Tecfi S.p.A. - Fixing Systems
Head Office:
S.S. Appia km.193 - 81050 Pastorano (CE) - Italia
tel. (+39).0823.88.33.38 - fax (+39).0823.88.32.60
www.tecfi.it *info@tecfi.it*

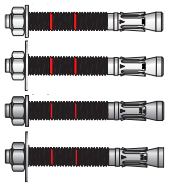
ISO 9001
ISO 14001

Declaration of Performance 1219-CPR-0071

According to the Regulation EU No 305/2011

ZJE01 - ZJE31 - ZJE51 - ZJE61 - ZJE71 - ZJE81

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia



1 - Intended use

Generic type:	Metal anchor for use in concrete, torque controlled expansion anchor
Base material:	Non-cracked concrete C20/25 to C50/60 acc. to EN 206-1:2003
Tecnical description of the product:	see Table 2
Specification of the intended use in accordance with the applicable EAD:	The anchors are intended to be used for anchorages for which requirements for mechanical resistance and stability, safety in case of fire and safety in use in the sense of the Basic Work Requirements 1 and 4 of Regulation 305/2011 (EU) (BWR 1 and BWR 4) shall be fulfilled and failure of anchorages made with these products would compromise the stability of the works, cause risk to human life and/or lead to considerable economic consequences.
Base material:	Reinforced or unreinforced normal weight non-cracked concrete of strength class C20/25 at minimum to C50/60 at maximum according to EN 206-1.
Installation:	Hole drilling by rotary plus hammer mode. In case of aborted hole: new drilling at a minimum distance away of twice the depth of the aborted hole or smaller distance if the aborted hole is filled with high strength mortar and if under shear or oblique tension load it is not the direction of the load application. After installation further turning of the anchor is not possible.
Loading:	Static and quasi-static loads
Durability:	ZJE01 e ZJE31: Dry internal conditions ZJE51 e ZJE61: Dry internal conditions ZJE71 e ZJE81: Dry internal conditions and also in structures subject to external atmospheric exposure (including industrial and marine environment), or exposure in permanently damp internal conditions, if no particular aggressive conditions exist. Such particular aggressive conditions are e. g. permanent, alternating immersion in seawater or the splash zone of seawater, chloride atmosphere of indoor swimming pools or atmosphere with extreme chemical pollution (e. g. in desulphurization plants or road tunnels where de-icing materials are used).
Service temperature:	The anchors may be used in the following temperature range: [-40°C ; +80°C]
Resistance to fire:	NPD
Reaction to fire:	The anchor is classified A1 according to EN 13501-1
European Assessment Document:	EAD330232-00-0601
European Technical Assessment:	ETA 13/1012
Technical Assessment Body:	Institut de ciencias de la construcción Eduardo Torroja (ITEcc)
Design methods:	- Static and quasi-static load: EN1992-4:2019
Assessment and Verification of Constancy of Performance:	EC Certificate No. 1219-CPR-0071
Notified Body:	Institut de ciencias de la construcción Eduardo Torroja (ITEcc), C/ Serrano Galvache, 4, 28033 Madrid, (Spagna)
Under the system:	1

