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 our standard channels, have formed anchors spaced on 4 inch (101.6 mm) centers. The 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*

*Unless otherwise noted.

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

Spot Inserts

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

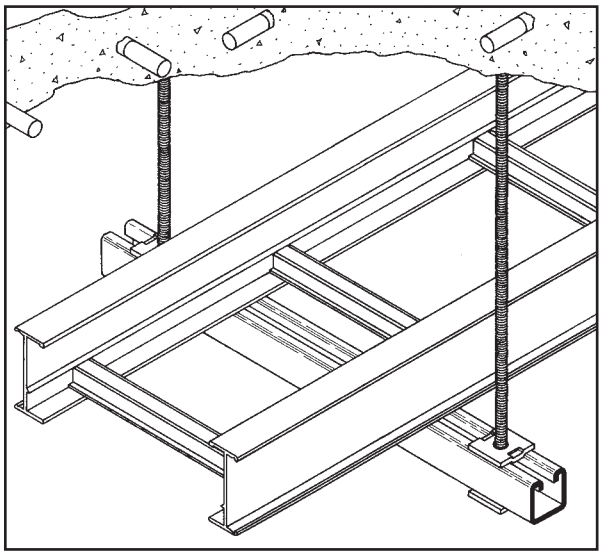
Pre-stressed inserts, inserts with studs welded to the back of the channel, and other types of special inserts are available.

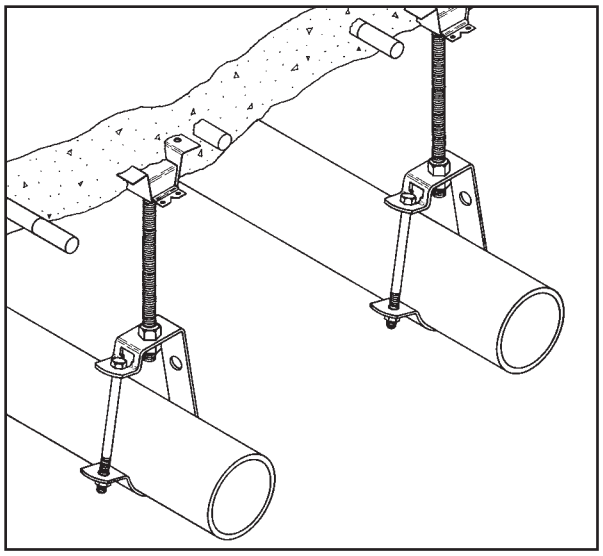
Test Data

Independent Testing Laboratory test data available upon request.

Metric

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



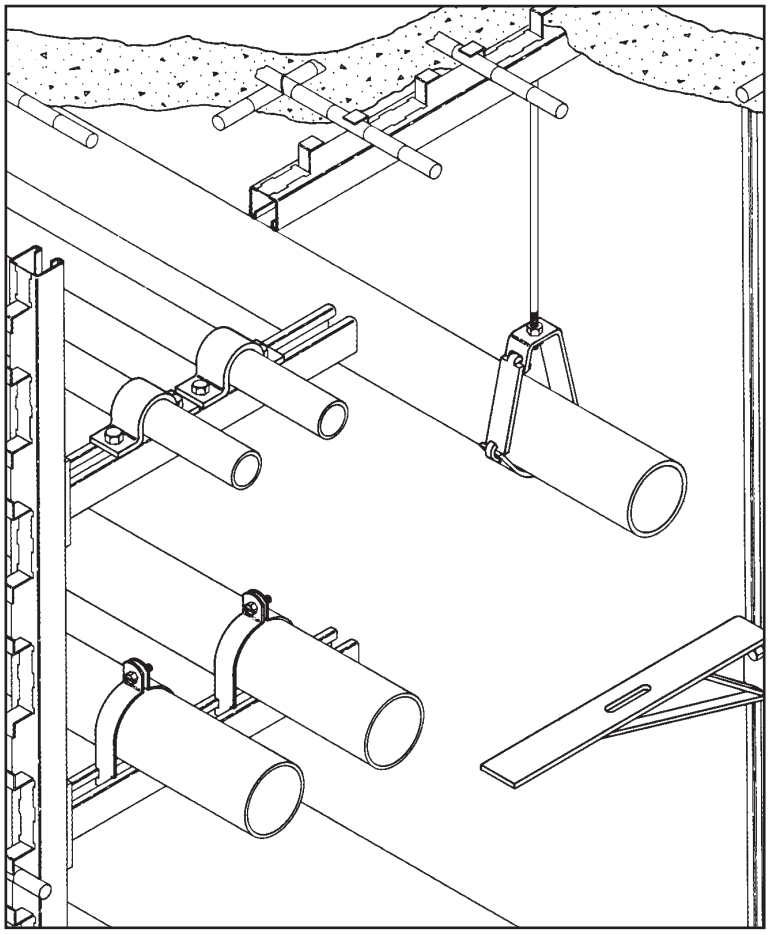


Continuous concrete inserts, installed in the ceiling, can be used to support trapeze hangers, suspended pipe racks, cable trays and single or multiple pipe hangers.

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.

Our 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.

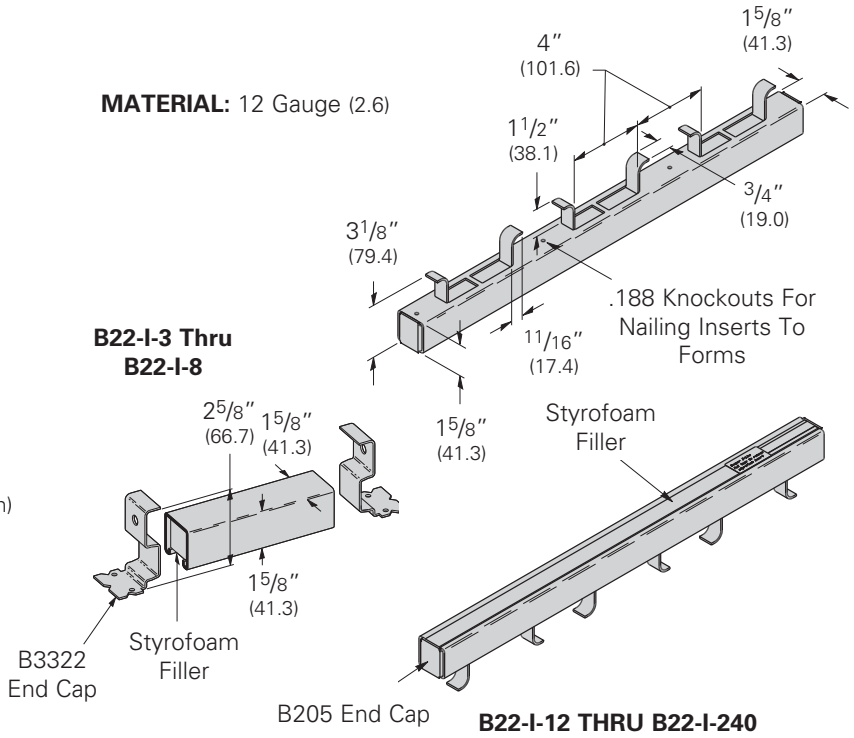


Reference page 254 for general fitting and standard finish specifications.

