FLEXCO® BOLT SOLID PLATE
Fastening System

The Industry Standard for Strong, Long-Lasting Splices

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 3/16" (5 mm) to over 15/16" (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**	
	in.	**mm**	**P.I.W.**	**kN/m**	**in.**	**mm**
1	3/16 - 7/16	5 - 11	150	30	12	300
140, 140VP	3/16 - 7/16	5 - 11	225	40	14	360
190, 190VP	5/16 - 9/16	8 - 14	375	65	18	460
1-1/2	7/16 - 11/16	11 - 17	300	50	18	460
2, 2VP	9/16 - 13/16	14 - 21	440	75	30	760
2*	15/16 - 1-1/4	8 - 32	700	123	20	510
2-1/4	9/16 - 1-3/16	14 - 30	620	105	36	920
2-1/2	3/4 - 1	19 - 25	450	75	42	1070
3	15/16 & over	24 & over	560	100	48	1220

* When used with No. 3 Lead Wedlok® pattern, belts over 7/8" (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 templets, 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.

Market applications.

• Sand • Gravel • Crushed Stone • Grain
• Coal • Cement • Salt

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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-Assembeled)				
1C		ICMA		
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

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 36" (900 mm) belt

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**			
in.	**mm**	**in.**	**mm**	**in.**	**mm**	**in.**	**mm**	**in.**	**mm**	**in.**	**mm**	**in.**	**mm**
		90°		45°		90°		45°		90°		45°	
12	300	10	9	12	12	8	8	9	10	6	6	7	7
18	450	15	14	19	19	12	11	15	15	9	9	12	12
24	600	20	19	26	26	16	15	21	21	12	13	17	16
30	750	25	24	33	33	20	19	27	27	16	16	21	21
36	900	30	29	41	40	24	23	33	32	19	19	26	26
	1000		32		45		26		36		21		29
42	1050	35	34	48	47	28	27	39	38	22	21	31	30
48	1200	40	39	55	54	32	31	44	43	26	26	35	35
54	1350	45	44	63	61	36	35	48	49	29	29	40	40
60	1500	50	49	69	68	40	39	56	55	32	32	44	44
72	1800	61	59	83	82	48	49	68	65	39	39	53	53

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

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Installation Tools

90º and 45º 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							
in.	mm	1	140	190	1-1/2	2	2-1/4	2-1/2	3
90° Templets									
12	300	1-12	140-12	190-12	1-1/2-12	2-12			
18	450	1-18	140-18	190-18	1-1/2-18	2-18			
24	600	1-24	140-24	190-24	1-1/2-24	2-24	2-1/4-24	2-1/2-24	
30	750	1-30	140-30	190-30	1-1/2-30	2-30	2-1/4-30	2-1/2-30	
36	900	1-36	140-36	190-36	1-1/2-36	2-36	2-1/4-36	2-1/2-36	3-36
42	1050	1-42	140-42	190-42	1-1/2-42	2-42	2-1/4-42	2-1/2-42	3-42
48	1200	1-48	140-48	190-48	1-1/2-48	2-48	2-1/4-48	2-1/2-48	3-48
54	1350				1-1/2-54	2-54	2-1/4-54	2-1/2-54	
60	1500			190-60	1-1/2-60	2-60	2-1/4-60	2-1/2-60	3-60
72	1800				1-1/2-72	2-72	2-1/4-72	2-1/2-72	3-72
45° Templets									
12	300	1-12-45							
18	450	1-18-45		190-18-45	1-1/2-18-45				
24	600	1-24-45	140-24-45	190-24-45	1-1/2-24-45	2-24-45			
30	750	1-30-45	140-30-45	190-30-45	1-1/2-30-45	2-30-45			
36	900	1-36-45	140-36-45	190-36-45	1-1/2-36-45	2-36-45			
42	1050		140-42-45	190-42-45	1-1/2-42-45	2-42-45			
48	1200	1-48-45	140-48-45	190-48-45	1-1/2-48-45				
60	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
in.	mm	
3/8-9/16	10-14	No. 16
1/4-1/2	6-13	RP1
3/8-13/16	10-21	RP2
9/16-1-3/16	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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Hand installation tools



Power installation tools



Bolt Breaker



Flexco-Lok® Tape



Cracking Chisel

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.



Silicone Lubricant Spray

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

Authorized Distributor:

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