

Flexco® Bolt Solid Plate Fastening System

The Cement Industry Standard for Strong, Long-Lasting Splices

Downtime can cost a cement plant as much as \$25,000 an hour, so operators need to replace belts and get damaged belts up and running as quickly as possible. Flexco® Bolt Solid Plate fasteners are engineered to meet the demands of the toughest material handling applications, providing a strong, sift-free splice with superior holding ability. A choice of sizes accommodates belts from 5 mm to over 24 mm thick.



*Exclusive Piloted Bolts:
Tapered tips that cradle
nuts securely in place.
Reduce installation time.
Easy to use.*



Selection Guide			
Fastener Size	Belt Thickness Range	For Belts with Mechanical Fastener Ratings Up To:	Minimum Pulley Diameter
	mm	kN/m	mm
1	5 - 11	30	300
140, 140VP	5 - 11	40	360
190, 190VP	8 - 14	65	460
1-1/2	11 - 17	50	460
2, 2VP	14 - 21	75	760
2*	8 - 32	123	510
2-1/4	14 - 30	105	920
2-1/2	19 - 25	75	1070
3	24 & over	100	1220

* When used with No. 3 Lead Wedlok® pattern, belts over 22 mm require extra long No. 2-1/4 bolts

High strength.

High strength is the result of superior design and plate compression on both the top and bottom sides of the belt. High tensile strength bolts compress top and bottom plates to distribute splice tension evenly across the entire width of each fastener plate. For added strength and pull-out resistance, specially formed teeth penetrate deep into the belt carcass – without damaging carcass fibers.

Easy installation.

Field-proven templates, punches, and boring tools make it easy to quickly and accurately prepare belts for fastener installation. Fasteners are easily installed on-site using portable hand tools or power tools. Our exclusive piloted bolts also contribute to faster installation.

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Fasteners

Each Quick-Fit “E” box contains 25 complete fastener sets. A set consists of a top plate, a bottom plate, two nuts, and two bolts.

Ordering Information				
Steel	Stainless— 300 Series	MegAlloy® Top Plates Balance Steel	MegAlloy® Top & Bottom Plates, Steel, Bolts & Nuts	Everdur
“E” Box (25 Fastener Sets)				
1E				
140E	140ES	140EMA	140EMAP	140EE
190E	190ES	190EMA	190EMAP	190EE
1-1/2E	1-1/2ES	1-1/2EMA	1-1/2EMAP	1-1/2EE
2E	2ES	2EMA	2EMAP	2EE
2-1/4E	2-1/4ES	2-1/4EMA	2-1/4EMAP	2-1/4EE
2-1/2*				
3*				
“C” Bucket (100 Fastener Sets – Bottom Plates Pre-Assembled)				
1C		1CMA		
140C		140CMA	140CMAP	140CE
190C		190CMA	190CMAP	190CE
1-1/2C		1-1/2CMA	1-1/2CMAP	
2C		2CMA	2CMAP	
2-1/4C		2-1/4CMA		
2-1/2C**				
3**				

* 10 fastener sets

** Packaged in cartons

NOTE: Additional fastener metal selections are available

Fasteners Sets Required in a Complete Joint						
Belt Width	Fastener Size 1, 140, & 190		Fastener Size 1-1/2, 2 & 2-1/4		Fastener Size 2-1/2 & 3	
	mm	mm	mm	mm	mm	mm
	90°	45°	90°	45°	90°	45°
300	9	12	8	10	6	7
450	14	19	11	15	9	12
600	19	26	15	21	13	16
750	24	33	19	27	16	21
900	29	40	23	32	19	26
1000	32	45	26	36	21	29
1050	34	47	27	38	21	30
1200	39	54	31	43	26	35
1350	44	61	35	49	29	40
1500	49	68	39	55	32	44
1800	59	82	49	65	39	53

NOTE: Required fastener sets may vary from those listed depending on exact fastener size



Flexco® VP™ Fasteners					
Rubber Covered Top Plates Balance Steel			Rubber Covered Top Plates MegAlloy® Bottom Plates		
Ordering Number	Plates Per Strip	Strips Per Box	Ordering Number	Plates Per Strip	Strips Per Box
Box*			Box*		
140VP	6	5	140VPMA	6	5
190VP	6	5	190VPMA	6	5
2VP	4	6			
Bucket			Bucket		
140VPB	6	16	140VPBMA	6	16
190VPB	6	16	190VPBMA	6	16
2VPB	4	24			

* Box quantities provide enough fasteners to splice a 900 mm belt

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Installation Tools

90° and 45° Templets

Templets are required for 90° and 45° Bolt Solid Plate fastener installation. Templets simplify installation by providing a guide for accurate bolt-hole placement. Lengths for all standard belt widths are available.