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

MATERIAL: 12 Gauge (2.6)



Part No.	Length in.	Length mm	Wt./C Lbs.	Wt./C kg	Design Load Lbs.	Design Load 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)

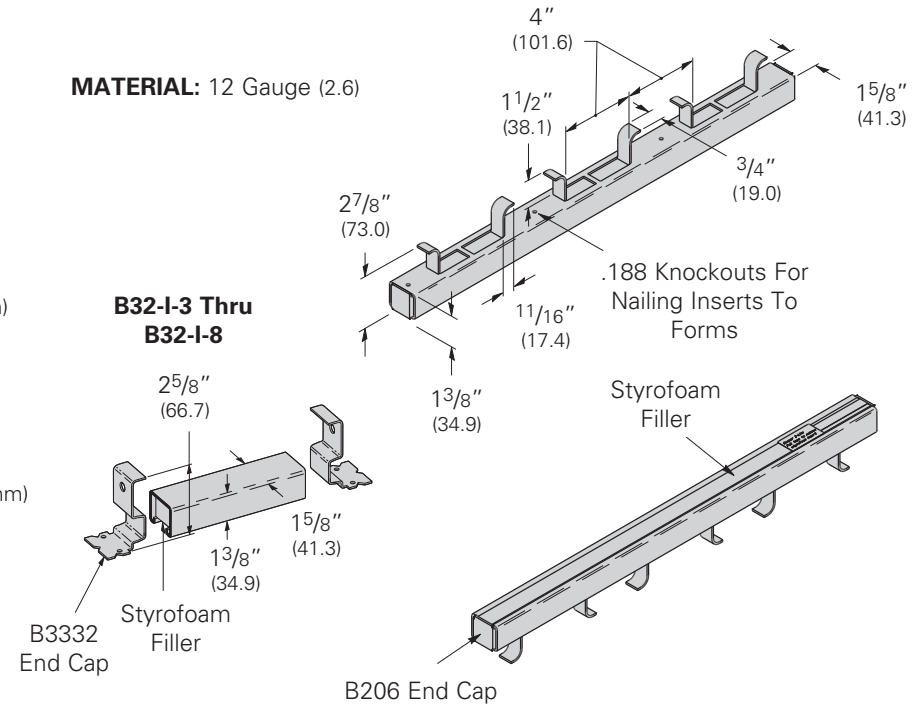
Part No.	Length in.	Length mm	Wt./C Lbs.	Wt./C kg
B22-I-12	12″	(305)	224	(101.6)
B22-I-16	16″	(406)	289	(131.1)
B22-I-20	20″	(508)	353	(160.1)
B22-I-24	24″	(609)	420	(190.5)
B22-I-32	32″	(813)	553	(250.8)
B22-I-36	36″	(914)	620	(281.2)
B22-I-40	40″	(1016)	686	(311.1)
B22-I-48	48″	(1219)	820	(371.9)
B22-I-60	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 254 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)



B22-I-12 THRU B22-I-240

Part No.	Length in.	Length mm	Wt./C Lbs.	Wt./C kg	Design Load Lbs.	Design Load 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)

Part No.	Length in.	Length mm	Wt./C Lbs.	Wt./C kg
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)

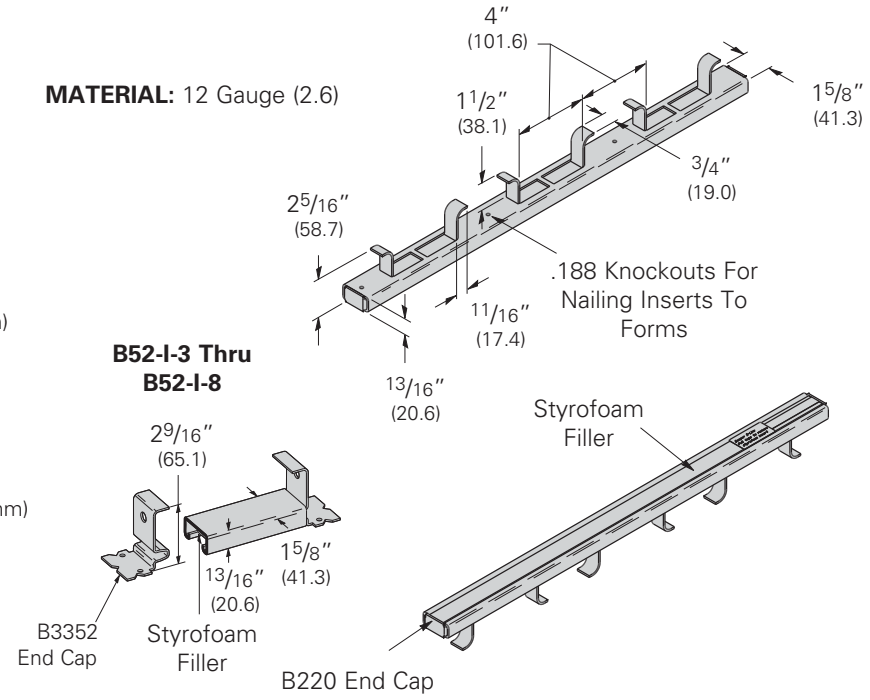
Reference page 254 for general fitting and standard finish specifications.

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)



B52-I-12 THRU B52-I-240

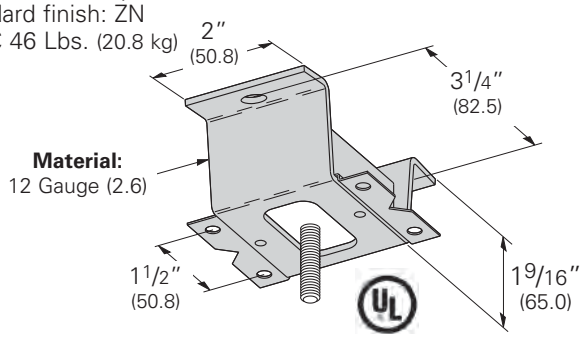
Part No.	Length in.	Length mm	Wt./C Lbs.	Wt./C kg	Design Load Lbs.	Design Load kN
B52-I-3	3″	(76)	53	(24.0)	400	(1.78)
B52-I-4	4″	(101)	63	(28.6)	500	(2.22)
B52-I-6	6″	(152)	85	(38.5)	750	(3.33)
B52-I-8	8″	(203)	106	(48.1)	1000	(4.45)

Part No.	Length in.	Length mm	Wt./C Lbs.	Wt./C 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 254 for general fitting and standard finish specifications

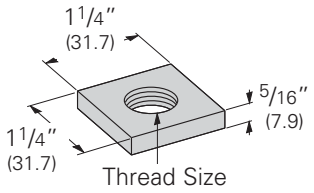
B2500
Spot Insert

- 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

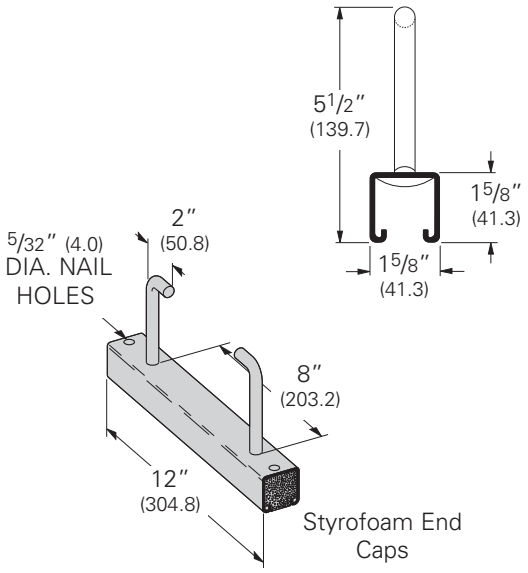
- For use in B2500 Spot Insert
- Material: Steel ASTM A36
- Standard finish: ZN



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)

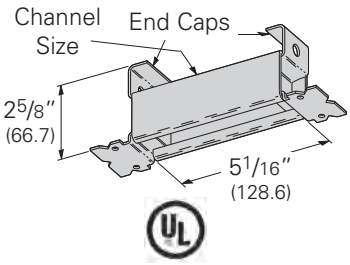
B2503
Heavy Duty Spot Insert

- 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

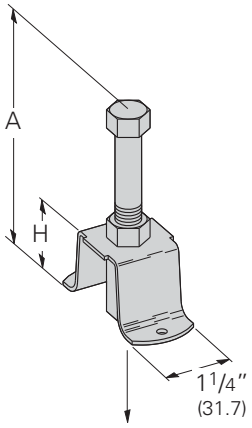
- Safety Factor of 5
- To support 10″ (250) pipe use B2505 insert with 5/8″-11 Channel Nuts.
- To support up to and including 8″ (200) pipes use B2506, B2507 and B2508 inserts with the desired Channel Nuts.
- Standard finish: ZN



Part No.	Channel Style	End Cap Part No.	Design Load Lbs.	kN	Maximum Pipe Size	Wt./C 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)



Design Load

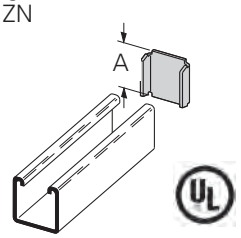
Part No. & Size	Height A In.	mm	Height H In.	mm	Design Load Lbs.	kN	Wt./C Lbs.	kN
B2501-1/4	2 7/16″	(61.9)	7/8″	(22.2)	250	(1.11)	16	(7.2)
B2501-3/8	3 1/16″	(77.8)	1 7/8″	(47.6)	610	(2.71)	22	(9.9)
B2501-1/2	4 1/8″	(104.8)	1 7/8″	(47.6)	880	(3.91)	26	(11.7)

Reference page 254 for general fitting and standard finish specifications.

Insert Accessories

B205, B206, B220
X Type End Caps

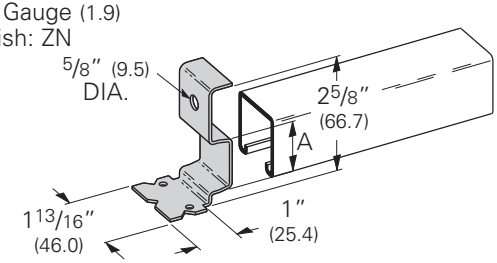
- UL listed for raceway use only
- Material: 12 Gauge (2.6)
- Standard finish: ZN



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

B3322, B3332, B3342, B3352
Y Type End Caps

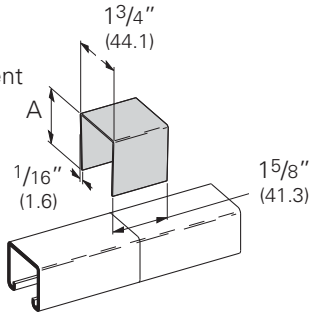
- UL listed for raceway use only
- Material: 14 Gauge (1.9)
- Standard finish: ZN



Part No.	Use With	A In.	A mm	Wt./C Lbs.	Wt./C 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)

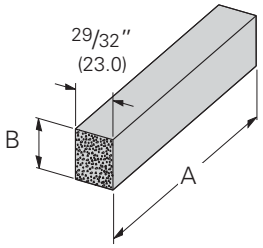
B380
Joint Splice Plate

- 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 In.	A mm	Wt./C Lbs.	Wt./C kg
B380-22	B22	1 5/8"	(41.3)	11	(5.0)
B380-32	B32	1 3/8"	(34.9)	10	(4.5)
B380-42	B42	1"	(25.4)	9	(4.1)
B380-52	B52	13/16"	(20.6)	7	(3.2)

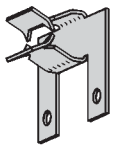
B22IFS-B52IFS
Styrofoam Filler Strip



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

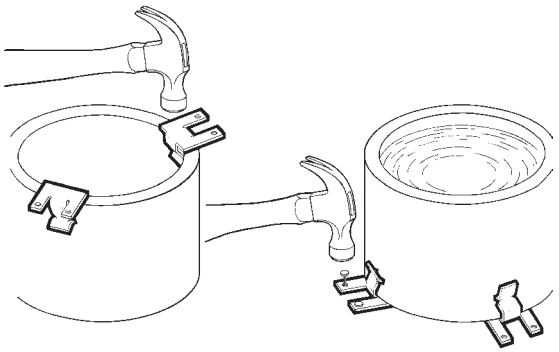
Pipe Sleeve Fasteners

- Allows for rigid attachment of pipe sleeves to wall and floor forms for concrete pouring.
- Accommodates Schedule 40, Schedule 80, or 5/16" (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.	5/16" & under
BE-5-8	6"	Schedule 80 pipe
BE-9-12	9" - 14"	Schedule 80 pipe

Reference page 254 for general fitting and standard finish specifications

Wedge Anchors †

- Heavy and medium duty all purpose anchor.
- For use in solid concrete and grout filled block.
- Anchors can be installed through the fixture, no need for hole spotting.
- **UL** (Underwriters Laboratories) Listed
- **FM** (Factory Mutual) Approved
- Available in Zinc Plated Carbon Steel or Type 304 Stainless Steel.

