

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.

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.





Direct Burial

Continuous loop Copper wire only

J-DB SERIES

Jones™ Rebar Clamp

NAED	CATALOG	REBAR SIZE		WIRE	CTN	EST. SHIPPING	
NUMBER	NUMBER	#	INCH	RANGE	QTY	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



*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



Use to connect wire to rebar or water pipe

GR-DB SERIES

LOW-WING™ System

NAED	CATALOG REE		BAR SIZE	WIRE	CTN	EST. SHIPPING	
NUMBER	NUMBER	#	INCH	RANGE	QTY	WEIGHT (lbs)	UNIT
30755	G 150-DB	6 - 9	3/4 - 11/8	4/0STR - #10SOL	25	12.2	CTN
30765	G 250-DB	11	13/8	4/0011(- #1000E	10	6.8	CTN

G150-DB Series not CSA. Screws are either bronze or stainless steel.



NAED	TREBUTE OF		AR SIZE	WIRE	CTN	EST. SHIPPING	
NUMBER	NUMBER	#	INCH	INCH RANGE		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



U-Bolt Clamp

NAED	CATALOG	REBAR SIZE		GROUND	CTN	EST. SHIPPING	
NUMBER	NUMBER	#	INCH	WIRE	QTY	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 - 11/2			0.80	EA

See C100 Series for complete listing of sizes.







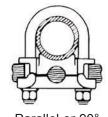












Parallel or 90° connection to rod or pipe

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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) for Ufer ground Rugged and compact with no awkward projections - easy coverage in concrete

Lay-in feature allows continous-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	CATALOG	WIRE	REB	AR SIZE	CTN	EST. SHIPPING	
NUMBER	NUMBER	RANGE	#	INCH	QTY	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

Direct Burial

Copper wire only

Direct Burial

Continuous loop Copper wire only

486D





BEAVER TOOTH LUG

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

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

BUGLUGS™

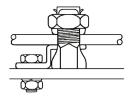
Heavy duty silicon bronze and copper, tin-plated

Lay-in-l	Lug
FOT OUIDD	NO

NAED	CATALOG	WIRE	MOUNTING	CTN	EST. SHIPPING		
NUMBER	NUMBER	MAX	BOLT SIZE	QTY	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

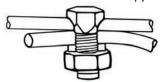
Copper-alloy bronze construction

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. SHIPP WEIGHT(lbs)	ING UNIT
10131	A2-DB	#10	#8 -12 AWG	0.03	EA
10132	A3-DB	#10	#6 SOL - 8 AWG	0.05	EA
10241	A5-DB	#6, #10	#4 AWG - 8 SOL	0.06	EA
10361	A8-DB	#2	#2 - 6 AWG	0.11	EA
10261	A10-DB	#1/0	#1/0 - 4 AWG	0.16	EA

Direct Burial Copper wire only





^{**}Not UL listed



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	CATALOG	GROUND ROD			EST. SHIPP	EST. SHIPPING	
NUMBER	NUMBER	SIZE (IN)	WIRE MAX	QTY	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	
27015	G 31E	5/8	#2 STR	50	4.9	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 CLAMPSFor 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	11/4 - 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	CATALOG	ROD	WATER PIPE	CABLE	EST. SHIPPING	
NUMBER	NUMBER	SIZE (IN)	SIZE (IPS)	RANGE	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	-	11/4	2/0 - #4	0.9	EA
25560	C 132	_	2	2/0 - #4	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

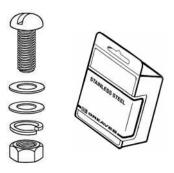
STAINLESS STEEL HARDWARE KITS

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	CATALOG	SCI	REW	KIT CONTENTS SCREWS WASHERS NUTS		EST. SHIPPING			
NUMBER	NUMBER	SIZE	L (IN)	JOKEWS	FLAT	LOCK	11010	WEIGHT (lbs)	UNIT
27221	SS 10-A		1/2					.4	KIT
27223	SS 10-B	10-24	3/4	50	100	50	50	.5	KIT
27225	SS 10-C	10-24	1					.6	KIT
27226	SS 10-D		11/4	50	-	50	50	.6	KIT
27231	SS 0-A		1/2					.6	KIT
27233	SS 0-B	1/4-20	3/4	25	50	25	25	.7	KIT
27235	SS 0-C	1/4-20	1	25	30	25	25	.8	KIT
27237	SS 0-D		11/2					.9	KIT

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

Direct Burial





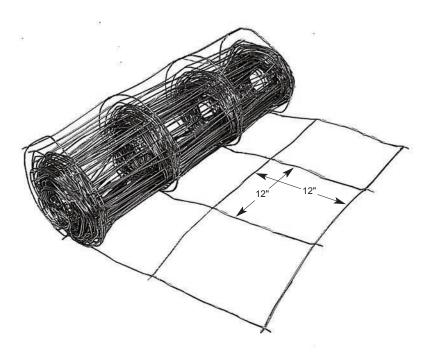
POOL and **SPA EQUIPOTENTIAL BONDING**

COPPER BONDING MESH KITS

Use to provide equipotential bonding grid

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

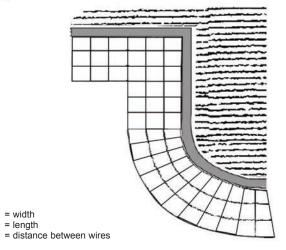
Fulfills 2008 NEC Article 680.26(B)(1)(b) requirements Made of #8AWG solid copper with exothermically welded joints Kits include hardware listed below Each kit is individually boxed



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.



CBM SERIES

NAED	CATALOG	WIRE	MESH DIMENSIONS			KIT CONTENTS			EST. SHIPPING	
NUMBER	NUMBER	MAT'L	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.

= length