Ordering Information								
Belt Width	Ordering Number							
mm	1	140	190	1-1/2	2	2-1/4	2-1/2	3
90° Templets								
300	1-12	140-12	190-12	1-1/2-12	2-12			
450	1-18	140-18	190-18	1-1/2-18	2-18			
600	1-24	140-24	190-24	1-1/2-24	2-24	2-1/4-24	2-1/2-24	
750	1-30	140-30	190-30	1-1/2-30	2-30	2-1/4-30	2-1/2-30	
900	1-36	140-36	190-36	1-1/2-36	2-36	2-1/4-36	2-1/2-36	3-36
1050	1-42	140-42	190-42	1-1/2-42	2-42	2-1/4-42	2-1/2-42	3-42
1200	1-48	140-48	190-48	1-1/2-48	2-48	2-1/4-48	2-1/2-48	3-48
1350				1-1/2-54	2-54	2-1/4-54	2-1/2-54	
1500			190-60	1-1/2-60	2-60	2-1/4-60	2-1/2-60	3-60
1800				1-1/2-72	2-72	2-1/4-72	2-1/2-72	3-72
45° Templets								
300	1-12-45							
450	1-18-45		190-18-45	1-1/2-18-45				
600	1-24-45	140-24-45	190-24-45	1-1/2-24-45	2-24-45			
750	1-30-45	140-30-45	190-30-45	1-1/2-30-45	2-30-45			
900	1-36-45	140-36-45	190-36-45	1-1/2-36-45	2-36-45			
1050		140-42-45	190-42-45	1-1/2-42-45	2-42-45			
1200	1-48-45	140-48-45	190-48-45	1-1/2-48-45				
1500		140-60-45	190-60-45	1-1/2-60-45	2-60-45			



Rip Repair

Use standard Flexco® Solid Plate fasteners to repair conveyor belt holes and edge tears. For jagged length-wise conveyor belt tears, standard Bolt Solid Plate fasteners can be combined with three-bolt Rip Repair fasteners. Three-bolt Rip Repair fasteners can also be used to bridge “soft” spots in the belt before they become rips.



Rip Repair Selection Information	
Belt Thickness	Fastener Size
mm	
10-14	No. 16
6-13	RP1
10-21	RP2
14-30	2-1/4



Ordering Information	
Ordering Number	Box Qty.
Steel	
RP1E	25
RP1C	100
RP2E	25
RP2C	100
2-1/4E	25
2-1/4C	100
Stainless	
RP1ES	25
RP2ES	25
2-1/4ES	25
Everdur®	
2-1/4EE	25
Turtle® Fastener-Steel	
16	50

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Installation Tools and Supplies

The only tools needed for Bolt Solid Plate fastener installation are a templet and portable hand or power tools such as wrenches and belt punches. Impact wrench driven power tools are recommended and can reduce installation time by at least 50%.

Flexco-Lok® Tape

Rigid nylon tape helps eliminate belt ripples on plied or solid-woven belting so belts run smoothly over pulleys and under cleaners. Also helps seal splices against seepage of fines and moisture.

Cracking Chisel

With a hammer and cracking chisel, individual worn plates can be easily replaced – without resorting to replacement of the entire splice.

Ordering Information		
Description	Fastener Number	Ordering Number
Hand Installation Tools		
Bolt Horn		2BH
Punch	1, 140, 190, RP1	P1P
	1-1/2, 2, 2-1/4, RP2	P2P
	2-1/2, 3	P3P
Boring Bit	1, 140, 190, RP1	B1B
	1-1/2, 2, 2-1/4, RP2	B2B
	2-1/2, 3	B3B
Wrench	1, 140, 190, RP1	S1S**
	1-1/2, 2, 2-1/4, RP2	S2S
	2-1/2, 3	S3S
Power Installation Tools		
Power Punch	1, 140, 190, RP1	HP1
	1-1/2, 2, 2-1/4, RP2	HP2
	2-1/2, 3	HP3
Power Boring Bit	1, 140, 190, RP1	HB1
	1-1/2, 2, 2-1/4, RP2	HB2
	2-1/2, 3	HB3
Power Wrench	1, 140, 190, RP1	HW1**
	1-1/2, 2, 2-1/4, RP2	HW2
	2-1/2, 3	HW3
Quick Change Chuck		5552
Bolt Breaker		
Bolt Breaker (Two Per Package)	1, 140, 190, RP1	110
	1-1/2, 2, 2-1/4, RP2	112*
	2-1/2, 3	113*
Flexco-Lok® Tape (100' per carton)		
	1, 140	FL7C
	190, 1-1/2, 2, 2-1/4	FL11C
Cracking Chisel		
	1, 140, 190	C1C
	1-1/2, 2, 2-1/4	C2C
	2-1/2, 3	C3C
Flexco® Silicone Lubricant		
Silicone Lubricant Spray		SL5-1

* Sizes 112 and 113 are straight bolt breakers—no bend
** For use with slotted nuts only



Hand installation tools



Power installation tools



Bolt Breaker



Flexco-Lok® Tape



Cracking Chisel



Silicone Lubricant Spray

Authorised Distributor:

