

# Continuous Concrete Inserts

Continuous slot Concrete Inserts are designed to provide a pre-set support system cast in concrete ceilings, walls, and floors to allow flexibility of attachment at any point along the channel. This provides an excellent support system for pipe, conduit, and cable trays.

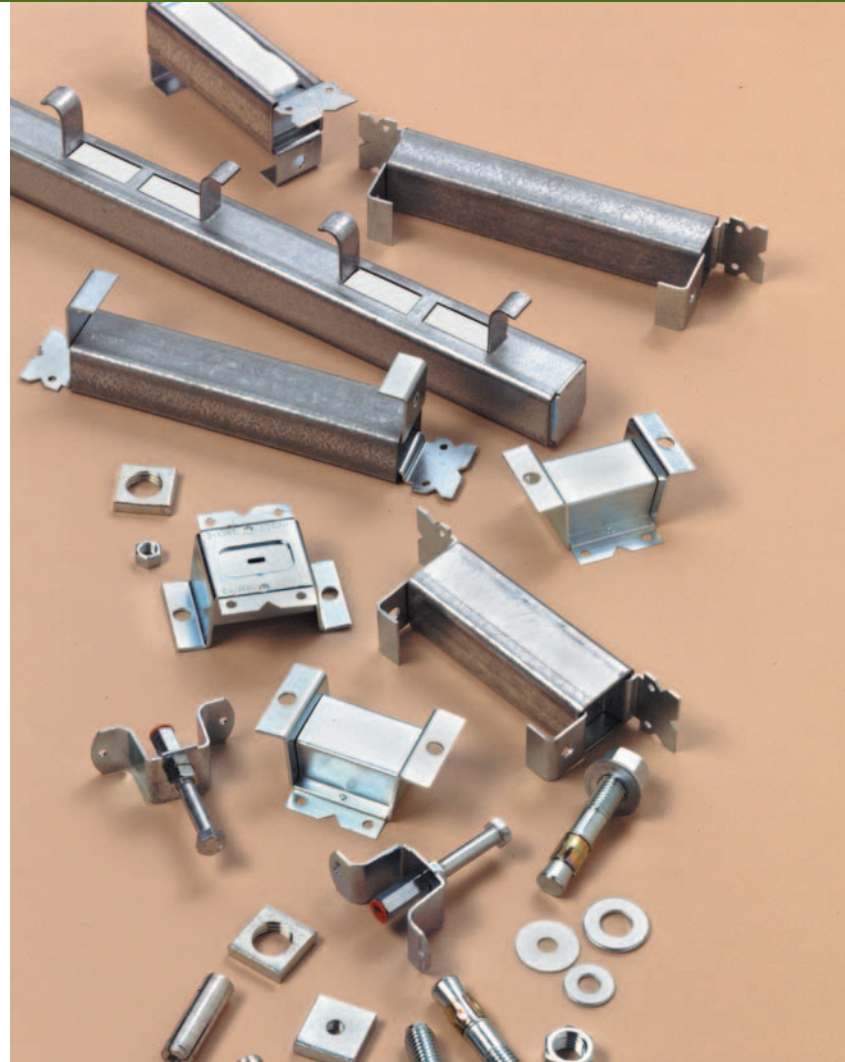
Continuous Concrete Inserts, manufactured from Cooper B-Line's standard channels, have formed anchors spaced on 4 inch (101.6 mm) centers.  $\frac{3}{16}$ " (4.8 mm) nail-holes are provided for securing the inserts to the forms.

Available in lengths from 3 inches (7.62 cm) to 240 inches (609.6 cm), Concrete Inserts are shipped complete with end caps and styrofoam filler strips which prevent seepage of concrete into the insert. Styrofoam is easily removed by pulling the convenient pull-tab.

## Materials & Finishes\*

Finish Code	Finish	Specification
PLN	Plain	ASTM A1011 33,000 PSI min. yield
GRN	Dura-Green	
ZN	Electro-Plated Zinc	ASTM B633 SC1 Type III
GALV	Pre-Galvanized	ASTM A653 33,000 PSI min. yield
HDG	Hot-Dipped Galvanized	ASTM A123
SS4	Stainless Steel Type 304	ASTM A240
SS6	Stainless Steel Type 316	ASTM A240

\*Unless otherwise noted.



## Spot Inserts

Cooper B-Line's Spot Inserts provide for economical single attachment points with full flexibility of fastener sizing, but with limited adjustment. These products are made from steel strips in accordance with ASTM A1011, 33,000 PSI min. yield. Standard finish is electro-plated zinc (ASTM B633).

## Special Concrete Inserts

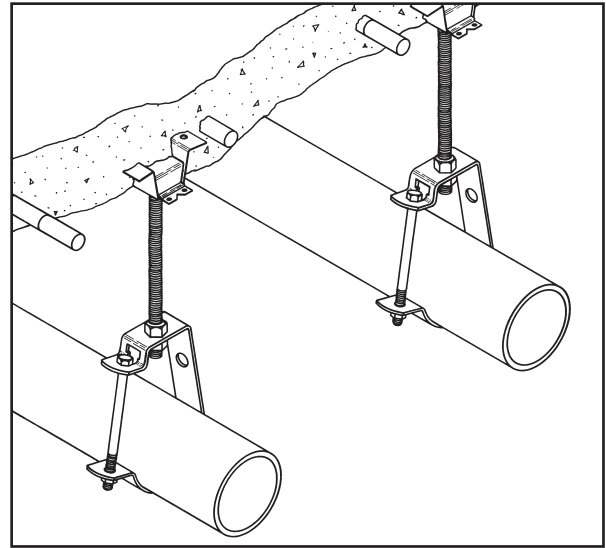
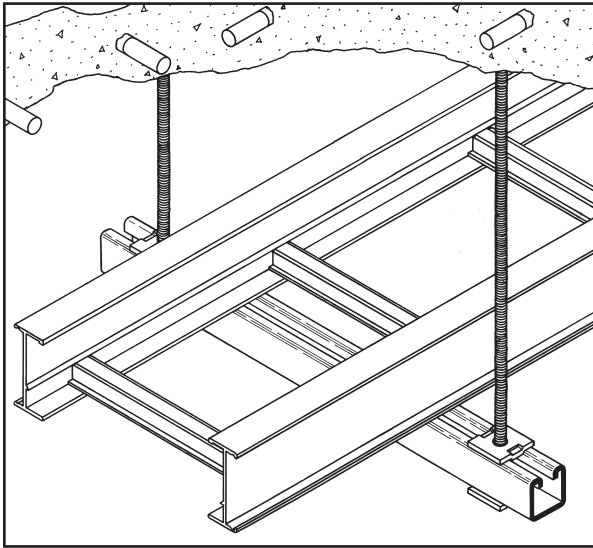
Pre-stressed inserts, inserts with studs welded to the back of the channel, and other types of special inserts are available from Cooper B-Line.

## Test Data

Independent Testing Laboratory test data available upon request.

## Metric

Metric dimensions are shown in parentheses. Unless noted, all metric dimensions are in millimeters.

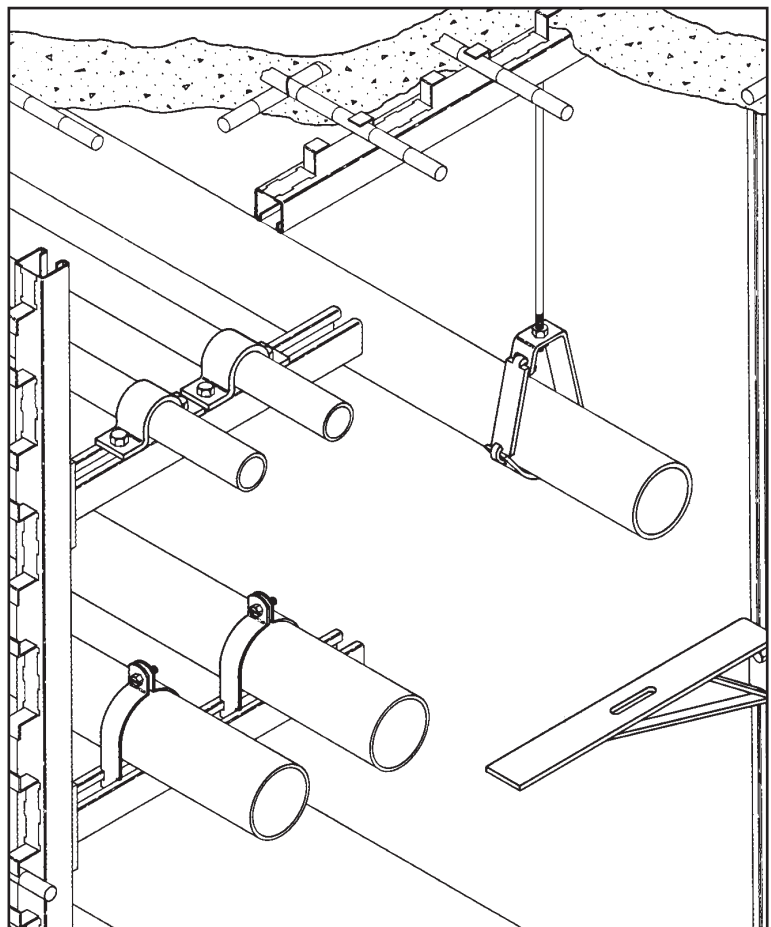


Continuous concrete inserts, installed in the ceiling, can be used to support trapeze hangers, suspended pipe racks, cable trays and single or multiple pipe hangers.

When installed in walls, continuous concrete inserts can be used as a support for tunnel stanchions, equipment braces, brackets and pipe racks.

Use spot inserts for single pipe-support or trapeze type hangers. Spot Inserts offer full flexibility of rod and fastener sizings.

Cooper B-Line Channel can be attached to continuous concrete inserts in walls or ceilings. Channel can also be attached to concrete walls and floors with expansion anchors.

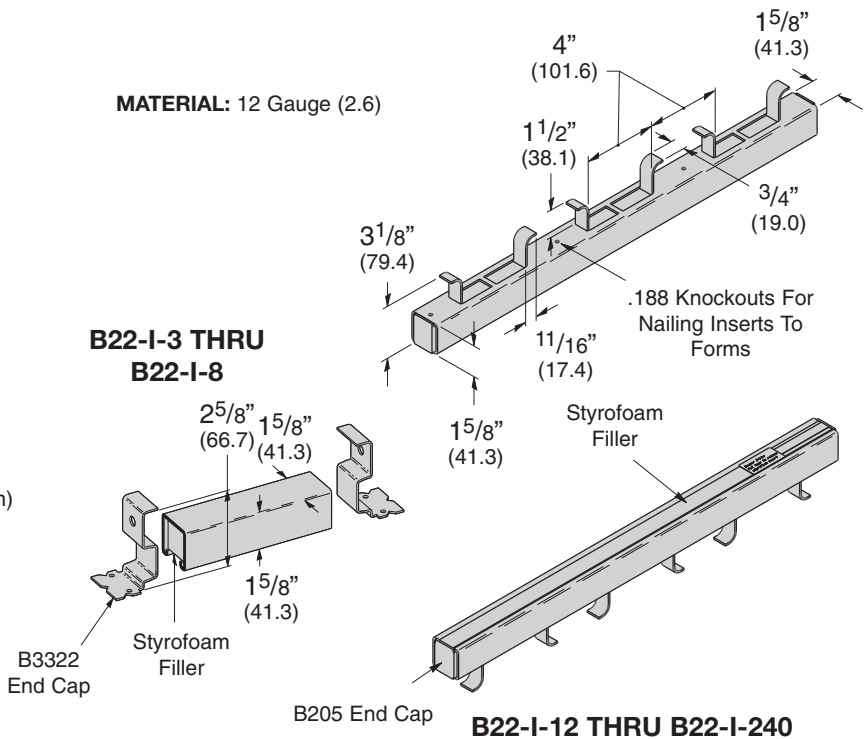


Reference page 212 for general fitting and standard finish specifications.

# Continuous Concrete Inserts

## B22I CONTINUOUS CONCRETE INSERT

- Design Load for B22-I-12 thru B22-I-240 is 2,000 lbs. (8.89 kN) per foot of concrete insert length with safety factor of 3 in 3000 psi concrete.
- Loads concentrated within the last 2 inches (50.8 mm) of concrete inserts 8" (203.2 mm) and longer should not exceed 1,000 lbs. (4.45kN).
- Concrete insert should be secured to the forms on 16" (406.4 mm) to 24" (609.6 mm) intervals.
- B22-I continuous concrete inserts are made from B22 channel. Use channel nuts designed for use in B22 channel.
- B22-I concrete inserts are supplied with styrofoam fillers. B3322 end caps are furnished with inserts through 8" (203.2 mm) long, and B205 end caps are furnished with inserts 12" (304.8 mm) and longer.
- Material: Plain Steel ASTM A1011 33,000 PSI min. yield or Pre-Galvanized Steel ASTM A653SS 33,000 PSI min. yield.
- Finish: Plain, Dura-Green, Pre-Galv, HDG



Part No.	Length		Wt./C		Design Load	
	in.	mm	Lbs.	kg	Lbs.	kN
B22-I-3	3"	(76)	72	(32.6)	500	(2.22)
B22-I-4	4"	(101)	88	(39.9)	800	(3.56)
B22-I-6	6"	(152)	120	(54.4)	1000	(4.45)
B22-I-8	8"	(203)	152	(68.9)	1200	(5.34)

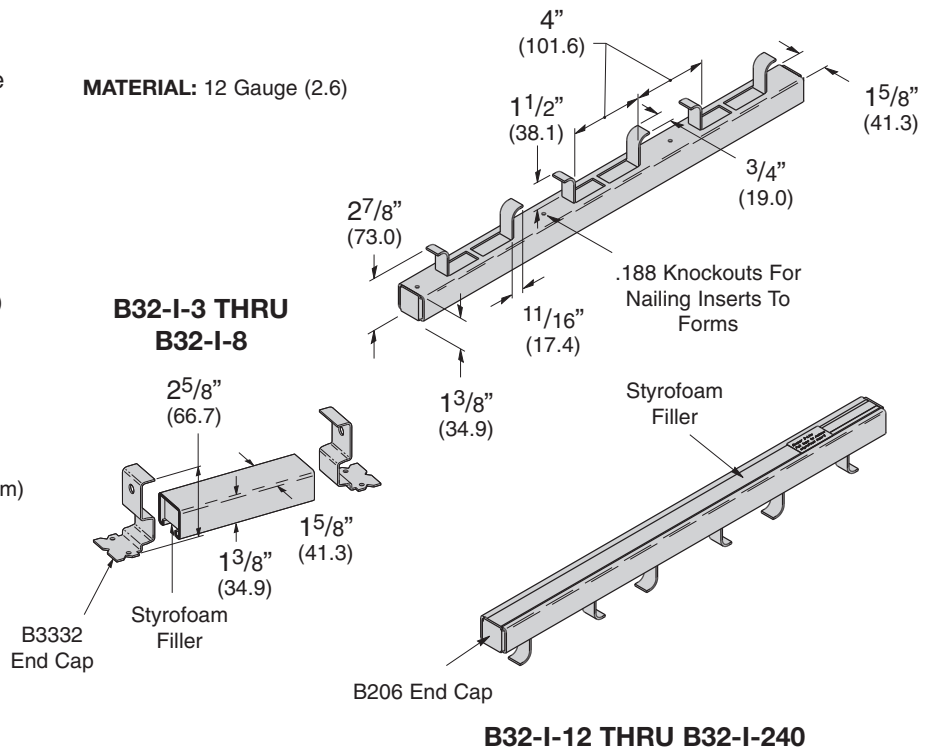
Part No.	Length		Wt./C	
	in.	mm	Lbs.	kg
B22-I-12	12"	(305)	224	(101.6)
B22-I-16	16"	(406)	289	(131.1)
B22-I-20	20"	(508)	353	(160.1)
B22-I-24	24"	(609)	420	(190.5)
B22-I-32	32"	(813)	553	(250.8)
B22-I-36	36"	(914)	620	(281.2)
B22-I-40	40"	(1016)	686	(311.1)
B22-I-48	48"	(1219)	820	(371.9)
B22-I-60	60"	(1524)	1018	(461.7)
B22-I-72	72"	(1829)	1218	(552.5)
B22-I-84	84"	(2133)	1417	(642.7)
B22-I-96	96"	(2438)	1616	(733.0)
B22-I-108	108"	(2743)	1816	(823.7)
B22-I-120	120"	(3048)	2016	(914.4)
B22-I-144	144"	(3657)	2416	(1095.9)
B22-I-168	168"	(4267)	2816	(1277.3)
B22-I-192	192"	(4877)	3216	(1458.7)
B22-I-216	216"	(5486)	3616	(1640.2)
B22-I-240	240"	(6096)	4016	(1821.6)

Reference page 212 for general fitting and standard finish specifications.

## B32I CONTINUOUS CONCRETE INSERT

- Design Load for B32-I-12 thru B32-I-240 is 2,000 lbs. (8.89 kN) per foot of concrete insert length with safety factor of 3 in 3000 psi concrete.
- Loads concentrated within the last 2 inches (50.8 mm) of concrete inserts 8" (203.2 mm) and longer should not exceed 1,000 lbs. (4.45kN).
- Concrete insert should be secured to the forms on 16" (406.4 mm) to 24" (609.6 mm) intervals.
- B32-I continuous concrete inserts are made from B32 channel. Use channel nuts designed for use in B32 channel.
- B32-I concrete inserts are supplied with styrofoam fillers. B3332 end caps are furnished with inserts through 8" (203.2 mm) long, and B206 end caps are furnished with inserts 12" (304.8 mm) and longer.
- Material: Plain Steel ASTM A1011 33,000 PSI min. yield or Pre-Galvanized Steel ASTM A653SS 33,000 PSI min. yield.
- Finish: Plain, Dura-Green, Pre-Galv, HDG

**MATERIAL:** 12 Gauge (2.6)



Part No.	Length		Wt./C		Design Load	
	in.	mm	Lbs.	kg	Lbs.	kN
B32-I-3	3"	(76)	65	(29.5)	500	(2.22)
B32-I-4	4"	(101)	80	(36.3)	800	(3.56)
B32-I-6	6"	(152)	108	(49.0)	1000	(4.45)
B32-I-8	8"	(203)	137	(62.1)	1200	(5.34)

Length Part No.	Wt./C		Lbs.	kg
	in.	mm		
B32-I-12	12"	(305)	202	(91.6)
B32-I-16	16"	(406)	262	(118.8)
B32-I-20	20"	(508)	316	(143.3)
B32-I-24	24"	(609)	376	(170.5)
B32-I-32	32"	(813)	496	(225.0)
B32-I-36	36"	(914)	556	(252.2)
B32-I-40	40"	(1016)	616	(279.4)
B32-I-48	48"	(1219)	736	(333.8)
B32-I-60	60"	(1524)	915	(415.0)
B32-I-72	72"	(1829)	1095	(496.7)
B32-I-84	84"	(2133)	1274	(577.9)
B32-I-96	96"	(2438)	1453	(659.0)
B32-I-108	108"	(2743)	1633	(740.7)
B32-I-120	120"	(3048)	1813	(822.3)
B32-I-144	144"	(3657)	2173	(985.6)
B32-I-168	168"	(4267)	2533	(1148.9)
B32-I-192	192"	(4877)	2893	(1312.2)
B32-I-216	216"	(5486)	3253	(1475.5)
B32-I-240	240"	(6096)	3613	(1638.8)

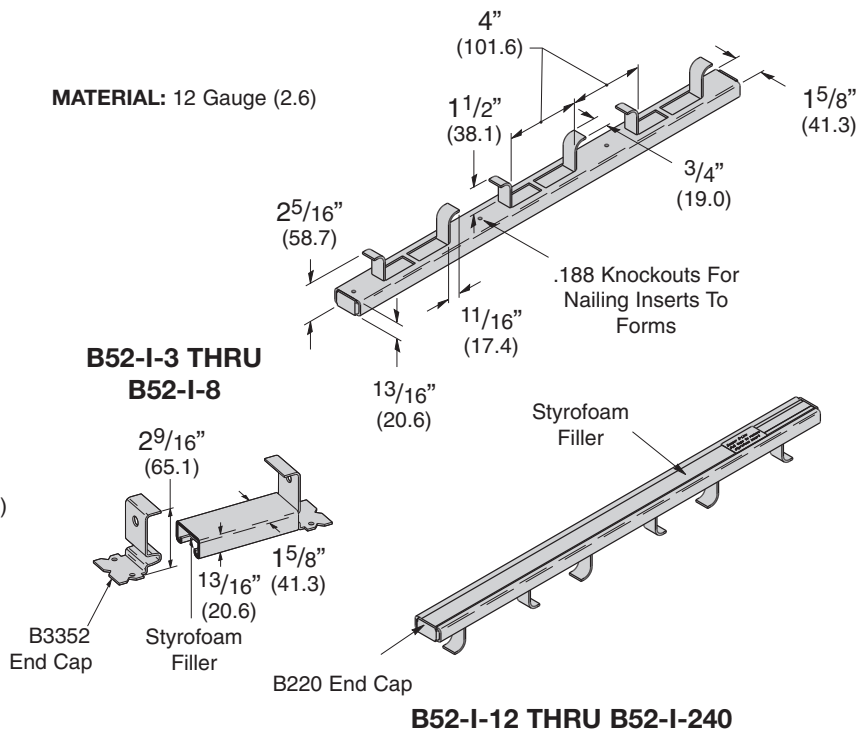
Reference page 212 for general fitting and standard finish specifications.

# Continuous Concrete Inserts

## B52I CONTINUOUS CONCRETE INSERT

- Design Load for B52-I-12 thru B52-I-240 is 1,500 lbs. (6.67 kN) per foot of concrete insert length with safety factor of 3 in 3000 psi concrete.
- Loads concentrated within the last 2 inches (50.8 mm) of concrete inserts 8" (203.2 mm) and longer should not exceed 750 lbs. (3.33kN).
- Concrete insert should be secured to the forms on 16" (406.4 mm) to 24" (609.6 mm) intervals.
- B52-I continuous concrete inserts are made from B52 channel. Use channel nuts designed for use in B52 channel.
- B52-I concrete inserts are supplied with styrofoam fillers. B3352 end caps are furnished with inserts through 8" (203.2 mm) long, and B220 end caps are furnished with inserts 12" (304.8 mm) and longer.
- Material: Plain Steel ASTM A1011 33,000 PSI min. yield or Pre-Galvanized Steel ASTM A653SS 33,000 PSI min. yield.
- Finish: Plain, Dura-Green, Pre-Galv, HDG

**MATERIAL:** 12 Gauge (2.6)



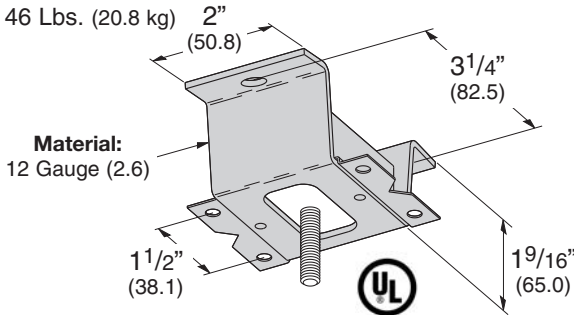
Part No.	Length		Wt./C		Design Load	
	in.	mm	Lbs.	kg	Lbs.	kN
B52-I-3	3"	(76)	53	(24.0)	400	(1.78)
B52-I-4	4"	(101)	63	(28.6)	500	(2.22)
B52-I-6	6"	(152)	85	(38.5)	750	(3.33)
B52-I-8	8"	(203)	106	(48.1)	1000	(4.45)

Part No.	Length		Wt./C	
	in.	mm	Lbs.	kg
B52-I-12	12"	(305)	157	(71.2)
B52-I-16	16"	(406)	202	(91.6)
B52-I-20	20"	(508)	237	(107.5)
B52-I-24	24"	(609)	282	(127.9)
B52-I-32	32"	(813)	373	(169.2)
B52-I-36	36"	(914)	419	(190.0)
B52-I-40	40"	(1016)	464	(210.4)
B52-I-48	48"	(1219)	556	(252.2)
B52-I-60	60"	(1524)	692	(313.9)
B52-I-72	72"	(1829)	829	(376.0)
B52-I-84	84"	(2133)	965	(437.7)
B52-I-96	96"	(2438)	1107	(502.1)
B52-I-108	108"	(2743)	1237	(561.1)
B52-I-120	120"	(3048)	1374	(623.2)
B52-I-144	144"	(3657)	1648	(747.5)
B52-I-168	168"	(4267)	1922	(871.8)
B52-I-192	192"	(4877)	2196	(996.1)
B52-I-216	216"	(5486)	2470	(1120.4)
B52-I-240	240"	(6096)	2744	(1244.6)

Reference page 212 for general fitting and standard finish specifications.

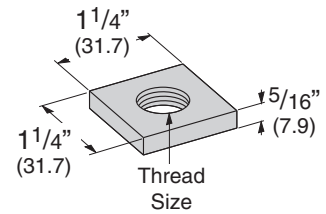
## B2500 SPOT INSERT

- Design Load 600 Lbs. (2.67 kN)
- Safety Factor of 5
- Order N2500 Nuts Separately
- Material: Steel ASTM A1011  
33,000 PSI min. yield
- Standard finish: ZN
- Wt./C 46 Lbs. (20.8 kg)



## N2500 INSERT SQUARE NUT

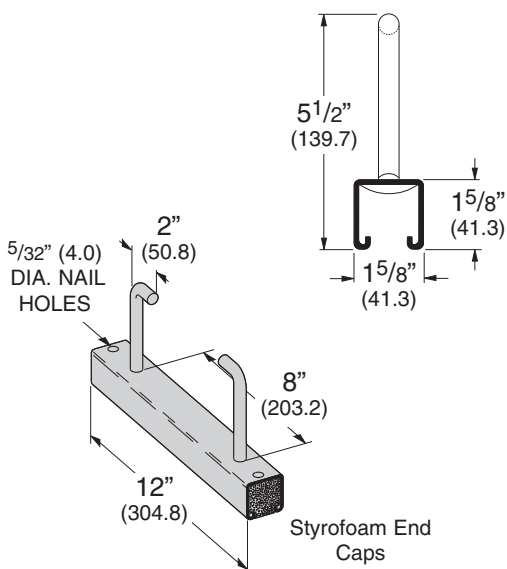
- For use in B2500 Spot Insert
- Material: Steel ASTM A36
- Standard finish: ZN



Part No.	Thread Size	Wt./C	
		Lbs.	kg
N2500-1/4	1/4"-20	13	(5.9)
N2500-5/16	5/16"-18	13	(5.9)
N2500-3/8	3/8"-16	12	(5.4)
N2500-1/2	1/2"-13	12	(5.4)
N2500-5/8	5/8"-11	11	(5.0)
N2500-3/4	3/4"-10	10	(4.5)
N2500-7/8	7/8"-9	9	(4.1)

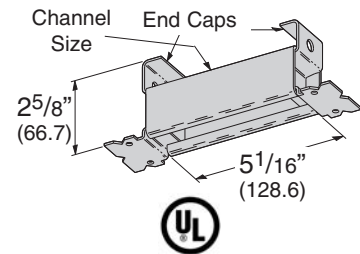
## B2503 HEAVY DUTY SPOT INSERT

- Designed for use where heavy loads are required in curtain wall applications
- Design Load is 5000 Lbs. (22.2 kN) with a Safety Factor of 3
- Loading based on two N225 channel nuts spaced 3" (76.2 mm) on center and a minimum of 2" (50.8 mm) from the end of the insert
- Styrofoam end caps prevent concrete seepage into the channel
- 12" (304.8 mm) long insert is anchored into the concrete at a depth of 5 1/2" (139.7 mm)
- Material: 12 Gauge (2.6 mm) thick steel
- Standard finish: ZN
- Wt./C 42 Lbs. (19.0 kg)



## B2505 THRU B2508 SPOT INSERT

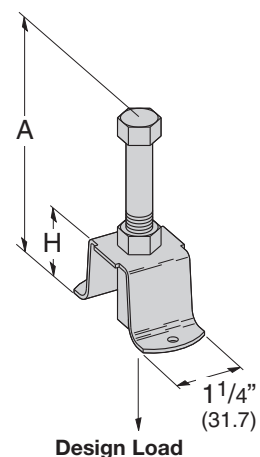
- Safety Factor of 5
- To support 10" (250) pipe use B2505 insert with 5/8"-11 Channel Nuts.
- To support up to and including 8" (200) pipes use B2506, B2507 and B2508 inserts with the desired Channel Nuts.
- Standard finish: ZN



Part No.	Channel Style	End Cap Part No.	Design Load		Maximum Pipe Size	Wt./C	
			Lbs.	kN		Lbs.	kg
B2505	B22	B3322	1200	(5.34)	10" (250)	96	(43.5)
B2506	B32	B3332	1000	(4.45)	8" (200)	88	(39.9)
B2507	B42	B3342	1000	(4.45)	8" (200)	77	(34.9)
B2508	B52	B3352	1000	(4.45)	8" (200)	69	(31.3)

## B2501 LIGHT DUTY SPOT INSERT

- Safety Factor of 2
- The concrete attachment problem solver for light duty applications.
- Fast and easy applications.
- No concrete leakage problems.
- One piece unitized construction.
- Color coded cap on thread for rod size identification and to prevent concrete seepage. (1/4"-Yellow, 3/8"-Red, 1/2"-Blue)



Part No. & Size	Height A		Height H		Design Load		Wt./C	
	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN
B2501-1/4	2 7/16"	(61.9)	7/8"	(22.2)	250	(1.11)	16	(7.2)
B2501-3/8	3 1/16"	(77.8)	1 7/8"	(47.6)	610	(2.71)	22	(9.9)
B2501-1/2	4 1/8"	(104.8)	1 7/8"	(47.6)	880	(3.91)	26	(11.7)

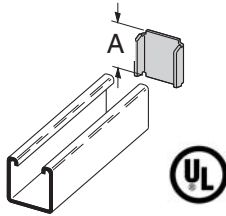
Reference page 212 for general fitting and standard finish specifications.

Concrete Inserts

# Insert Accessories

## B205, B206, B220 X TYPE END CAPS

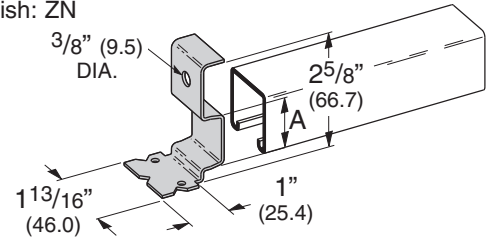
- UL listed for raceway use only
- Material: 12 Gauge (2.6)
- Standard finish: ZN



Part No.	Use With	A	Wt./C	
			Lbs.	kg
B205	B22	1 <sup>21</sup> / <sub>32</sub> " (42.0)	10	(4.5)
B206	B32	1 <sup>13</sup> / <sub>32</sub> " (35.7)	8	(3.6)
B220	B52	<sup>27</sup> / <sub>32</sub> " (21.4)	4	(1.8)

## B3322, B3332, B3342, B3352 Y TYPE END CAPS

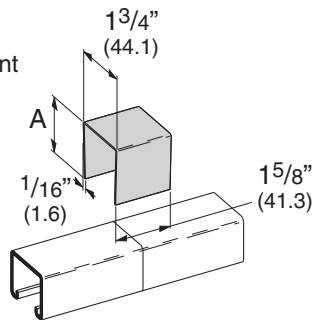
- UL listed for raceway use only
- Material: 14 Gauge (1.9)
- Standard finish: ZN



Part No.	Use With	A	Wt./C	
			Lbs.	kg
B3322	B22	1.270 (32.2)	15	(6.8)
B3332	B32	1.000 (25.4)	15	(6.8)
B3342	B42	.645 (16.4)	15	(6.8)
B3352	B52	.460 (11.7)	15	(6.8)

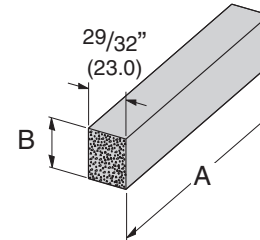
## B380 JOINT SPLICE PLATE

- Used at splice points to prevent concrete seepage in long continuous runs of concrete inserts.
- Material: 18 Gauge (1.2)
- Standard finish: GALV



Part No.	Use With	A	Wt./C	
			Lbs.	kg
B380-22	B22	1 <sup>5</sup> / <sub>8</sub> " (41.3)	11	(5.0)
B380-32	B32	1 <sup>3</sup> / <sub>8</sub> " (34.9)	10	(4.5)
B380-42	B42	1" (25.4)	9	(4.1)
B380-52	B52	<sup>13</sup> / <sub>16</sub> " (20.6)	7	(3.2)

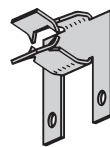
## B22IFS-B52IFS STYROFOAM FILLER STRIP



Part No.	A		B	Wt./C	
	Ft.	mm		Lbs.	kg
B22-IFS	4'	(1219)	1 <sup>7</sup> / <sub>32</sub> " (309)	10	(4.5)
B32-IFS	4'	(1219)	1" (254)	9	(4.1)
B52-IFS	4'	(1219)	<sup>21</sup> / <sub>32</sub> " (167)	7	(3.2)

## PIPE SLEEVE FASTENERS

- Allows for rigid attachment of pipe sleeves to wall and floor forms for concrete pouring.
- Accommodates Schedule 40, Schedule 80, or <sup>5</sup>/<sub>16</sub>" (8) and smaller wall thickness.
- Simply installed with a hammer.

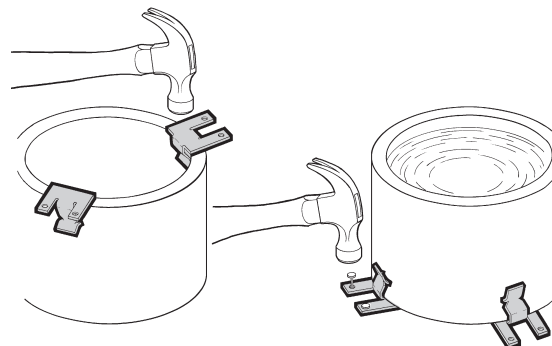


BD40



BE-5-8 & BE-9-12

Part No.	Sleeve Diameter	Wall Thickness
BD40	All Dia.	<sup>5</sup> / <sub>16</sub> " & under
BE-5-8	6"	Schedule 80 pipe
BE-9-12	9" - 14"	Schedule 80 pipe



Reference page 212 for general fitting and standard finish specifications.