† Not ICC-ES Certified

Wedge Anchor - Data	1/4"	3/8"	1/2"	5/8"
ANSI Drill Bit Size (in.)	1/4	3/8	1/2	5/8
Fixture Clearance Hole (in.)	5/16	7/16	9/16	11/16
Thread Size (UNC)	1/4"-20	3/4"-16	1/2"-13	5/8"-11
Washer O.D. (in.)	5/8	13/16	11/16	13/4
Wrench Size	7/16	9/16	3/4	15/16
Max. Tightening Torque (ft-lbs)	8	28	60	90
Min. Embedment Depth (in.)	11/8	15/8	21/4	23/4
Load Capacity Tension (lbs) *	415	775	1200	1570
Load Capacity Shear (lbs) *	325	635	1050	1705

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

Catalog Number	Size	Thread Length
Zinc Plated Carbon Steel		
AWA-25-175	1/4" x 13/4"	3/4"
AWA-25-225	1/4" x 21/4"	11/4"
AWA-25-325	1/4" x 31/4"	21/4"
AWA-37-225	3/8" x 21/4"	11/4"
AWA-37-275	3/8" x 23/4"	15/8"
AWA-37-300	3/8" x 3"	17/8"
AWA-37-350	3/8" x 31/2"	23/8"
AWA-37-375	3/8" x 33/4"	25/8"
AWA-37-500	3/8" x 5"	37/8"
AWA-50-275	1/2" x 23/4"	13/8"
AWA-50-375	1/2" x 33/4"	23/8"
AWA-50-450	1/2" x 41/2"	31/8"
AWA-50-550	1/2" x 51/2"	41/8"
AWA-50-700	1/2" x 7"	55/8"
AWA-62-275	5/8" x 31/2"	2"
AWA-62-375	5/8" x 41/2"	3"
AWA-62-450	5/8" x 5"	31/2"
AWA-62-550	5/8" x 6"	41/2"
AWA-62-700	5/8" x 7"	51/2"
Stainless Steel		
AWA-25-175SS4	1/4" x 13/4"	3/4"
AWA-25-225SS4	1/4" x 21/4"	11/4"
AWA-25-325SS4	1/4" x 31/4"	21/4"
AWA-37-225SS4	3/8" x 21/4"	11/4"
AWA-37-275SS4	3/8" x 23/4"	15/8"
AWA-37-300SS4	3/8" x 3"	17/8"
AWA-37-350SS4	3/8" x 31/2"	23/8"
AWA-37-375SS4	3/8" x 33/4"	25/8"
AWA-37-500SS4	3/8" x 5"	37/8"
AWA-50-275SS4	1/2" x 23/4"	13/8"
AWA-50-375SS4	1/2" x 33/4"	23/8"
AWA-50-450SS4	1/2" x 41/2"	31/8"
AWA-50-550SS4	1/2" x 51/2"	41/8"
AWA-50-700SS4	1/2" x 7"	55/8"
AWA-62-275SS4	5/8" x 31/2"	2"
AWA-62-375SS4	5/8" x 41/2"	3"
AWA-62-450SS4	5/8" x 5"	31/2"
AWA-62-550SS4	5/8" x 6"	41/2"
AWA-62-700SS4	5/8" x 7"	51/2"

Seismic Wedge Anchors

- Fully threaded, torque-controlled wedge anchor which is designed for consistent performance in cracked and uncracked concrete.
- For use in concrete, structural sand lightweight concrete, and concrete over metal deck.
- Nominal drill but size is the same as the anchor diameter.
- **ICC-ES Listed**, ESR-2502, Category 1.
- **UL** (Underwriters Laboratories) Listed
- **FM** (Factory Mutual) Approved
- Zinc Plated Carbon Steel with stainless steel expansion clip for premium perfprmance.

Consult factory for sizes and other information.

Reference page 254 for general fitting and standard finish specifications.

Concrete Screw Bolts

- For use in racking, shelving, material handling, structural anchorage, masonry and food & beverage facilities.
- One piece heavy-duty anchor with a finished hex-head.
- Fast installation and immediate loading reduces downtime.
- For proper performance, screw anchors must be installed with the corresponding bits. The bits have a matched tolerance range designed to provide optimum performance.
- **ICC-ES Listed, ESR 2526**, qualified for static, seismic and wind loading in concrete.
- **ICC-ES Listed, ESR 4042**, qualified for static, wind and seismic loading in grouted masonry.

Catalog Number	Anchor Length	Thread Length
Screw Type Anchor - Steel		
ACB-25-175	1/4" x 1 3/4"	1 5/8"
ACB-25-225	1/4" x 2 1/4"	2"
ACB-25-300	1/4" x 3"	2 3/4"
ACB-37-175	3/8" x 1 3/4"	1 1/2"
ACB-37-250	3/8" x 2 1/2"	2 1/4"
ACB-37-300	3/8" x 3"	2 3/4"
ACB-37-400	3/8" x 4"	3 3/4"

Catalog Number	Drill Size	Usable Length	Overall Length
Drill Bits - Straight Shank Type			
1372	1/4"	4"	6"
1380	3/8"	4"	6"
Drill Bits - SDS Type			
1314	1/4"	4"	6"
1316	3/8"	4"	6"

Note: Matched tolerance bits must be used for installation.

Straight Shank Drill Bit

SDS Hex Drill Bit

Concrete Screw Bolts - Data	1/4"	3/8"
ACB Drill Bit Size (in.)	1/4	3/8
Min. Embedment Depth (in.)	1	1 1/2
Load Capacity Tension (lbs) *	385	835
Load Capacity Shear (lbs) *	480	1125

* Based on concrete compression strength of 4000 psi in uncracked concrete using applied safety factor of 4.0. For additional loading information contact factory. For ultimate strength design data in cracked and uncracked concrete, see ICC-ES ESR-3889.

