



GROUNDING

2005 NEC Article 250.52(A)(3) requires all “present” grounding electrodes to be bonded together to form a grounding electrode system. “Present” concrete-encased electrodes (re-enforcing bar, or rebar) and/or grounded I-beam must be included in the grounding electrode system. The result is a more effective and reliable grounding system.



Direct Burial
Continuous loop
Copper wire only

REBAR “UFER” GROUNDING CLAMPS

Lay-in feature allows continuous loop wiring
Bronze bodies with bronze or stainless steel hardware
For use in other harsh environments such as swimming pool/spa, agricultural buildings, food processing, marine, communications grid and others
Compared to compression and exothermic methods for rebar “Ufer” grounding and bonding, Greaves mechanical clamps provide fast installation and range-taking capability.
Use to connect wire to rebar. Not for use on epoxy coated rebar.

J-DB SERIES Jones™ Rebar Clamp

NAED NUMBER	CATALOG NUMBER	REBAR SIZE		WIRE RANGE	CTN QTY	EST. SHIPPING	
		#	INCH			WEIGHT (lbs)	UNIT
27101	J 29-DB	3	3/8	#6 SOL - 8 SOL	50	7.5	CTN
27110	J 30-DB	4	1/2	#4 STR - 8 SOL	50	8.5	CTN
27120	J 31-DB	5	5/8	2/0 STR - *6 SOL	25	5.0	CTN
27130	** J 32-DB	4,5,6	1/2,5/8,3/4	4/0 STR - 6 SOL	12	4.3	CTN

Not for use on epoxy-coated rebar
*UL listed for #4 STR - #2 STR
**Not UL listed.

Use to connect wire to galvanized water pipe, rod, tube, fence post, or rebar
Orient head in any direction - lock in position with serrated teeth

G-50DB SERIES LOW-WING™ System

NAED NUMBER	CATALOG NUMBER	REBAR SIZE		WIRE RANGE	CTN QTY	EST. SHIPPING	
		#	INCH			WEIGHT (lbs)	UNIT
30755	G 150-DB	6 - 9	3/4 - 1 1/8	4/0STR - #10SOL	25	12.2	CTN
30765	G 250-DB	11	1 3/8		10	6.8	CTN

G-50DB Series not CSA. Screws are either bronze or stainless steel.

Use to connect wire to rebar or water pipe

GR-DB SERIES Lay-in Rebar Clamp

NAED NUMBER	CATALOG NUMBER	REBAR SIZE		WIRE RANGE	CTN QTY	EST. SHIPPING	
		#	INCH			WEIGHT (lbs)	UNIT
70621	*G 1R-DB	3 - 8	3/8 - 1	#2STR - 10SOL	50	11.6	CTN

*Not CSA.

Use to connect wire to galvanized water pipe, conduit, rod, tube, fence post, or rebar
Connects wire either parallel or 90° to pipe

C100 SERIES U-Bolt Clamp

NAED NUMBER	CATALOG NUMBER	REBAR SIZE		GROUND WIRE	CTN QTY	EST. SHIPPING	
		#	INCH			WEIGHT (lbs)	UNIT
25020	C 101	3 - 5	3/8 - 5/8			0.48	EA
25080	C 104	4 - 6	1/2 - 3/4			0.54	EA
25160	C 108	7 - 8	7/8 - 1	2/0 - #4	EA	0.49	EA
25260	C 114	7 - 11	7/8 - 1 3/8			0.66	EA
25360	C 120	8 - 12	1 - 1 1/2			0.80	EA

See C100 Series for complete listing of sizes.



