla sopivan kokoisella teräsharjalla. Kun puhdistat porareikää harjalla, harjassa pitää tuntua vastusta – ellei tunnu, harja on liian pieni ja se on vaihdettava.
- Jos porattaessa koko porareian syvyydeltä (esim. kun puskuautoja ei ole täytetty) ei tunnu merkittävää porausvastusta, tästä asemasta on luovuttava.

⚠ Umpitiillimateriaalin ja betoniin tehdyn porareian täyttö: Varmista, että täytät porareian reiän pohjalta aloittaen siten, ettei porareian pohjalle jää ilmakuplia. Tarvittaessa käytä lisävarustetta/jatkoa, jotta pääset porareian pohjaan saakka. Jos porattaessa osutaan ontelotilaan, käytä HIT-SC:tä.**⚠ Kun teet työtä pään yläpuolelle, käytä lisävarustetta HIT-SZ** ja ole tarkka, kun asetat kiinnityselementtiä paikalleen. Liika kiinnitysmassaa voi pursua ulos porareistä. Varmista, ettei kiinnitysmassaa tipu kenenkään päälle.**⚠ Ontelotillimateriaalin tehdyn porareian täyttö:** Käytä siiviläholkkia HIT-SC. Täytä siiviläholkki keskityssuojuksesta siten, että kiinnitysmassaa tulee ulos keskityssuojuksesta (täyttymisen tarkastus).**⚠ Huomautus:** Hilti HIT-HY 270 -kiinnitysmassaa ei ole tarkastettu kiipeilykoukkujen yhteydessä käytettäväksi. Käyttö tällaiseen tarkoitukseen on käyttäjän omalla vastuulla.**⚠ Ohjeiden noudattamatta jättäminen voi johtaa kiinnityksen pettämiseen!**

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1343

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14

1343-CPR-M 500-1/07.14
ETA-13/1036
ETAG 029



* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

www.hilti.com

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