Concrete Inserts

Reference page 254 for general fitting and standard finish specifications

Concrete Screws

- Light to medium duty anchor for use in concrete, masonry block and brick base materials.
- Concrete screws are engineered with matched tolerance bits and installation tools to optimize performance.
- High low thread design for greater stability and grip.
- No hole spotting required.
- One drill bit is packaged in each box of concrete screws.
- Blue fluorocarbon coating for corrosion resistance.

Catalog Number	Size
Hex Head Concrete Screws	
ACS-18-125H †	3/16" x 1 1/4"
ACS-18-175H †	3/16" x 1 3/4"
ACS-18-225H	3/16" x 2 1/4"
ACS-18-275H	3/16" x 2 3/4"
ACS-18-325H	3/16" x 3 1/4"
ACS-18-375H	3/16" x 3 3/4"
ACS-18-400H	3/16" x 4"
ACS-25-125H †	1/4" x 1 1/4"
ACS-25-175H †	1/4" x 1 3/4"
ACS-25-225H	1/4" x 2 1/4"
ACS-25-275H	1/4" x 2 3/4"
ACS-25-325H	1/4" x 3 1/4"
ACS-25-375H	1/4" x 3 3/4"
ACS-25-400H	1/4" x 4"
Flat Head Concrete Screws	
ACS-18-125F †	3/16" x 1 1/4"
ACS-18-175F †	3/16" x 1 3/4"
ACS-18-225F	3/16" x 2 1/4"
ACS-18-275F	3/16" x 2 3/4"
ACS-25-125F †	1/4" x 1 1/4"
ACS-25-175F †	1/4" x 1 3/4"
ACS-25-225F	1/4" x 2 1/4"
ACS-25-275F	1/4" x 2 3/4"

† Not ICC-ES listed

Hex Head

Hex Head - Data	3/16"	1/4"
ANSI Drill Bit Size (in.)	5/32	3/16
Fixture Clearance Hole (in.)	1/4	5/16
Head Height (in.)	7/64	9/64
Head Width (in.)	1/4	5/16
Washer O.D. (in.)	11/32	13/32
Washer Thickness (in.)	1/32	1/32
Hex Driver (in.)	1/4	5/16

Flat Head

Flat Head - Data	3/16"	1/4"
ANSI Drill Bit Size (in.)	5/32	3/16
Fixture Clearance Hole (in.)	1/4	5/16
Phillips Head O.D. (in.)	3/8	1/2
Phillips Head Height (in.)	9/64	3/16
Phillips Bit Size	2	3

Straight Shank Drill Bit

SDS Hex Drill Bit

Catalog Number	Bit Size	Usable Length
Straight Shank Drill Bits		
2782SD	5/32" x 4 1/2"	3"
2786SD	3/16" x 4 1/2"	3"
SDS Hex Drill Bits		
2793	5/32" x 5"	3"
2796	3/16" x 5"	3"

Catalog Number	Dsecription
Setting Tool	
2791	Concrete Screw Tool Kit

Embedment Depth	Nominal Anchor Dia. / Loading*			
	3/16" Tension	3/16" Shear	1/4" Tension	1/4" Shear
1 3/4"	360	240	555	375

* Based on concrete compression strength of 4000 psi using applied safety factor of 4.0. For additional loading information contact factory.

ICC-ES Listed, ESR 3068, qualified for static, wind and loading in concrete.

ICC-ES Listed, ESR 1678, qualified for static, wind and seismic loading in grouted concrete.

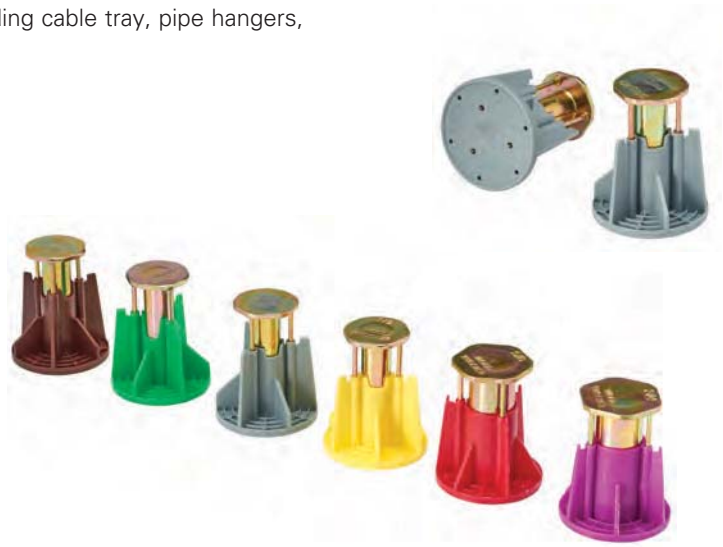
ICC-ES Listed, ESR 3213, qualified for use in chemically treated wood.

ICC-ES Listed, ESR 3042, qualified for use in wood.

Reference page 254 for general fitting and standard finish specifications.

Wood-Knocker™ †II Anchors

- Wood-Knocker concrete inserts are installed on wooden forms used to to support newly poured concrete floorsroof slabs, or walls.
- When the forms are stripped, the color-coded flange is visibly embedded in the concrete surface.
- The unique, six sided impact plate offers resistance to rotation within the concrete as threaded rod is being installed.
- Suitable for overhead installations such as suspending cable tray, pipe hangers, strut, and conduit.
- Color coded by size for all trades.
- Lowest in-place cost.
- **ICC-ES** Certified. See ICC-ESR-3657
- **UL** (Underwriters Laboratories) Listed
- **FM** (Factory Mutual) Approved



Wood-Knocker™ II Anchors

Catalog Number	Rod Diameter	Color
ACPW-25-2	1/4"	Brown
ACPW-37-2	3/8"	Green
ACPW-3750-2	3/8"-1/2"	Gray
ACPW-50-2	1/2"	Yellow
ACPW-62-2	5/8"	Red
ACPW-75-2	3/4"	Purple

Wood Knocker™ - Data	1/4"	3/8"	1/2"	5/8"	3/4"
Insert Thread Length (in.)	3/8	5/8	11/16	15/16	1 1/8
Plastic Flange Diameter (in.)	1 3/8	1 3/8	1 3/8	1 5/8	1 5/8
Thread Size (UNC)	1/4"-20	3/8"-16	1/2"-13	5/8"-11	3/4"-10
Overall Length (in.)	1 7/8	1 7/8	1 7/8	1 7/8	1 7/8
Min. Insert Spacing (in.)	9	9	9	12	12
Min. End Distance (in.)	6	6	6	9	9
Load Capacity Tension (lbs) *	1240	1605	1605	1550	1550
Load Capacity Shear (lbs) *	495	1775	2465	3785	3785

* Based on normal weight concrete with minimum compression strength of 3000 psi. Allowable load capacities are calculated using applied safety factor of 4.0. For additional loading information contact factory.