## WEDGE ANCHOR

Catalog Number	Thread Size	Size		Thread Length		Drill/Hole Size		Load Cap. Tension*		Load Cap. Shear*	
		in.	mm	in.	mm	in.	mm	lbs.	kN	lbs.	kN
AWA-37-225	3/8"-16	3/8" x 2 1/4"	(9 x 57)	1 1/4"	(32)	3/8"	(9)	760	(3.38)	940	(4.18)
AWA-37-275	3/8"-16	3/8" x 2 3/4"	(9 x 70)	1 5/8"	(41)						
AWA-37-300	3/8"-16	3/8" x 3"	(9 x 76)	1 7/8"	(47)						
AWA-37-350	3/8"-16	3/8" x 3 1/2"	(9 x 89)	2 3/8"	(60)						
AWA-37-375	3/8"-16	3/8" x 3 3/4"	(9 x 95)	2 5/8"	(66)						
AWA-37-500	3/8"-16	3/8" x 5"	(9 x 127)	3 7/8"	(98)	1/2"	(13)	1390	(6.18)	1700	(7.56)
AWA-50-275	1/2"-13	1/2" x 2 3/4"	(13 x 70)	1 3/8"	(35)						
AWA-50-375	1/2"-13	1/2" x 3 3/4"	(13 x 95)	2 3/8"	(60)						
AWA-50-450	1/2"-13	1/2" x 4 1/2"	(13 x 114)	3 1/8"	(79)						
AWA-50-550	1/2"-13	1/2" x 5 1/2"	(13 x 140)	4 1/8"	(105)						
AWA-50-700	1/2"-13	1/2" x 7"	(13 x 178)	5 5/8"	(143)						



Note: Based on concrete compression strength of 4,000 psi using applied safety factor of 4.

## HOLLOW BASE DROP-IN ANCHORS

Catalog Number	Rod Size	Overall Length		Sleeve Length		Drill/Hole Diameter		Load Cap. Tension*		Load Cap. Shear*	
		in.	mm	in.	mm	in.	mm	lbs.	kN	lbs.	kN
ADH-25	1/4"-20	7/8"	(22)	5/8"	(16)	3/8"	(9)	285	(1.27)	300	(1.33)
ADH-37	3/8"-16	1 5/16"	(33)	1 5/16"	(24)	5/8"	(16)	520	(2.31)	640	(2.84)
ADH-50	1/2"-13	1 3/4"	(44)	1 1/4"	(32)	3/4"	(19)	1005	(4.47)	1005	(44.70)
9323	1/4"	--	--	--	--	--	--	--	--	--	--
9343	3/8"	--	--	--	--	--	--	--	--	--	--
9353	1/2"	--	--	--	--	--	--	--	--	--	--



Note: Based on concrete compression strength of 4,000 psi using applied safety factor of 4.

## RAPID ROD™ HANGERS FOR CONCRETE

Catalog Number	Rod Size	Shank Size & Length		Drill/Hole Size		Load Cap. Tension*		Load Cap. Shear*	
		in.	mm	in.	mm	Lbs.	kN	Lbs.	kN
ARC-25-125	1/4"-20	1/4" x 1 1/4"	(6 x 32)	1/4"	(6)	485	(2.16)	610	(2.71)
ARC-37-150	3/8"-16	1/4" x 1 1/2"	(6 x 38)	1/4"	(6)	650	(2.89)	660	(2.93)
ARC-50-275	1/2"-13	3/8" x 2 3/4"	(9 x 70)	1/4"	(6)	1510	(6.71)	1580	(7.03)



Note: Based on concrete compression strength of 4,000 psi using applied safety factor of 4.

## RAPID ROD™ HANGERS FOR STEEL

Catalog Number	Rod Size	Shank Size & Length		Load Cap. Tension* In 12 Ga.		Load Cap. Tension* In 1/4"	
		in.	mm	Lbs.	kN	Lbs.	kN
ARS-25-100	1/4"-20	1/4" x 1"	(6 x 25)	390	(1.75)	1260	(5.60)
ARS-37-100HN	3/8"-16	1/4" x 1" *	(6 x 25)	512	(2.28)	1260	(5.60)
ARS-37-150	3/8"-16	1/4" x 1 1/2"	(6 x 38)	390	(1.75)	1260	(5.60)
ARS-37-150HN	3/8"-16	1/4" x 1 1/2"	(6 x 38)	512	(2.28)	1260	(5.60)
ARS-37-200	3/8"-16	1/4" x 2"	(6 x 51)	390	(1.75)	1260	(5.60)



Note: Loads shown for ASTM A36 beams and ASTM A572 steel purlins include a safety factor of 4. For UL and FM listings, steel rapid rod must be installed with a retaining nut.

Reference page 212 for general fitting and standard finish specifications.

## PLASTIC SCREW ANCHORS

• Kits contain 100 anchors, 100 screws, and 1 concrete drill bit



Catalog Number	Screw Size	Load Cap. Tension*		Load Cap. Shear*	
		Lbs.	kN	Lbs.	kN
APC-8K	#8 x 1"	110	(0.49)	70	(0.31)
APC-10K	#10 x 1"	140	(0.62)	90	(0.40)
APC-12K	#12 x 1"	140	(0.62)	90	(0.40)

Note: Based on concrete compression strength of 4,000 psi using applied safety factor of 4.

## WOOD-KNOCKER™ ANCHORS



Catalog Number	Rod Size	Color	Insert Thread Length		Overall Length		Load Cap. Tension*		Load Cap. Shear*	
			in.	mm	in.	mm	lbs.	kN	lbs.	kN
ACPW-25	1/4"-20	Brown	3/8"	(9)	1 7/8"	(47)	930	(4.13)	370	(1.64)
ACPW-37	3/8"-16	Green	5/8"	(16)	1 7/8"	(47)	1200	(5.33)	1330	(5.91)
ACPW-50	1/2"-13	Yellow	1 1/16"	(17)	1 7/8"	(47)	1200	(5.33)	1840	(8.18)
ACPW-62	5/8"-11	Red	1 5/16"	(24)	1 7/8"	(47)	1160	(5.16)	2800	(12.45)
ACPW-75	3/4"-10	Purple	1 1/8"	(28)	1 7/8"	(47)	1160	(5.16)	2800	(12.45)

Notes: Based on normal weight concrete with minimum compression strength of 3,000 psi. Allowable load capacities are calculated using applied safety factor of 4. Minimum embedment is 2" (51mm).