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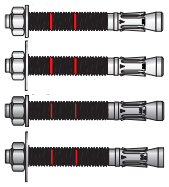
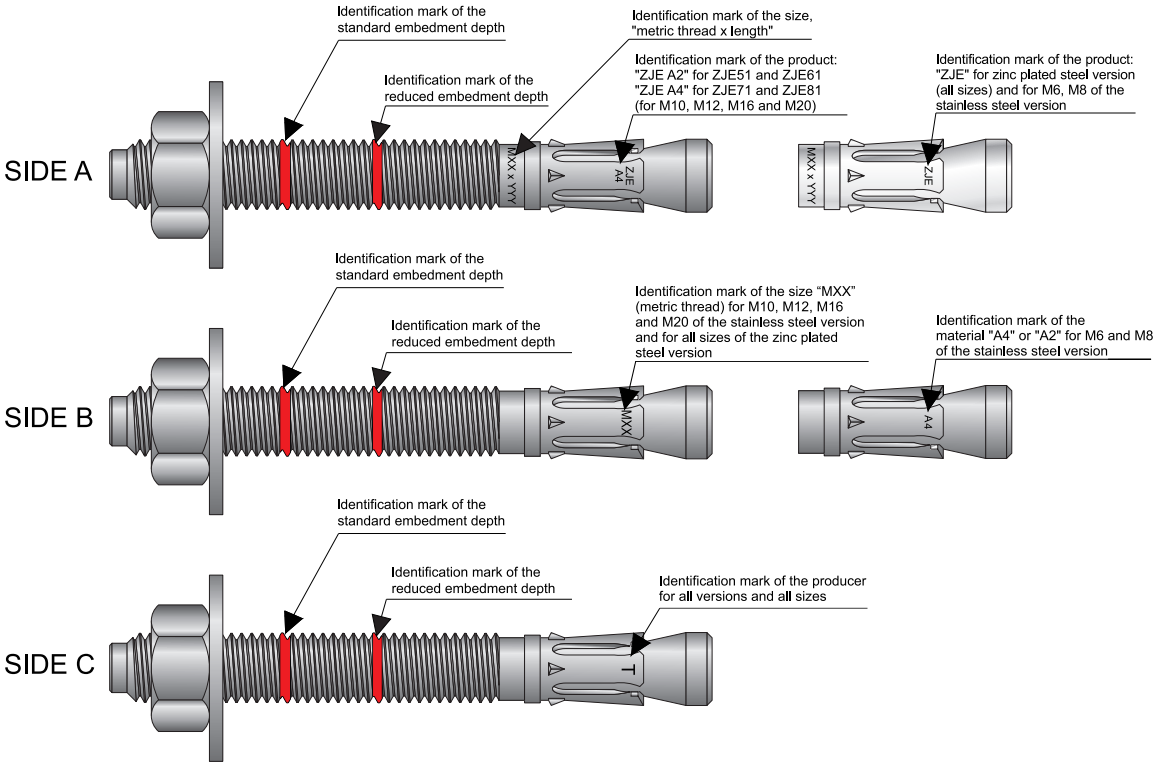


2 - Type of anchors

Item code	Description
ZJE01	Wedge anchor in carbon steel, with nut and washer, zinc plated
ZJE31	Wedge anchor in carbon steel, with nut and large series washer, zinc plated
ZJE51	A2 (AISI 304) Stainless Steel wedge anchor, with nut and washer
ZJE61	A2 (AISI 304) Stainless Steel wedge anchor, with nut and large washer
ZJE71	A4 (AISI 316) Stainless Steel wedge anchor, with nut and washer
ZJE81	A4 (AISI 316) Stainless Steel wedge anchor, with nut and large washer



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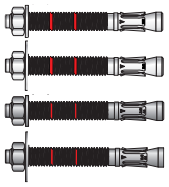
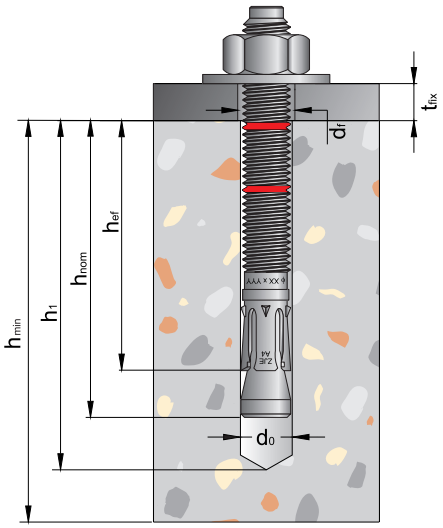


3 - Installation



d_f	Diameter of the clearance hole in the fixture
t_{fix}	Thickness of the fixtures
d_0	Diameter of the drill hole
h_1	Depth of drill hole
h_{min}	Minimum thickness of the concrete member
h_{nom}	Overall anchor embedment depth
h_{ef}	Anchorage depth