Minimum embedment depth is 2".

† Wood-Knocker™ is a registered trademark used by DeWalt

Reference page 254 for general fitting and standard finish specifications

Bang-It™† + Anchors

- Bang-It concrete inserts are designed for installation in and through metal composite deck used to support newly poured concrete floors or roof slabs.
- After installation, the protective sleeve of the insert protrudes below the surface of the deck, allowing overhead attachment of threaded rod.
- The unique, six sided impact plate offers resistance to rotation within the concrete as threaded rod is being installed.
- Suitable for overhead installations such as suspending cable tray, pipe hangers, strut, and conduit.
- Color coded by size for all trades.
- **ICC-ES** Certified. See ICC-ESR-3657
- **UL** (Underwriters Laboratories) Listed
- **FM** (Factory Mutual) Approved
- Lowest in-place cost.

Bang-It™+ Anchors

Catalog Number	Rod Diameter	Color
ACPD-25	1/4"	Brown
ACPD-37	3/8"	Green
ACPD-3750-2	3/8"-1/2"	Gray
ACPD-50	1/2"	Yellow
ACPD-62	5/8"	Red
ACPD-75	3/4"	Purple

Carbide Hole Saw for Bang-It™+ Anchors

Catalog Number	Description
ACPD-HS813-2	13/16" diameter for 1/4", 3/8", & 1/2" sizes
ACPD-HS1188-2	1 3/16" diameter for 5/8" & 3/4" sizes

Bang-It™ - Data	1/4"	3/8"	1/2"	5/8"	3/4"
Metal Hole Saw Diameter (in.)	13/16	13/16	13/16	1 3/16	1 3/16
Drilling Speed (rpm)	700-900	700-900	700-900	500-700	500-700
Insert Thread Length (in.)	3/8	5/8	11/16	15/16	1 1/8
Length of Sleeve (in.)	3 3/8	3 3/8	3 3/8	3 3/8	3 3/8
Thread Size (UNC)	1/4"-20	3/8"-16	1/2"-13	5/8"-11	3/4"-10
Embedment Depth (in.)	2	2	2	2	2
Upper Deck Tension Load (lbs) *	1115	1915	2370	2935	2935
Lower Deck Tension Load (lbs) *	830	830	830	930	990
Upper Deck Shear Load (lbs) *	835	1115	1115	1115	1115
Lower Deck Shear Load (lbs) *	625	840	840	840	840

* Based on sand lightweight and normal weight concrete with minimum compressio strength of 3000 psi over steel deck.

Allowable load capacities are calculated using applied safety factor of 4.0.

For additional loading information contact factory.

Minimum insert spacing of 6", minimum end spacing 6".

† Bang-It™ is a registered trademark used by DeWalt

Reference page 254 for general fitting and standard finish specifications.

Rapid Rod™ Hangers for Steel †

- One-piece, all steel threaded fastener system for suspending steel threaded rod.
- Suitable for overhead installations such as suspending cable tray, pipe hangers, strut and conduit.
- Side Mount (SW) available for side mounting applications.
- Lower in-place cost, when compared to beam clamps, lag bolts and drop-ins.
- Steel rapid rods can be installed with a screw gun or hammer drill.
- **UL** (Underwriters Laboratories) Listed
- **FM** (Factory Mutual) Approved
- Made of Zinc Plated carbon steel.

Steel Hanger Rod

Steel Hanger Rod - Side Mount

Catalog Number	Rod Size	Shank Size & Length
Steel Rod Hanger - Point Style #3 For Purlins		
ARS-25-100-2	1/4"	1/4" x 1"
ARS-37-100HN-2 **	3/8"	1/4" x 1" w/nuts
ARS-37-150-2	3/8"	1/4" x 1 1/2"
ARS-37-150HN-2 **	3/8"	1/4" x 1 1/2" w/nuts
ARS-37-200-2	3/8"	1/4" x 2"
Steel Rod Hanger - Side Mount - Point Style #3 For Purlins		
ARS-25-100SW-2	1/4"	1/4" x 1" w/nuts
ARS-37-100SW-2	3/8"	1/4" x 1" w/nuts
Steel Rod Hanger - Point Style #5 For Purlins		
ARS-37-150HDHN-2 **	3/8"	#12-24 x 1 1/2" w/nuts

** For UL & FM listings, steel rapid rod should be installed with a retaining nut.

† Not ICC-ES Certified

Catalog Number	Tool Description
Tool	
7187-2	Steel Socket

Steel Rapid Rod - Data

Description	Rod Size	Min. Thickness	Max. Thickness	Load (Material Thickness)	Load Direction	UL Pipe Size	UL Pipe Thickness	FM Pipe Size	FM Pipe Thickness
ARS-25-100-2	1/4"	0.060	0.250	593 (0.125")	–	–	–	–	–
ARS-37-100HN-2	3/8"	0.060	0.250	1172 (0.125")	V	4"	0.125"	4"	12 ga.
ARS-37-150-2	3/8"	0.188	0.250	593 (0.125")	V	4"	0.060"	–	–
ARS-37-150HN-2	3/8"	0.060	0.250	1172 (0.125")	V	4"	0.060"	–	–
ARS-37-200-2	3/8"	0.060	0.250	593 (0.125")	V	4"	0.125"	–	–
ARS-25-100SW-2	3/8"	0.060	0.250	642 (0.111")	H	4"	–	–	–
ARS-37-100SW-2	3/8"	0.060	0.250	702 (0.111")	H	4"	0.060"	4"	16 ga.
ARS-37-150HDHN-2	3/8"	0.060	0.250	1452 (0.111")	V	4"	0.125"	4"	12 ga.

Loads shown for ASTM A36 steel beams and ASTM A572 steel purlins include a safety factor of 4.

For UL & FM listings, steel rapid rod must be installed with a retaining nut. UL & FM load rating for 3/8" rapid rod is 365 lbs. and can support up to a maximum 4" pipe.

Steel Rapid Rod - Data		
Point Style	#3	#5
Self-Drilling Range (in.)	1/16 - 1/4	1/16 - 1/2
Screw Size (UNC) *	1/4"-20	1/4"-20

* Dimensions for self-drilling (embedded) portion of anchor.