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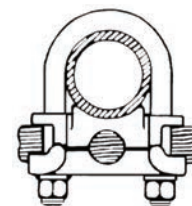
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Parallel or 90° connection to rod or pipe

2005 NEC 250.52(A)(3) requires bonding all “present” grounding electrodes, including concrete-encased electrodes (Ufer).



GREAVES EXCLUSIVE

POOL and SPA

“Jones Bond™” system

CONTINUOUS LOOP BONDING & GROUNDING

Swimming pools / spas, foundation footings, agricultural buildings and other difficult environments

JONES REBAR CLAMP

Connect grounding electrode conductor to rebar (concrete encased electrode)
 Rugged and compact with no awkward projections - easy coverage in concrete
 Lay-in feature allows continuous-run or termination
 Cast bronze body with stainless steel hardware
 The J32-DB handles a range of rebar sizes and wire sizes
 CSA (C US) certified and UL listed for direct burial in earth or concrete

Rebar Clamp

NAED NUMBER	CATALOG NUMBER	WIRE RANGE	REBAR SIZE		CTN QTY	EST. SHIPPING	
			#	INCH		WEIGHT (lbs)	UNIT
27101	J 29-DB	6 SOL - #8	3	3/8	50	7.74	CTN
27110	J 30-DB	4 STR - #8 SOL	4	1/2	50	8.49	CTN
27120	J 31-DB	2/0 STR - *#6 SOL	5	5/8	25	5.66	CTN
27130	**J 32-DB	4/0 STR - #6 SOL	4,5,6	1/2,5/8,3/4	12	4.18	CTN

J-series clamps are designed for bare rebar only
 Do not use on ground rod, pipe, or epoxy-coated rebar
 Installation torque 150 in-lbs
 *UL listed for #4 STR - #2 STR
 **Not UL listed



Patent Pending

Direct Burial
 Continuous loop
 Copper wire only



BEAVER TOOTH LUG

Use on electrical equipment, pool/spa equipment, conduit bushings, jumper to multiple conduits
 Copper body, stainless steel screw, for use with copper wire only

Lay-in-Lug

NAED NUMBER	CATALOG NUMBER	WIRE RANGE	BOLT SIZE	CTN QTY	EST. SHIPPING	
					WEIGHT (lbs)	UNIT
27201	BTL 4-DB	#4 -14 AWG	#10	50	3.06	CTN
27202	BTL 4-DBP	#4 -14 AWG	#10	50	3.06	CTN
27205	BTL 414-DB	#4 -14 AWG	1/4	50	3.89	CTN
27206	BTL 414-DBP	#4 -14 AWG	1/4	50	3.89	CTN

DBP is tin-plated for use on aluminum pool structure. Use of oxide-inhibitor is recommended.



Direct Burial
 Copper wire only



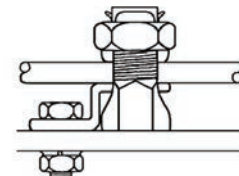
BUGLUGS™

Heavy duty silicon bronze and copper, tin-plated

Lay-in-Lug

NAED NUMBER	CATALOG NUMBER	WIRE MAX	MOUNTING BOLT SIZE	CTN QTY	EST. SHIPPING	
					WEIGHT (lbs)	UNIT
70850	BL 6	#6	#10	50	2.92	CTN
70855	BL 4	#4	1/4	50	4.40	CTN
70860	*BL 2	#2	1/4	50	5.80	CTN
70865	*BL 1/0	1/0	5/16	25	5.27	CTN

Tin-plated for use on aluminum pool structure. Use of oxide-inhibitor is recommended. *Not CSA



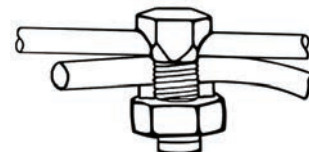
Direct Burial
 Copper wire only



MESH-BUG™

Use to connect copper conductor to wire mesh
 Copper-alloy bronze construction
 Sizes available for rolled (#10) and heavy (#6) wire mesh
 UL listed for direct burial in earth and concrete

NAED NUMBER	CATALOG NUMBER	MESH/ WIRE SIZE	COPPER COND. RANGE (AWG)	EST. SHIPPING	
				WEIGHT (lbs)	UNIT
10131	A2-DB	#10	#8 -12 AWG	0.03	CTN
10132	A3-DB	#10	#6 SOL - 8 AWG	0.05	CTN
10241	A5-DB	#6, #10	#4 AWG - 8 SOL	0.06	CTN
10251	A8-DB	#2	#2 - 6 AWG	0.11	CTN
10261	A10-DB	#1/0	#1/0 - 4 AWG	0.16	CTN