3.1 - Installation data valid for all anchor types

Size		M6	M8	M10	M12	M14[1)]	M16	M20
Diameter of the drill hole	d_o [mm]	6	8	10	12	14	16	20
Fixture clearance hole diameter	d_f [mm]	7	9	12	14	16	18	22
Wrench size	SW [mm]	10	13	17	19	22	24	30
Installation torque moment	T_{inst} [Nm]	7	20	35	60	90	120	240
Standard embedment depth – $h_{ef,std}$								
Overall anchor embedment depth	h_{nom} [mm]	49,5	59,5	66,5	77	91	103,5	125
Minimum thickness of the concrete member	h_{min} [mm]	100	100	110	130	150	168	206
Anchorage depth	h_{ef} [mm]	40	48	55	65	75	84	103
Depth of drill hole	h_1 = [mm]	55	65	75	85	100	110	135
Minimum allowable spacing	S_{min} = [mm]	35	40	50	70	80	90	135
Minimum allowable edge distance	C_{min}= [mm]	35	40	50	70	80	90	135
Reduced embedment depth – $h_{ef,red}$								
Overall anchor embedment depth	h_{nom} [mm]	-	46,5	53,5	62	-	84,5	97
Minimum thickness of the concrete member	h_{min} [mm]		100	100	100		130	150
Anchorage depth	h_{ef} [mm]		35	42	50		65	75
Depth of drill hole	h_1 = [mm]		50	60	70		90	107
Minimum allowable spacing	S_{min} = [mm]		40	50	70		90	135
Minimum allowable edge distance	C_{min}= [mm]		40	50	70		90	135

[1)] Not valid for Stainless steel version

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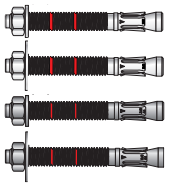
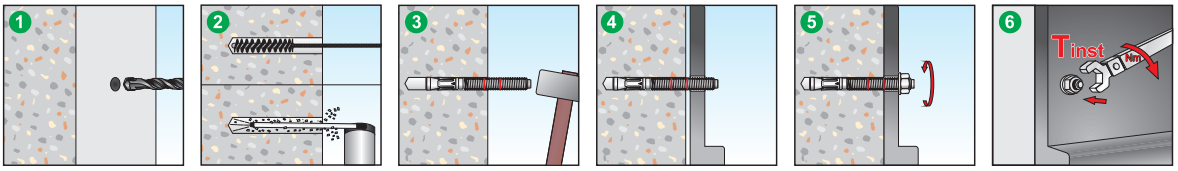
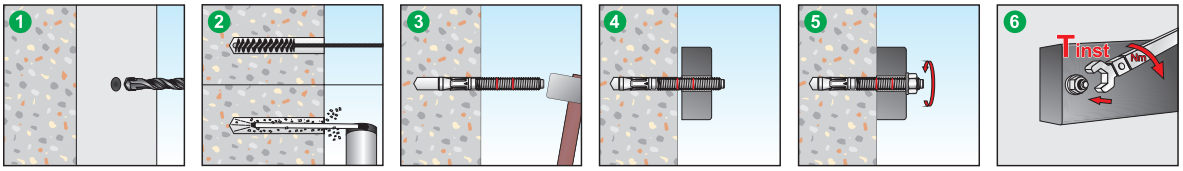


3.2 - Installation instruction

Standard embedment depth	
Step 1	Drill a hole into the concrete in rotary plus hammer mode
Step 2	Remove the dust into the hole using a brush and a blowing pump
Step 3	Hammer the anchor in the drill hole
Step 4	Place the fixture
Step 5	Tighten the nut
Step 6	Apply the required torque moment
Reduced embed-ment depth	
Step 1	Drill a hole into the concrete in rotary plus hammer mode
Step 2	Remove the dust into the hole using a brush and a blowing pump
Step 3	Hammer the anchor in the drill hole
Step 4	Place the fixture
Step 5	Tighten the nut
Step 6	Apply the required torque moment

3.3 - Tools for installation

Drill bit			Blowing pump
	**Anchor diameter**	**Drill bit item code**	
	Ø 6	EOX41 06 160	
	Ø 8	EOX41 08 160	
	Ø 10	EOX41 10 210	
	Ø 12	EOX41 12 210	
	Ø 14	EOX41 14 210	
	Ø 16	EOX41 16 260	
	Ø 20	EOX41 20 310	Item code: DW 01 00 001

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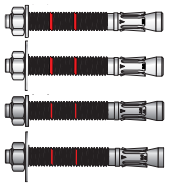