Reference page 254 for general fitting and standard finish specifications

Rapid Rod™ Hangers for Concrete †
Rapid Rod™ Hangers for Wood †

- One-piece, all steel threaded fastener system for suspending steel threaded rod.
- Suitable for overhead installations such as suspending cable tray, pipe hangers, strut and conduit.
- Side Mount (SW) available for side mounting applications.
- Lower in-place cost, when compared to beam clamps, lag bolts and drop-ins.
- Wood rapid rods can be installed with a screw gun or hammer drill.
- Concrete Rapid Rod hangers can be installed with an adjustable torque, battery powered screw gun or hammer drill.
- **UL** (Underwriters Laboratories) Listed
- **FM** (Factory Mutual) Approved
- Made of Zinc Plated carbon steel.

ARC Series

ARW Series

ARW-SW Series

Catalog Number	Rod Size	Shank Size & Length
Concrete Rod Hanger - ANSI Wedge-Bolt OT Thread Shank Style		
ARC-25-125	1/4"	1/4" x 1 5/8"
ARC-37-150	3/8"	1/4" x 1 5/8"
ARC-37-275	3/8"	3/8" x 2 3/4"
For side mount concrete applications use ARW-25-100SW or ARW-37-200SW with 3/16" drill bit.		
Wood Rod Hanger - Point Style Type 17		
ARW-25-200	1/4"	1/4" x 2"
ARW-37-100	3/8"	1/4" x 1"
ARW-37-200	3/8"	1/4" x 2"
ARW-37-250	3/8"	5/16" x 2 1/2"
ARW-50-250	1/2"	5/16" x 2 1/2"
Wood Rod Hanger - Side Mount - Point Style Type 17		
ARW-25-100SW	1/4"	1/4" x 1"
ARW-37-200SW	3/8"	1/4" x 2"

Catalog Number	Tool Description
Tools	
7187-2	Wood Socket
7195-2	1/4" Concrete Socket
7197-2	3/8" Concrete Socket
5874	Concrete Tapper Sleeve Assy.
5866	1/4" X 6" Hex Shank SDS Drill Bit

Rapid Rod Hangers - Concrete

Concrete Rapid Rod - Data	1/4"	3/8"	3/8"
ANSI Drill Bit (in.)	1/4	1/4	1/4
Thread Length (in.)	1 5/8	1 5/8	2 1/2
Min. Embedment Depth (in.)	1 5/8	1 5/8	2 1/2
Load Capacity Tension (lbs.) *	815	815	1050
Load Capacity Shear (lbs.) *	380	525	525

* Based on concrete compression strength of 4000 psi using applied safety factor of 4.0. For additional loading information contact factory.

FM approved load capacity for 3/8" anchor is 365 lbs., maximum 4" pipe size.

Rapid Rod Hangers - Wood

Wood Rapid Rod - Data	1/4" Thread Forming	3/8" Thread Forming
Pre-Drill Diameter (in.)	1/8	1/8
Point Style	Type 17	Type 17

Wood Rapid Rod - Embedment & Load Data (lbs.)

Rod/Anchor Size	Embedment Depth	Fir	Pine	Spruce
1/4"	1"	170	160	160
3/8"	2"	375	375	375
1/2"	2 1/2"	665	775	775

Minimum load ratings are based on a safety factor of 4.

UL approved load capacity for 3/8" rod sizes and 1/4" screw size is 260 lbs., maximum 3" pipe. UL approved load capacity for 3/8" rod sizes and 3/8" screw size is 375 lbs., maximum 4" pipe.

FM approval only applies to 3/8" x 2 1/2" screw size. Approved for 365 lbs., up to 4" pipe.

† Not ICC-ES Certified

7187

7195

7197

Reference page 254 for general fitting and standard finish specifications.

Self-Tapping Screw Anchors

- For use in normal-weight concrete, structural sand lightweight concrete and concrete over metal deck.
- Anchor design allows for shallow embedment and mechanically interlocks with base material.
- Internally threaded anchor for easy adjustment and removability of threaded rod or bolt.
- Fast anchor installation with a powered impact wrench.
- Suitable for overhead applications such as suspending cable tray, strut, pipe hangers and conduit.
- **FM** Approved.
- **ICC-ES** certified. See ICC-ES ESR-2272.
- Made of Zinc Plated carbon steel.
- Setting tool included.

ATM-37 Anchor

Catalog Number	Size	Thread Depth
Self-Tapping Screw Anchor		
ATM-37	3/8"	11/16"
Tool		
6407 SD	3/8"	–

ICC-ES certified. See ICC-ES ESR-2272.

6407 SD Tool

Self-Tapping Machine Screw - Data	3/8"
ANSI Drill Bit Size (in.)	1/2
Min. Concrete Thickness (in.)	4
Max. Tightening Torque (ft-lbs)	8
Min. Embedment Depth (in.)	1 5/8
Load Capacity Tension (lbs) *	590
Load Capacity Shear (lbs) *	260

* Based on concrete compression strength of 3000 psi in uncracked concrete using applied safety factor of 4.0.

For additional loading information contact factory. The shear capacity is controlled by steel strength and is ASTM A36 (or equivalent).

For ultimate strength design data in cracked and uncracked concrete, see ICC-ES ESR-2272.

Sleeve Type Expansion Anchors

- For use in concrete and masonry substrates.
- Suitable for solid and hollow core materials.
- Fits standard fixture holes - no need to undersize anchors for proper fit.
- Sleeve has 360° contact area and reduces concrete stress.
- **UL** Listed and **FM** Approved
- Zinc Plated Steel and (Type 304 Stainless Steel ****** add SS4 to part number)

Hex Nut (HN) Style

Acorn Nut (AN) Style

Slotted Round Head (RS) Style

Sleeve Type Expansion - Data	1/4"	3/8"	1/2"	5/8"	3/4"
ANSI Drill Bit Size (in.)	1/4	3/8	1/2	5/8	3/4
Fixture Clearance Hole (in.)	5/16	7/16	9/16	11/16	15/16
Plow Bolt Size (UNC)	#10-24	5/16"-18	3/8"-16	1/2"-13	5/8"-11
Min. Embedment Depth (in.)	1/2	1 1/4	1 1/2	2	2 1/4
Load Capacity Tension (lbs) *	65	540	645	1405	1455
Load Capacity Shear (lbs) *	250	1030	1215	1215	2760

For loading information, see ICC-ES ESR-2502.