Direct Burial
 Copper wire only





POOL and SPA

“Jones Bond™” system

Direct Burial

Copper wire only

GROUND ROD CLAMPS

For connecting ground wire to ground rod
Cast bronze body with silicon bronze bolt
UL listed for direct burial in earth and concrete

NAED NUMBER	CATALOG NUMBER	GROUND ROD SIZE (IN)	GROUND WIRE MAX	CTN QTY	EST. SHIPPING	
					WEIGHT (lbs)	UNIT
27000	G 29	3/8	#4 STR	50	3.3	CTN
27010	G 30	1/2	#4 SOL	50	4.2	CTN
27020	G 31	5/8	1/0 SOL	50	5.6	CTN
27030	G 32	3/4	#2 SOL	50	6.7	CTN
27040	G 100	1	4/0 STR	25	7.6	CTN



PIPE CLAMPS

For connecting ground wire to water pipe
Cast bronze body, silicon bronze or stainless steel screws
UL listed for direct burial in earth and concrete

NAED NUMBER	CATALOG NUMBER	WATER PIPE SIZE (IPS)	GROUND WIRE MAX	CTN QTY	EST. SHIPPING	
					WEIGHT (lbs)	UNIT
70620	G 1S-DB	1/2 - 1	#2 STR	50	9.5	CTN
70622	G 2S-DB	1 1/4 - 2	#2 STR	25	9.0	CTN



Direct Burial



U-BOLT CLAMPS

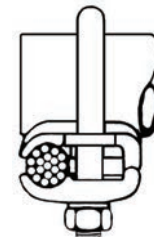
Heavy Duty U-bolt Clamps
Use to connect wire to pipe, rod, or fence posts
Cast bronze bodies with silicon bronze hardware
CSA Certified for direct burial in earth and concrete

NAED NUMBER	CATALOG NUMBER	ROD SIZE (IN)	WATER PIPE SIZE (IPS)	CABLE RANGE	EST. SHIPPING	
					WEIGHT (lbs)	UNIT
25020	C 101	1/2	1/4		0.5	EA
25080	C 104	5/8 - 3/4	3/8	2/0 - #4	0.6	EA
25160	C 108	7/8 - 1	1/2 - 3/4		0.6	EA
25260	C 114	-	1		0.7	EA
25360	C 120	-	1 1/4	2/0 - #4	0.9	EA
25560	C 132	-	2		1.0	EA
71245	C 142	-	3		1.5	EA

See C100 Series for complete listing of sizes.
PLATING: For tin plating of above items add suffix "P" to catalog number.

Direct Burial

Continuous Loop



Parallel or 90° connection to rod or pipe

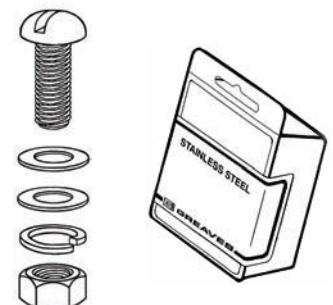
STAINLESS STEEL HARDWARE KITS

Sets of stainless steel screws, washers, and nuts
Use to mount BTL-DB and BL Series lugs to equipment
Each kit packaged in clear plastic display box

NAED NUMBER	CATALOG NUMBER	SCREW		KIT CONTENTS				EST. SHIPPING	
		SIZE	L (IN)	SCREWS	WASHERS FLAT	NUTS LOCK	WEIGHT (lbs)	UNIT	
27221	SS 10-A	10-24	1/2	50	100	50	50	.4	KIT
27223	SS 10-B		3/4					.5	KIT
27225	SS 10-C		1					.6	KIT
27226	SS 10-D		1 1/4					.6	KIT
27231	SS 0-A	1/4-20	1/2	25	50	25	25	.6	KIT
27233	SS 0-B		3/4					.7	KIT
27235	SS 0-C		1					.8	KIT
27237	SS 0-D		1 1/2					.9	KIT

For larger sizes of stainless steel or silicon bronze see hardware section.