4 - Declared performance according to EAD 330232-00-0601

Size			M6	M8	M10	M12	M14[1)]	M16	M20
Steel failure to tension load - Zinc plated version (ZJE01 e ZJE31)									
Characteristic resistance to tension load	$N_{rk,s}$	[kN]	7,4	13	23,7	33,3	49,1	60,1	99,5
Partial safety factor	$\gamma_{M,s}$	[-]	1,40						
Steel failure to tension load - Stainless steel version (ZJE51 - ZJE61 - ZJE71 - ZJE81)									
Characteristic resistance to tension load	$N_{rk,s}$	[kN]	10,1	19,1	34,3	49,6	-	85,9	140,7
Partial safety factor	$\gamma_{M,s}$	[-]	1,68				-	1,68	
Pull-out failure to tension load - Standard embedment depth - $h_{ef,std}$									
Characteristic resistance to tension load Zinc plated version	$N_{rk,p,urc}$	[kN]	-[2)]	-[2)]	19	-[2)]	-[2)]	-[2)]	-[2)]
Installation safety factor Zinc plated version	γ_2	[-]	-	1,0					
Characteristic resistance to tension load Stainless Steel version	$N_{rk,p,urc}$	[kN]	-[2)]	12	16	25	-	35	50
Installation safety factor Stainless Steel version	γ_2	[-]	-[2)]	1,0	1,2				
Pull-out failure to tension load - Reduced embedment depth - $h_{ef,red}$									
Characteristic resistance to tension load Zinc plated version	$N_{rk,p,urc}$	[kN]	NPD	10	-[2)]	-[2)]	NPD	-[2)]	-[2)]
Installation safety factor Zinc plated version	γ_2	[-]	1,0						
Characteristic resistance to tension load Stainless Steel version	$N_{rk,p,urc}$	[kN]	NPD	9	12	16	NPD		
Installation safety factor Stainless Steel version	γ_2	[-]	-[2)]	1,0	1,2				
Increasing factor for concrete C30/37	Ψ_c C30/37	[-]	1,22						
Increasing factor for concrete C40/50	Ψ_c C40/50	[-]	1,41						
Increasing factor for concrete C50/60	Ψ_c C50/60	[-]	1,58						

[1)] Not valid for Stainless steel version (ZJE71 e ZJE 81)
[2)] Pull out failure is not decisive

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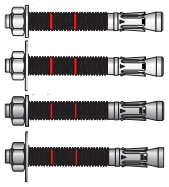

4 (cont.) - Declared performance according to EAD 330232-00-0601

Size			M6	M8	M10	M12	M14[1)]	M16	M20
Concrete cone failure and splitting failure - Standard embedment depth - $h_{ef,std}$									
Effective anchorage depth	h_{ef}	[mm]	40	48	55	65	75	84	103
Installation safety factor	γ_2	[-]	1,0						
Factor for equation 7.2 Eurocod 2 part 4	k_1	[-]	11						
Spacing Zinc Plated version	$S_{cr,N}$	[mm]	3 x h_{ef}						
	$S_{cr,sp}$	[mm]	160	192	220	260	300	280	360
Edge distance Zinc Plated version	$C_{cr,N}$	[mm]	1,5 x h_{ef}						
	$C_{cr,sp}$	[mm]	80	96	110	130	150	140	180
Spacing Stainless Steel version	$S_{cr,N}$	[mm]	3 x h_{ef}						
	$S_{cr,sp}$	[mm]	160	192	220	260	NPD	336	412
Edge distance Stainless Steel version	$C_{cr,N}$	[mm]	1,5 x h_{ef}						
	$C_{cr,sp}$	[mm]	80	96	110	130	NPD	168	206
Concrete cone failure and splitting failure – Reduced embedment depth - $h_{ef,red}$									
Effective anchorage depth Zinc Plated version	h_{ef}	[mm]	NPD	35[2)]	42	50	NPD	65	75
Effective anchorage depth Stainless Steel version	h_{ef}	[mm]	NPD	35[2)]	42	50	NPD	NPD	NPD
Installation safety factor	γ_2	[-]	1,0						
Factor for equation 7.2 Eurocod 2 part 4	k_1	[-]	11						
Spacing Zinc Plated version	$S_{cr,N}$	[mm]	3 x h_{ef}						
	$S_{cr,sp}$	[mm]	NPD	140	168	200	NPD	260	300
Edge distance Zinc Plated version	$C_{cr,N}$	[mm]	1,5 x h_{ef}						
	$C_{cr,sp}$	[mm]	NPD	70	84	100	NPD	130	150
Spacing Stainless Steel version	$S_{cr,N}$	[mm]	3 x h_{ef}						
	$S_{cr,sp}$	[mm]	NPD	140	168	200	NPD	NPD	NPD
Edge distance Stainless Steel version	$C_{cr,N}$	[mm]	1,5 x h_{ef}						
	$C_{cr,sp}$	[mm]	NPD	70	84	100	NPD	NPD	NPD