Rod Hanger (RH) Style

Sleeve Type Expansion - Data	Hanger Rod 1/4"	3/8"	1/2"
ANSI Drill Bit Size (in.)	1/4	3/8	1/2
Fixture Clearance Hole (in.)	NA	NA	NA
Plow Bolt Size (UNC)	#10-24	5/16"-18	3/8"-16
Coupling Height (in.)	7/8	1	1 1/4
Min. Embedment Depth (in.)	1/2	1 1/4	1 1/2
Load Capacity Tension (lbs) *	65	540	645
Load Capacity Shear (lbs) *	250	1030	1215

* Based on concrete compression strength of 4000 psi using applied safety factor of 4.0. For additional loading contact factory.

Catalog Number	Size	Thread Length
Hex Nut Style		
ASA-37-187HN	3/8" x 1 7/8" **	1 5/8"
ASA-37-300HN	3/8" x 3" **	1 5/8"
ASA-37-400HN	3/8" x 4"	1 5/8"
ASA-50-225HN	1/2" x 2 1/2" **	2 1/8"
ASA-50-300HN	1/2" x 3" **	2 1/4"
ASA-50-400HN	1/2" x 3 3/4" **	2 1/4"
ASA-50-525HN	1/2" x 5 1/4"	2 1/4"
ASA-50-600HN	1/2" x 6"	2 1/4"
ASA-62-225HN	5/8" x 2 1/2"	2 1/8"
ASA-62-300HN	5/8" x 3"	2 3/4"
ASA-62-425HN	5/8" x 4 1/4" **	2 3/4"
ASA-62-600HN	5/8" x 5 3/4"	2 3/4"
ASA-75-250HN	3/4" x 2 3/4"	2 1/8"
ASA-75-425HN	3/4" x 4 1/4"	3/8"
ASA-75-625HN	3/4" x 6 1/4"	3/8"
Acorn Nut Style		
ASA-25-62AN	1/4" x 5/8"	1/2"
ASA-25-137AN	1/4" x 1 3/8"	1 1/8"
ASA-25-225AN	1/4" x 2 1/4"	1 1/8"
Slotted Round Head Style		
ASA-25-112RS	1/4" x 1 3/8"	1"
ASA-25-200RS	1/2" x 2 1/4"	1 1/8"

Catalog Number	Size	Drill Diameter
Rod Hanger		
ASA-25-150RH	1/4" x 1 1/2"	5/16"
ASA-37-187RH	3/8" x 1 7/8"	3/8"
ASA-50-225RH	1/2" x 2 1/4"	1/2"

Reference page 254 for general fitting and standard finish specifications

Hollow Base Drop-in Anchors ‡

- For use in hollow base materials such as hollow concrete block, brick with weep holes, and precast hollow core plank.
- Can also be used in solid base materials.
- Smooth wall drop-in can be installed flush mounted or below the base material surface.
- Available in Zinc Plated finish.

Catalog Number	Rod Size	Overall Length	Sleeve Length
Hollow Base Drop-In			
ADH-25	1/4"	7/8"	5/8"
ADH-37	3/8"	1 5/16"	15/16"
ADH-50	1/2"	1 3/4"	1 1/4"
Setting Tools			
9323	1/4"	–	–
9343	3/8"	–	–
9353	1/2"	–	–

‡ Not ICC-ES certified

Anchor

Setting Tool

Hollow Base Drop-In - Data	1/4"	3/8"	1/2"
ANSI Drill Bit Size (in.)	3/8	5/8	3/4
Max. Tightening Torque (ft-lbs)	5	10	20
Thread Size (UNC)	1/4"-20	3/8"-16	1/2"-13
Thread Length In Cone (in.)	3/8	5/8	3/4
Min. Embedment Depth (in.)	3/4	1	1 1/2
Load Capacity Tension (lbs) *	230	415	805
Load Capacity Shear (lbs) *	240	510	805

* Based on concrete compression strength of 4000 psi using applied safety factor of 4.0. For additional loading information contact factory.

Wall Screws

- One-piece, all steel anchor with high-profile threads for easy fastening into wallboard and other masonry base materials.
- Deep cutting, corkscrew-like threads provide for smooth entry and a strong hold.
- No pre-drilling is required when fastening into wallboard or wood.
- Fastening into concrete, hollow or grout filled block, brick and plaster requires a pre-drilled 3/16" ANSI hole.
- Installed with a No. 8 drill bit or No. 2 Phillips driver.
- Made of case hardened carbon steel with chrome finish.

Catalog Number	Size	Head Type
Wall Screw		
AWS-CH	3/16" x 1 1/4"	Combo
AWS-OH	3/16" x 1 1/4"	Oval
AWS-PH	3/16" x 1 1/4"	Pan

‡ Not ICC-ES certified

AWS-CH

AWS-OH

AWS-PH

Wall Screw - Data	Minimum Embedment Depth	Load Cap. Tension (lbs.) *	Load Cap. Shear (lbs.) *
Concrete *	3/4"	90	260
1/2" Wallboard	NA	20	60
5/8" Wallboard	NA	35	90
3/4" Plywood	NA	65	150
Grout-Filled Concrete Masonry	1"	55	165
Hollow Concrete Masonry	1"	60	165
Brick Masonry	3/4"	70	120

* Based on concrete compression strength of 4000 psi. Allowable load capacities are calculated using an applied safety factor of 4.0. For additional loading contact factory.

Plastic Screw Anchors

- Designed for use with lightweight fixtures.
- Recommended for use in concrete, block and brick.
- Recommended for light duty static applications where holding power is not critical.
- Not recommended for overhead use.
- Kit includes 100 anchors, 100 screws and one drill bit.
- Made of engineered plastic.

Catalog Number	Screw Size
APC-8K	#8 x 1"
APC-10K	#10 x 1"
APC-12K	#12 x 1"

Plastic Conical Anchor - Data	#8 Tension (lbs.)	#8 Shear (lbs.)	#10 - #12 Tension (lbs.)	#10 - #12 Shear (lbs.)
Nominal Weight Concrete *	85	70	140	90
Hollow Concrete Masonry **	60	45	70	55
Clay Brick Masonry ***	30	50	55	65
Minimum Embedment Depth	7/8"	7/8"	1"	1"

* Based on concrete compression strength of 4000 psi.

** Based on hollow concrete masonry with minimum compression strength of 1500 psi.

*** Based on clay brick masonry with minimum compression strength of 1500 psi.

Loads contain an applied safety factor of 4.0.

For additional loading information contact factory.

Reference page 254 for general fitting and standard finish specifications.