Direct Burial





POOL and SPA EQUIPOTENTIAL BONDING

COPPER BONDING MESH KITS

Use to provide equipotential bonding grid

- under pool perimeter surfaces,
- under paving stones or concrete

Fulfills 2008 NEC Article 680.26(B)(1)(b) requirements

Made of #8AWG solid copper with exothermically welded joints

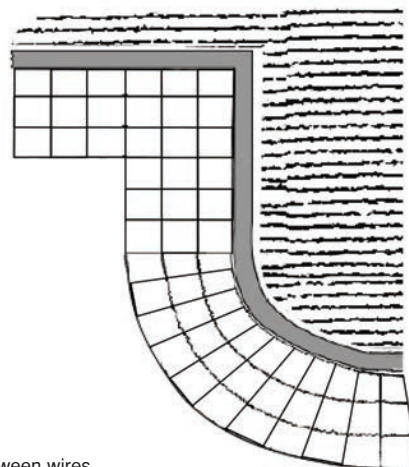
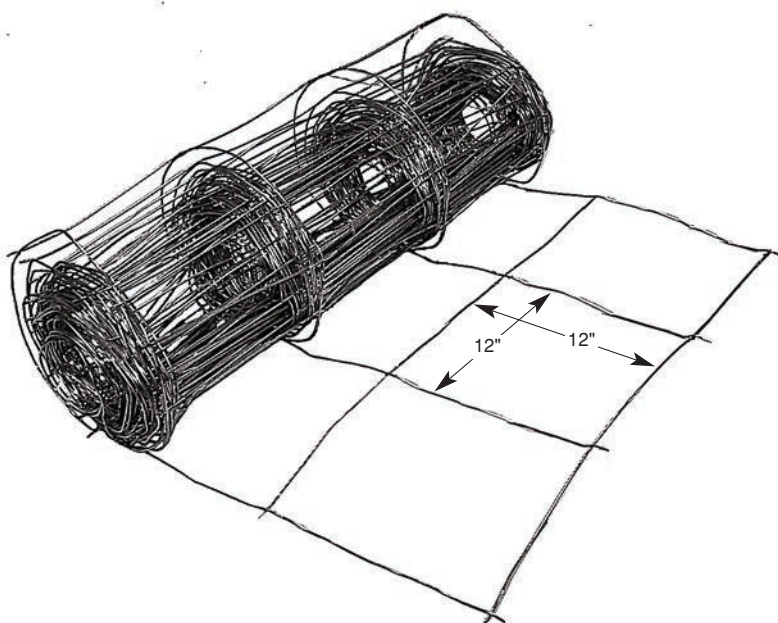
Kits include hardware listed below

Each kit is individually boxed



2008 NEC Article 680.26(B)(1)(b) and 680.26(B)(2) excerpts:

- A copper conductor grid shall be provided and
- be constructed of minimum 8 AWG bare copper conductors bonded to each other at all points of crossing
 - be arranged in a 300mm (12 in) by 300mm (12 in) network of conductors in a uniformly spaced perpendicular grid pattern with a tolerance of 100mm (4 in)
 - the perimeter surface shall extend for 1 m (3 ft) horizontally beyond the inside walls of the pool and shall include unpaved surfaces as well as poured concrete and other types of paving.



W = width
L = length
S = distance between wires

CBM SERIES

NAED NUMBER	CATALOG NUMBER	WIRE MAT'L	MESH DIMENSIONS			KIT CONTENTS			EST. SHIPPING	
			W (FT)	L (FT)	S (IN)	CLAMP	SPLIT BOLTS	STAKES	WEIGHT (lbs)	UNIT
27410	CBM35K	#8CU	3	50	12	1	9	16	22	EA
27415	CBM310K	#8CU	3	100	12	1	17	16	43	EA

INSTALLATION

- 1 - Unroll into position. Use holding stakes to assist one-man work.
- 2 - Bond to rebar with rebar clamp provided (accepts two #8 wires), or Jones Rebar clamp #J29-DB (3/8 rebar), or #J30-DB (1/2" rebar), or #G1R-DB (3/8" - 1" rebar).
- 3 - For contours, shape the mesh wire or cut and splice
- 4 - Bond mesh sections together with direct burial split bolts supplied or Greaves #A2-DB or #A5-DB.