[1)] Not valid for Stainless steel version (ZJE71 e ZJE 81)
[2)] Use restricted to anchoring of structural components which are statically indeterminate

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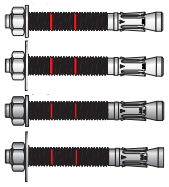

4 (cont.) - Declared performance according to EAD 330232-00-0601

Size				M6	M8	M10	M12	M14[1)]	M16	M20
Steel failure to shear load - Zinc plated version - (ZJE01 e ZJE31)										
Steel failure without lever arm		$V_{Rk,S}$	[kN]	5,1	9,3	14,7	20,6	28,1	38,4	56,3
Steel failure with lever arm		$M^0_{rk,s}$	[Nm]	7,7	19,1	38,1	64,1	102,2	163,1	298,5
Partial safety factor		$\gamma_{M,p}$	[-]	1,25						
Steel failure to shear load - Stainless steel version - (ZJE71 e ZJE81)										
Steel failure without lever arm		$V_{Rk,s}$	[kN]	6,0	10,9	17,4	25,2	-	47,1	73,5
Steel failure with lever arm		$M^0_{rk,s}$	[Nm]	9,2	22,5	44,9	78,6	-	200	389
Partial safety factor		$\gamma_{M,p}$	[-]	1,52						
Concrete pryout failure										
Factor in equation 7.39 Eurocod 2 part 4	Per $h_{ef.std}$	k_8	[-]	1,0			2,0			
	Per $h_{ef.red}$	k_8	[-]	NPD	1,0[2)]	1,0		NPD	2,0[1)]	
Installation safety factor		γ_2	[-]	1,0						
Concrete edge failure										
Factor in equation 7.41 Eurocod 2 part 4	Per $h_{ef.std}$	l_f	[mm]	40	48	55	65	75	84	103
	Per $h_{ef.red}$	l_f	[mm]	NPD	35[2)]	42	50	NPD	65[1)]	75[1)]
Outside diameter of anchor		d_{nom}	[mm]	6	8	10	12	14	16	20
Installation safety factor		γ_2	[-]	1,0						

[1)] Not valid for Stainless steel version (ZJE51 - ZJE61 - ZJE71 e ZJE 81)
[2)] Use restricted to anchoring of structural components which are statically indeterminate

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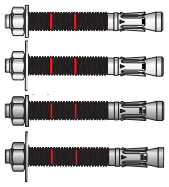