Wood-Knocker™ is a trademark of Powers® Fasteners

## BANG-IT™ ANCHORS



Catalog Number	Rod Size	Color	Insert Thread Length		Upper Deck Tension Load*		Lower Deck Tension Load*		Upper Deck Shear Load*		Lower Deck Shear Load*	
			in.	mm	lbs.	kN	lbs.	kN	lbs.	kN	lbs.	kN
ACPD-25	1/4"-20	Brown	3/8"	(9)	1112	(4.94)	830	(3.69)	625	(2.78)	625	(2.78)
ACPD-37	3/8"-16	Green	5/8"	(16)	1435	(6.38)	830	(3.69)	837	(3.72)	837	(3.72)
ACPD-50	1/2"-13	Yellow	1 1/16"	(17)	1775	(7.89)	830	(3.69)	837	(3.72)	837	(3.72)
ACPD-62	5/8"-11	Red	1 5/16"	(24)	2200	(9.78)	990	(4.40)	837	(3.72)	837	(3.72)
ACPD-75	3/4"-10	Purple	1 1/8"	(28)	2200	(9.78)	990	(4.40)	837	(3.72)	837	(3.72)
ACPD-87	7/8"-9	Black	1 5/16"	(33)	2200	(9.78)	990	(4.40)	837	(3.72)	837	(3.72)

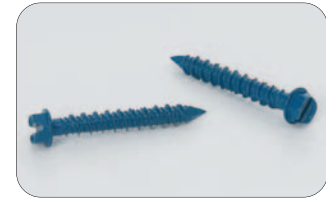
Notes: Based on normal weight concrete with minimum compression strength of 3,000 psi. Allowable load capacities are calculated using applied safety factor of 4. Minimum insert spacing of 12" (305mm), minimum end spacing of 12" (305mm). Minimum embedment is 2" (51mm). Length of sleeve is 3 3/8" (86mm).

Bang-It™ is a trademark of Powers® Fasteners

Reference page 212 for general fitting and standard finish specifications.

## 1/4" CONCRETE SCREWS

Catalog Number	Rod Size		Drill/Hole Size		Load Cap. Tension*		Load Cap. Shear*	
	in.	mm	in.	mm	lbs.	kN	lbs.	kN
ACS-125H	1/4" x 1 1/4"	(6 x 32)	3/16"	(5)	265	(1.18)	205	(0.91)
ACS-175H	1/4" x 1 3/4"	(6 x 44)	3/16"	(5)	265	(1.18)	205	(0.91)
ACS-225H	1/4" x 2 1/4"	(6 x 57)	3/16"	(5)	265	(1.18)	205	(0.91)
ACS-275H	1/4" x 2 3/4"	(6 x 70)	3/16"	(5)	265	(1.18)	205	(0.91)
ACS-325H	1/4" x 3 1/4"	(6 x 82)	3/16"	(5)	265	(1.18)	205	(0.91)



Note: Based on 1" (25mm) embedment with concrete compression strength of 4,000 psi using applied safety factor of 4. Consult factory for loading of other embedment depths.

## SELF-TAPPING MACHINE SCREW ANCHOR

Catalog Number	Rod Size	Thread Depth		Drill/Hole Size		Load Cap. Tension*		Load Cap. Shear*	
		in.	mm	in.	mm	Lbs.	kN	Lbs.	kN
ATM-37	3/8"-16	1 1/16"	(17)	1/2"	(13)	540	(2.40)	825	(3.67)



Note: Based on concrete compression strength of 4,000 psi in uncracked concrete using applied safety factor of 4. Minimum concrete thickness 4" (101mm) with minimum embedment of 1 5/8" (41mm)

## WALL SCREWS

Catalog Number	Head Type	Thread Depth		Minimum Embedment		Load Cap. Tension*		Load Cap. Shear*	
		in.	mm	in.	mm	Lbs.	kN	Lbs.	kN
AWS-CH	Combo	3/16" x 1 1/4"	(5 x 32)	3/4"	(19)	90	(0.40)	260	(1.15)
AWS-OH	Oval	3/16" x 1 1/4"	(5 x 32)	3/4"	(19)	90	(0.40)	260	(1.15)
AWS-PH	Pan	3/16" x 1 1/4"	(5 x 32)	3/4"	(19)	90	(0.40)	260	(1.15)



Note: Based on concrete compression strength of 4,000 psi. Allowable load capacities are calculated using an applied safety factor of 4.

## SLEEVE TYPE EXPANSION ANCHORS

Catalog Number	Anchor Size & Length		Thread Length		Drill/Hole Diameter		Minimum Embedment		Load Cap. Tension*		Load Cap. Shear*	
	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kN	lbs.	kN
ASA-37-187HN	3/8" x 1 7/8"	(9 x 47)	1 5/8"	(41)	3/8"	(9)	1 5/8"	(41)	670	(2.98)	610	(2.71)
ASA-37-300HN	3/8" x 3"	(9 x 76)	1 5/8"	(41)	3/8"	(9)	1 5/8"	(41)	670	(2.98)	610	(2.71)
ASA-37-400HN	3/8" x 4"	(9 x 101)	1 5/8"	(41)	3/8"	(9)	1 5/8"	(41)	670	(2.98)	610	(2.71)
ASA-50-225HN	1/2" x 2 1/4"	(13 x 57)	2 1/4"	(57)	1/2"	(13)	2 1/4"	(57)	1255	(5.58)	1055	(4.69)
ASA-50-300HN	1/2" x 3"	(13 x 76)	2 1/4"	(57)	1/2"	(13)	2 1/4"	(57)	1255	(5.58)	1055	(4.69)
ASA-50-400HN	1/2" x 4"	(13 x 101)	2 1/4"	(57)	1/2"	(13)	2 1/4"	(57)	1255	(5.58)	1055	(4.69)
ASA-50-525HN	1/2" x 5 1/4"	(13 x 133)	2 1/4"	(57)	1/2"	(13)	2 1/4"	(57)	1255	(5.58)	1055	(4.69)
ASA-50-600HN	1/2" x 6"	(13 x 152)	2 1/4"	(57)	1/2"	(13)	2 1/4"	(57)	1255	(5.58)	1055	(4.69)



Note: Based on concrete compression strength of 4,000 psi using applied safety factor of 4.

Reference page 212 for general fitting and standard finish specifications.