4 (cont.) - Declared performance according to EAD 330232-00-0601

Size			M6	M8	M10	M12	M14[1)]	M16	M20
Displacement under tension load - Standard embedment depth - $h_{ef,std}$ - (ZJE01 e ZJE31)									
Service tension load in non-cracked concrete C20/25	N_{ucr}	[kN]	3,8	6,6	9,0	12,6	15,6	18,5	25,1
Displacement	δ_{N0}	[mm]	0,4	0,7	1,0	1,2	1,3	1,9	2,2
	$\delta_{N0,\infty}$	[mm]	1,8	2,1	2,4	2,6	2,7	3,3	3,8
Displacement under tension load - Standard embedment depth - $h_{ef,std}$ - (ZJE51 - ZJE61 - ZJE71 - ZJE81)									
Service tension load in non-cracked concrete C20/25	N_{ucr}	[kN]	4,3	5,7	6,3	9,9	-	13,8	19,8
Displacement	δ_{N0}	[mm]	0,42	0,22	0,17	0,19	-	0,19	0,11
	$\delta_{N0,\infty}$	[mm]	1,33	1,33	1,33	1,33	-	1,33	1,33
Displacement under tension load - Reduced embedment depth - $h_{ef,red}$ - (ZJE01 e ZJE31)									
Service tension load in non-cracked concrete C20/25	N_{ucr}	[kN]	NPD	4,8	6,5	8,5	NPD	12,6	15,6
Displacement	δ_{N0}	[mm]	NPD	0,3	0,6	1,0	NPD	1,6	1,9
	$\delta_{N0,\infty}$	[mm]	NPD	1,4	1,7	2,1	NPD	2,7	3,0
Displacement under tension load - Reduced embedment depth - $h_{ef,red}$ - (ZJE51 - ZJE61 - ZJE71 - ZJE81)									
Service tension load in non-cracked concrete C20/25	N_{ucr}	[kN]	NPD	4,2	5,7	7,6	NPD	NPD	NPD
Displacement	δ_{N0}	[mm]	NPD	0,07	0,04	0,32	NPD	NPD	NPD
	$\delta_{N0,\infty}$	[mm]	NPD	0,6	0,6	0,6	NPD	NPD	NPD
Displacement under shear load - Standard embedment depth - $h_{ef,red}$ - (ZJE01 e ZJE31)									
Service shear load in non-cracked concrete C20/25	V	[kN]	2,9	5,3	8,4	11,8	16,0	21,9	32,1
Displacement	δ_{N0}	[mm]	0,65	2,80	1,75	2,45	2,78	3,53	4,13
	$\delta_{N0,\infty}$	[mm]	0,98	4,20	2,63	3,68	4,16	5,29	6,19
Displacement under shear load - Standard embedment depth - $h_{ef,std}$ - (ZJE51 - ZJE61 - ZJE71 - ZJE81)									
Service shear load in non-cracked concrete C20/25	V	[kN]	2,8	5,1	8,1	11,8	-	22,1	34,5
Displacement	δ_{N0}	[mm]	1,66	1,79	3,83	4,13	-	5,75	6,59
	$\delta_{N0,\infty}$	[mm]	2,49	2,68	5,74	6,19	-	8,62	9,88
Displacement under shear load - Reduced embedment depth - $h_{ef,red}$ - (ZJE01 e ZJE31)									
Service shear load in non-cracked concrete C20/25	V	[kN]	NPD	5,3	8,4	11,8	NPD	21,9	32,1
Displacement	δ_{N0}	[mm]	NPD	0,59	1,22	1,10	NPD	3,10	3,40
	$\delta_{N0,\infty}$	[mm]	NPD	0,89	1,83	1,65	NPD	4,60	5,10
Displacement under shear load - Reduced embedment depth - $h_{ef,red}$ -(ZJE51 - ZJE61 - ZJE71 - ZJE81)									
Service shear load in non-cracked concrete C20/25	V	[kN]	NPD	5,1	8,1	11,8	-	NPD	NPD
Displacement	δ_{N0}	[mm]	NPD	0,60	3,83	4,13	-	NPD	NPD
	$\delta_{N0,\infty}$	[mm]	NPD	0,90	5,74	6,19	-	NPD	NPD

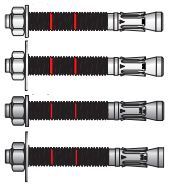
Tecfi S.p.A. - Fixing Systems
Head Office:
S.S. Appia km.193 - 81050 Pastorano (CE) - Italia
tel. (+39).0823.88.33.38 - fax (+39).0823.88.32.60
www.tecfi.it *info@tecfi.it*

Declaration of Performance 1219-CPR-0071

According to the Regulation EU No 305/2011

ZJE01 - ZJE31 - ZJE51 - ZJE61 - ZJE71 - ZJE81

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia



5 - Range ZJE01 and ZJE31

Item Code	M	d_o [mm]	l [mm]	$t_{fix,std}$ [mm]		$t_{fix,red}$ [mm]	
				DIN 9021 o DIN 440	DIN 125	DIN 9021 o DIN 440	DIN 125
ZJE 01 06 060 – ZJE 31 06 060	6	6	60	L-58	L-58	NA	
ZJE 01 06 080 – ZJE 31 06 080			80				
ZJE 01 06 100 – ZJE 31 06 100			100				
ZJE 01 06 120 – ZJE 31 06 120			120				
ZJE 01 08 060 – ZJE 31 08 060	8	8	60	L-70	L-71	L-57	L-58
ZJE 01 08 075 – ZJE 31 08 075			75				
ZJE 01 08 090 – ZJE 31 08 080			90				
ZJE 01 08 115 – ZJE 31 08 115			115				
ZJE 01 08 130 – ZJE 31 08 130			130				
ZJE 01 10 070 – ZJE 31 10 070	10	10	70	L-80	L-80	L-67	L-67
ZJE 01 10 080 – ZJE 31 10 080			80				
ZJE 01 10 090 – ZJE 31 10 090			90				
ZJE 01 10 120 – ZJE 31 10 120			120				
ZJE 01 10 150 – ZJE 31 10 150			150				
ZJE 01 12 090 – ZJE 31 12 090	12	12	90	L-92	L-94	L-77	L-79
ZJE 01 12 110 – ZJE 31 12 110			110				
ZJE 01 12 140 – ZJE 31 12 140			140				
ZJE 01 12 160 – ZJE 31 12 160			160				
ZJE 01 12 180 – ZJE 31 12 180			180				
ZJE 01 12 200 – ZJE 31 12 200			200				
ZJE 01 12 250 – ZJE 31 12 250			250				
ZJE 01 14 120 – ZJE 31 14 120	14	14	120	L-108	L-108	NA	
ZJE 01 14 145 – ZJE 31 14 145			145				
ZJE 01 14 170 – ZJE 31 14 170			170				
ZJE 01 16 125 – ZJE 31 16 125	16	16	125	L-122	L-124	L-103	L-105
ZJE 01 16 145 – ZJE 31 16 145			145				
ZJE 01 16 170 – ZJE 31 16 170			170				
ZJE 01 16 220 – ZJE 31 16 220			220				
ZJE 01 16 250 – ZJE 31 16 250			250				
ZJE 01 16 280 – ZJE 31 16 280			280				
ZJE 01 20 170 – ZJE 31 20 170	20	20	170	L-147	L-149	L-121	L-123
ZJE 01 20 220 – ZJE 31 20 220			220				

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Declaration of Performance 1219-CPR-0071

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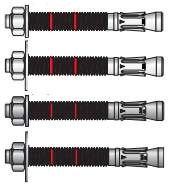
ZJE01 - ZJE31 - ZJE51 - ZJE61 - ZJE71 - ZJE81

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia



5.a - Range ZJE51 and ZJE61

Item code	M	d_o [mm]	l [mm]	$t_{fix,std}$ [mm]		$t_{fix,red}$ [mm]	
				DIN 9021 o DIN 440	DIN 125	DIN 9021 o DIN 440	DIN 125
ZJE 51 06 060 – ZJE 61 06 060	6	6	60	L-58	L-58	NA	
ZJE 51 06 080 – ZJE 61 06 080			80				
ZJE 51 08 075 – ZJE 61 08 075	8	8	75	L-70	L-71	L-58	L-58
ZJE 51 08 090 – ZJE 61 08 080			90				
ZJE 51 08 115 – ZJE 61 08 115			115				
ZJE 51 10 070 – ZJE 61 10 070	10	10	70	L-80	L-80	L-67	L-67
ZJE 51 10 090 – ZJE 61 10 090			90				
ZJE 51 10 120 – ZJE 61 10 120			120				
ZJE 51 10 150 – ZJE 61 10 150			150				
ZJE 51 12 090 – ZJE 61 12 090	12	12	90	L-92	L-94	L-77	L-79
ZJE 51 12 110 – ZJE 61 12 110			110				
ZJE 51 12 140 – ZJE 61 12 140			140				
ZJE 51 16 090 – ZJE 61 16 090	16	16	90	L-122	L-124	L-103	L-105
ZJE 51 16 125 – ZJE 61 16 125			125				
ZJE 51 16 145 – ZJE 61 16 145			145				
ZJE 51 16 170 – ZJE 61 16 170			170				
ZJE 51 20 170 – ZJE 61 20 170	20	20	170	L-147	L-149	L-121	L-123
ZJE 51 20 220 – ZJE 61 20 220			220				

5.b - Range ZJE71 and ZJE81

Item code	M	d_o [mm]	l [mm]	$t_{fix,std}$ [mm]		$t_{fix,red}$ [mm]	
				DIN 9021 o DIN 440	DIN 125	DIN 9021 o DIN 440	DIN 125
ZJE 71 06 060 – ZJE 81 06 060	6	6	60	L-58	L-58	NA	
ZJE 71 06 080 – ZJE 81 06 080			80				
ZJE 71 08 075 – ZJE 81 08 075	8	8	75	L-70	L-71	L-58	L-58
ZJE 71 08 090 – ZJE 81 08 080			90				
ZJE 71 08 115 – ZJE 81 08 115			115				
ZJE 71 10 070 – ZJE 81 10 070	10	10	70	L-80	L-80	L-67	L-67
ZJE 71 10 090 – ZJE 81 10 090			90				
ZJE 71 10 120 – ZJE 81 10 120			120				
ZJE 71 10 150 – ZJE 81 10 150			150				
ZJE 71 12 090 – ZJE 81 12 090	12	12	90	L-92	L-94	L-77	L-79
ZJE 71 12 110 – ZJE 81 12 110			110				
ZJE 71 12 140 – ZJE 81 12 140			140				
ZJE 71 12 180 – ZJE 81 12 180			180				
ZJE 71 16 090 – ZJE 81 16 090	16	16	90	L-122	L-124	L-103	L-105
ZJE 71 16 125 – ZJE 81 16 125			125				
ZJE 71 16 145 – ZJE 81 16 145			145				
ZJE 71 16 170 – ZJE 81 16 170			170				
ZJE 71 20 170 – ZJE 81 20 170	20	20	170	L-147	L-149	L-121	L-123
ZJE 71 20 220 – ZJE 81 20 220			220				

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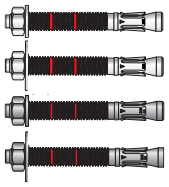
ISO 9001
ISO 14001

Declaration of Performance 1219-CPR-0071

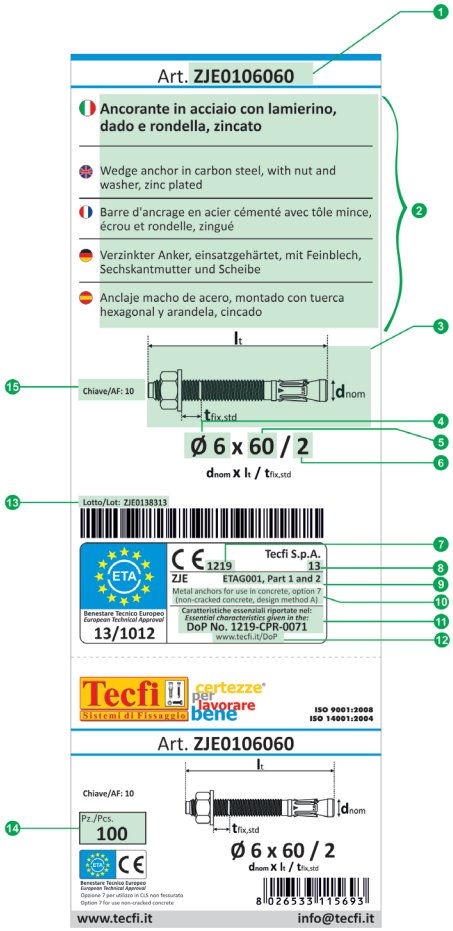
According to the Regulation EU No 305/2011

ZJE01 - ZJE31 - ZJE51 - ZJE61 - ZJE71 - ZJE81

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia



6 - Lable



1. Item Code
2. Descriptions
3. Picture
4. Anchor Diameter (d_{nom})
5. Anchor Length (l_t)
6. Maximum Thickness of fixture (t_{fix})
7. Identification number of the Notified Body
8. Last two digits of the year in wich the marking was first affixed
9. European Technical Specification
10. Intended use of the product as laid down in the European standard applied, level of performance declared
11. DoP Number
12. Link to DoP
13. Lot Number
14. Number of Pieces per Box
15. Wrench Size

The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Name and function	Place and date of issue	Signature
President Antonio Guarino	Pastorano, March 20th 2019	